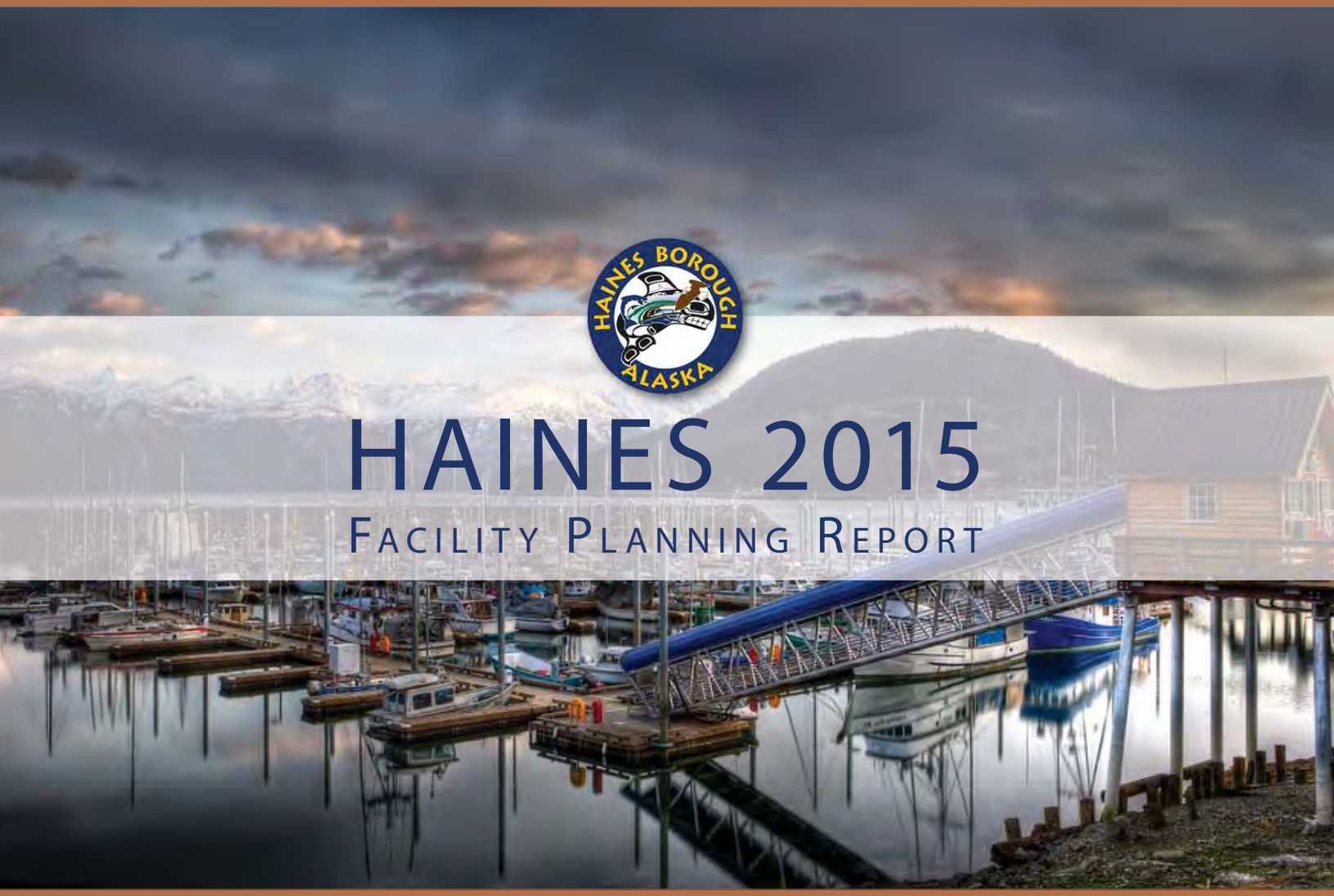


HAINES 2015

Facility Planning Report

Collaborative Team

Haines Borough I Project Facilitation & Management

Stephanie Scott, Mayor
Email: sscott@haines.ak.us I Phone: (907) 766-2231
www.hainesalaska.gov

Mark Earnest, Borough Manager
Email: mearnest@haines.ak.us I Phone: (907) 766-2231
www.hainesalaska.gov

Darsie Culbeck, Executive Assistant to the Manager
Email: dculbeck@haines.ak.us I Phone: (907) 766-2231 ext. 60
www.hainesalaska.gov

Carlos Jimenez, Director of Public Facilities
Email: cjimenez@haines.ak.us I Phone: (907) 766-2231
www.hainesalaska.gov

Eddie Bryant, Facilities Maintenance
Email: dculbeck@haines.ak.us I Phone: (907) 314-0649
www.hainesalaska.gov

McCool Carlson Green I Architect

John Weir, Principal Architect
Email: jweir@mcgalaska.com I Phone: (907) 563-8474
www.mcgalaska.com

Jason Gamache, Project Architect
Email: jgamache@mcgalaska.com I Phone: (907) 563-8474
www.mcgalaska.com

The Professional Development Company I Community Consultant

Lenise Fontenot
Email: lenisehf@mac.com I Phone: (907) 314-0456

WSP Flack + Kurtz I M&E Engineer / Energy Consultant

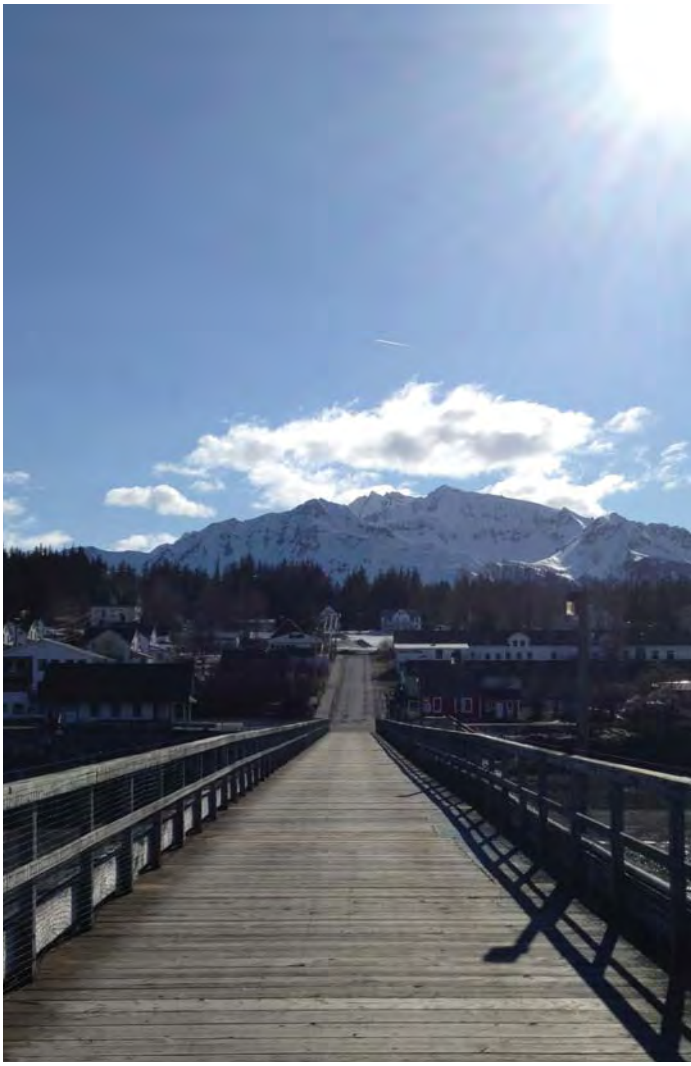
Tom Marseille, Senior Vice President
Email: tom.marseille@wspfk.com I Phone: (206) 883-1220
www.wspfk.com

The Steering Committee and The Haines Community

Extending sincere gratitude to all who contributed to the information in this report!

Table of Contents

Section	Description	Page
1.0	**Planning Report Summary**	**4**
1.1	Introduction	5
1.2	Process	7
1.3	Community Needs Survey	8
1.4	General Condition Assessment	9
1.5	Programing Questionnaire	11
1.6	Facility Appraisal	12
1.7	ROM Estimating	14
1.8	Energy Analysis	15
1.9	Conclusion	15
2.0	**Facility Analysis**	**16**
2.1	Overview	17
2.2	Facility Report Summary	17
2.2.1	Museum and Cultural Center	19
2.2.2	Public Safety	23
2.2.3	Human Resources	28
2.2.4	Administrative Building	32
2.5.5	Pool	36
2.2.6	Visitor Center	40
2.2.7	Chilkat Center	44
2.2.8	Senior Center	49
3.0	**Appendix**	**53**
3.1	Community Needs Survey	
3.2	Sample Questionnaire	
3.3	Sample Facility Appraisal	
3.4	Energy Benchmarking	
3.5	Life Cycle Cost Analysis	
3.6	Cost Comparison Matrix	
3.7	Facility Photos	



Section 1.0 Planning Report Summary

Planning Report Summary

1.1 Introduction

In 2011, the Haines Borough issued a request for proposal (RFP), at the request of the public, for the design of a new community center. Following the RFP solicitation, McCool Carlson Green (MCG), an Anchorage-based architecture firm was commissioned by the Borough to help design the project. Meeting with the Borough Project Steering Committee in Spring of 2012, it was determined that in order to develop an appropriate program for the design of a community center, first the definition of "Community Center" needed to be established. It was agreed that the most comprehensive path for defining the facility would be achieved by conducting a planning exercise that seeks public input and prioritizes community needs with a review of 8 existing facilities. These facilities are highlighted because they programmatically provide a component of common use, which is typically found in a traditional community center.

In order to define the project, 5 key activities were required to assess actual community needs:

1. Determine public priorities by conducting a Community Needs Survey.
2. Validate priorities with a surface-level facility assessment of the 8 Borough-identified community buildings.
3. Gather facility adequacy information, from staff, to inform program area needs. This is achieved by completing a Programming Questionnaire and Facility Appraisal.
4. Develop a Rough Order of Magnitude (ROM) for estimating the Remodel, Expansion, and/or Replacement costs.
5. Analyze energy performance and use that information to predict future operational expenses through a 50-year Life Cycle Cost Analysis (LCCA).

The project is titled 'Haines 2015' by the Steering Committee and in the Fall of 2012, MCG, along with its Haines-based project partner, The Professional Development Company, assembled a planning report that embodies all of the data collected from the highlighted 5 key planning activities. The report combines public surveys, programmatic adequacy analysis, and the energy life cycle cost studies with general condition observations of the 8 facilities. Intended to serve as a source for project development guidance, the report can be used to aid decision making for 'Haines 2015' and develop capital improvement scenarios. This report is not intended to provide a single solution solely determined by MCG, rather a roadmap of choices for the Borough to consider.

This document serves as a starting point for better understanding the relationships between the Borough facilities and their related programs. Program information for this report was developed by compiling data collected from Program Questionnaires and Facility Appraisals. The report also serves as a consolidated perspective of the many facility technical needs and their related costs for improvements.

By conducting facility assessments, we are able to validate many of the Borough's known deferred maintenance items and, additionally, identify any previously unknown deficiencies. Many of these noted conditions will eventually need to be addressed within a facility's useful life span. Some of the items are merely cosmetic, while others are more serious life/safety issues. In addition, there are several facilities that do not comply with ADA standards.

One of the overarching goals of the report is to help the Borough refocus priorities for capital improvements, specifically by highlighting information that will help reduce current operations and maintenance (O&M) costs. The research conducted suggested that the most effective way to achieve cost reductions is by applying a more consolidated approach to maintenance. This may ultimately require an inventory reduction of existing facilities.

The various deficiencies, as they currently present themselves, are broad in nature and, consequently, cause a strain on Borough resources. The 8 buildings evaluated in this report represent a small portion of the total 36 Borough-owned facilities. Consolidation of programs and reduction of building inventory is potentially valuable for not only satisfying community needs, but also for alleviating maintenance deficiencies concurrently. This approach could expand community civic opportunities while lowering operating costs.

The report also highlights the direct value of energy savings that could help Haines save annual operations expenses by replacing or upgrading existing facilities with more energy efficient solutions. The Borough has been diligently attempting to repair many of the known issues and the maintenance staff appears to be providing high-quality service. Unfortunately, some of the facilities are reaching the end of their useful life. Life extension of some of these buildings may no longer be a cost-effective option, which we highlight in the Cost Estimating section of this report. Understandably, there may be apprehension about capital improvement projects, however, the reality of our investigation suggests that doing nothing many be ultimately more expensive than doing something.

Maintenance costs can be offset through renewal or replacement of existing facilities and other potential capital improvement projects. Such projects can help reduce eventual continuous maintenance needs of the older facility inventory. The Borough-owned facilities are, for the most part, 30-40 years old, reaching an important tipping point in the maintenance vs. replacement discussion. By providing comprehensive capital improvement projects, annual maintenance can be reduced or, in some cases all together eliminated.

Human productivity and health can represent one of the largest capital investments by any organization. If public facilities are provided with good environmental quality, occupants in those facilities tend to be more productive, motivated, and efficient about their business. Quality of life can be a highly marketed asset for the Borough of Haines.

1.2 Process

The process for this project was organized by outlining an overall project schedule with the Steering Committee, which includes program and facility staff interviews, site visits with a condition analysis, the needs assessment, public planning collaboration, and an open feedback loop of the data collected.

The following actions were initiated to build community input for completing the pre-development attributes:

1. Meet with Key Stakeholders (Assembly, Steering Committee, and Borough Staff) in August 2012.
2. Institute a community needs survey for facility users in August/September 2012.
3. Tour all 8 identified existing Borough facilities with Maintenance Personnel, Interview Staff, and conduct surface -level condition surveys parallel to additional Stakeholder meetings in August 2012.
4. Have Program Directors complete a Programming Questionnaire and Facility Appraisals in September 2012.
5. Collect supporting facility data from the Borough in September/October 2012.
6. In September/October 2012, analyze data collected during condition survey and plan review.
7. Complete analysis of energy use to support a financial case for capital improvements October 2012.
8. Assemble a Draft Report with supporting Data and Develop Capital Improvement Scenarios in November 2012.
9. Report back to the Key Stakeholders for review and feedback during the November 2012 Stakeholder meeting.
10. Refine the planning report, incorporate Stakeholder input and submit to the Borough in Spring 2013.

This report was custom tailored for the Haines community, however, planning efforts of this scale typically outline the broader impacts of facility conditions, programmatic needs, and roughly estimate costs for associated improvements; meaning that the intention of this effort was to identify an overall needs analysis with cursory detail to establish potential scenarios for achieving 'Haines 2015' goals. The Facility Planning Report can be used to help prioritize future capital improvement projects.

Collaboration with the Borough and the project Steering Committee is critical for making the process transparent with an open platform for comment and guidance. The Steering Committee is an important asset for adding input and building consensus around the various issues, needs, concerns, and costs that are typically involved in an analysis of this magnitude. MCG was in frequent contact with the Borough, both providing and receiving information on the process, giving project updates, and soliciting additional feedback. As the project moves out of the planning report phase and shifts into actualization, we recommend a more rigorous level of collaboration with the Steering Committee, as well as more Public Forums. Public participation is invaluable and essential for moving forward.

The first Steering Committee meetings, involving MCG, was in Haines on April 17th and 18th, 2012, which included a personal introduction of MCG to the community.

A second follow-up meeting took place on August 23, 2012, once a project Notice to Proceed was issued. This meeting officially kicked off the project and included a discussion about the process, establishing the project goals, and provided an estimated schedule. During this meeting MCG introduced examples of similar community-wide facility planning reports, and outlined the specific needs for Haines. The discussion also reviewed which buildings would be included in this custom tailored report, and ultimately how we would all go about completing the task. Both meetings included a public audience who contributed to an open question and answer session.

The third public meeting with the Steering Committee took place on November 25, 2012. This meeting was necessary for sharing a draft summary of the information compiled for the preparation of this report. MCG compared results of the public needs survey, the surface level facility condition analysis, the program questionnaires, facility appraisals, capital improvement cost estimating, and the energy-use study which included the life cycle costs analysis. During this meeting, it was agreed that the next step would include the a review of the draft planning report by the Steering Committee and that they would then provide guidance to the Borough and MCG team on how to proceed. It was also discussed that is was not in the scope of work for MCG to provide a single solution, but rather to continue working with the Steering Committee to develop feasible scenarios for potential capital improvements based on the information provided in this report.

1.3 Community Needs Survey

The Haines 2015 Needs Survey was conducted by The Development Company to help determine the priorities and opinions of the Haines community about current and possible future services provided by the Haines Borough and the buildings associated with them.

1,525 surveys were mailed to all Haines Borough postal customers on September 10, 2012 with a return date by September 21, 2012. 355 surveys were returned, allowing a 95% (with +/-5%) confidence level in a community of 2,620. Refer to the Appendix for a sample survey with completed results.

The survey included six main questions, each with several parts, to help determine the priorities and thoughts of the community about services provided or supported by the Borough and the buildings that house them.

In the results, Fire, Ambulance and Police Services, and K-12 Education were ranked significantly higher than the others listed in both the order of importance to the community and which buildings should theoretically be built first.

When asked about whether services meet the needs of the community, the survey showed a high level of satisfaction by very large percentage of excellent or good and very low number of poor ratings.

When asked what new services or facilities the Borough should provide, a very strong voice for taking care of what the community already has and not building anything new came through: about sixteen percent up to possibly twenty-seven percent. However, those that felt the Borough should provide more wrote a total of three hundred and nineteen other ideas. Eighteen-and-a-half percent asked for an indoor recreation center.

When asked to allocate limited funds to buildings, the Fire, Ambulance & Police Building once again came out on top. The second and third places were given to the Chilkat Center and a New Recreation Center. But it is important to note that the allocation of average dollars was less than $2.00 out of $10.00 on these projects; demonstrating a need for a conservative and limited approach.

When asked about energy efficiency, low on-going maintenance costs, ease of parking and snow removal the community showed over 90% agreement in these areas being a top priority in borough owned buildings. A slightly lower number, but still a clear majority of seventy percent, thought that building attractiveness should be a priority. Overall, the Needs Assessment Survey had a strong return and consistent voice.

The complete Survey Report can be found in the Appendix section of this document. Results from the survey have been used as community importance factors for priorities matrix located in the Section 3.

Haines 2015 Survey

1. Please Rank the following borough provided services in order of their importance:
1= Most Important 11=Least Important

___ Police, Ambulance & Fire Protection
___ Administrative Services: Borough Offices, Mayor, Planning, Payments
___ K-12 Education
___ Swimming Pool
___ Recreation Services: Exercise, Parks, Trails, etc.
___ Library Services
___ Museum Services
___ Cultural Services: Theater, Music, Arts
___ Senior Services
___ Visitor Services
___ Pre-School Education

2. If all the above services needed new buildings, in order of importance, which four would you build first?
1.
2.
3.
4.

3. Please evaluate the following borough provided services:
+ Adequate - Needs Improvement

___ Police, Ambulance & Fire Protection
___ Administrative Services: Borough Offices, Mayor, Planning, Payments
___ Swimming Pool
___ Library Services
___ Museum Services
___ Cultural Services: Theater, Music, Arts
___ K-12 Education
___ Senior Services
___ Visitor Center
___ Pre School Education
___ Recreational Services: Exercise, Parks, Trails, etc.

4. What NEW services or facilities would you like to see the borough provide?

5. In the list of following borough buildings imagine they all need major repairs, you have only $10.00 to spend, where would you put your money?
You may divide it up however you like, but the total must equal no more than $10.00.

___ Police, Ambulance & Fire Building
___ Administrative Offices: Borough Offices, Mayor, Planning, Payments
___ Library
___ Chilkat Center
___ Visitor Center
___ Human Resource Building (Pre-school)
___ Swimming Pool
___ Sheldon Museum
___ Senior Center
___ Brand New Recreational Facility

6. Please rate the following priorities in future borough buildings:

Ⅱ Very Important Ⅱ Somewhat Important – Not Important

___ Energy costs & efficiency
___ Low on-going maintenance costs
___ Nice appearance
___ Ease of parking & snow removal
___ Centrally located to downtown

Survey Sample

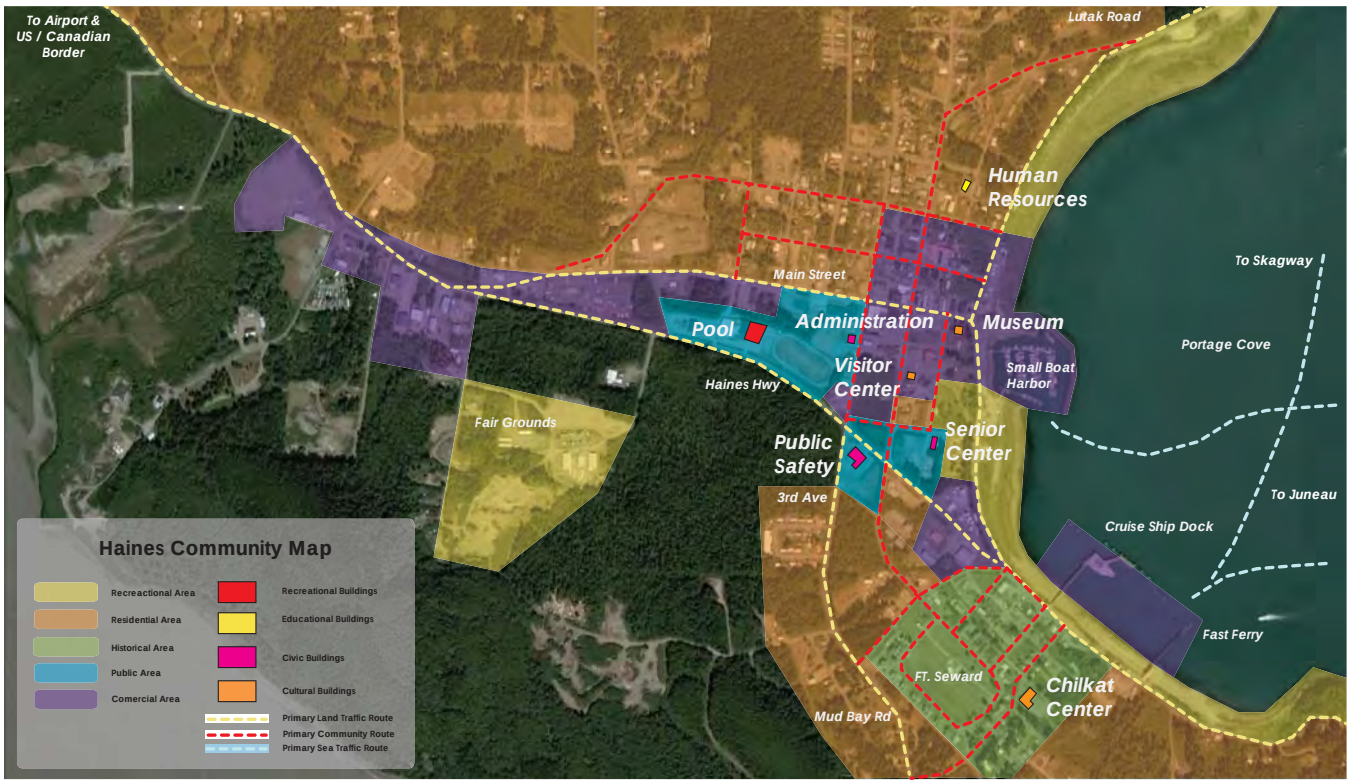
1.4 General Condition Assessments

MCG engaged the process of assembling the planning report with an investigation of 8 public facilities identified by the Borough. These facilities were all identified because of their common programmatic attributes that could be potentially combined with a future community center. These identified buildings were also included because of synergies discovered between the facility types, as well as their programmatic area needs.

The condition assessment for each building began with a site visit, which was a 2-day effort, occurring parallel to the August 2012 Steering Committee meeting in Haines, and included the facilities listed here:

- Sheldon Museum and Cultural Center
- Public Safety
- Human Resources
- Administrative Building
- Pool
- Visitor Center
- Chilkat Center
- Senior Center

MCG was led on a tour of each facility with Borough facility personnel. The tours were quick walkthroughs, allowing for basic observations to be made of surface-level conditions. During the site visits MCG also collected a large photographic library of information to support future work. The staff was on hand to provide access to all of the spaces and share knowledge of each of the building's maintenance issues. During a majority of the visits, we were able to collect additional information by interviewing other facility and program staff. They shared details about the facility and program efficiencies, deficiencies, needs, as well as their perspective of physical conditions.



The time at each site was used to conduct a general surface-level condition assessment and did not explore deeper potential issues, such: as subsurface conditions, non-visible moisture issues, hazardous material surveys, mechanical equipment conditions, nor detailed structural analysis. The facility tours MCG completed were cursory based on visual observations and there may be a need, on a case-by-case situation, for a more thorough and in-depth inspection to be completed for each building, depending on its intended future use. In some cases, detailed facility assessments had already been completed in previous studies and will be referenced in this report. Individual information specific to each facility can be found in Section 2. Some photos from the site visits have also been cataloged in the Appendix of this report for general reference.

Through the facility condition assessment, feedback was used to maintain transparency and build consensus at the forefront of the project. Content presented to the Steering Committee is available for review and dissemination within the Borough Departments and are intended to further build on the established feedback loop on a constituent review basis.

Collateral benefits of this analysis produced information that is useful to the Borough for the overall 'Haines 2015' planning efforts. MCG used existing hard copy drawings provided by the Borough of various dates condition, while also visiting the facilities to validate each space layout. Creating updated electronic drawings would have been an added value to the Borough, however, this was excluded from this scope of work. For future capital improvement projects, we recommend updating existing plans into electronic drawings. This will greatly help as planning tools to aide analyzing areas and additional code study information. These backgrounds could also be used to help identify scalable solutions throughout the planning process and should be used at the next level of development as the project moves forward.

1.5 Programming Questionnaire

The programming questionnaire is a critical component of this project and looks closely at programmatic areas of each building. Understanding how the space is used, helps us develop program requirements and identify how they relate to other space types. Additionally, this shows us which areas are not currently being accommodated. In some cases, the existing areas may even be identified as excessive. An example might be an area in an existing building that is occupied by storage for items that could be disposed of in an effort to reduce building program area needs.

In order to effectively complete this part of the study, it is essential to have full user participation. The questionnaire is created to reveal useful information that only the occupants of each specific facility would understand. This effort conceptually looks at the functionality and efficiencies of a facility and could bridge programmatic spatial adjacencies. Results from the programming questionnaire provide a basis of space needs for each program. These program area sheets were validated and refined through staff feedback, comparative space analysis, and practical planning experience.

The information provided by the staff helps us better understand what spaces are perceived to need an update and which facilities are in need of more space to include current or future program needs. We are then able to later assign program area with a rough estimate of cost of construction per square feet. We are also able to use this information to help identify potential synergies in programmatic areas that may possibly be combined with other Borough programs or facilities that are also being analyzed in this report.

Space Programming Questionnaire

Haines 2015

Department/Division Name:_____

For the upcoming meeting we will be covering the following questions (among others). Please take an opportunity to review the questions and prepare for a discussion of the responses at the meeting.

1. Please provide a brief overview of the organization and function of your department.

2. What other departments and services should your department be near? What are the advantages of these adjacencies?

3. Do you have any specialized site needs, such as material or vehicle storage areas?

4. What technical or programmatic/regulatory requirements do you anticipate in the upcoming decade that will affect your department?

Space Programming Questionnaire

Haines 2015

Department/Division Name:_____

Program Space Summary Worksheet

Please list the spaces you need to support your current and future operations (offices, storage, conference rooms, etc.) – do not include restrooms, hallways and other general building support spaces. If you know how much space is required list that, if not we will help you figure it out. List both existing spaces and additional spaces needed to support an efficient/effective department. Be prepared to discuss your needs and any other facility requirements that may be important to the master planning process.

SPACE NAME	Number of Staff	Area Required	Existing Building	Room Number	Other Facility Requirements

PROGRAM QUESTIONNAIRE SAMPLE

1.6 Facility Appraisal

The other tool used in this process of data collection is the Facility Appraisal. This exercise is an additional method for categorizing priorities of an individual facility. The collected data can later be reused for evaluating long view community goals and needs. The appraisals are facilitated by MCG. Responsible staff as well as Borough maintenance staff are responsible for completing the evaluation. The derived information is used to support the relative information developed in the previously mentioned Programming Questionnaires. Combined, these two documents help show us how the facilities are used, how they could be used differently, and how to rank the information in a scale which establishes a common ground for making comparisons to other public facilities, regardless of varying sizes, uses, or conditions. This important tool collects and describes programmatic attributes on each of the facilities into a reference format. They are tools for articulating the basic adequacy of programmatic relationships and their unique characteristics. Major categories identified for analysis include:

- Activities and Space usage - informing what activities occur in the department
- Existing characteristics - allowing a quick reference to what we learned in the interviews
- Spatial Relationships - provides information of space adjacencies
- Finishes - provides guidance on what type of finishes are ideal and what to avoid
- Additional Considerations - utility, services, and the site

The attribute sheets used in the Appraisals were reviewed with the same scrutiny as the validation process of the program requirement sheets used in the Programming Questionnaire.

Appraisal Guide for Public Facilities

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1-29%	Poor 30-49%	Borderline 50-69%	Satisfactory 70-89%	Excellent 90-100%
5	0	1	2	3	4	5
10	0	2	4	6	8	10
15	0	3	6	9	12	15
20	0	4	8	12	16	20
25	0	5	10	15	20	25

Appraisal Summary

SECTION	POSSIBLE POINTS	TOTAL EARNED	PERCENT	RATING BY CATEGORY
1.0 The School Site	100	0	0%	0
2.0 Structural and Mechanical	200	0	0%	0
3.0 Plant Maintainability	100	0	0%	0
4.0 School Building Safety & Security	200	0	0%	0
5.0 Program Adequacy	200	0	0%	0
6.0 Environment for Program	200	0	0%	0
TOTAL	1,000	0	0%	Borderline

Facility Appraisal for Haines 2015- x Building 8/22/2012 | pg. 2

1.0 The Site

100 Points

1.1	Site is large enough to meet present and future needs.	25	0
1.2	Site is easily accessible and conveniently located for the present and future population.	20	0
1.3	Location is removed from undesirable business, industry, traffic, and natural hazards.	10	0
1.4	Site is well landscaped and developed to meet needs.	10	0
1.5	Outdoor special use areas are separated from streets and parking areas.	10	0
1.6	Topography is varied enough to provide desirable appearance and without steep inclines.	5	0
1.7	Site has stable, well drained soil free of erosion.	5	0
1.8	Site is suitable for special outdoor use.	5	0
1.9	Pedestrian services include adequate sidewalks with designated crosswalks, curb cuts, and correct slopes.	5	0
1.10	Sufficient on-site, solid surface parking is provided for faculty, staff and community.	5	0
	TOTAL – THE SITE	100	0

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1-29%	Poor 30-49%	Borderline 50-69%	Satisfactory 70-89%	Excellent 90-100%
5	0	1	2	3	4	5
10	0	2	4	6	8	10
20	0	4	8	12	16	20
25	0	5	10	15	20	25

Facility Appraisal for Haines 2015- x Building 8/22/2012 | pg. 3

FACILITY APPRAISAL SAMPLE

Planning Report Summary

At this point in the process enough core material was available to begin to form some clear direction on progress. Defining key issues was a crucial step in tailoring our collaborative efforts, which led to two ideas:

1. Maintenance Issues and Code Compliance issues focus on a “fix what you have” approach.
2. Operational Deficiency issues focus on solving department deficiencies and improving needs of the program. This includes the realization of facility adequacy for the program.

Maintenance Issues and Code Compliance started with an evaluation of the existing facilities and an assessment of the magnitude of the problem in terms of “maintenance vs. replacement”. Borough Facilities evaluated in this study range in the 70 to 30-year span, where some are nearing or have arrived at the end of their serviceable life. Providing ongoing maintenance to aging facilities and addressing the major maintenance and code-compliance items are the first line of defense and a more equitable fiscal solution to a facility replacement option, unless the facility is not meeting programmatic needs, or has greater concerns which continue to exhaust funding and resources. Other opportunities available with providing ongoing major maintenance projects include:

- Reducing energy consumption by upgrading boilers, mechanical systems, lighting systems, roofs, wall envelopes and windows, further reducing the operational “bottom-line”.
- Providing repairs that reduce costs related to collateral damage or system failures.
- Address Life Safety and Health issues, either structural or environmental.
- Protect the large capital and operational expenses of Borough services.

As part of the issue-development process related to the Operational Deficiencies, we identified a few useful strategies to help focus efforts and craft solid solutions. We looked at space requirements related to the programs, improving the functionality and productivity of the departments, capitalizing on existing space efficiencies and a broad planning perspective on the more ideal arrangements to improve Borough services.

1.7 Rough order of Magnitude (ROM) Facility/Program Improvement Cost Estimating

Rough cost estimates are provided on a conceptual level. These are established to provide a fiscal sign post and help to weigh the cost-benefit for each potential solution. It is important to understand that costs estimated have the following conditions:

- Costs are estimated on a rough cost-per-square-foot basis
- Costs-per-square-foot are adjusted based on building type and scope of work
- Costs are based on recent data from projects estimated regionally
- These are rough order of magnitude costs ("Ball-Park") and costs will need to be validated by a professional cost estimator at the next stage of development
- Costs shown are the total estimated project costs
- Costs will need to be adjusted depending on deployment of Capital Improvement Projects
- Potential cost savings may be realized through project consolidation

To develop a metric for evaluating rough costs for upgrades, we first compare area information from the Programming Questionnaire, highlighting the 'Required Area' and 'Existing Area'. This shows us what is actually needed for the facility to be adequate for the intended use. We are able to apply a cost-per-square-foot estimate to the 'Required Area' which shows us what it would cost to add space. Then, we look at how much area, again influenced by results from the Programming Questionnaire, should be included in a remodel. We estimate the cost by applying a rough cost-per-square-foot to the area identified for remodel. A remodel will vary depending on the facility. Generally, these are cosmetic surface treatments, as well as finish replacements, along with some ADA upgrades. In facilities that require energy efficiency upgrades, ADA upgrades, HAZMAT abatement, and structural repairs, the figures will be much higher.

With the base information in place, we can then analyze various approaches for packaging a potential capital improvement project. In this report, we look at: Additional Program Area Required, Remodel with Required Area, Replacement with Current Program Area, and Replacement with Required Program Area.

To elaborate on the cost per square foot, MCG uses a number of resources to establish reasonable cost-per-square-foot numbers as a basis for this evaluation. We utilized recommendations from a professional estimator who has worked regionally in Alaska for 20+ years.

Cost benchmarks recommended for Haines includes (actual may fluctuate):

- New office (or similar)-type construction at $450/SF
- Remodel of office (or similar)-type construction at $200 /SF
- Addition of office (or similar)-type construction to existing at $500 /SF
- Estimate efforts were broken down by scope of work that looked more closely at the specific anticipated work, reflecting the effort; however most construction types can be assumed as similar for the purpose of this exercise.
- All construction is assumed to be basic materials and minimal design.
- For a local perspective, however, the Haines Library at 8,400 SF reportedly costs roughly $2.5M to construct in 2003 (project costs), equaling $300/SF. If we escalate that cost at the market rate escalation at 6%+ a year (not accounting for the upswing years where escalation was at 8-9%) the cost for that Library today would be around $400-500/SF.
- The Cordova Center currently under construction is 34,000 SF and estimated to be $36,000,000 equaling over $1000+/SF for new construction; however, it sits on a challenging site. Using it as reference is only to demonstrate the potential range of cost for similar project types.

The Steering Committee will be encouraged to provide important feedback for this initial analysis. It's crucial to remember that this effort is intended to establish a Rough Order of Magnitude (ROM) and the specificity of final design solutions will move projects to the next level of development. Information developed in the cost analysis is used in the cost matrix, which is used to help identify the cost of pursuing certain project development strategies.

1.8 Energy Analysis

In order to create a digestible business case for Capital Improvements it was critical to find out where major expenditures (Utility Costs) in Operations and Maintenance of the existing facilities were being consumed. We first looked at the Fuel and Electric bills/usage for each facility over the last year. By calculating an annual average and dividing that number by the square footage it was possible to determine the Energy Use Index (EUI). After establishing the EUI of each facility, it was then possible to compare facilities of different sizes, use, construction, and type, on a fair scalable metric.

It then became clearer as to which of the facilities were more or less energy efficient and it is possible to rank those. This directly contributed to the priority rankings for taking corrective action in reduction of maintenance cost. In some cases, this may suggest improvements to the building envelope, mechanical system, or even fixture replacement. Understanding where the physical deficiencies lay we can look at comparable cost for facility replacement or upgrades.

For drawing comparisons between facility replacements vs. repairs, the exercise calculated a 50-year (minimum expected life of new construction) life cycle cost analysis (LCCA). In some cases, the utility savings over 50 years would pay for the expense of replacing the facility. Determining what the maximum return on investment could potentially be for a facility, you should also consider trading the quality of the facility (or quality of life) savings vs. total project costs. The cost of running a facility as-is (as it would be if it were upgraded to current standards) was calculated, and we also looked at how it would perform if reconstructed with high performance design practices.

1.9 Conclusion

Having collected data from the five planning activities, we were able comparatively evaluate all of the information once complied into a matrix. The information was a hybrid of public input and technical investigation, which identified priorities of community needs.

The top three projects identified for capital improvement where:

1. Public Safety
2. Senior Center
3. Chilkat

Note that the Senior Center ranked higher due to higher public score and poor energy performance. However, the Senior Center ranked highest in adequacy and highest in condition. Assuming an improvement in energy performance with the new boiler, this would fall lower in the overall ratings and the Pool (Recreation) would rise to the third spot. Focusing on potential energy savings through renovation or replacement, the Pool scores the highest and would also replace Sr. Center in the top 3.

In conclusion, the results suggest two approaches:

1. Consider a shared use of new or existing buildings, and consolidation of programs with a reduction in facility inventory, concentrating limited funding for CIP and O&M on a smaller focus, while increasing the quality of community services.
2. Invest in corrective solutions with greater potential for increased savings over a longer period of time. This means that it is feasible to expend capital now on replacement, consolidate facilities, reduce inventory, and save more money on O&M over the projected 50-year analysis. We like to think of this as a paid-from-savings approach.

A complete Comparison Matrix is included in the Appendix.

Section 2.0 Facility Analysis

Facility Analysis

2.1 Overview

This section is developed to provide a quick reference and overview of the main tasks completed to collect, build, and assemble data for the evaluation of each of the eight facilities in this report. The information has been broken down into separate categories for each respective facility.

2.1 Facility Analysis Summary

Each of the eight facilities in this report contain the follow sub categories of information:

- Quick Status
- General Condition Assessment
- Deficiencies
- Community Needs Survey
- Programming Questionnaire
- Facility Appraisal
- Rough Order of Magnitude (ROM) Estimating
- Energy Analysis

These sub-categories are congruent with the key pre-development tasks identified in the Summary. They play an important role in the process, building a broad and tangible database of information that reaches beyond the cosmetic condition of a facility to consider public sentiment and measure that against public funding, along with actual technical conditions that will need to be addressed, regardless of a building's intended future use.

Quick Status
Here, we list the basic information relevant to the facility. The purpose is to have a quick overview of the core components of a building, which are generally the areas that play the largest factor in operations and maintenance cost.

General Condition Assessment
This is an abbreviated narrative of the surface-level condition assessment. The narrative is developed from notes taken during the on-site walk-through, and interviews with facility maintenance personnel and staff. The information may also be cross-coordinated in other sub-categories, such as deficiencies and programming. The narrative serves as a summary of the general condition.

Deficiencies
Each of the major maintenance items have been listed in this section, either as completed, or outstanding. Future maintenance and operations will need to consider each of these as a cost for sustaining the facility. At some point in time, these will be a cost item due to the need for repairs. For the purpose of our study, we have factored these into the square foot cost of the estimated building remodel in the ROM estimating sub-category. The cost of each of these items is not broken down individually, but rather estimated in the larger ROM, suggesting efficiency in completing them all at once.

Community Needs Survey
Again, we provide an abbreviated summary of what was discovered regarding the public perception of the importance of each facility. The results are used as a public importance factor in the project cost comparison analysis. This will help Haines decided how to consolidate program services, and when that should occur in a Capital Improvement process.

Facility Analysis

Programming Questionnaire

The information in this section is provided by facility staff. Narratives were edited to fit the format of this report, and the information developed from the Questionnaire was used to build a program area analysis in the ROM Estimating Section. This helps us better understand what program areas are under-utilized, and which are under-served. Essentially, we are able to evaluate the facility's adequacy relative to its program and use. In many cases, we see potential for overlapping and consolidation. Following the collection of data generated by the Questionnaires, the Steering Committee requested additional information regarding adequacy of parking, which was added in this section of the report. This information was also provided by facility staff.

Facility Appraisal

This section provides a summary of how the facility scored in an appraisal completed by the facility staff. This is a slightly more measurable response to similar questions asked in the Programming Questionnaire, however, it goes a step further to see how the condition of the space affects the use of the building.

ROM Estimating

Here, we present information collected from the General Condition Assessment, Deficiencies List, Programming Questionnaire, and the Facility Appraisal. The information is combined to look holistically at rough estimated costs associated with Remodeling a Facility, with the understanding that it would include all outstanding items on the deficiency list. We also estimate what it would roughly cost to expand program area to meet current needs. This information can be used to develop a better understanding of the financial impacts associated with moving forward with capital improvement projects.

Energy Analysis

The energy analysis is a collection of utility cost and use from the previous year of operation of each facility identified in the report. Fuel oil and Electricity was converted into a comparable kBtu and then divided by the area of the building, revealing how efficiently the facility operates. With that information, we look at how that building would perform if it were reconstructed to current standards and, again, with a more aggressive approach for achieving high performance. We can see the anticipated energy savings, however, to better understand of the effect on public spending on operations and maintenance; we ran the same numbers into a Life Cycle Cost Analysis of 50 years. This gives us a better understanding of the long-term benefits of immediate investing in capital improvements.

Facility Analysis

2.2.1 Sheldon Museum and Cultural Center

Quick Status

Area	6900 sf
Condition	Fair
Year Built	1979
Heat Source	Boiler / 33 / Good Condition
Fuel Tank	Above Ground
Construction	Wood Frame
Roof Type	Metal / Fair Condition
Siding	Hardi Plank / Fair Condition
Sprinklered	Yes
Occupancy	A-3 (Assembly) / B (Business)

General Condition Assessment

Despite housing an excellent collection of local cultural artifacts, the Museum is overall in fair condition. It has experienced its fair share of maintenance calls and needs improvements.

The most noticeable issues are needs for repainting the building or considering an alternative material siding to replace what is there. Local environmental and climate conditions are harsh on the existing material and it requires maintenance, mostly frequent painting for its up-keep. The design of the building's exterior, however interesting, causes a number of challenges, such as ice-build up in the drainage and snow/ice accumulation at the entry. These actions are safety hazards and require maintenance calls for removal. Additionally, the detailing for water drainage from the roof is a probable cause for structural degradation. Window replacement would increase interior comfort, as well as energy performance.

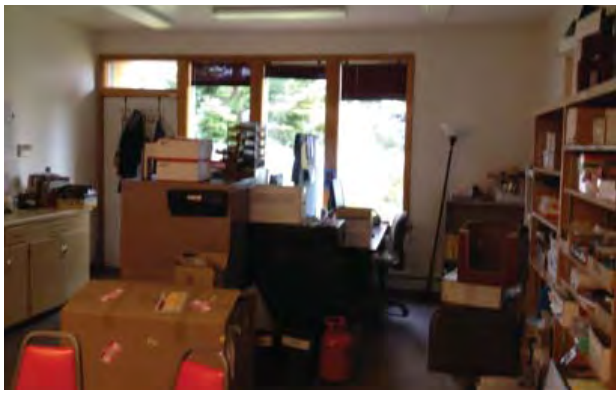
On the interior, the aesthetic is dated and in need of updating, which could be simply achieved with finish material replacement and painting. More serious issues are the accessibility for disabled visitors due to door hardware, clearances and overall accessibility to the various levels of the building. Additionally, the bathrooms do not comply with current ADA regulations. Significant alterations and a remodel would be required for accessible design compliance. An elevator, along with restroom reconfiguration, is essential. If the facility were to be renovated, it should be brought up to current IBC Building Codes.

Programmatically, the building requires additional archive and artifact storage space. Offices are short of space and power and data supply do not meet current needs. The lower level, which was originally designed as a caretaker's apartment, does not provide an efficient configuration for the current space use as an office.

Structurally, there are signs of water-infiltration and potential stress on the exterior walls, which may be caused by wind pressure on the roof. Due to the date of construction and visual observation of suspicious materials, this facility may contain hazardous materials. This, along with water issues, also raise questions about air quality.

Exterior - Main Entry

Interior - Exhibit Area



Interior - Office

Exterior - Street Access

Facility Analysis

Deficiencies

Repairs Recently Completed:

- New carpets
- Repaired humidifier
- New fuel tank
- Installed Tiger loop on boiler

Outstanding Repairs Needed:

- Replace roofing
- Repaint building
- Replace or Repaint Hardi Siding
- Repair or Redesign drainage system
- Repair heat zoning issues
- Replace outside concrete stairs
- Replace exterior door hardware
- Install dead bolt on basement exterior door
- Install new door bell system
- Lighting Upgrades
- Install more efficient Humidifier

Community Needs Survey

For detailed information on how the Museum ranked on the public survey, please refer to the document in its entirety, which can be found in the Appendix of this report. Overall, the Museum scored fairly low on the priority list, which may be the result of its more frequent use by visitors and not by local citizens. However, the Museum can serve as an important support to tourism by showcasing the history and culture of the community. It may be a good opportunity to consolidate services with other facilities that scored higher on the survey.

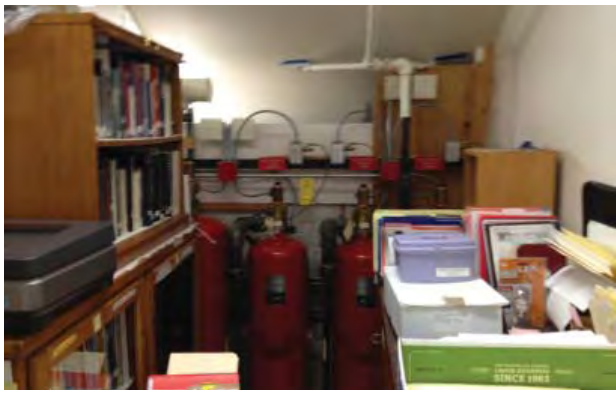
Programming Questionnaire

The museum services the community as the local history archive. The staff maintains exhibits that represent a broad variety of local history, culture, and art. Work at the museum includes maintaining a historical archive and assisting researchers. The museum is used by teachers to enhance their curriculum at the school and facilitates a local National History Contest. Space is made available for public meetings and other community programs. Exhibitions by local artists are shown in the Hakkinen Gallery.

In terms of redefining the museum and improving its operations, a location closer to the library could share infrastructure, a classroom, non-artifact storage, and perhaps staff and volunteers. Efficiencies could demonstrate less overlap of programs. The Museum and Library already collaborate on partnership and program coordination. The library occasionally uses the museum's archive for photographs and historical information for their enhancement grant programs.

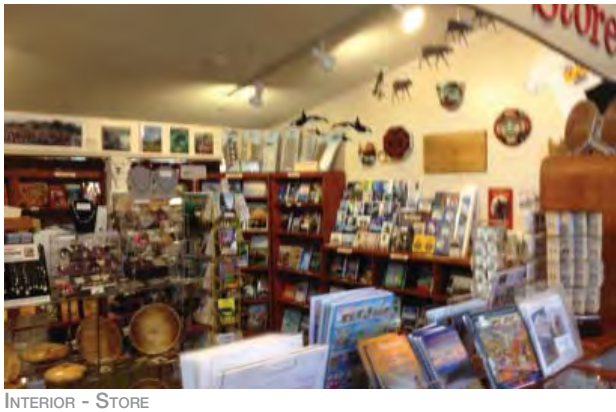
Spatial deficiencies include a need for more storage; more offices; a conference room and/or classroom; and expanded workroom. Sufficient artifact and archival material storage is essential for the purpose of the building's existence and to provide those spaces with improved climate control. A room or shed for exhibit preparation would be beneficial. Power and Data upgrades, along with access to technology such as telephone, computer and internet, are needed.

Interior - Exhibit Area



Interior - Archive

Interior - Storage



Interior - Store

Facility Analysis

During the summer season, Museum parking is on-site in front of the museum and off-site across 1st Avenue except on days when a cruise ship is in port. During those times, the off-site parking area across 1st Avenue is reserved for the shuttle. Staff parking during the summer season is on the 1st Avenue behind the bank. In the winter season, off -site parking behind the bank is unavailable because it is needed for snow removal and for access to the lot for snow storage.

The parking areas are usually cleared of snow, allowing for adequate parking during in the winter season. The only time that more space is needed occurs when the Museum hosts a larger public event. Programs, however, are usually in the evening and visitors find additional parking off-site on 1st Avenue and at the bank parking lot.

Facility Appraisal

Results from the facility appraisal completed by the Museum Director indicated that the condition of the building is categorically across the board 'Borderline' in terms of condition and meeting needs of the space utilization in the facility. The building's score was 59% and each individual category received a 'Borderline' rating.

Appraisal Summary	SECTION	POSSIBLE POINTS	TOTAL EARNED	PERCENT	RATING BY CATEGORY
	1.0 Site	100	69	69	Borderline
	2.0 Structural and Mechanical	200	109	55	Borderline
	3.0 Maintainability	100	66	66	Borderline
	4.0 Safety	200	132	66	Borderline
	5.0 Program Adequacy	200	100	50	Borderline
	6.0 Environment for Program	200	116	58	Borderline
	TOTAL	1,000	592	59	Borderline

ROM Estimating

Program Area	Required Area	Existing Area	Existing Area Requiring Remodel	Additional Program Area Required	Remodel w/ Required Area	Replacement w/ Current Program Area	Replacement w/ Required Program Area
Exhibit Galleries	3,500	3,000	3,000	500			
Offices	800	720	720	80			
Reception	500	280	410	220			
Restrooms	300	180	180	120			
Archive/Artifact/Storage	1,500	975	460	525			
Gift Shop	780	780	780	-			
Classroom / Conference Room	450	-	-	450			
Workroom	300	280	280	20			
Mechanical	175	175	-	-			
Elevator	100	-	-	100			
Area Subtotals	8,405	6,390					
Total Area	9,077	6,900					
Circulation	672	510					
Parking							
Totals	9,077	6,900	5,830	2,015			
Estimated Project Cost / Sf			$250.00	$500.00		$450.00	
Estimated Total Project Costs			$1,457,500.00	$1,007,500.00	$2,465,000.00	$3,105,000.00	$4,112,500.00

Facility Analysis

Energy Analysis

Building Energy Use and Cost

	Existing (From Utility Bills)						
Building	Area	Annual kBtu	Annual Cost	EUI	% Better than Average	Elec	Fuel
Museum	4753	493137	$13,604	104	-174%	14%	86%

	Existing (Predicted from Current Fuel Rate)		Average Building for the Region	
Building	EUI	Annual Cost	EUI	Annual Cost
Museum	104	$17,384	38	$6,400

	Typical New Construction					
Building	EUI	Annual Cost	Annual Cost Savings			
Museum	25	$4,300	$9,304	33%	Reduction	Reduction

	High Performance					
Building	EUI	Annual Cost	Annual Cost Savings			
Museum	11	$2,000	$11,604	70%	Reduction	Reduction

Notes:
Average buildings based on EnergyStar Target Finder results (CBECS database)
Typical New Construction meet ASHRAE 90.1-2007 (Typically about a 33% Reduction from Average)
High performance meets 2030 Challenge for 2020 (70% reduction from Average)
All estimated costs rounded to nearest $100
Pool energy use based on Target Finder results combined with savings WSPFK has previously calculated for typical pool mechanical designs
Existing (Predicted from Current Fuel Rate) annual costs take the existing utility bills and scale up the annual cost from the fuel rate of $3.40 per gallon to $4.63 per gallon

Interesting Items:
Target Finder pool EUI is a calculated value rather than a sampled value. It is lower than some of our other calculations indicate for pool energy use.
Pool EUI seems low. Jason indicates humidity levels are very high. Could be sacrificing comfort for energy savings.
Visitor center EUI seems high
Fuel Oil costs much less per Btu than electricity
Adjusted Energy Costs:
Previous Fuel: $3.40 per gallon = $0.0245 per kBtu
Current Fuel: $4.63 per gallon = $0.0334 per kBtu
Elec: $0.172 per kWh = $0.0504 per kBtu

Life Cycle Cost Analysis

Inputs		
Inflation Rate	7.5%	
Discount Rate (Real)	3.0%	
Utility Escalation Rate (Real)	2.0%	
Duration of Study	50	years

Building	Existing	Existing (Predicted)
	Annual Cost	Annual Cost
Museum	$13,604	$17,384

Building	Typical New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Museum	$11,000	$6,384	$2,186,000

Building	High Performance New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Museum	$4,900	$12,484	$4,274,500

Notes:
Existing (Predicted) Costs adjust reported fuel oil bills to current fuel oil rates
DOE Inflation Rate is 3%.
DOE Discount Rate is 3%, typical discount rates vary from 3%-6%
FEMP Utility Escalation Rate (Real) for 70% Fuel Oil / 30% Elec is 0.59%. Rate tends to be skewed low. Typical rates 2%-5%
Life Cycle Cost Savings rounded to nearest $500

2.2.2 Public Safety

Quick Status

Area	12656 sf
Condition	Poor
Year Built	1980
Heat Source	Boiler / 1 / New
Fuel Tank	Under Ground
Construction	Wood Frame
Roof Type	EPDM / Good Condition
Siding	T-111 / Fair Condition
Sprinklered	Yes
Occupancy	A-3 (Assembly) / B (Business) I-3 (Institutional) / S-1 (Storage)

General Condition Assessment

Reportedly, the Public Safety building was originally designed as a temporary structure, but has found a permanent home and may be nearing the end of its useful life. This facility ranks as one of the community's most important structures, and, in a code study, will show a high structural importance factor as it needs to be the last building standing in the case of a major disaster. The facility houses all of the Boroughs first response emergency vehicles, dispatch center, jail, morgue, assembly chambers and other offices. It does not comply with ADA requirements for public facilities and a major renovation would require significant code (IBC) upgrades, including egress, occupancy separation and structural upgrades.

Construction incorporates modularly designed building units on wooden pile foundations. Maintenance reports of structural issues due to water infiltration and related material degradation. The crawl space shows signs of seasonal water flow from underground water sources. This can lend itself to unhealthy air quality issues and low energy performance due to damaged insulation and structural fatigue.

It is assumed that the facility was constructed in accordance with the 1976 edition of the Uniform Building Code. According to the ASCE Seismic Evaluation of Existing Buildings (ASCE 31), the 1976 Uniform Building Code is the benchmark code for timber framed buildings. (Source: PND) If the building was constructed prior to that Code, it is likely that the building is deficient laterally and will require upgrades. Parallel to this report, PND conducted a separate Structural report which should be referenced for further information about this facility.

Interior cosmetics could use updating and some materials appear suspicious for containing hazardous compounds. The facility should be tested and removed of HAZMAT, if present. Overall, the vehicle bays appear to be undersized for Borough vehicles, with minimal clearance for parking and maintenance. The garage bay does not appear to be properly separated from the rest of the building per current building code (IBC 2009) requirements. Storage for EMS is not sufficient, and other upgrades could include increased drainage and wash bays. An overhaul of the dispatch system, along with updating of the jail's holding cells and prisoner processing are needed to meet current standards.

Exterior - Street Access

Interior - Vehicle Bay

Interior - Dispatch Office

Crawl Space

Facility Analysis

The exterior shows signs of degradation and is need of repainting. There are several areas where water has damaged the exterior envelope of the building and, in some cases, exterior materials have already been replaced. Window, Door, and Door Hardware replacements should be considered. The roof appears to be in good condition, however, original construction drawings indicate that the roof structure may be undersized for snow load conditions in Haines.

Exterior - Rear

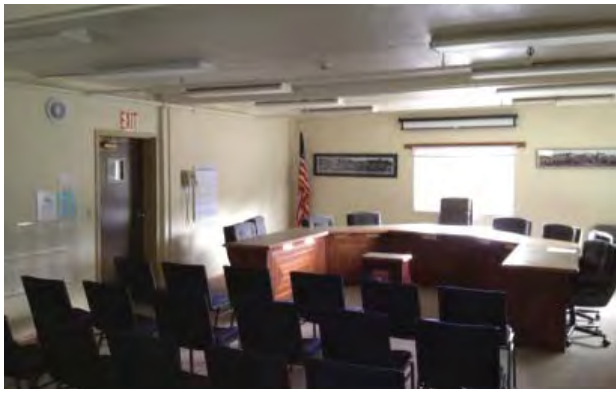
Deficiencies

Repairs Recently Completed:

- Continuous domestic copper pipe, leak repairs
- Rot repairs made in fire hall kitchen floor
- Iron waste pipes, ongoing repairs
- Rot repair of south wall and porch
- Replaced police department exterior doors
- Repaired rotted floor at upstairs bathrooms
- Replaced assembly chambers windows
- New carpet and paint in assembly Chambers
- New T-8 light fixtures Police department an upstairs offices
- New Boiler
- New Kitchen Cabinets

Outstanding Repairs Needed:

- New domestic copper piping
- Address major rot issues
- Replace all exterior doors and windows
- Replace all iron waste piping
- Install ventilation in crawl space and repair insulation
- Heat Zone repairs
- New Dispatch Equipment (outdated and frequent failures)



Interior - Assembly Chamber

Community Needs Survey

For detailed information on how the Public Safety Building ranked on the public survey, please refer to the document in its entirety, which can be found in the Appendix of this report. Overall, the PSB scored very high across the board which suggests the public recognizes is importance and need of attention. It may be a good opportunity to begin a capital improvement plan with this facility.

Interior - Vehicle Bay

Programming Questionnaire

The Public Safety Building is a vital component of the Haines community as it holds the Fire Hall, Police Department, Public Facilities offices, as well as the Haines Borough Assembly Chambers. The Police Department lacks needed program area and the Jail/Booking areas are inadequate. The Fire Department needs more storage areas for equipment and supplies, a Physical Training area, larger bays for vehicle capacity and is specifically challenged with undersized bay doors. The Assembly Chamber is a sufficient size, however, requires ADA accessible restrooms.

This building should, ideally, be near the Borough Administration Building for improved access to staff and local government records/ resources. Site needs will mandate consideration of vehicular access. Upgrades to power, data, and telecommunications are required, along with a more advanced communication system for dispatching emergency services. The building is woefully inadequate on virtually every level.

Interior - Multi-Purpose Room

Facility Analysis

On-site parking and access are considered to be sufficient; however, the vehicle and equipment bays are undersized and are not adequately meeting current needs.

Facility Appraisal

Results from the facility appraisal completed by the Police and Fire Department indicated that the state of the building is 'Poor', in terms of condition and meeting needs of the space use in the facility. The building's score was 43%. Maintainability and Environment for the Program scored the lowest with 'Very Inadequate', while the highest score was the Site and received a 'Satisfactory' rating.

Appraisal Summary

SECTION	POSSIBLE POINTS	TOTAL EARNED	PERCENT	RATING BY CATEGORY
1.0 Site	100	86	86%	Satisfactory
2.0 Structural and Mechanical	200	64	32%	Poor
3.0 Maintainability	100	28	28%	Very inadequate
4.0 Safety	200	114	57%	Borderline
5.0 Program Adequacy	200	84	42%	Poor
6.0 Environment for Program	200	50	25%	Very inadequate
TOTAL	1,000	426	43%	Poor

ROM Estimating

Program Area	Required Area	Existing Area	Existing Area Requiring Remodel	Additional Program Area Required	Remodel w/ Required Area	Replacement w/ Current Program Area	Replacement w/ Required Program Area
Assembly Chambers							
Meeting Room	800	720	-	80			
ADA Bathrooms	300	-	-	300			
Police Department							
Holding Rooms (3)	600	558	558	42			
Vehicle Bay	300	252	-	48			
Morgue	100	88	88	12			
Offices (3)	450	558	558	(108)			
Shower	150	64	64	86			
Kitchen & Booking	200	108	108	92			
Storage	100	36	-	64			
Men's Room	150	120	120	30			
Women's Room	150	48	48	102			
Fire Department							
Apparatus Room	4,200	3,744	3,744	456			
Equipment Storage	300	-	-	300			
Fitness Room	250	-	-	250			
Hose Dry	150	80	-	70			
Level 2 Offices	1,440	1,440	1,440	-			
Common Use							
Fitness Room	250	-	-	250			
Utility	120	120	-	-			
Boiler Room	102	102	-	-			
Dispatch	250	186	186	64			
Public Facilities Offices							
Commingled Space Level 2	3,000	2,976	2,976	24			
Area Subtotals	13,362	11,200					
Total Area	14,965	12,656					
Circulation	1,603	1,456					
Totals	14,965	12,656	9,890	2,162			
Estimated Project Cost / Sf			$350.00	$600.00		$550.00	
Estimated Sub-Total Project Costs			$3,461,500.00	$1,297,200.00	$4,758,700.00	$6,960,800.00	$8,258,000.00
Structural Upgrade Costs			$507,940.00	$507,940.00	$507,940.00	$0.00	$0.00
Estimated Total Project Costs			$3,969,440.00	$1,805,140.00	$5,266,640.00	$6,960,800.00	$8,258,000.00

Energy Analysis

Building Energy Use and Cost

	Existing (From Utility Bills)						
Building	Area	Annual kBtu	Annual Cost	EUI	% Better than Average	Elec	Fuel
Public Safety	12557	759554	$23,363	60	-1%	32%	68%

	Existing (Predicted from Current Fuel Rate)		Average Building for the Region	
Building	EUI	Annual Cost	EUI	Annual Cost
Public Safety	60	$28,028	60	$27,800

	Typical New Construction				
Building	EUI	Annual Cost	Annual Cost Savings		
Public Safety	40	$18,700	$4,663	33% Reduction	Reduction

	High Performance				
Building	EUI	Annual Cost	Annual Cost Savings		
Public Safety	18	$8,400	$14,963	70% Reduction	Reduction

Notes:
Average buildings based on EnergyStar Target Finder results (CBECS database)
Typical New Construction meet ASHRAE 90.1-2007 (Typically about a 33% Reduction from Average)
High performance meets 2030 Challenge for 2020 (70% reduction from Average)
All estimated costs rounded to nearest $100
Pool energy use based on Target Finder results combined with savings WSPFK has previously calculated for typical pool mechanical designs
Existing (Predicted from Current Fuel Rate) annual costs take the existing utility bills and scale up the annual cost from the fuel rate of $3.40 per gallon to $4.63 per gallon

Interesting Items:
Target Finder pool EUI is a calculated value rather than a sampled value. It is lower than some of our other calculations indicate for pool energy use.
Pool EUI seems low. Jason indicates humidity levels are very high. Could be sacrificing comfort for energy savings.
Visitor center EUI seems high
Fuel Oil costs much less per Btu than electricity
Adjusted Energy Costs:
Previous Fuel: $3.40 per gallon = $0.0245 per kBtu
Current Fuel: $4.63 per gallon = $0.0334 per kBtu
Elec: $0.172 per kWh = $0.0504 per kBtu

Life Cycle Cost Analysis

Inputs		
Inflation Rate	7.5%	
Discount Rate (Real)	3.0%	
Utility Escalation Rate (Real)	2.0%	
Duration of Study	50	years

Building	Existing	Existing (Predicted)
	Annual Cost	Annual Cost
Public Safety	$23,363	$28,028

Building	Typical New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Public Safety	$18,700	$9,328	$3,194,000

Building	High Performance New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Public Safety	$8,400	$19,628	$6,720,000

Notes:
Existing (Predicted) Costs adjust reported fuel oil bills to current fuel oil rates
DOE Inflation Rate is 3%.
DOE Discount Rate is 3%, typical discount rates vary from 3%-6%
FEMP Utility Escalation Rate (Real) for 70% Fuel Oil / 30% Elec is 0.59%. Rate tends to be skewed low. Typical rates 2%-5%
Life Cycle Cost Savings rounded to nearest $500

2.2.3 Human Resources

Quick Status

Area	4080 sf
Condition	Poor
Year Built	1905, 1955, 1976
Heat Source	Boiler / 40 / Fair
Fuel Tank	Above Ground
Construction	Wood Frame
Roof Type	Metal / Poor Condition
Siding	Shingle / Poor Condition
Sprinklered	No
Occupancy	E (Education - Day Care)

General Condition Assessment

Home of the Chilkat Valley Pre-School, this former school, health clinic, turned Human Resources Building, turned Pre-School has held up as best it can since 1905, however, it may be reaching the end of its usefull life.

Re-siding and re-insulation of the exterior would help to greatly improve both appearance and energy performance. From the appearances, the structural condition appears to be stable, however, it's hard to tell without deeper investigation. Mindful of the need for a new roof, caution should be taken in assessing the building's structural stability.

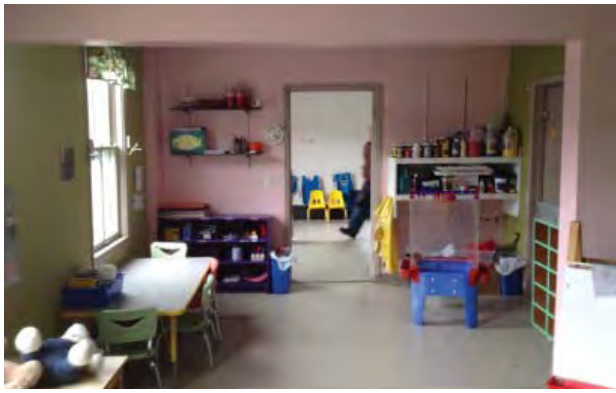
Window replacement would improve indoor comfort for children and staff, as well as energy performance. Interior finishes could use a cosmetic upgrade, however, that may prove to be too difficult with a building of this age. There are signs of pipe leaks in the build which, apparently, are an ongoing maintenance issue.

The building has some serious concerns; for example, the lack of automatic fire suppression systems, combustible materials, inadequate egress routes, lack of ADA compliance, and poor air quality. There are also some suspicious building materials, based on visual appearance, that may possibly contain hazardous materials. The chimney on the rear of the building was damaged by the heavy snow fall in 2011/2012 and needed to be replaced before toxic fumes penetrated the building. A replacement was reportedly completeted. A major remodel would require expensive alterations to bring the facility up to current (IBC 2009) Building Code. Light upgrades and Acoustic treatment would improve the learning environment.

Programmatically, the building needs a few tweaks. Additional spaces upstairs are being occupied by others and the basement is full with storage of items that might be possible to dispose. The facility lacks sufficient power, data, and telecommunications. An updated or expanded kitchen would greatly help the day-to-day activities at the Day Care.

The Pre-School would be better-suited by a more community centric location that is in walking distance to Library, Museum, the School and other Park/Recreational areas. The Pre-Preschool currently uses a Borough Vehicle to transport students to other community resources. Many parents have complained that access to the Pre-School can be somewhat hazardous during icy winter driving conditions.

Exterior - Street View



Interior - Classroom

Interior - Kitchen

Exterior - Site

Facility Analysis

Deficiencies

Repairs Recently Completed:

- New exit stairs
- Parking lot repairs
- New Chimney

Outstanding Repairs Needed:

- Replace Siding (maybe HAZMAT)
- New roof
- New boiler
- Replace windows
- New perimeter fence
- Replace Floor coverings (maybe HAZMAT)
- Upgrade lighting
- Replace Pipes
- Winterize with new Insulation
- New Doors and Hardware
- Replace Sinks and Toilets
- Rotten foundation at entry
- Remove Old Refrigerater and Furnance from basement

Community Needs Survey

Following a review of the public survey, the Human Resources Building (listed in the survey as "Pre-School") ranked in various positions, depending on the survey question category. In most cases, it was mid-range to low on priorities. However, it raises the question as to if the survey-taker understood that the Pre-School is the Human Resource building and if they were aware of the physical conditions of the building. What was apparent is that there seems to be some opportunity for the relocation of the Pre-School to another existing and centralized community building.

Programming Questionnaire

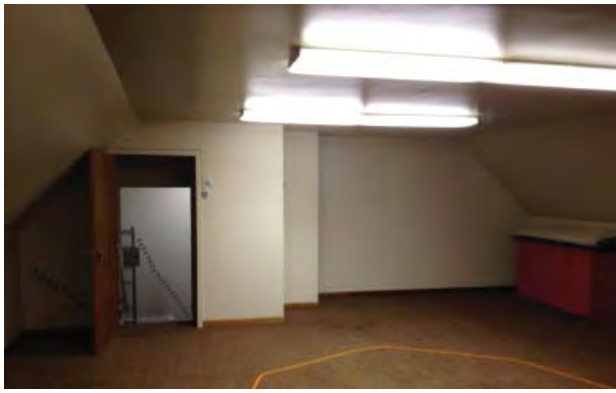
Chilkat Valley Preschool is a 501c(3) organization that provides early childhood education for the community of Haines. The program serves up to 20 families, and employs teaching and administrative staff. A volunteer board of directors governs the organization.

A close proximity to the pool, library and school would be most beneficial to the program. Students utilize services at these locations on a regular basis—as often as twice a month, in the case of the library. They currently access these services by borrowing the borough van, (walking if weather allows), or carpooling with parents and staff. A closer proximity would allow for a more efficient use of time and even more use of those services, provided that walking routes could remain separated from the main Haines Highway. Parking and access are currently inadaquate.

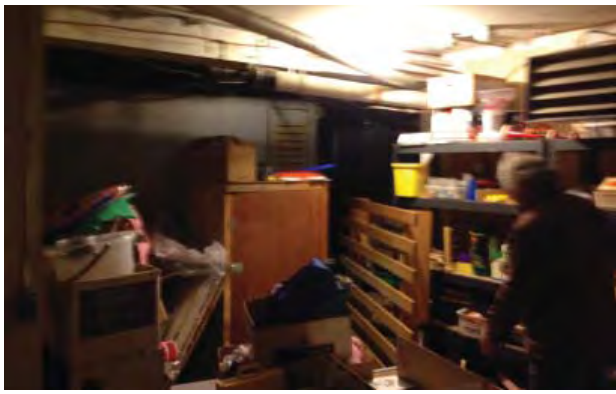
Necessary site considerations would include:

- Fenced outdoor play area meeting minimum size, access, and fill/surface requirements for childcare licensing
- Small outside storage
- Safe and adequate parking

Interior - Kitchen



Interior - Second Floor Multi-Purpose Room



Interior - Basement Storage

Interior - Classroom

Facility Analysis

Chilkat Valley Preschool abides by childcare licensing regulations set out by the Alaska Department of Health and Social Services. These regulations are occasionally tightened and/or adapted, which can necessitate additional staff training and minor changes to the program setting (i.e. locks on office doors, removal of certain playground equipment, etc.) CVP has a long history of open, professional communication with childcare licensing representatives, and we should be able to address any future requirements in a timely and cost-effective manner.

Facility Appraisal

Results from the facility appraisal completed by the Pre-School Director indicated that the condition of is on average 'Borderline' in terms of condition and meeting the needs of the space use in the facility. The building's score was 59%. Site received the highest ranking of Satisfactory and Program Adequacy ranked the lowest with Poor. The results suggest that the building itself is just barely meeting the needs of the user.

Appraisal Summary	SECTION	POSSIBLE POINTS	TOTAL EARNED	PERCENT	RATING BY CATEGORY
	1.0 Site	100	71	71%	Satisfactory
	2.0 Structural and Mechanical	200	130	65%	Borderline
	3.0 Maintainability	100	69	69%	Borderline
	4.0 Safety	200	121	60%	Borderline
	5.0 Program Adequacy	200	83	41%	Poor
	6.0 Environment for Program	200	115	58%	Borderline
	TOTAL	1,000	589	59%	Borderline

ROM Estimating

Program Area	Required Area	Existing Area	Existing Area Requiring Remodel	Additional Program Area Required	Remodel w/ Required Area	Replacement w/ Current Program Area	Replacement w/ Required Program Area
Office	200	100	100	100			
Storage	500	1,160	-	(660)			
Kitchen	300	100	100	200			
Learning Space 1	400	250	250	150			
Learning Space 2	400	250	250	150			
Learning Space 3	400	250	250	150			
Learning Space 4	400	250	250	150			
Workroom	200	-	-	200			
Mechanical	150	200	-	(50)			
Restroom	300	50	50	250			
Level 2 Space	-	1,360					
Area Subtotals	3,250	3,970					
Total Area	3,413	4,080					
Circulation	163	110					
Parking							
Totals	3,413	4,080	1,250	640			
Estimated Project Cost / Sf			$200.00	$400.00		$350.00	
Estimated Total Project Costs			$250,000.00	$256,000.00	$506,000.00	$1,428,000.00	$1,684,000.00

Energy Analysis

Building Energy Use and Cost

	Existing (From Utility Bills)						
Building	Area	Annual kBtu	Annual Cost	EUI	% Better than Average	Elec	Fuel
Human Resources	4080	235375	$6,290	58	2%	4%	96%

	Existing (Predicted from Current Fuel Rate)		Average Building for the Region	
Building	EUI	Annual Cost	EUI	Annual Cost
Human Resources	58	$8,296	59	$8,500

	Typical New Construction					
Building	EUI	Annual Cost	Annual Cost Savings	33%	Reduction	Reduction
Human Resources	40	$5,700	$590			

	High Performance					
Building	EUI	Annual Cost	Annual Cost Savings	70%	Reduction	Reduction
Human Resources	18	$2,600	$3,690			

Notes:
Average buildings based on EnergyStar Target Finder results (CBECS database)
Typical New Construction meet ASHRAE 90.1-2007 (Typically about a 33% Reduction from Average)
High performance meets 2030 Challenge for 2020 (70% reduction from Average)
All estimated costs rounded to nearest $100
Pool energy use based on Target Finder results combined with savings WSPFK has previously calculated for typical pool mechanical designs
Existing (Predicted from Current Fuel Rate) annual costs take the existing utility bills and scale up the annual cost from the fuel rate of $3.40 per gallon to $4.63 per gallon

Interesting Items:
Target Finder pool EUI is a calculated value rather than a sampled value. It is lower than some of our other calculations indicate for pool energy use.
Pool EUI seems low. Jason indicates humidity levels are very high. Could be sacrificing comfort for energy savings.
Visitor center EUI seems high
Fuel Oil costs much less per Btu than electricity
Adjusted Energy Costs:
Previous Fuel: $3.40 per gallon = $0.0245 per kBtu
Current Fuel: $4.63 per gallon = $0.0334 per kBtu
Elec: $0.172 per kWh = $0.0504 per kBtu

Life Cycle Cost Analysis

Inputs		
Inflation Rate	7.5%	
Discount Rate (Real)	3.0%	
Utility Escalation Rate (Real)	2.0%	
Duration of Study	50	years

Building	Existing	Existing (Predicted)
	Annual Cost	Annual Cost
Human Resources	$6,290	$8,296

Building	Typical New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Human Resources	$5,700	$2,596	$889,000

Building	High Performance New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Human Resources	$2,400	$5,896	$2,019,000

Notes:
Existing (Predicted) Costs adjust reported fuel oil bills to current fuel oil rates
DOE Inflation Rate is 3%.
DOE Discount Rate is 3%, typical discount rates vary from 3%-6%
FEMP Utility Escalation Rate (Real) for 70% Fuel Oil / 30% Elec is 0.59%. Rate tends to be skewed low. Typical rates 2%-5%
Life Cycle Cost Savings rounded to nearest $500

2.2.4 Administration Building

Quick Status

Area	3552 sf
Condition	Good
Year Built	1961, 1980
Heat Source	Boiler / 30 / Fair
Fuel Tank	Above Ground
Construction	Wood Frame
Roof Type	Shingle/EPDM / Poor Condition
Siding	T-111 / Fair Condition
Sprinklered	No
Occupancy	B (Business)

General Condition Assessment

The Administration building, once the former Library, is now the Borough Office building and appears on the surface to be in good condition. Despite its age, there are only a few cosmetic blemishes that could use repair. The building envelope and structure don't show visible indications of significant issues which would be a cause for concern. The flat roof on the original portion of the building is in need of replacement and, perhaps, a pitched slope to match that of the 1980's addition. It's reported that a reroofing project is already being initiated.

The exterior trim does show signs of water damage, probably due to icing conditions or poor water drainage. The wood shingles on the newer roof are also in need of repair.

Replacing some doors and, especially, the older windows will help with energy efficiency improvements. Major maintenance items are actually quite limited on this building, however, there is a need for a new front entry sidewalk, as the existing one is cracked, presenting a tripping hazard.

Site access and parking seem adequate, and the location is in a prime central community location. If necessary, this building would be a good candidate for either remaining as a Borough Office building or being repurposed for another use. A change in use might, however, trigger a few code and ADA related upgrades. For example, depending on the occupancy use, as sprinkler system might be required, or in the case of the rest rooms a few minor accessibility related upgrades.

Deficiencies

Repairs Recently Completed:

- New front door
- All new carpet
- New T-8 light fixtures
- New rear window

Outstanding Repairs Needed:

- New roofing
- Minor Sheetrock work
- New poured front and rear concrete walkways
- New rear stairs.
- New rear doors.
- Minor paint and trim touch-up
- Window replacement
- Minor caulking in rest room
- New gasket on boiler side-arm

Exterior - Street View

Exterior - Roof

Interior - Offices

Interior - Offices

Facility Analysis

Community Needs Survey

The survey reveals that this facility holds a mid to low-level importance with the general public. One could make the assumption that this is because the facility is typically used by Borough staff with an occasional visit by the public. Because there appears to be little emotional attachment to the building, it could be a good opportunity to re reallocate the facility to an alternative use if the Administration moved, and, through that process, the Administration might benefit from sharing a new space with a more popular priority, for consolidating of resources.

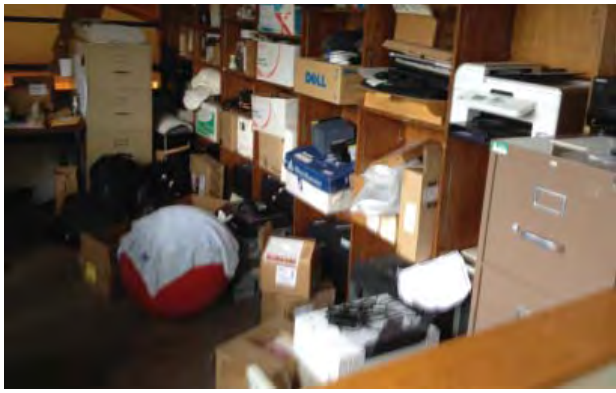
Programming Questionnaire

The Haines Borough Administration Building includes programmatic area for administrative borough offices including finance, planning and zoning, the Mayor, the Manager, as well as the Clerk's Office. The facility's purpose is to house administrative operations for the borough government and its associated departments. The Administration Building is also a place for interaction with the public.

Programmatic function could be improved if it the facility were closer to other departments and services, such as the Public Facilities Director and Public Safety Building. Advantages of these adjacencies would help foster better communication between staff/departments, and make common accessibility easier for the public.

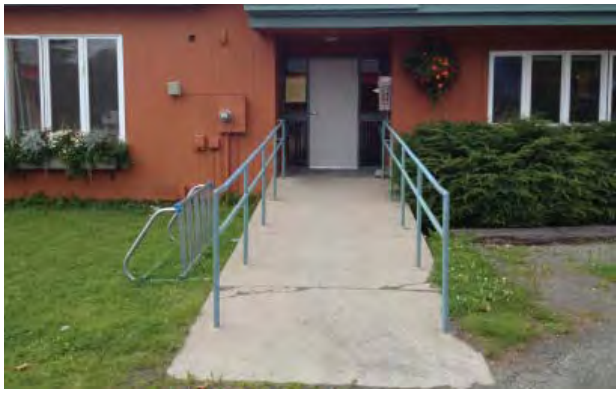
The existing program space in the building seems adequate for its current needs, however, the facility might benefit from additional storage space for office supplies and records. The Borough does not anticipate any technical or programmatic/regulatory requirements in the upcoming decade that will affect the facility.

Interior - Break Room



Interior - Loft Office and Storage

Interior - Crawl Space



Exterior - Street Access

Facility Analysis

Facility Appraisal

The appraisal for the Administration building scored surprisingly low, considering that the building is in relatively good condition. In fact, the average rating was "Poor" which fell between the lowest ranking of "Very Inadequate' for both the Program Adequacy and Environment for the Program. The highest ranking was for "Borderline" and that was categorized with Safety, Maintainability and Structural/Mechanical. In most comparisons, the facilities have ranked similar to their respective technical condition, which, in this case was "Good". So, either there is a large gap between physical condition and the programmed use for the facility or there was an error in data collection. Although the programming questionnaire indicated that there is no need for additional area, having visually investigated how the facility is used, it appears that the space may not be adequate for the program.

Appraisal Summary	SECTION	POSSIBLE POINTS	TOTAL EARNED	PERCENT	RATING BY CATEGORY
	1.0 Site	100	44	44%	Poor
	2.0 Structural and Mechanical	200	115	58%	Borderline
	3.0 Maintainability	100	60	60%	Borderline
	4.0 Safety	200	108	54%	Borderline
	5.0 Program Adequacy	200	42	21%	Very Inade.
	6.0 Environment for Program	200	46	23%	Very Inade.
	TOTAL	1,000	415	42%	Poor

ROM Estimating

Program Area	Required Area	Existing Area	Existing Area Requiring Remodel	Additional Program Area Required	Remodel w/ Required Area	Replacement w/ Current Program Area	Replacement w/ Required Program Area
Conference Room	288	288	-	-			
Offices	2,300	2,300	-	-			
Restrooms	300	300	-	-			
Mechanical	100	100	-	-			
Storage / Break	200	100		100			
Area Subtotals	3,188	3,088					
Total Area	3,634	3,552					
Circulation	446	464					
Totals	3,634	3,552	-	100			
Estimated Project Cost / Sf			$200.00	$450.00		$400.00	
Estimated Total Project Costs			$0.00	$45,000.00	$45,000.00	$1,420,800.00	$1,465,800.00

Facility Analysis

Energy Analysis

Building Energy Use and Cost

	Existing (From Utility Bills)						
Building	Area	Annual kBtu	Annual Cost	EUI	% Better than Average	Elec	Fuel
Admin	3552	245462	$8,228	69	-23%	40%	60%

	Existing (Predicted from Current Fuel Rate)		Average Building for the Region	
Building	EUI	Annual Cost	EUI	Annual Cost
Admin	69	$9,530	56	$7,800

	Typical New Construction					
Building	EUI	Annual Cost	Annual Cost Savings	33% Reduction	Reduction
Admin	38	$5,300	$2,928		

	High Performance				
Building	EUI	Annual Cost	Annual Cost Savings	70% Reduction	Reduction
Admin	17	$2,400	$5,828		

Notes:
Average buildings based on EnergyStar Target Finder results (CBECS database)
Typical New Construction meet ASHRAE 90.1-2007 (Typically about a 33% Reduction from Average)
High performance meets 2030 Challenge for 2020 (70% reduction from Average)
All estimated costs rounded to nearest $100
Pool energy use based on Target Finder results combined with savings WSPFK has previously calculated for typical pool mechanical designs
Existing (Predicted from Current Fuel Rate) annual costs take the existing utility bills and scale up the annual cost from the fuel rate of $3.40 per gallon to $4.63 per gallon

Interesting Items:
Target Finder pool EUI is a calculated value rather than a sampled value. It is lower than some of our other calculations indicate for pool energy use.
Pool EUI seems low. Jason indicates humidity levels are very high. Could be sacrificing comfort for energy savings.
Visitor center EUI seems high
Fuel Oil costs much less per Btu than electricity
Adjusted Energy Costs:
Previous Fuel: $3.40 per gallon = $0.0245 per kBtu
Current Fuel: $4.63 per gallon = $0.0334 per kBtu
Elec: $0.172 per kWh = $0.0504 per kBtu

Life Cycle Cost Analysis

Inputs		
Inflation Rate	7.5%	
Discount Rate (Real)	3.0%	
Utility Escalation Rate (Real)	2.0%	
Duration of Study	50	years

Building	Existing	Existing (Predicted)
	Annual Cost	Annual Cost
Admin	$8,228	$9,530

Building	Typical New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Admin	$5,300	$4,230	$1,448,500

Building	High Performance New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Admin	$2,400	$7,130	$2,441,500

Notes:
Existing (Predicted) Costs adjust reported fuel oil bills to current fuel oil rates
DOE Inflation Rate is 3%.
DOE Discount Rate is 3%, typical discount rates vary from 3%-6%
FEMP Utility Escalation Rate (Real) for 70% Fuel Oil / 30% Elec is 0.59%. Rate tends to be skewed low. Typical rates 2%-5%
Life Cycle Cost Savings rounded to nearest $500

2.2.5 Pool

Quick Status

Area	13600 sf
Condition	Fair
Year Built	1982
Heat Source	N/A (School)
Fuel Tank	Under Ground
Construction	Steel Frame
Roof Type	EPDM / Good Condition
Siding	Metal / Fair Condition
Sprinklered	Yes
Occupancy	A-4 (Assembly - Pool w/ Seating)

Exterior - Street Access

General Condition Assessment

The Pool is clearly a well-used community asset and serves a broad portion of the population. For the time being it's a primary source for indoor recreation. The Pool facility, attached to the School, is borderline good/fair condition. The pool has reportedly undergone several condition surveys in 2001, 2007, and 2010. Following a detailed facility condition survey in 2007 by Jensen Yorba Lott, the pool received a fairly significant overhaul, which repaired the pool liner and much of the associated mechanical equipment. The 2007 survey assessed architectural, structural, mechanical, electrical, and aquatic facility conditions of the facility to determine the basic soundness of the structure, the condition of existing systems and assemblies, and to project the remaining life of all major systems. Cosmetic recommendations in the 2007 survey, that were not completed in a subsequent 2008 upgrade include:

Interior - Entry Ramp

- Replacing hand/guardrails
- Clearing out storage under pool
- Replacing attic access
- Replacing entry ramp
- Updating locker rooms with new showers
- Providing better signage
- Insulating pipes
- Improving building entry
- Updating pool lobby
- Consideration of acoustic improvements
- Replacing ceiling in locker rooms
- Overhauling ventilation system
- Replacing lighting fixtures
- Exterior envelope improvements
- Replacing windows

Interior - Lobby

Revisiting these items in this facility assessment, a majority of those recommendations still stand accurate. In 2011, Jensen Yorba Lott provided the Haines Pool Locker Room & Lobby Renovation Conceptual Design. Due to the amount of study and planning that has already been invested in this facility, this facility analysis report will only mention the work completed to date, without providing another full blown study.

The location, adjacent to the school, and the popularity of the pool make it a good candidate to consider expanding physical fitness capabilities. An exercise and training center could fit well with the facility if it were to move forward with a major renovation of the locker rooms and lobby. Combining the projects would maximize efficiency and reduce the costs that would be incurred by individual projects.

Interior - Pool

Facility Analysis

Deficiencies

Repairs Recently Completed:

- New Pool Filter
- New Surge Tanks
- New Pool Pump
- Major Pool Overhaul 2008
- Frozen Sprinkler Head
- Air Vent Cleaning
- New Automatic Door Opener (Entry)
- Storage Removal (under pool)
- New Exterior Doors

Outstanding Repairs Needed:

- Ramp Replacement or Elevator
- Window and Interior Door Upgrades
- Improved Humidity Controls (w/Heat Recover)
- Lighting Upgrades and Replacement
- Exterior Envelope Improvements
- Ventilation Fan Repairs
- Locker Room Upgrades
- New heat exchanger
- Install new chlorine equipment
- Repair rusted flashing on pool
- Repair broken rafters on front shed roof, (falling Snow)

Community Needs Survey

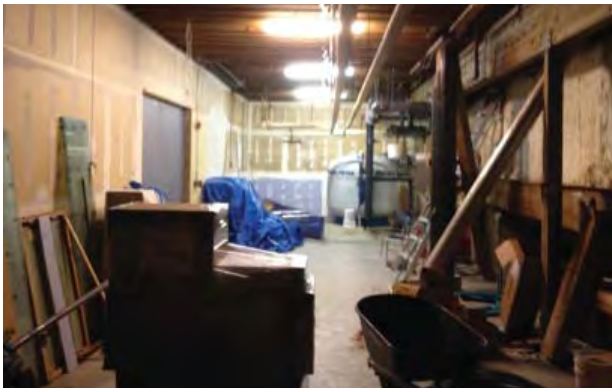
With a quick analysis of the public survey, the pool scored modestly in terms of priority. It's clear that the pool requires significant financial attention in terms of maintenance, operations, and facility improvements. Synergies between the recreational use of this facility align well with other public recreation priorities addressed in the survey.

Programing Questionnaire

The Haines Borough Pool serves the community as a social hub for fitness and wellbeing. Programs and activities at the pool include, but are not limited to: Senior fitness classes, preschool swim lessons and activities, and elementary through high school swim lessons, cold water safety classes and P.E. classes. The pool also provides rental times available for groups for competitive swimming, fisherman's training, water polo, triathlon, and various other fun activities.

The pool is located near the school (open gym and weight room) and fire department (emergency services). The vicinity in which these departments are located is sufficient. There has been some interest in having open gym & weight room hours coincide with open swim times and providing access to both through the same entrance. The benefit of this would be to offer fitness options that are complimentary to each other.

Material storage is sufficient. No vehicle storage is necessary for this department. The school district stores a lot of equipment and various other non-pool related items in the building. Site access and parking are reported to be adequate.



Interior - Sub-Level Mechanical and Storage

Interior - Locker Room

Interior - Pool

Interior - Showers

Facility Analysis

Facility Appraisal

The appraisal score for the Pool was a mid-range 61%, which equates to a "Borderline" evaluation. It performed the weakest in Maintainability with a "Poor" rating. This is complementary to the facility information collected from the Borough, as well as what we observed during the tour. All other categories scored higher with "Satisfactory" and "Borderline" appraisals. Site and safety, also scored very well. Overall, the appraisal confirmed some observations about how the facility is being used for the program and how it could also be improved through a remodel or expansion project.

Appraisal Summary	SECTION	POSSIBLE POINTS	TOTAL EARNED	PERCENT	RATING BY CATEGORY
	1.0 Site	100	71	71%	Satisfactory
	2.0 Structural and Mechanical	200	115	58%	Borderline
	3.0 Maintainability	100	30	30%	Poor
	4.0 Safety	200	174	87%	Satisfactory
	5.0 Program Adequacy	200	106	53%	Borderline
	6.0 Environment for Program	200	117	59%	Borderline
	TOTAL	1,000	613	61%	Borderline

ROM Estimating

Program Area	Required Area	Existing Area	Existing Area Requiring Remodel	Additional Program Area Required	Remodel w/ Required Area	Replacement w/ Current Program Area	Replacement w/ Required Program Area
Locker Rooms (Exclude HS)	1,900	1,900	1,900	-			
Office Space	400	400	400	-			
Pool	2,700	2,700	-	-			
Pool Deck	2,500	2,500	2,500	-			
Seating	650	650	650	-			
Storage	550	550	-	-			
Staff Changing / Wash	230	230	230				
Mechanical (All Level 1)	3,000	3,000	-	-			
Lobby	800	800	800	-			
Fitness Center	2,500	-	-	2,500			
Elevator	100	-	-	100			
Area Subtotals	15,330	12,730					
Total Area	16,403	13,600					
Circulation	1,073	870					
Parking							
Totals	16,403	13,600	6,480	2,600			
Estimated Project Cost / Sf			$350.00	$650.00		$600.00	
Estimated Total Project Costs			$2,268,000.00	$1,690,000.00	$3,958,000.00	$8,160,000.00	$9,850,000.00

Facility Analysis

Energy Analysis

Building Energy Use and Cost

	Existing (From Utility Bills)						
Building	Area	Annual kBtu	Annual Cost	EUI	% Better than Average	Elec	Fuel
Pool	11010	2168569	$66,493	197	2%	24%	76%

	Existing (Predicted from Current Fuel Rate)		Average Building for the Region	
Building	EUI	Annual Cost	EUI	Annual Cost
Pool	197	$81,062	200	$82,400

	Typical New Construction				
Building	EUI	Annual Cost	Annual Cost Savings	33% Reduction	Reduction
Pool	161	$66,300	$193		

	High Performance				
Building	EUI	Annual Cost	Annual Cost Savings	70% Reduction	Reduction
Pool	72	$29,600	$36,893		

Notes:
Average buildings based on EnergyStar Target Finder results (CBECS database)
Typical New Construction meet ASHRAE 90.1-2007 (Typically about a 33% Reduction from Average)
High performance meets 2030 Challenge for 2020 (70% reduction from Average)
All estimated costs rounded to nearest $100
Pool energy use based on Target Finder results combined with savings WSPFK has previously calculated for typical pool mechanical designs
Existing (Predicted from Current Fuel Rate) annual costs take the existing utility bills and scale up the annual cost from the fuel rate of $3.40 per gallon to $4.63 per gallon

Interesting Items:
Target Finder pool EUI is a calculated value rather than a sampled value. It is lower than some of our other calculations indicate for pool energy use.
Pool EUI seems low. Jason indicates humidity levels are very high. Could be sacrificing comfort for energy savings.
Visitor center EUI seems high
Fuel Oil costs much less per Btu than electricity
Adjusted Energy Costs:
Previous Fuel: $3.40 per gallon = $0.0245 per kBtu
Current Fuel: $4.63 per gallon = $0.0334 per kBtu
Elec: $0.172 per kWh = $0.0504 per kBtu

Life Cycle Cost Analysis

Inputs		
Inflation Rate	7.5%	
Discount Rate (Real)	3.0%	
Utility Escalation Rate (Real)	2.0%	
Duration of Study	50	years

Building	Existing	Existing (Predicted)
	Annual Cost	Annual Cost
Pool	$66,493	$81,062

Building	Typical New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Pool	$66,300	$14,762	$5,054,000

Building	High Performance New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Pool	$29,600	$51,462	$17,619,000

Notes:
Existing (Predicted) Costs adjust reported fuel oil bills to current fuel oil rates
DOE Inflation Rate is 3%.
DOE Discount Rate is 3%, typical discount rates vary from 3%-6%
FEMP Utility Escalation Rate (Real) for 70% Fuel Oil / 30% Elec is 0.59%. Rate tends to be skewed low. Typical rates 2%-5%
Life Cycle Cost Savings rounded to nearest $500

2.2.6 Visitor Center

Quick Status

Area	1000 sf
Condition	Fair
Year Built	1983
Heat Source	Boiler / 31/ Fair Condition
Fuel Tank	Above Ground
Construction	Log
Roof Type	Metal / Fair Condition
Siding	Log / Fair Condition
Sprinklered	No
Occupancy	B (Business)

Exterior - Street Access

General Condition Assessment

This little log cabin is put to the test with seasonal swings of tourist from one extreme to the other. Some days the facility may see two visitors and on other days it may experience as many as 350. The building is in fair condition.

Several recent repairs have been made on the facility and it shows a rather high expense in terms of energy consumption. Unfortunately, due to its construction type it would be challenging, if not all together impossible, to upgrade efficiency. According to the energy analysis, the Borough spends over $10,000 a year on energy for a 1000 SF building. That cost does not take into account the expenses required for maintenance and repairs. This is a sizable expense for a facility of this size that, according to the Programming Questionnaire and Facility Appraisal, is not fully meeting the needs of its intended use.

The building requires upgrades for ADA accessibility and other conveniences listed in the Programming Questionnaire narrative. The program would benefit from more efficient use of space as it currently appears very cluttered and staff are forced to work in close proximity to one another. The major work area is currently a combined space. A larger space with more than one service counter would help alleviate many issues for visitor experience. A more efficiently organized counter layout would be beneficial so staff and guests are not talking over each other. This space feels highly congested when more than 6-8 eight people are inside.

Interior - Lobby

Interior - Boiler

Deficiencies

Repairs Recently Completed:

- New flooring (office)
- New windows (office)
- Rotted floor in rest rooms replaced
- New entrance door (office)
- Replaced rotten wall on back side of building
- Resealing is needed
- Replaced rotten entrance on restroom

Outstanding Repairs Needed:

- New boiler
- Repair rotted rim joists
- Rotten logs repair
- Paint Rest rooms
- Ventilate crawl spaces
- Repair rotten wood at front wall of building

Interior - Lobby

Facility Analysis

Community Needs Survey

The Visitor Center scores, across the board, very low in the public survey results. This probably occurs because the general public perceives this facility to be more of a resource to visitors than community members. A low priority ranking in the survey is actually a great opportunity to look at consolidating program area with other capital improvement projects. The cost to renew this facility alone would be higher in comparison, however, if combined with another project, may result in a negligible financial impact, with the reward of an improved space to market the Haines Community and reduce operations cost.

Programming Questionnaire

The Visitor Center helps and provides information to visitors and can host anywhere from 2-350 visitors in a single day. When the facility is busy, it is challenging to clearly communicate information to tourists. The work space adjacencies are tight, adding the difficulty of talking on the phone while visitors are being helped at the counter.

The Visitor Center, Museum, and Library may benefit from overlapping program space, if available. Many guests are directed to the Library for internet; however, noise levels and traffic would need to be considered. Additional program synergies could be aligned with the Chamber.

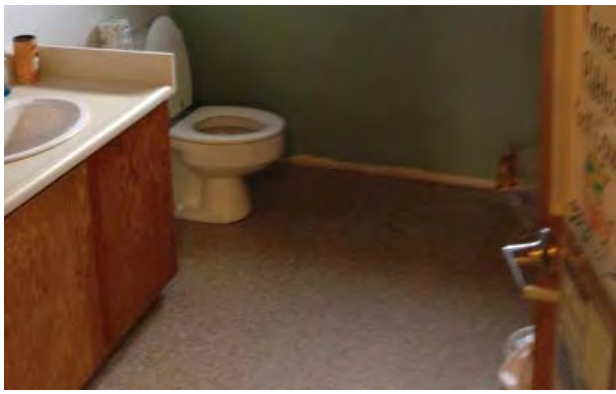
Storage of literature and supplies is greatly needed with a room large enough to keep media organized and easily accessible, along with accommodating Trade Show and office supplies year-round. New attractive and space-saving brochure displays would also be helpful. Parking is currently inadequate. The traffic flow through the lot is dangerous due to adjacent clinic access locations and Hungry Moose drive through. There are also not enough spaces, nor is there any real parking for larger vehicles. Closer proximity to other Borough Departments would help foot traffic.

Technology is a future necessity in the Visitor Center. Having an interactive terminal or two for guests to look at the area and find their own information would be useful. Younger travelers are very savvy and sometime would prefer to just explore what they want and not be directed. It would also help alleviate a line-up of visitors looking for information. Also, an improved A/V area would be beneficial. Currently, there is a small TV that plays Haines promotional videos, but, when busy, no one can really sit and watch because other patrons are in front of it, or conversations drown out the audio.

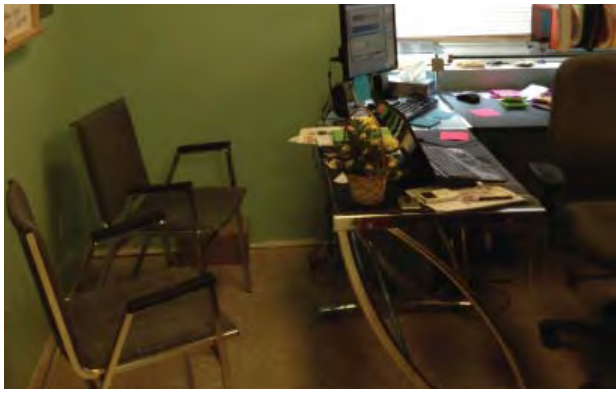
Parking and site access are inadequate and fluctuate seasonally. During the winter season there is little demand for parking. The summer season, may experience 4-6 recreation vehicles and 5-6 car/motorcycles daily. There are currently one handicap space, three other marked spaces, and additional unmarked areas. Occasional motor coaches park parallel to the building. Local tour operators also park with various sized vehicles. Staff can require up to 4 parking spaces.

Interior - Restroom

Interior - Ceiling



Interior - Restroom



Interior - Office

Facility Analysis

Facility Appraisal

Results from the Appraisal suggested a "Borderline" average with half of the categories rating as "Satisfactory" and the other half as "Poor." It appears as though the facility is either not completely meeting the needs of its intended use, or that it's under serving its potential for providing great services to visitors and tourists which could make Haines a more attractive destination.

Appraisal Summary	SECTION	POSSIBLE POINTS	TOTAL EARNED	PERCENT	RATING BY CATEGORY
	1.0 Site	100	83	83%	Satisfactory
	2.0 Structural and Mechanical	200	141	71%	Satisfactory
	3.0 Maintainability	100	71	71%	Satisfactory
	4.0 Safety	200	97	49%	Poor
	5.0 Program Adequacy	200	66	33%	Poor
	6.0 Environment for Program	200	93	47%	Poor
	TOTAL	1,000	551	55%	Borderline

ROM Estimating

Program Area	Required Area	Existing Area	Existing Area Requiring Remodel	Additional Program Area Required	Remodel w/ Required Area	Replacement w/ Current Program Area	Replacement w/ Required Program Area
Office	250	125	125	125			
Reception	500	250	250	250			
Public Area	800	400	400	400			
Mechanical	50	25	-	25			
Men's Room	150	75	75	75			
Women's Room	150	75	75	75			
Area Subtotals	1,900	950					
Total Area	1,995	1,000					
Circulation	95	50					
Parking							
Totals	1,995	1,000	925	950			
Estimated Project Cost / Sf			$250.00	$450.00		$400.00	
Estimated Total Project Costs			$231,250.00	$427,500.00	$658,750.00	$400,000.00	$827,500.00

Facility Analysis

Energy Analysis

Building Energy Use and Cost

	Existing (From Utility Bills)						
Building	Area	Annual kBtu	Annual Cost	EUI	% Better than Average	Elec	Fuel
Visitor	1008	335333	$10,489	333	-50%	29%	71%

	Existing (Predicted from Current Fuel Rate)		Average Building for the Region	
Building	EUI	Annual Cost	EUI	Annual Cost
Visitor	333	$12,530	222	$8,400

	Typical New Construction				
Building	EUI	Annual Cost	Annual Cost Savings	33% Reduction	Reduction
Visitor	149	$5,700	$4,789		

	High Performance				
Building	EUI	Annual Cost	Annual Cost Savings	70% Reduction	Reduction
Visitor	67	$2,100	$8,389		

Notes:
Average buildings based on EnergyStar Target Finder results (CBECS database)
Typical New Construction meet ASHRAE 90.1-2007 (Typically about a 33% Reduction from Average)
High performance meets 2030 Challenge for 2020 (70% reduction from Average)
All estimated costs rounded to nearest $100
Pool energy use based on Target Finder results combined with savings WSPFK has previously calculated for typical pool mechanical designs
Existing (Predicted from Current Fuel Rate) annual costs take the existing utility bills and scale up the annual cost from the fuel rate of $3.40 per gallon to $4.63 per gallon

Interesting Items:
Target Finder pool EUI is a calculated value rather than a sampled value. It is lower than some of our other calculations indicate for pool energy use.
Pool EUI seems low. Jason indicates humidity levels are very high. Could be sacrificing comfort for energy savings.
Visitor center EUI seems high
Fuel Oil costs much less per Btu than electricity
Adjusted Energy Costs:
Previous Fuel: $3.40 per gallon = $0.0245 per kBtu
Current Fuel: $4.63 per gallon = $0.0334 per kBtu
Elec: $0.172 per kWh = $0.0504 per kBtu

Life Cycle Cost Analysis

Inputs		
Inflation Rate	7.5%	
Discount Rate (Real)	3.0%	
Utility Escalation Rate (Real)	2.0%	
Duration of Study	50	years

Building	Existing	Existing (Predicted)
	Annual Cost	Annual Cost
Visitor Center	$10,489	$12,530

Building	Typical New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Visitor Center	$5,700	$6,830	$2,338,500

Building	High Performance New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Visitor Center	$2,100	$10,430	$3,571,000

Notes:
Existing (Predicted) Costs adjust reported fuel oil bills to current fuel oil rates
DOE Inflation Rate is 3%.
DOE Discount Rate is 3%, typical discount rates vary from 3%-6%
FEMP Utility Escalation Rate (Real) for 70% Fuel Oil / 30% Elec is 0.59%. Rate tends to be skewed low. Typical rates 2%-5%
Life Cycle Cost Savings rounded to nearest $500

2.2.7 Chilkat Center

Quick Status

Area	20,230 sf
Condition	Fair
Year Built	1800's, 1924, 1967, 1979
Heat Source	Boiler / 1 / New Condition
Fuel Tank	Under Ground
Construction	Wood Frame / Heavy Timber
Roof Type	Wood Shingle / New Condition
Siding	Wood Lap / Fair Condition
Sprinklered	Yes
Occupancy	A-1/ A-3 (Assembly) / B (Business)

General Condition Assessment

The Chilkat Center was built in the late 1800's as a cannery; relocated to its current location in 1924 as the Education and Recreational Building for FT. Seward; became a performing 350 seat arts theatre in 1967; and underwent further remodel in 1979, transforming it into the multi-purpose facility we know today. The Chilkat Center is a true multi-purpose arts facility, servicing a large population of the community in various aspects. It provides a venue for performances and workshops, film showings, radio, conferences, community gatherings, fitness classes, and religious services.

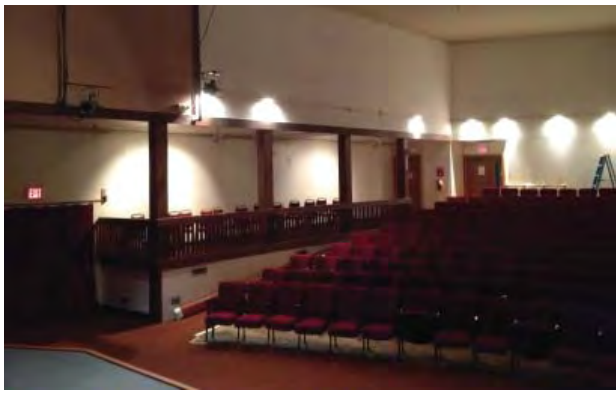
A detailed condition survey was completed in 2008 by PND, as well as indoor environmental quality testing by Carson Dorn in 2011. For the purpose of this report, we have conducted a surface level walk through and analyzed the 2008/2011 studies. Our findings are complementary to the evaluations made in the previous reports and thus will avoid revisiting those issues in great detail. Please find copies of the previous studies in the Appendix of this report.

Though it is a beloved building, the Center does have many concerning issues. The surface level issues include possible existence of hazardous materials, poor indoor air quality/ thermal comfort, pests in the attic and a need for cosmetic upgrades. The facility is severely deficient in accommodating disabled visitors, does not comply with ADA, or several other current building codes for egress and door hardware. The facility would also greatly benefit from door and window replacement

Mechanical challenges include an ongoing history of freezing pipes, leaky pipes, water damage, automatic fire suppression system issues, non-ADA compliant fixtures, environmental controls and inefficient heating and ventilation systems. Structurally, the roof was just replaced due to leaks, water infiltration, and ice dams, caused by lack of proper ventilation or insulation, which lends itself to mold and rotten structural components. Structural engineers in 2008 indentified overstressed roof rafters/beams undersized for snow load, and a lack of support for seismic lateral loads. Overloading is visable on the upper level where the radio station's vinyl records are being stored. Upgrades are needed for the electrical system, including lighting fixtures, lighting controls, and power/ data.

Exterior - Street Access

Interior - MPR / Rehearsal



Interior - Theater

Interior - Lobby / MPR

Facility Analysis

Deficiencies

Repairs Recently Completed:

- Repaired rot, women's rest room
- New flooring in lobby and rest rooms
- Repaired and repaint sheetrock in lobby
- Replaced rotten section front awning
- Level 2 Connector Bridge
- New Roof
- New Boilers
- New sprinkler compressor
- New front windows

Outstanding Repairs Needed:

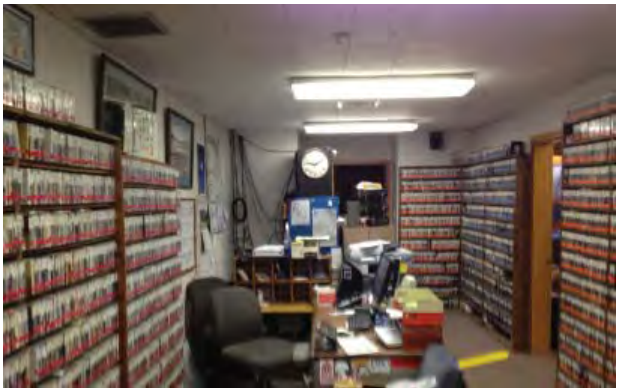
- Address Egress
- Comply with ADA
- Replace Doors and Windows
- Replace Heating and Ventilation
- Update fixtures
- Replace lighting fixtures and controls
- Address indoor air quality
- Update Kitchen
- Take corrective action for Structural issues
- Siding repairs and refasten
- HAZMAT Survey is needed

Community Needs Survey

The Chilkat Center was built in the late 1800's as a cannery; relocated to its current location in 1924 as the Education and Recreational Building for FT. Seward; became a performing 350 seat arts theatre in 1967; and underwent further remodel in 1979, transforming it into the multi-purpose facility we know today. The Chilkat Center is a true multi-purpose arts facility, servicing a large population of the community in various aspects. It provides a venue for performances and workshops, film showings, radio, conferences, community gatherings, fitness classes, and religious services.

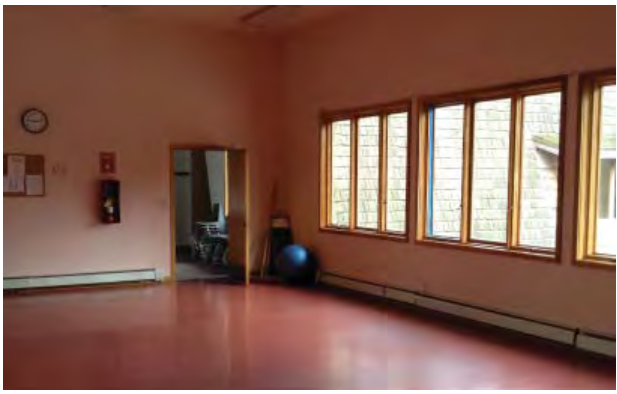
A detailed condition survey was completed in 2008 by PND, as well as indoor environmental quality testing by Carson Dorn in 2011. For the purpose of this report, we have only conducted a surface-level walk-through, in addition to analyzing the 2008/2011 studies. Our findings are complementary to the evaluations made in the previous reports and thus will avoid revisiting those issues in great detail. Please find copies of the previous studies in the Appendix of this report.

Though it is a beloved building, the Center does have many concerning issues. The surface level issues include possible existence of hazardous materials, poor indoor air quality/ thermal comfort, pests in the attic and a need for cosmetic upgrades. The facility is severely deficient in accommodating disabled visitors, does not comply with ADA, or several other current building codes for egress and door hardware. The facility would also greatly benefit from door and window replacement

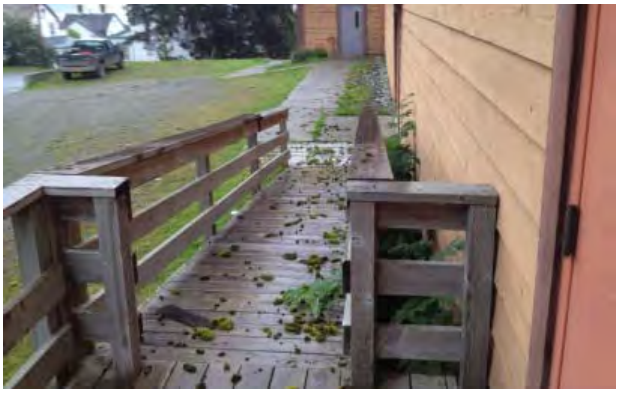


Interior - Radio Station

Interior - Entry



Interior - MPR



Exterior - Access

Facility Analysis

Mechanical challenges include an ongoing history of freezing pipes, leaky pipes, water damage, automatic fire suppression system issues, non-ADA compliant fixtures, environmental controls and inefficient heating and ventilation systems. Structurally, the roof was just replaced due to leaks, water infiltration, and ice dams, caused by lack of proper ventilation or insulation, which lends itself to mold and rotten structural components. Structural engineers in 2008 identified overstressed roof rafters/beams undersized for snow load, and a lack of support for seismic lateral loads. Overloading is visible on the upper level where the radio station's vinyl records are being stored. Upgrades are needed for the electrical system, including lighting fixtures, lighting controls, and power/data.

Facility Appraisal

The facility scored a "Borderline" average for its adequacy in meeting facility-use needs and conditions. Site and Safety both scored with a rating as "Satisfactory" and the other categories were listed as "Borderline". This shows us that the facility is generally a good fit, however, is still in need of improvements. One item to highlight is the 'Satisfactory' score of Safety and a 'Borderline' rating for Structure and Mechanical. The appraisal is not incorrect, but is derived from the perspective of how occupants use the space. A deeper technical analysis indicates some serious issues with both Structure/Mechanical and Safety.

Appraisal Summary	SECTION	POSSIBLE POINTS	TOTAL EARNED	PERCENT	RATING BY CATEGORY
	1.0 Site	100	73	73%	Satisfactory
	2.0 Structural and Mechanical	200	108	54%	Borderline
	3.0 Maintainability	100	68	68%	Borderline
	4.0 Safety	200	147	74%	Satisfactory
	5.0 Program Adequacy	200	128	64%	Borderline
	6.0 Environment for Program	200	110	55%	Borderline
	TOTAL	1,000	634	64%	**Borderline**

ROM Estimating

Program Area	Required Area	Existing Area	Existing Area Requiring Remodel	Additional Program Area Required	Remodel w/ Required Area	Replacement w/ Current Program Area	Replacement w/ Required Program Area
Basement							
Mechancial	500	500	-	-			
Storage	2,000	1,800	1,750	200			
Changing Room	1,000	900	880	100			
First Floor							
Work Room / Storage	1,800	1,700	-	100			
Green Room	225	225	225	-			
Stage	1,850	1,850	-	-			
Theater Seating	2,800	2,800	2,800	-			
Restooms	400	250	250	150			
Lobby	1,250	1,250	1,265	-			
Kitchen	300	200	190	100			
Entry	210	210	210	-			
Second Floor							
Dance Studio	1,000	800	760	200			
Offices	800	800	750	-			
Control Booth	750	700	750	50			
Radio Offices	1,250	1,150	1,150	100			
Exterior Storage Shed	500	-	-	500			
Area Subtotals	16,135	15,135					
Total Area	28,075	20,230					
Circulation	11,940	5,095					
Totals	28,075	20,230	10,980	1,000			
Estimated Project Cost / Sf			$450.00	$650.00		$600.00	
Estimated Total Project Costs			$4,941,000.00	$650,000.00	$5,591,000.00	$12,138,000.00	$12,788,000.00

Energy Analysis

Building Energy Use and Cost

	Existing (From Utility Bills)						
Building	Area	Annual kBtu	Annual Cost	EUI	% Better than Average	Elec	Fuel
Chilkat	20230	1637367	$44,729	81	5%	7%	93%

	Existing (Predicted from Current Fuel Rate)		Average Building for the Region	
Building	EUI	Annual Cost	EUI	Annual Cost
Chilkat	81	$56,967	85	$60,200

	Typical New Construction				
Building	EUI	Annual Cost	Annual Cost Savings	33% Reduction	Reduction
Chilkat	57	$40,400	$4,329		

	High Performance				
Building	EUI	Annual Cost	Annual Cost Savings	70% Reduction	Reduction
Chilkat	26	$18,100	$26,629		

Notes:
Average buildings based on EnergyStar Target Finder results (CBECS database)
Typical New Construction meet ASHRAE 90.1-2007 (Typically about a 33% Reduction from Average)
High performance meets 2030 Challenge for 2020 (70% reduction from Average)
All estimated costs rounded to nearest $100
Pool energy use based on Target Finder results combined with savings WSPFK has previously calculated for typical pool mechanical designs
Existing (Predicted from Current Fuel Rate) annual costs take the existing utility bills and scale up the annual cost from the fuel rate of $3.40 per gallon to $4.63 per gallon

Interesting Items:
Target Finder pool EUI is a calculated value rather than a sampled value. It is lower than some of our other calculations indicate for pool energy use.
Pool EUI seems low. Jason indicates humidity levels are very high. Could be sacrificing comfort for energy savings.
Visitor center EUI seems high
Fuel Oil costs much less per Btu than electricity
Adjusted Energy Costs:
Previous Fuel: $3.40 per gallon = $0.0245 per kBtu
Current Fuel: $4.63 per gallon = $0.0334 per kBtu
Elec: $0.172 per kWh = $0.0504 per kBtu

Life Cycle Cost Analysis

Inputs		
Inflation Rate	7.5%	
Discount Rate (Real)	3.0%	
Utility Escalation Rate (Real)	2.0%	
Duration of Study	50	years

Building	Existing	Existing (Predicted)
	Annual Cost	Annual Cost
Visitor Center	$10,489	$12,530

Building	Typical New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Visitor Center	$5,700	$6,830	$2,338,500

Building	High Performance New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Visitor Center	$2,100	$10,430	$3,571,000

Notes:
Existing (Predicted) Costs adjust reported fuel oil bills to current fuel oil rates
DOE Inflation Rate is 3%.
DOE Discount Rate is 3%, typical discount rates vary from 3%-6%
FEMP Utility Escalation Rate (Real) for 70% Fuel Oil / 30% Elec is 0.59%. Rate tends to be skewed low. Typical rates 2%-5%
Life Cycle Cost Savings rounded to nearest $500

2.2.8 Senior Center

Quick Status

Area	2700 SF
Condition	Good
Year Built	1981, 2009
Heat Source	Wood Fired Boiler / New
Fuel Tank	Above Ground
Construction	Masonry / Wood Frame
Roof Type	Metal
Siding	Lap Siding
Sprinklered	No
Occupancy	A-3 (Assembly)

General Condition Assessment

Overall, the Senior Center is a well-used public facility that is generally in good condition and is well-positioned in a central location between senior housing and an adjacent park.

The facility is operated Monday through Thursday between 8am and 3pm. The center has a commercial kitchen, assembly room and some exercise equipment. Programs include Senior activities, along with a meals program. Two Saturdays per month, the facility is also used for all-day programs that include use by a Quilters Group. Occasionally, the facility is rented out to other individuals and various community groups throughout the year.

The facility is need of only a few minor cosmetic improvements and upgrades. With recent wood pellet boiler replacement and the carport canopy addition, the only significant deficiencies include ADA improvements, along with heating distribution replacements and siding repairs. Minor upgrades include painting and finish material replacements.

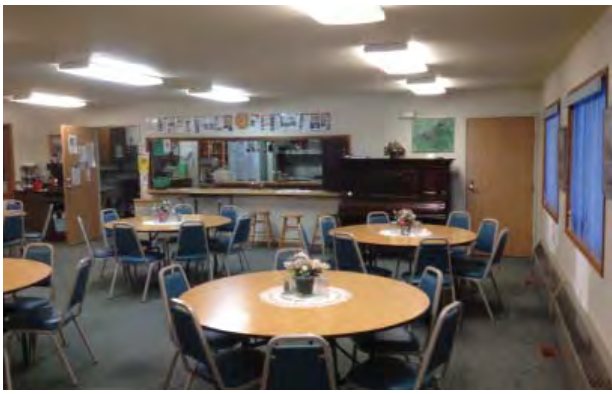
The facility is not currently in compliance with ADA standards. The most noticeable issues include door hardware, clearances, and fixtures in the restroom, as well as the overall clearances in the restrooms.

The Borough recently replaced a 25 year old diesel boiler that had reached the end of its life, with an Okofen wood pellet boiler. It's expected to achieve significant savings in fuel costs over the 20+ year life of the boiler. The boiler is functioning as designed and has been a catalyst for up to 3 new wood pellet boiler installations in Haines this year. The new boiler has also reduced air emissions and carbon footprint.

With the recent boiler replacement, an effort to maximize energy efficiency would require infrastructure improvements, like efficient window glazing, door seals and, possibly, envelope insulation enhancements.

Exterior - Street Access

Interior - MPR



Interior - MPR

Exterior - Rear

Facility Analysis

Deficiencies

Repairs Recently Completed:

- Repaired rot in pantry
- Replaced all light fixtures
- New Car port added
- New sewer line
- Handicap sinks
- New Boiler

Outstanding Repairs Needed:

- Painting
- Finish Material Upgrades
- New heat distribution system
- Repair siding
- General ADA upgrades (rest room)

Community Needs Survey

The Senior Center scored high in most categories of the survey, suggesting a consensus of strong community support for both the facility and the services it provides. The facility is not in need of major repairs and its housing of vital community programs for Senior Citizens remains popular.

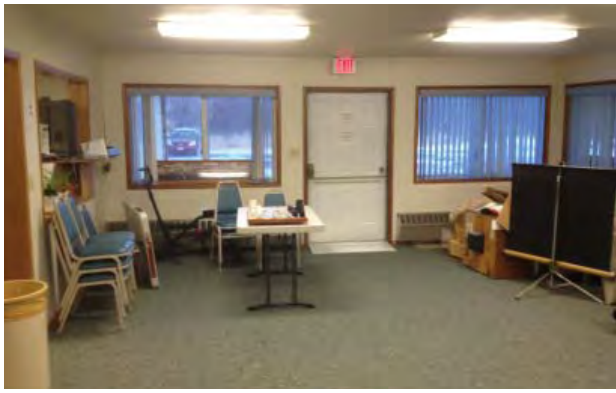
Programming Questionnaire

This is a Borough facility managed by Haines Senior Citizens Center Inc. and it provides a wide range of senior services out of the building. Services include a meals program 4 days a week, both on-site and delivered meals: senior transportation services; social gathering, and exercises; and the facility is available to rent for various community and individual activities, such as quilting, wedding receptions, family gatherings, classes, etc.

Proximity to the 13-unit Haines Senior Village across the street is an advantage as residents can walk to the lunches and activities. A small storage area, approximately 150 sf, for maintenance supplies, flower pots, tires, chains and other misc. items is needed.

The senior transportation program also operates from this location, requiring parking for two large passenger vans, as well as additional public parking. The parking requirement of 15 spaces and site access is adequate for the facility with the current space available.

Interior - Kitchen



Interior - MPR

Interior - Restroom

Interior - Kitchen

Facility Analysis

Facility Appraisal

Following evaluation of the facility appraisal conducted for the Senior Center, it was determined to be "Satisfactory" in its ability to adequately support program needs. Out of all of the public facilities appraised in this report, the Senior Center scores the highest, which validates other evaluations made in both the program questionnaire, as well as the overall facility assessment. Each category in this appraised scored a "Satisfactory" ranking.

Appraisal Summary

SECTION	POSSIBLE POINTS	TOTAL EARNED	PERCENT	RATING BY CATEGORY
1.0 Site	100	74	74%	Satisfactory
2.0 Structural and Mechanical	200	156	78%	Satisfactory
3.0 Maintainability	100	70	70%	Satisfactory
4.0 Safety	200	128	64%	Borderline
5.0 Program Adequacy	200	143	71%	Satisfactory
6.0 Environment for Program	200	151	75%	Satisfactory
TOTAL	1,000	722	72%	Satisfactory

ROM Estimating

Program Area	Required Area	Existing Area	Existing Area Requiring Remodel	Additional Program Area Required	Remodel w/ Required Area	Replacement w/ Current Program Area	Replacement w/ Required Program Area
Kitchen Entry	72	72		-			
Boiler Room	49	49		-			
Kitchen Entry	300	300		-			
Pantry	132	132		-			
Multi- Purpose Room	1,073	1,073		-			
Recreation Room	566	566		-			
Office	190	190		-			
Main Entry Vest.	171	171		-			
Womens Restroom	150	80	80	70			
Mens Restroom	150	80	80	70			
Area Subtotals	2,853	2,713					
Total Area	2,996	2,844					
Circulation	143	131					
Totals	2,996	2,844	160	140			
Estimated Project Cost / Sf			$250.00	$450.00		$300.00	
Estimated Total Project Costs			$40,000.00	$63,000.00	$103,000.00	$853,200.00	$916,200.00

Energy Analysis

Building Energy Use and Cost

	Existing (From Utility Bills)						
Building	Area	Annual kBtu	Annual Cost	EUI	% Better than Average	Elec	Fuel
Senior Center	2844	273482		96	-9%	14%	86%

	Existing (Predicted from Current Fuel Rate)		Average Building for the Region	
Building	EUI	Annual Cost	EUI	Annual Cost
Senior Center	96	$11,640	88	$10,900

	Typical New Construction				
Building	EUI	Annual Cost	Annual Cost Savings	33% Reduction	Reduction
Senior Center	63	$8,000	$3,640		

	High Performance				
Building	EUI	Annual Cost	Annual Cost Savings	70% Reduction	Reduction
Senior Center	35	$4,600	$7,040		

Notes:
Average buildings based on EnergyStar Target Finder results (CBECS database)
Typical New Construction meet ASHRAE 90.1-2007 (Typically about a 33% Reduction from Average)
High performance meets 2030 Challenge for 2020 (70% reduction from Average)
All estimated costs rounded to nearest $100
Pool energy use based on Target Finder results combined with savings WSPFK has previously calculated for typical pool mechanical designs
Existing (Predicted from Current Fuel Rate) annual costs take the existing utility bills and scale up the annual cost from the fuel rate of $3.40 per gallon to $4.63 per gallon

Interesting Items:
Target Finder pool EUI is a calculated value rather than a sampled value. It is lower than some of our other calculations indicate for pool energy use.
Pool EUI seems low. Jason indicates humidity levels are very high. Could be sacrificing comfort for energy savings.
Visitor center EUI seems high
Fuel Oil costs much less per Btu than electricity
Adjusted Energy Costs:
Previous Fuel: $3.40 per gallon = $0.0245 per kBtu
Current Fuel: $4.63 per gallon = $0.0334 per kBtu
Elec: $0.172 per kWh = $0.0504 per kBtu

Life Cycle Cost Analysis

Inputs		
Inflation Rate	7.5%	
Discount Rate (Real)	3.0%	
Utility Escalation Rate (Real)	2.0%	
Duration of Study	50	years

Building	Existing	Existing (Predicted)
	Annual Cost	Annual Cost
Senior Center	$0	$11,640

Building	Typical New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Senior Center	$8,000	$3,640	$1,246,500

Building	High Performance New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Senior Center	$4,600	$7,040	$2,410,500

Notes:
Existing (Predicted) Costs adjust reported fuel oil bills to current fuel oil rates
DOE Inflation Rate is 3%.
DOE Discount Rate is 3%, typical discount rates vary from 3%-6%
FEMP Utility Escalation Rate (Real) for 70% Fuel Oil / 30% Elec is 0.59%. Rate tends to be skewed low. Typical rates 2%-5%
Life Cycle Cost Savings rounded to nearest $500

Section 3.0 Appendix

SECTION 3.1 COMMUNITY NEEDS SURVEY

Haines 2015

Prepared for: Community Facilities Committee
Prepared by: The Professional Development Company
Date: September 2012

Haines 2015:

Needs Assessment Postal Survey

Summary

- 1525 surveys mailed to postal customers in Haines Borough.
- 335 surveys were returned.
- Return represents a confidence level of 95% +/- 5%.
- Partial answers with correct procedures were counted.
- Population of Haines: 2620
  (Pop. provided by State of Alaska Community & Regional Affairs)

Executive Summary:

One thousand five hundred and twenty-five Needs Assessment Surveys were mailed on September 10th, 2012 for return by September 21st, 2012, to the Haines Borough postal customers. Three hundred and thirty-five surveys were returned, allowing a ninety-five percent confidence level in a community of two thousand six hundred and twenty, plus or minus five percent.

The survey included six main questions, each with several parts, to help determine the priorities and thoughts of the community about services provided or supported by the Borough and the buildings that house them.

In the results, the Fire, Ambulance and Police Services, and K-12 Education were ranked significantly higher than the others in both the order of importance to our community and which buildings should theoretically be built first.

When asked about whether services met the needs of our community, the survey showed a high level of satisfaction by very large percentage of excellent or good and very low number of poor ratings.

When asked what new services or facilities the Borough should provide, a very strong voice for taking care of what we have and not building anything new came through; about sixteen percent up to possibly twenty-seven percent. But also, those that felt the Borough should provide more wrote a total of three hundred and nineteen other ideas. Eighteen and a half percent asked for an indoor recreation center.

When asked to allocate limited funds to buildings, the Fire, Ambulance & Police Building once again came out on top. The second and third places were given to the Chilkat Center and a New Recreation Center. But it is important to note that the allocation of average dollars was less than $2.00 out of $10.00 on these projects; demonstrating a need for a conservative and limited approach.

When asked about energy efficiency, low on-going maintenance costs, ease of parking and snow removal the community showed over ninety percent agreement in these areas being a top priority in borough owned buildings. A slightly lower number, but still a clear majority of seventy percent, thought that building attractiveness should be a priority.

Overall, the Needs Assessment Survey had a strong return and consistent voice. Very few questions were eliminated due to improper procedures and many people took the time to make additional constructive comments. I was encouraged by the time and care individuals put into filling out the survey. This is a great opportunity to hear from a large number of people that may not have the schedule or motivation to attend a public workshop.

Lenise Henderson Fontenot
The Professional Development Company

What Is Important To Our Community Question #1

1. Please rank the following borough services in order of importance to our community.

In order of survey results: (The lower the score, the higher the ranking)

1. Fire, Ambulance, Police	score 759	av. 2.49
2. K-12 Education	score 844	av. 2.85
3. Library	score 1342	av. 4.64
4. Senior Services	score 1697	av. 5.77
5. Pre- school Education	score 1778	av. 6.10
6. Administration Services	score 1894	av. 6.48
7. Recreation Services	score 1986	av. 6.8
8. Swimming Pool	score 2041	av. 6.8
9. Cultural Services: Theater Music & Art	score 2038	av. 6.95
10. Museum	score 2264	av. 7.88
11. Visitor Services	score 2396	av. 8.34

- The Fire Ambulance and Police Services, and K-12 Education were ranked significantly higher than the others in order of importance to our community.

What Would You Build First? Question #2:

2. If all the above services needed new buildings what four buildings would you build first?

Ranked by number of times chosen:
(More times chosen, the higher the ranking)

1. Police Fire Ambulance	214
2. K-12 Education	168
3. Senior Services	128
4. Cultural Services	115
5. Library	104
6. Administrative Services	95
7. Pre school education	93
8. Swimming Pool	90
9. Recreation Services	76
10. Visitor Services	44
11. Museum	35

- Police, Fire, Ambulance Building scored first again by a significant margin.
- Senior Services score moved up one by scoring third.
- Cultural Services, defined as theater, music and the arts, makes the most movement, into the top four to show a clear interest in this area.
- Visitor Center & Museum are in the bottom two again showing less interest or interaction by the local community.

How Are We Doing? Question #3:

3. How would you rate the current borough provided services in meeting the Haines community needs?

	Excellent	Good	Fair	Poor	Don't Know
Police	4 21%	3 47%	2 21%	1 7%	00 4%
Ambulance	4 68%	3 24%	2 5%	1 0 %	00 3%
Fire Protection	4 60%	3 29%	2 6%	1 0%	00 5%
Administrative Services	4 12%	3 45%	2 30%	1 7%	00 6%
Swimming Pool	4 14%	3 49%	2 19%	1 5%	00 13%
Library Services	4 69%	3 26%	2 3%	1 0%	00 2%
Museum Services	4 35%	3 48%	2 9%	1 2%	00 6%
Cultural Services:	4 23%	3 46%	2 20%	1 6%	00 5%
K-12 Education	4 34%	3 46%	2 8%	1 3%	00 9%
Senior Services	4 14%	3 44%	2 27%	1 1%	00 14%
Visitor Center	4 17%	3 43%	2 21%	1 3%	00 16%
Pre-school Education	4 13%	3 37%	2 18%	1 5%	00 27%
Recreational Services	4 11%	3 42%	2 33%	1 10%	0 4%

Q#3 Performance Summaries:

- The services with the most percentage of “Excellent” ratings were the Library at 69% followed closely by Ambulance Service at 68%.

- Overall borough services scored positively with a high level of excellent and good responses.

Ranked by Positive Performance

		% Of Excellent & Good
1.	Library	95%
2.	Ambulance Services	92
3.	Fire Protection	89
4.	Museum	83
5.	K-12 Education	80
6.	Cultural Services (Theater, Music & arts)	69
7.	Police	68
8.	Swimming Pool	63
9.	Visitor Center	60
10.	Senior Services	58
11.	Administrative Services	57
12.	Recreational Services	53
13.	Preschool Education	50

- The number of responses that borough services ranked Poor 10% or lower.

- “Poor” can represent an opportunity to improve our ability to meet resident’s needs by improving, expanding, relocating, or changing services.

		% Of Poor Performance
1.	Recreational Services	10%
2.	Police	7
3.	Administrative	7
4.	Cultural Services	6
5.	Swimming Pool	5
6.	Pre-School Education	5
7.	Visitor Services	3
8.	K-12 Education	3
9.	Museum	2
10.	Senior Services	1
11.	Ambulance	0
12.	Fire	0
13.	Library	0

- Overall the community shows a significant level of satisfaction in services provided.

What Do You Want? Question #4

This question engages people's imagination and wishes. It probably best represents the types of ideas and discussion we would have in public workshop.

4. What NEW services or facilities would you like to see the borough provide?

Summarized:

Just maintain current facilities or "None":	53 responses
No Response *See note below could be interpreted as "None":	84 responses
Recreation Center of some type:	64 responses
Variety of Ideas:	202 responses

Approximately 319 ideas written:
(Hard to count percentages or tabulate numerically because some people made several comments, some made zero)

- 15.5% of the sample strongly answered NONE.
- At least half of the No Responses may have meant NONE in my observation due to other comments they made on the survey:
  (If we add that half/ + 42. It could bring the "Nones" up to 27.9%)
  The reason I am making this observation is because the "no build- save money" comments were strong. Suggesting a need for a good economic argument for new construction.
- About 18.5% of the sample made a clear request for a recreation center. Several other comments like teen center or community center could have been interpreted as part of this response but I did not include it in the 18.5% if people were not clear. This is difficult to measure precisely because of the multiple answers and different descriptions from some individuals.
- There were a large variety of responses that did not include a new building of any type.
  There were many suggestions for new outdoor spaces.
  There were many suggestions for new social and technology services.

Summary of ideas that came up several times:

Take better care of what we have
Community/ multi- use center
Teen center
Roof/repair for the Chilkat Center
More walking paths downtown
Trails, bike paths, sidewalks
Downtown central park
Outdoor recreation & skiing
Senior services
More enforcement of existing regulations
Ways to cut spending & save money
Combining services under one roof
Boat Harbor improvements
Artist space
Office space

How Would You Spend The Money? Question #5:

After Question Four engages the individual wants and imagination of the survey taker, I would expect a shift in responses from more practical and community minded to more self-oriented and wishful. This is likely to represent many topics that may come up in public workshops.

Question 5:
In the list of borough buildings below, imagine they ALL need major repairs. If you have only $10.00 to spend towards repairs, where would you put your money? You may divide it up however you like, but the total must equal no more than $10.00

Results:

1. Police, Ambulance, and Fire Building	$697.25
2. Chilkat Center	$548.50
3. "Brand New" Recreational Facility	$452.75
4. Library	$268.50
5. Senior Center	$263.50
6. Swimming Pool	$260.75
7. Human Resource Building (Pre-school)	$201.75
8. Administrative Offices	$180.25
9. Sheldon Museum	$116.75
10. Visitor Center	$104.00

- Adjusting out the "tens" $10.00, which represents the "only" projects of a small number of people listed below. This procedure would change the order of the Library and Senior Center.

Number of $10's or "Only" Projects:

1. "Brand New" Recreational Facility	$120	12 people
2. Chilkat Center	$110	11 people
3. Police, Ambulance, and Fire Building	$100	10 people
4. Library	$20	2 people
5. Swimming Pool	$20	2 people
6. Senior Center	$10	1 person
7. Human Resource Building (Pre-school)	$10	1 person
8. Administrative Offices	$0	
9. Sheldon Museum	$0	
10. Visitor Center	$0	

Average Dollars allocated of top three without the "tens" and entire sample:

Police, Ambulance, Fire Building = 215 donors for average of	$2.77
Average for entire survey population	$2.08
Chilkat Center = 167 donors for average of	$2.62
Average for entire survey population	$1.63
Recreation Center= 129 donors with average of	$2.57
Average for entire survey population	$1.35

- Police, Fire, Ambulance continues to score first. Museum & Visitor Center continues to score bottom two. Chilkat Center & Recreational Facility present in the top 3: notice amounts are less than $2 for entire (335) survey population.

What Should Our Priorities Be? Question #6:

Question 6 represents four important topics to consider when remodeling facilities or new construction is considered.

6. Please circle one answer in the following statements:

A. Energy costs & efficiency should be a top priority in borough owned buildings.

Strongly Agree	Agree	Disagree	Strongly Disagree
62%	33%	4%	1%

- Note: 95% agreement

B. Low on-going maintenance should be a top priority in borough owned buildings.

Strongly Agree	Agree	Disagree	Strongly Disagree
47%	46%	5%	2%

- Note: 93% agreement

C. Attractive appearance should be a top priority in borough owned buildings.

Strongly Agree	Agree	Disagree	Strongly Disagree
19%	51%	24%	6%

- Note: 70% agreement

D. Ease of parking & snow removal should be a top priority in borough owned buildings.

Strongly Agree	Agree	Disagree	Strongly Disagree
24%	58%	16%	2%

- Note 82% agreement

Needs Assessment Postal Mailing Method Summary:

This Needs Assessment survey was originally created for stakeholder interviews. After reviewing it, the Facilities Committee decided they wanted a postal customer mailing in order to get a larger return and more objective sample of the community. I changed the answer format so that questions could be mostly tabulated mathematically. After I did a few more revisions to simplify, I was concerned the survey would be too difficult for a unassisted mail box holder, I then did a test run on a dozen high school students to a make sure they could understand the questions and fill it out correctly. Once that was completed, and the high school students were successful, Darcie Culbeck and I worked together to refine the questionnaire and get it ready for mailing. We had four edits by borough employees to check for errors in grammar and spelling. The High School Honor Society helped fold, staple and stamp the 1525 two-page survey.

The survey was mailed on September 10th for return by September 21st. Our goal was a return of at least 307 surveys allowing us a 95% confidence level in a community of 2620 +/- 5%.
We met our goal and received 335 back.

I batched the survey by tens and tabulated findings. All data was double checked for entry errors with tapes on a 10-key system. Batches of tens were also reviewed for spot errors and outlier errors. Results were then batched by question number and error checked by an average system. Only 43 questions or 1.4% were eliminated due to incorrect procedures. Partial correct answers were counted. Each question was counted for total number of responses to that question and tabulated by the specific number not the total of 335 surveys in order to get more precise averages and results.

The report was written and results will be reported to borough management 10/1/12.

A meeting will be scheduled to communicate results to the Facilities Committee and further discuss the results.

Lenise Henderson Fontenot

9/29/12

The Professional Development Company
P.O. Box 12
Haines, Alaska 99827
lenisepdc@aol.com
(907) 314-0456

SECTION 3.2 SAMPLE QUESTIONNAIRE

Space Programming Questionnaire

Haines 2015

Department/Division Name:_____

For the upcoming meeting we will be covering the following questions (among others). Please take an opportunity to review the questions and prepare for a discussion of the responses at the meeting.

1. Please provide a brief overview of the organization and function of your department.

2. What other departments and services should your department be near? What are the advantages of these adjacencies?

3. Do you have any specialized site needs, such as material or vehicle storage areas?

4. What technical or programmatic/regulatory requirements do you anticipate in the upcoming decade that will affect your department?

Space Programming Questionnaire

Haines 2015

Department/Division Name:_____

Program Space Summary Worksheet

Please list the spaces you need to support your current and future operations (offices, storage, conference rooms, etc.) – do not include restrooms, hallways and other general building support spaces. If you know how much space is required list that, if not we will help you figure it out. List both existing spaces and additional spaces needed to support an efficient/effective department. Be prepared to discuss your needs and any other facility requirements that may be important to the master planning process.

SPACE NAME	Number of Staff	Area Required	Existing Building	Room Number	Other Facility Requirements

SECTION 3.3 SAMPLE FACILITY APPRAISAL

Appraisal Guide for Public Facilities

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1-29%	Poor 30-49%	Borderline 50-69%	Satisfactory 70-89%	Excellent 90-100%
5	0	1	2	3	4	5
10	0	2	4	6	8	10
15	0	3	6	9	12	15
20	0	4	8	12	16	20
25	0	5	10	15	20	25

Appraisal Summary

SECTION	POSSIBLE POINTS	TOTAL EARNED	PERCENT	RATING BY CATEGORY
1.0 Site	100	0	0%	0
2.0 Structural and Mechanical	200	0	0%	0
3.0 Maintainability	100	0	0%	0
4.0 Safety	200	0	0%	0
5.0 Program Adequacy	200	0	0%	0
6.0 Environment for Program	200	0	0%	0
TOTAL	1,000	0	0%	**0**

1.0 Site

100 Points

1.1	Site is large enough to meet present and future needs.	25	0
1.2	Site is easily accessible and conveniently located for the present and future population.	20	0
1.3	Location is removed from undesirable business, industry, traffic, and natural hazards.	10	0
1.4	Site is well landscaped and developed to meet needs.	10	0
1.5	Outdoor special use areas are separated from streets and parking areas.	10	0
1.6	Topography is varied enough to provide desirable appearance and without steep inclines.	5	0
1.7	Site has stable, well drained soil free of erosion.	5	0
1.8	Site is suitable for special outdoor use.	5	0
1.9	Pedestrian services include adequate sidewalks with designated crosswalks, curb cuts, and correct slopes.	5	0
1.10	Sufficient on-site, solid surface parking is provided for faculty, staff and community.	5	0
	TOTAL – SITE	100	0

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1-29%	Poor 30-49%	Borderline 50-69%	Satisfactory 70-89%	Excellent 90-100%
5	0	1	2	3	4	5
10	0	2	4	6	8	10
20	0	4	8	12	16	20
25	0	5	10	15	20	25

2.0 Structural and Mechanical Features 200 Points

STRUCTURAL

2.1	Structure meets all barrier-free requirements both externally and internally.	15	0
2.2	Roofs appear sound, have positive drainage, and are weather tight.	15	0
2.3	Foundations are strong and stable with no observable cracks.	10	0
2.4	Exterior and interior walls have sufficient expansion joints and are free of deterioration.	10	0
2.5	Entrances and exits are located so as to permit efficient student traffic flow.	10	0
2.6	Building “envelope” generally provides for energy conservation.	10	0
2.7	Structure is free of friable asbestos and toxic materials.	10	0
2.8	Interior walls permit sufficient flexibility for a variety of class sizes.	10	0

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1-29%	Poor 30-49%	Borderline 50-69%	Satisfactory 70-89%	Excellent 90-100%
10	0	2	4	6	8	10
15	0	3	6	9	12	15

MECHANICAL/ELECTRICAL

2.9	Adequate light sources are well maintained, properly placed and are not subject to overheating.	15	0
2.10	Internal water supply is adequate with sufficient pressure to meet health and safety requirements.	15	0
2.11	Each area has adequate convenient wall outlets, phone and computer cabling for technology applications.	15	0
2.12	Electrical controls are safely protected with disconnect switches easily accessible.	10	0
2.13	Drinking fountains are adequate in number and placement, and are properly maintained including provisions for the disabled.	10	0
2.14	Number and size of restrooms meet requirements.	10	0
2.15	Drainage systems are properly maintained and meet requirements.	10	0
2.16	Fire alarms, smoke detectors, and sprinkler systems are properly maintained and meet requirements.	10	0
2.17	Intercommunication system allows dependable communication between the offices.	10	0
2.18	Exterior water supply is sufficient and available for normal usage.	5	0
	TOTAL – STRUCTURAL AND MECHANICAL FEATURES	200	0

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1-29%	Poor 30-49%	Borderline 50-69%	Satisfactory 70-89%	Excellent 90-100%
5	0	1	2	3	4	5
10	0	2	4	6	8	10
15	0	3	6	9	12	15

3.0 Maintainability

100 Points

3.1	Exterior windows, doors, and walls are of material and finish requiring minimum maintenance.	15	0
3.2	Floor surfaces throughout the building require minimum care.	15	0
3.3	Ceilings and walls throughout the building, including service areas, are easily cleaned and resistant to stain.	10	0
3.4	Built-in equipment is designed and constructed for ease maintenance.	10	0
3.5	Finishes and hardware, with a compatible keying system, are of durable quality.	10	0
3.6	Restroom fixtures are wall mounted and of quality finish.	10	0
3.7	Adequate custodial storage space with water and drain is accessible throughout the building.	10	0
3.8	Adequate electrical outlets and power, to permit routine cleaning, are available in every area.	10	0
3.9	Outdoor light fixtures, electric outlets, equipment, and other fixtures are accessible for repair and replacement.	10	0
	TOTAL – MAINTAINABILITY	100	0

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1-29%	Poor 30-49%	Borderline 50-69%	Satisfactory 70-89%	Excellent 90-100%
10	0	2	4	6	8	10
15	0	3	6	9	12	15

4.0 Safety

200 Points

SITE SAFETY

4.1	Entries are segregated from other vehicular traffic and pedestrian walkways.	15	0
4.2	Walkways, both on and offsite, are available for safety of pedestrians.	10	0
4.3	Access streets have sufficient signals and signs to permit safe entrance to and exit from the area.	5	0
4.4	Vehicular entrances and exits permit safe traffic flow.	5	0
4.5	Locations and types of outside spaces are free from hazard.	5	0

BUILDING SAFETY

4.6	The heating unit(s) are protected in occupied areas.	20	0
4.7	Multi-story buildings have at least two stairways for occupant egress.	15	0
4.8	Exterior doors open outward and are equipped with panic hardware.	10	0
4.9	Emergency lighting is provided throughout the building with exit signs on separate electrical circuits.	10	0
4.10	Doors open outward.	10	0
4.11	Building security systems are provided to assure uninterrupted operation of the program.	10	0

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1-29%	Poor 30-49%	Borderline 50-69%	Satisfactory 70-89%	Excellent 90-100%
5	0	1	2	3	4	5
10	0	2	4	6	8	10
15	0	3	6	9	12	15
20	0	4	8	12	16	20

4.12	Flooring (including ramps and stairways) is maintained in a nonslip condition.	5	0
4.13	Stairs (interior and exterior) meet standards (maximum 7” rise to 11” tread) and steps range in number from 3-16.	5	0
4.14	Glass is properly located and protected with wire or safety material to prevent accidental injury.	5	0
4.15	Fixed projections in the traffic areas do not extend more than eight inches from the corridor wall.	5	0
4.16	Traffic areas terminate at an exit or stairway leading to an egress.	5	0

EMERGENCY SAFETY

4.17	Adequate fire safety equipment is properly located.	15	0
4.18	There are at least two independent exits from any point in the building.	15	0
4.19	Fire-resistant materials are used throughout the structure.	15	0
4.20	Automatic and manual emergency alarm system with a distinctive sound and flashing light is provided.	15	0
	TOTAL –SAFETY	200	0

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1-29%	Poor 30-49%	Borderline 50-69%	Satisfactory 70-89%	Excellent 90-100%
5	0	1	2	3	4	5
15	0	3	6	9	12	15

5.0 Program Adequacy

200 Points

5.1	Size of areas meets desirable needs.	15	0
5.2	Space permits arrangements for various activities.	10	0
5.3	Location of special use areas is near related activities and away from disruptive noises.	10	0
5.4	Personal space in the facility allows privacy time for individual.	5	0
5.5	Storage for staff materials is adequate.	5	0
5.6	Storage for personal materials is adequate.	5	0
5.7	Size of specialized area(s) meets needs.	15	0
5.8	Design of specialized area(s) is compatible with facility use.	10	0
5.9	Resource/Media Area provides appropriate and attractive space.	15	0
5.10	Outdoor space adequately serves needs.	10	0
5.11	Program provides sufficient space and equipment.	10	0
5.12	Sound treatments are adequate.	10	0

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1-29%	Poor 30-49%	Borderline 50-69%	Satisfactory 70-89%	Excellent 90-100%
5	0	1	2	3	4	5
10	0	2	4	6	8	10
15	0	3	6	9	12	15
25	0	5	10	15	20	25

5.13	Space provided for instruction, meetings, presentations, with room for supplies, and equipment.	10	0
5.14	Space for technology permits use of state-of-the-art equipment.	10	0
5.15	Related space for is provided adjacent to special services.	5	0
5.16	Storage is adequate.	5	0

SUPPORT SPACE

5.17	Lounge and work areas supports professionals.	10	0
5.18	Kitchen/break room is provided with seating/dining, delivery, storage, and food preparation.	10	0
5.19	Administrative offices are consistent in appearance and function.	10	0
5.20	Private offices are available and insures privacy and sufficient storage.	5	0
5.21	Restroom is near administrative offices and is equipped to meet requirements.	5	0
5.22	Suitable reception space is available for visitors.	5	0
5.23	Administrative personnel are provided sufficient work space and privacy.	5	0
	TOTAL – PROGRAM ADEQUACY	200	0

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1-29%	Poor 30-49%	Borderline 50-69%	Satisfactory 70-89%	Excellent 90-100%
5	0	1	2	3	4	5
10	0	2	4	6	8	10

6.0 Environment for Program

200 Points

EXTERIOR ENVIRONMENT

6.1	Overall design is aesthetically pleasing and appropriate.	15	7
6.2	Site and building are well landscaped.	10	0
6.3	Exterior noise and surrounding environment do not disrupt use.	10	0
6.4	Entrances and walkways are sheltered from sun and inclement weather.	10	0
6.5	Building materials provide attractive color and texture.	5	0

INTERIOR ENVIRONMENT

6.6	Color schemes, building materials, and décor provide an enjoyable space.	20	0
6.7	Year around comfortable temperature and humidity are provided throughout the building.	15	0
6.8	Ventilating system provides adequate quiet circulation of clean air and meets 15cfm VBC requirement.	15	0
6.9	Lighting system provides proper intensity, diffusion, and distribution of illumination.	15	0
6.10	Sufficient drinking fountains and restroom facilities are conveniently located	15	0
6.11	Communication among students is enhanced by commons area.	10	0

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1-29%	Poor 30-49%	Borderline 50-69%	Satisfactory 70-89%	Excellent 90-100%
5	0	1	2	3	4	5
10	0	2	4	6	8	10
15	0	3	6	9	12	15
20	0	4	8	12	16	20

6.12	Traffic flow is aided by appropriate foyers and corridors.	10	0
6.13	Areas to interact are suitable.	10	0
6.14	Large areas are designed for effective use and flexibility.	10	0
6.15	Acoustical treatment of ceilings, walls, and floors provides effective sound control.	10	0
6.16	Window design contributes to a pleasant environment.	10	0
6.17	Furniture and equipment provide a pleasing atmosphere.	10	0
	TOTAL – ENVIRONMENT FOR PROGRAM	200	0

Table of Weights and Categories

Maximum Points Allotted	Non-Existent	Very Inadequate 1-29%	Poor 30-49%	Borderline 50-69%	Satisfactory 70-89%	Excellent 90-100%
10	0	2	4	6	8	10

SECTION 3.4 ENERGY BENCHMARKING

Building Energy Use and Cost

	Existing (From Utility Bills)						
Building	**Area**	**Annual kBtu**	**Annual Cost**	**EUI**	**% Better than Average**	**Elec**	**Fuel**
Public Safety	12557	759554	$23,363	60	-1%	32%	68%
Human Resources	4080	235375	$6,290	58	2%	4%	96%
Admin	3552	245462	$8,228	69	-23%	40%	60%
Pool	11010	2168569	$66,493	197	2%	24%	76%
Visitor	1008	335333	$10,489	333	-50%	29%	71%
Chilkat	20230	1637367	$44,729	81	5%	7%	93%
Museum	4753	493137	$13,604	104	-174%	14%	86%
Senior Center	2844	273482		96	-9%	14%	86%

	Existing (Predicted from Current Fuel Rate)		Average Building for the Region	
Building	**EUI**	**Annual Cost**	**EUI**	**Annual Cost**
Public Safety	60	$28,028	60	$27,800
Human Resources	58	$8,296	59	$8,500
Admin	69	$9,530	56	$7,800
Pool	197	$81,062	200	$82,400
Visitor	333	$12,530	222	$8,400
Chilkat	81	$56,967	85	$60,200
Museum	104	$17,384	38	$6,400
Senior Center	96	$11,640	88	$10,900

	Typical New Construction				
Building	**EUI**	**Annual Cost**	**Annual Cost Savings**	**33% Reduction**	**Reduction**
Public Safety	40	$18,700	$4,663		
Human Resources	40	$5,700	$590		
Admin	38	$5,300	$2,928		
Pool	161	$66,300	$193		
Visitor	149	$5,700	$4,789		
Chilkat	57	$40,400	$4,329		
Museum	25	$4,300	$9,304		
Senior Center	63	$8,000	$3,640		

	High Performance				
Building	**EUI**	**Annual Cost**	**Annual Cost Savings**	**70% Reduction**	**Reduction**
Public Safety	18	$8,400	$14,963		
Human Resources	18	$2,600	$3,690		
Admin	17	$2,400	$5,828		
Pool	72	$29,600	$36,893		
Visitor	67	$2,100	$8,389		
Chilkat	26	$18,100	$26,629		
Museum	11	$2,000	$11,604		
Senior Center	35	$4,600	$7,040		

Notes:
Average buildings based on EnergyStar Target Finder results (CBECS database)
Typical New Construction meet ASHRAE 90.1-2007 (Typically about a 33% Reduction from Average)
High performance meets 2030 Challenge for 2020 (70% reduction from Average)
All estimated costs rounded to nearest $100
Pool energy use based on Target Finder results combined with savings WSPFK has previously calculated for typical pool mechanical designs
Existing (Predicted from Current Fuel Rate) annual costs take the existing utility bills and scale up the annual cost from the fuel rate of $3.40 per gallon to $4.63 per gallon

Interesting Items:
Target Finder pool EUI is a calculated value rather than a sampled value. It is lower than some of our other calculations indicate for pool energy use.
Pool EUI seems low. Jason indicates humidity levels are very high. Could be sacrificing comfort for energy savings.
Visitor center EUI seems high
Fuel Oil costs much less per Btu than electricity
Adjusted Energy Costs:
Previous Fuel: $3.40 per gallon = $0.0245 per kBtu
Current Fuel: $4.63 per gallon = $0.0334 per kBtu
Elec: $0.172 per kWh = $0.0504 per kBtu

SECTION 3.5 LIFE CYCLE COST ANALYSIS

Life Cycle Cost Analysis

Inputs		
Inflation Rate	7.5%	
Discount Rate (Real)	3.0%	
Utility Escalation Rate (Real)	2.0%	
Duration of Study	50	years

Building	Existing	Existing (Predicted)
	Annual Cost	Annual Cost
Public Safety	$23,363	$28,028
Human Resources	$6,290	$8,296
Admin	$8,228	$9,530
Pool	$66,493	$81,062
Visitor Center	$10,489	$12,530
Chilkat	$44,729	$56,967
Museum	$13,604	$17,384
Senior Center	$0	$11,640

Building	Typical New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Public Safety	$18,700	$9,328	$3,194,000
Human Resources	$5,700	$2,596	$889,000
Admin	$5,300	$4,230	$1,448,500
Pool	$66,300	$14,762	$5,054,000
Visitor Center	$5,700	$6,830	$2,338,500
Chilkat	$40,400	$16,567	$5,672,000
Museum	$11,000	$6,384	$2,186,000
Senior Center	$8,000	$3,640	$1,246,500

Building	High Performance New Construction		
	Annual Cost	Annual Cost Savings	Life Cycle NPV Savings
Public Safety	$8,400	$19,628	$6,720,000
Human Resources	$2,400	$5,896	$2,019,000
Admin	$2,400	$7,130	$2,441,500
Pool	$29,600	$51,462	$17,619,000
Visitor Center	$2,100	$10,430	$3,571,000
Chilkat	$18,100	$38,867	$13,307,000
Museum	$4,900	$12,484	$4,274,500
Senior Center	$4,600	$7,040	$2,410,500

Notes:
Existing (Predicted) Costs adjust reported fuel oil bills to current fuel oil rates
DOE Inflation Rate is 3%.
DOE Discount Rate is 3%, typical discount rates vary from 3%-6%
FEMP Utility Escalation Rate (Real) for 70% Fuel Oil / 30% Elec is 0.59%. Rate tends to be skewed low. Typical rates 2%-5%
Life Cycle Cost Savings rounded to nearest $500

SECTION 3.6 COST COMPARISON MATRIX

Haines 2015 Facility Planning Report - Analysis Comparison Matrix

Capital Improvement Project (CIP) Priority Identification											
Building Name	Public Service Priority	Public Building Priority	Public Spending Priority	Assessment Condition	Numeric Condition Value	Programmatic Adequacy	Numeric Adequacy Value	Energy Use Index (EUI) Score	EUI Rank	Priority Score	CIP Rank
Public Safety	1	1	1	Poor	1	Poor	1	60	7	2.0	1
Human Resources	3	5	5	Poor	1	Borderline	2	58**	8	4.0	5t
Admin	4	4	6	Good	3	Poor	1	69	6	4.0	5t
Pool	5	6	4	Fair	2	Borderline	2	197	2	3.5	4
Visitor	8	7	8	Fair	2	Borderline	2	333	1	4.7	6
Chilkat	6	3	2	Fair	2	Borderline	2	81	5	3.3	3
Museum	7	8	7	Fair	2	Borderline	2	104	3	4.8	7
Sr. Center	2	2	3	Good	3	Satisfactory	3	96*	4	2.8	2
	1 = Highest	1 = Highest	1 = Highest		1 = Lowest		1 = Lowest		1 = Lowest		1 = Highest

* = Subject to improve with new wood pellet boiler replacement project.

** = Lower score may be a result of poor environmental comfort and unconditioned spaces.

Comparative Information Of Potential Long Term Facility Costs											
Building Name	Existing Area Requiring Remodel	Additional Program Area Required	Remodel w/ Required Area	Replacement w/ Current Program Area	Replacement w/ Required Program Area	Area Available (SF)	Area Required (SF)	Projected Current Annual Cost	LCCA Annual Cost High Performance	Annual LCCA Savings High Performance	50 Year LCCA Savings High Performance
Public Safety	$3,461,500	$1,297,200	$4,758,700	$6,960,800	$8,258,000	12600	14968	$28,028	$8,400	$19,628	$6,720,000
Human Resources	$250,000	$256,000	$506,000	$1,428,000	$1,684,000	4080	3413	$8,296	$2,400	$5,896	$2,019,000
Admin	$0	$45,000	$45,000	$1,420,800	$1,465,800	3550	3552	$9,530	$2,400	$7,130	$2,441,500
Pool	$2,268,000	$1,690,000	$3,958,000	$8,160,000	$9,850,000	13600	16403	$81,062	$29,600	$51,462	$17,619,000
Visitor Center	$231,250	$427,500	$658,750	$400,000	$827,500	1000	1995	$12,530	$2,100	$10,430	$3,571,000
Chilkat	$4,941,000	$650,000	$5,591,000	$12,138,000	$12,788,000	20230	28075	$56,967	$18,100	$38,867	$13,307,000
Museum	$1,457,500	$1,007,500	$2,465,000	$3,105,000	$4,112,500	6900	9077	$17,384	$4,900	$12,484	$4,274,500
Sr. Center	$40,000	$63,000	$103,000	$853,200	$916,200	2844	2996	$11,640	$4,600	$7,040	$2,410,500

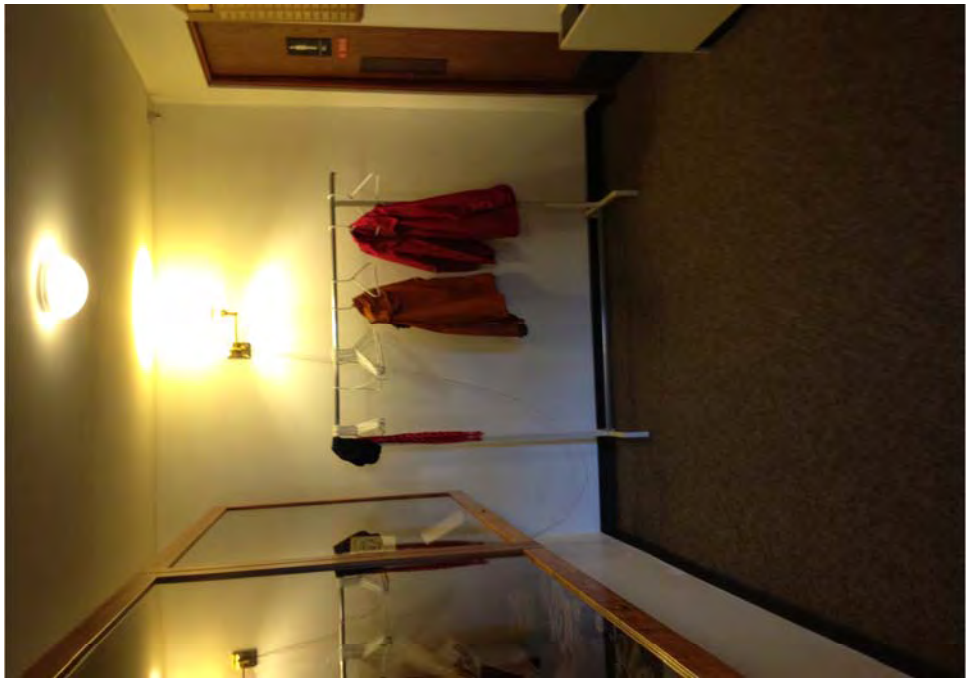
SECTION 3.5 FACILITY PHOTOS

SECTION 3.5 FACILITY PHOTOS

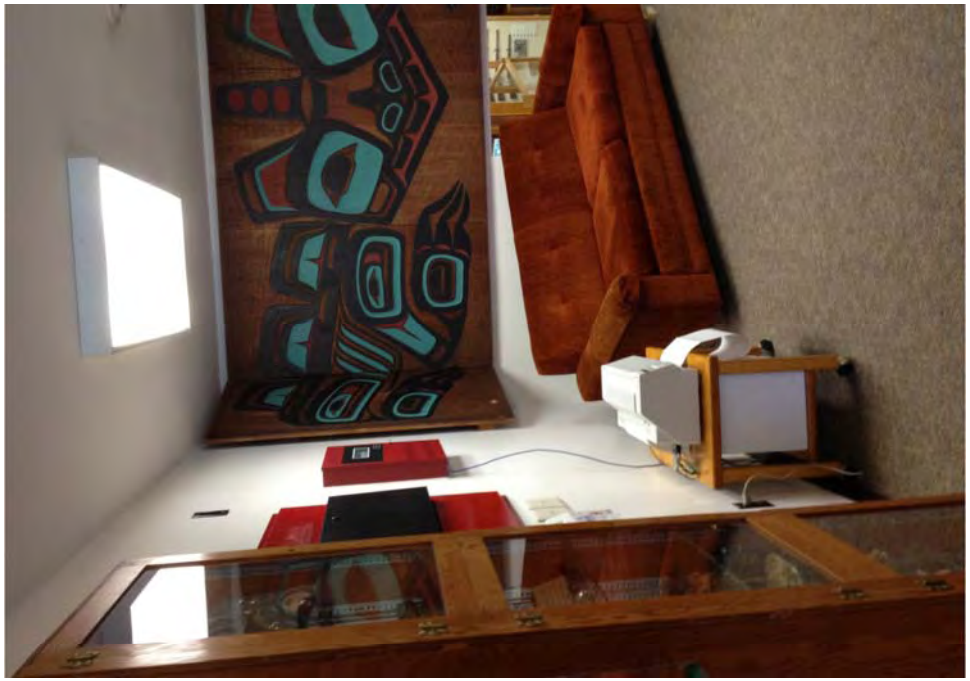
MUSEUM AND CULTURAL CENTER

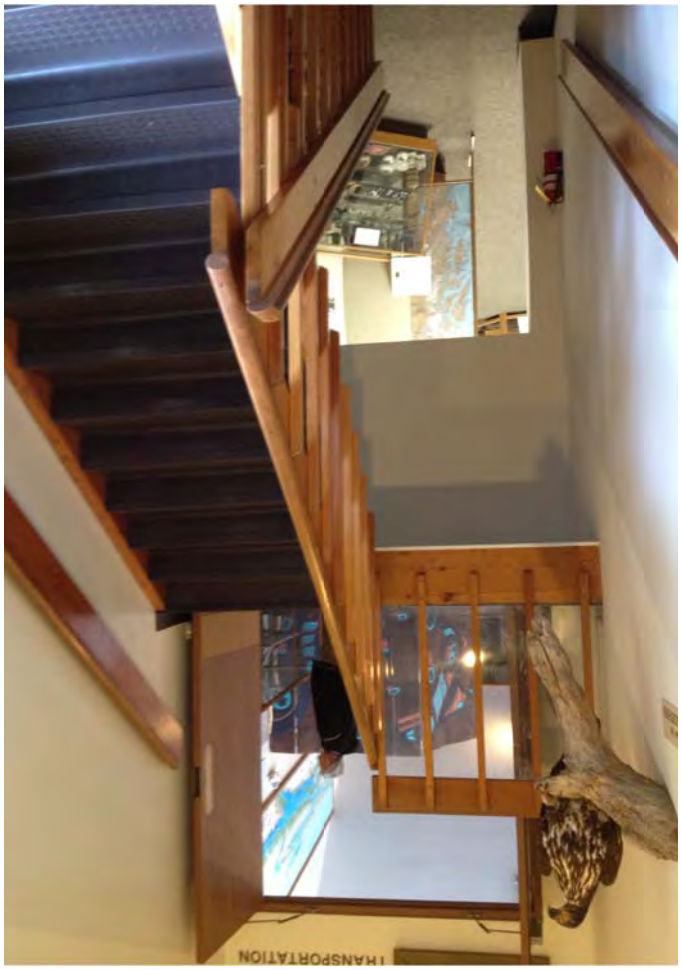
SHELDON
MUSEUM
AND
CULTURAL
CENTER
OPEN

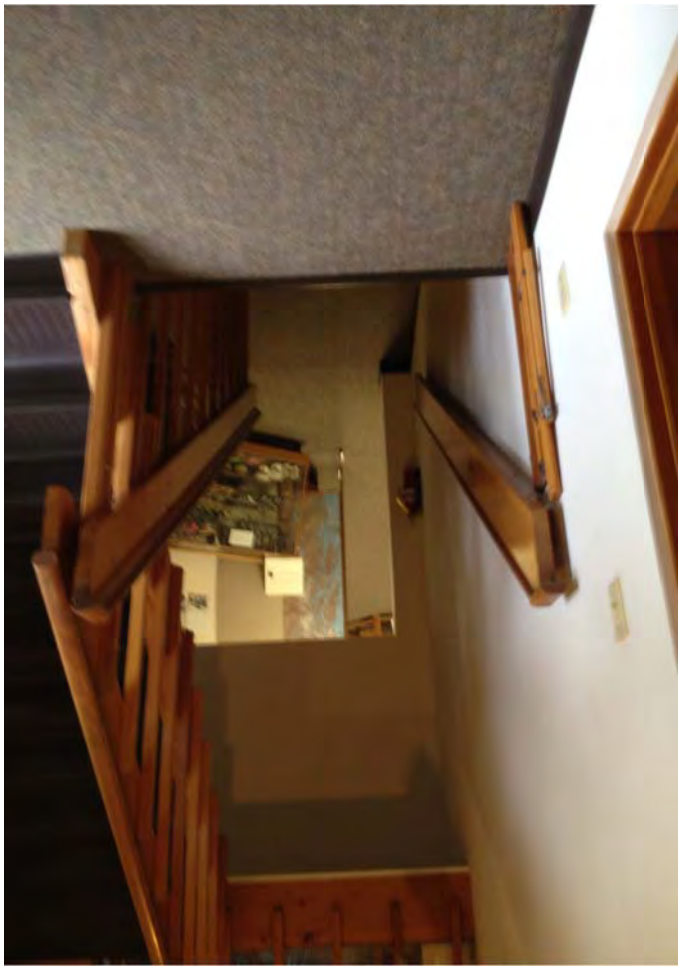
SHELDON
MUSEUM
AND
CULTURAL
CENTER
OPEN

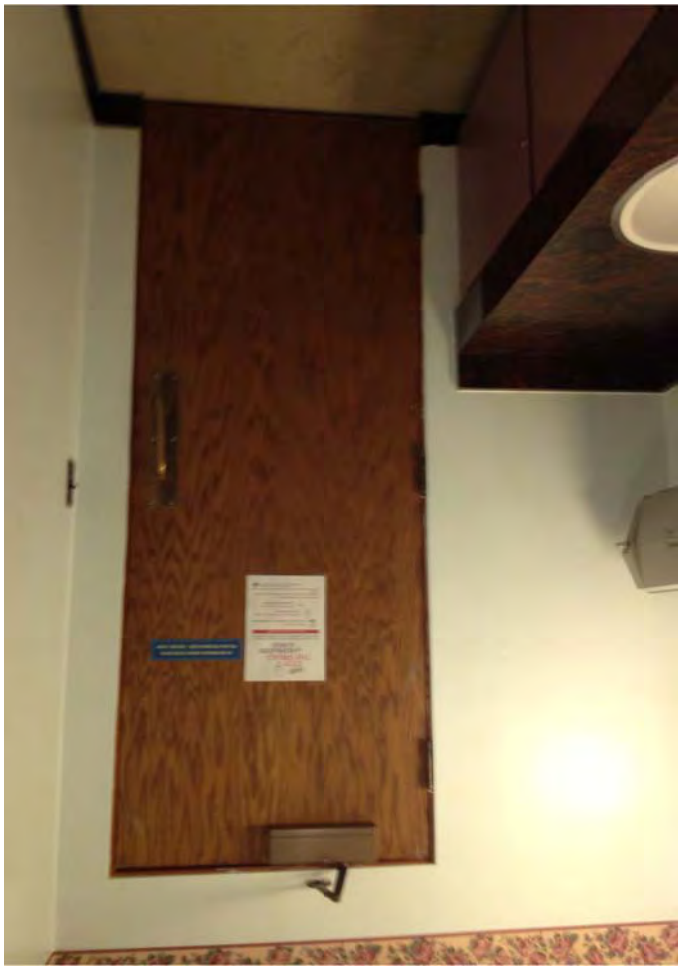


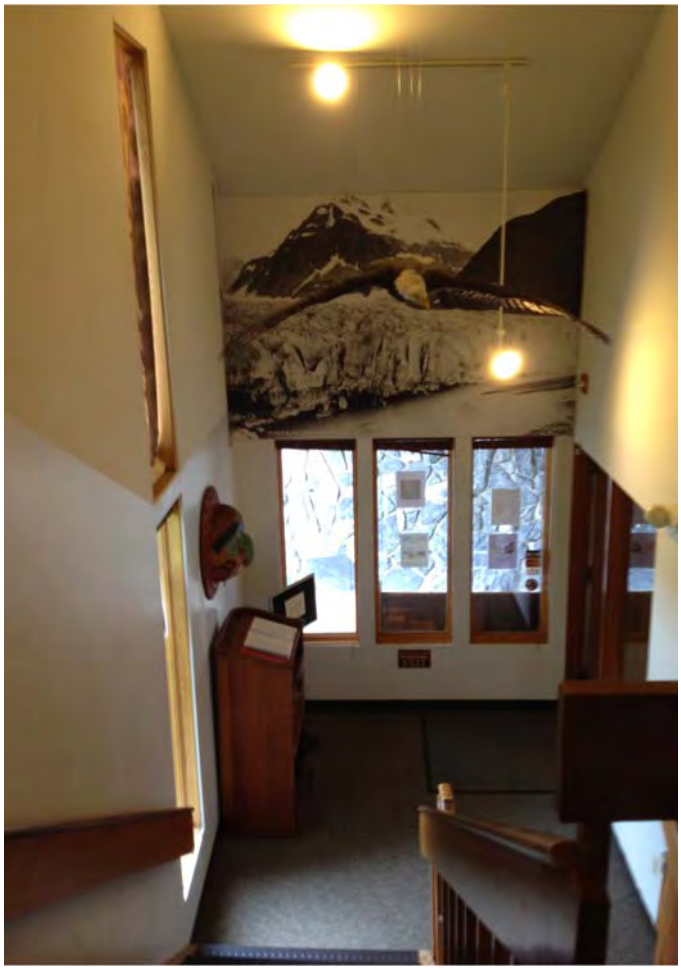
EXIT




TRANSPORTATION



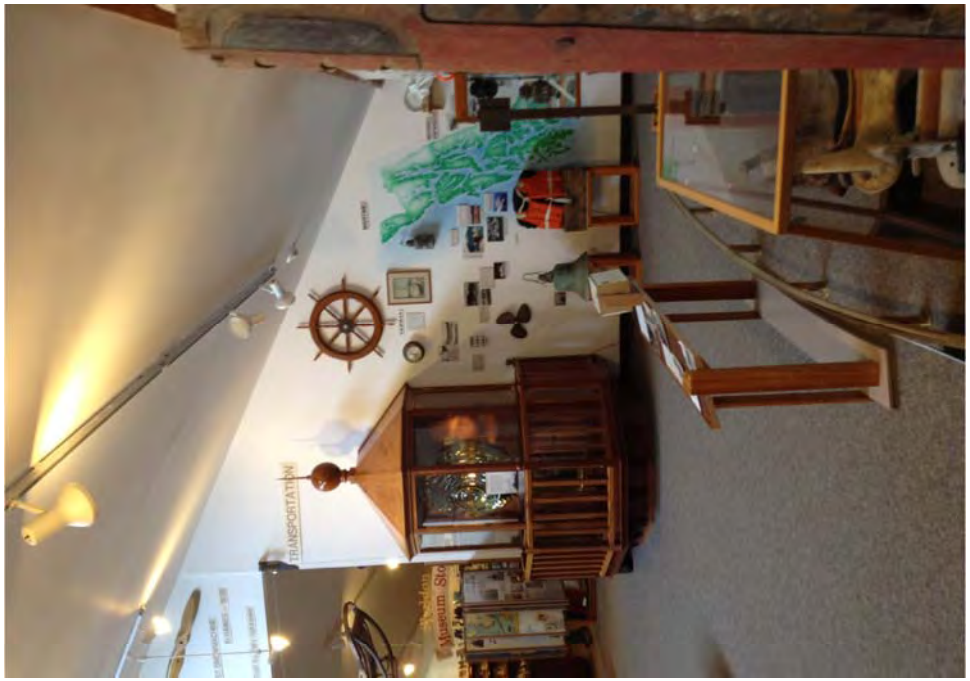


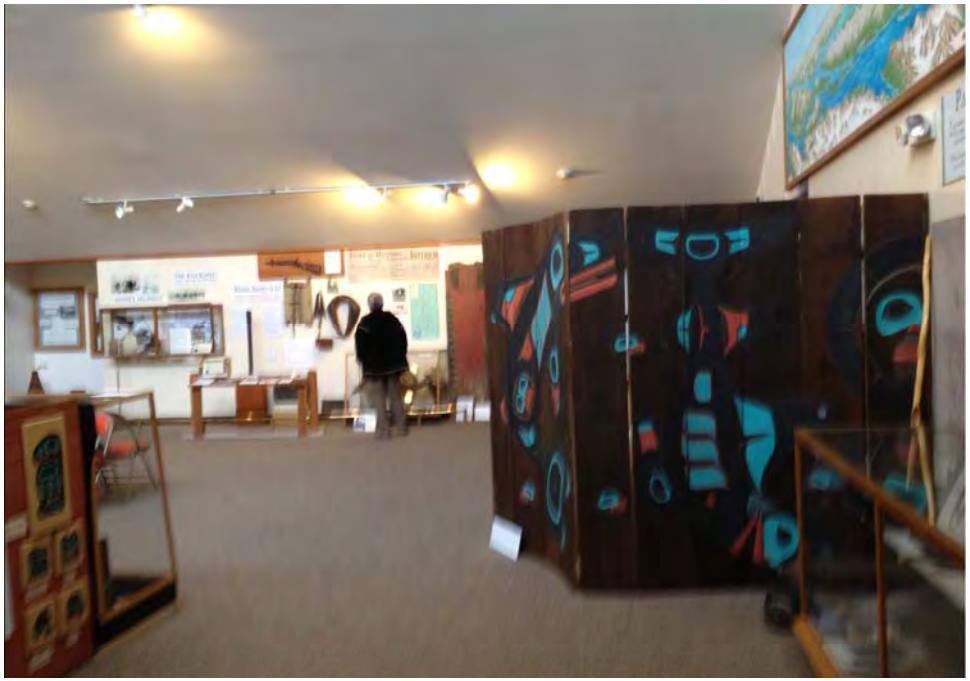


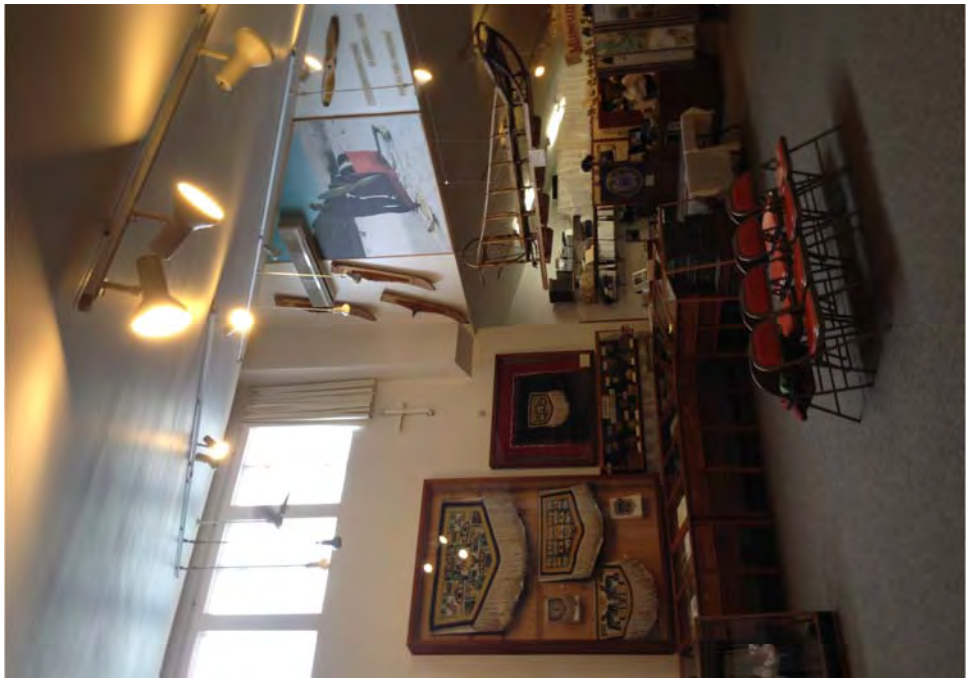
EXIT
FIRE

EXIT

EXIT

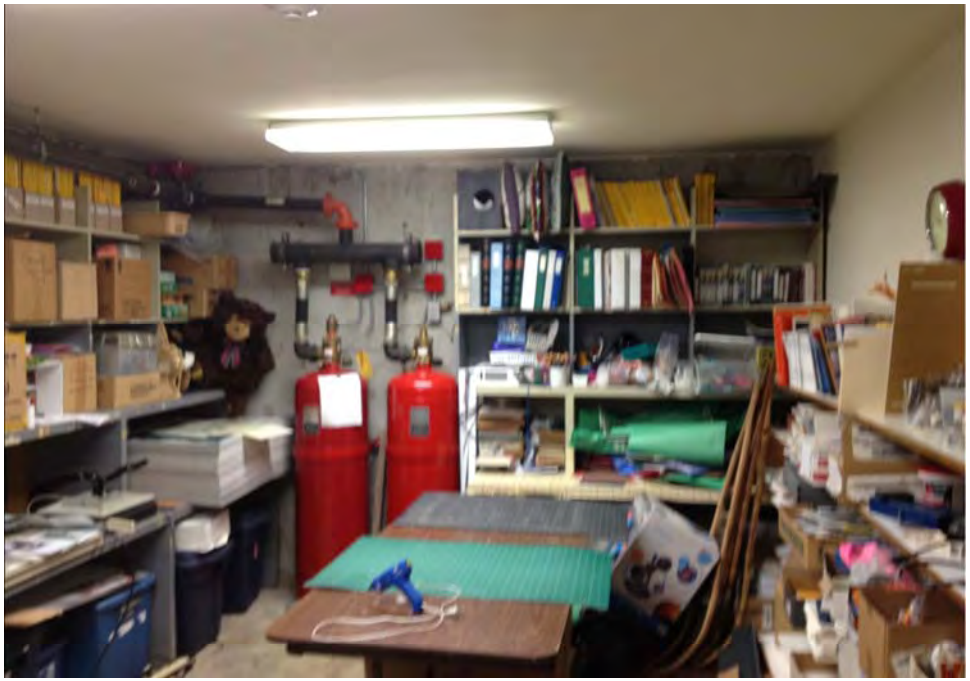

TRANSPORTATION



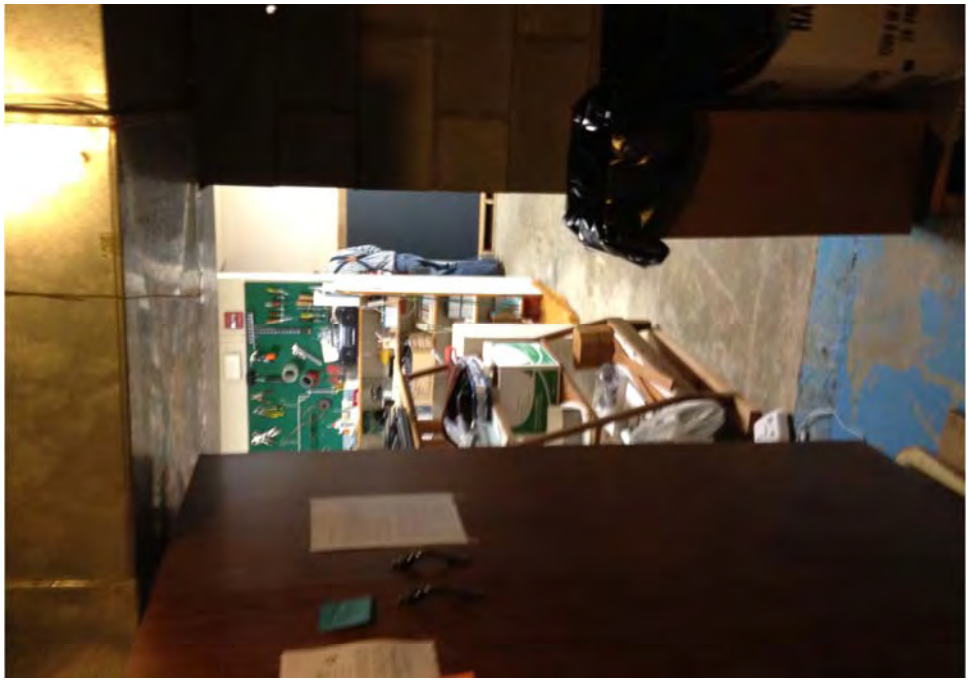


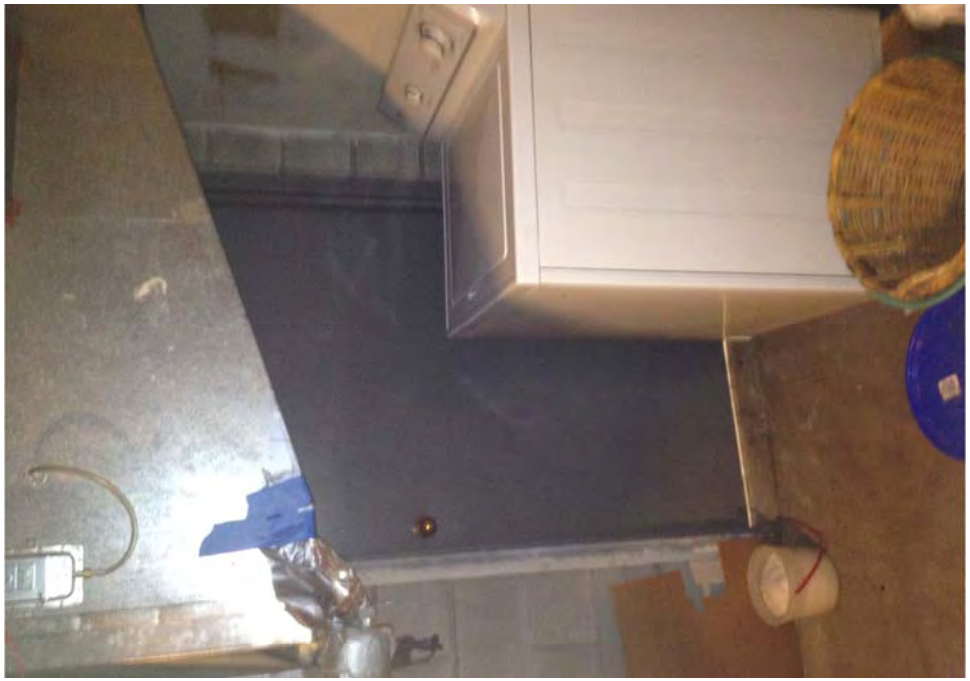
TRANSPORTATION

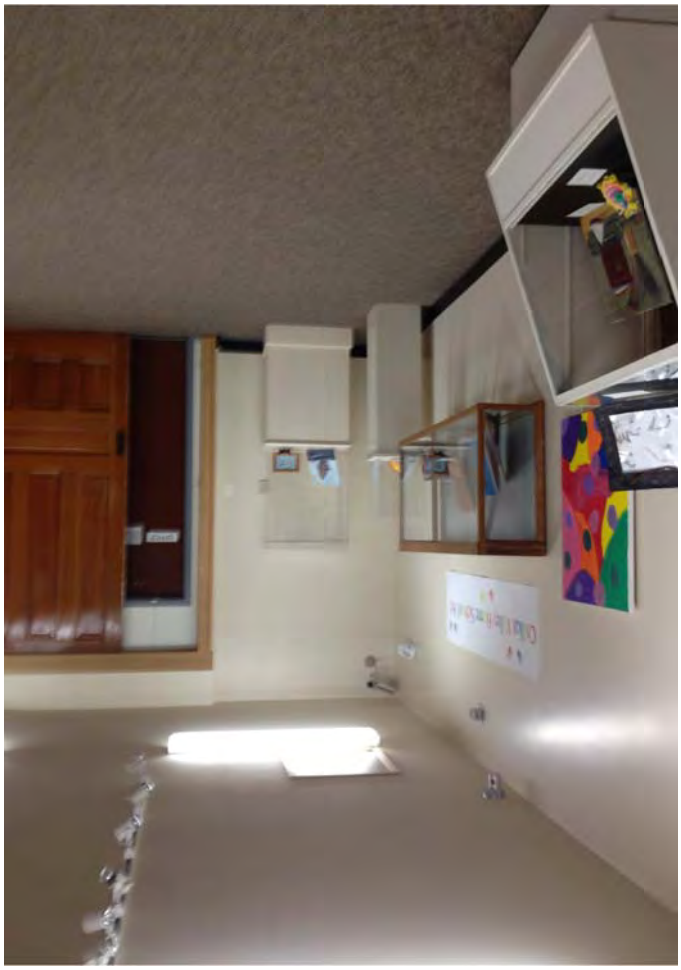
ALASKA COASTAL AIRLINES
ALASKA Coastal AIRLINES
Serving Southeastern Alaska
PAN AMERICAN WORLD AIRWAYS
The System of the Flying Clippers



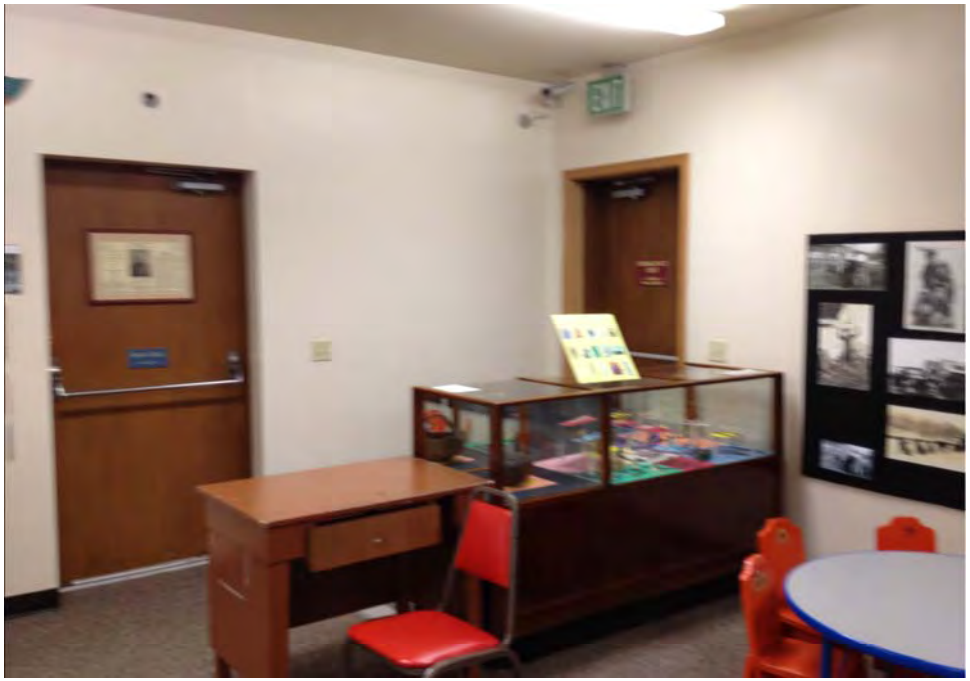
HEATING RETURN
HEATING SUPPLY

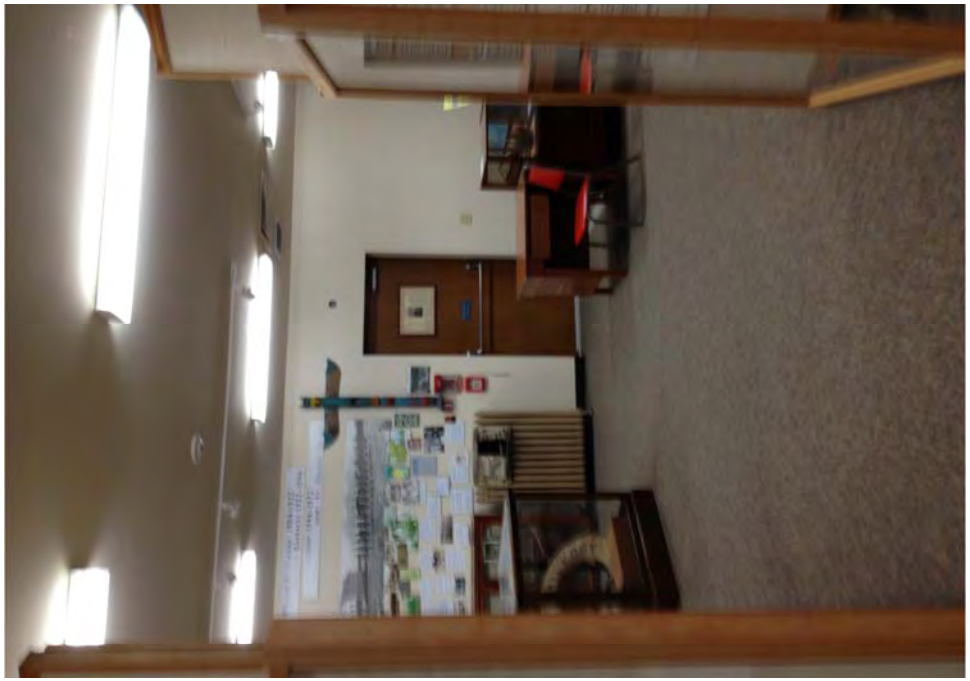






Gold Mining Co
OFFICE


EXIT

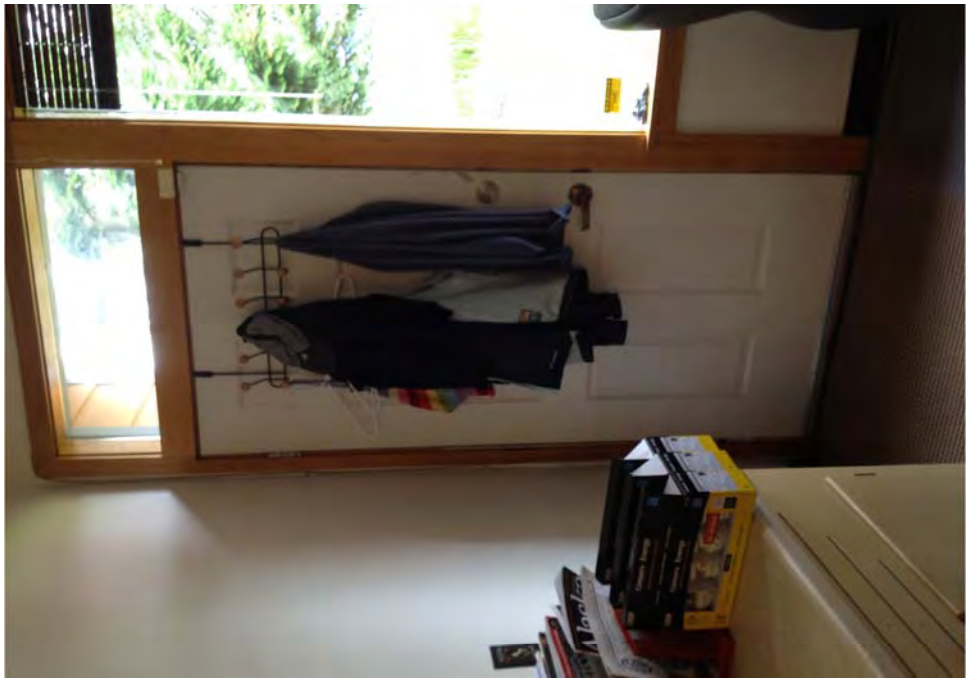


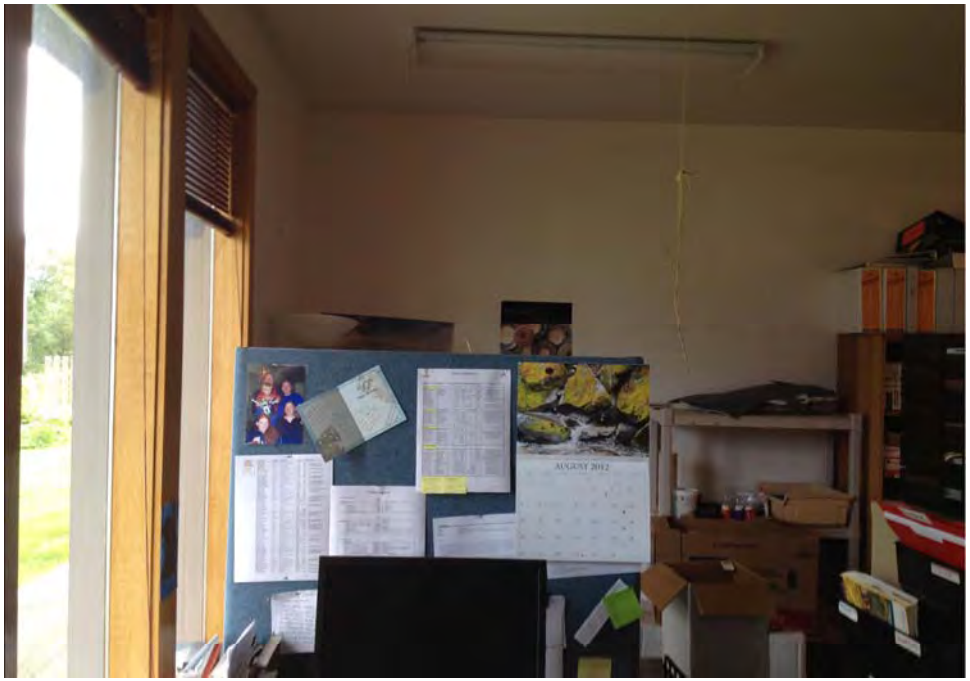
EXIT

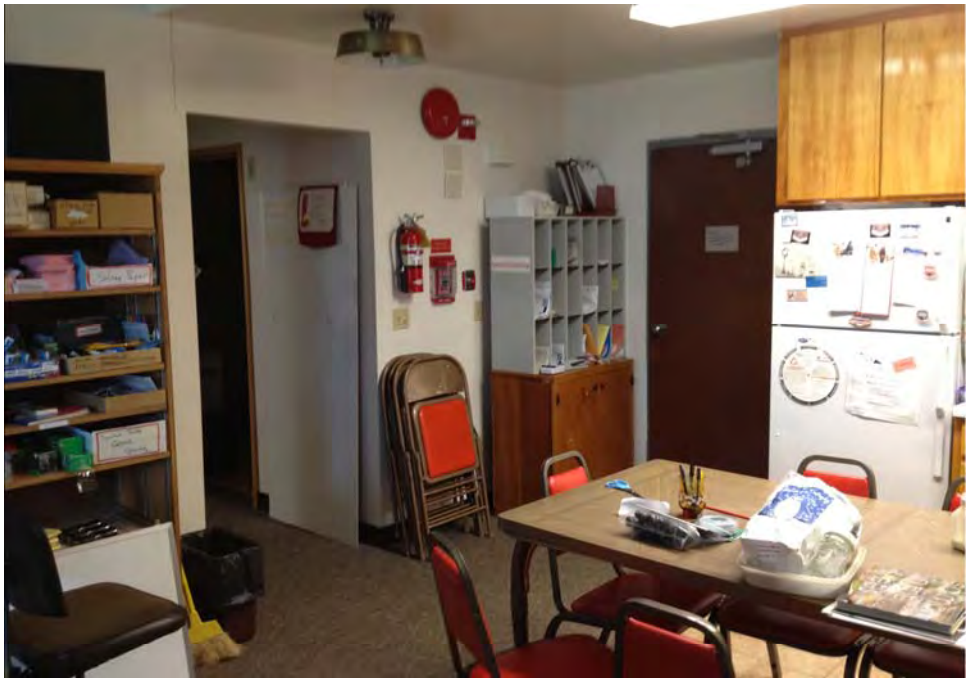
very Corner

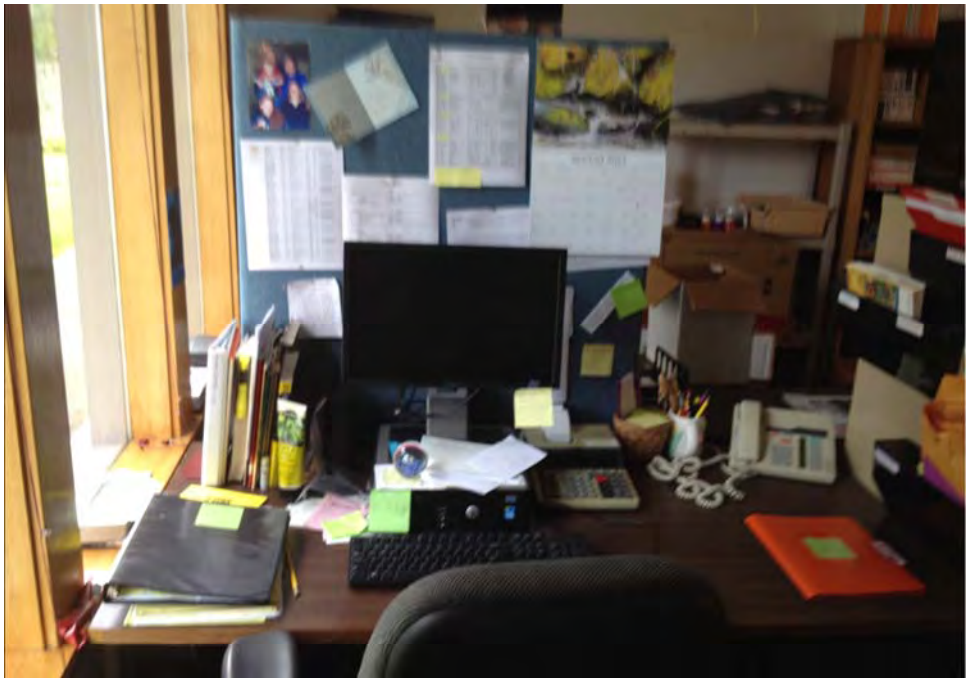
EMERGENCY
EXIT

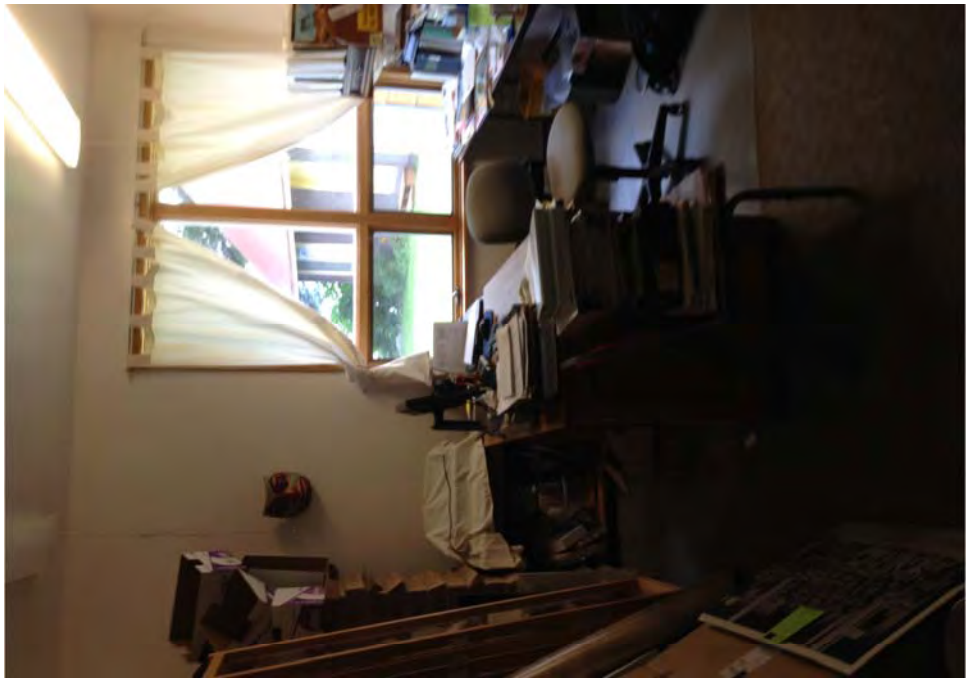
OFFICE




AUGUST 2012







LEVOLOR
LEVOLOR
LEVOLOR

ALASKA VISIONARIES

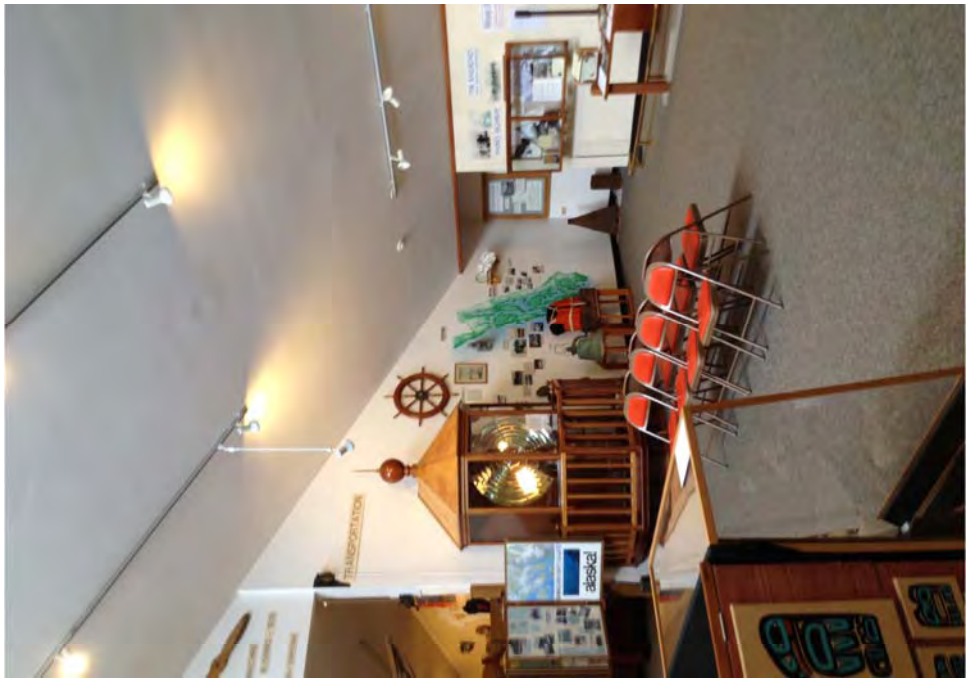
First Aid

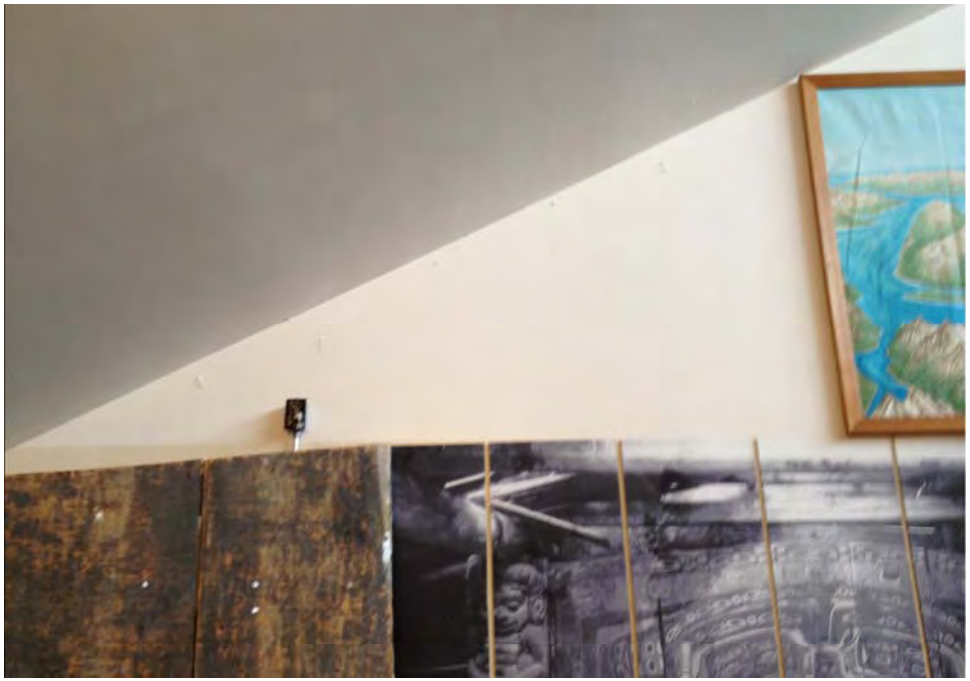
Softsoap

AMSL
AutoPulse

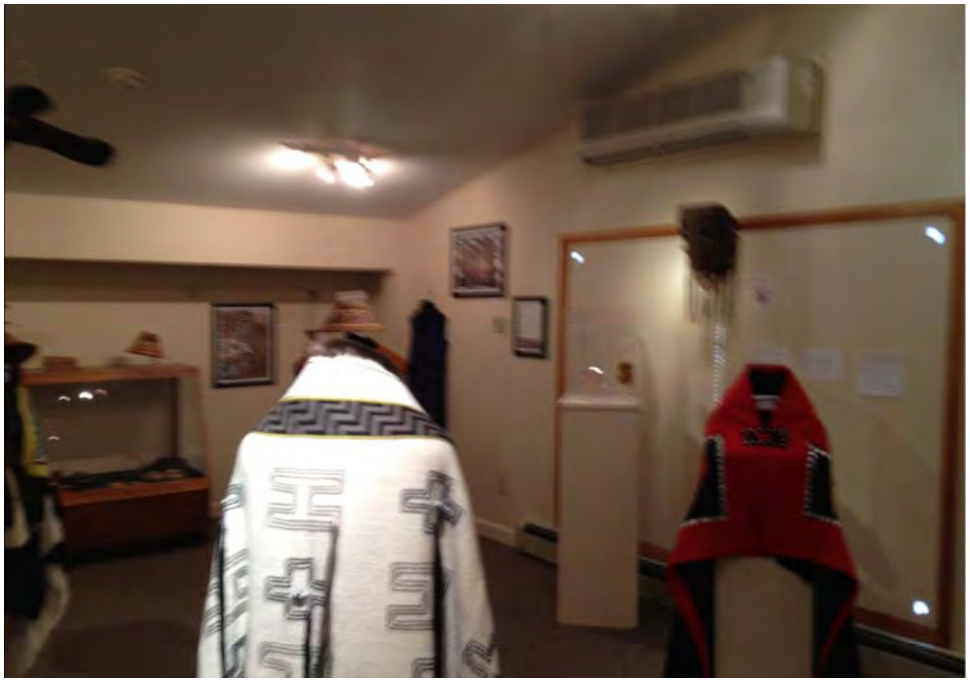
TRANSPORTATION
Sheldon
Museum Store
alaska!
Tlingit Social Structure

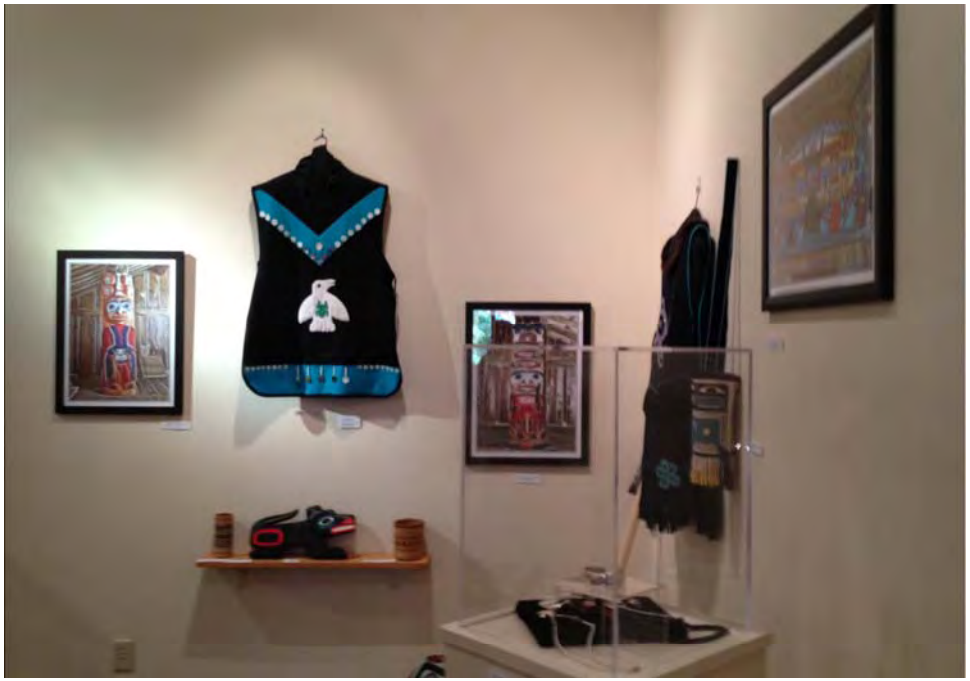
TRANSPORTATION
FERRY
alaska!
HAINES HIGHWAY

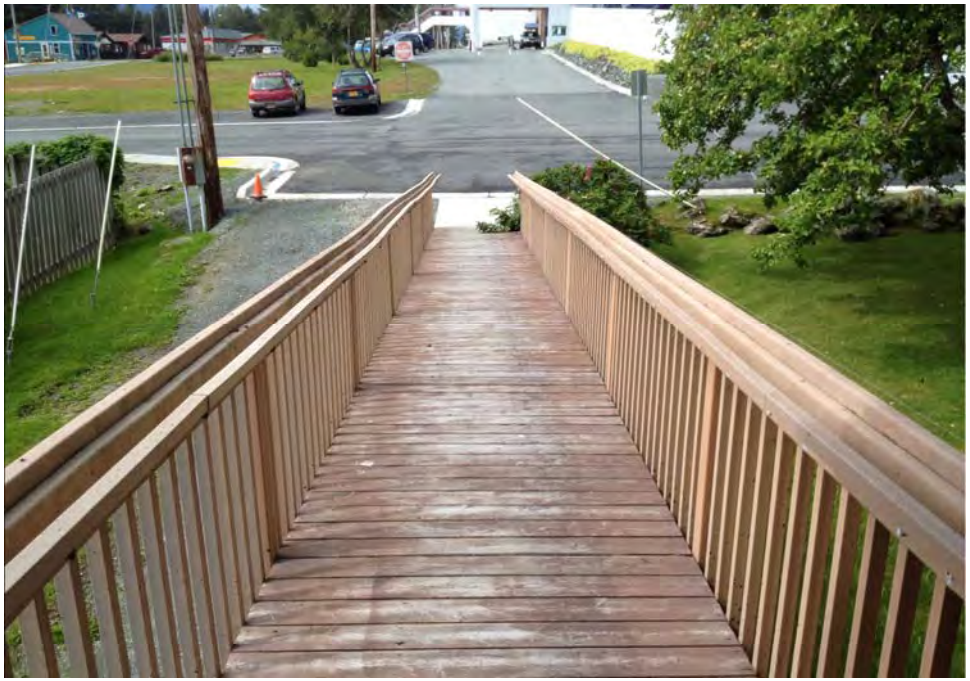

TRANSPORTATION
alaska!

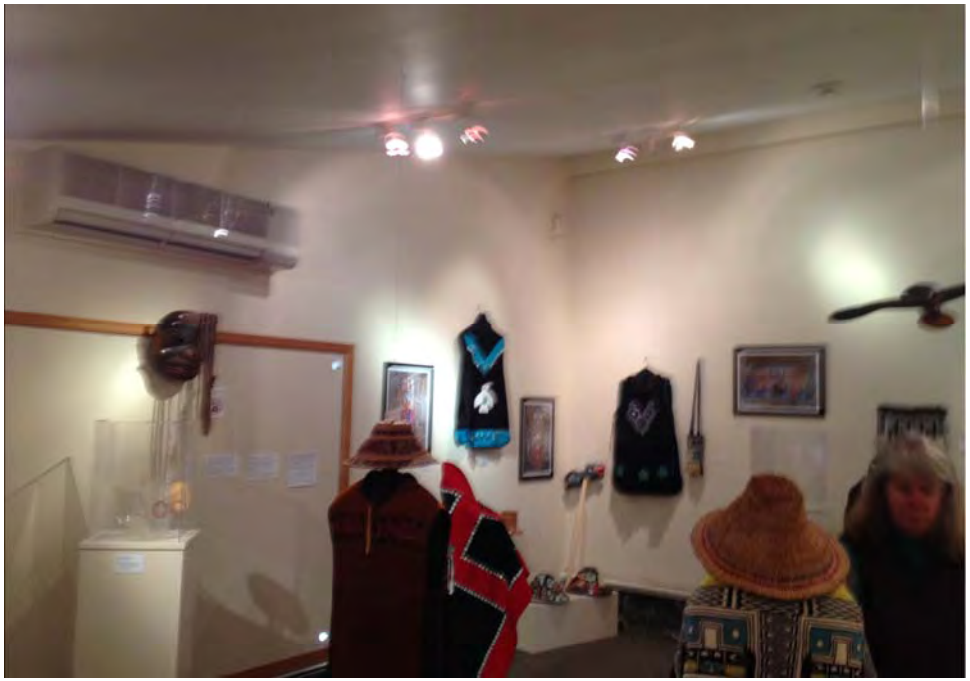


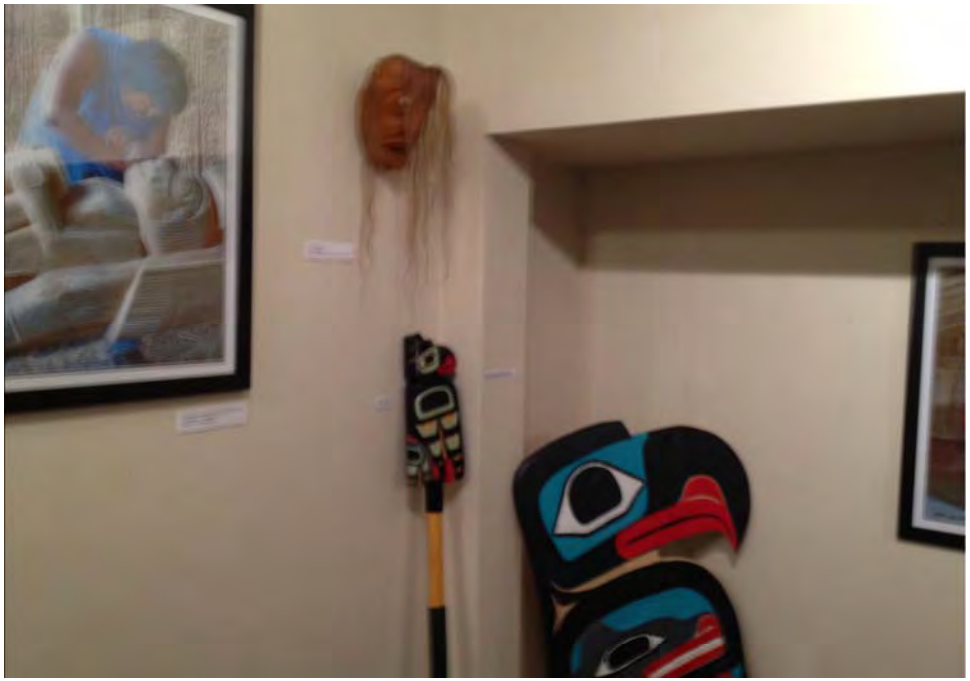
Sheldon
Museum Store

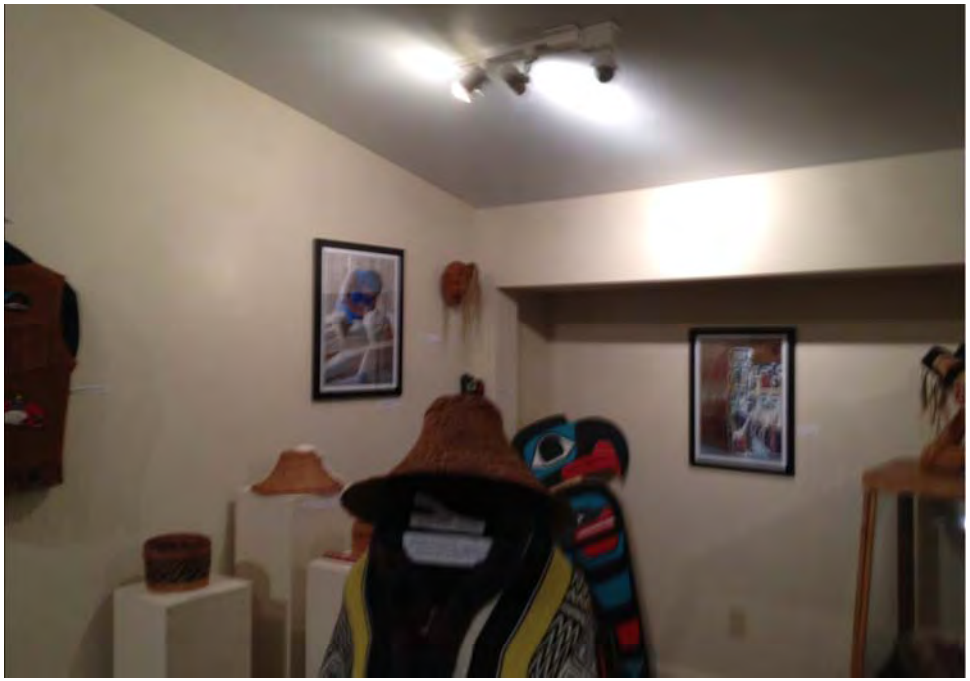


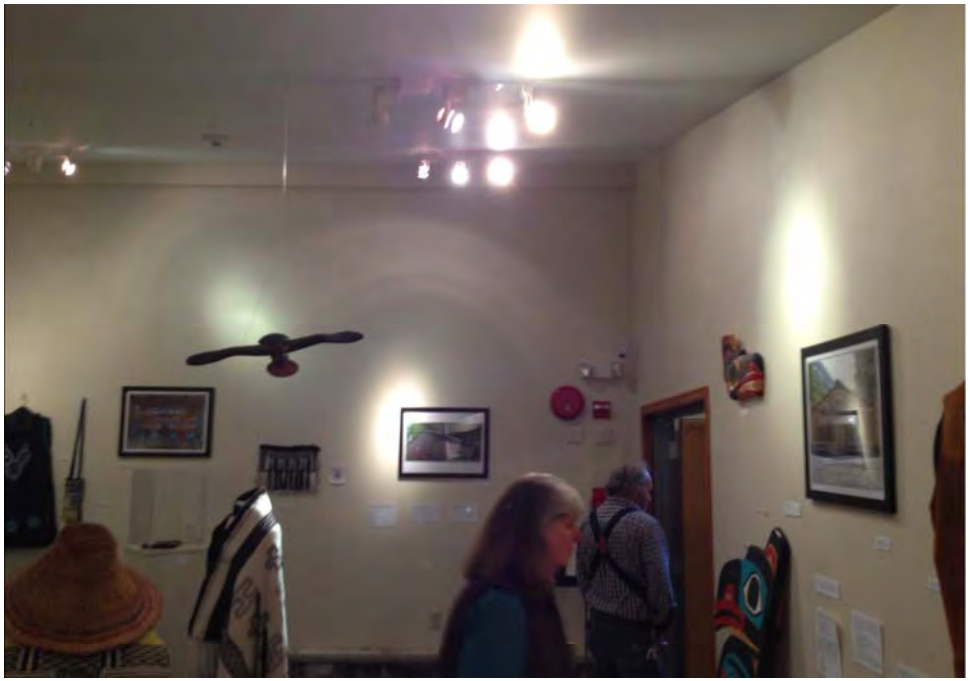


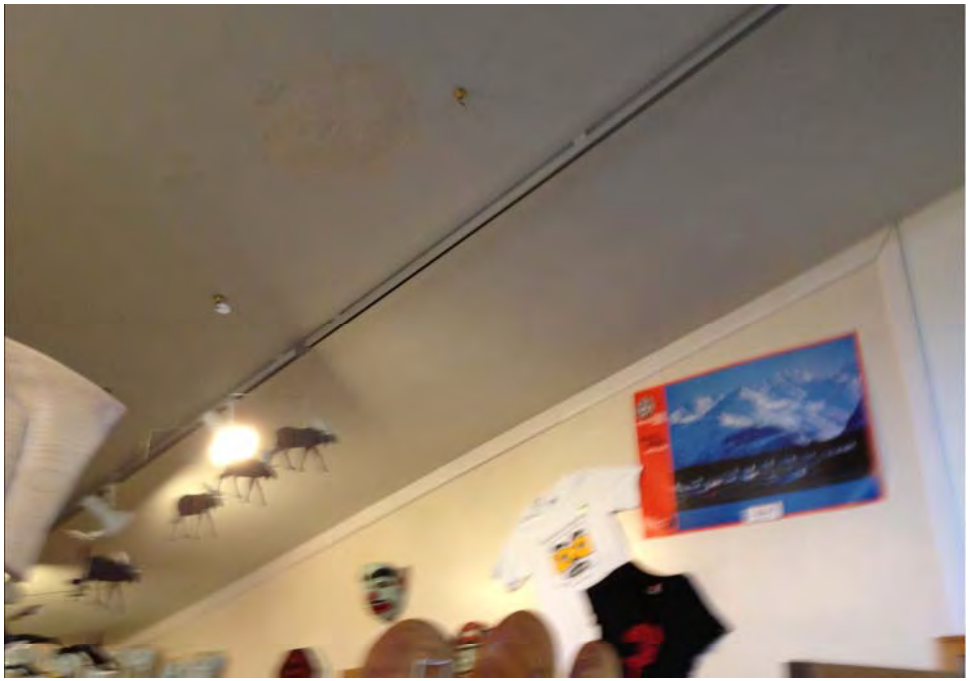




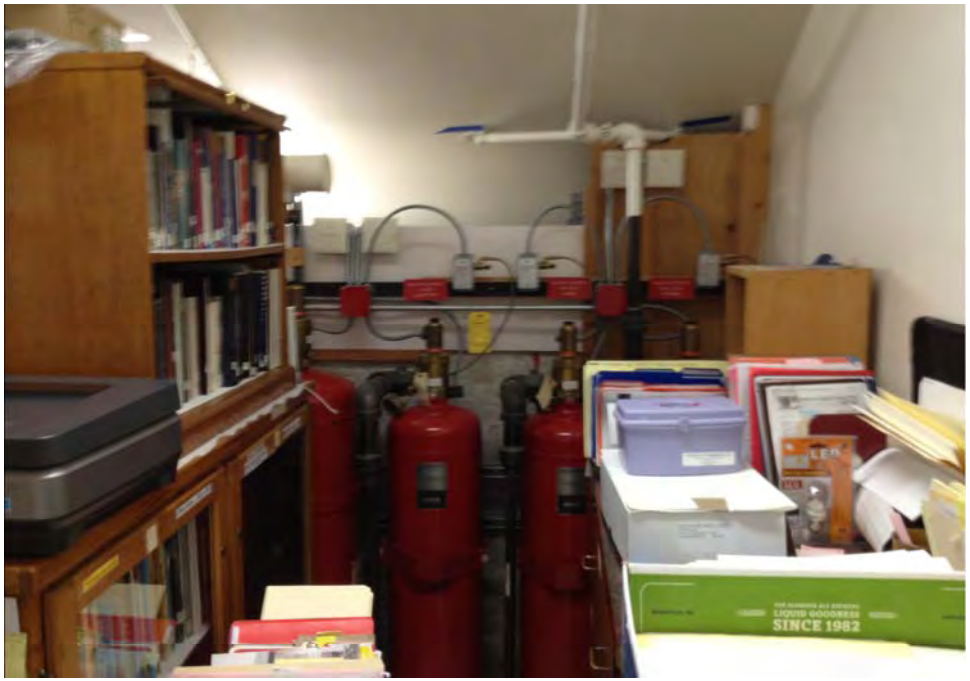


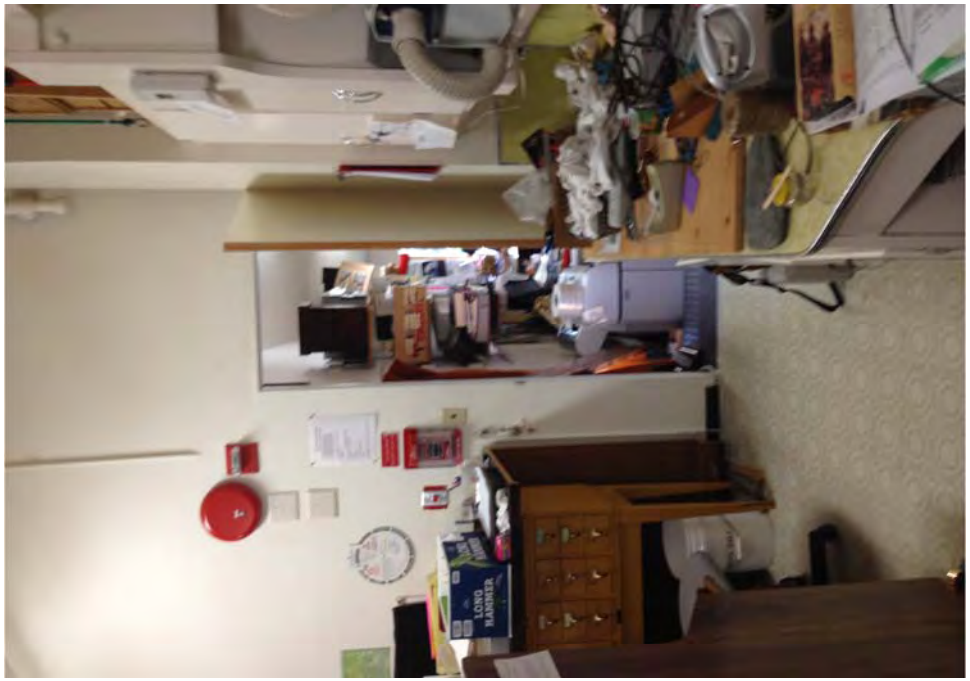




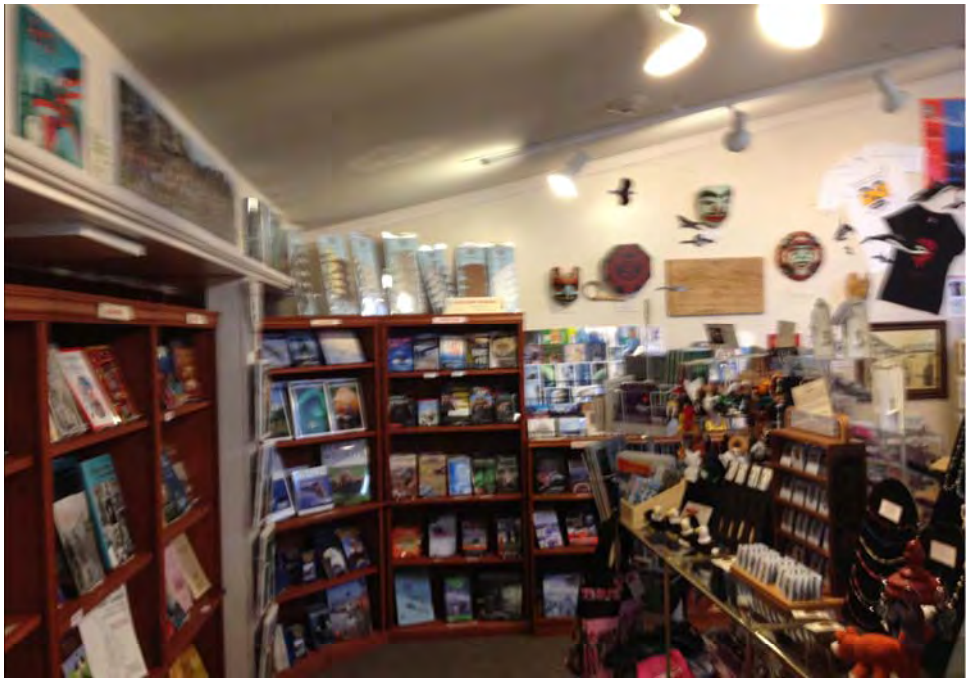


ELISABETH S. HAKKINEN
GALLERY


SINCE 1982


LONG
MANNER

Store

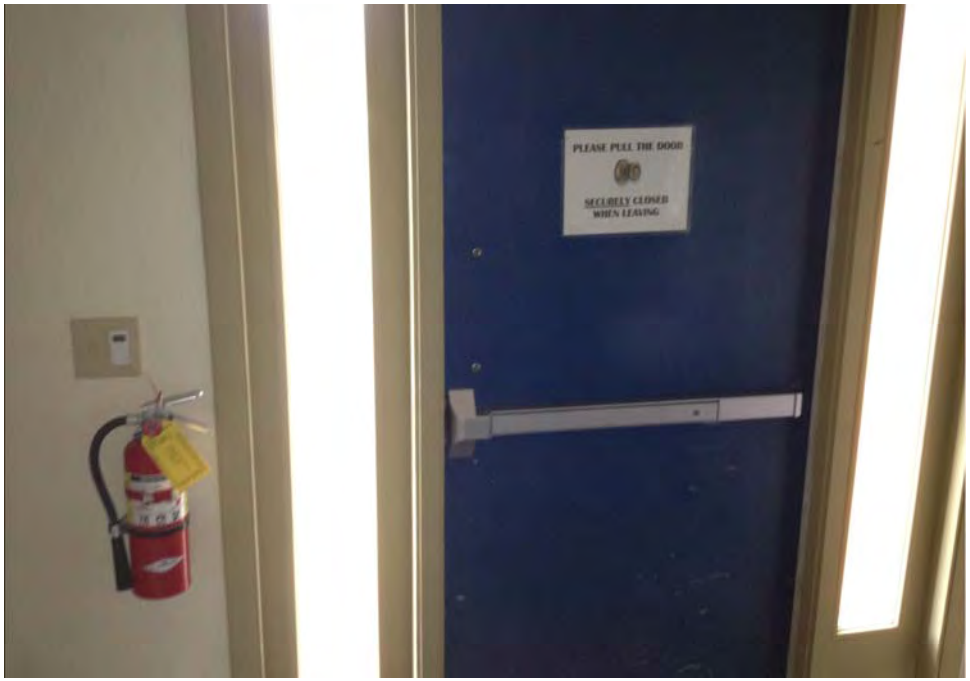


Salish Museum
and
Cultural Center

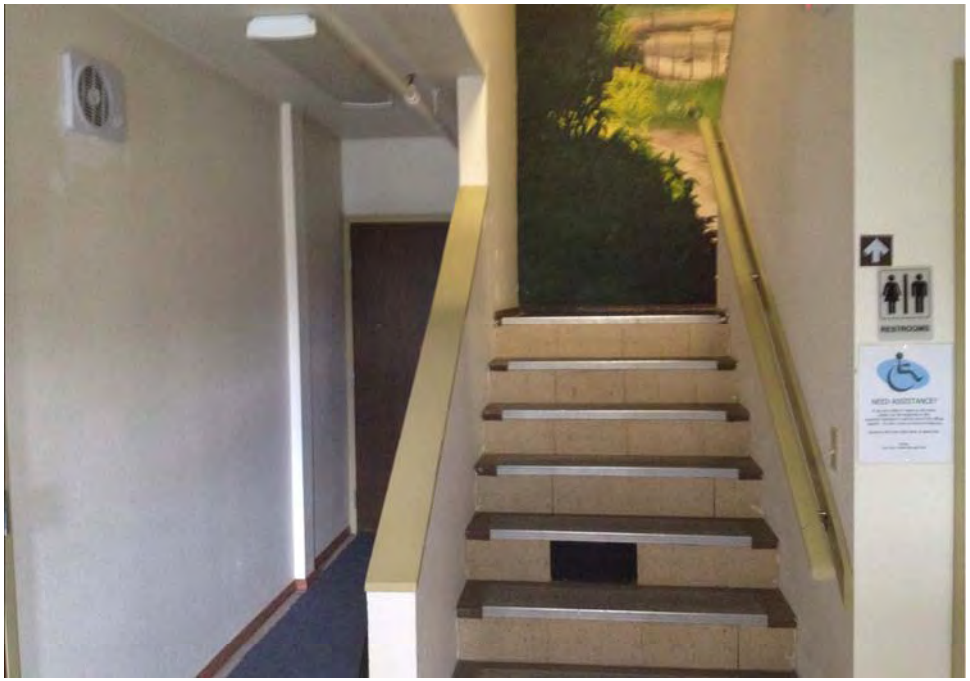
DON
EUM
D
URAL
TER

Section 3.5 Facility Photos

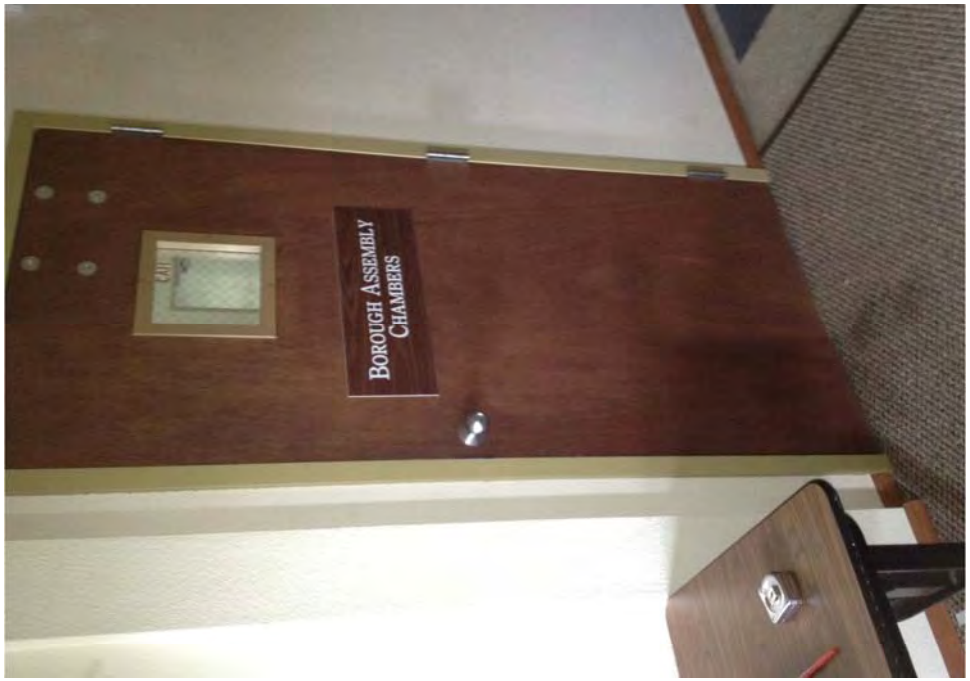
Public Safety


PLEASE PULL THE DOOR
SECURELY CLOSED
WHEN LEAVING

FORD


RESTROOMS
NEED ASSISTANCE?

EXIT

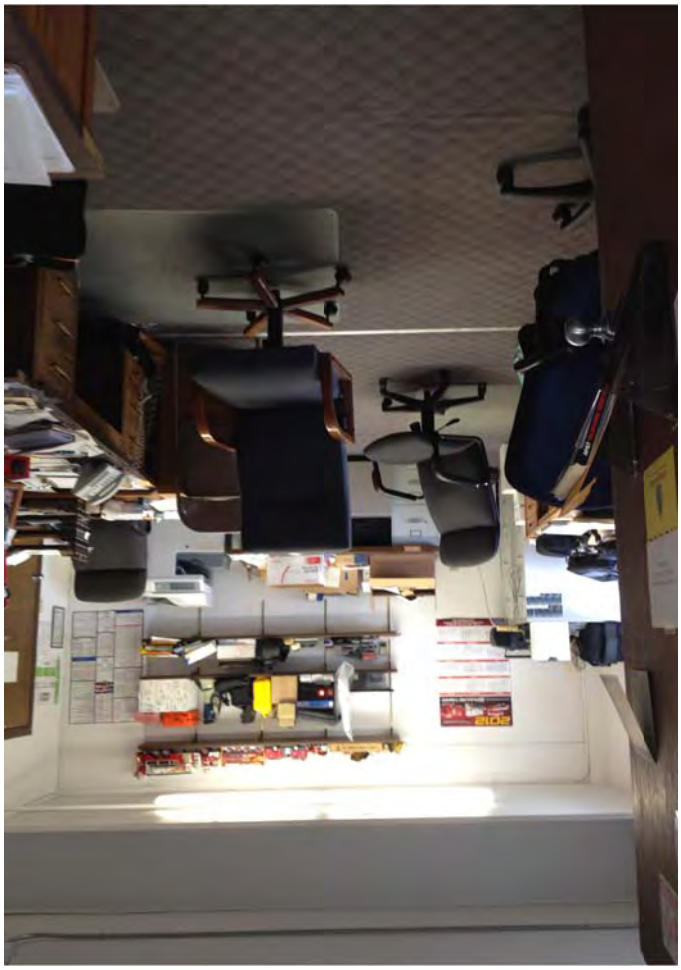

BOROUGH ASSEMBLY
CHAMBERS

EXIT

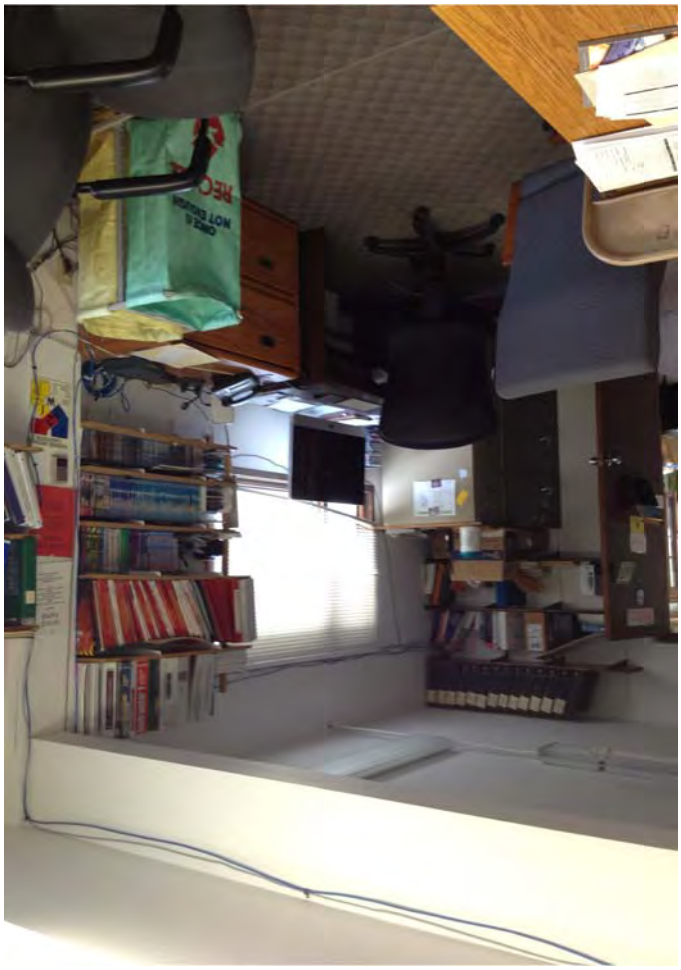
EXIT

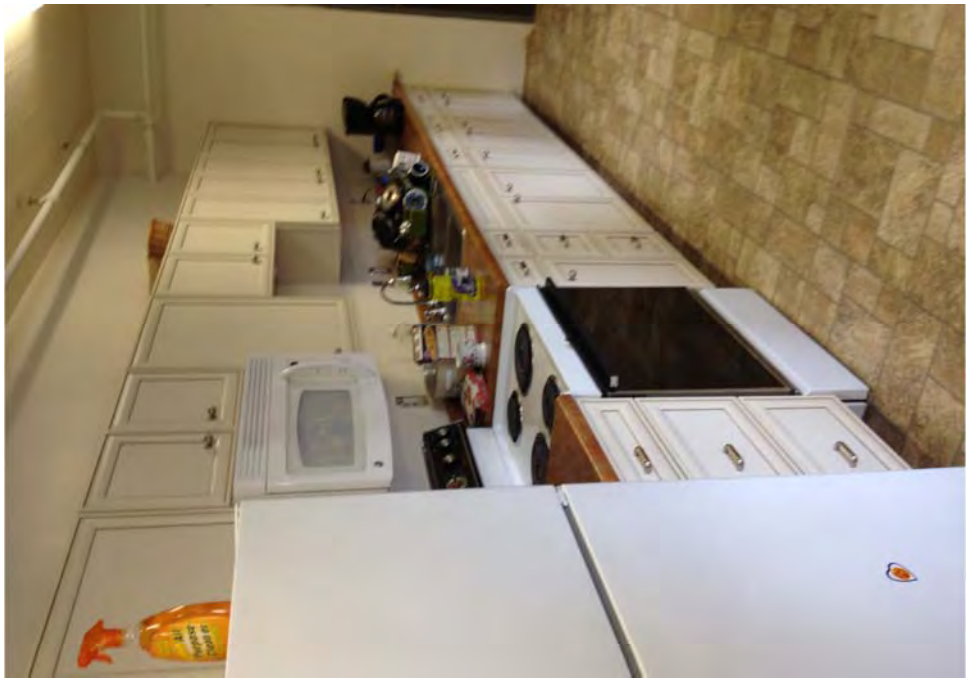
EXIT

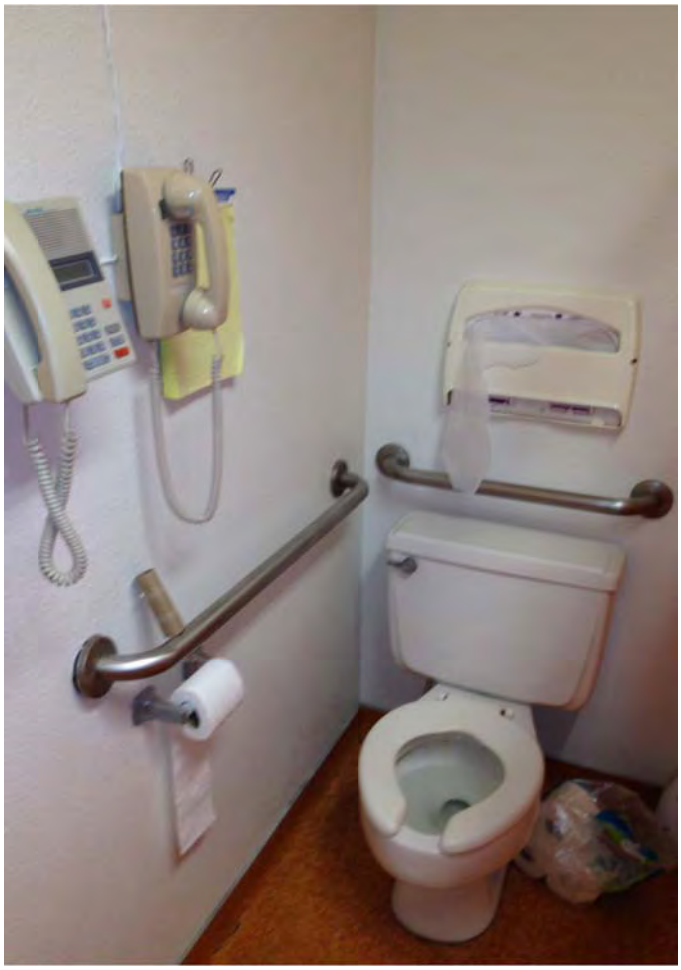
2012

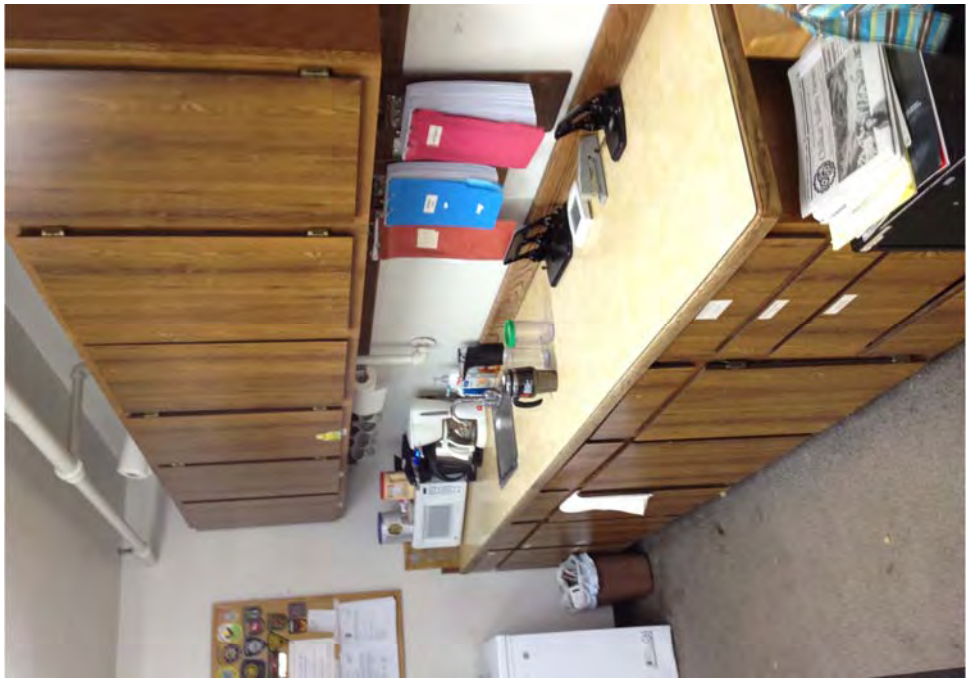


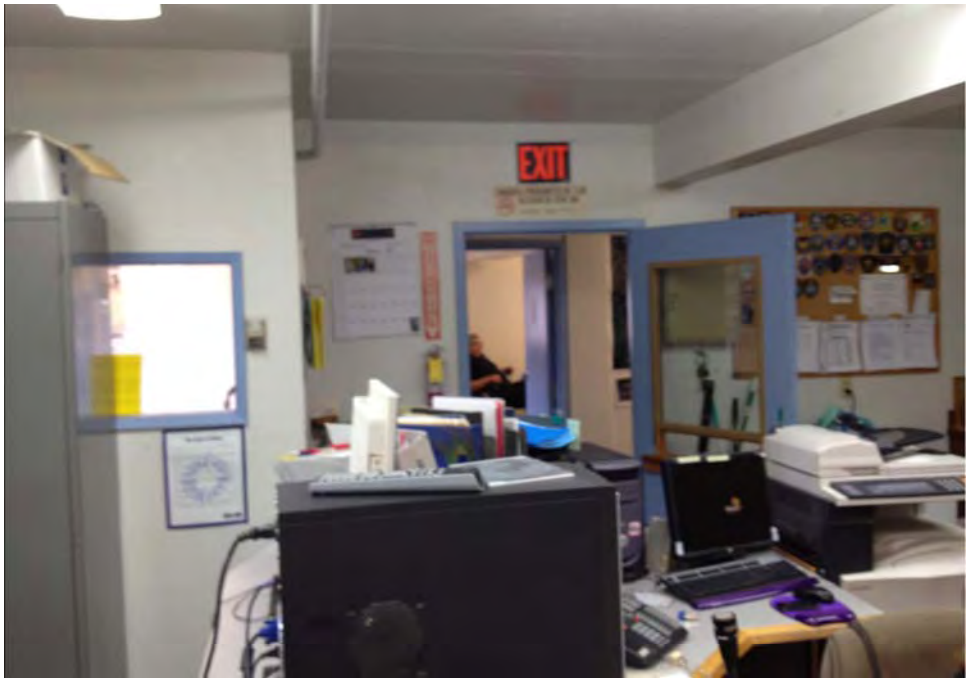
EXIT



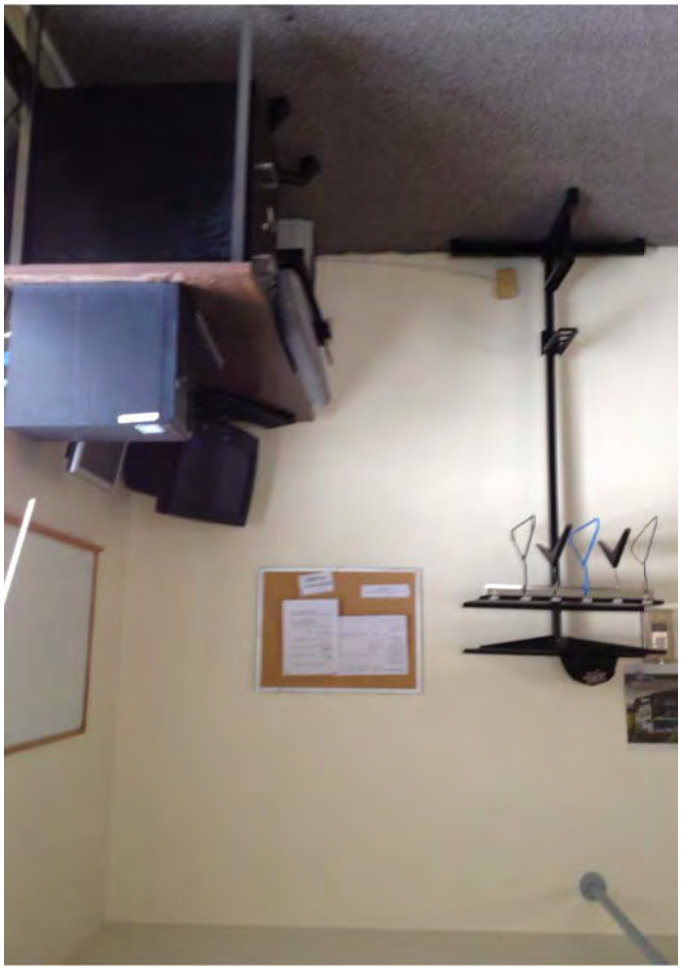


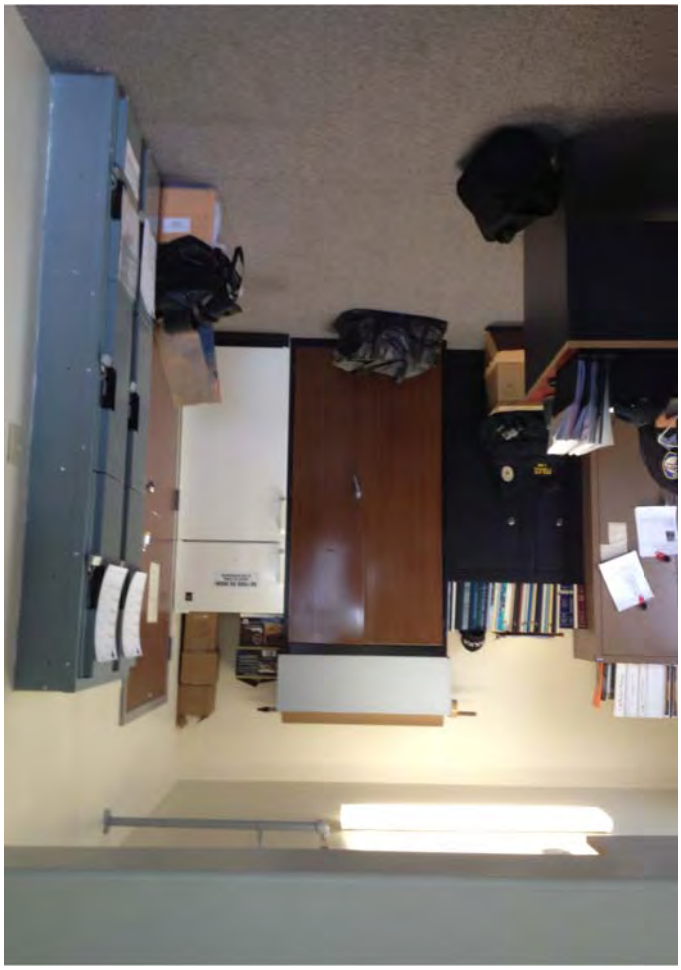


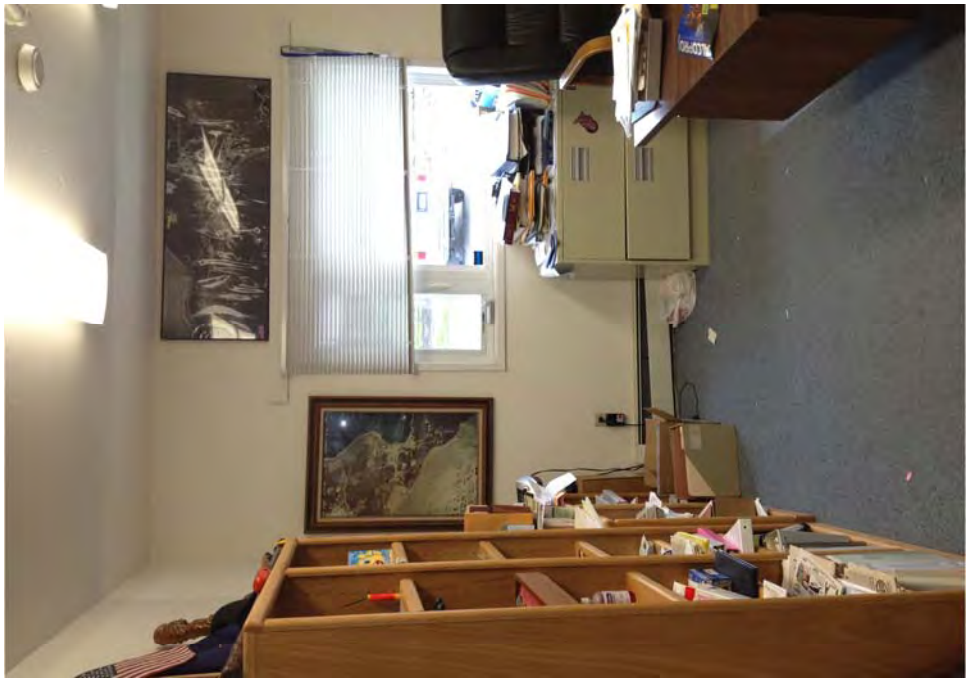


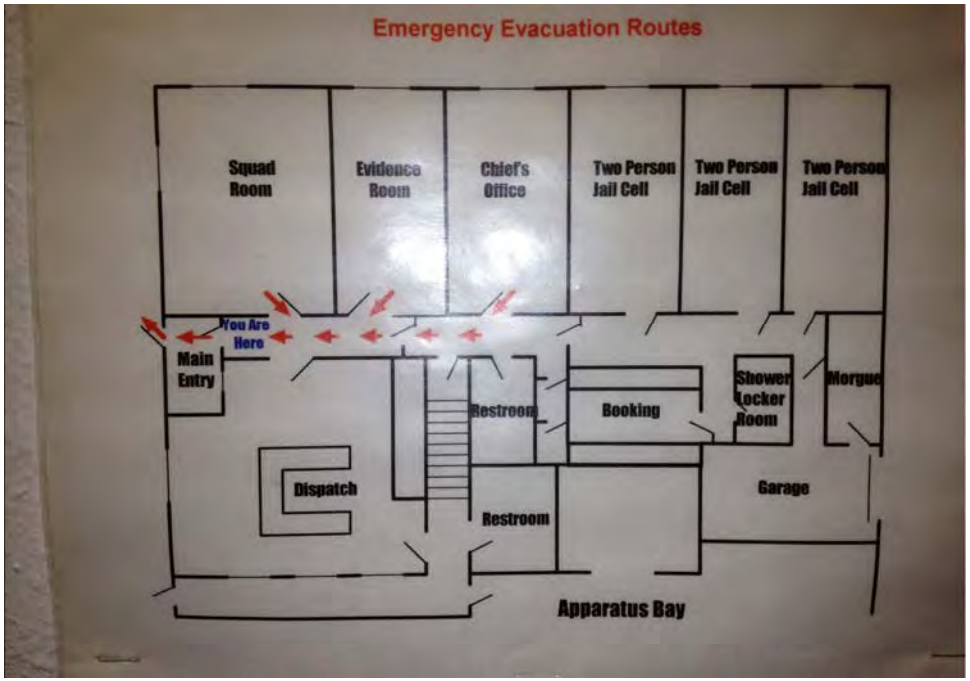

EXIT

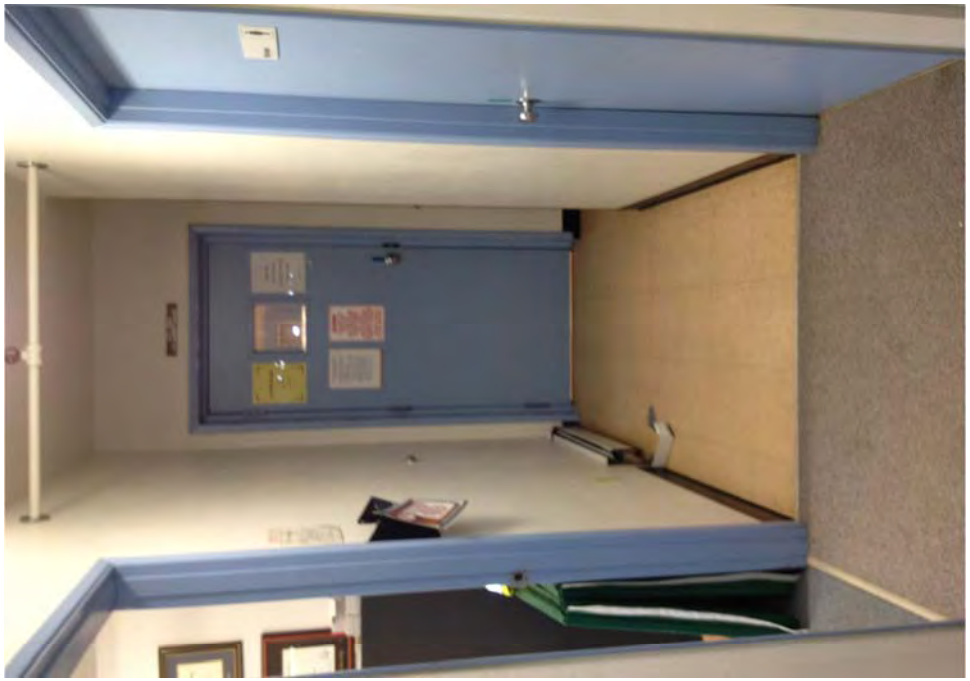
EXIT

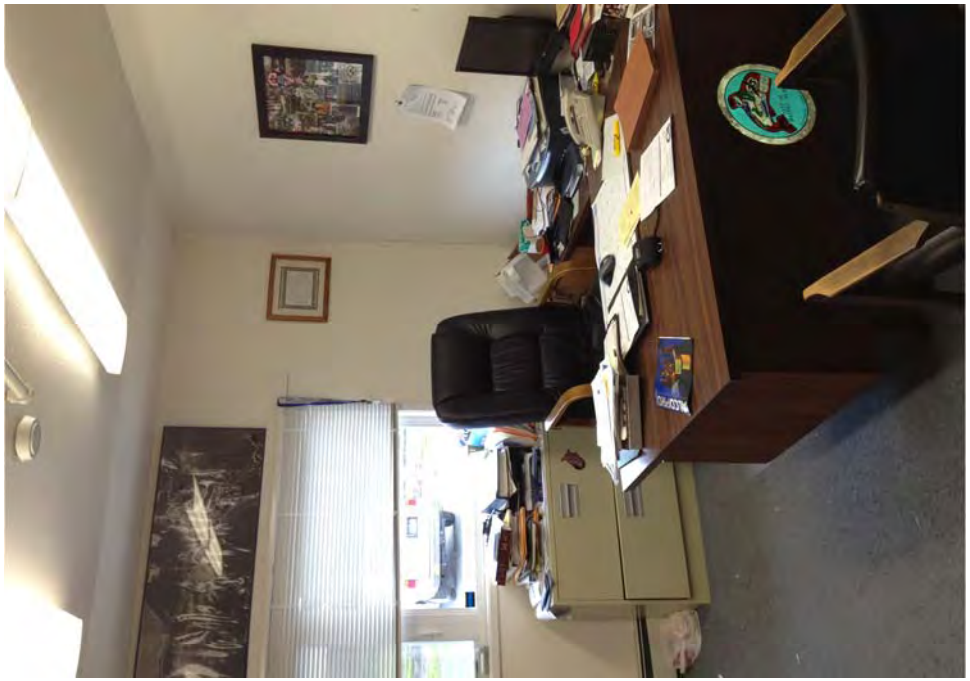


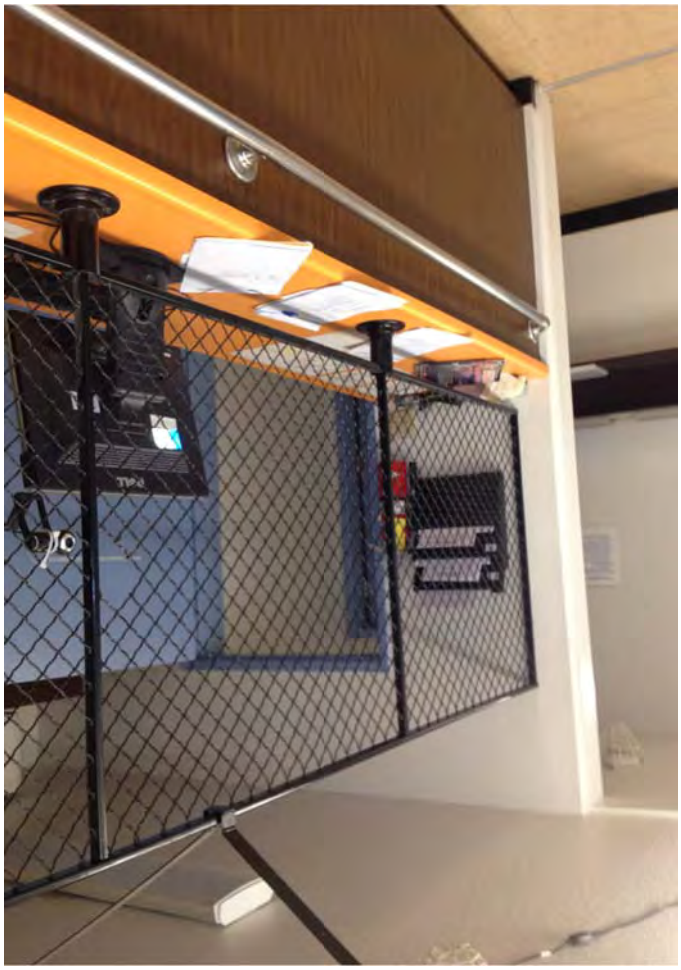


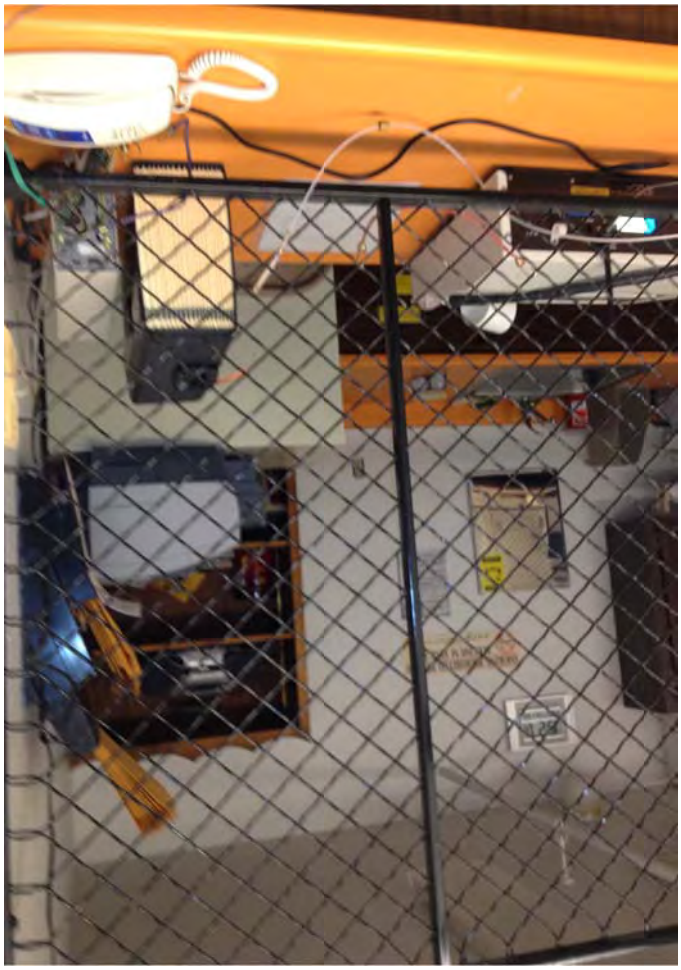


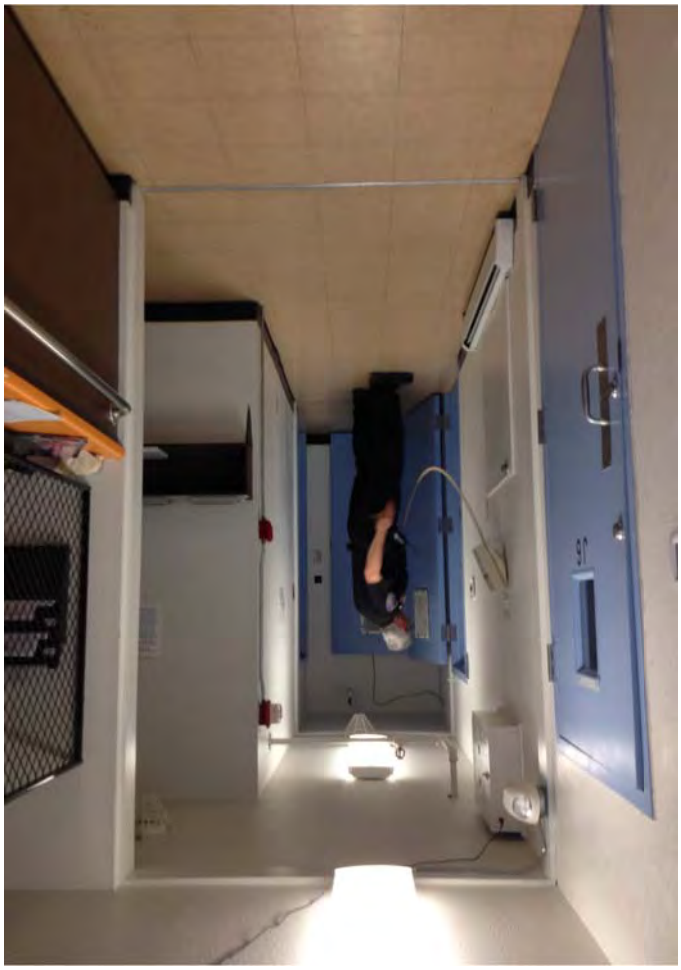

Emergency Evacuation Routes
Squad Room
Evidence Room
Chief's Office
Two Person Jail Cell
Two Person Jail Cell
Two Person Jail Cell
You Are Here
Main Entry
Restroom
Booking
Shower Locker Room
Morgue
Dispatch
Garage
Restroom
Apparatus Bay

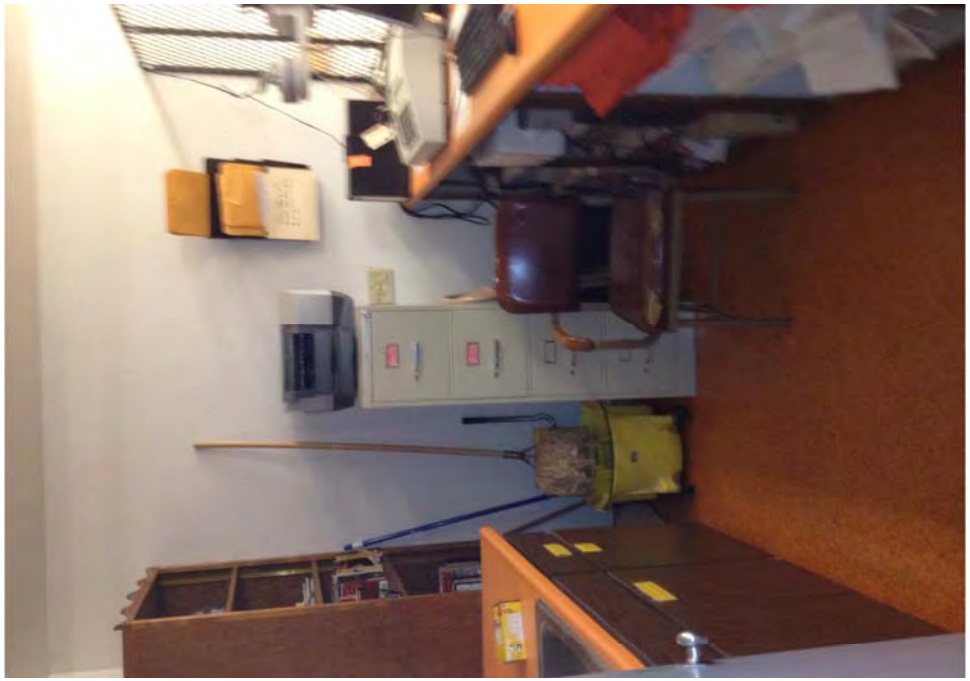


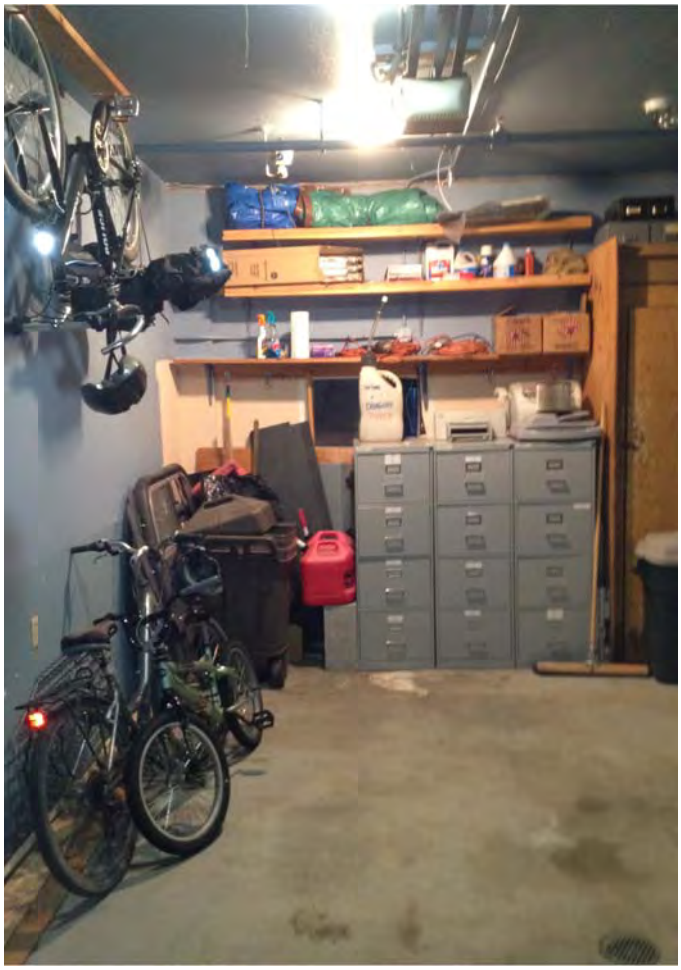


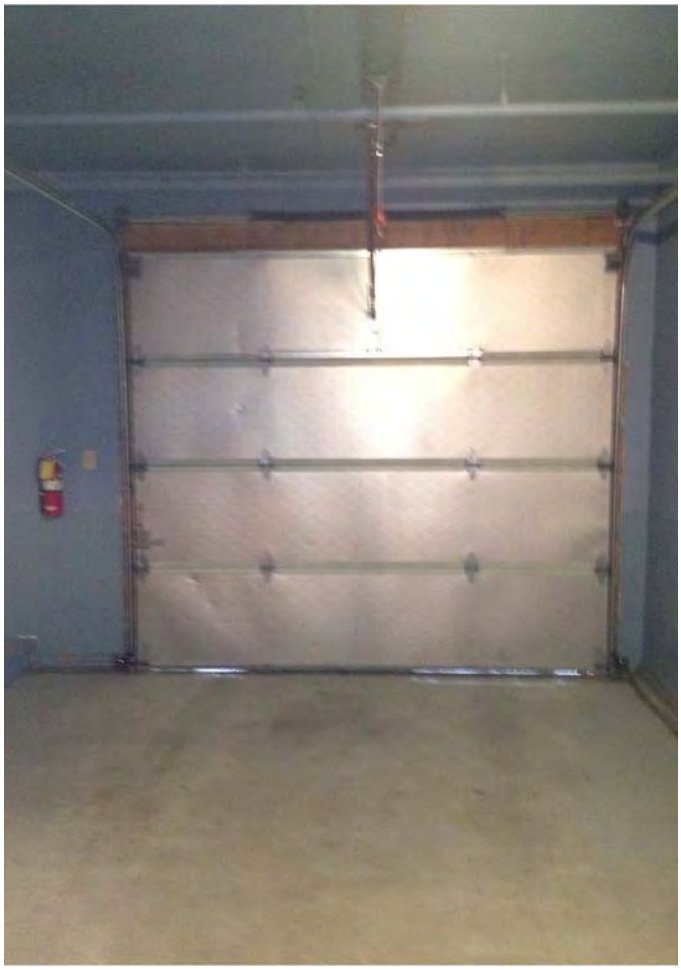


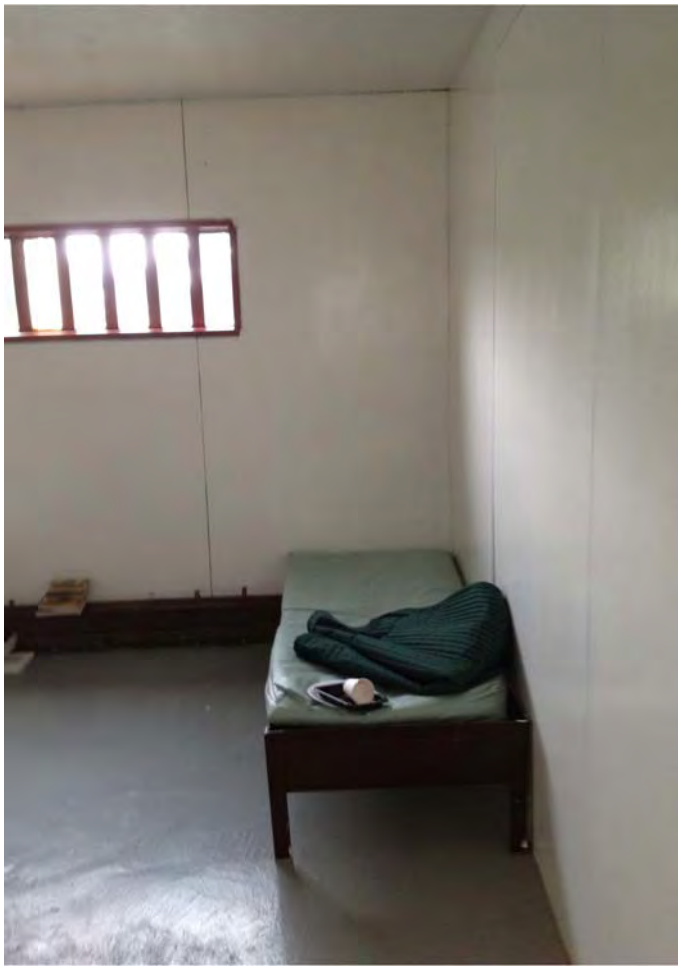


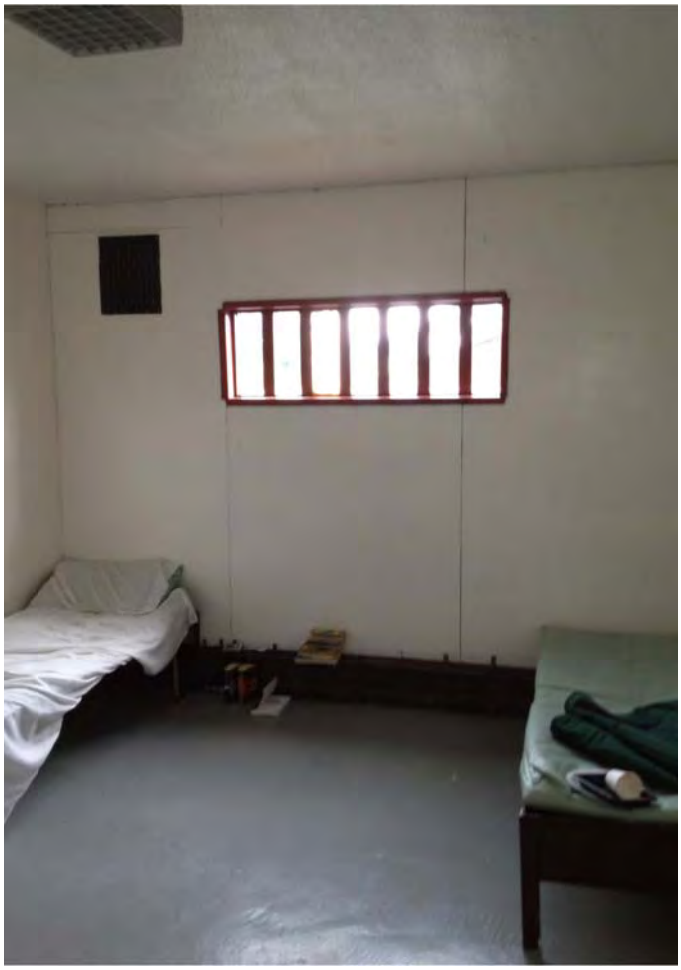


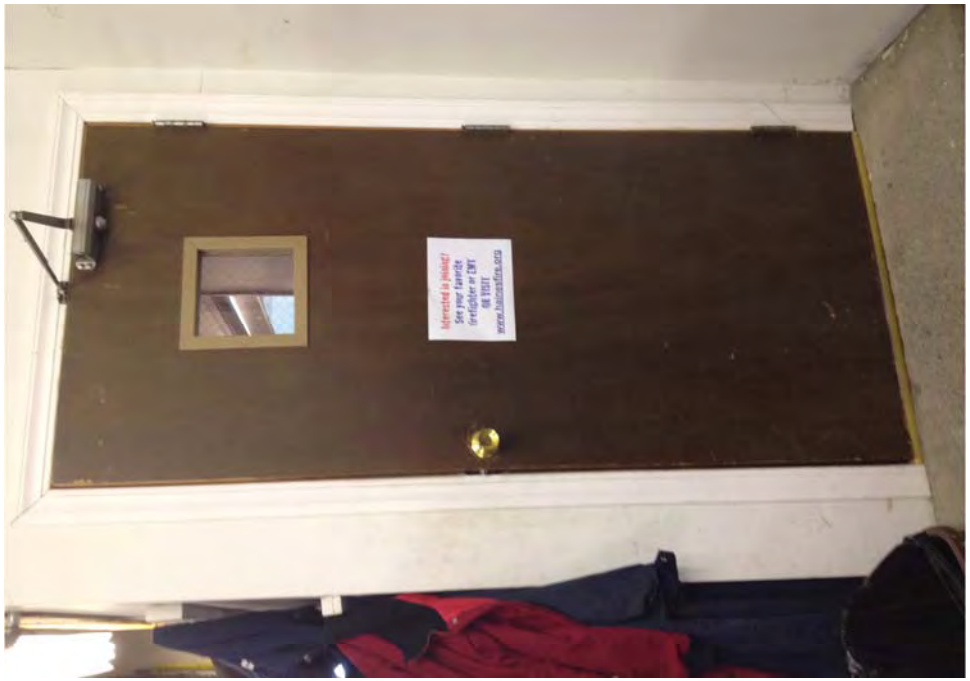


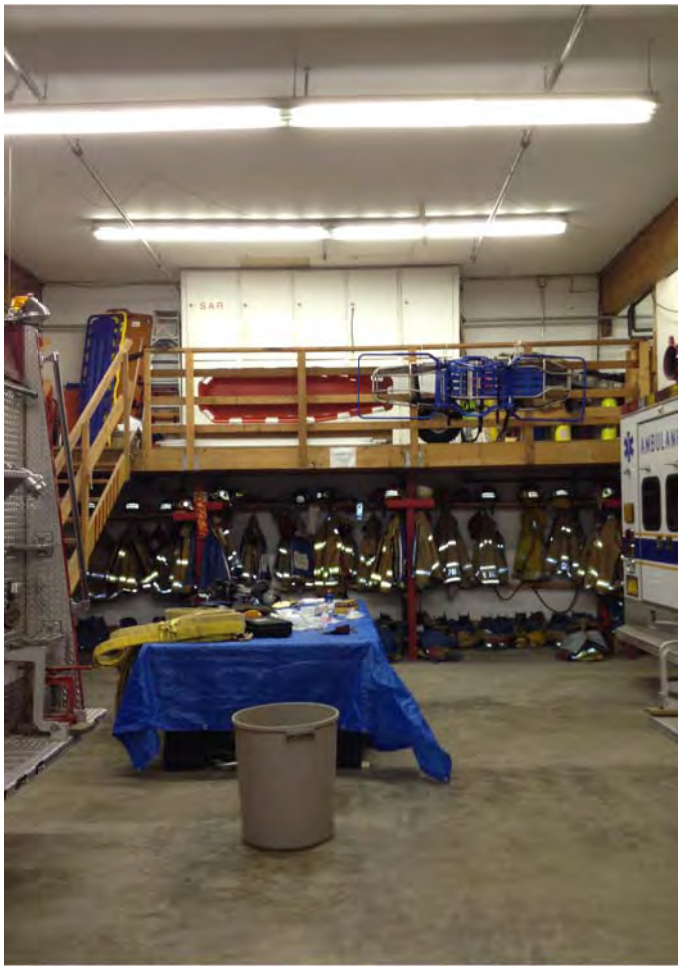






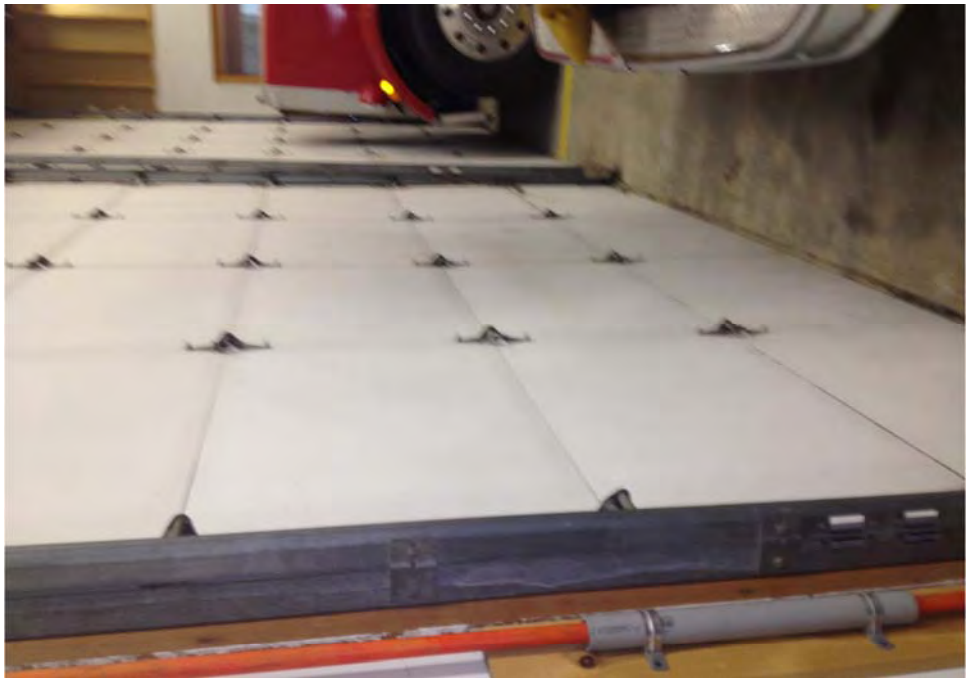



Interested in Jobs?
See your favorite
firefighter or EMT
OR VISIT
www.hainesoffice.com

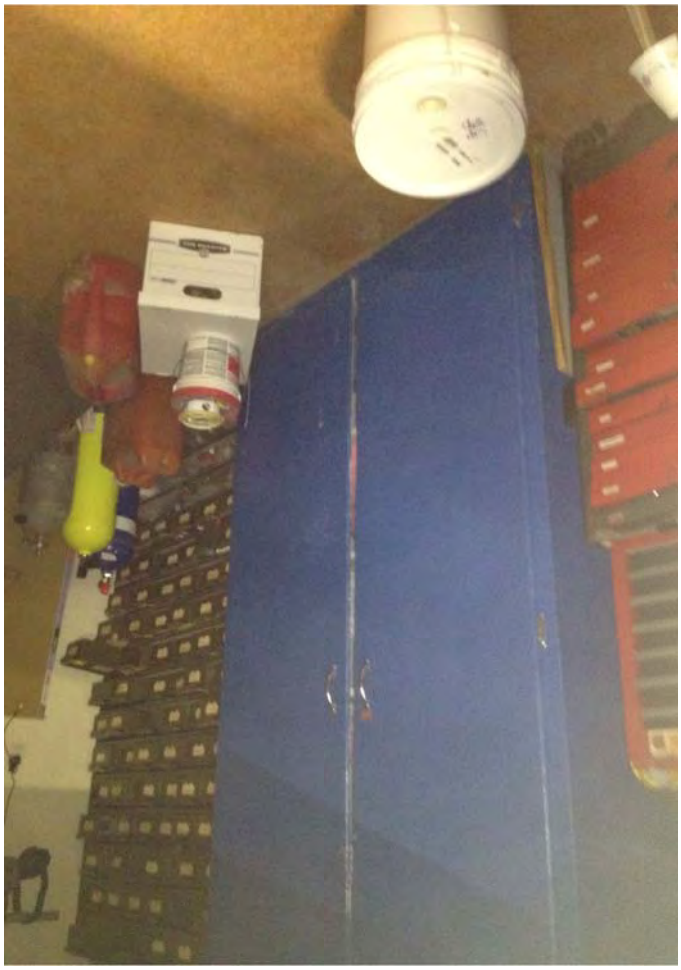


AMBULANCE

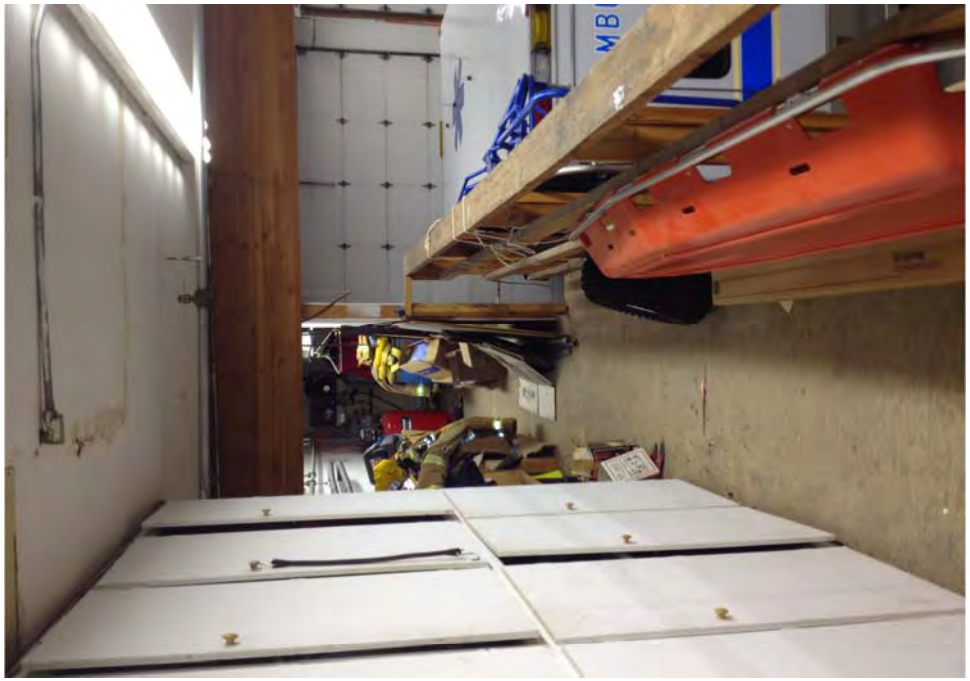
HAINES
VOL.
FIRE DEPT.
ENGINE 3



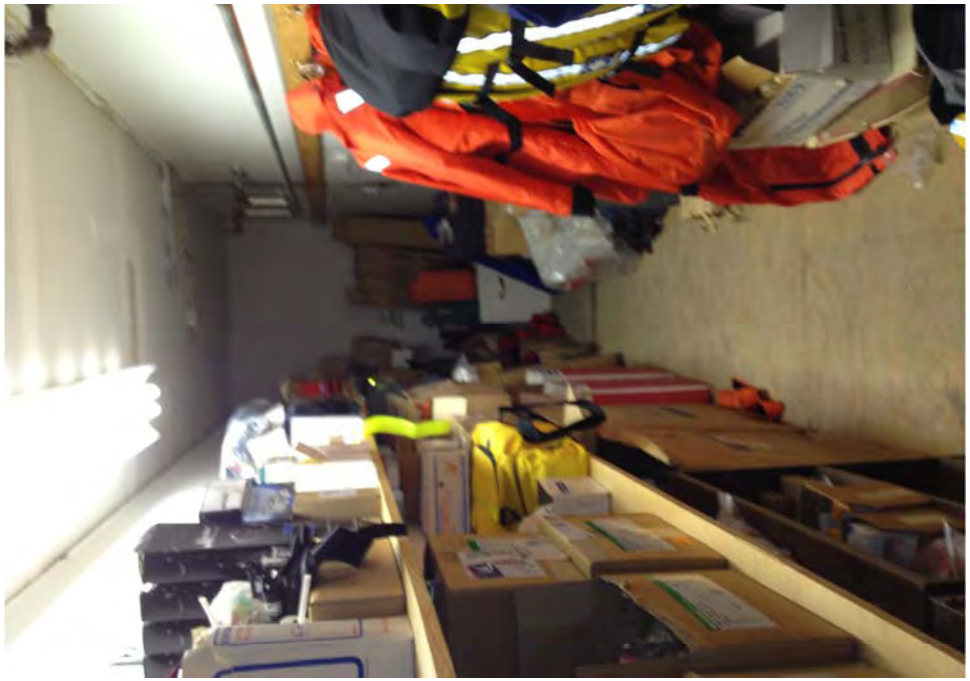
MAKO



AMBULANCE

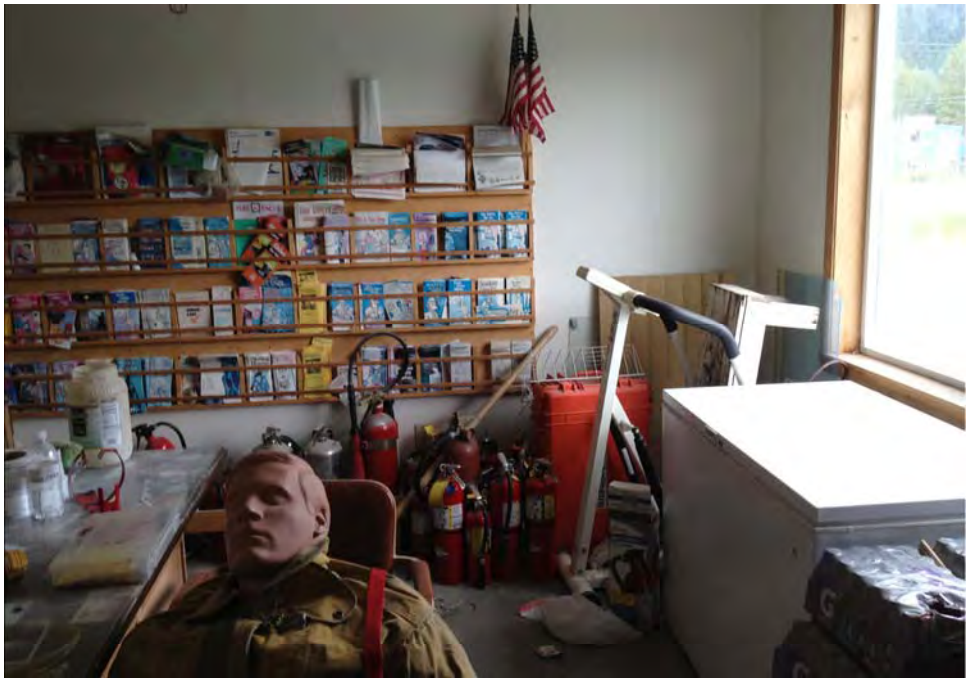


FIRE/RESCUE



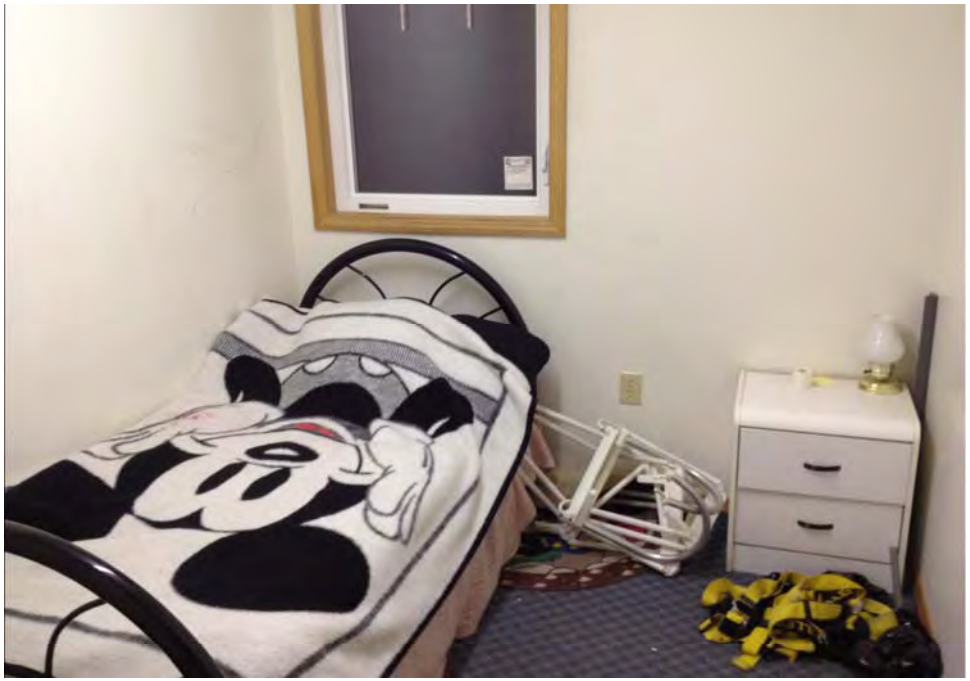
Mack

HAINES

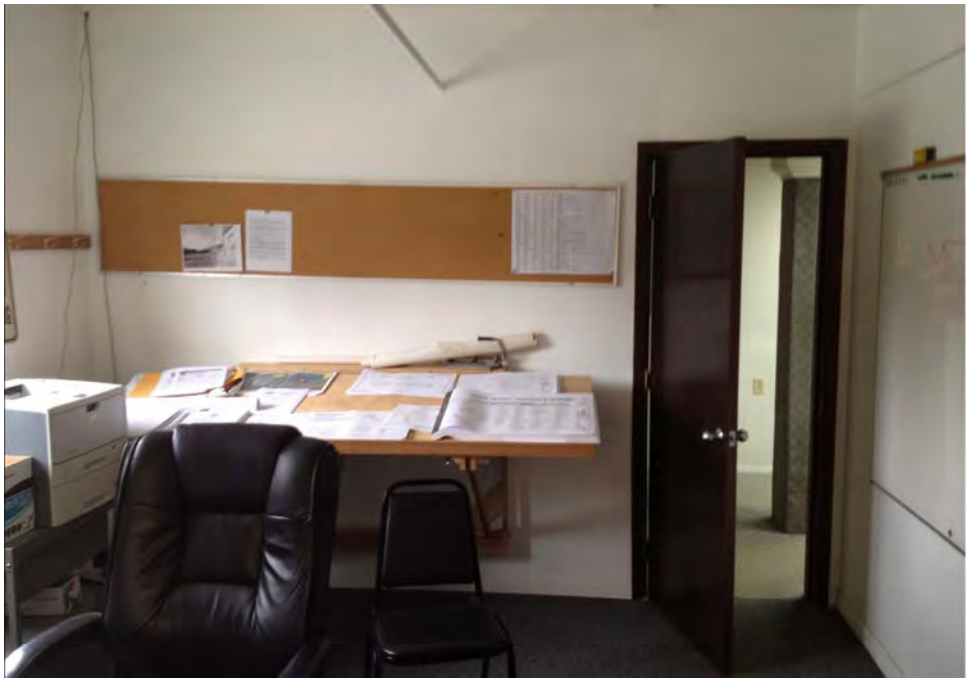


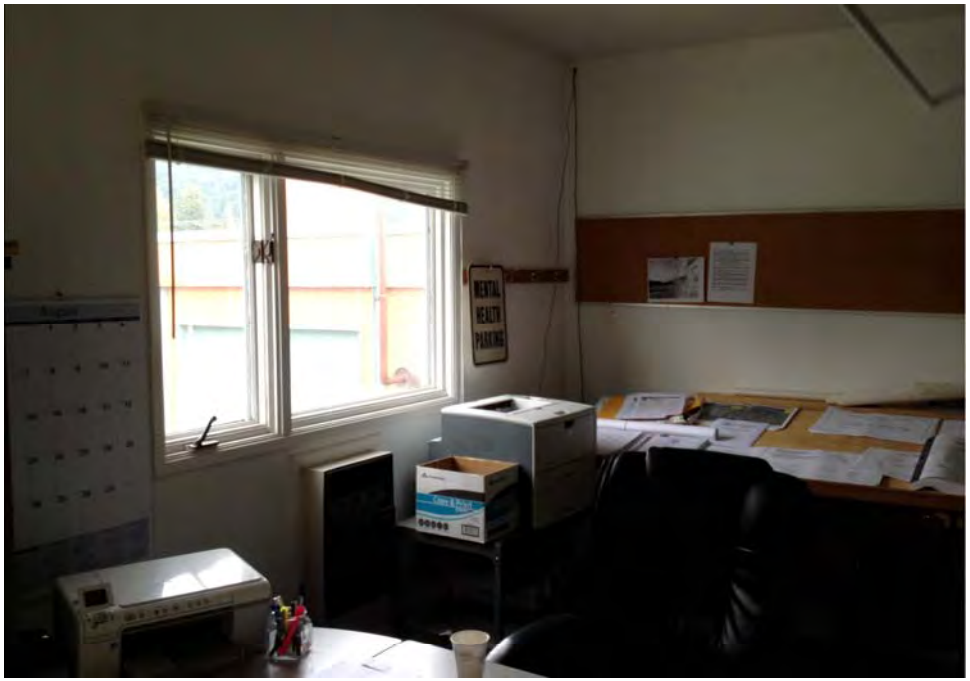
EXIT

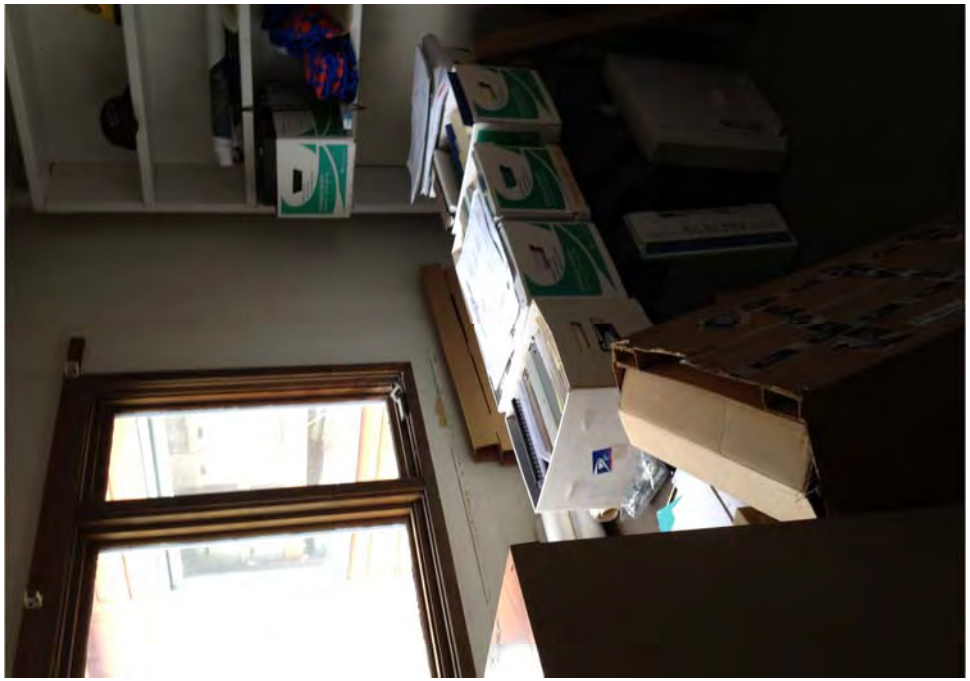
GILDAN
GILDAN
GILDAN



U.S. OFFICE
Willamette




MENTAL
HEALTH
PARKING



Haines Borough Assembly Chambers

Haines Borough Assembly Chambers

4
5
6

HAINES
VOL.
FIRE DEPT.

AMBULANCE

AMBULANC

Volunteer
1
Haines
Fire
2
Department
3
WILDLAND FIRE
DANGER

Haines Borough Public Safety Building
Volunteer
1
POLICE

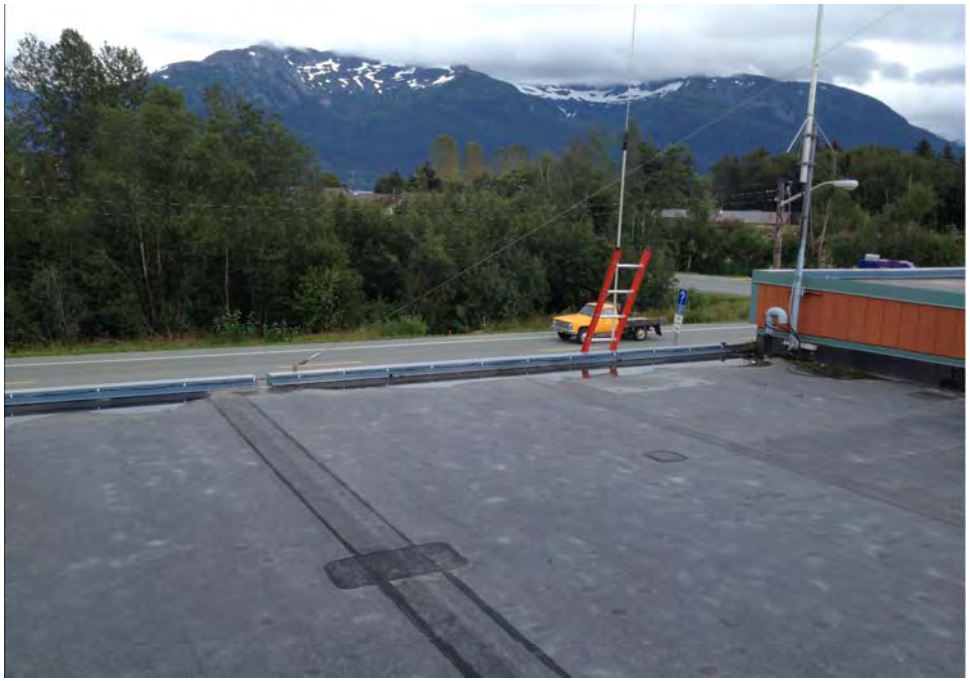
Department
3
WILDLAND FIRE
DANGER

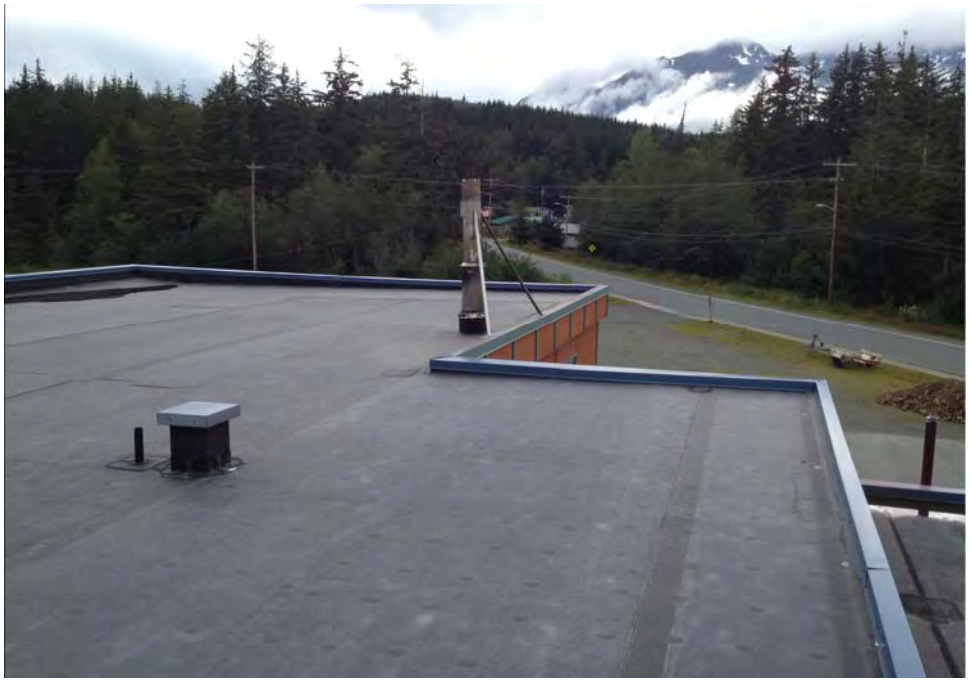
Haines Borough Public Safety Building
Volunteer
1
Haines
Fire
2
Department
3

THIS AREA
POLICE

Haines Borough Public Safety Building
Volunteer
1
Haines
Fire
2
Department
3

Haines Borough Public Safety Building
THIS AREA
POLICE

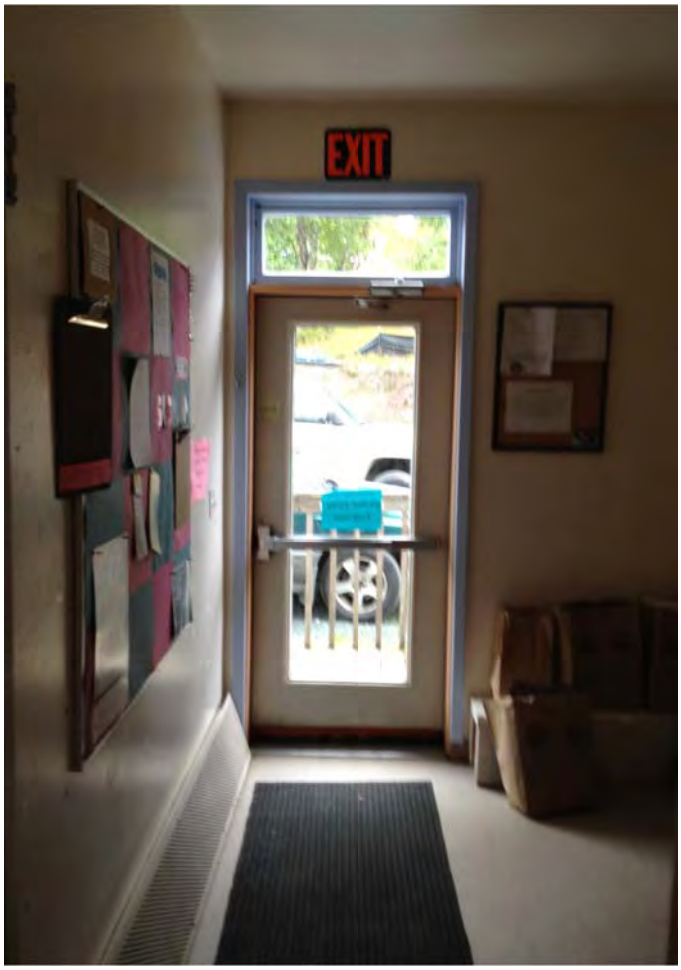


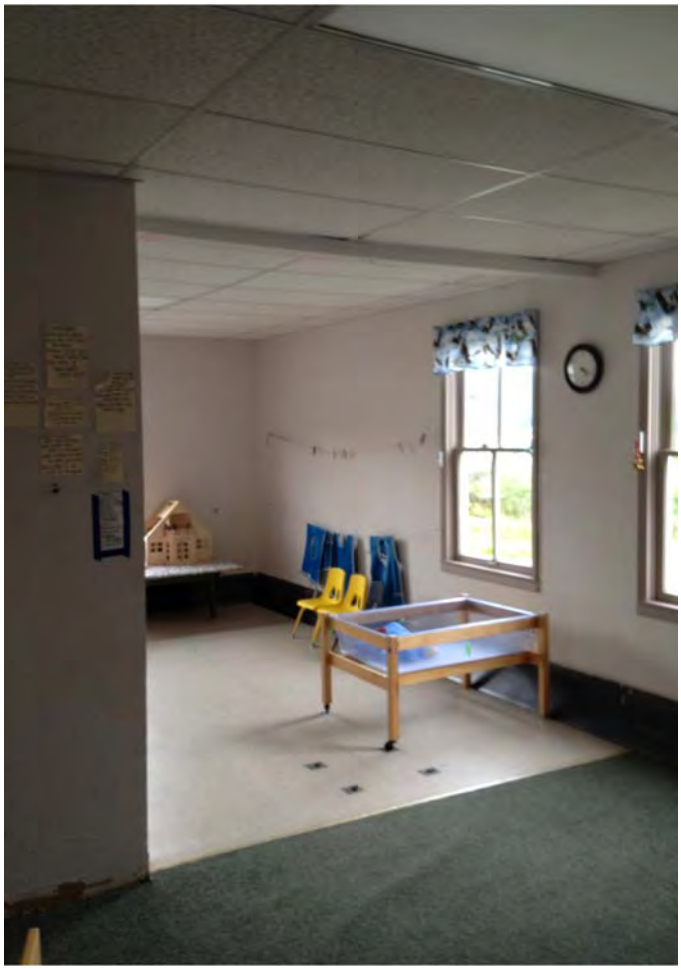


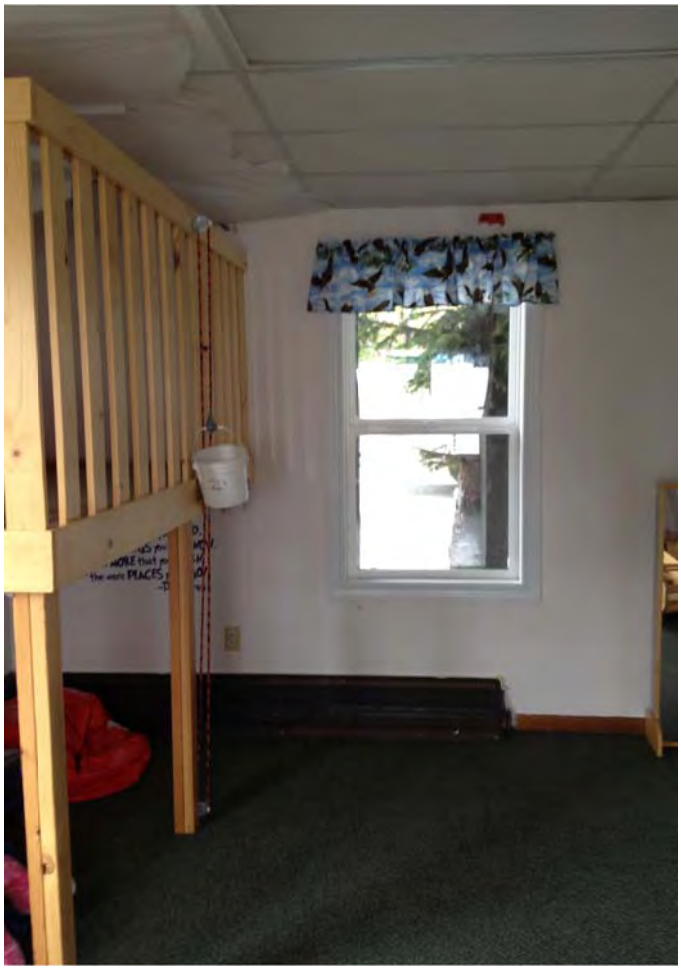
SECTION 3.5 FACILITY PHOTOS

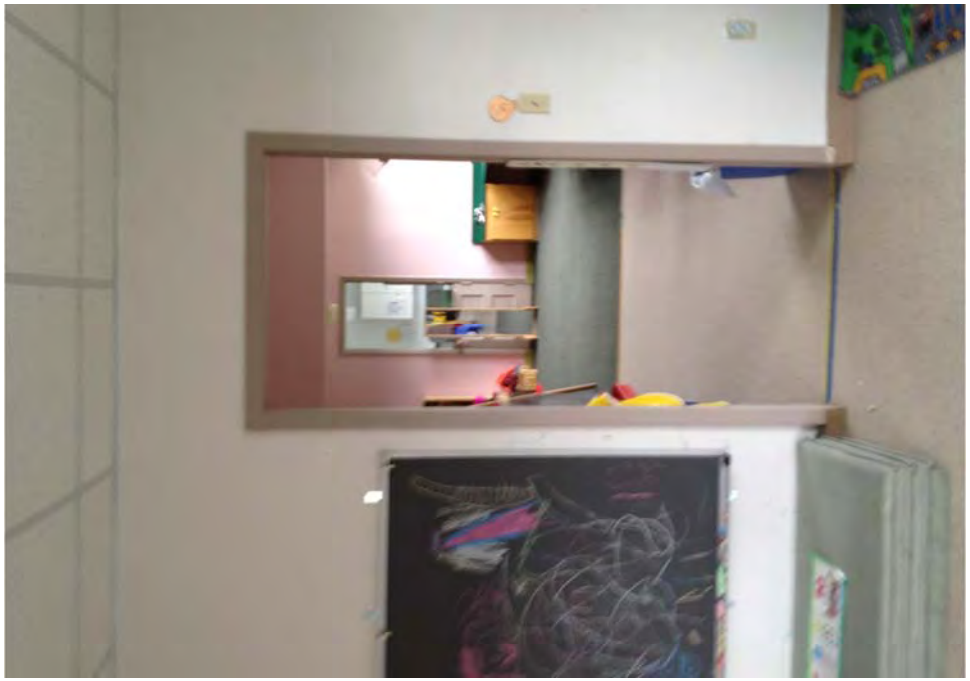
HUMAN RESOURCES

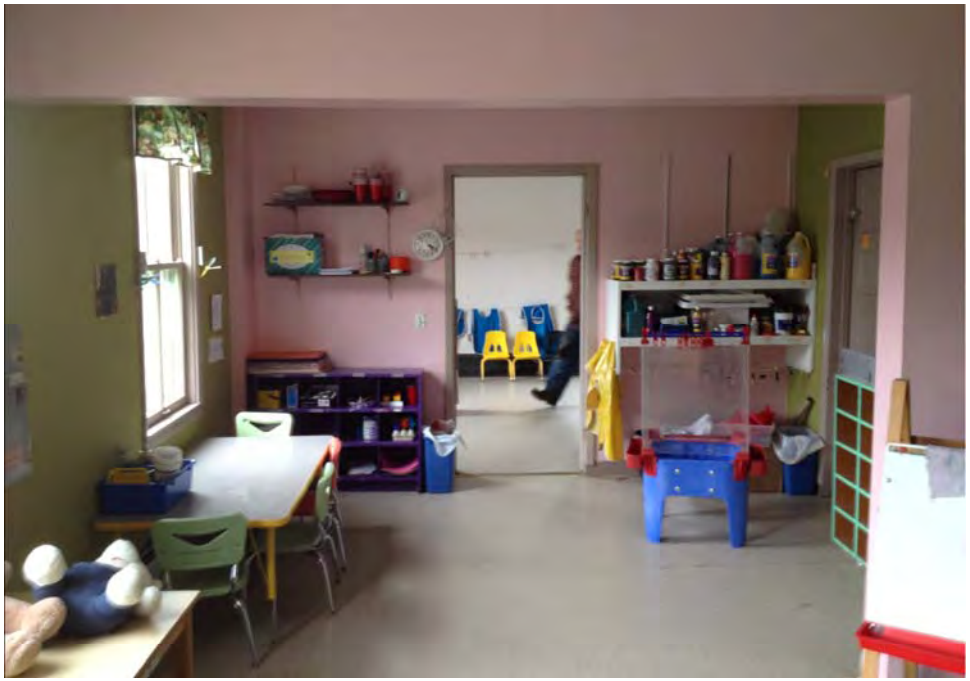
Welcome To
Chilkat Valley
Preschool


EXIT



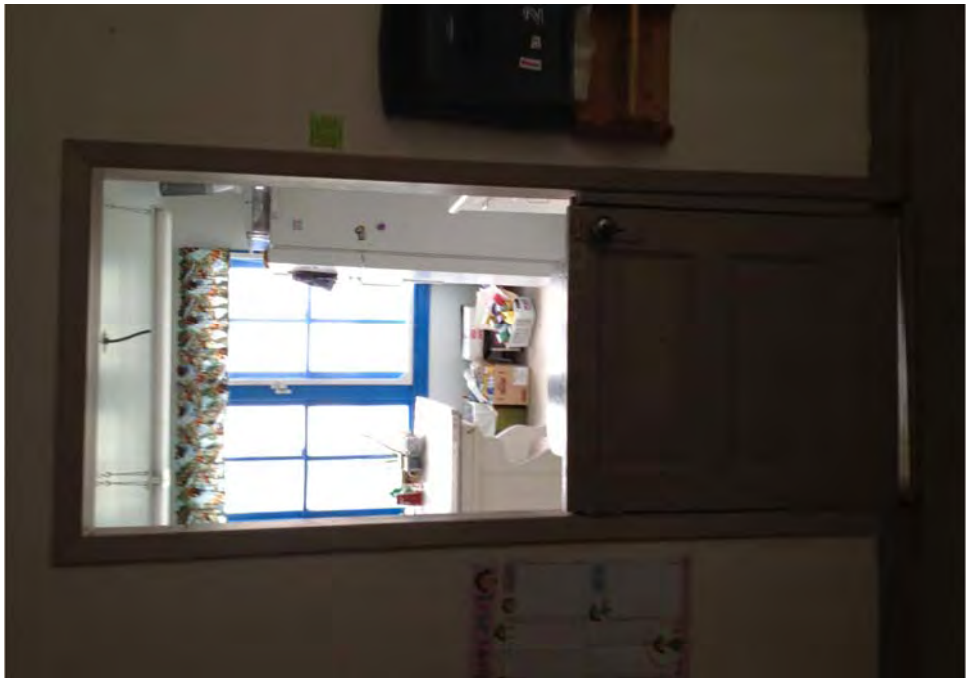




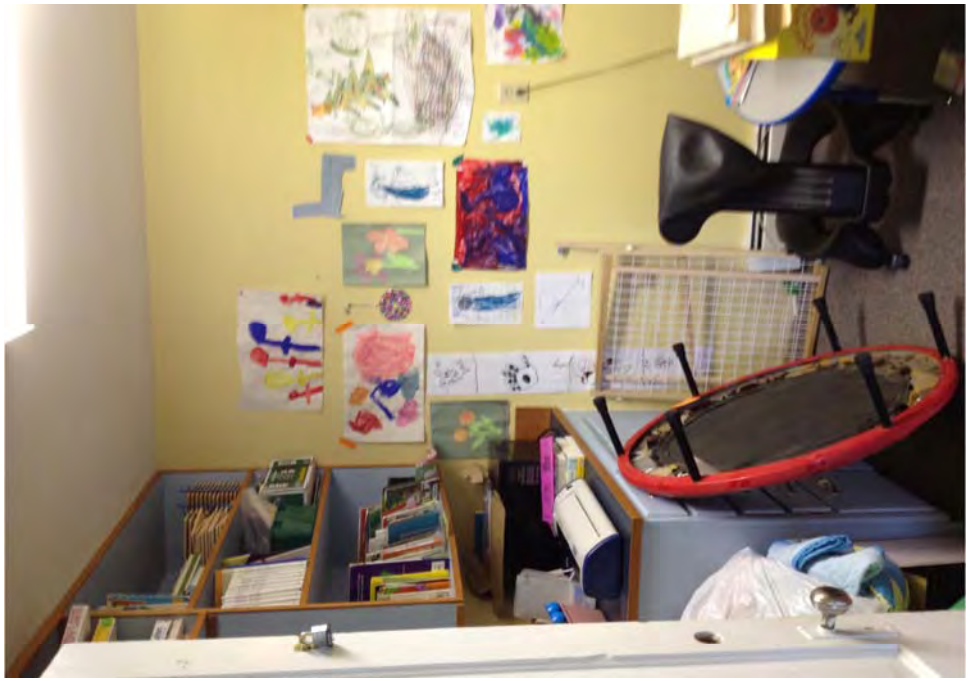


SCHEDULE
TODAY'S
HELPERS

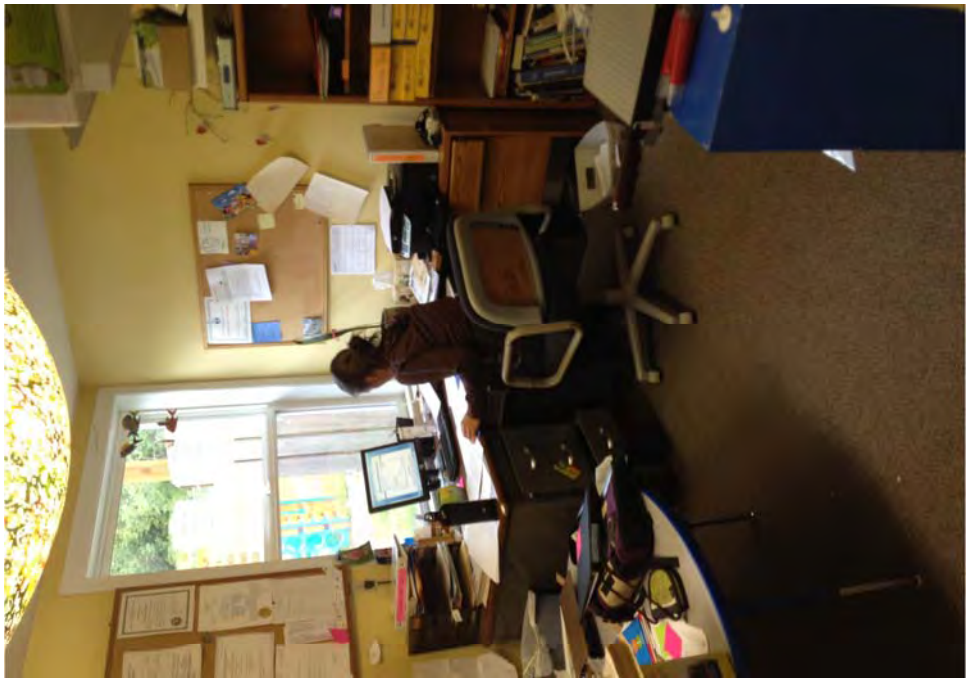
SCHEDU
TODAY'S
HELPERS



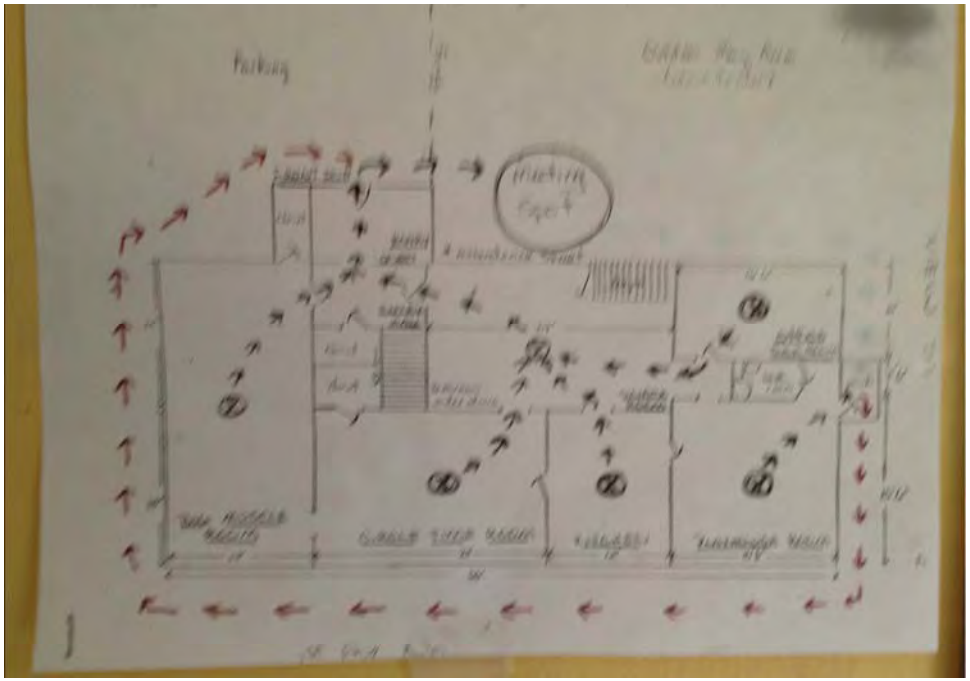
EXIT



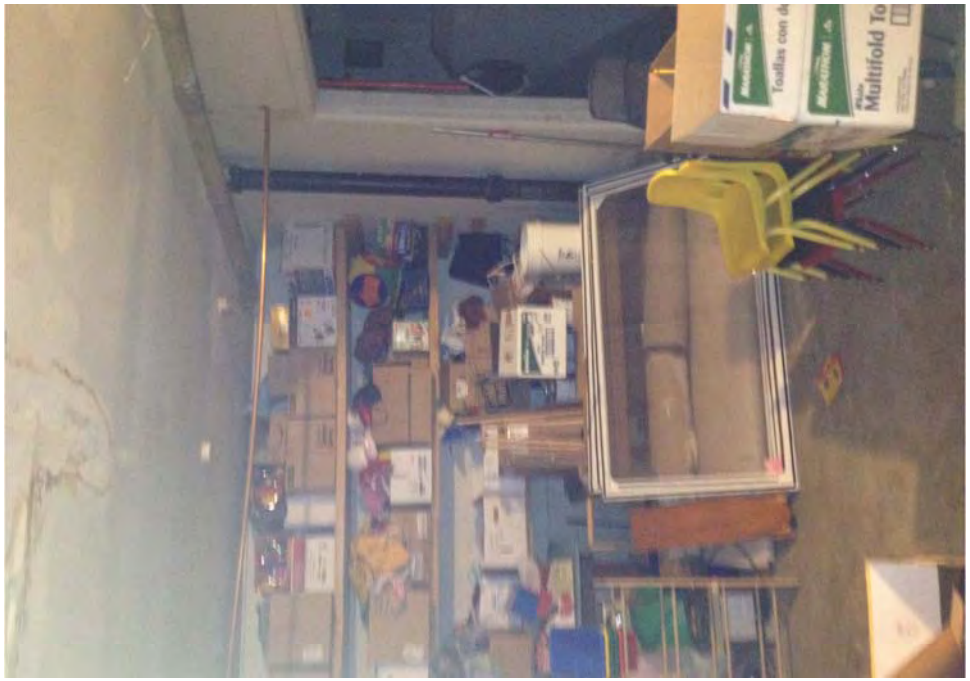
EXIT



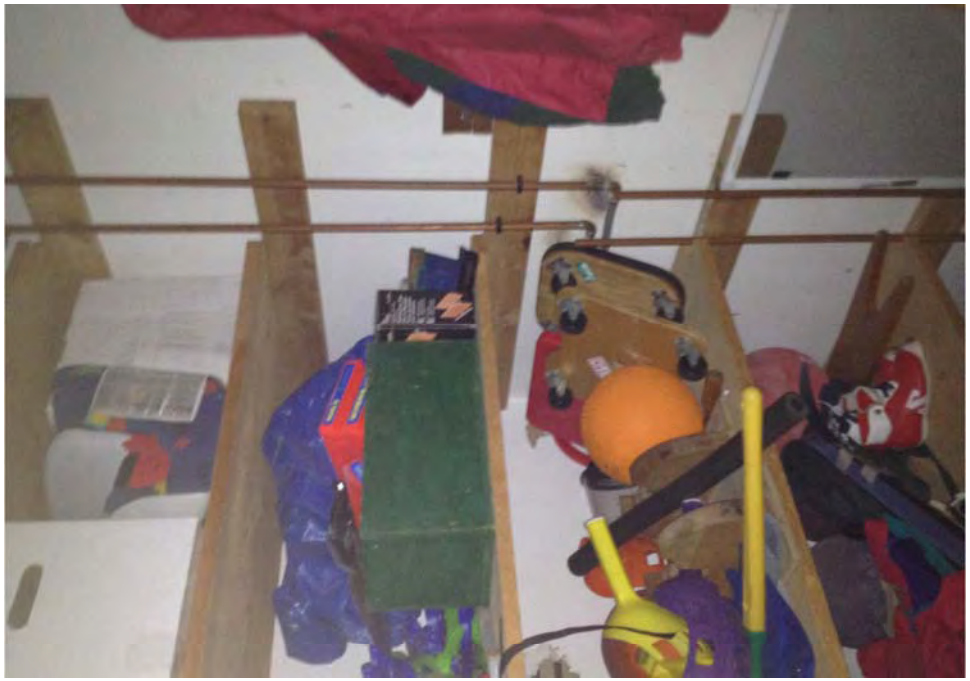
WANTED

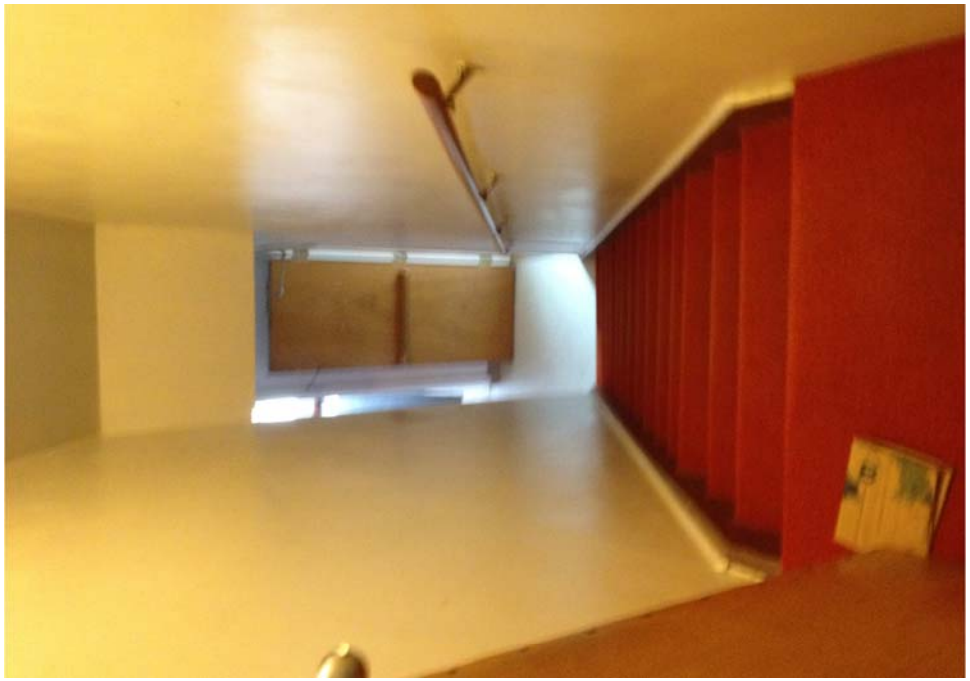

Parking

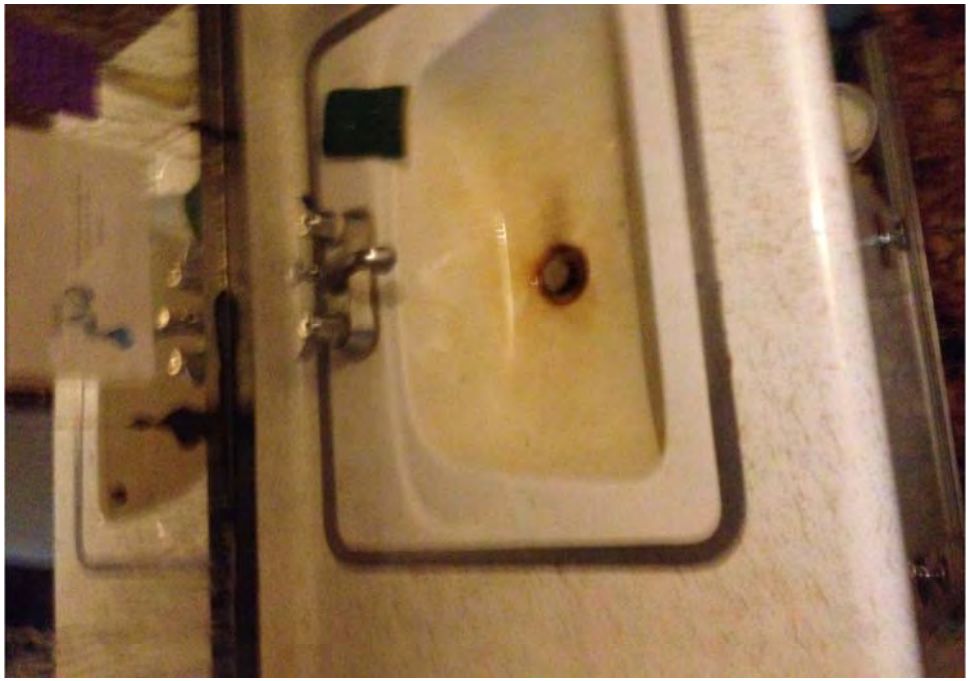
EXIT

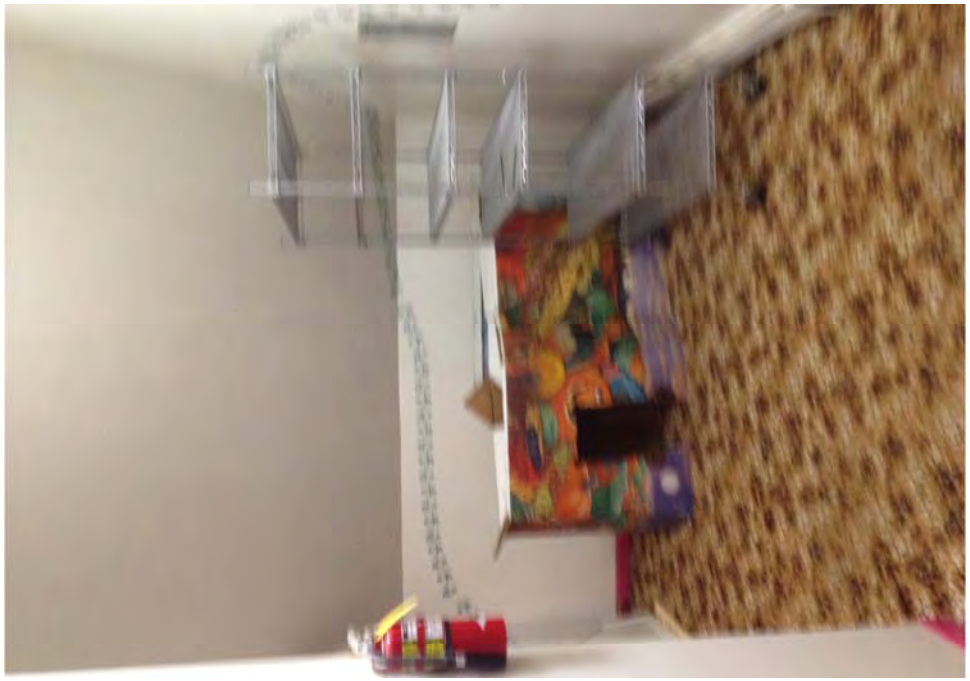

Multifold

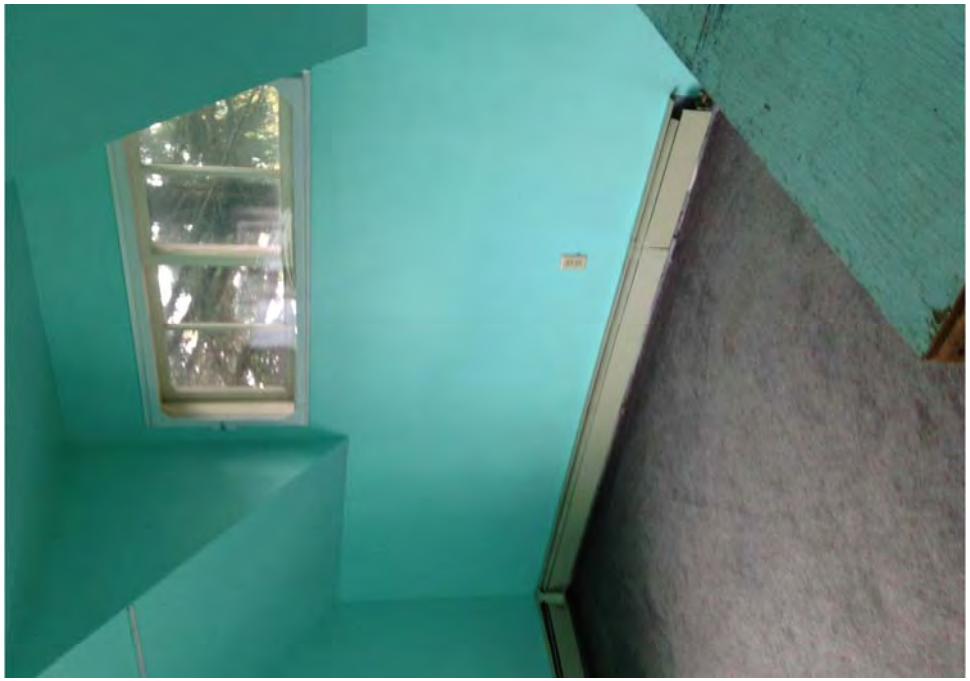
FREE
CAUTION

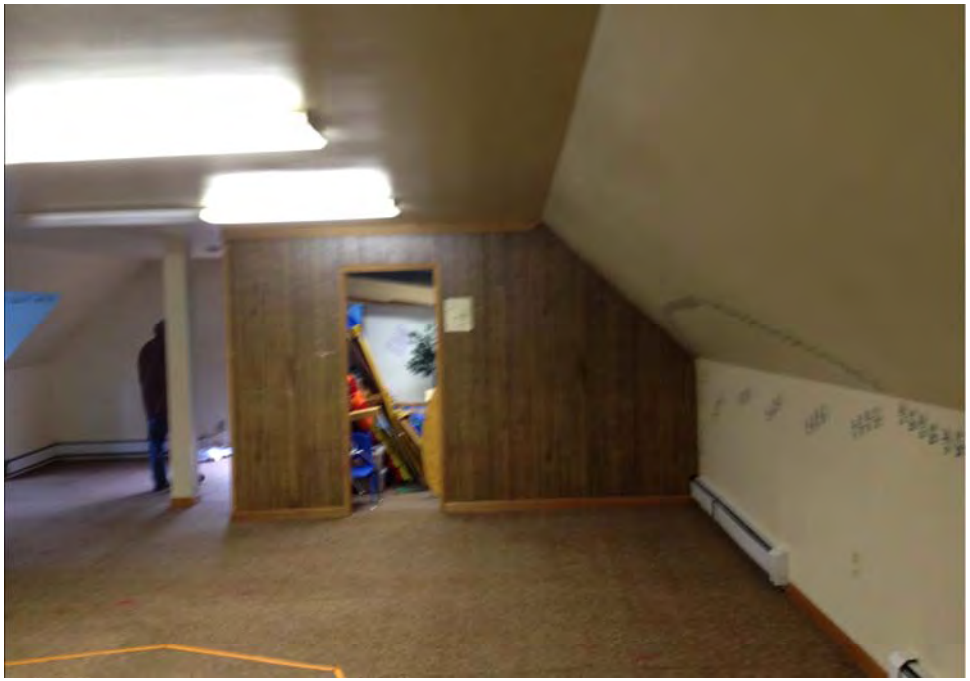


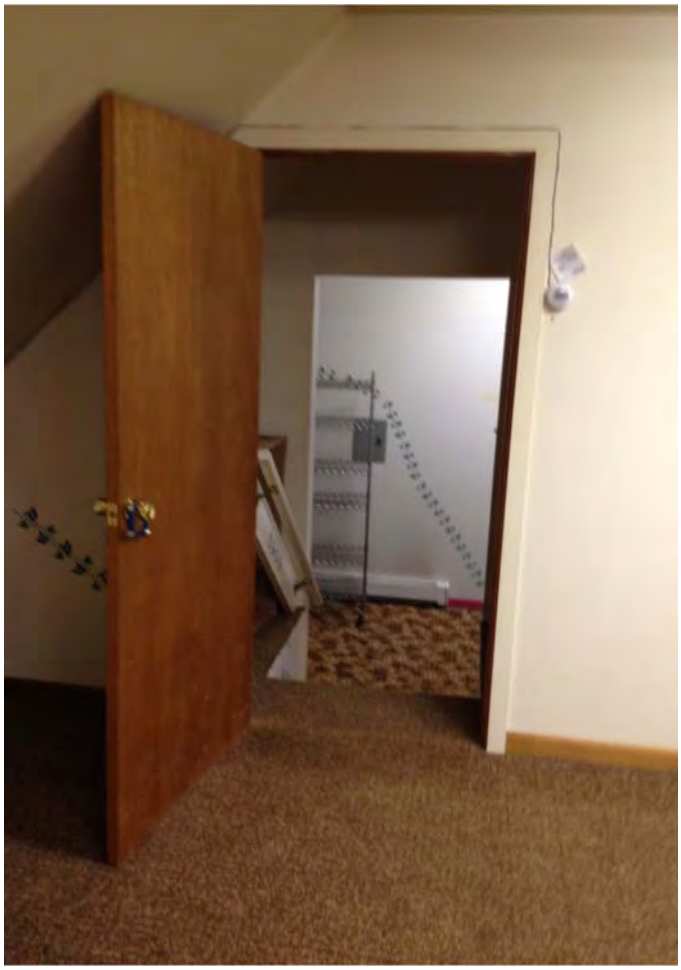


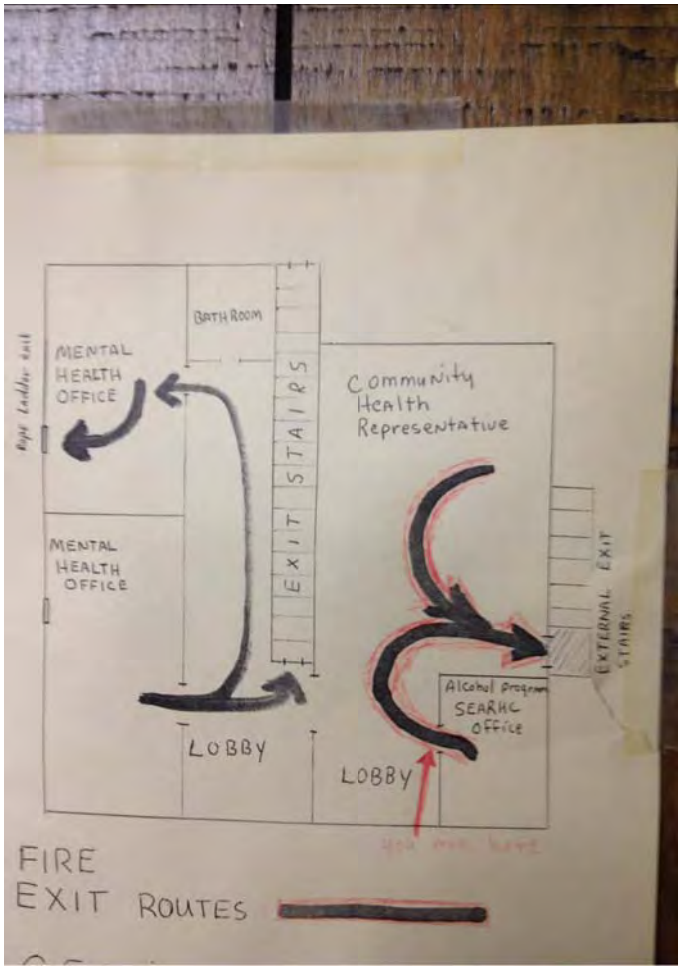


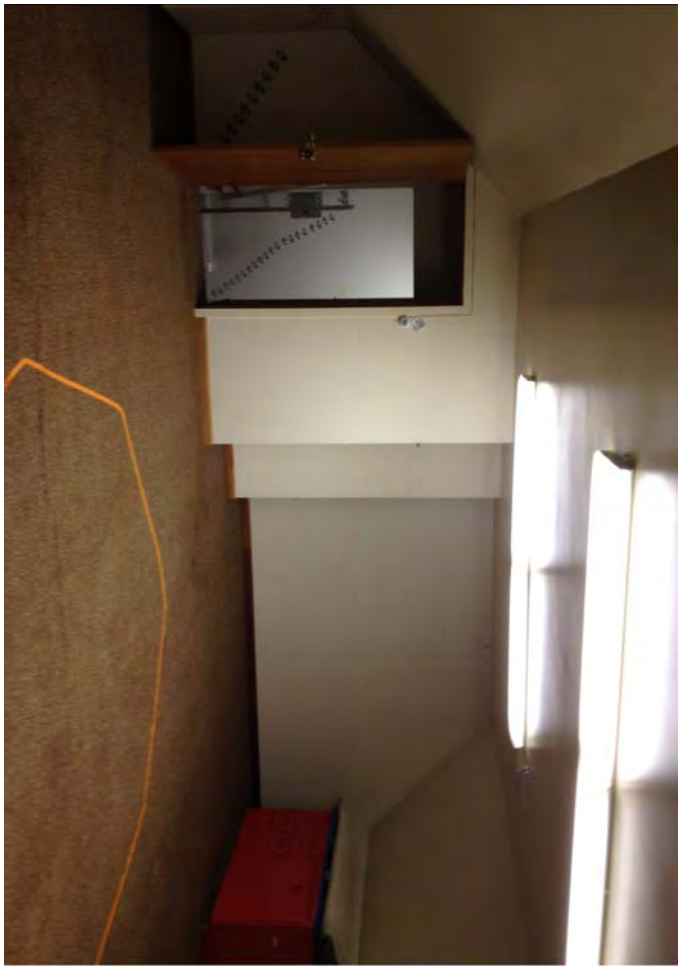


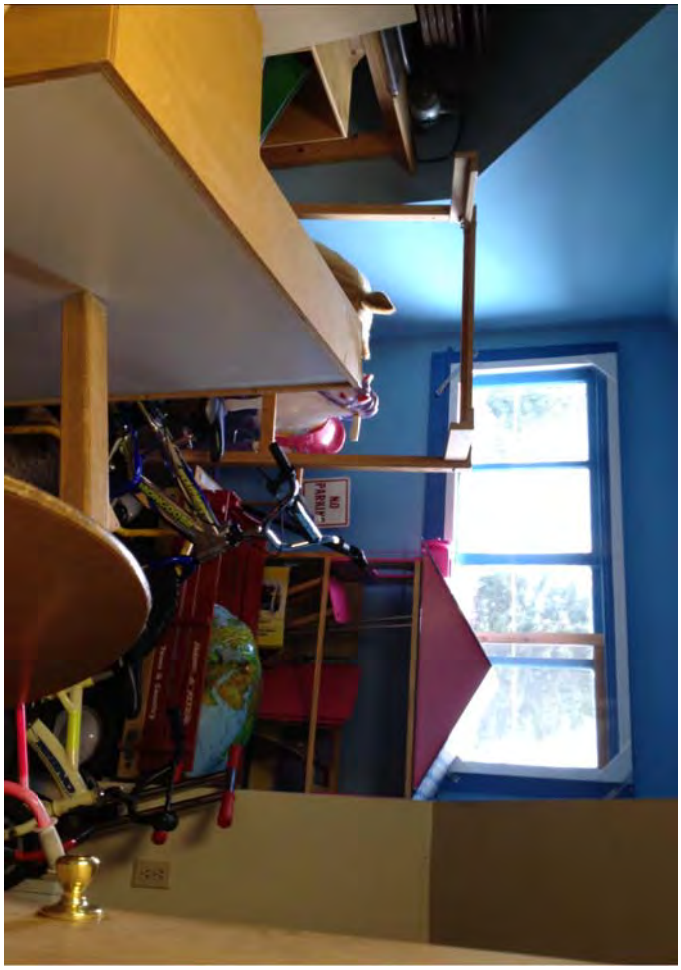


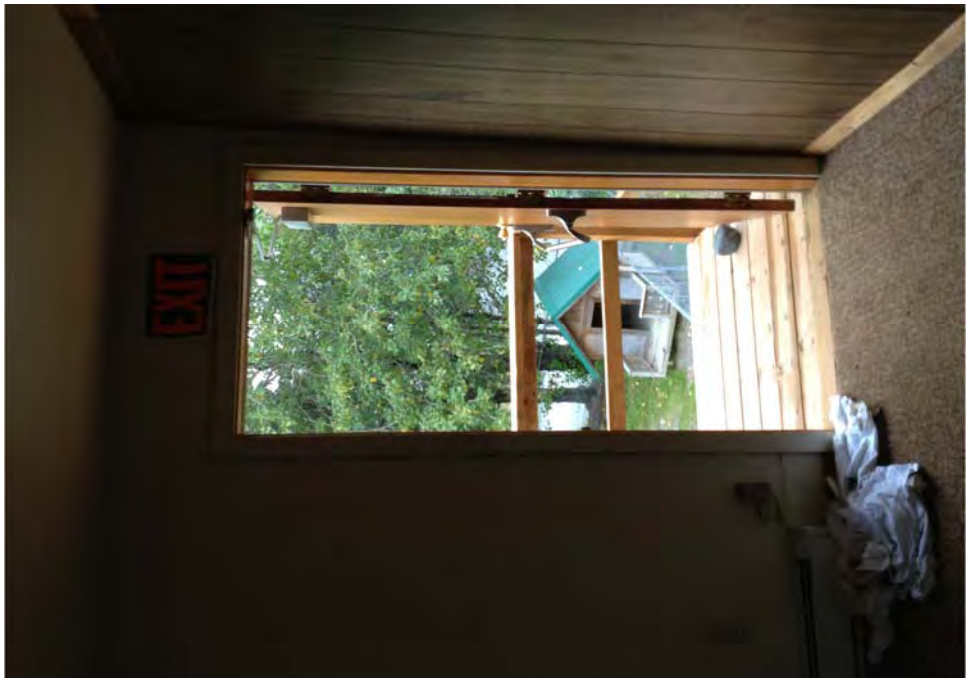


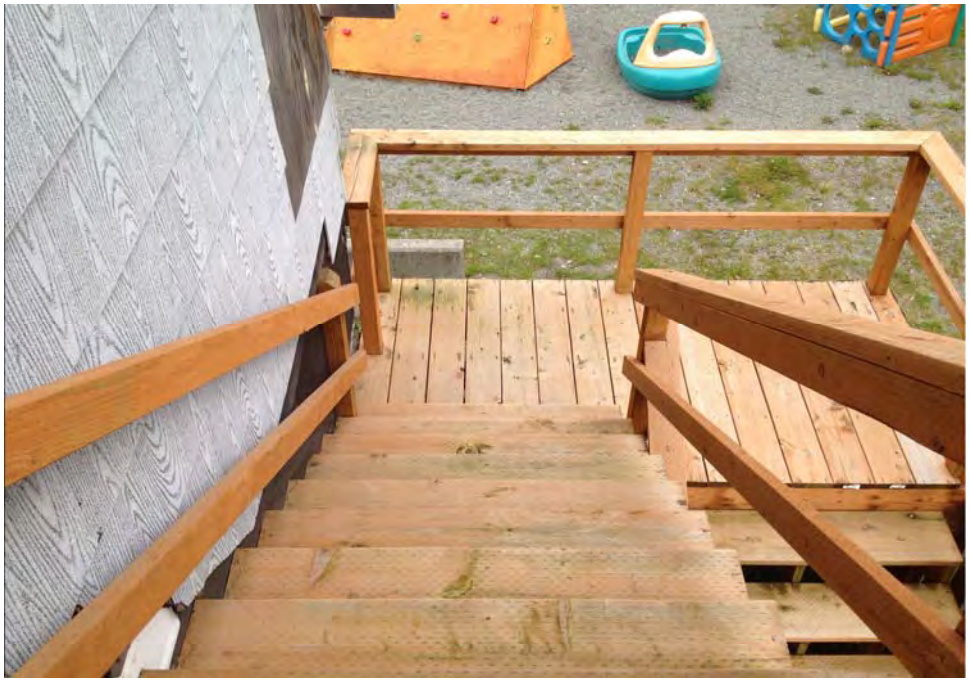



BATH ROOM
MENTAL HEALTH OFFICE
EXIT STAIRS
Community Health Representative
MENTAL HEALTH OFFICE
EXTERNAL EXIT STAIRS
Alcohol program SEARHC OFFICE
LOBBY
LOBBY
FIRE EXIT ROUTES




NO PARKING

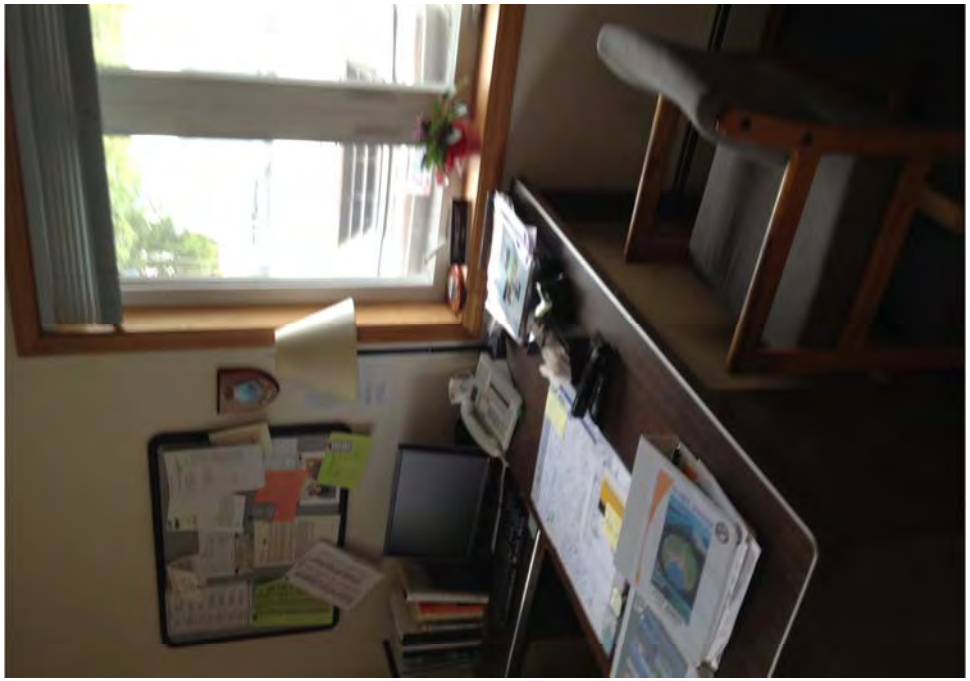

EXIT



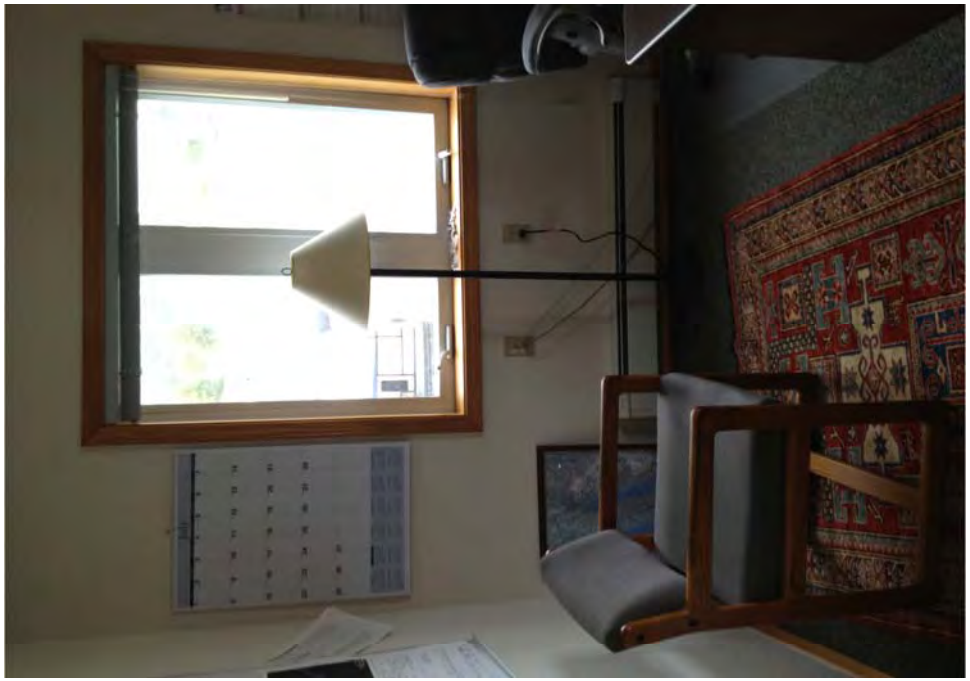
Section 3.5 Facility Photos

Administrative Building

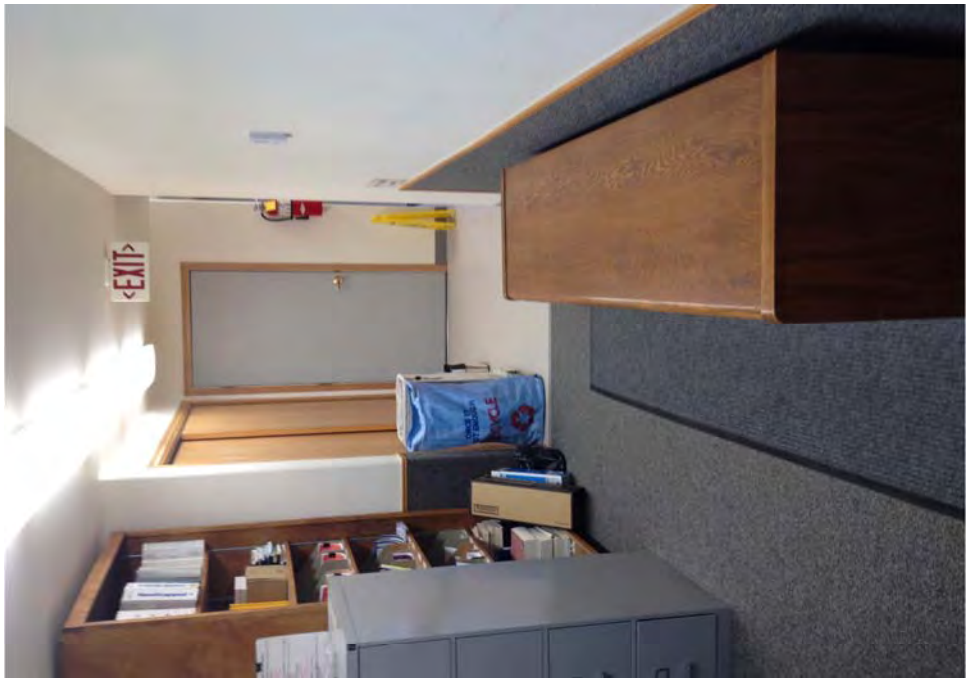
Grand Cherokee

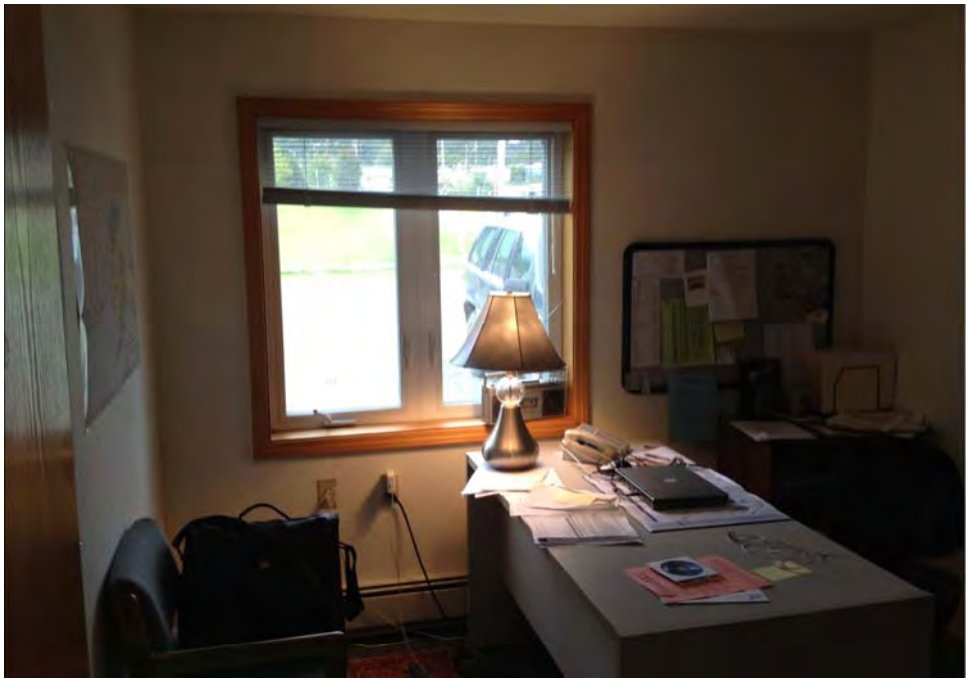


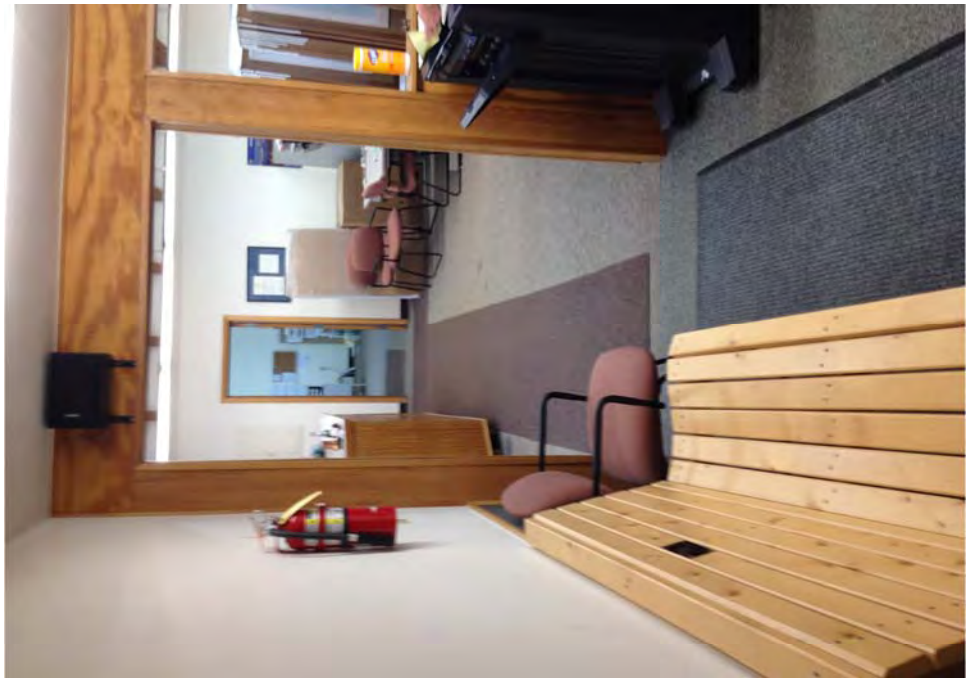
Haines Borough Administration



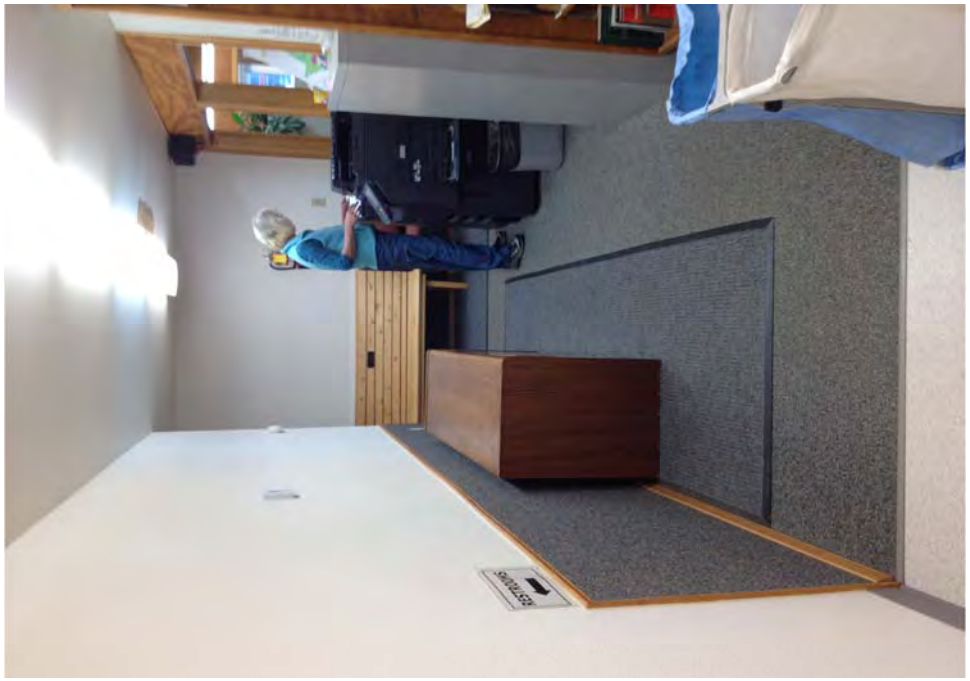
MARK EARNEST

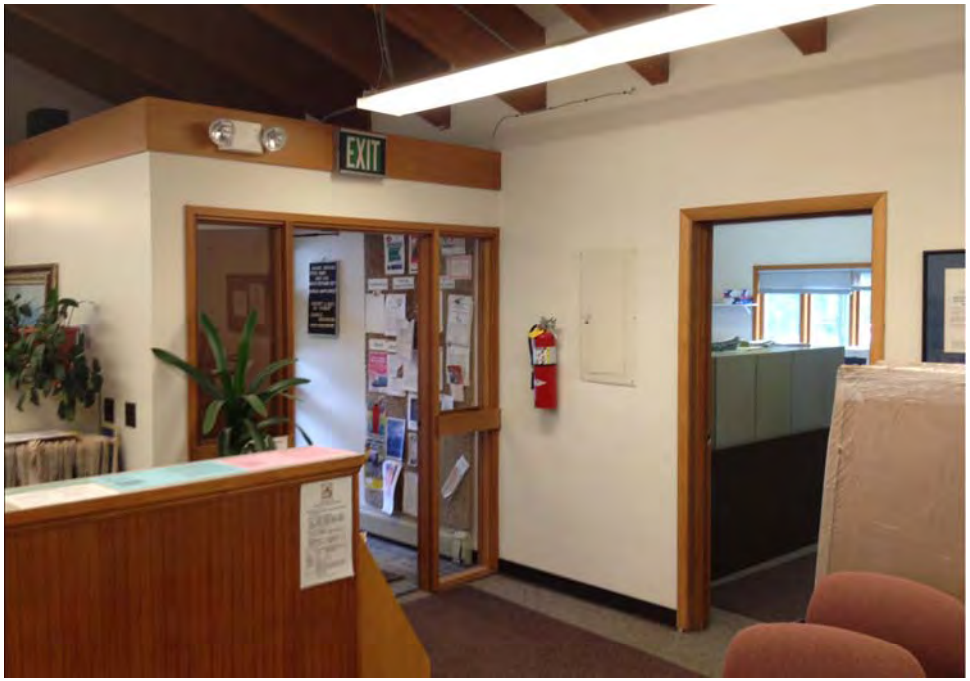

<EXIT>

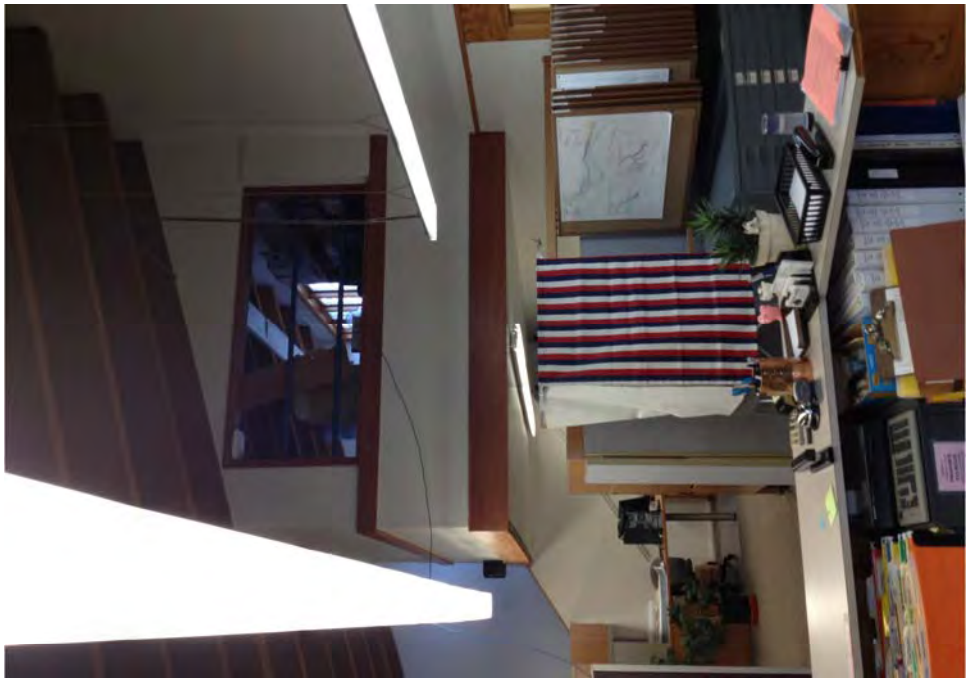


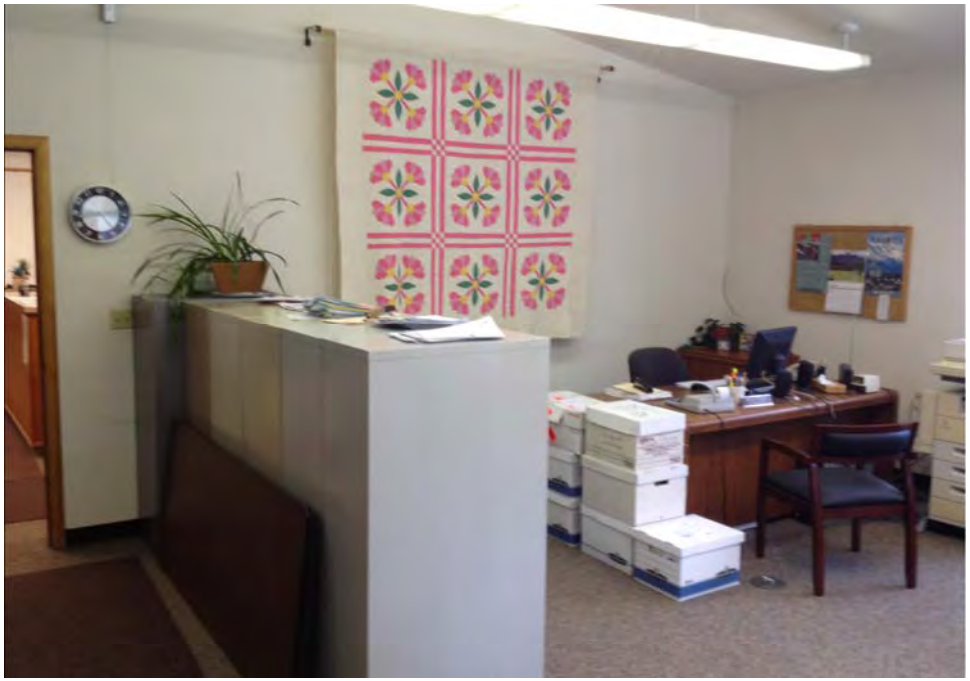


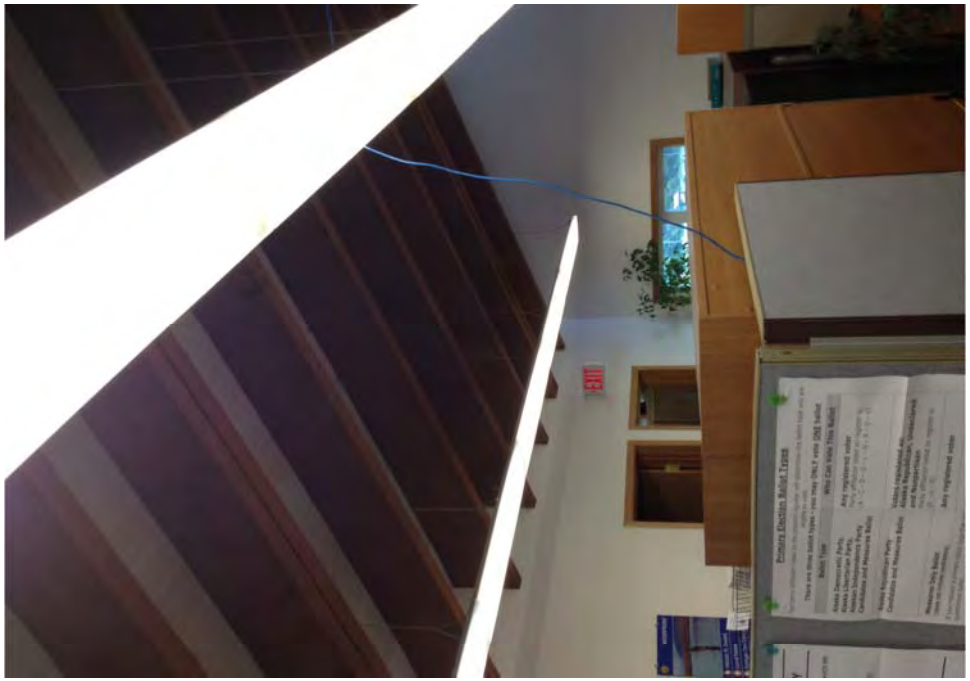
EXIT

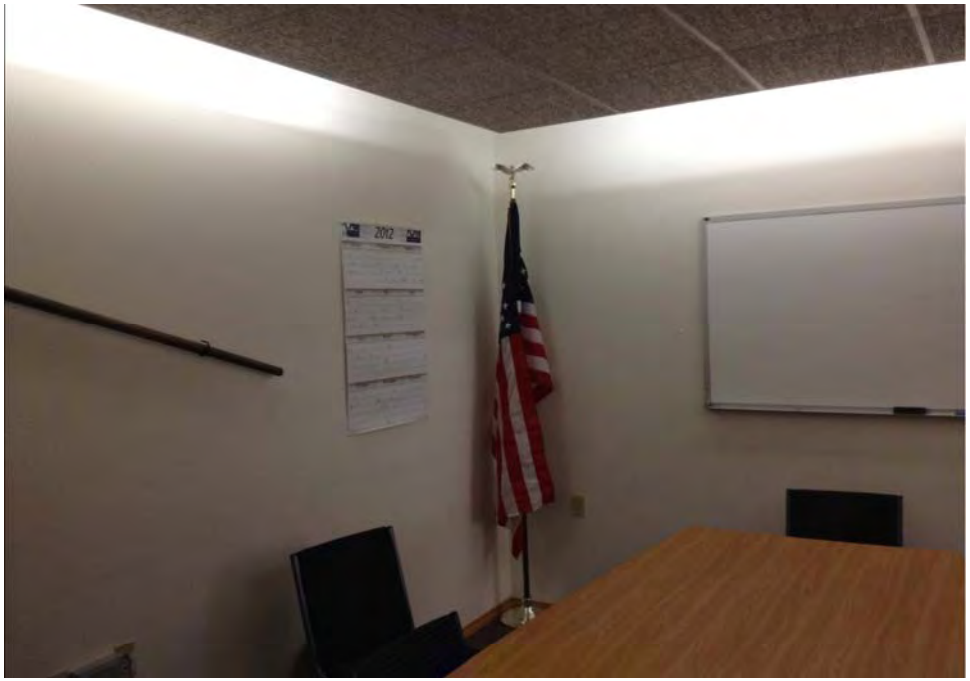


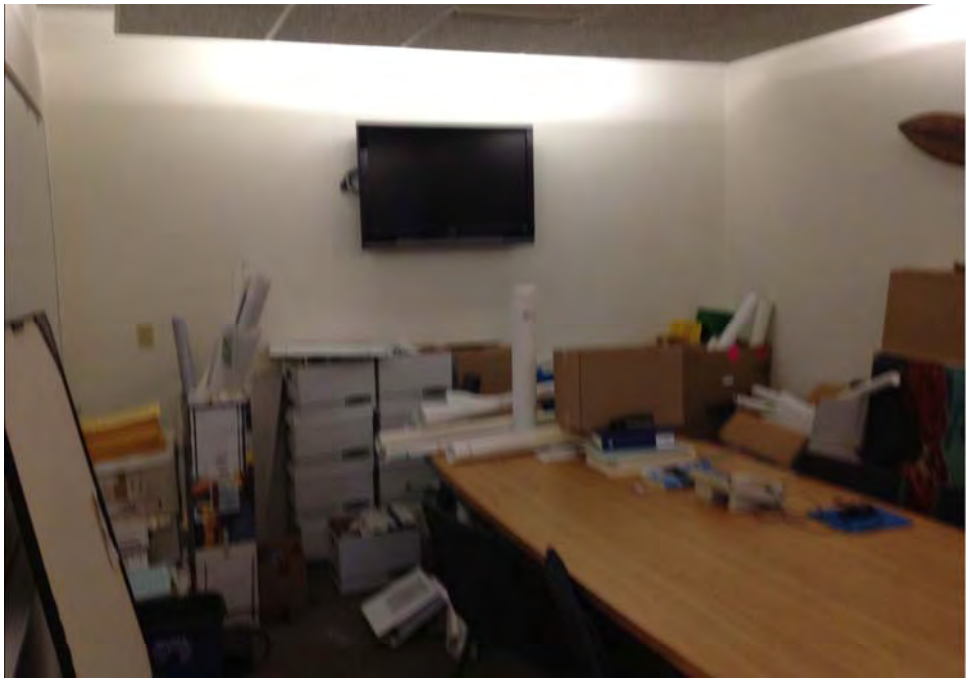

EXIT

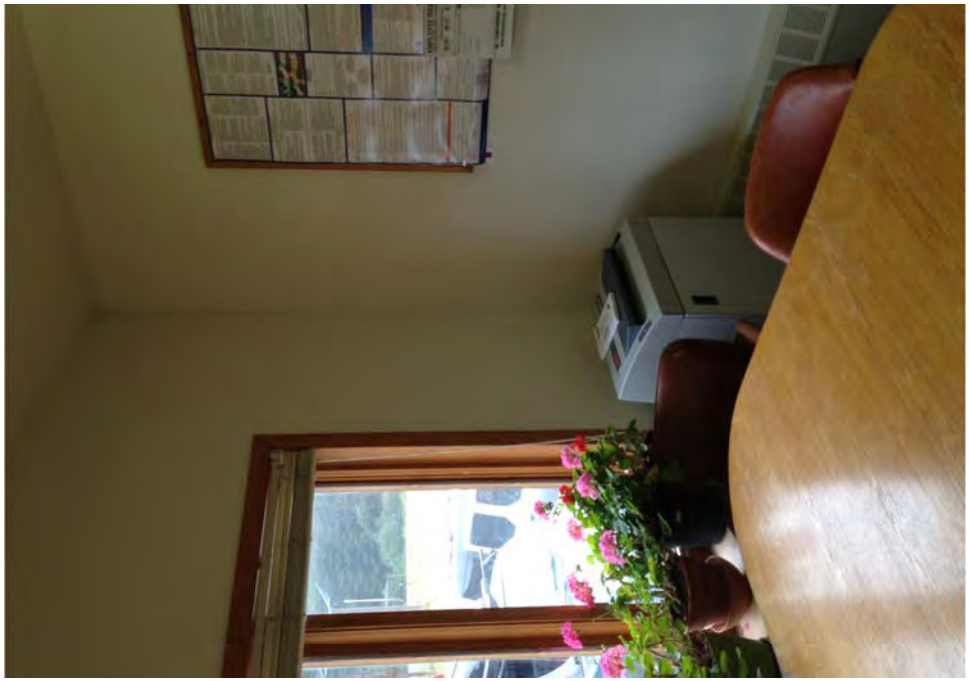


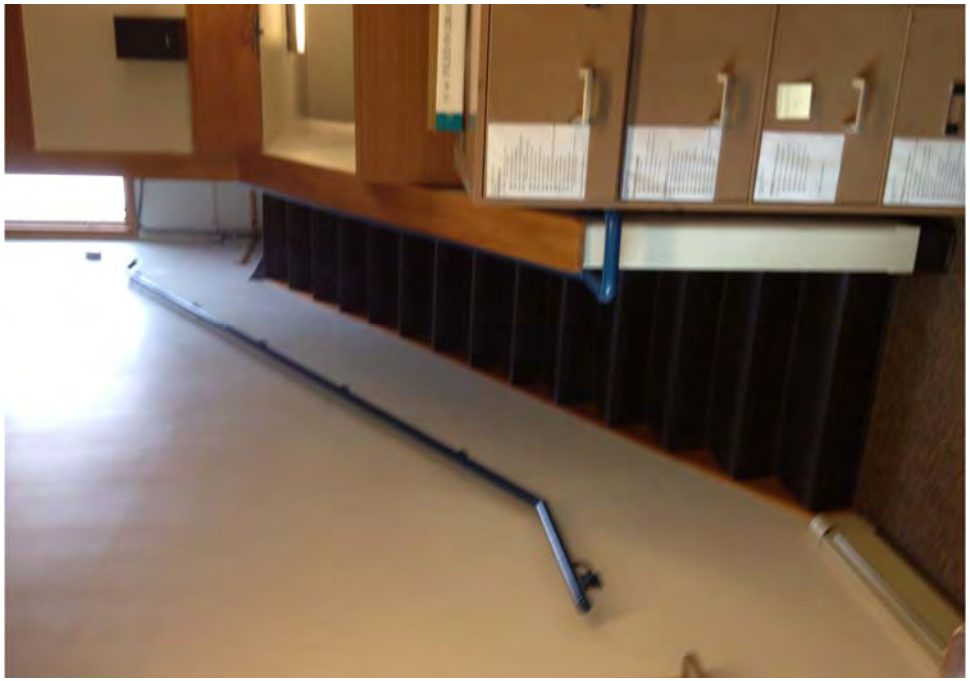


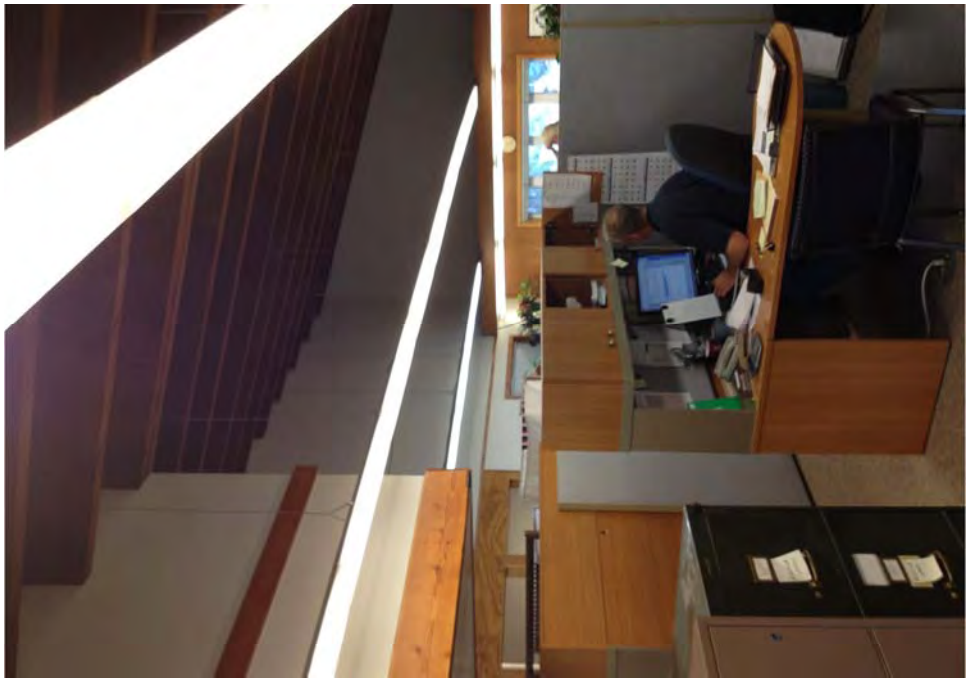

EXIT
Primary Election Ballot Types

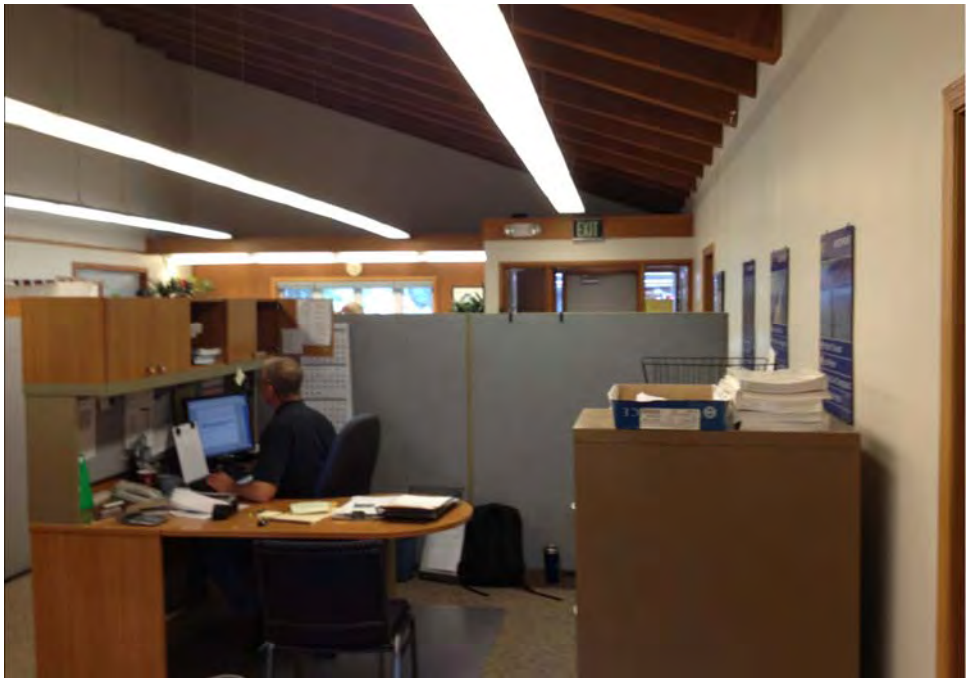

2012

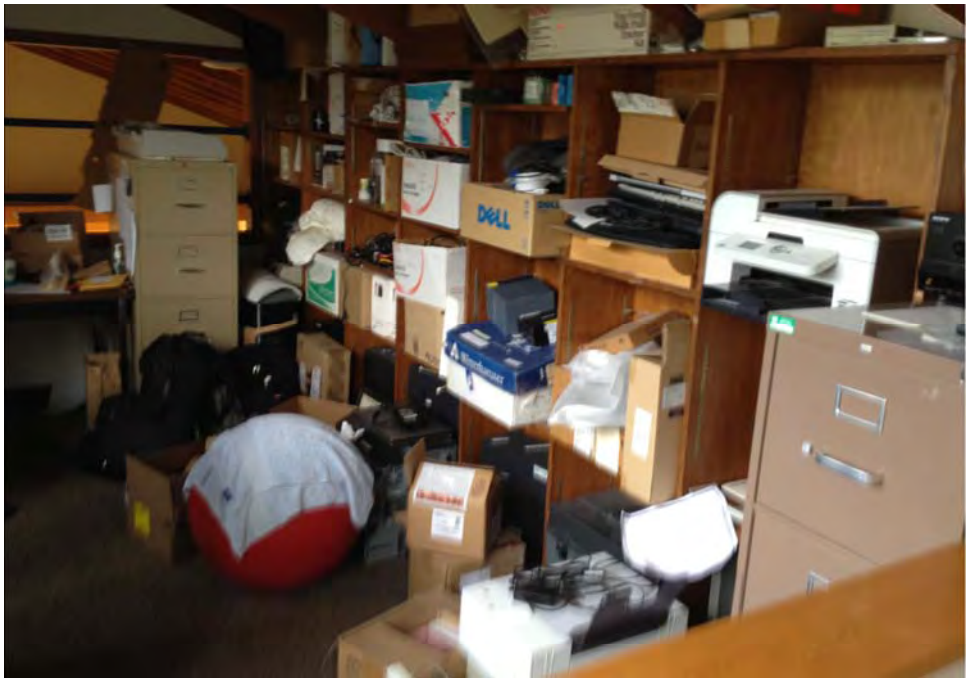


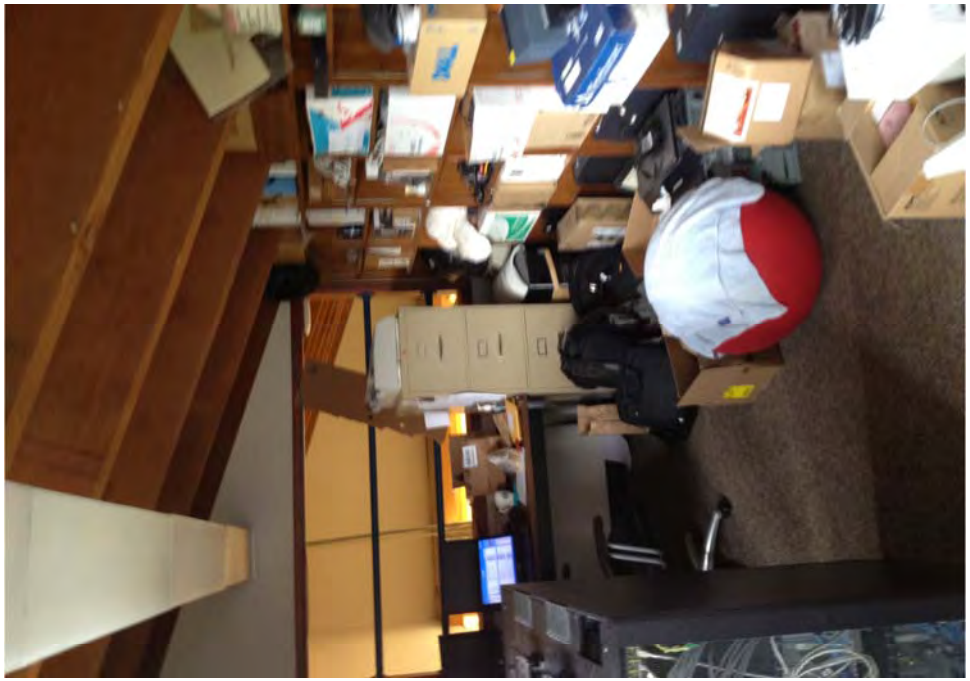


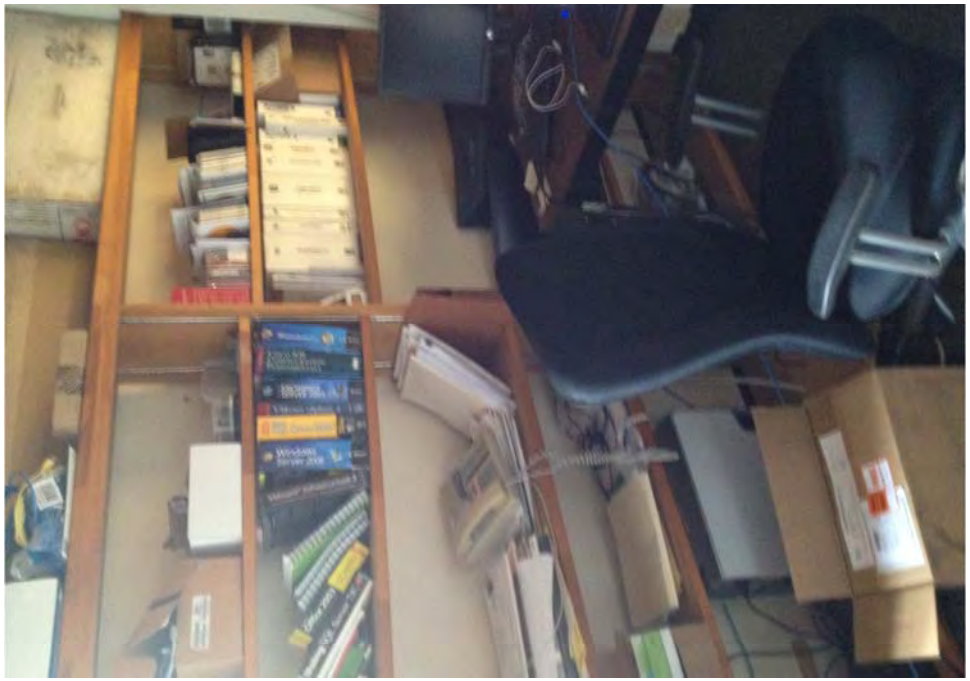





EXIT


DELL



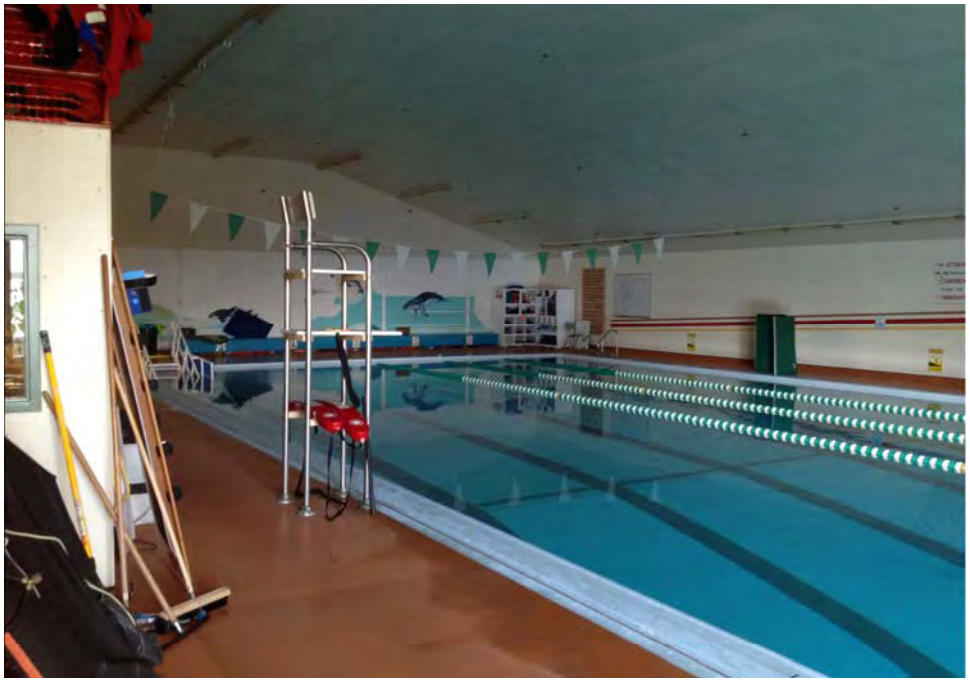


Haines Borough Administration

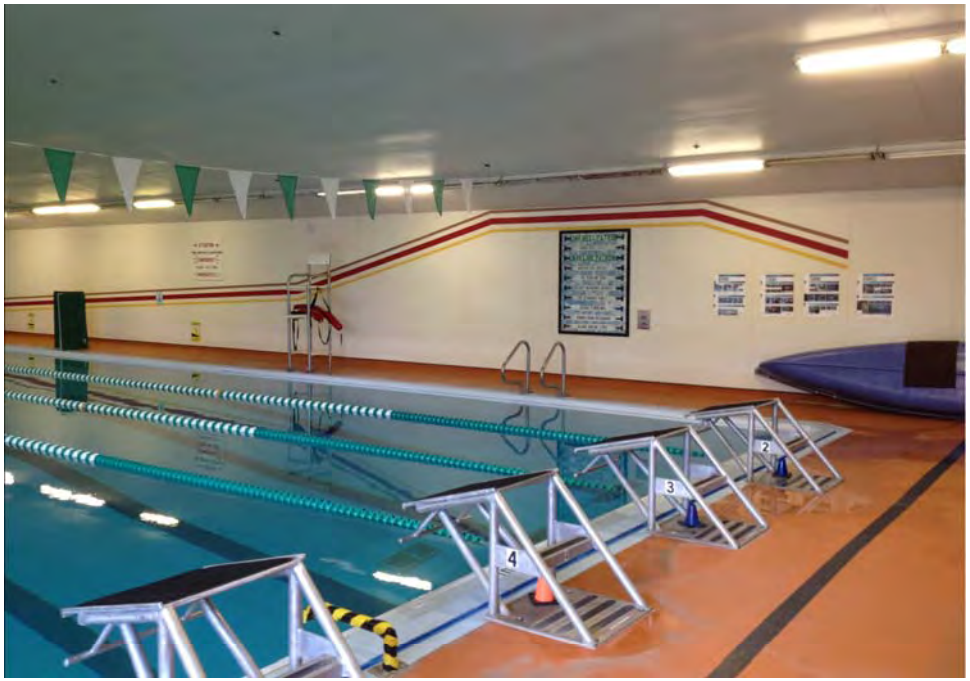
SECTION 3.5 FACILITY PHOTOS

POOL

POOL



POOL
POOL

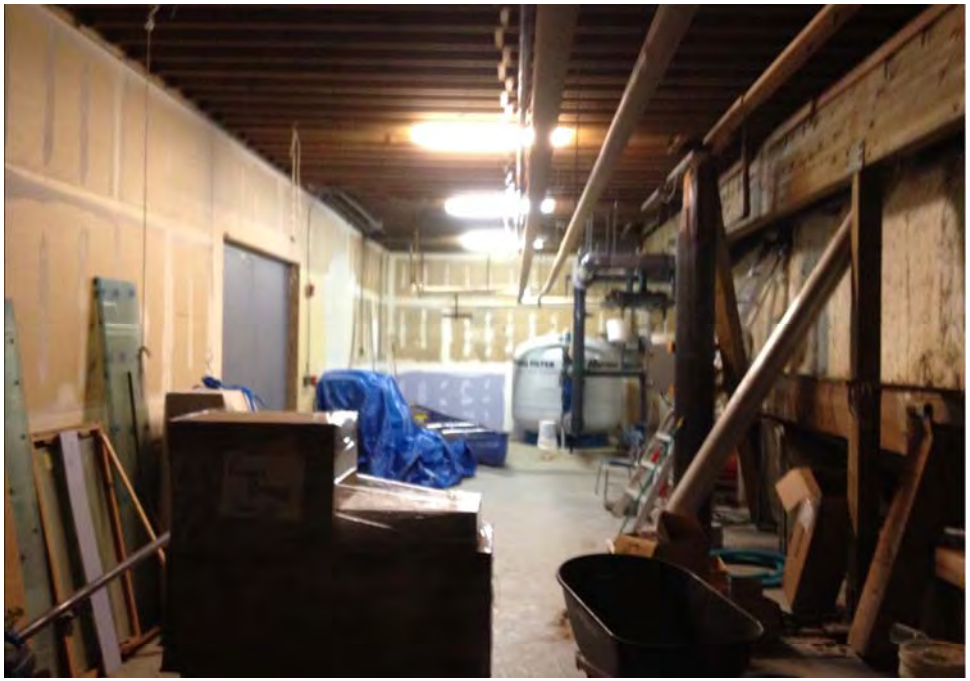


POOL

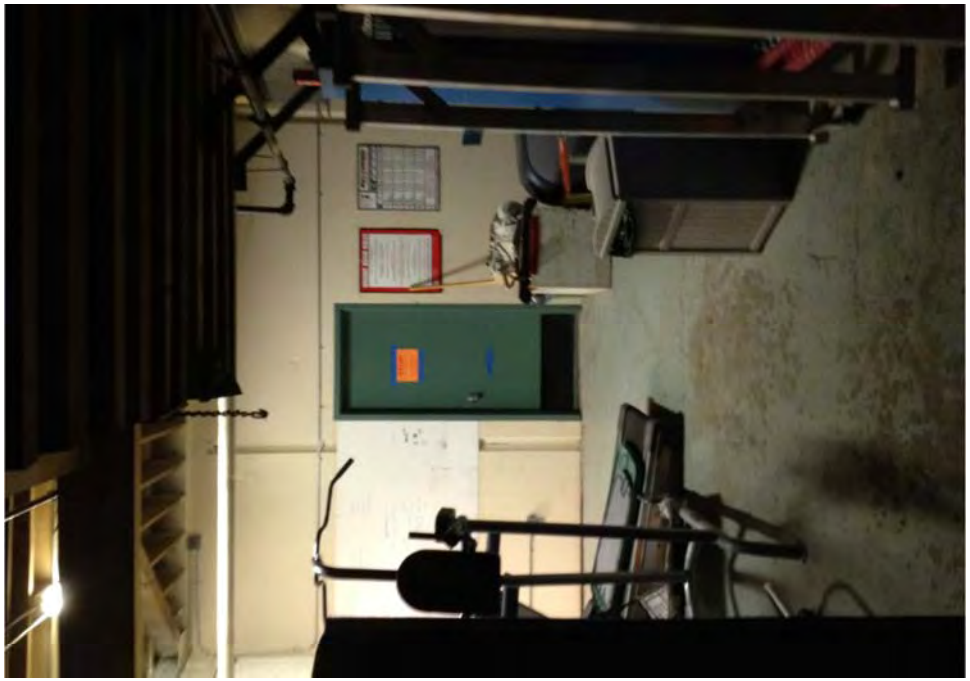
NATIONAL FILTER

NATIONAL FILTER

TIONAL FILTER

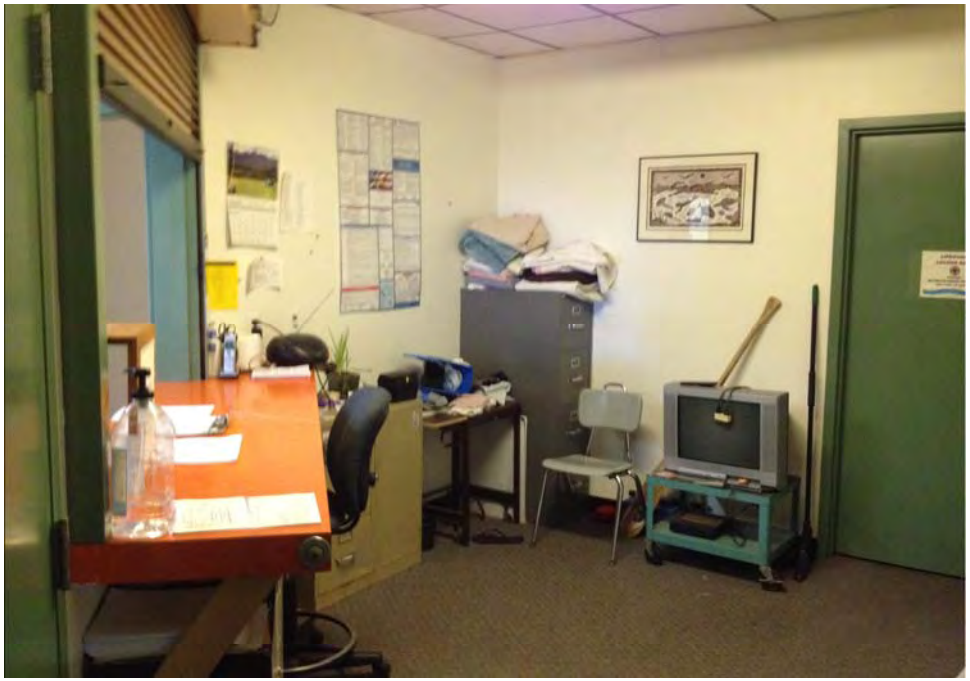


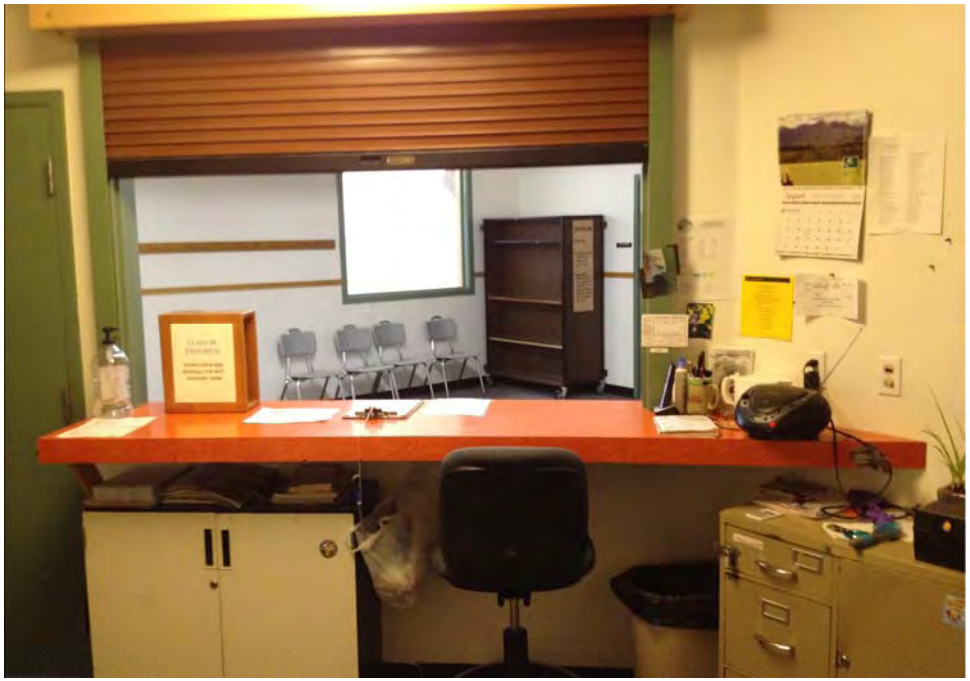
Unit 1
Unit 2

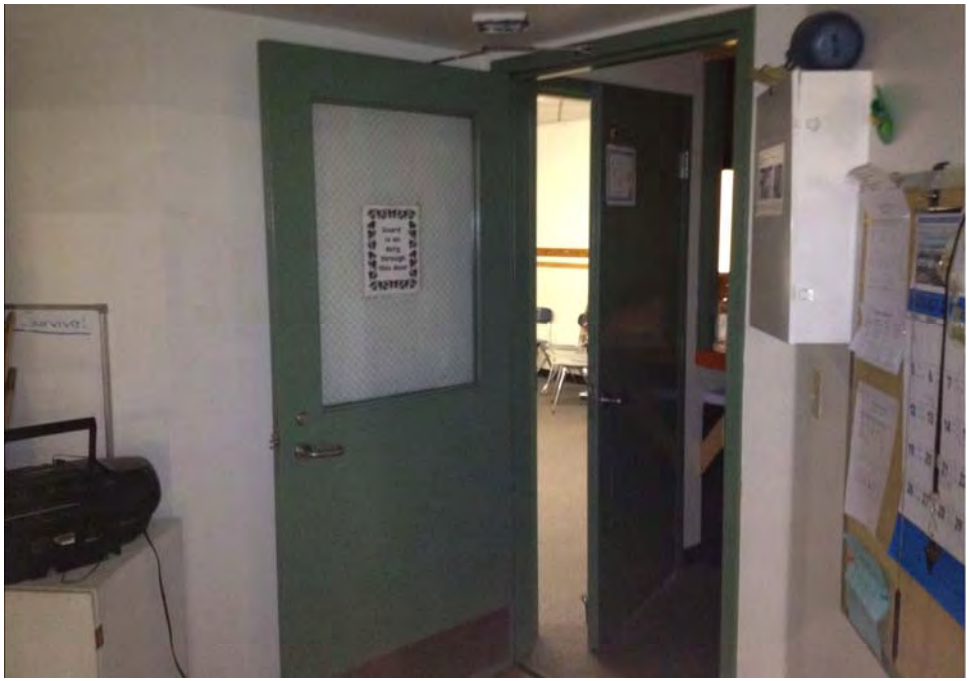


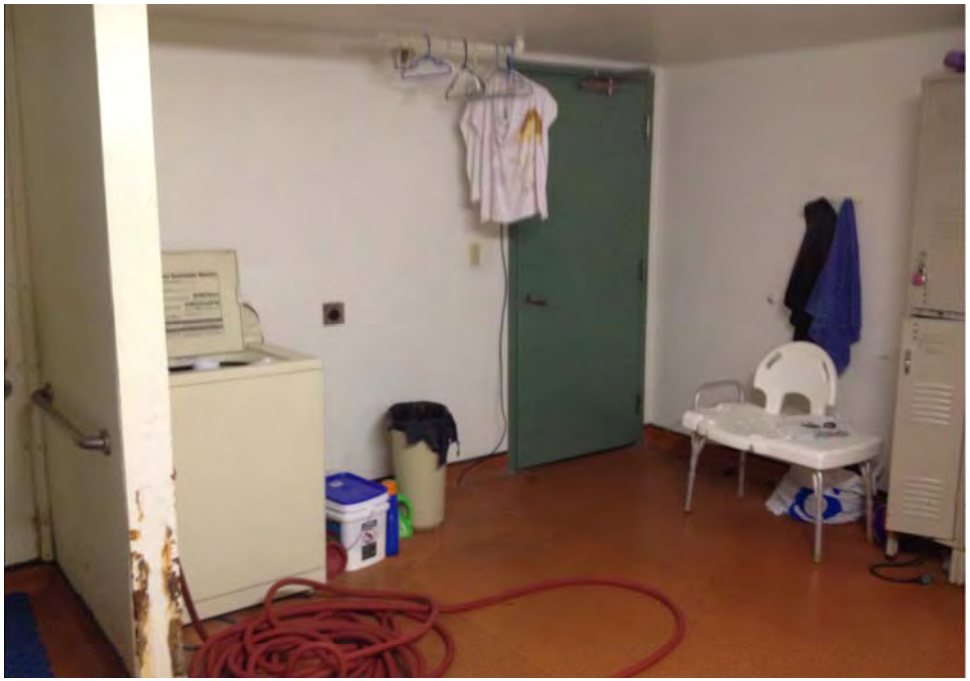
EXIT

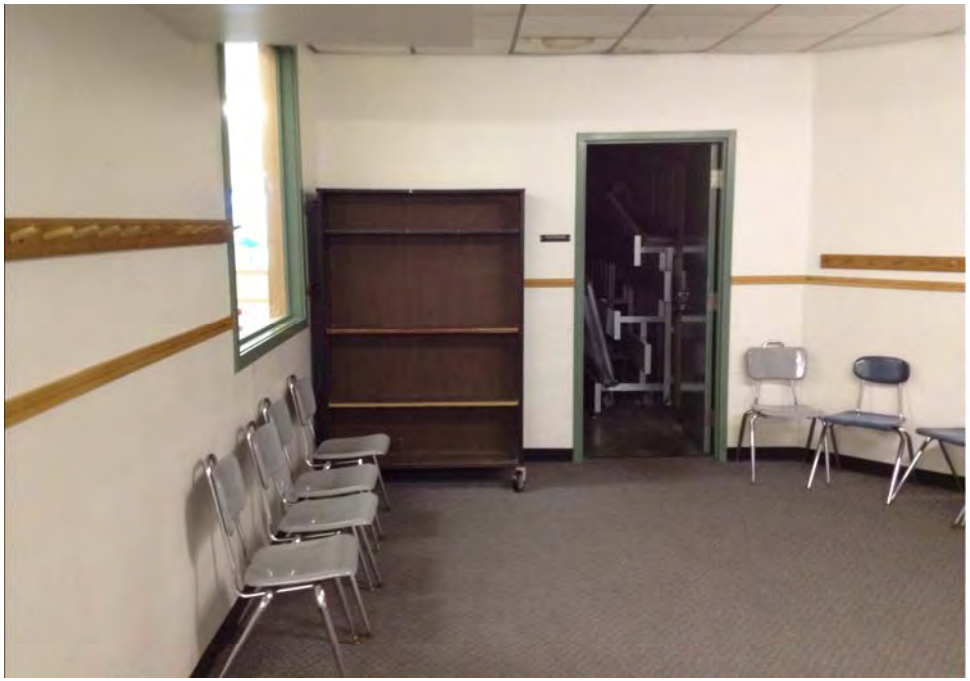
EXIT

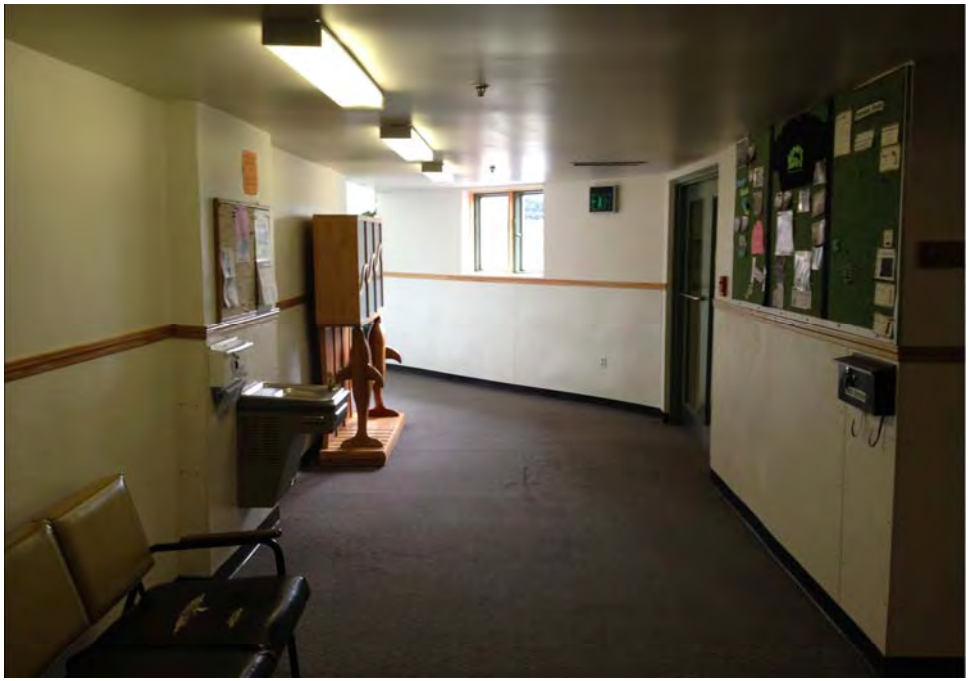


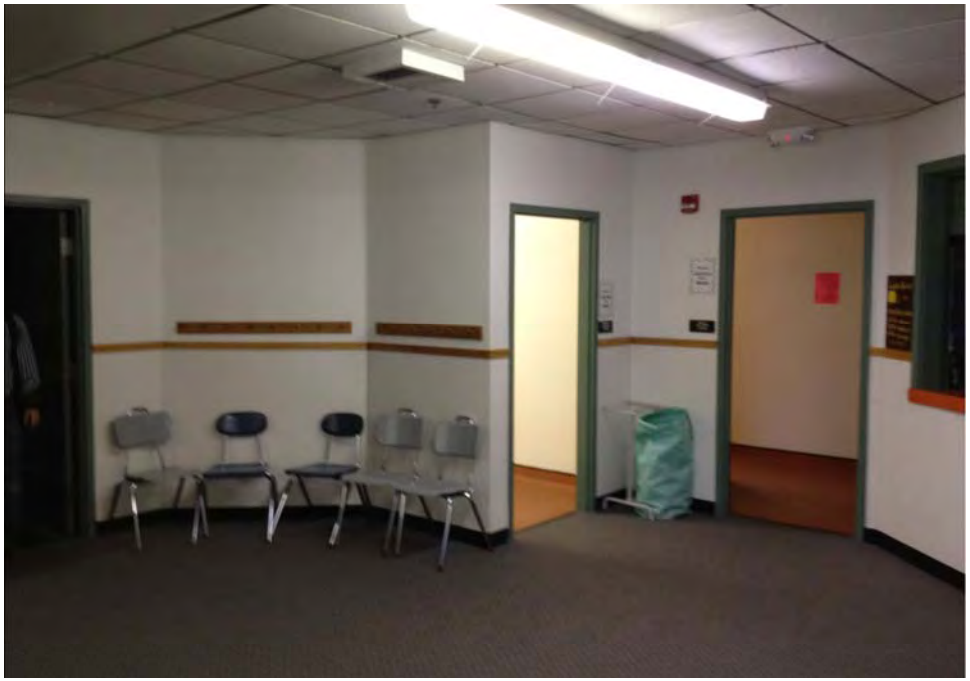




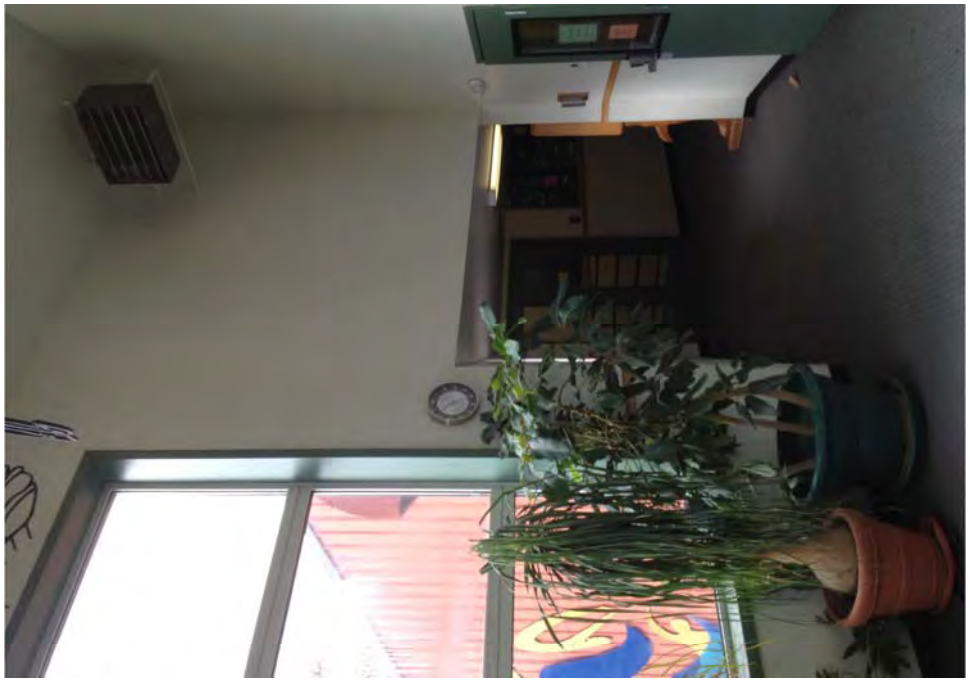


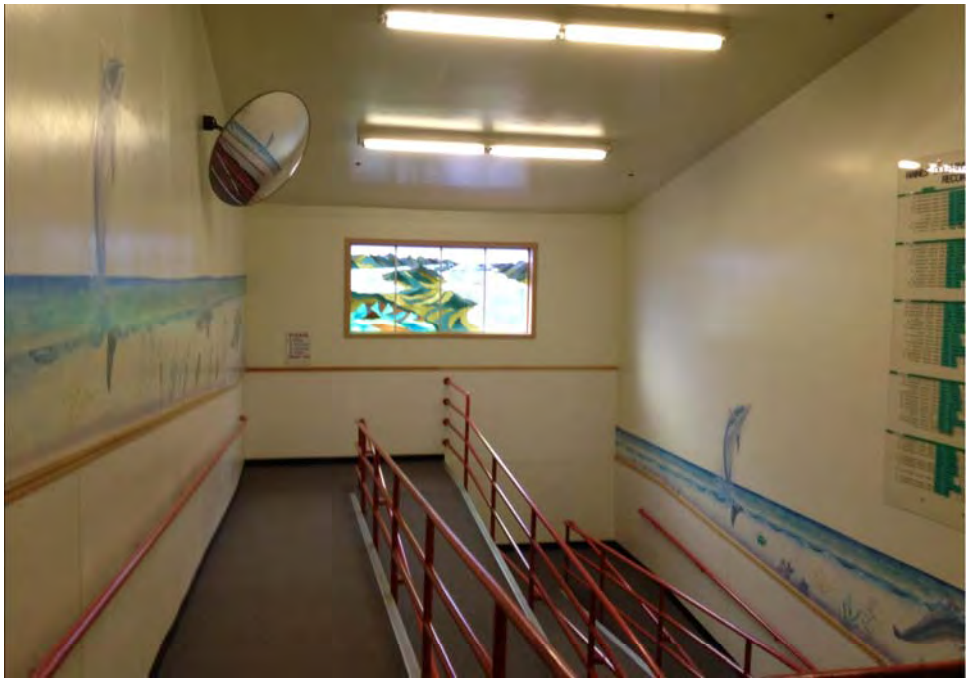


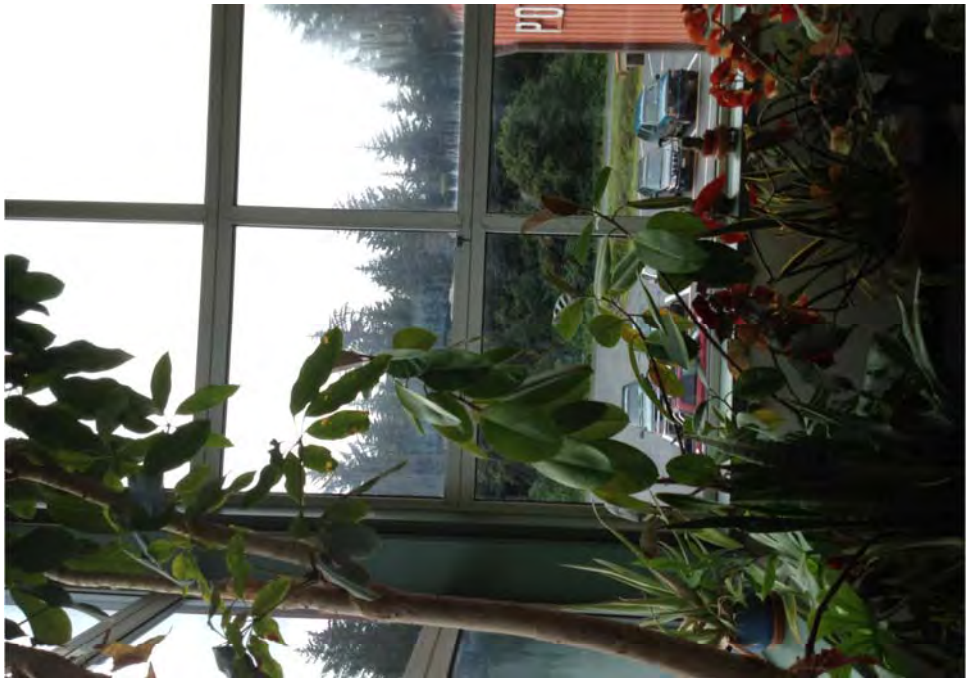


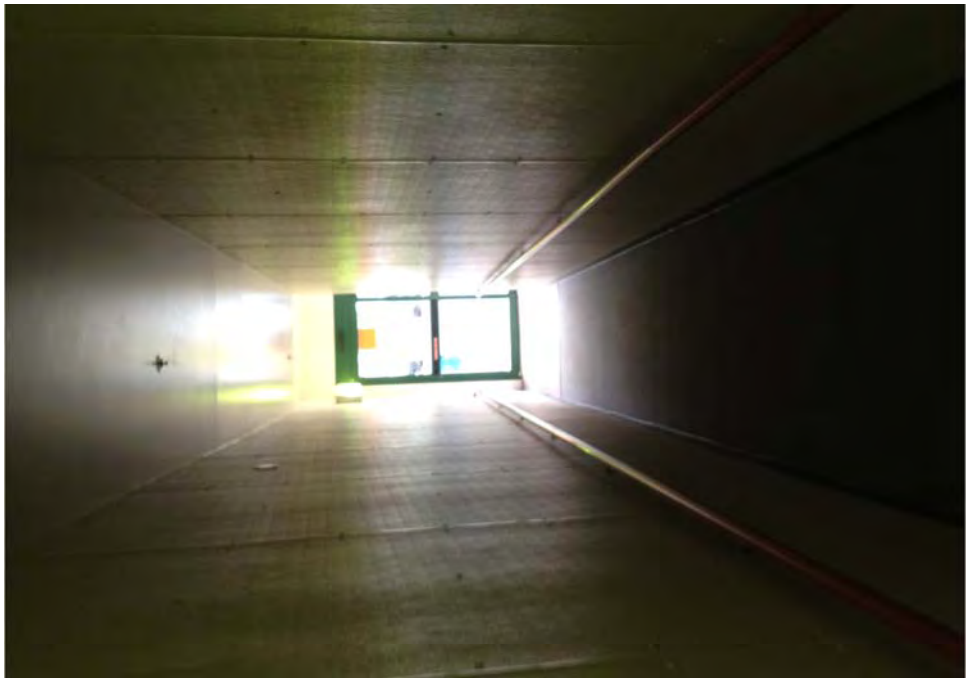


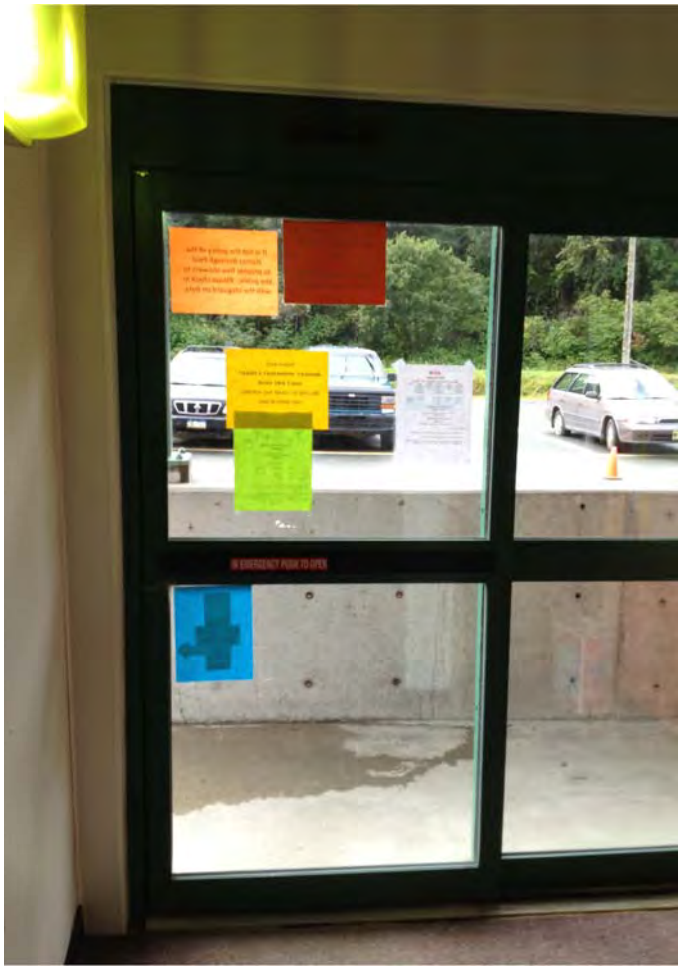
REMOVE
SHOES
BEFORE
ENTERING





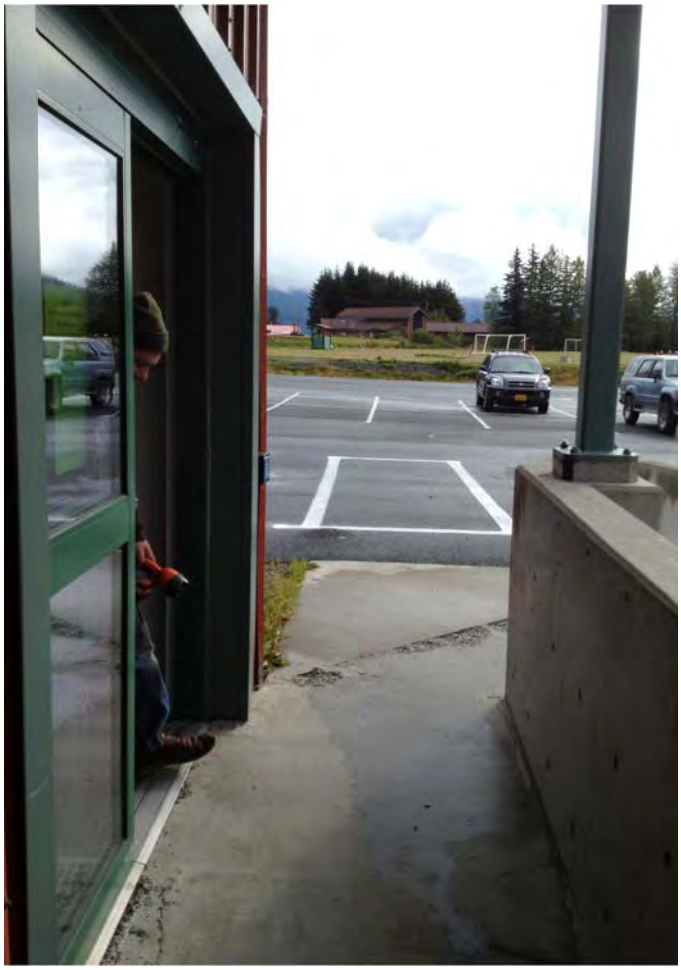


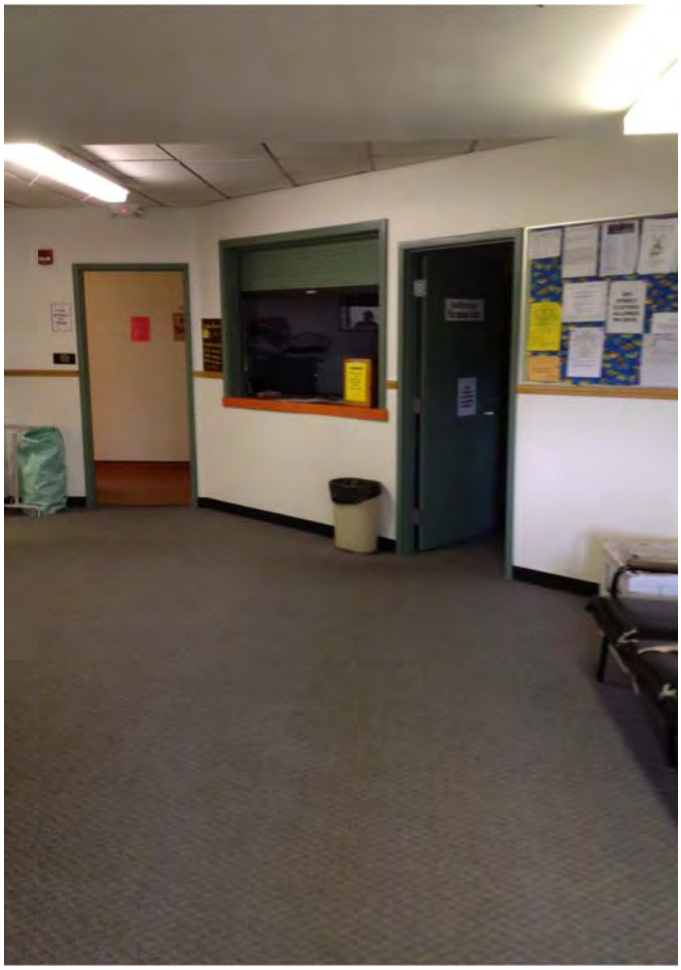


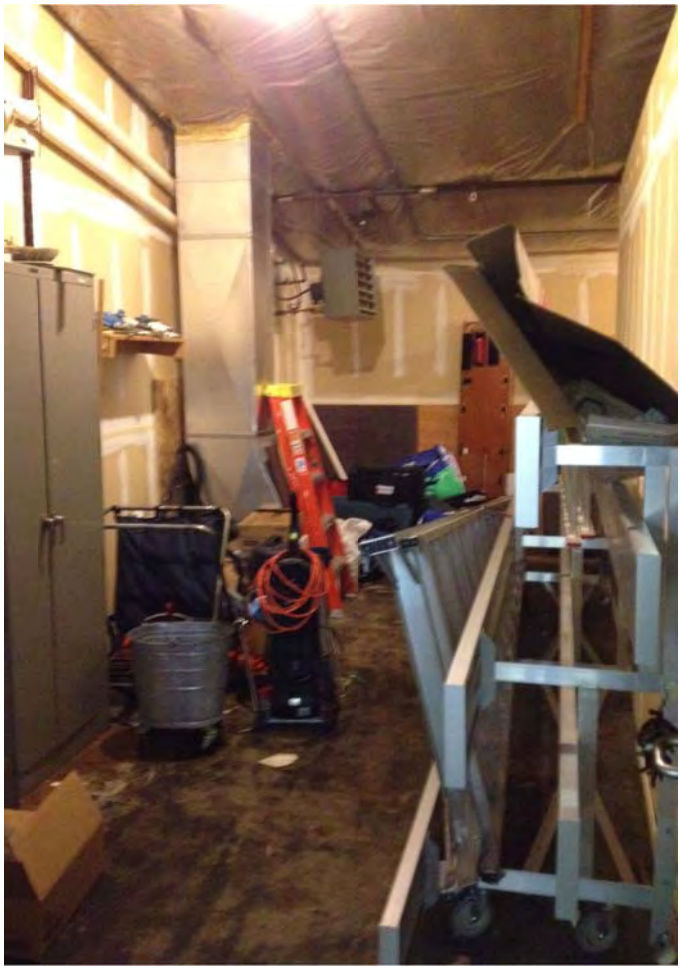


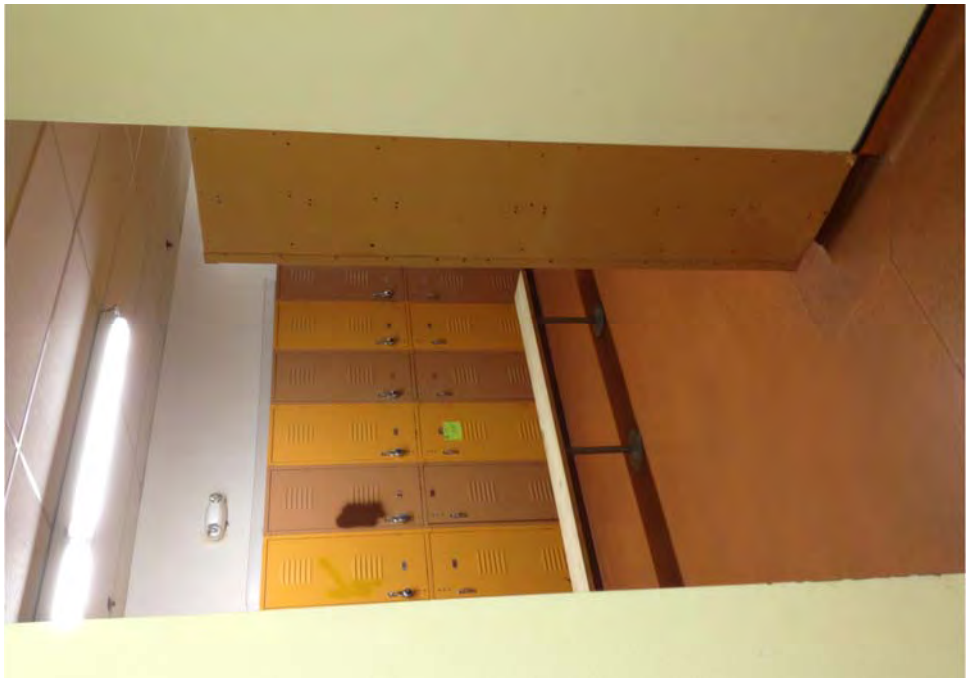
POOL
ENTRANCE

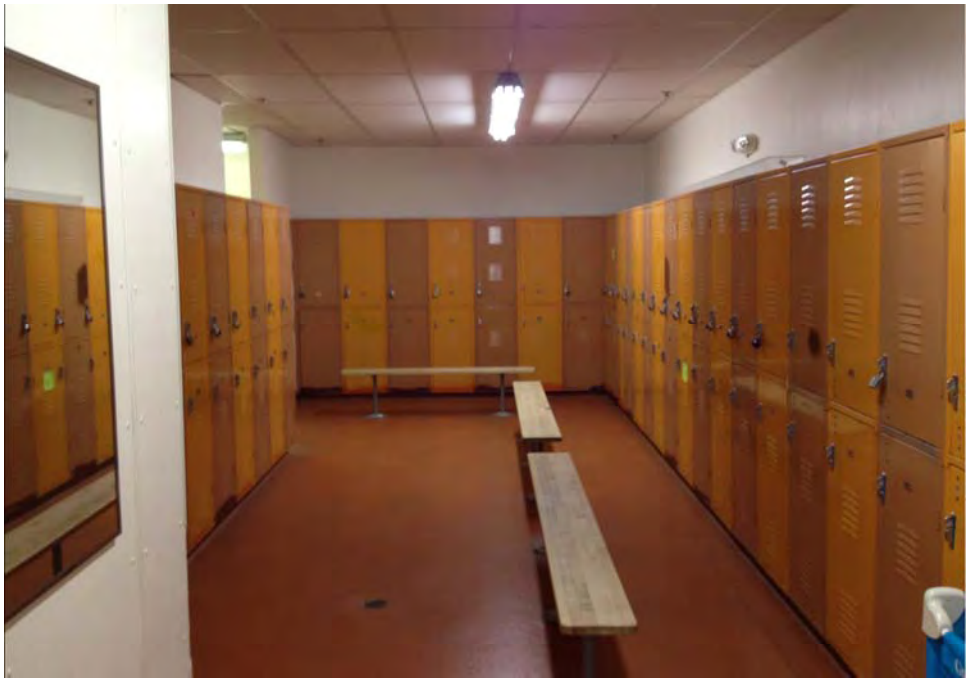
POOL
ENTRANCE





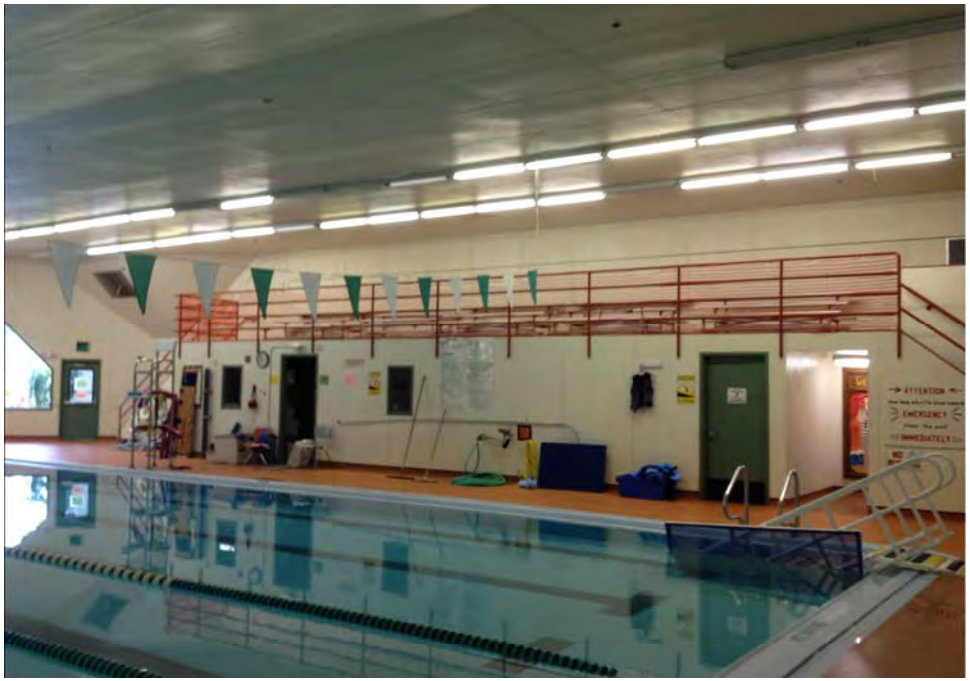




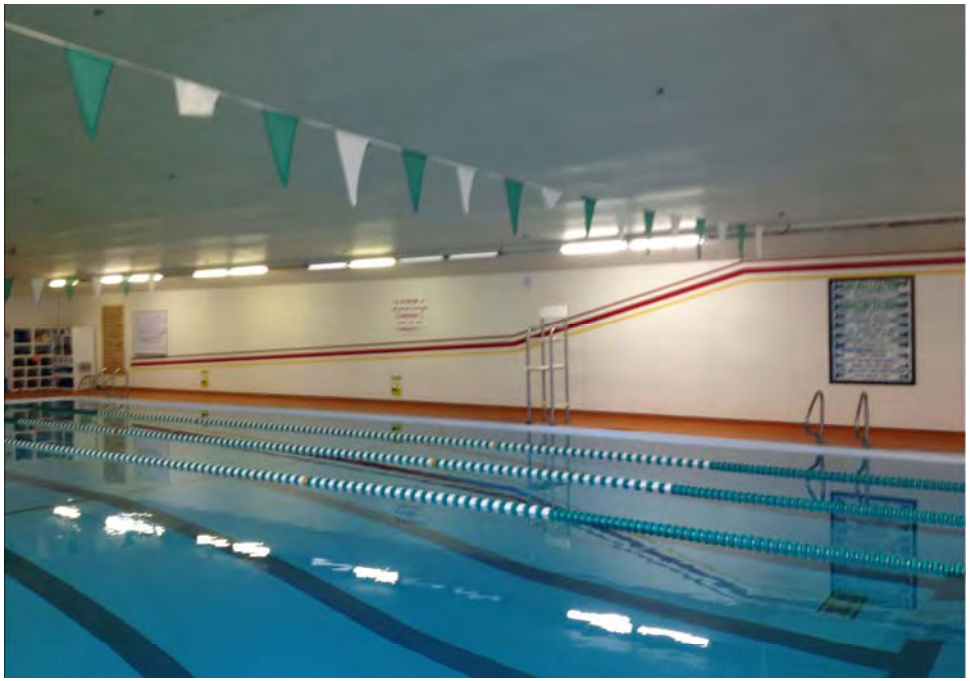


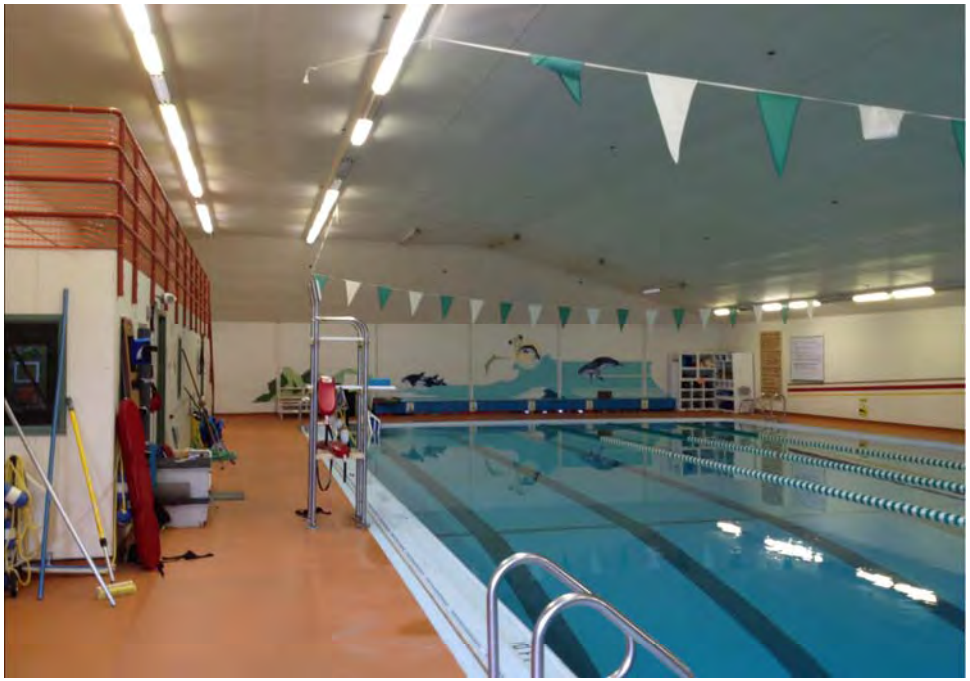
ATTENTION
EMERGENCY
IMMEDIATELY
LADIES

Ladies

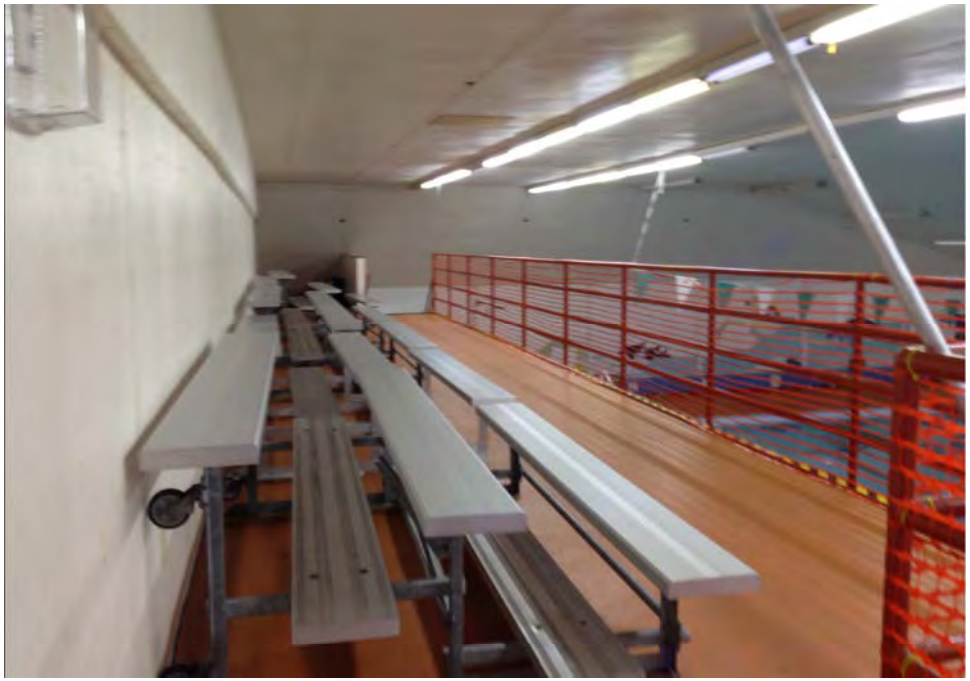

ATTENTION
EMERGENCY
IMMEDIATELY

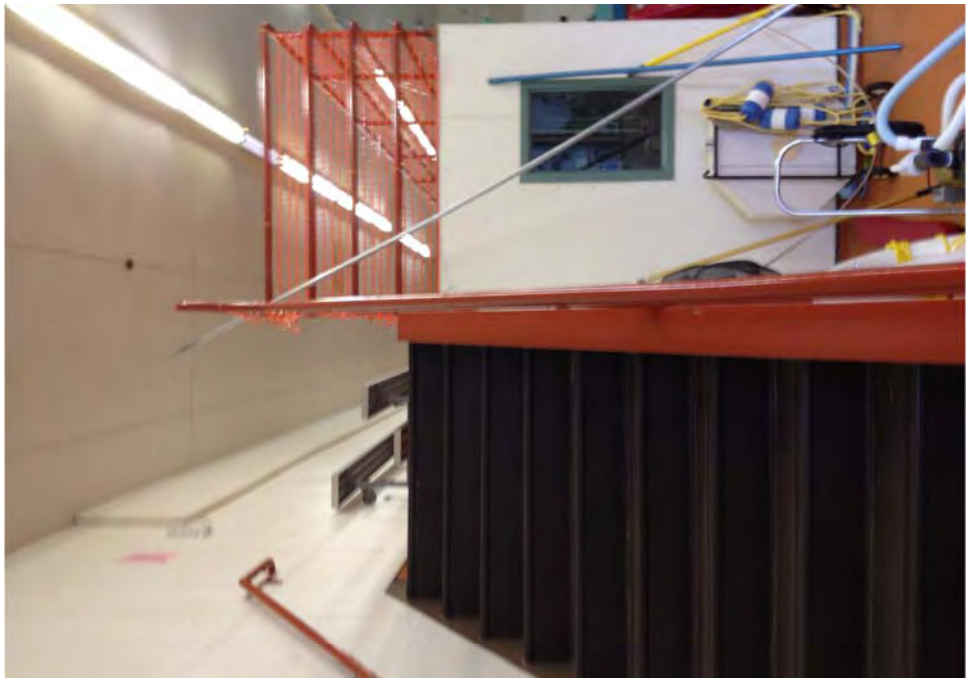
Gents

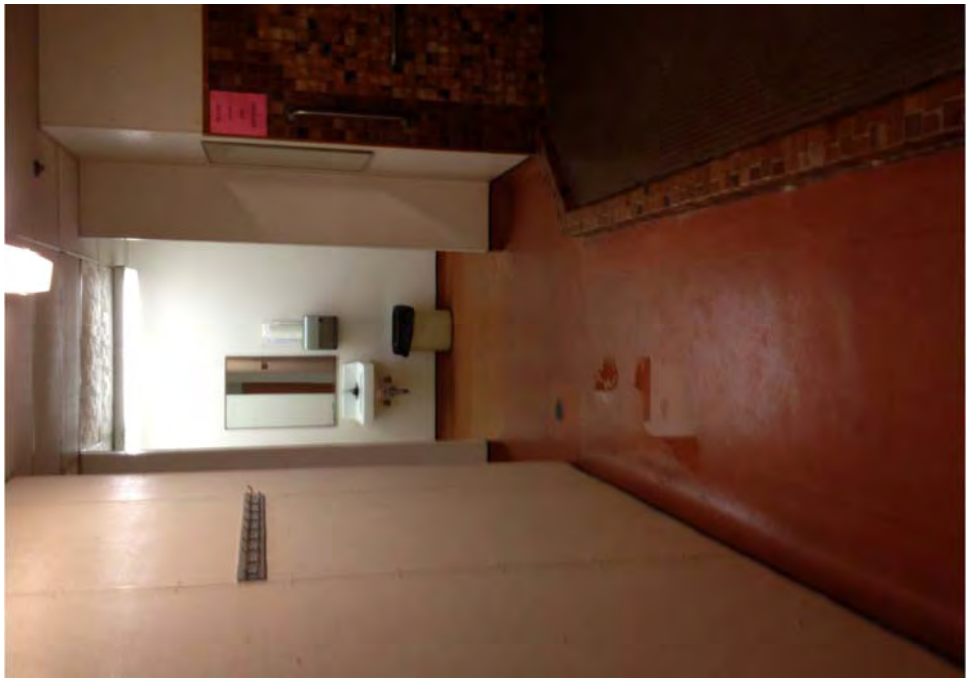


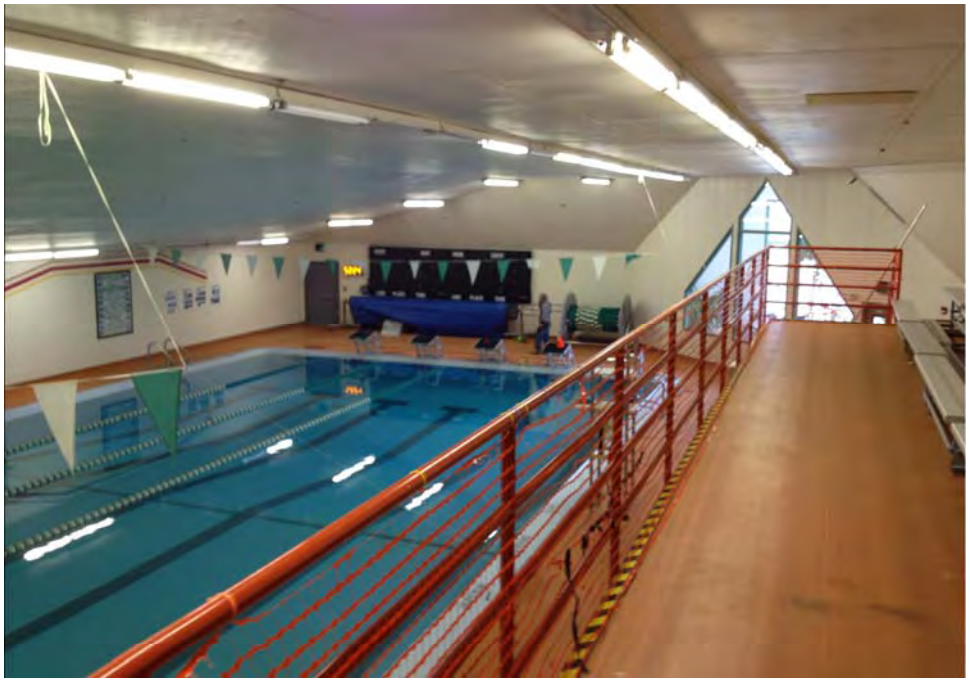


GUEST
LANE PLACE TIME
LANE PLACE TIME
5









NOTICE
NO
RUNNING

POOL

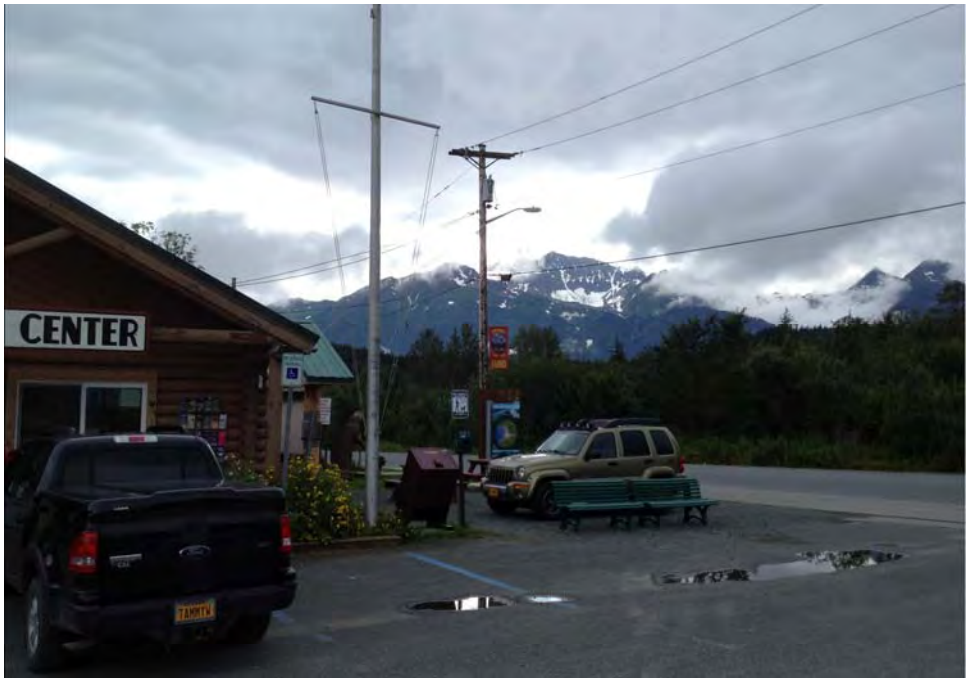
Section 3.5 Facility Photos

Visitor Center

VISITOR INFORMATION CENTER

RESTROOMS
VISITOR INFORMA

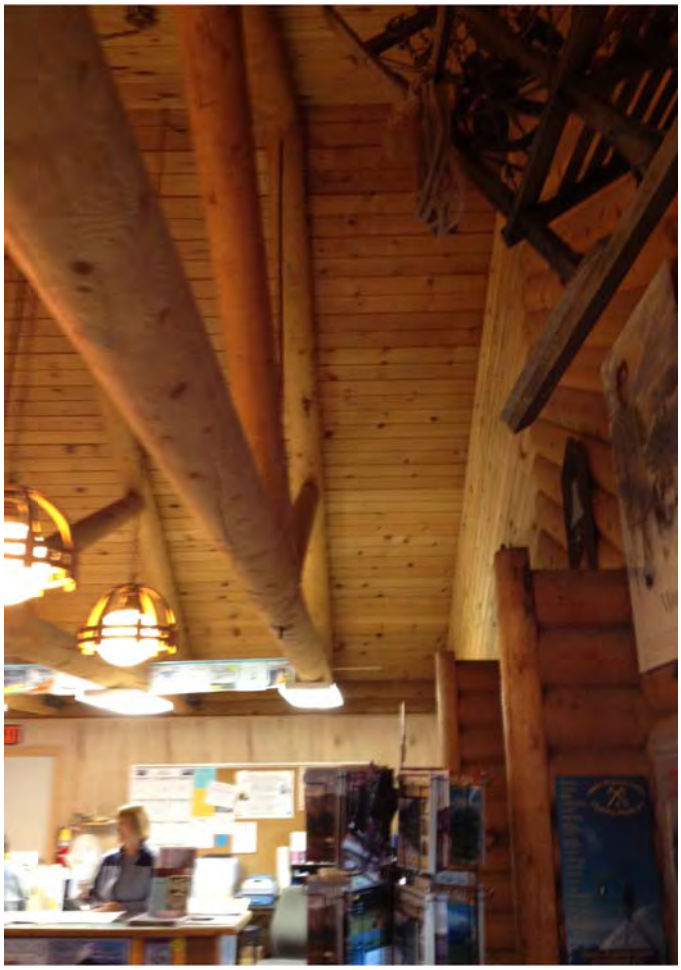
KIRKLAND

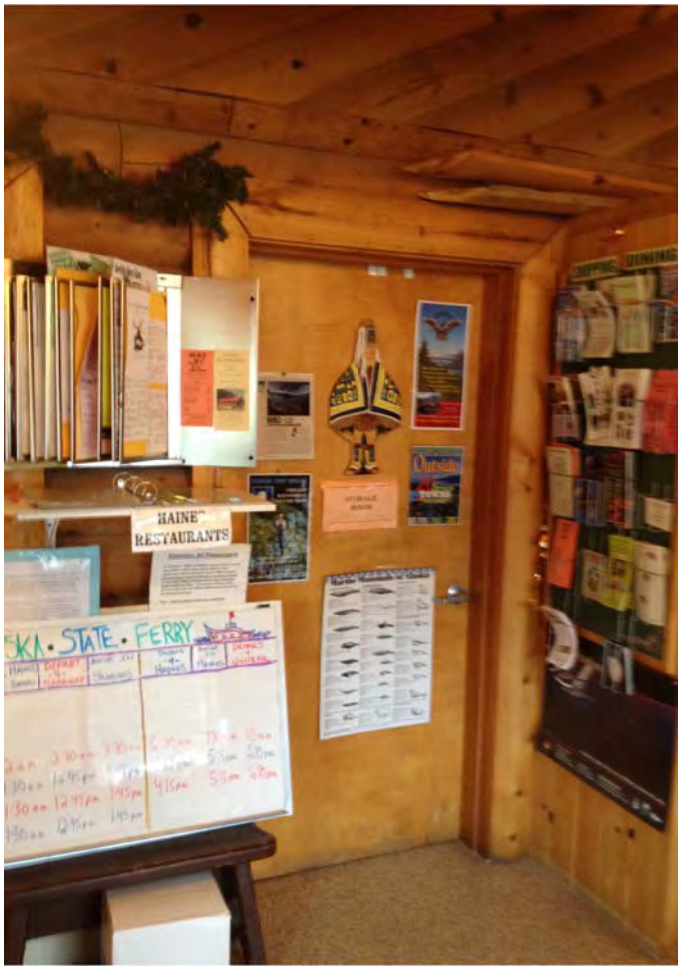

CENTER

OPEN

SHOPPING
DINING

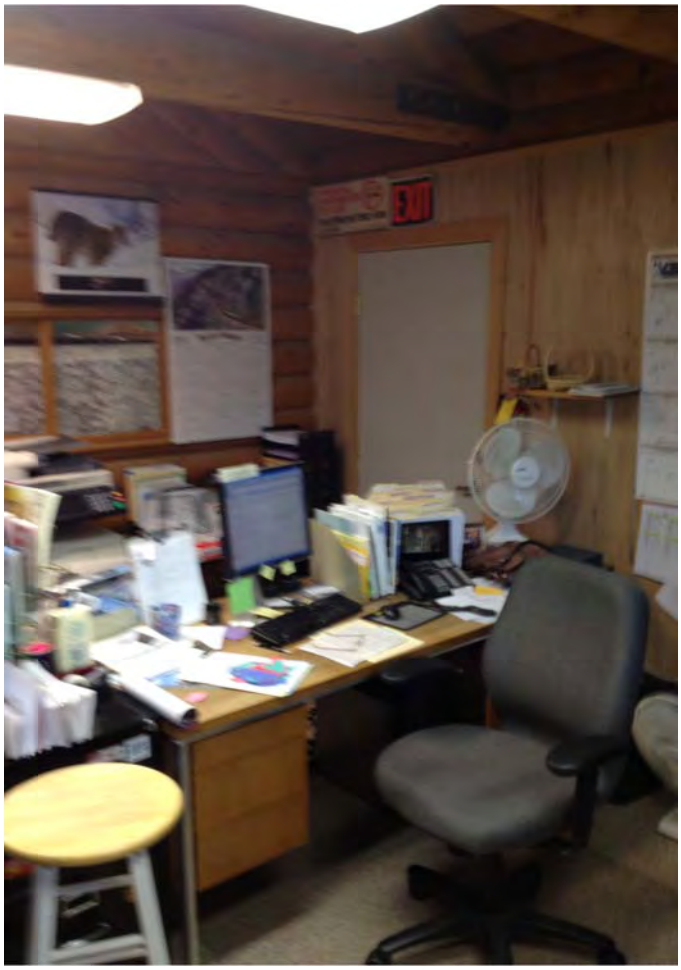
EXIT
Free

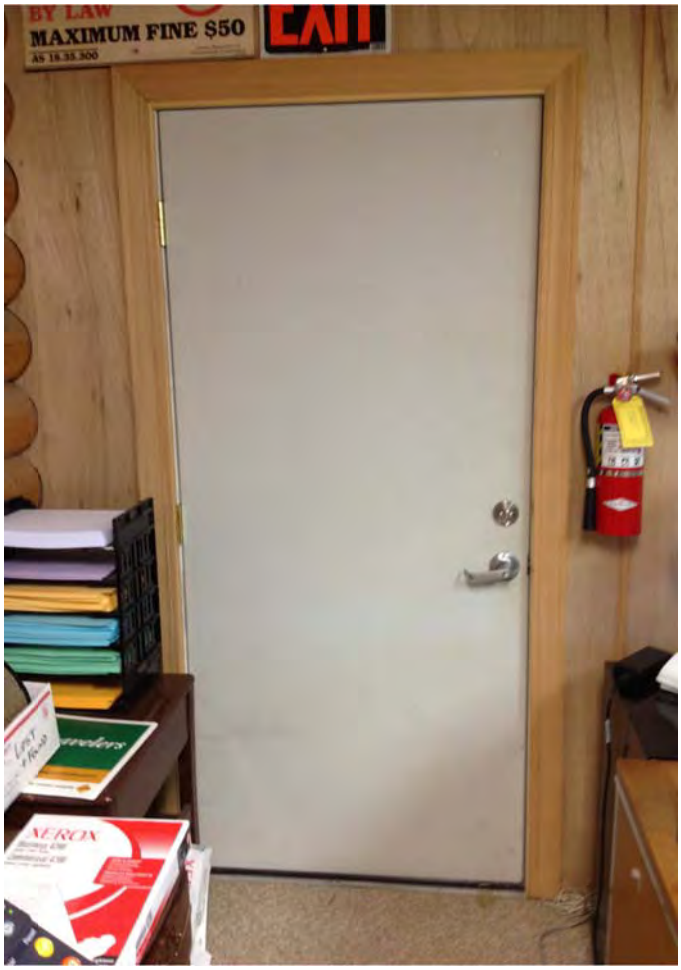


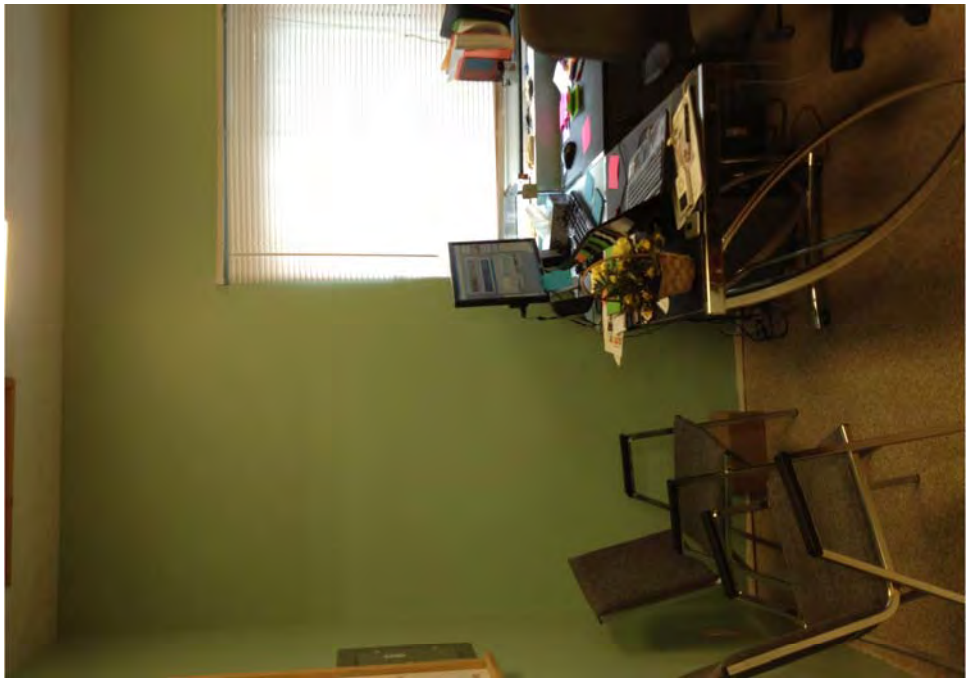

HAINE
RESTAURANTS

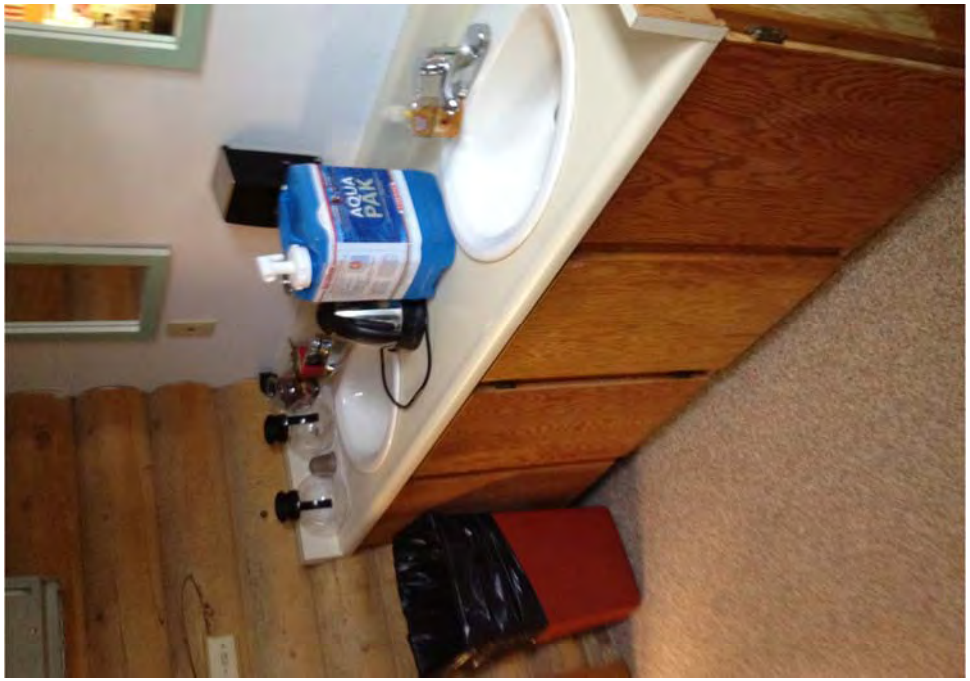
EXIT

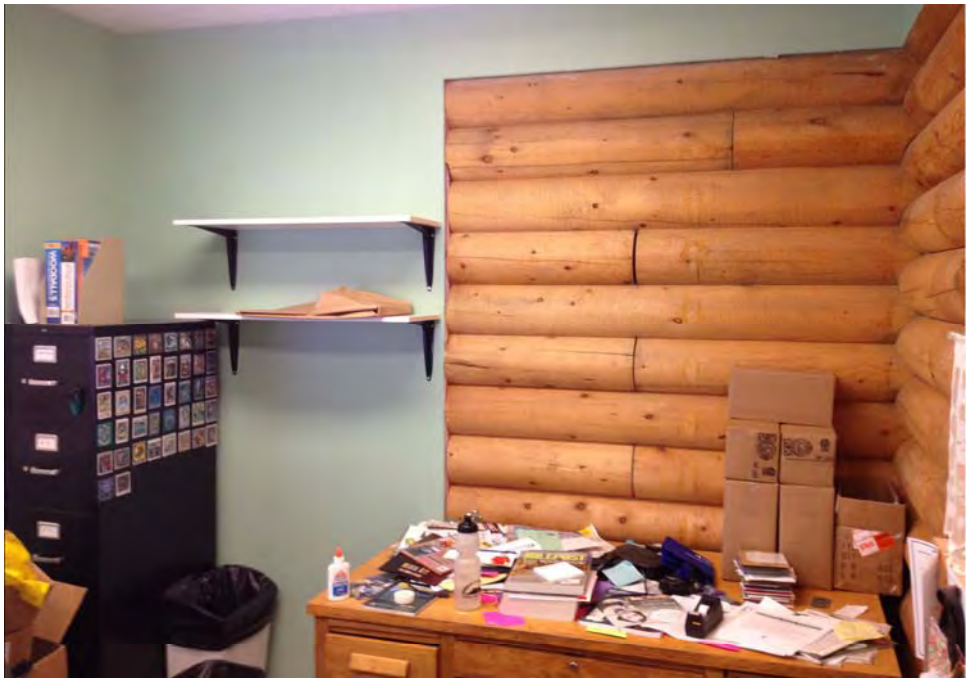
EXIT
CLOSED

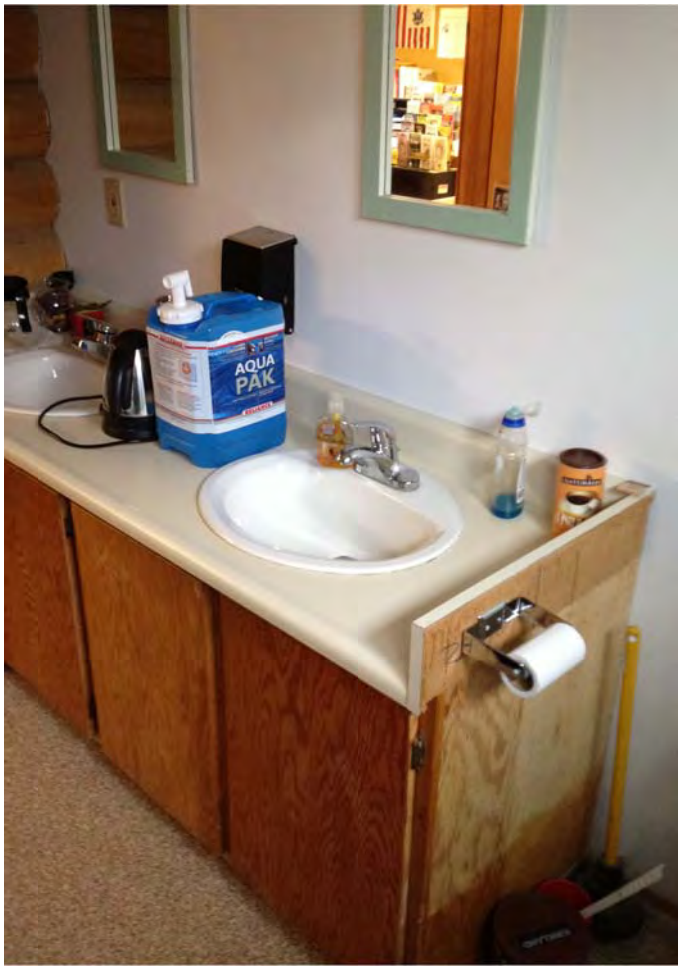

EXIT

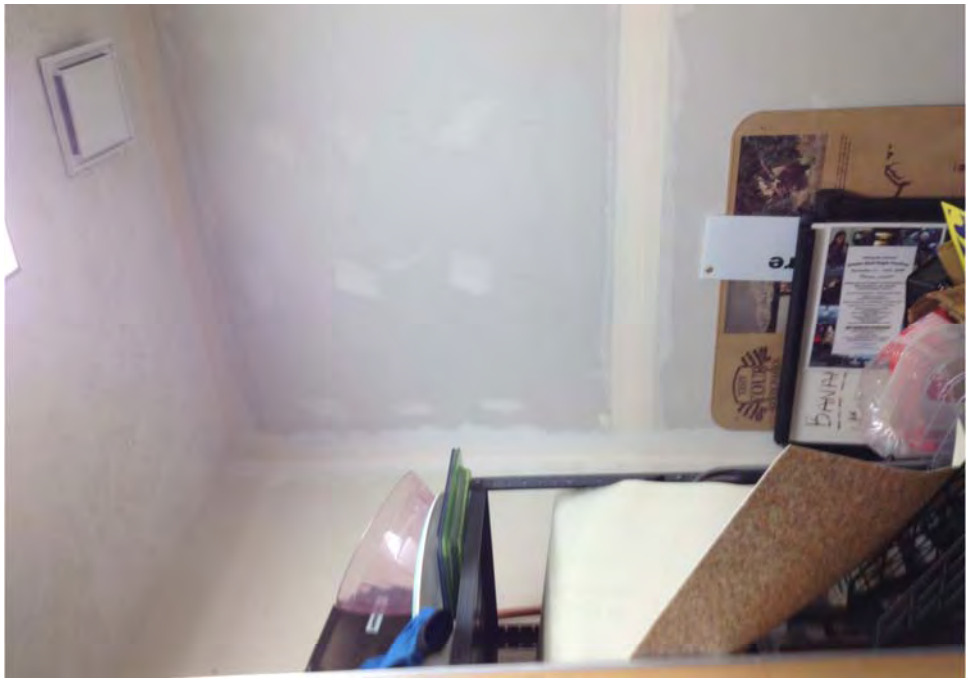

BY LAW
MAXIMUM FINE $50
EXIT
XEROX




AQUA
PAK

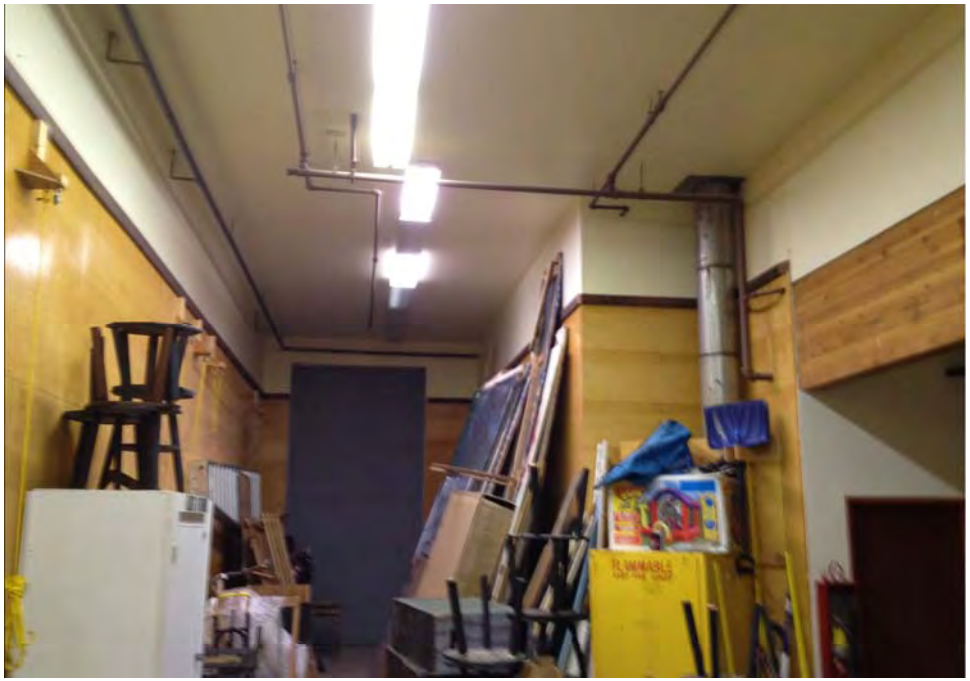


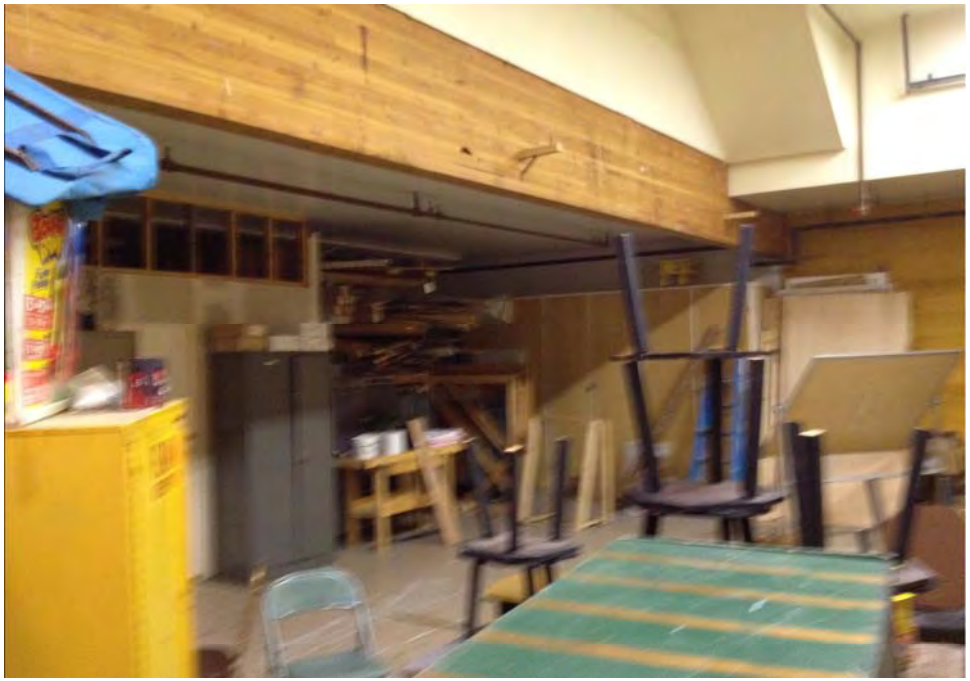

AQUA
PAK

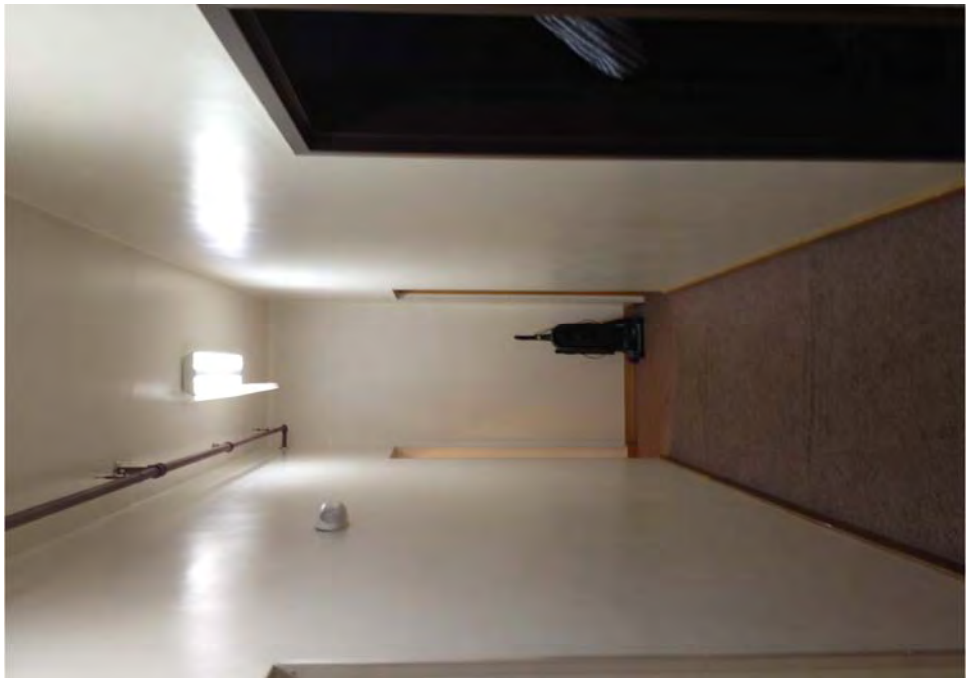


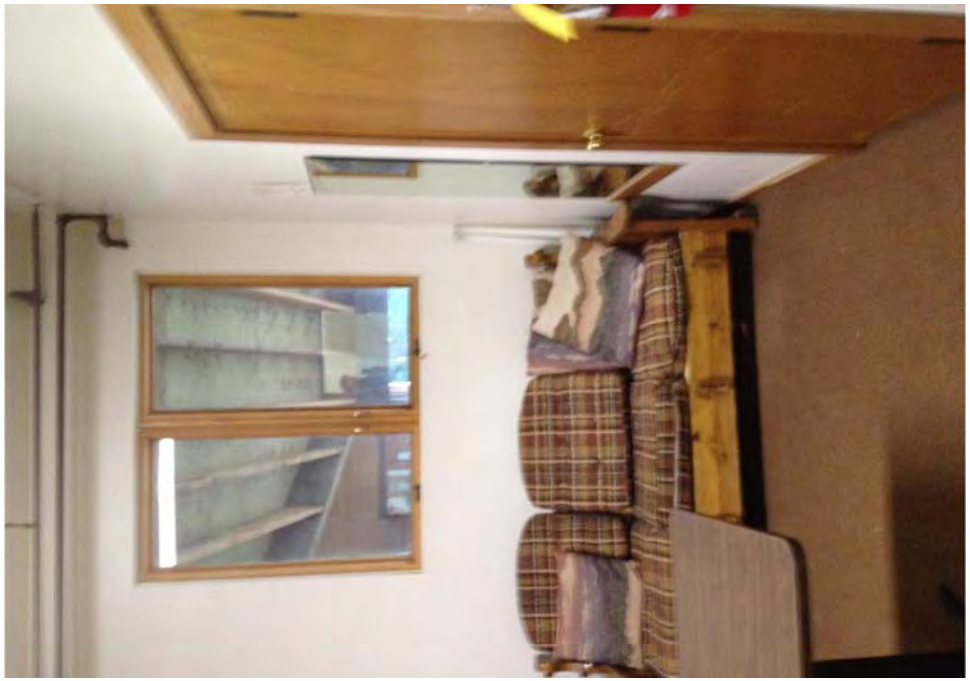
SECTION 3.5 FACILITY PHOTOS

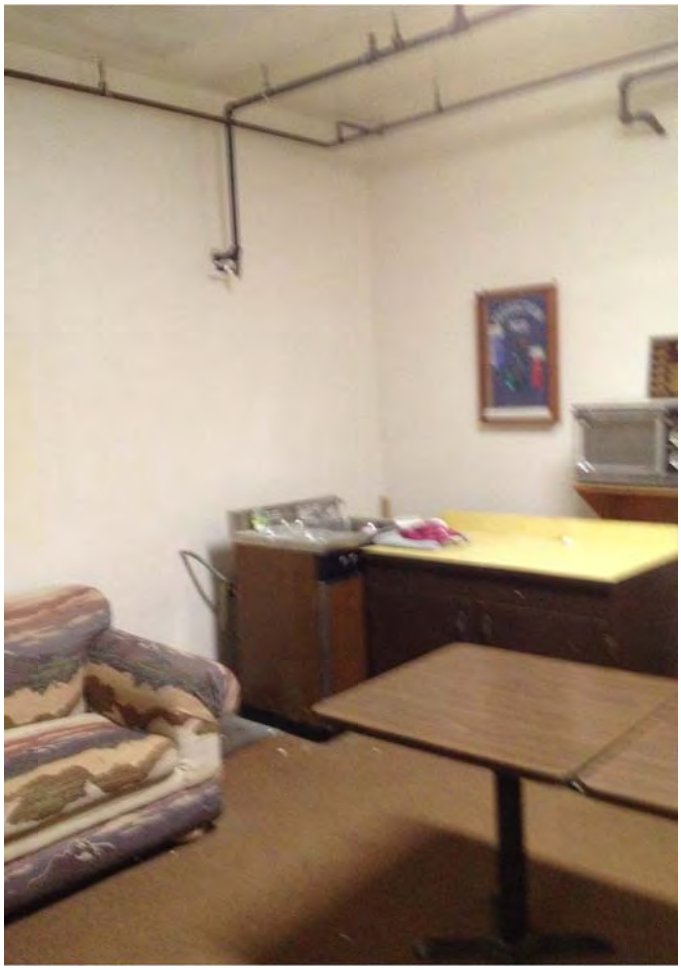
CHILKAT CENTER

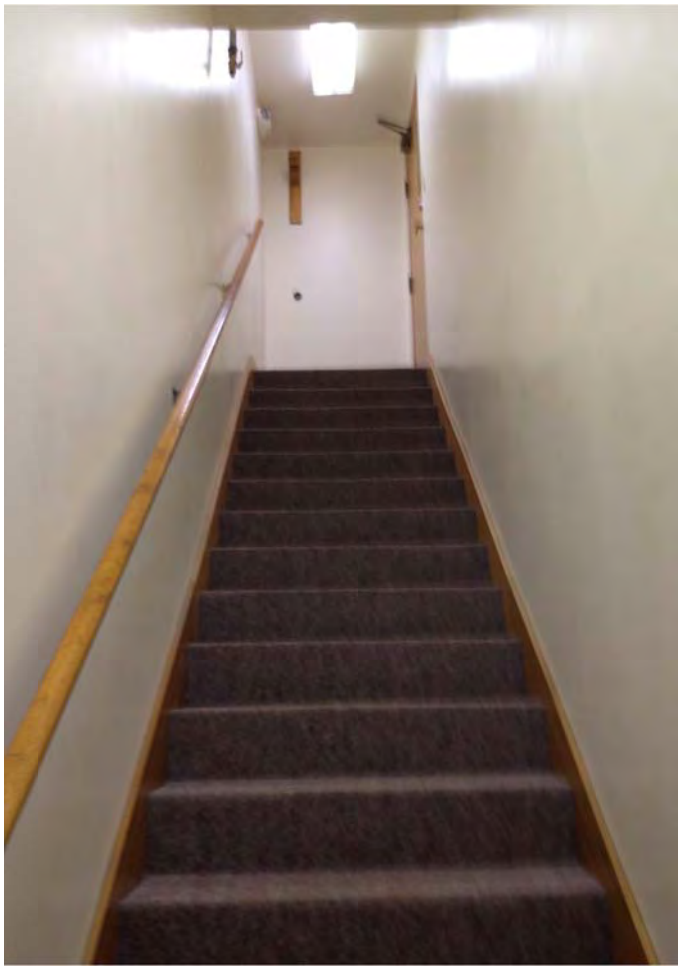






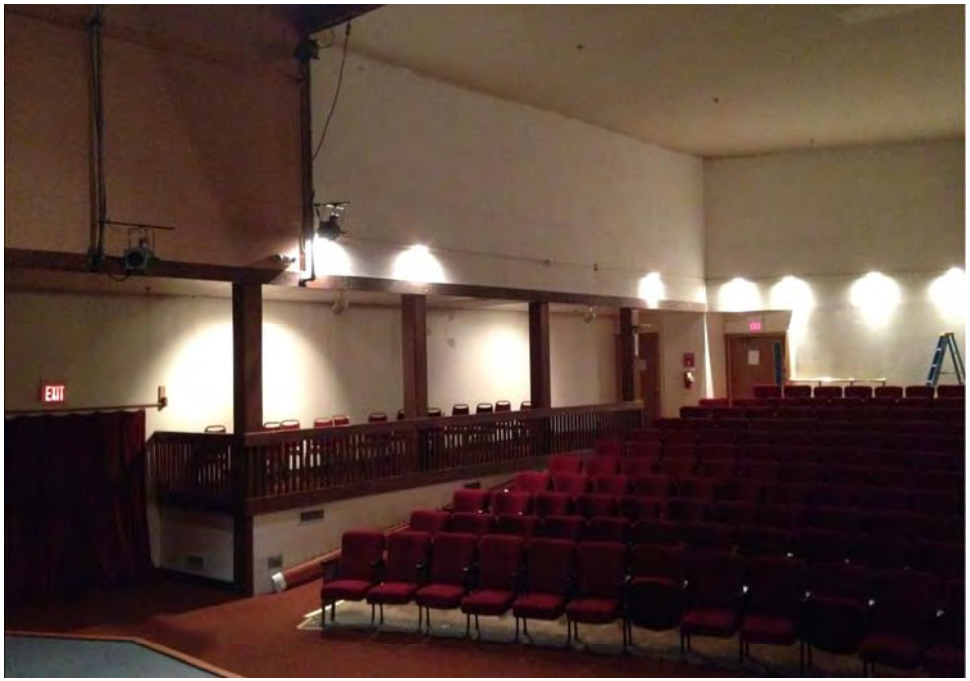


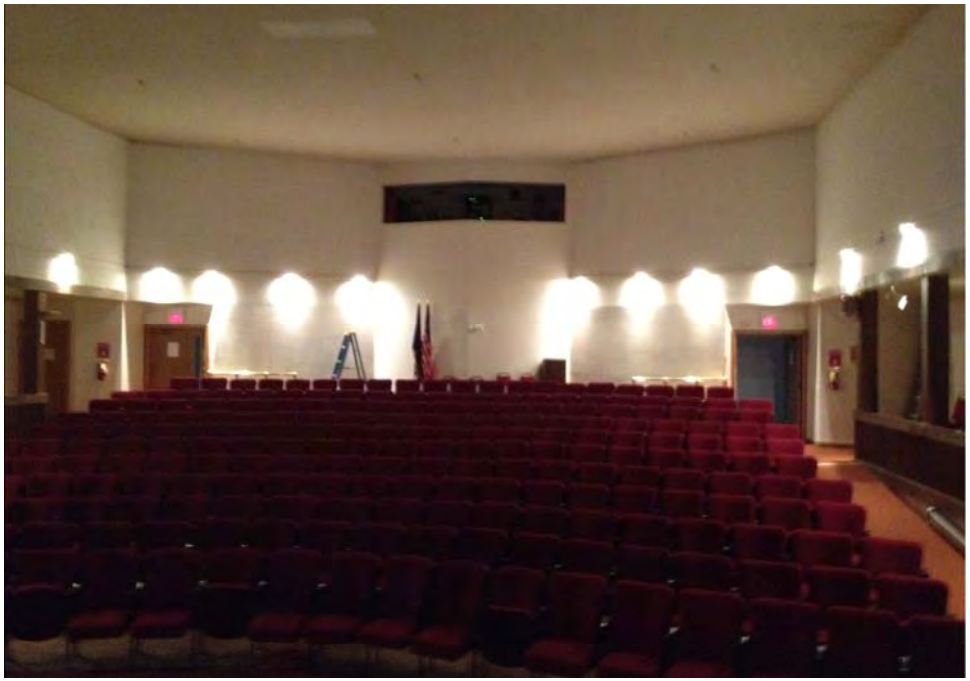


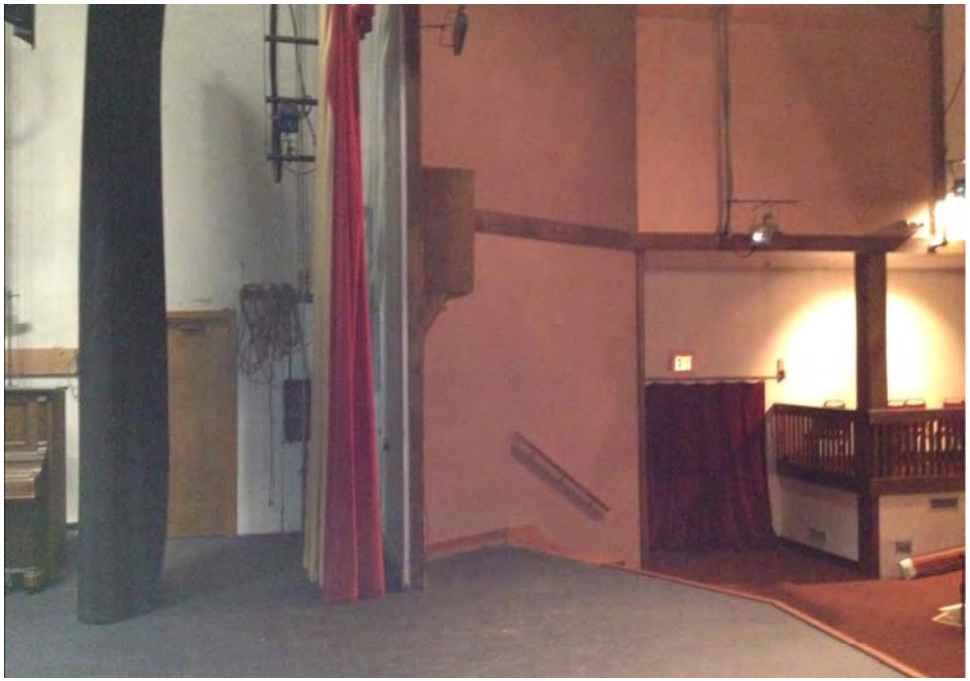


EXIT

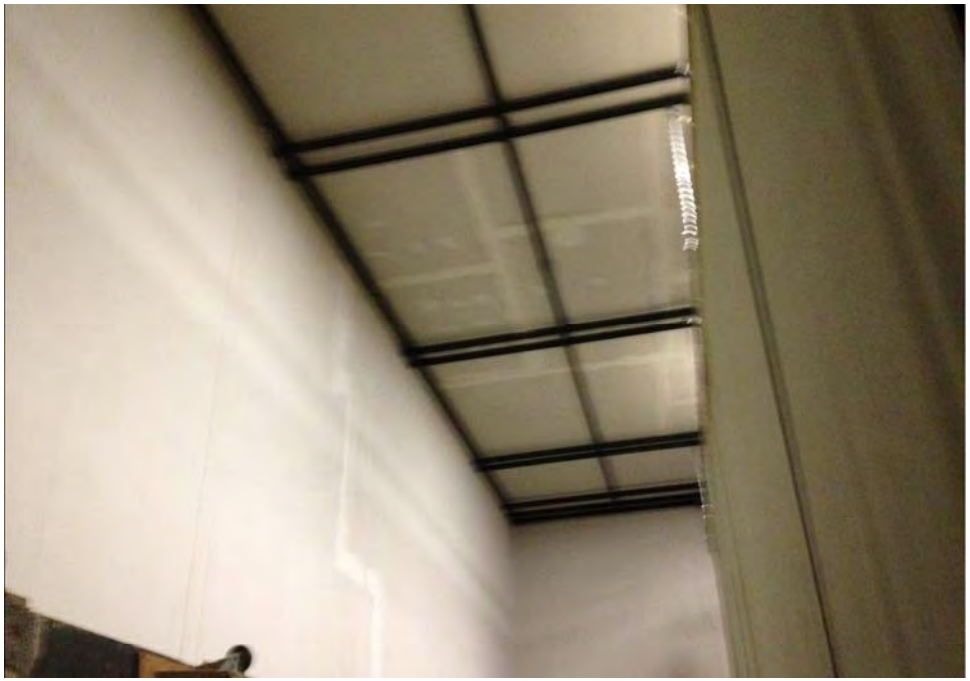
EXIT

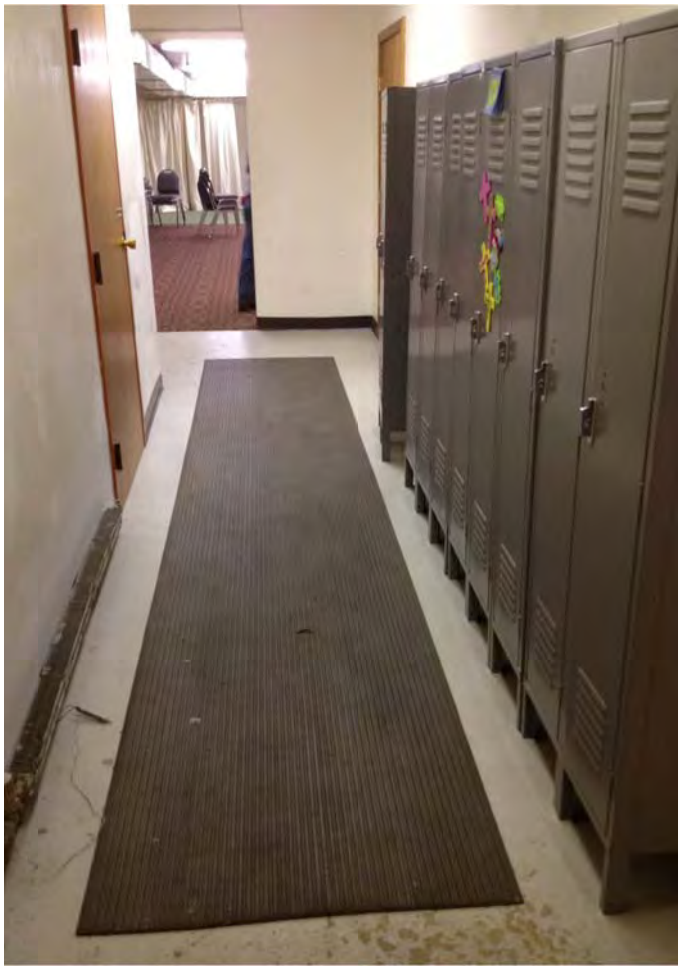

EXIT

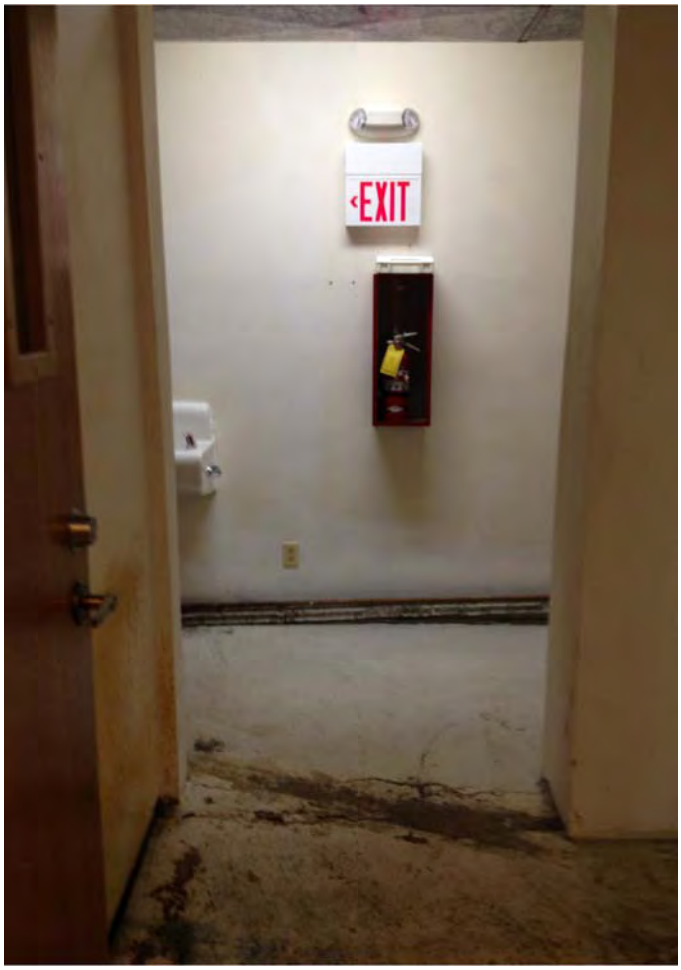


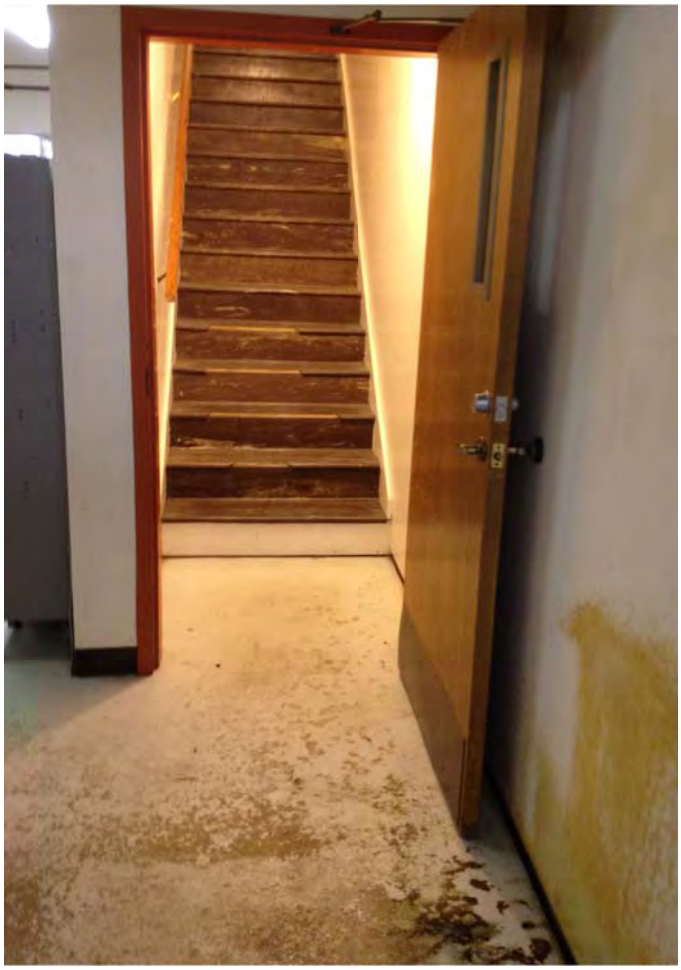


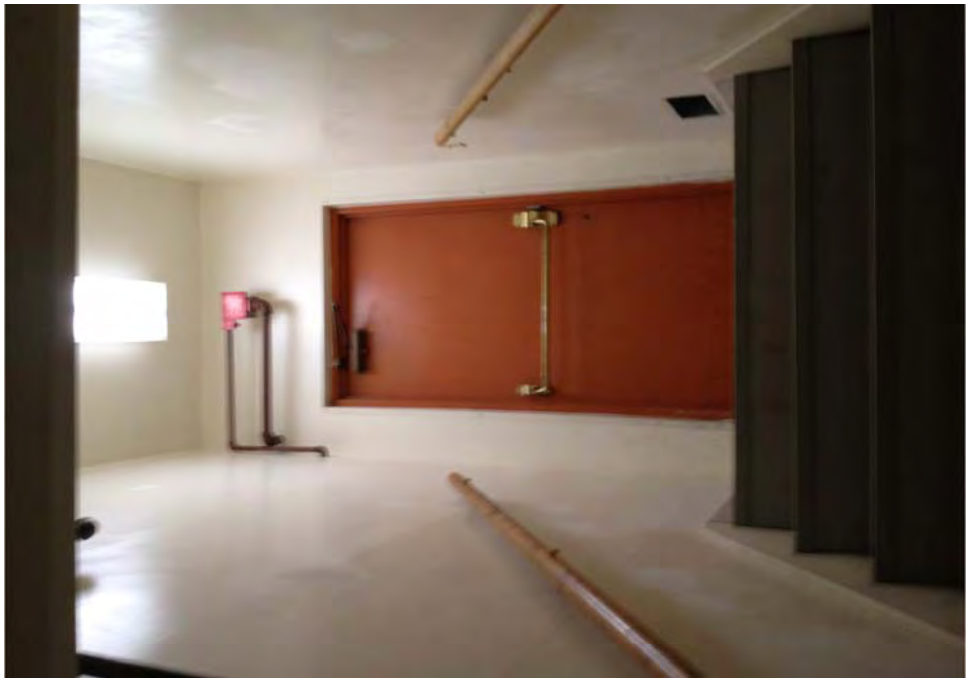
EXIT

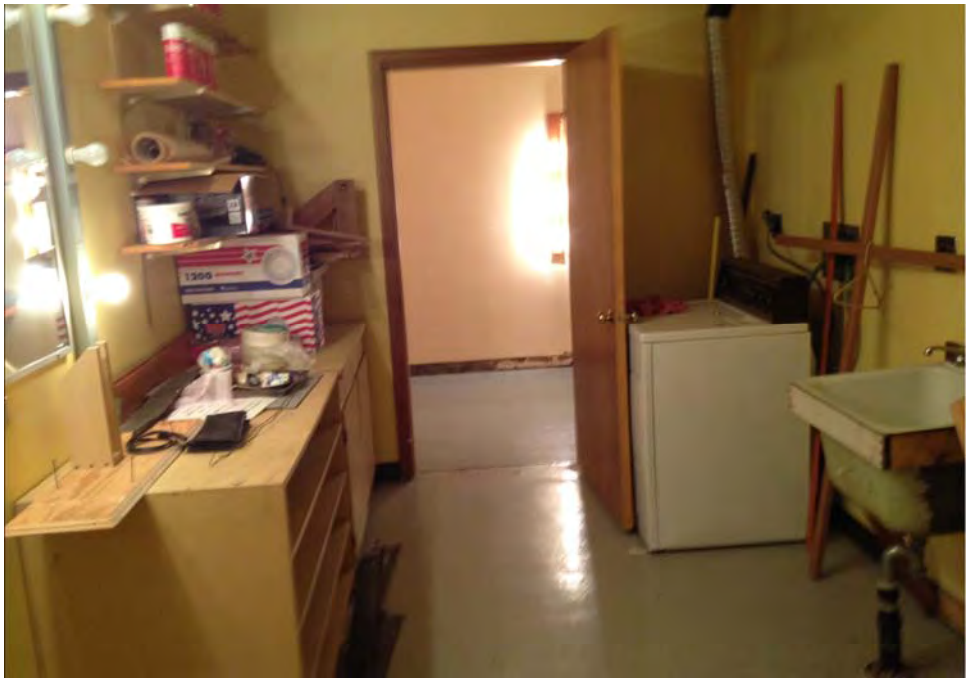


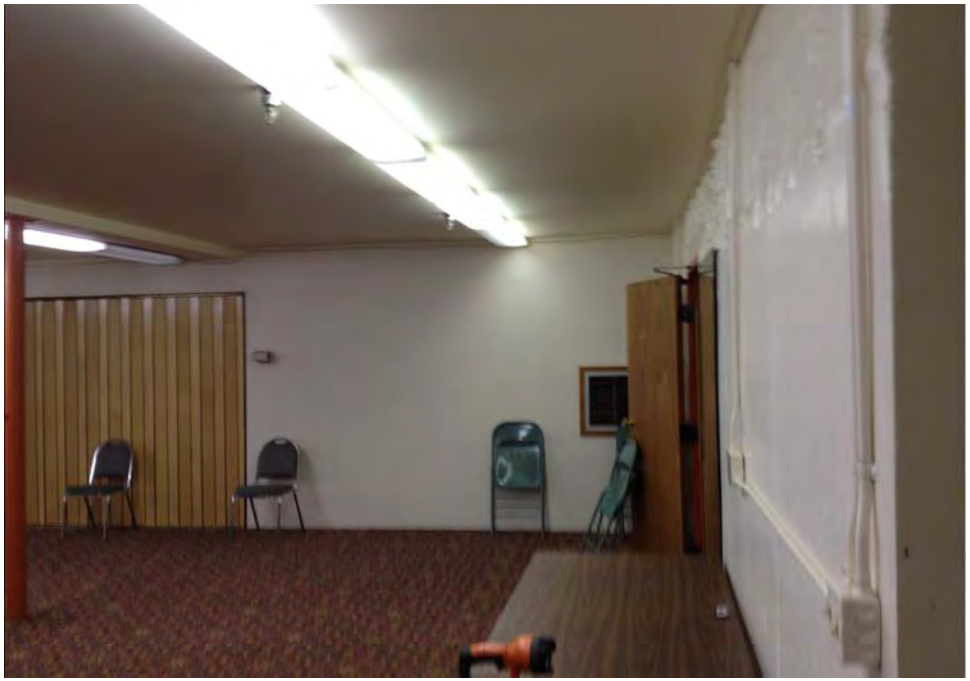



EXIT



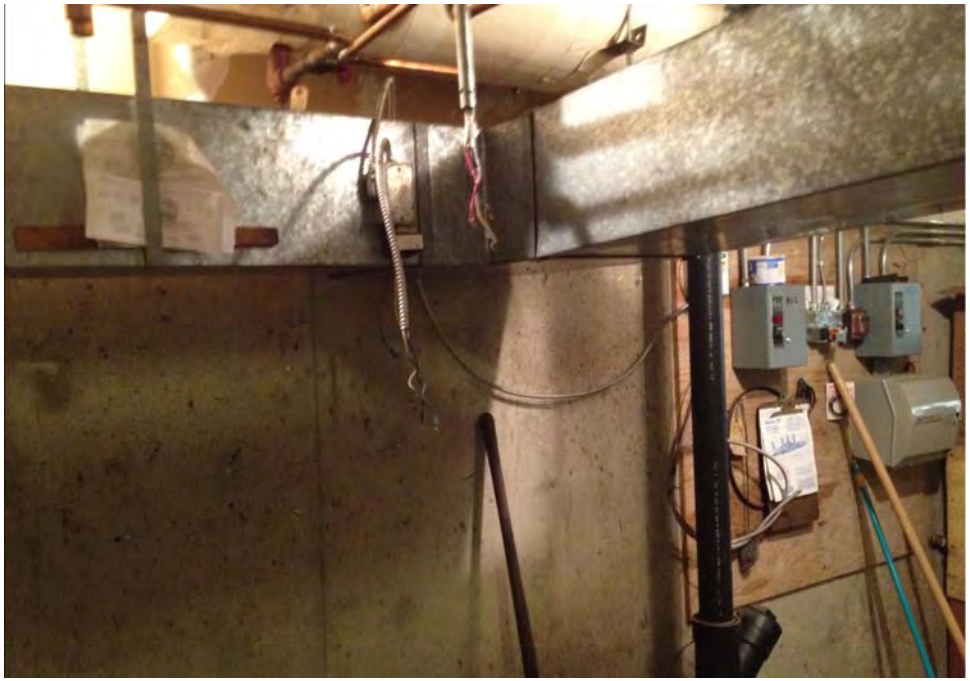




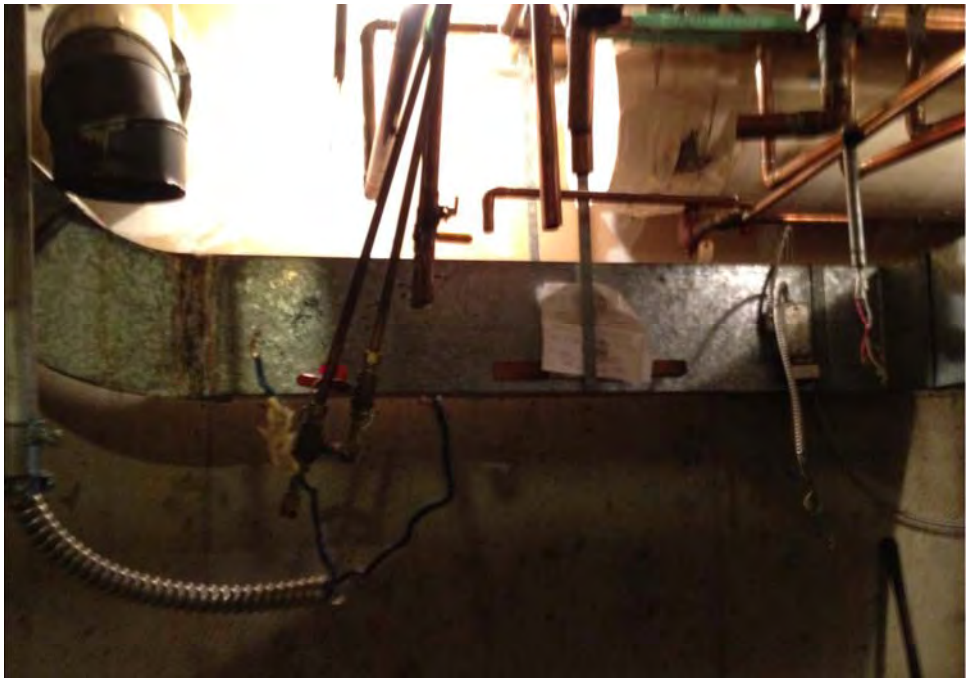


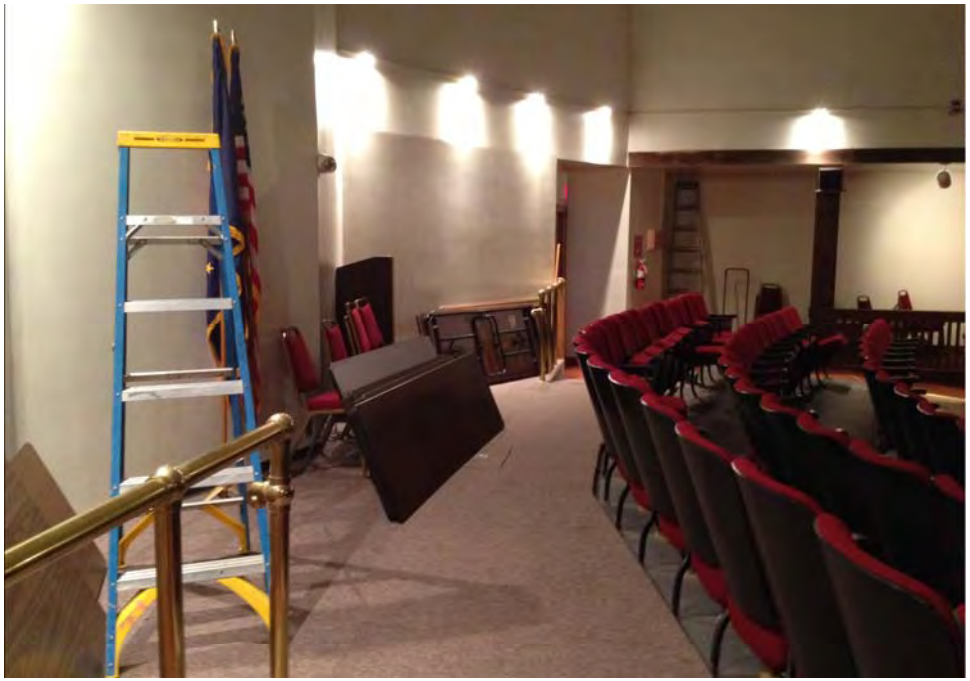
EXIT

EXIT

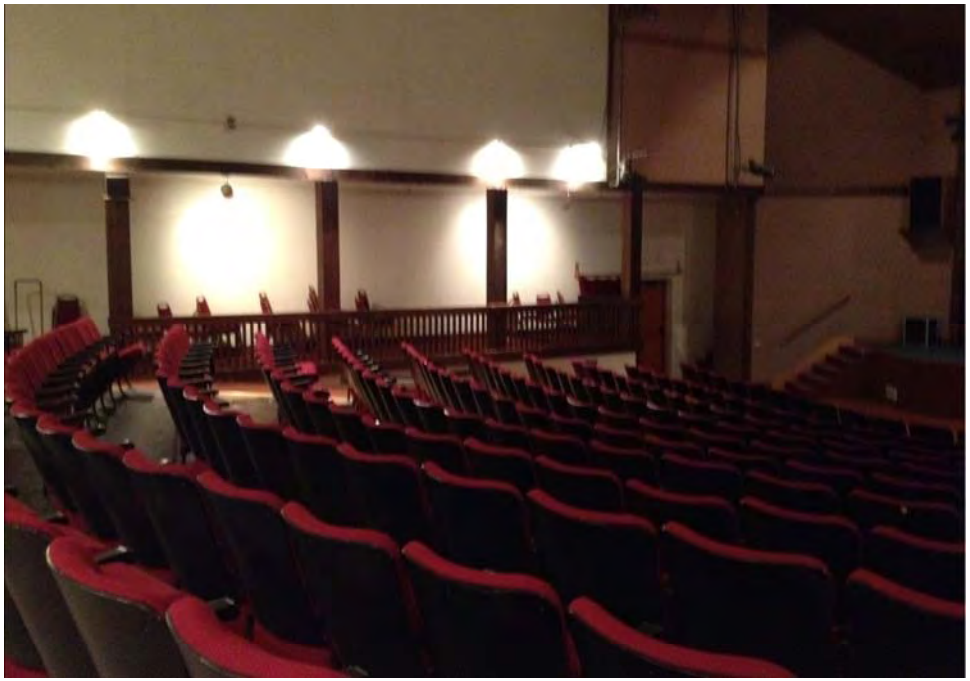


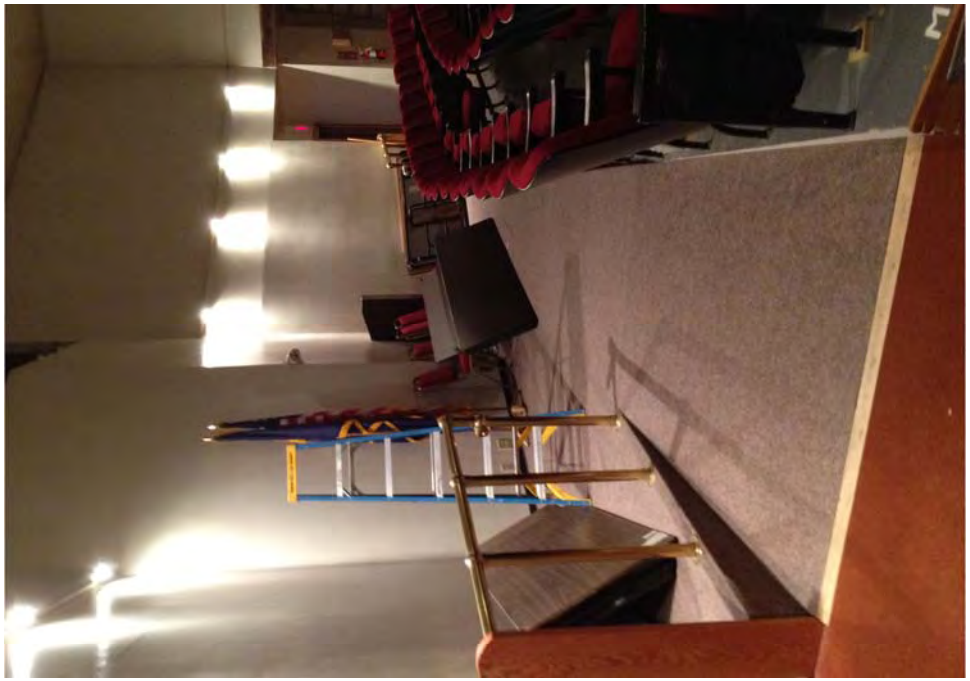
HV-2
PACE



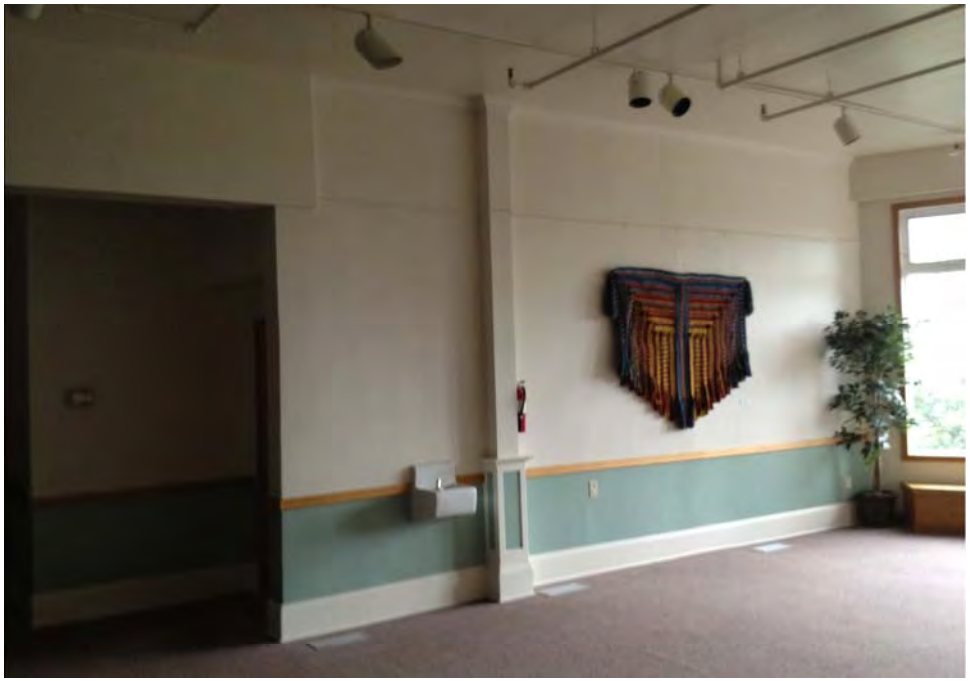


EXIT

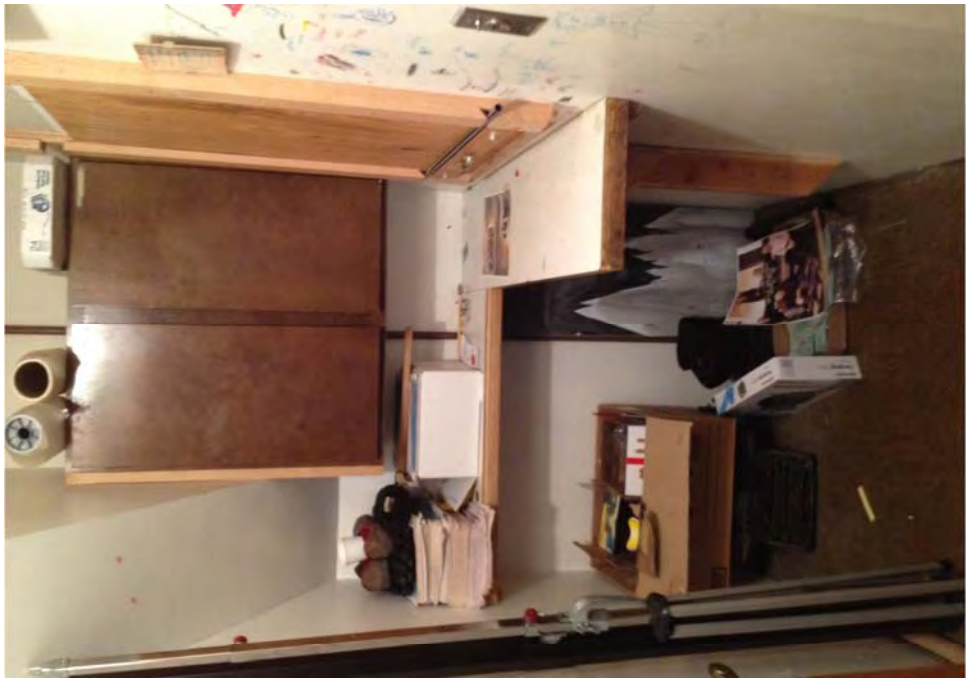


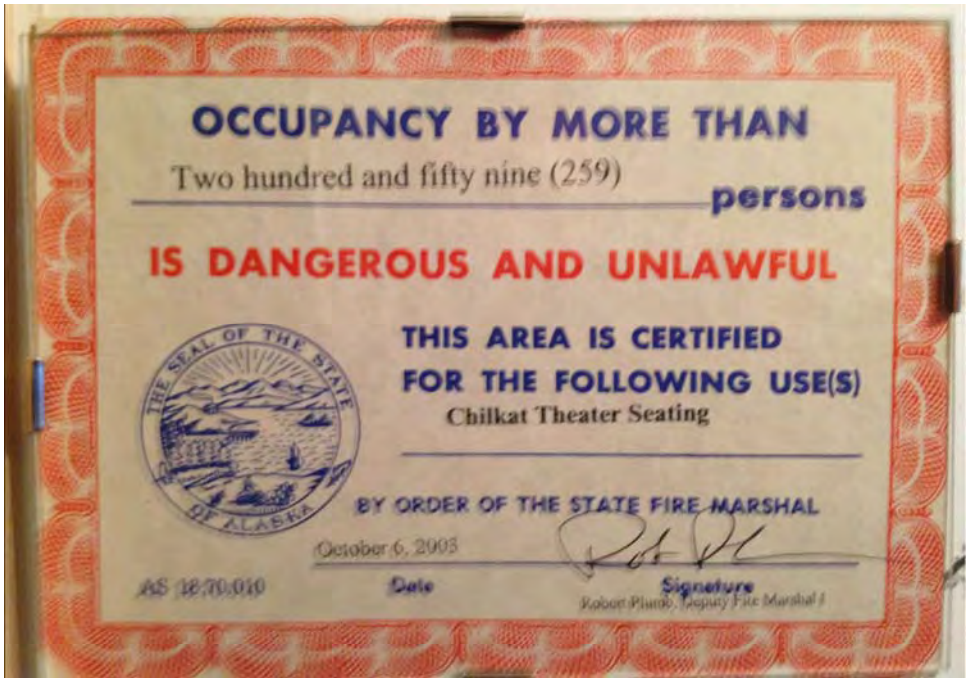


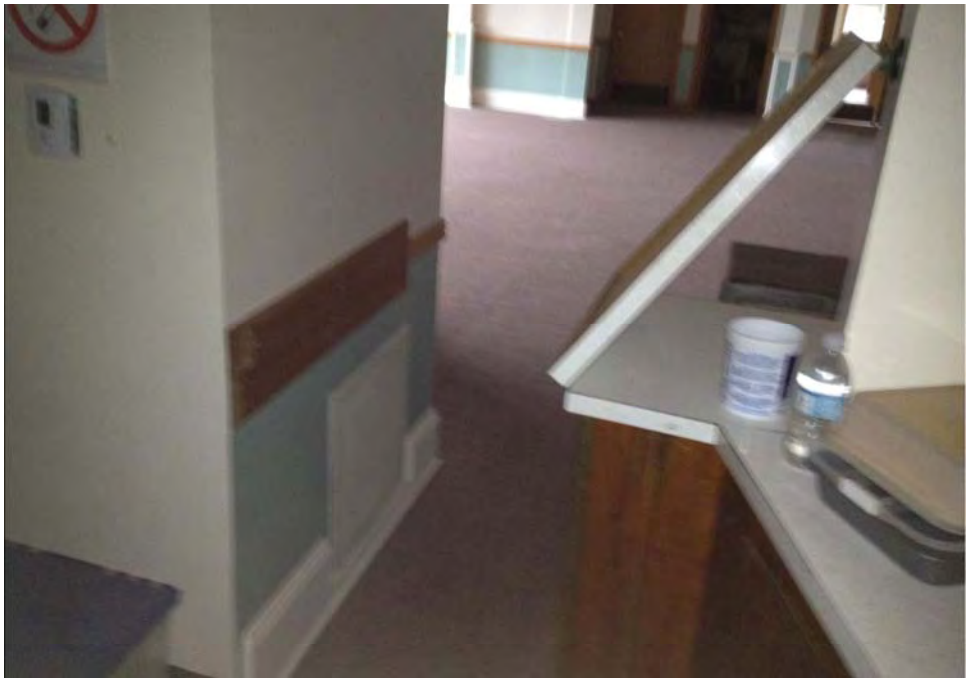
EXIT



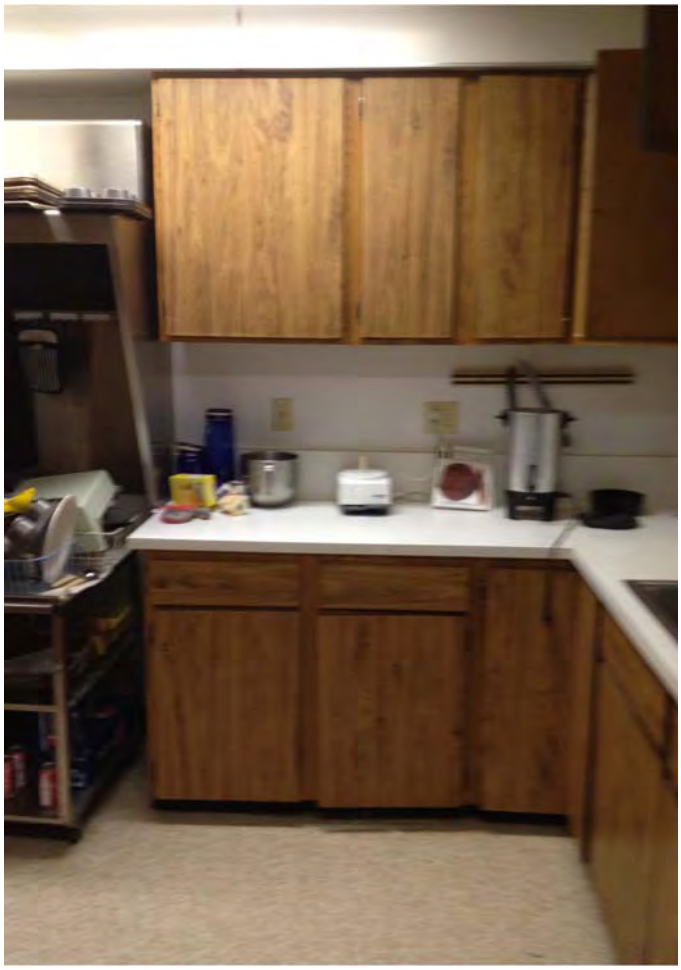
EXIT



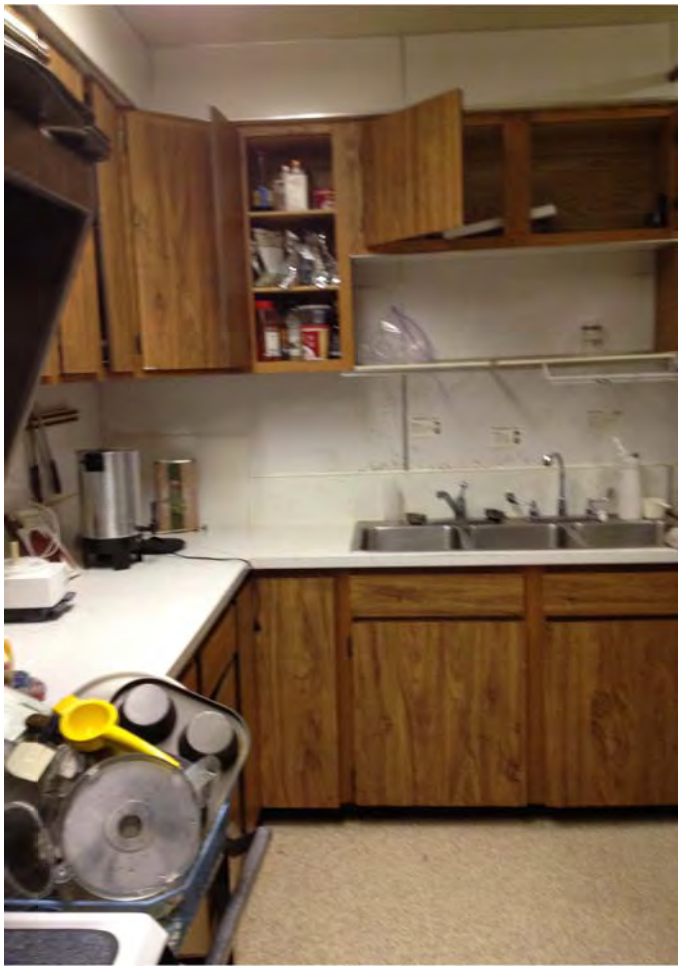

OCCUPANCY BY MORE THAN
Two hundred and fifty nine (259)
persons
IS DANGEROUS AND UNLAWFUL
THE SEAL OF THE STATE OF ALASKA
THIS AREA IS CERTIFIED
FOR THE FOLLOWING USE(S)
Chilkat Theater Seating
BY ORDER OF THE STATE FIRE MARSHAL
October 6, 2003
AS 18.70.010
Date
Signature
Robert Plumb, Deputy Fire Marshal I

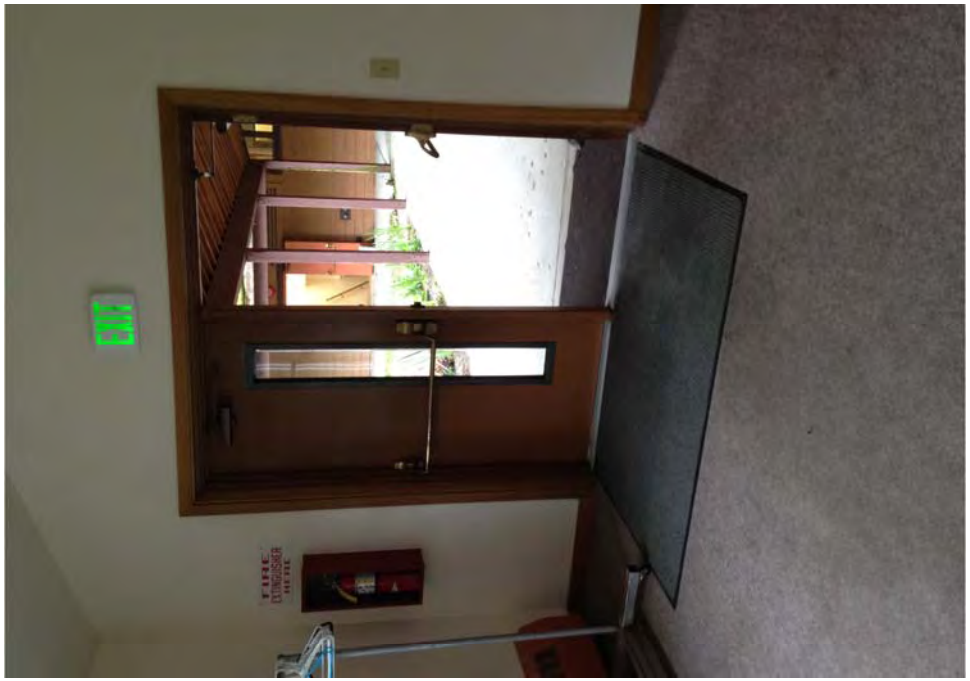


EXIT



polyvinyl film



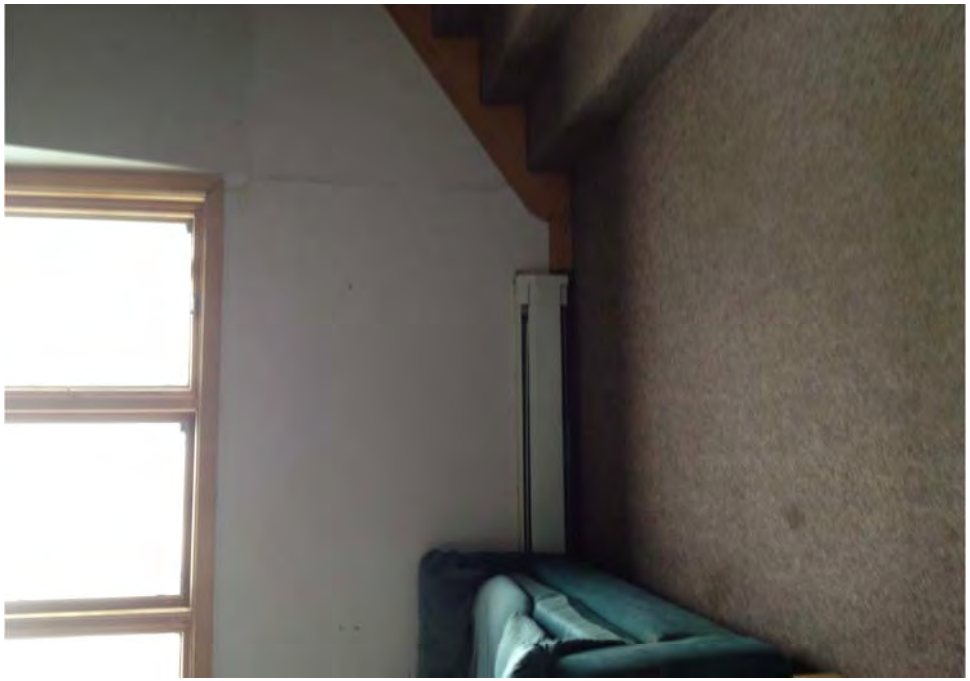

EXIT

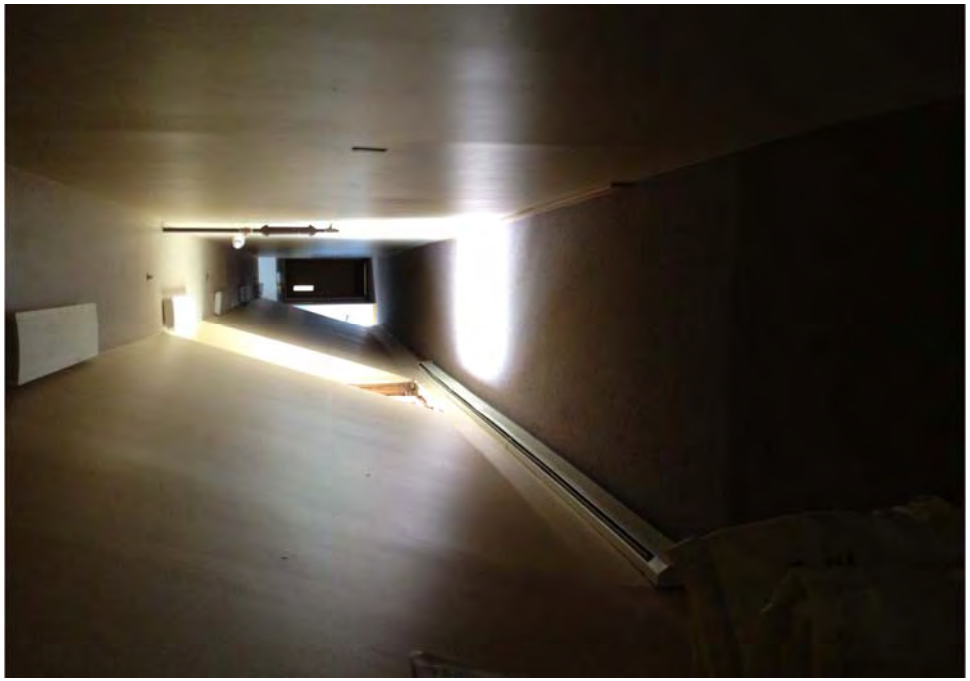
CHATEAU

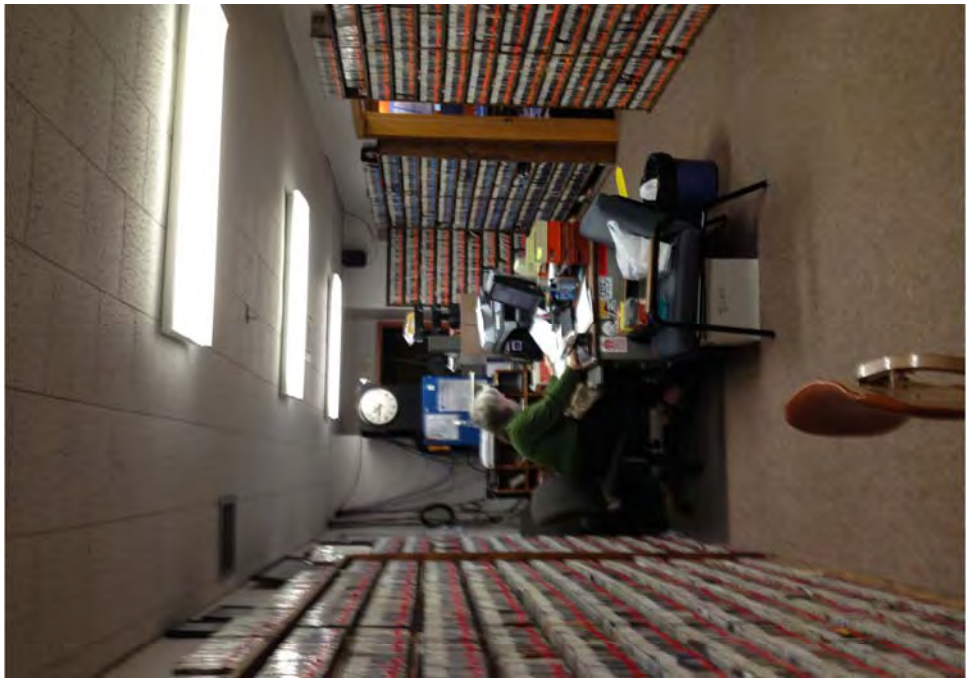
DUNHAM-BUSH

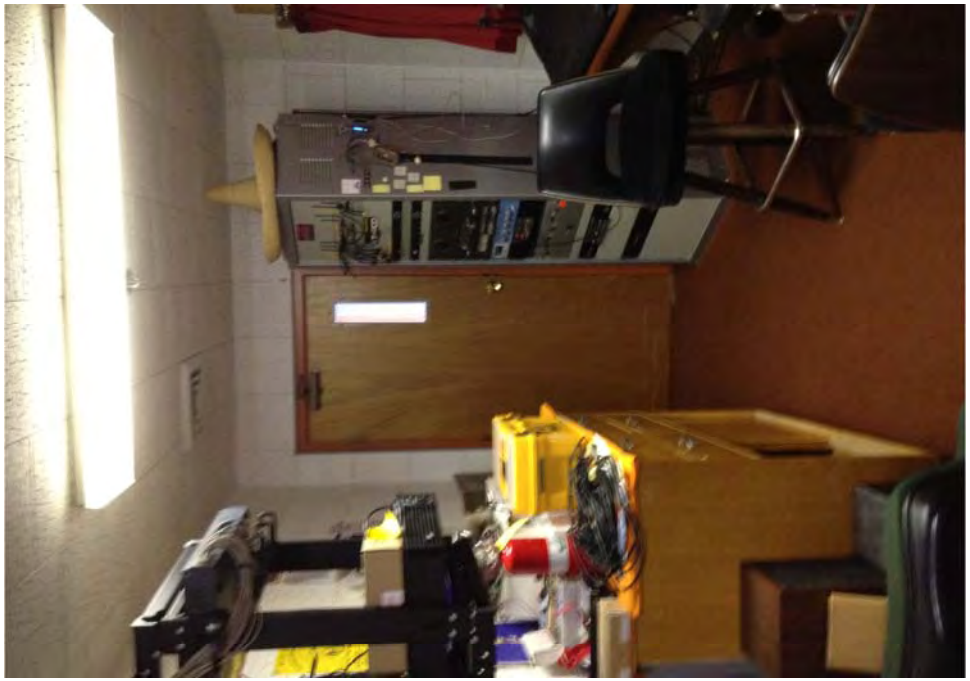
St. Michael

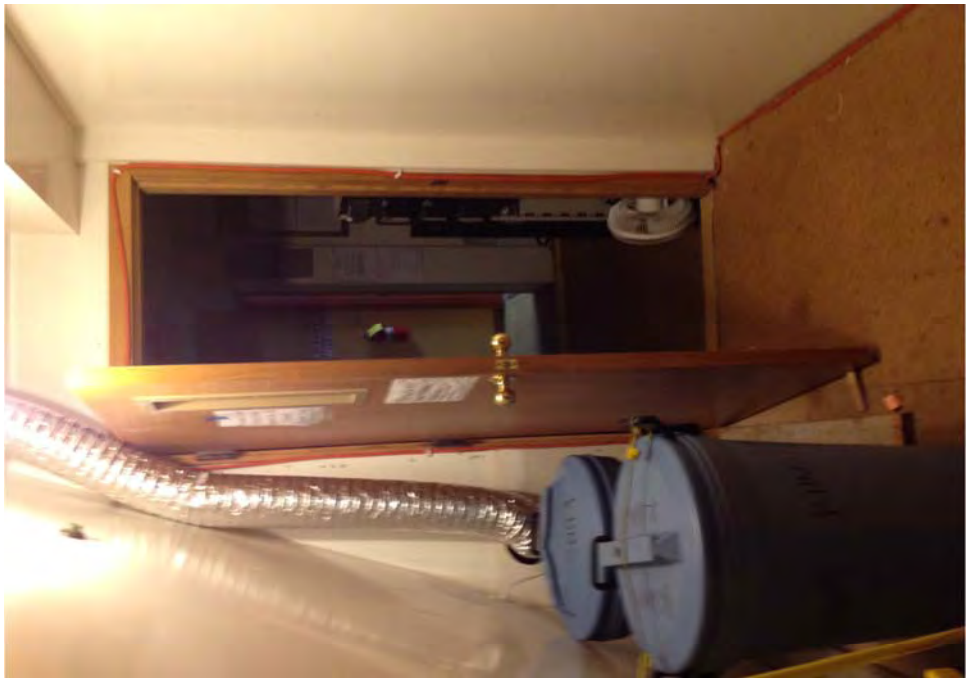
NO SMOKING

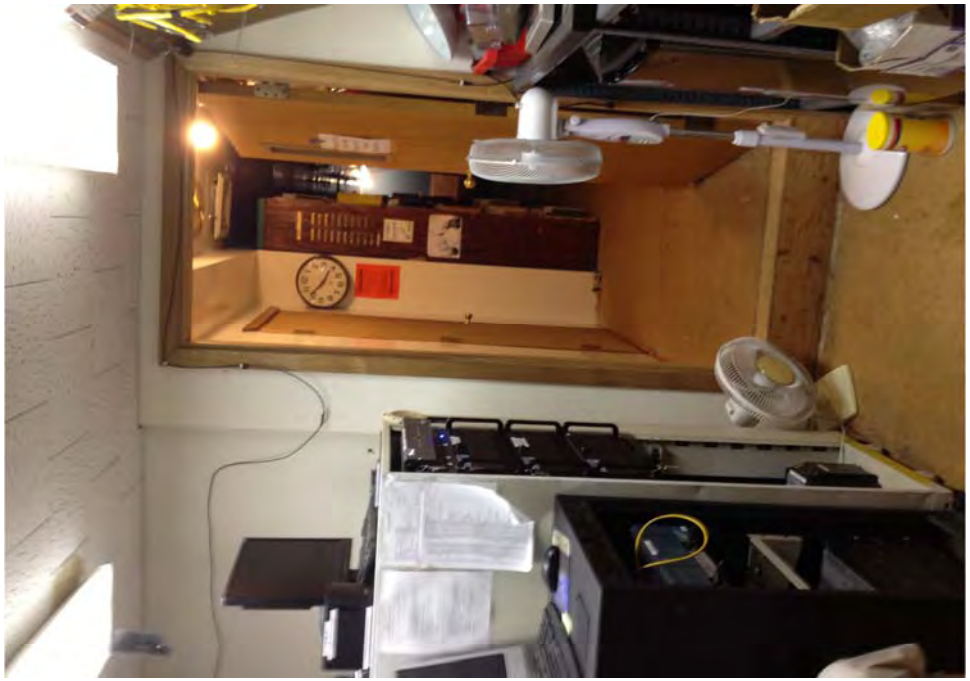


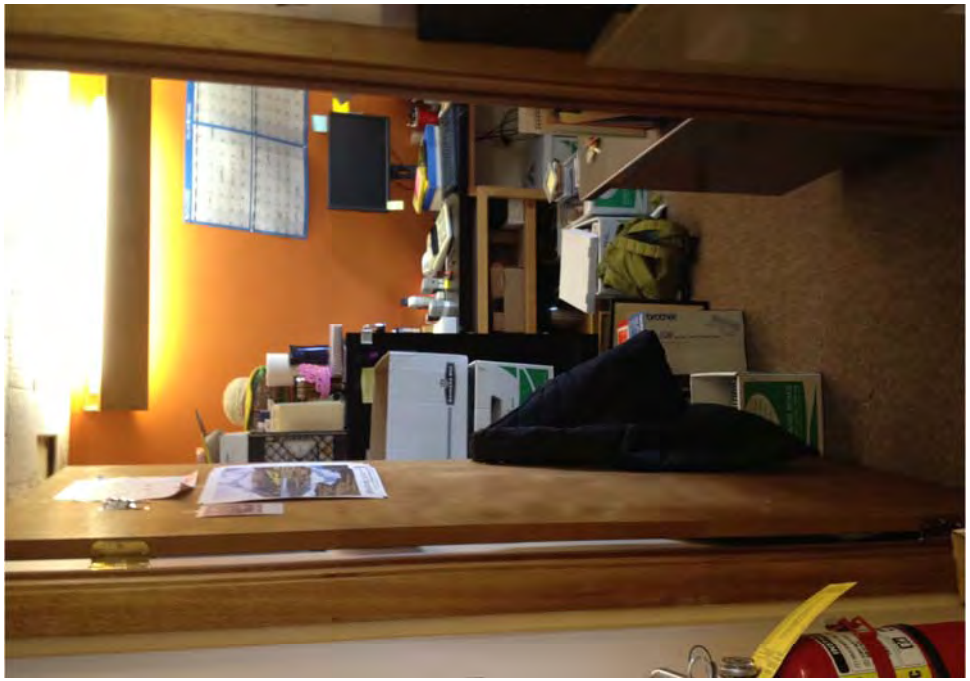


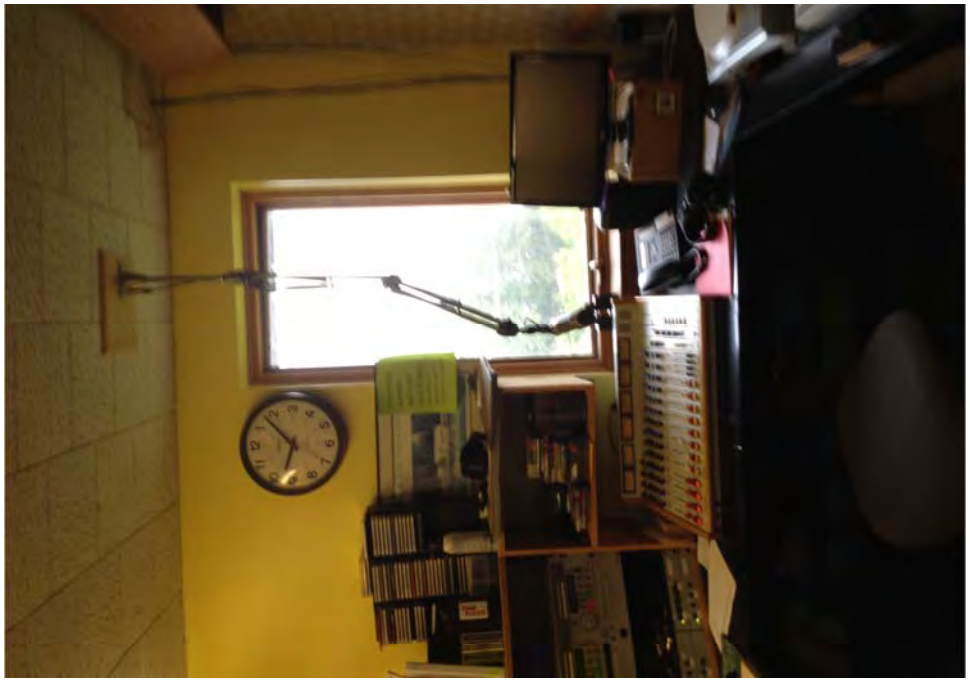


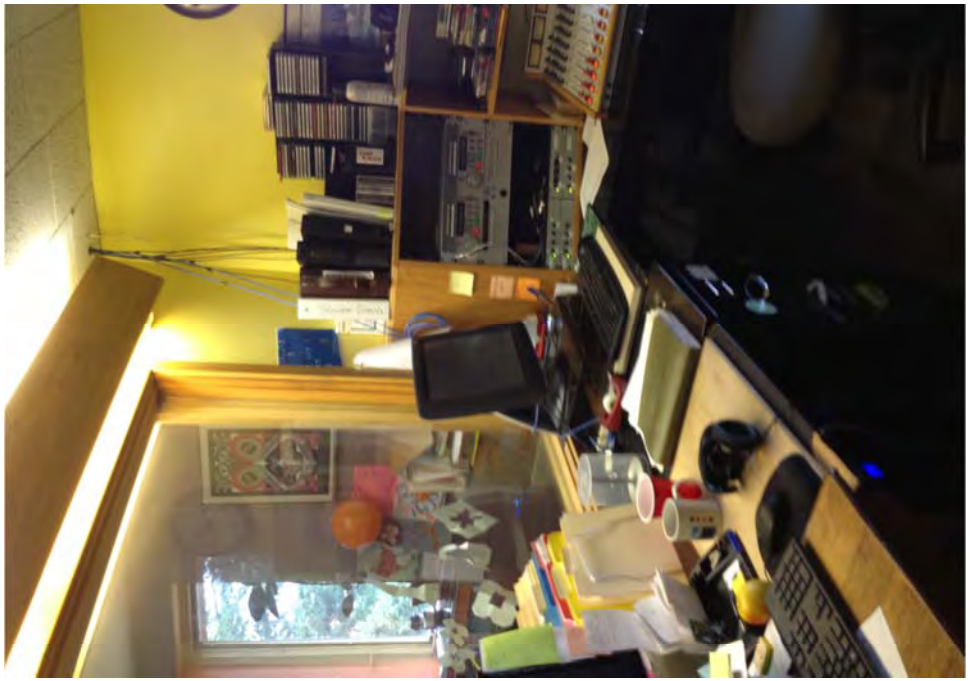




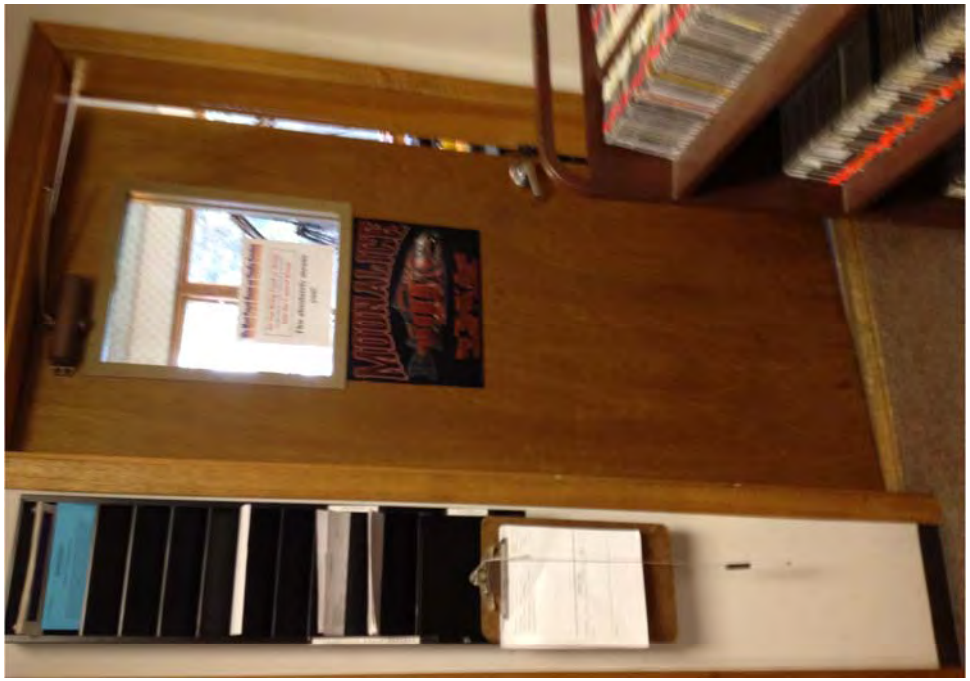


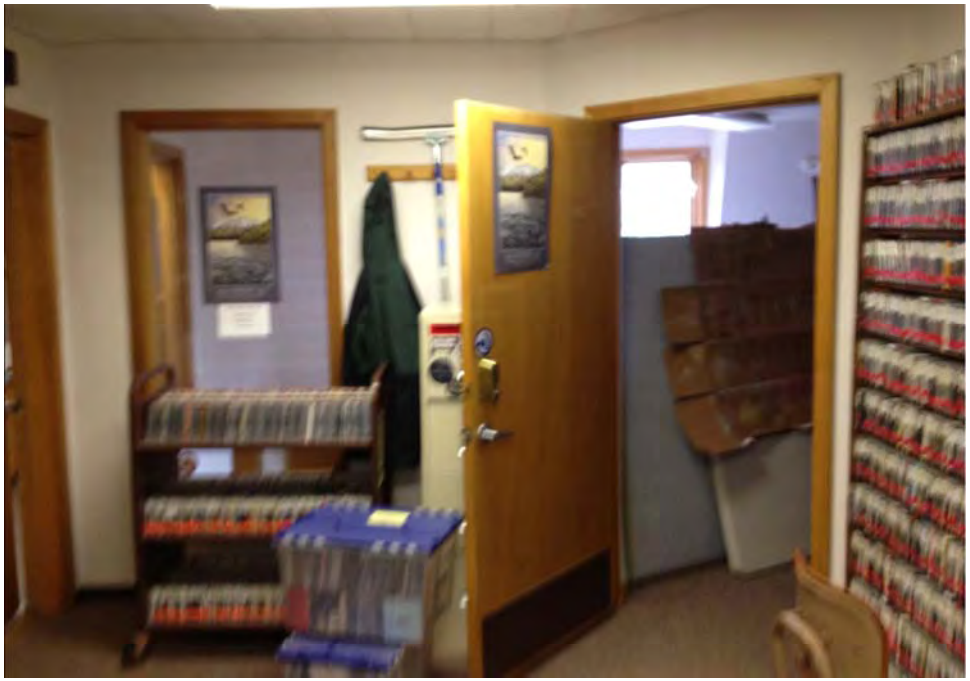


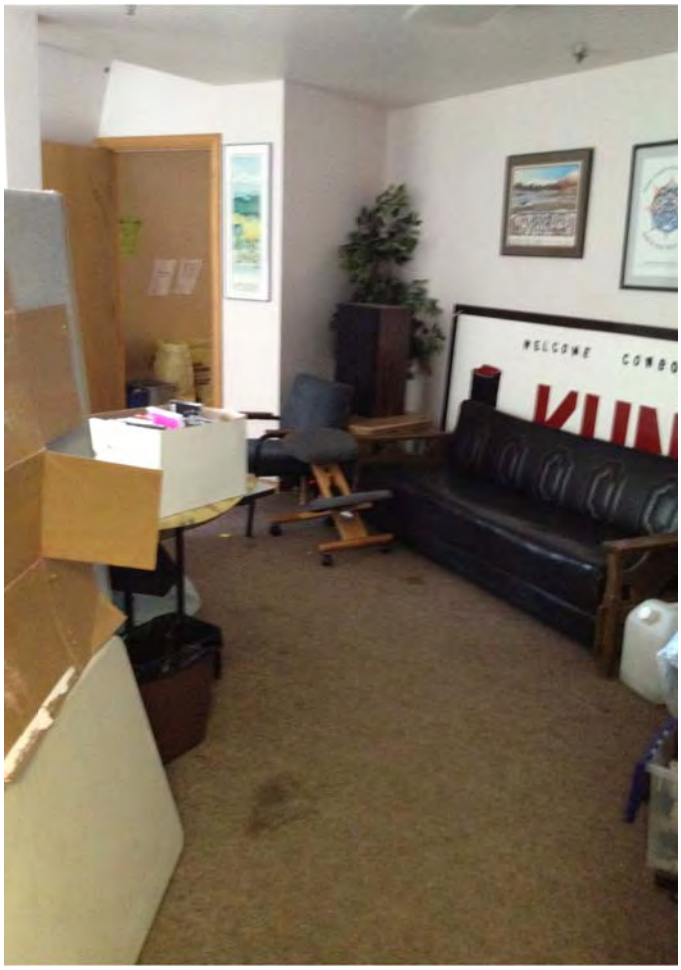


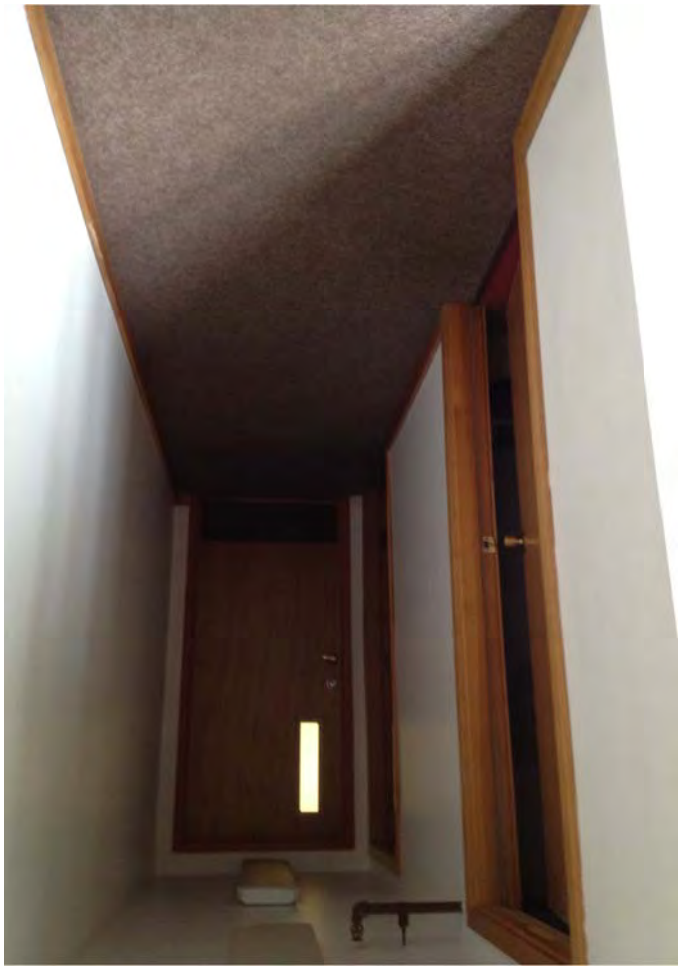


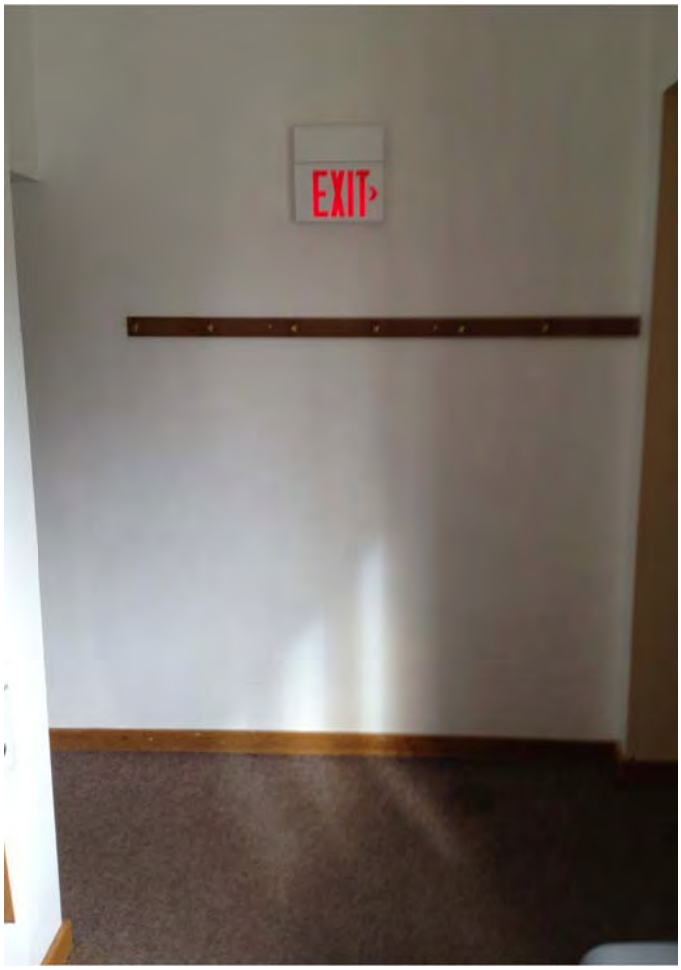
SUB POP

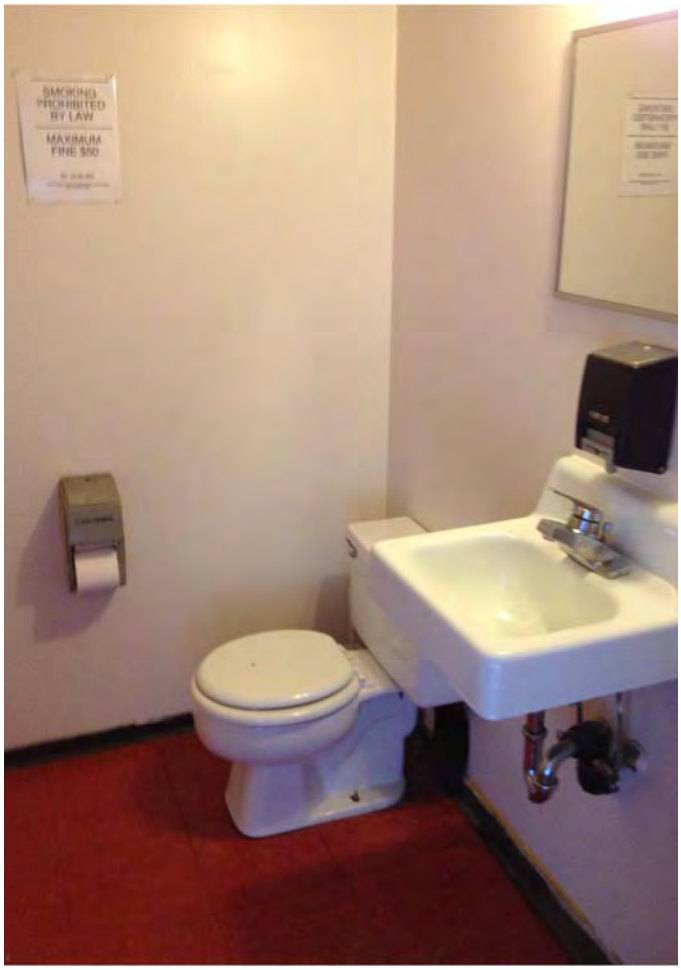

MOONALICE

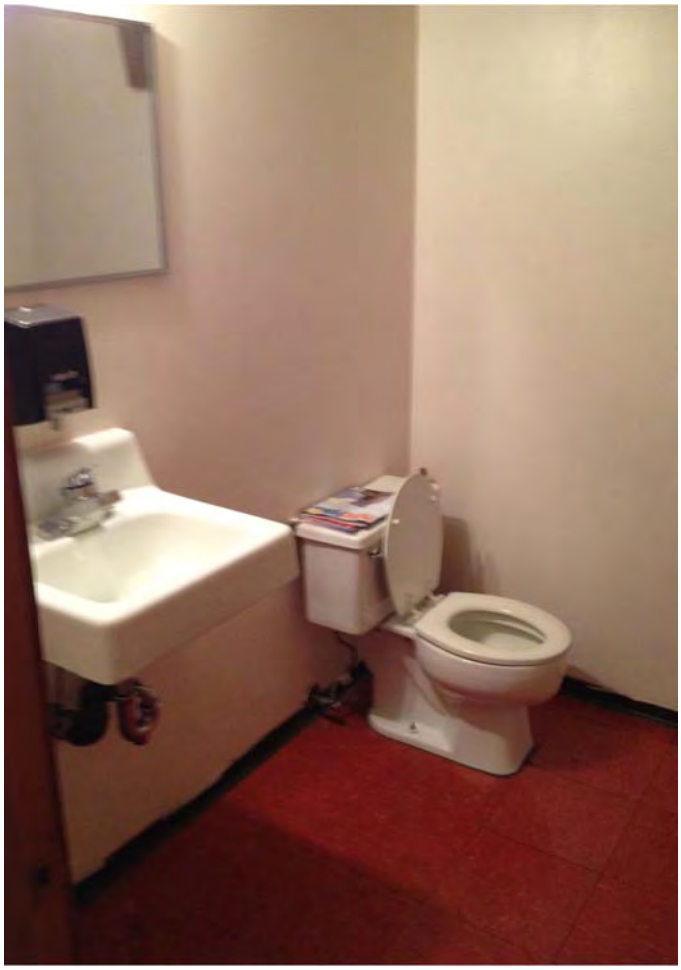



WELCOME

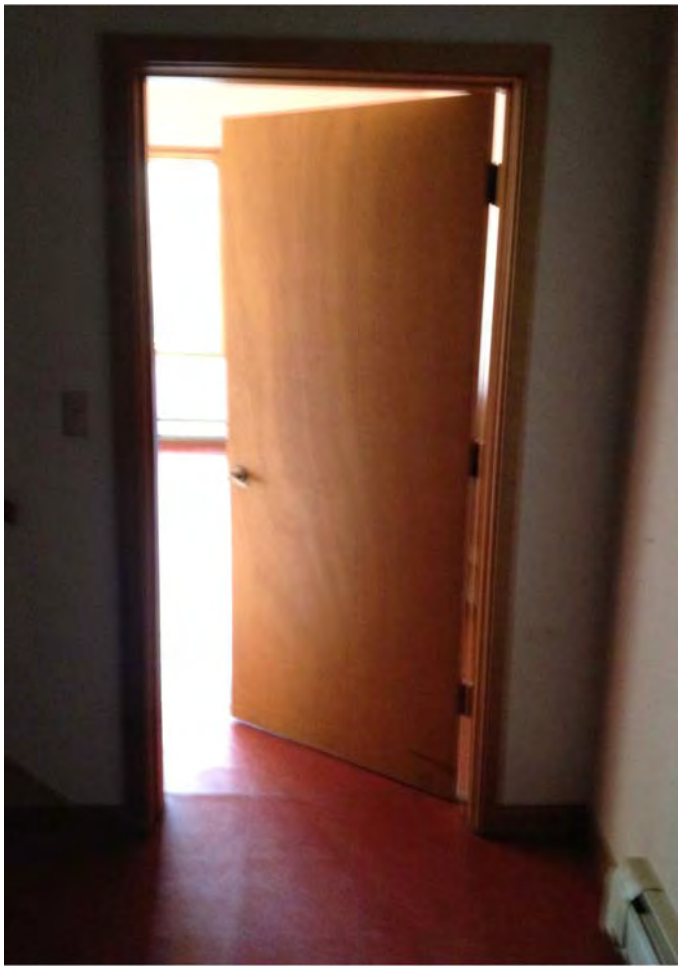


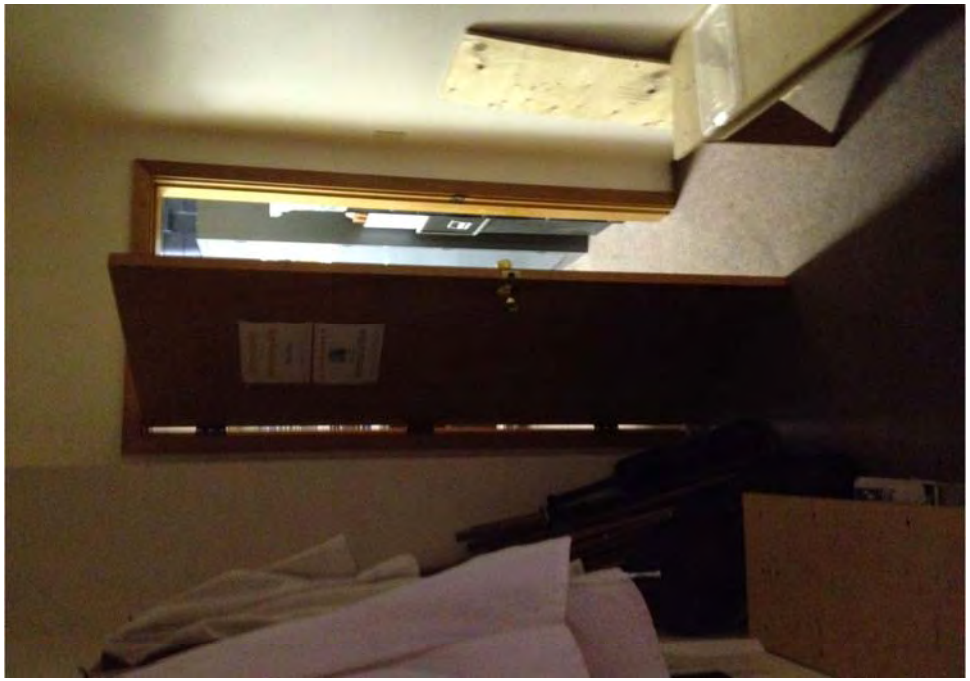

EXIT

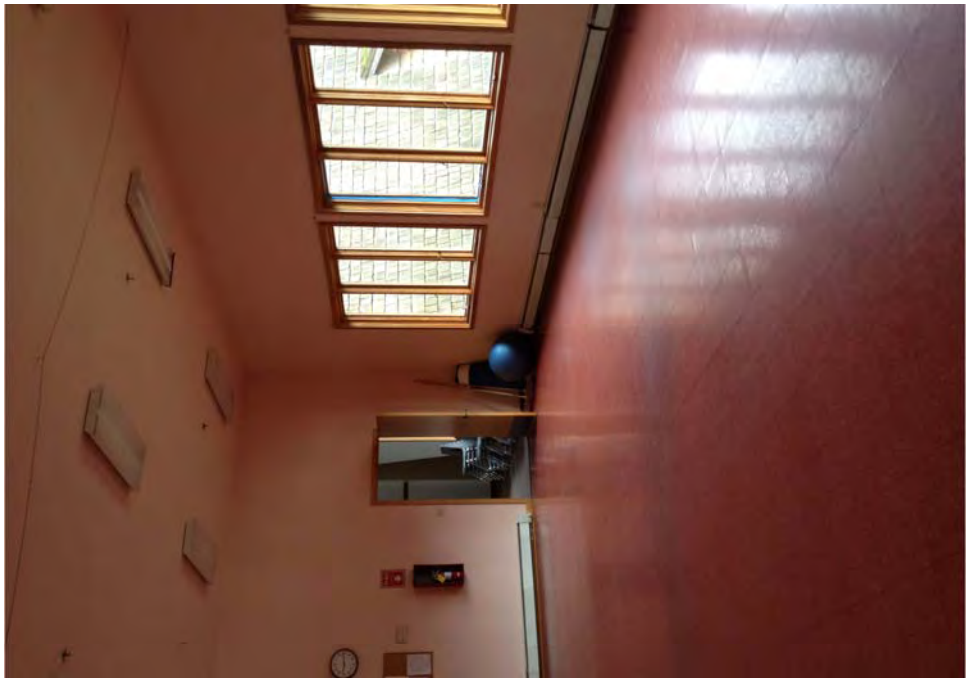

SMOKING
PROHIBITED
BY LAW
MAXIMUM
FINE $50

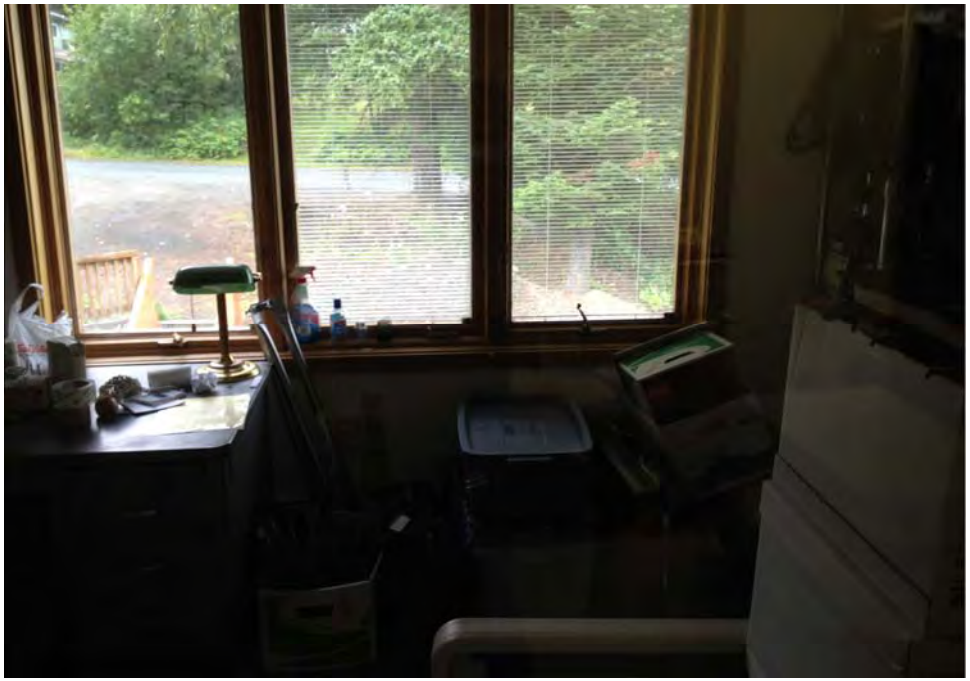


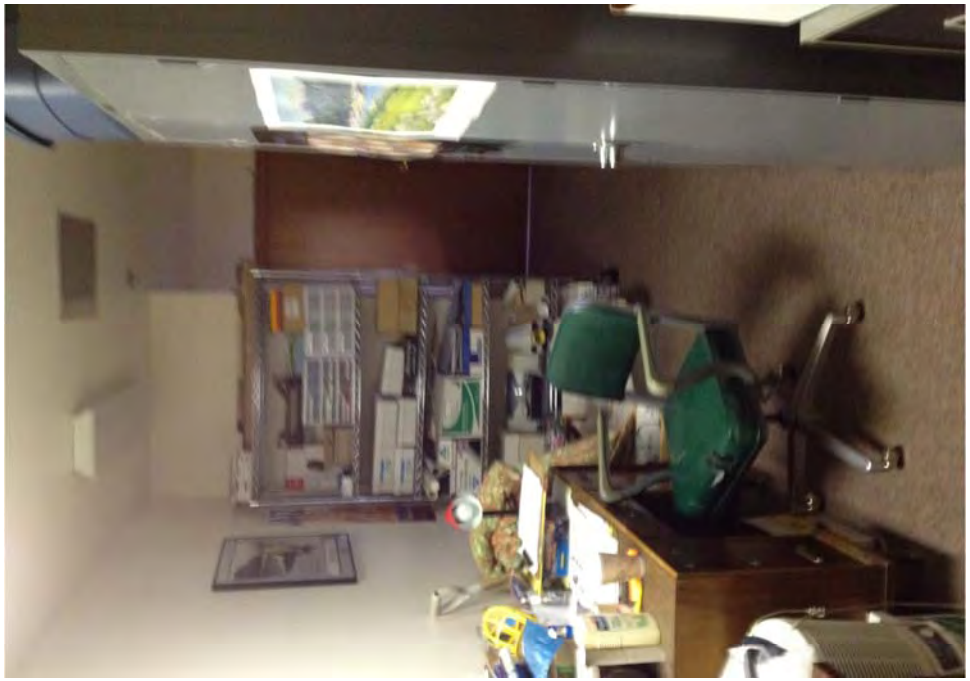
SMOKING
PROHIBITED
BY LAW
MAXIMUM
FINE $50

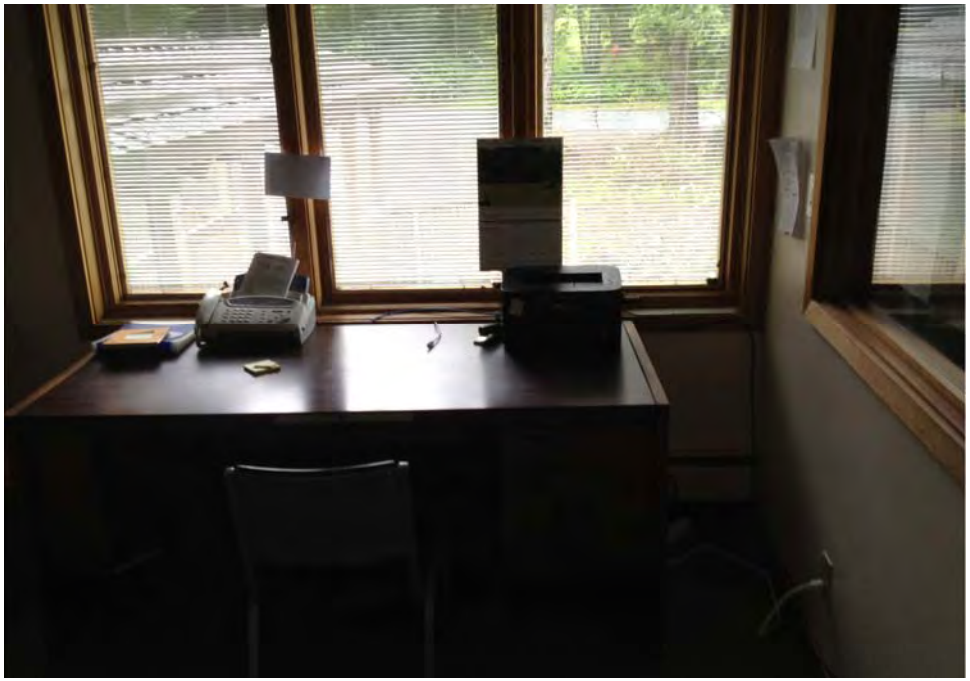




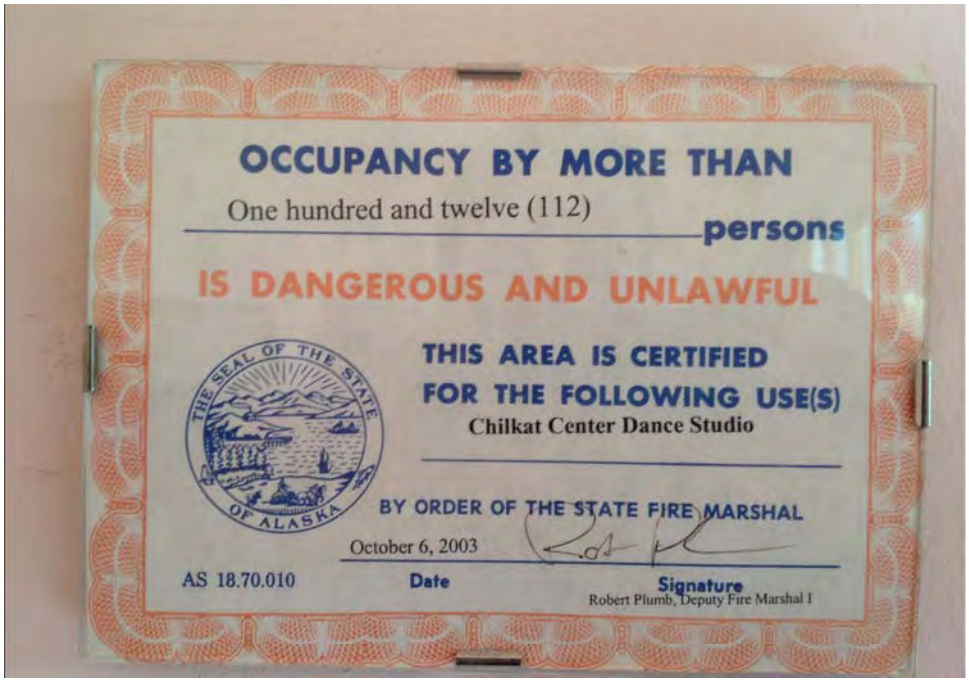








DELL

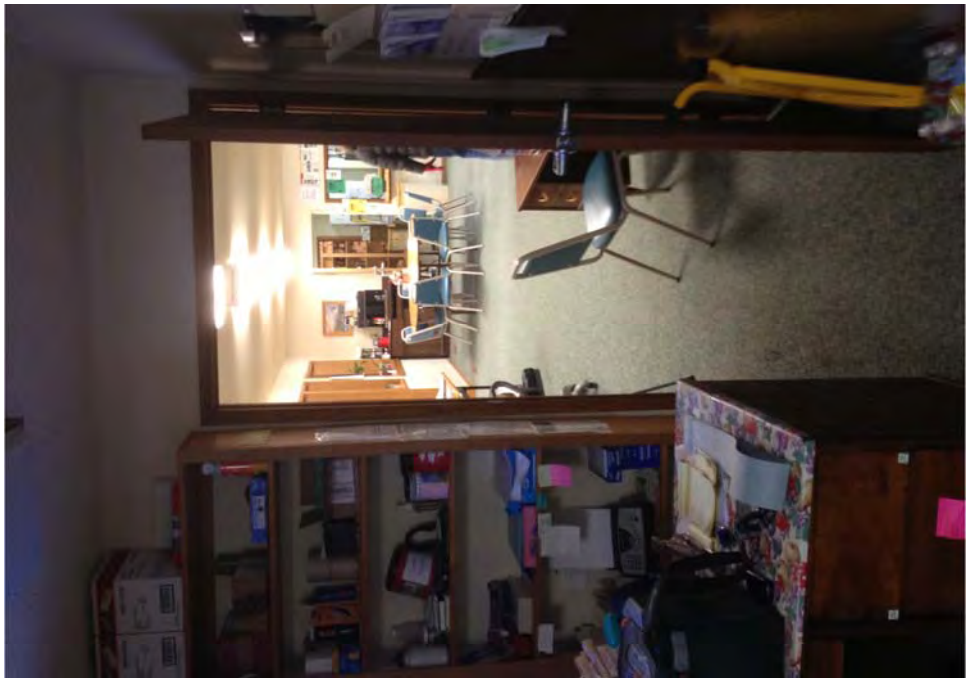

OCCUPANCY BY MORE THAN
One hundred and twelve (112)
persons
IS DANGEROUS AND UNLAWFUL
THE SEAL OF THE STATE OF ALASKA
THIS AREA IS CERTIFIED
FOR THE FOLLOWING USE(S)
Chilkat Center Dance Studio
BY ORDER OF THE STATE FIRE MARSHAL
October 6, 2003
AS 18.70.010
Date
Signature
Robert Plumb, Deputy Fire Marshal I

Walmart.com

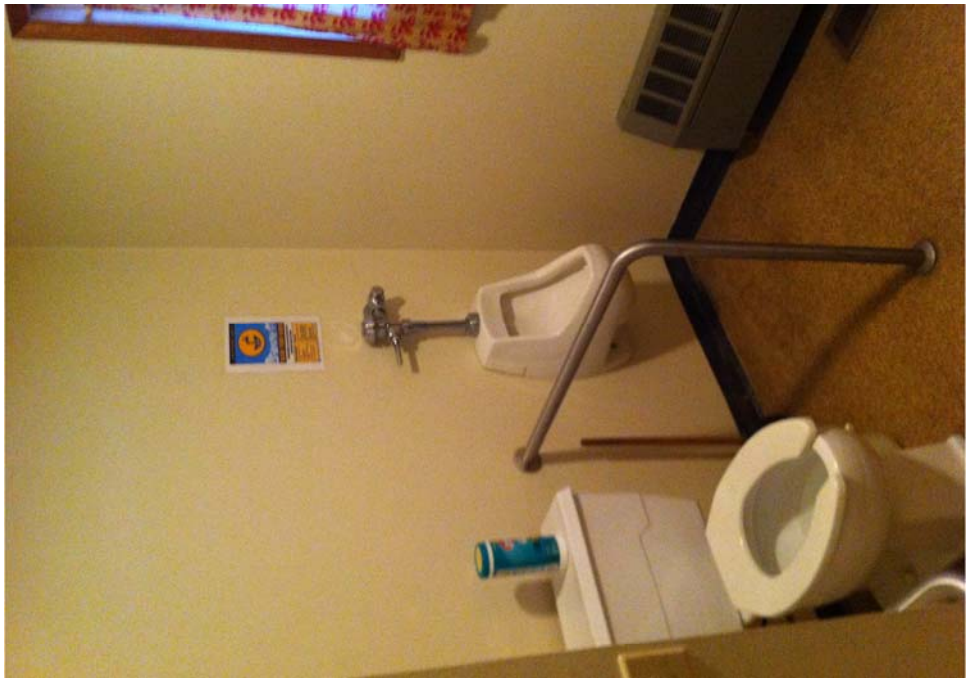
Section 3.5 Facility Photos

Senior Center

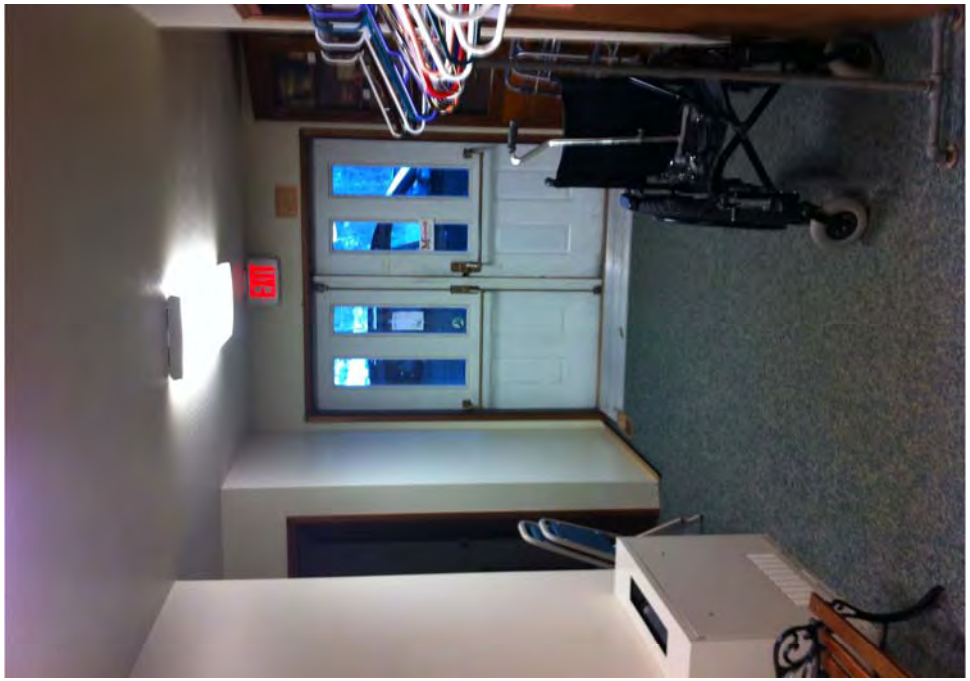
BUS
PARKING
ONLY



EXIT

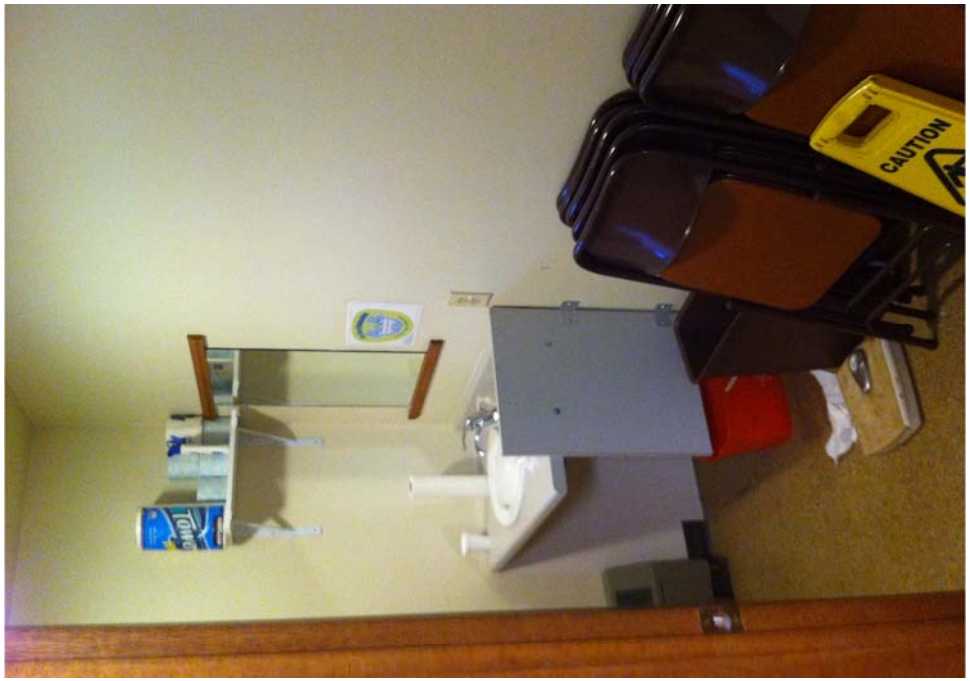


EXIT


EXIT

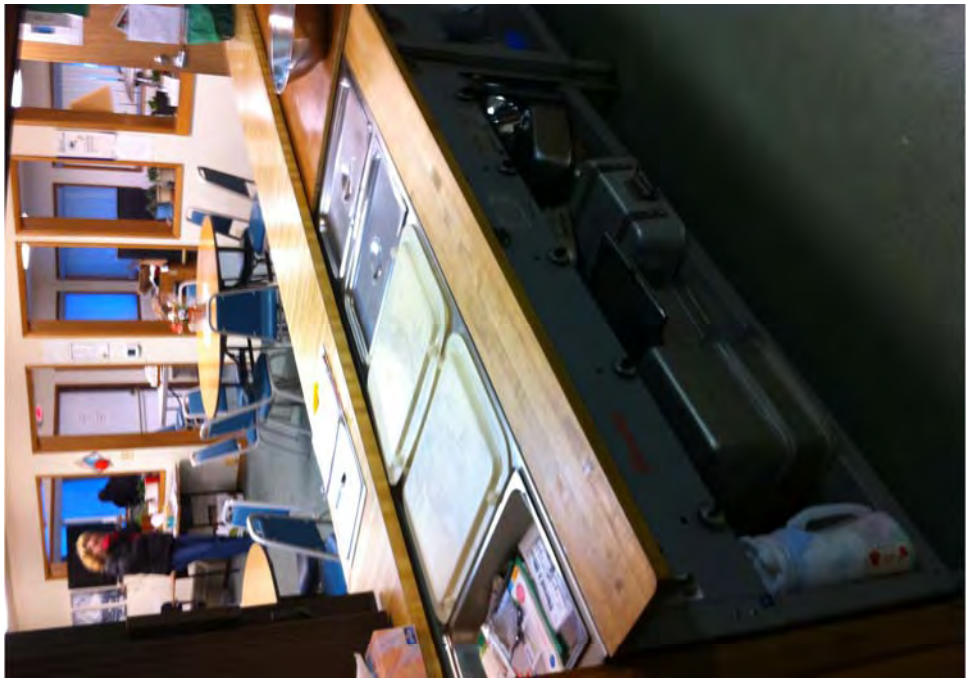
CAUTION

HOBART
STOP!
MASTER ONLY

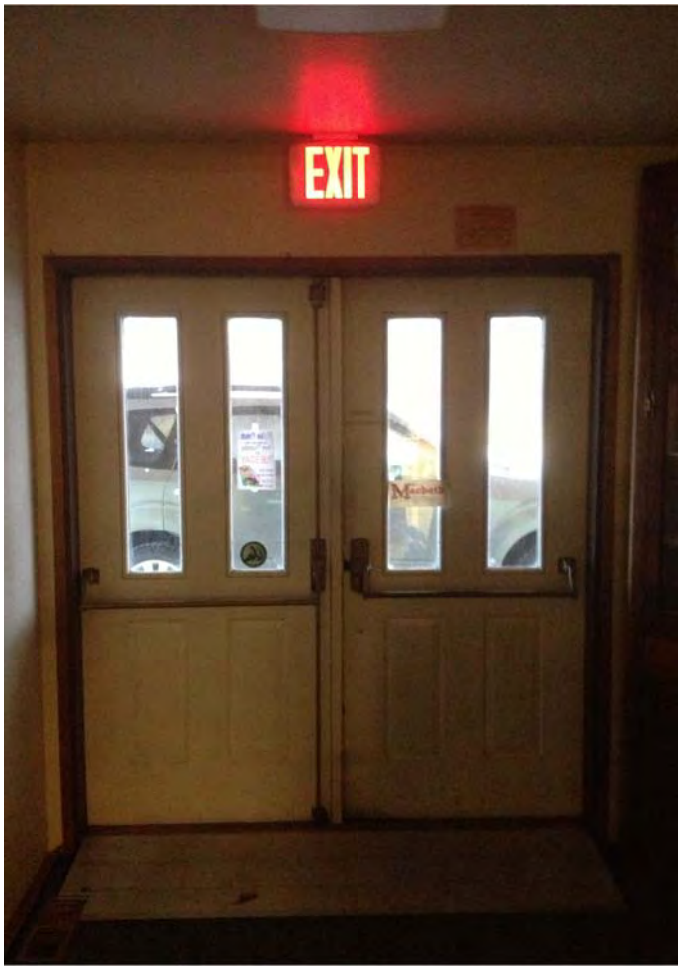

CAUTION

AutoPellet
MESYS

MESYS
MaineEnergySystems.com

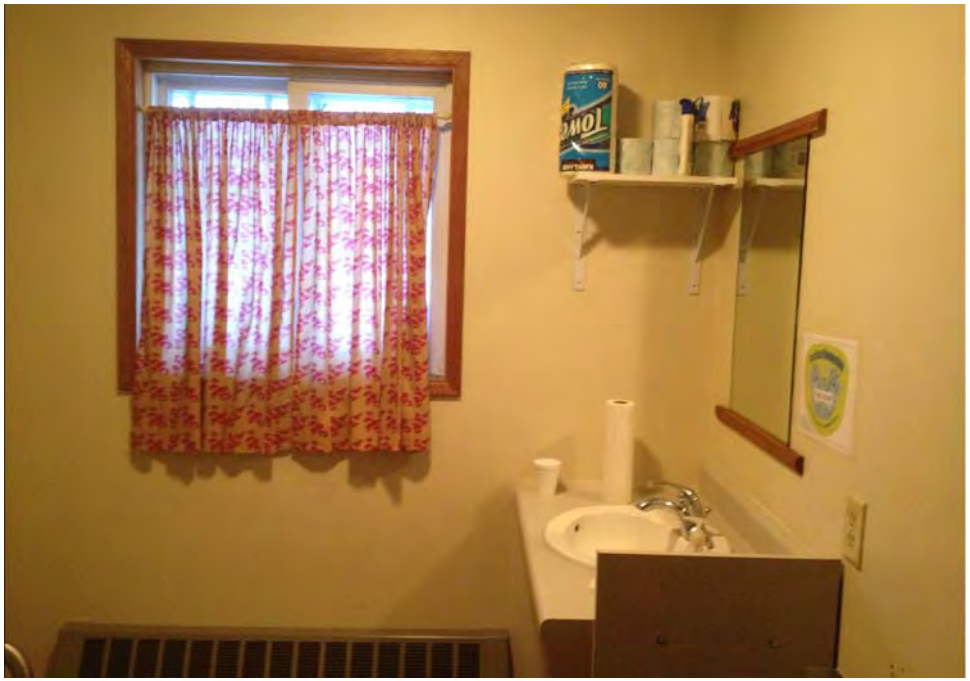


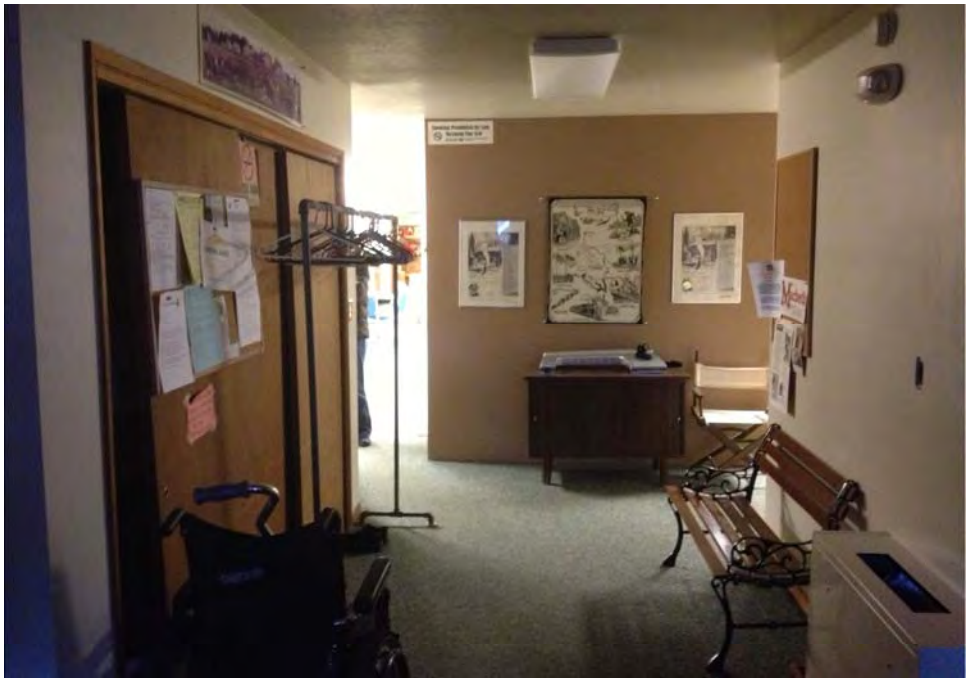
February 2002
In
Memory
of
Ted Gregg
9/27/13-2/1/02
For His
Leadership & Dedication
To
Haines Senior Center
And To Haines
Pioneers of Alaska
A True Pioneer
Artist, Visionary & Friend


EXIT

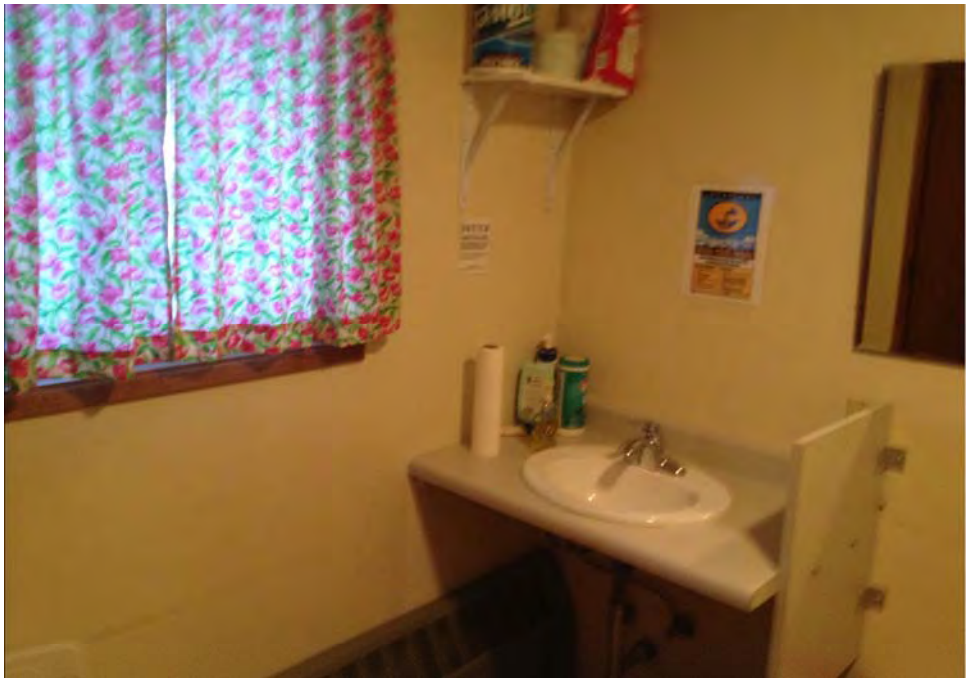
Men
CAUTION
WET
FLOOR

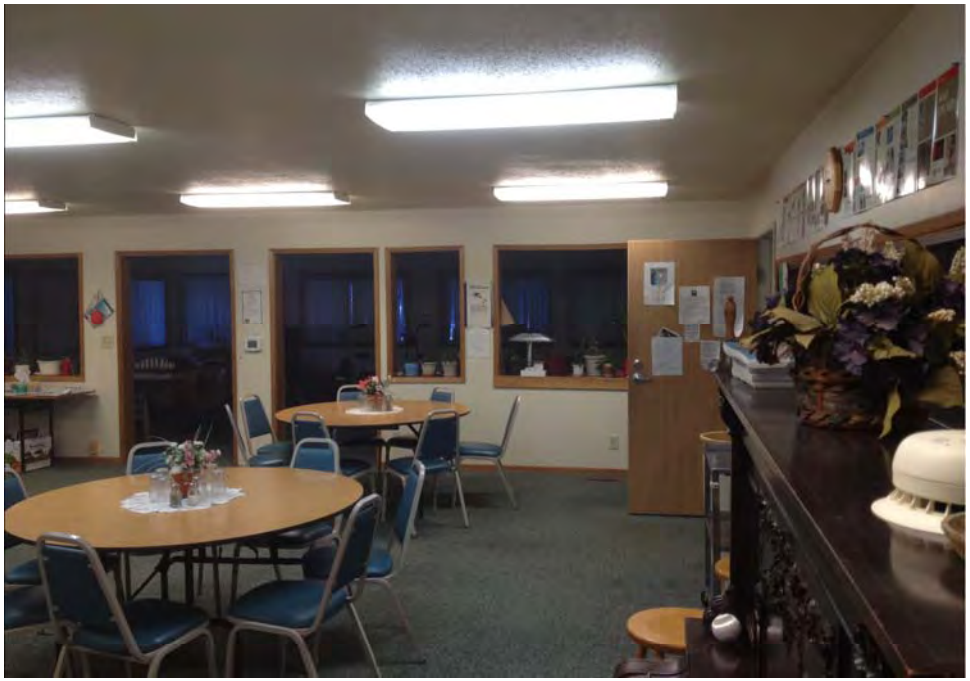
EXIT



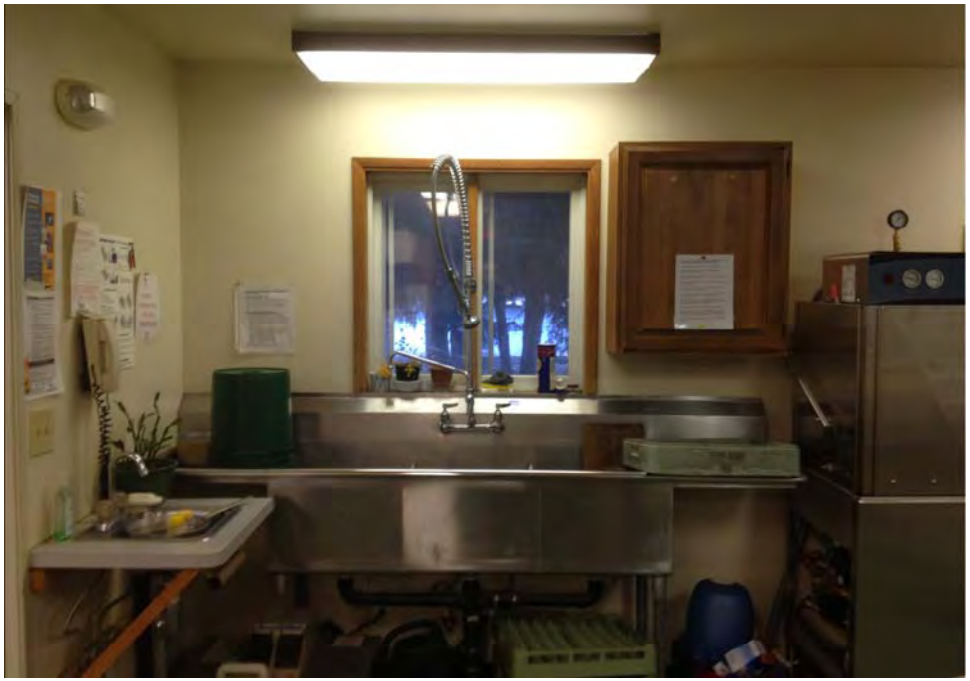


EXIT



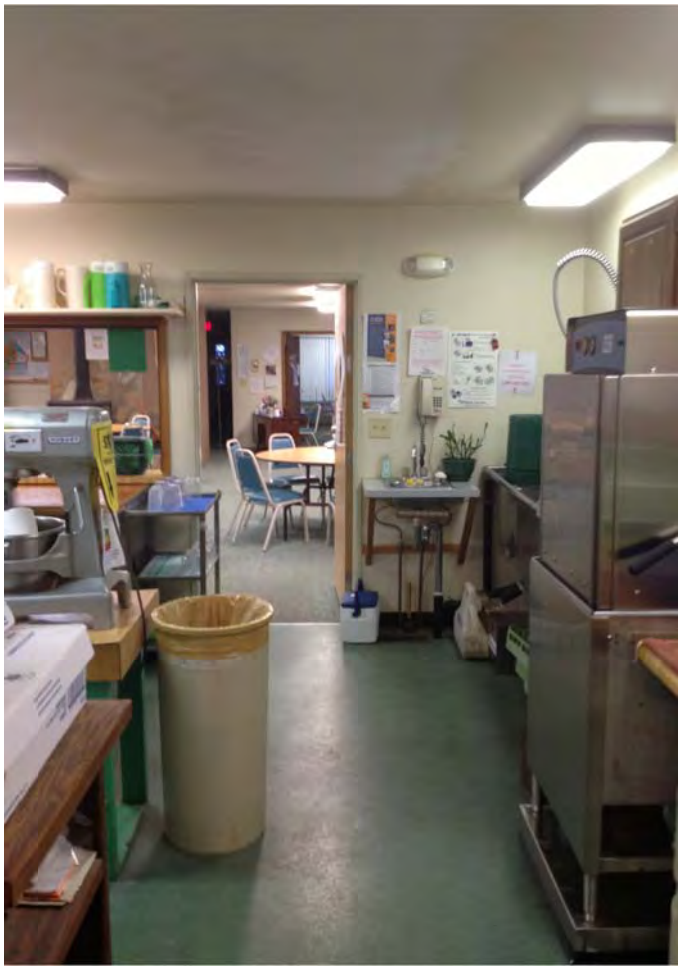


THE LAW



EXIT

THE LAW
HOBART

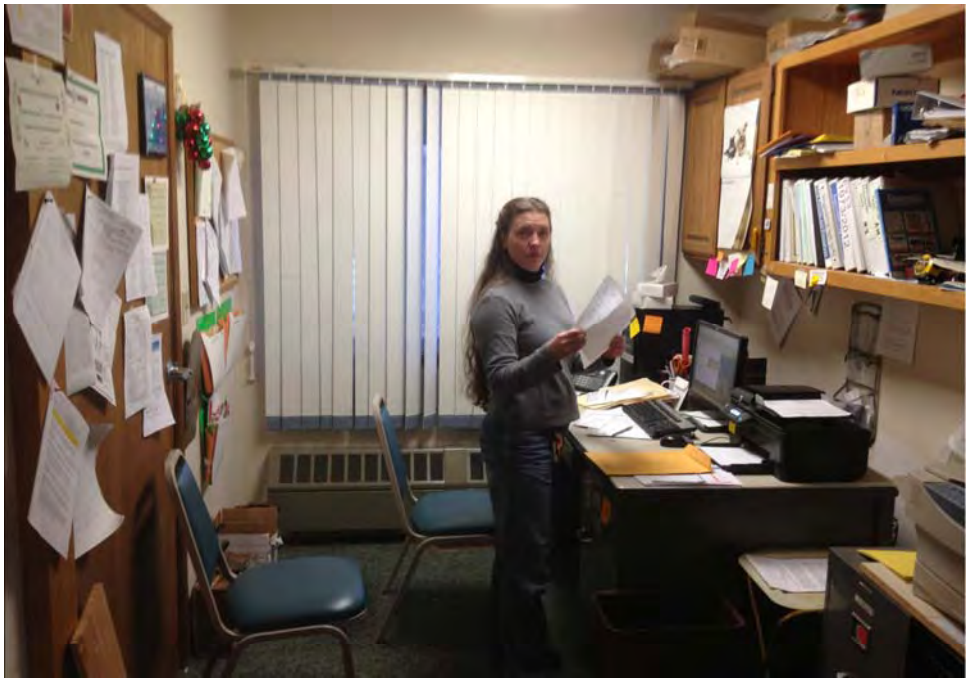


AutoPellet

STYRO

AutoPellet
MESYS

MESYS

EXIT

EXIT