MEMORANDUM

To: Mayor Westover and Members of the Assembly
Jim Dinley, Municipal Administrator

From: Michael Harmon, P.E. Public Works Director
Stephen Weatherman, P.E, Municipal Engineer
Kelli Cropper, Project Manager (KC)

cc: Jay Sweeney, Finance Director
Tammy O'Neill, Contract Coordinator

Date: January 4, 2012

Subject: Pacific High School Schematic Design Milestone

Background- Project History:

Contractual:

- The State of Alaska, Department of Education & Early Development (EED) approved a grant to the City of Sitka for the renovation of Pacific High School (PHS) with a funding split of 65% ($1,736,502.00) from the State and 35% ($935,056.00) from the City of Sitka (CBS) in July of 2009.
- In the regular election October 5, 2010, Proposition No. 5 approving the required $935,056.00 CBS match funding for the renovation of Pacific High School from the proceeds from the seasonal 1% sales tax was approved by the voters.
- The Project Agreement for the renovation of Pacific High in the amount of $2,671,558.00 between the EED and the CBS was signed in March of 2011.
- A 'Request for Qualification' (RFQ) for a 'Needs Assessment' and Professional Design Services for the Pacific High School Building was published by the CBS.
- The Consultant Team headed by the Architectural Firm, McCool Carlson and Green (MCG) was selected.
- Award of the Contract to MCG in the amount of $220,215.00 for Professional Design Services for the Pacific High School Renovation was approved by the Assembly at the June 28, 2011 Assembly Meeting.

Process:

- July 2011 the Needs Assessment and Schematic Design Phase began with a two day site visit 'project kick off'. Meetings were held to organize and structure the Building Design Committee, define roles, and address preliminary educational programmatic issues. Day two included meeting with the full design team onsite at PHS, where they

were measuring, documenting, and evaluating the physical conditions of the Pacific High School Building.

- August 2011 the Building Design Committee (BDC) was formed from teachers, past students, community members, a School Board Member, and SSD/CBS staff.
- The Needs Assessment report was completed at the end of August.
- Meetings: September 2011 through early December 2011 six (6) Building Design Committee meetings, multiple student workshops, as well as multiple Educational Program mini-workshops were held.
- Multiple conceptual designs for the renovation of Pacific High School were developed by the Architects during the initial design process. These design options were developed from the comments and information shared by the BDC and students, along with the physical and budgetary parameters of the project. These options were evaluated, and refined though the multiple meetings until a consensus was reached and a preferred option was chosen.
- October 19, 2011 an advertised Evening Public Meeting was held to review the proposed schematic design for Pacific High School and receive any additional comments from the community before finalizing the preferred schematic plan for a professional cost estimate.
- November 2011 a Professional Cost Estimate was prepared for the preferred schematic design and it was over the construction budget for the project. The Architects modified the plan reducing the project scope to get the cost estimate within the construction budget.
- The Architects met with the Building Design Committee and presented the recommended design changes required by the project budget and collected feedback from the group resulting in additional plan modifications and a 'final' proposed schematic design with a cost estimate within the project construction budget.
- December 12, 2011 the proposed 35% or Schematic Design was presented to the School Board and it was unanimously approved.
- December 13, 2011 the proposed Pacific High School Schematic Design was presented to the Assembly and the Community.

Analysis:

The proposed schematic design for the renovation of Pacific High School is the direct result of the process described above. The plan responds to the needs expressed by the students and teachers, the users of the building, and to the project budgetary constraints.

The existing 5,000 square foot building cannot be expanded with the current grant funding (65%/35% split). For reasons that were expressed during the Workshops, the proposed plan uses the roof of the renovated building. First the usable space is important and needed and the connection to the Career Center is very important, because it allows for the Pacific High Kitchen to be relocated to the Career Center, thus freeing up much needed space inside Pacific High for educational purposes.

It is also the goal for the project to take advantage of every potential opportunity in making the limited space(s) 'work hard' or have multiple purposes. It is a goal to keep the building as flexible as possible for proposed uses and for future modifications and potential expansion.

The design phase between 35% and 65% is called 'Design Development'. This is the phase where the 35% schematic design is further developed and refined. Materials are chosen and cost estimates are once again prepared. This is the phase where a roofing system, as well as the structure is vetted. Each building is particular, to its use, size, and location. In this particular instance the right low slope roof/roof deck is the best design solution. Whatever roof system is eventually specified, it will be a proven product that we have vetted and it will perform as we require.

Fiscal Note:

The total funding for the Pacific High School Remodel Project is $2,671,558.00 and is funded 65% by a grant of $1,736,502.00 from the State of Alaska Department of Education & Early Development (EED) and by a 35% City of Sitka (CBS) match of $935,056.00. The CBS match is from proceeds from the seasonal 1% sales tax, which was approved by the voters October 5, 2010, in the regular election. Currently the project is on budget.

Recommendation:

Approve the 35% Schematic Design to go forward through the 65% Design Development phase with the proposed low slope roof and roof deck.

McCOOL CARLSON GREEN
ARCHITECTURE • INTERIOR DESIGN • SPACE PLANNING

Pacific High School Renewal

Project Update - Roof Alternates

Project Overview

Pacific High School (PHS) is Sitka's optional high school, serving grades 9-12. The school has a population of approximately 36 students and 6 staff.
PHS is located across from the harbor on Lincoln Street in a building constructed in 1957 which was remodeled in 1993 to create the current configuration. The building has significant structural, building systems and programmatic deficiencies which led the school to seek state funding for renewal.

In October 2010 the Sitka voters approved Proposition 5, to fund a State grant match to remodel PHS. This approval of funding allowed the School District to accept a grant from the Alaska Department of Education and Early Development (DEED). In March 2011 the Sitka School District, City of Sitka and DEED executed a grant agreement to fund 65% of the Pacific High School Renewal project.

Subsequently, McCool Carlson Green Architects (MCG) was selected to lead the building assessment and remodel design efforts. To date, MCG, their design team and the Building Design Committee have completed the following:

- Completed a building investigation to identify building deficiencies and recommend capital improvements. This report included design narratives, as-built drawings and a concept level cost estimate for renewal of the school.
- Formed a Building Design Committee consisting of school staff, students, parents, community representatives, City of Sitka project managers and the architects. This committee has held 6 meetings to review, critique and develop the current schematic design plans.
- Produced a 35% schematic level set of design drawings with several design alternates identified.
- Produced a schematic level cost estimate. This estimate was over budget and the design team thoroughly reviewed and qualified the estimate. Several adjustments to the design were made in consultation with the City of Sitka and the BDC to bring the project back within budget.
- Arrived at a consensus with the BDC on a schematic design that is within budget and meets the school's educational program needs while providing an efficient, durable community asset.

Project Update

On December 12, 2011 a 35% Schematic Design and Cost Estimate were presented to the Sitka School Board. The design was unanimously approved by the School Board to move forward through Design Development.

On December 13, 2011 MCG presented the Pacific High School 35% design to the Assembly. The focus of this presentation was a project update and review of the estimated construction costs.
During the Dec. 13th meeting some concerns were raised by the Assembly regarding the proposed roof design which is a low-slope, ballasted roof accessible by stairs from within the school and useable as a deck or roof garden. The main concern being that a low-slope roof is not customary building practice in Sitka where the climate is one of the rainiest in the nation (86 in. annual rainfall).

Alternate Roof Designs

In response to these concerns the City and Borough of Sitka (CBS) directed MCG to investigate alternate designs eliminating the roof deck and incorporating a sloped metal roof.
One alternate design includes stair access into the attic space and a connection to the Voc-Ed building to the north.
The second alternate design does not include the stair or covered connection to the Voc-Ed building. This design would require PHS students and staff to walk outdoors up the existing sidewalks to access the neighboring building.

Ballasted Roof Precedents

CBS also directed MCG to further investigate the appropriateness of low-slope, ballasted roofs in Sitka's climate. A couple recent Alaskan precedents are worth noting:

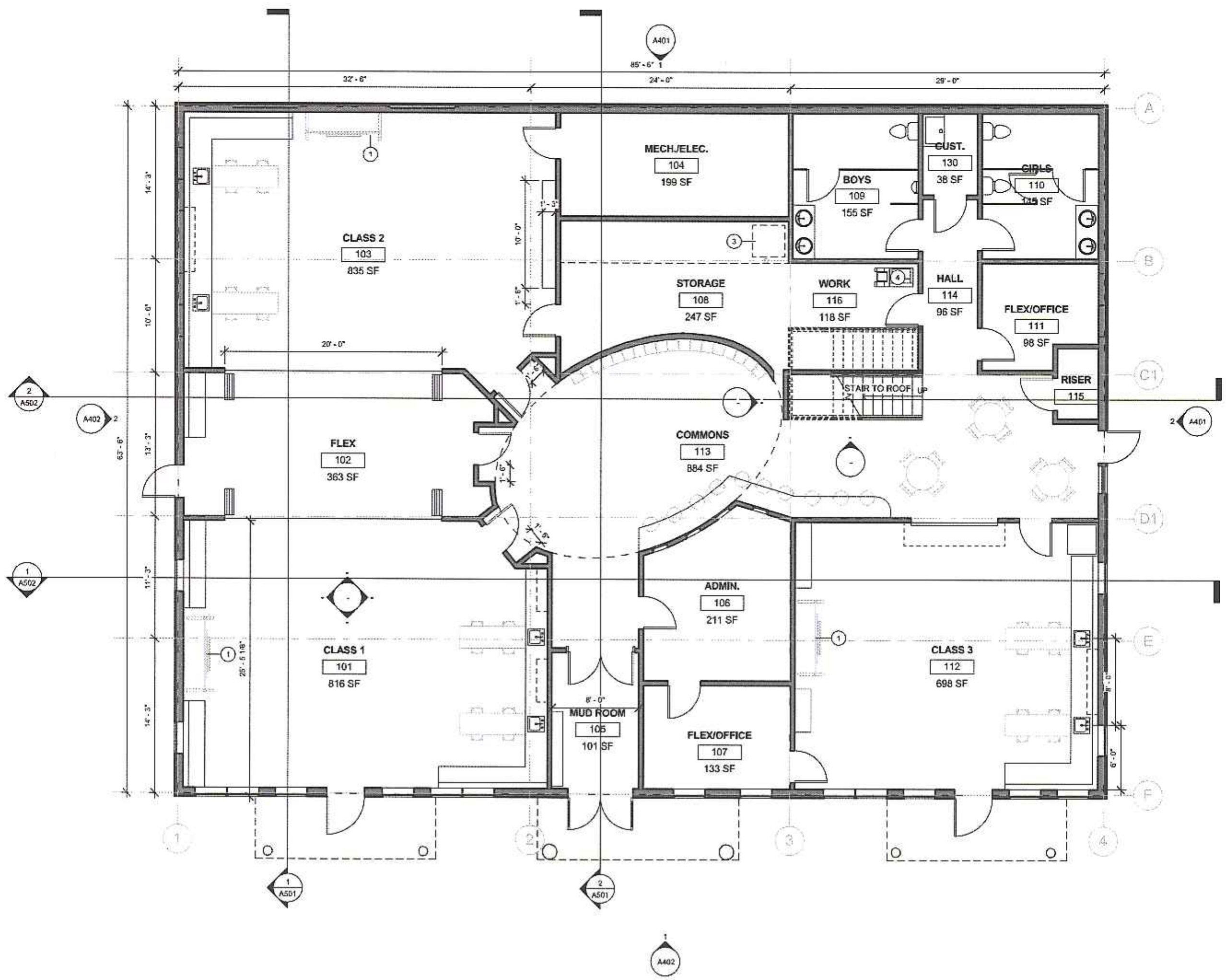
- Juneau Transit Center, Juneau, AK (58 in. annual rainfall) - completed in 2010, this project features a low-slope ballasted roof featuring a 4" thick modular green roof.
- Mt. Eccles Elementary School Gym Addition, Cordova, AK (89 in. annual rainfall) - completed in 2010, this school features rubber playtile pavers to create an outdoor play area on the school roof. The roof insulation below the rubber tiles slopes to a gutter and drain on one edge of the roof.

Design Drawings

Please see the attached drawings illustrating the current 35% design with roof deck and the 2 alternate sloped roof designs.

Pacific High School Renewal - Schematic Design Rendering

McCool Carlson Green Architects
www.mcgalaska.com



FLOOR PLAN
3/16" = 1'-0"

GENERAL NOTES

SHEET NOTES

1. OWNER-SUPPLIED MOBILE INTERACTIVE BOARD; NOT IN CONTRACT
2. N/A
3. COMMUNICATIONS RACK LOCATION; REFER TO ELECTRICAL
4. COPIER/PRINTER BY OWNER

PLAN LEGEND

(1) SHEET NOTE

Room name
101
150 SF
ROOM TAG WITH NAME, NUMBER, AND AREA

McCOOL CARLSON GREEN
ARCHITECTURE INTERIOR DESIGN SPACE PLANNING
201 PHOTO AVENUE, ANCHORAGE, AK (907) 563-8474

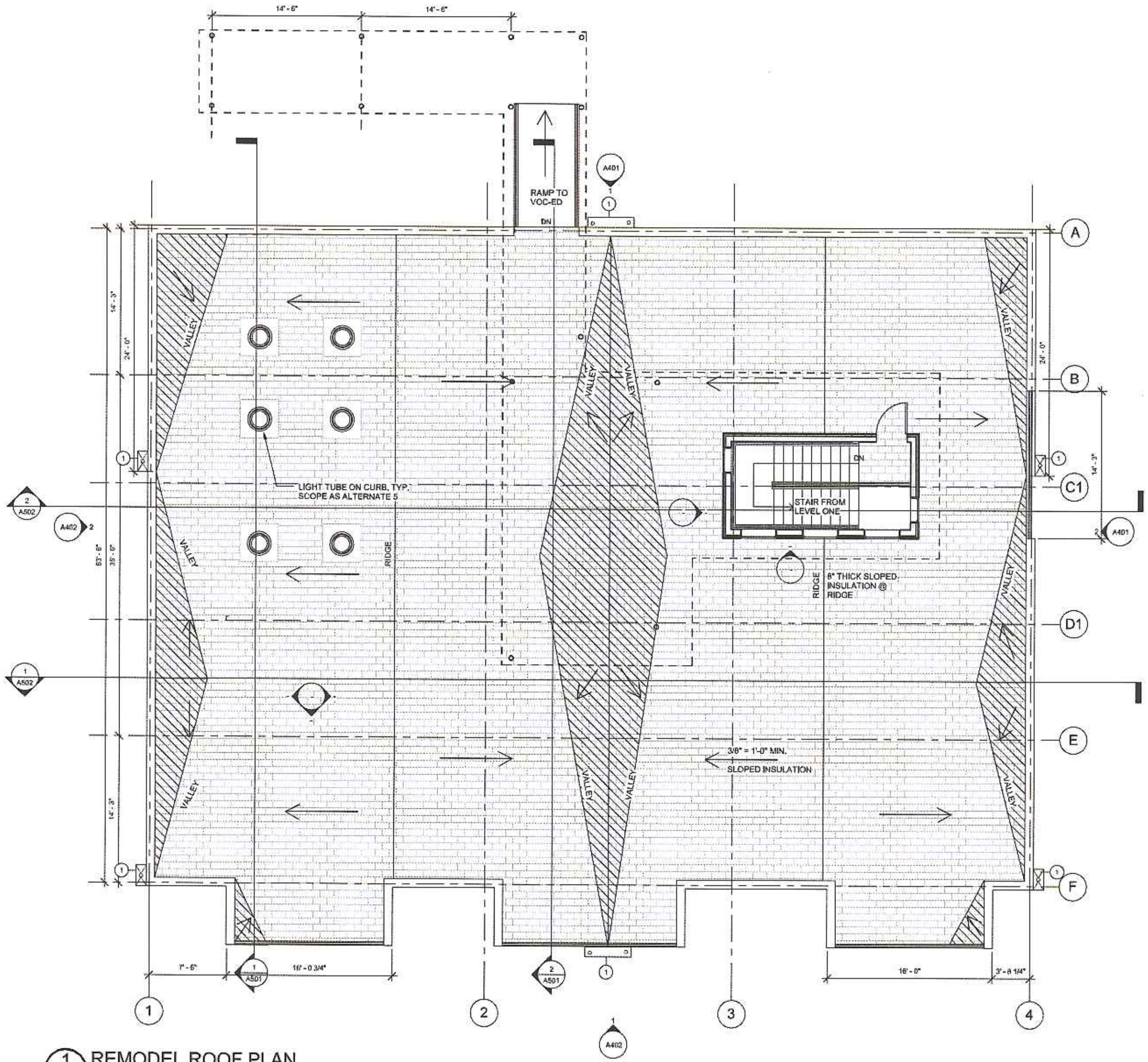
JOB NO.	2011020
PROJ. MGR.	Designer
DRAWN BY	Author
DATE	1-20-2012
REVISIONS	
REVIEWED BY	Checker

PACIFIC HIGH SCHOOL RENEWAL
SITKA, ALASKA
SITKA SCHOOL DISTRICT

FLOOR PLAN

SHEET NO.
A201

65% DESIGN DEVELOPMENT



1 REMODEL ROOF PLAN
A202 3/16" = 1'-0"

GENERAL NOTES

SHEET NOTES

1. SHEET METAL SCUPPER AND DOWNSPOUT

ROOF LEGEND

- METAL ROOFING
- ROOF PAVERS
- DIRECTION OF SLOPED INSULATION SLOPE BELOW PAVERS
- CROSS-HATCHED AREAS INDICATE SLOPED INSULATION CRICKET BELOW PAVERS

JOB NO. 2011020
PROJ. MGR. Designer
DRAWN BY WVZ
DATE: 1-20-2012
REVISIONS
REVIEWED BY:
Checker

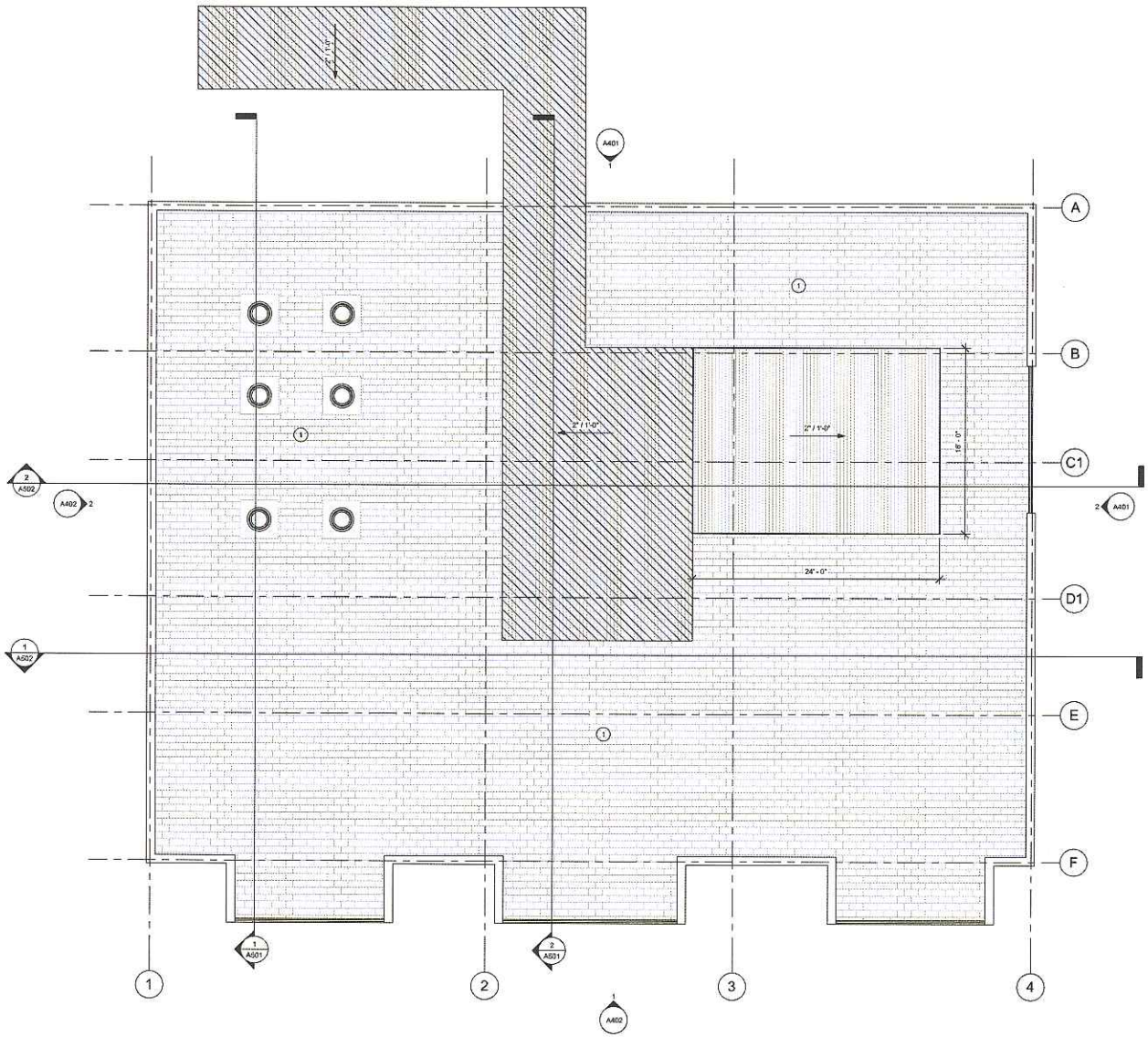
McCOOL CARLSON GREEN
ARCHITECTURE INTERIOR DESIGN SPACE PLANNING

PACIFIC HIGH SCHOOL RENEWAL
SITKA, ALASKA
SITKA SCHOOL DISTRICT

ROOF PLAN

65% DESIGN DEVELOPMENT

SHEET NO.
A202



1 A203 HIGH ROOF
3/16" = 1'-0"

GENERAL NOTES

SHEET NOTES

1 REFER TO ROOF PLAN FOR MORE INFORMATION

ROOF LEGEND

- METAL ROOFING
- ROOF PAVERS
- METAL ROOFING; CROSS-HATCHED HIGH ROOF AS PART OF ALTERNATE

McCOOL CARLSON GREEN
ARCHITECTURE INTERIOR DESIGN CITY & REGIONAL PLANNING
201 E. 9TH ST. SUITE 300 ANCHORAGE, AK (907) 258-4174

JOB NO. 2010020
PROJ. MGR. Designer
DRAWN BY Author
DATE: 1-20-2012
REVISIONS

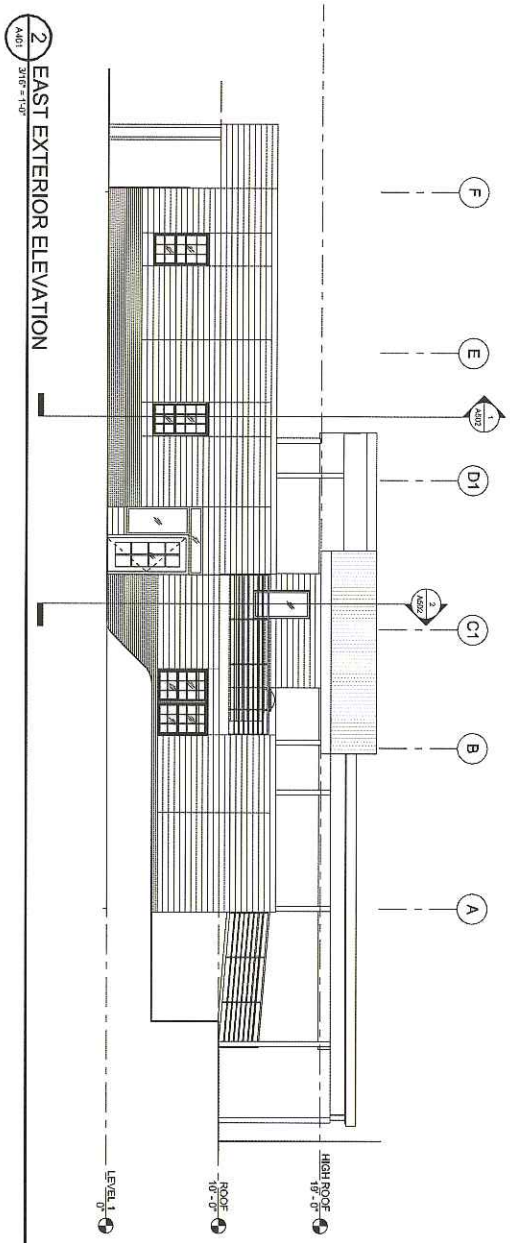
Checker

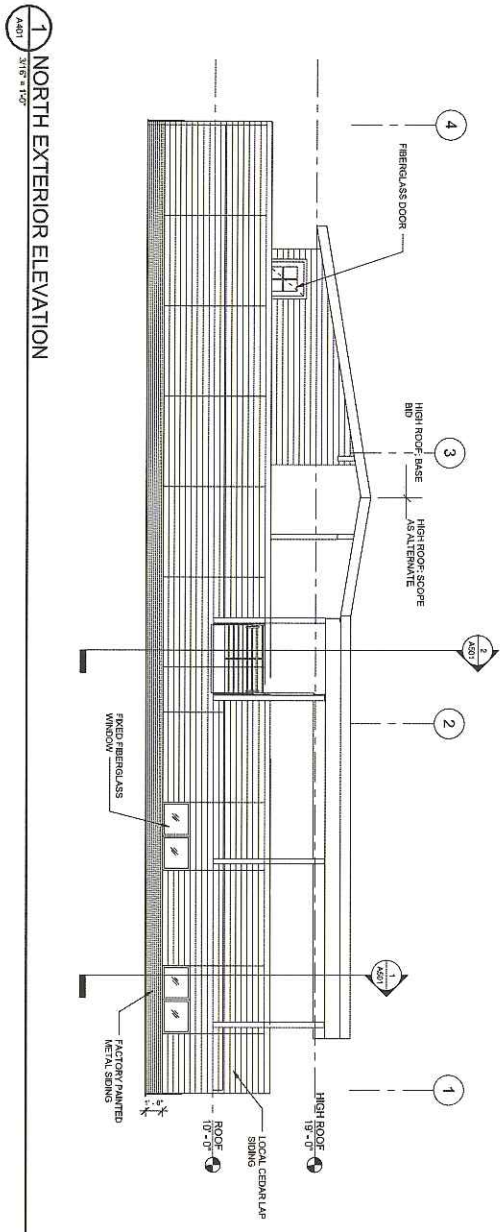
65% DESIGN DEVELOPMENT

SHEET NO. A203

PACIFIC HIGH SCHOOL RENEWAL
SITKA, ALASKA
SITKA SCHOOL DISTRICT

HIGH ROOF PLAN





65% DESIGN DEVELOPMENT

SHEET NO.
A401

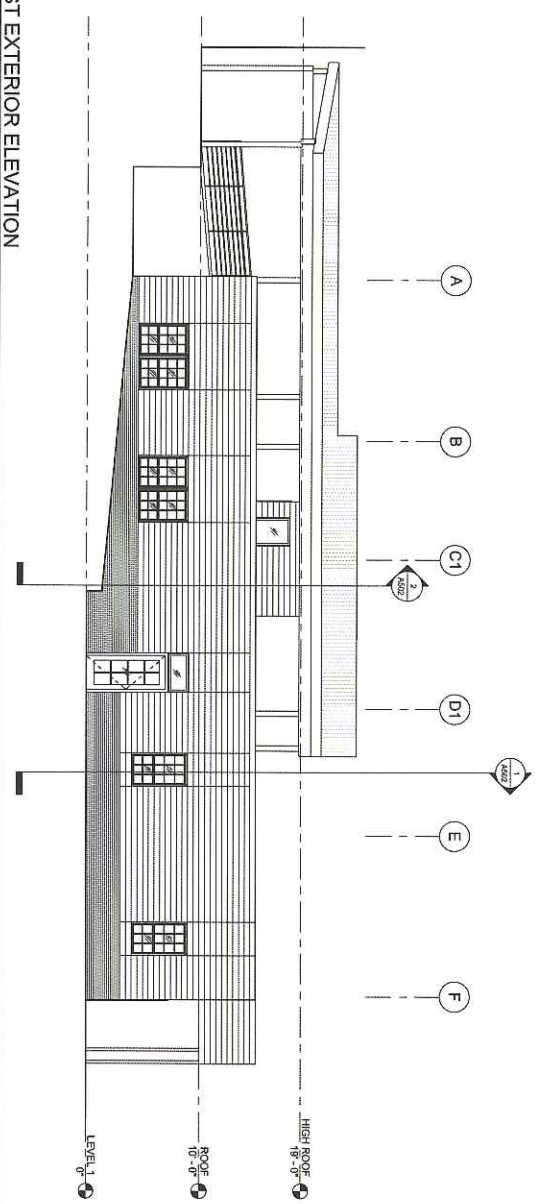
PACIFIC HIGH SCHOOL RENEWAL
SITKA, ALASKA
SITKA SCHOOL DISTRICT

EXTERIOR ELEVATIONS

McCOOL CARLSON GREEN
ARCHITECTURE INTERIOR DESIGN SPACE PLANNING
301 PHOTO AVENUE, ANCHORAGE, AK (907) 561-1674

JOB NO. 2011020	REVIEWED BY:
PROJ. MGR.: Designer	
DRAWN BY: WVZ	
DATE: 1-20-2012	Checker
REVISIONS	

2 A402 WEST EXTERIOR ELEVATION
3/16" = 1'-0"



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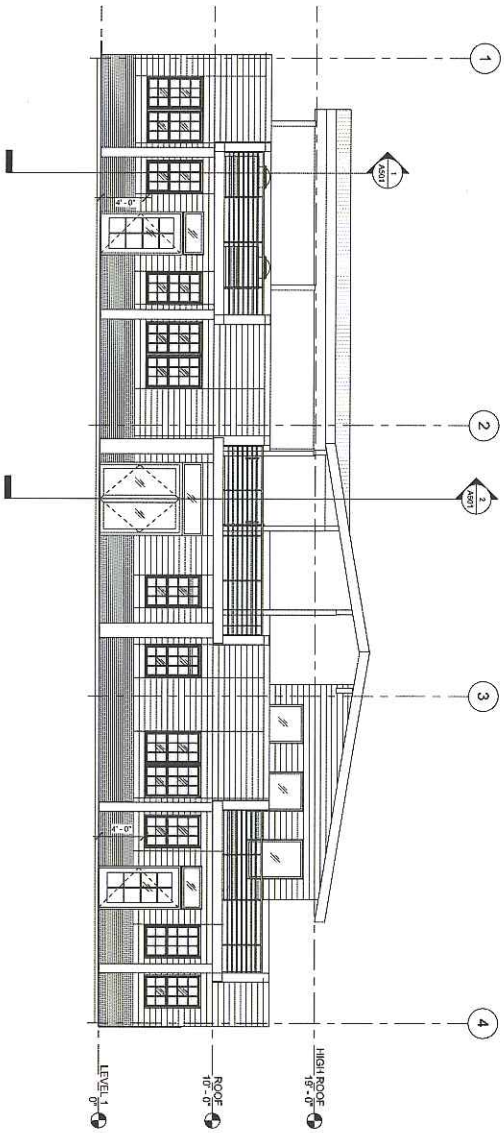
3/16" = 1'-0"



65% DESIGN DEVELOPMENT

SHEET NO.
A402

PACIFIC HIGH SCHOOL RENEWAL
SITKA, ALASKA
SITKA SCHOOL DISTRICT

EXTERIOR ELEVATIONS

McCOOL CARLSON GREEN
ARCHITECTURE INTERIOR DESIGN SPACE PLANNING
301 PHOTO AVENUE ANCHORAGE AK (907) 563-8474

JOB NO. 2011020	REVIEWED BY:
PROJ. MGR. Designer	
DRAWN BY: Author	
DATE: 1-20-2012	Checker
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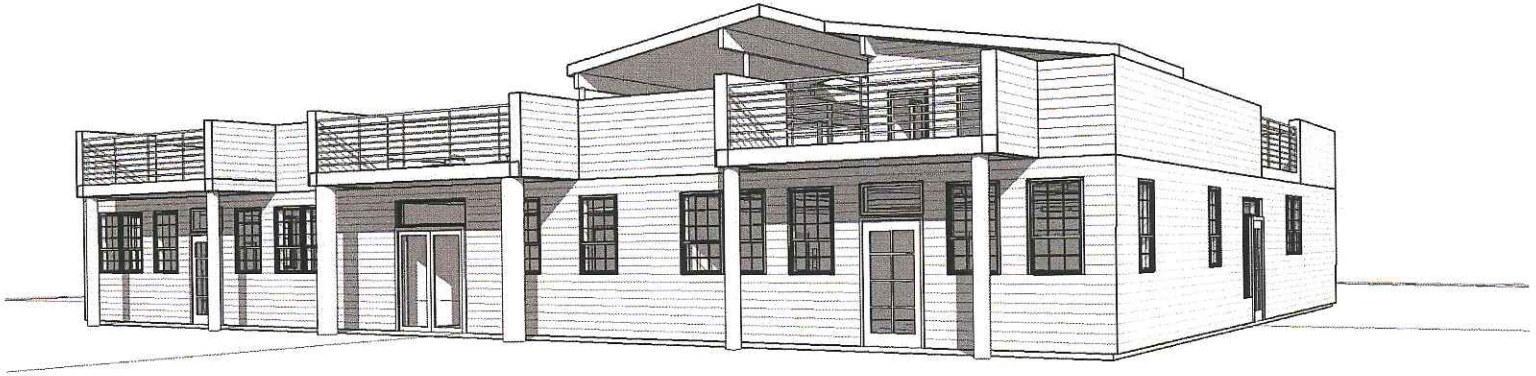
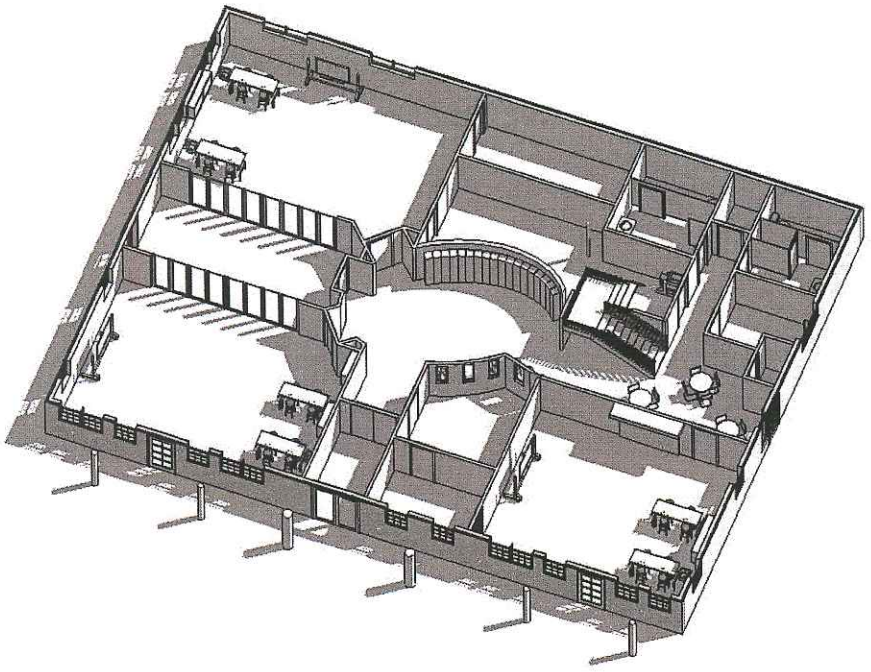
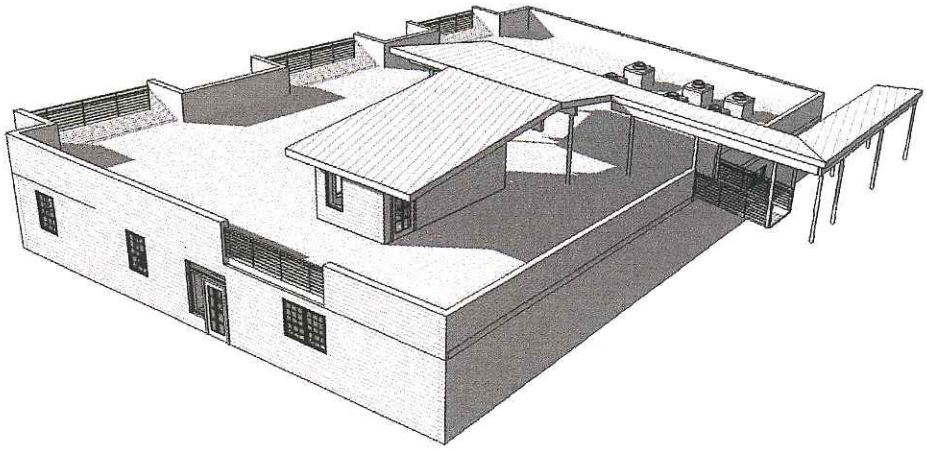
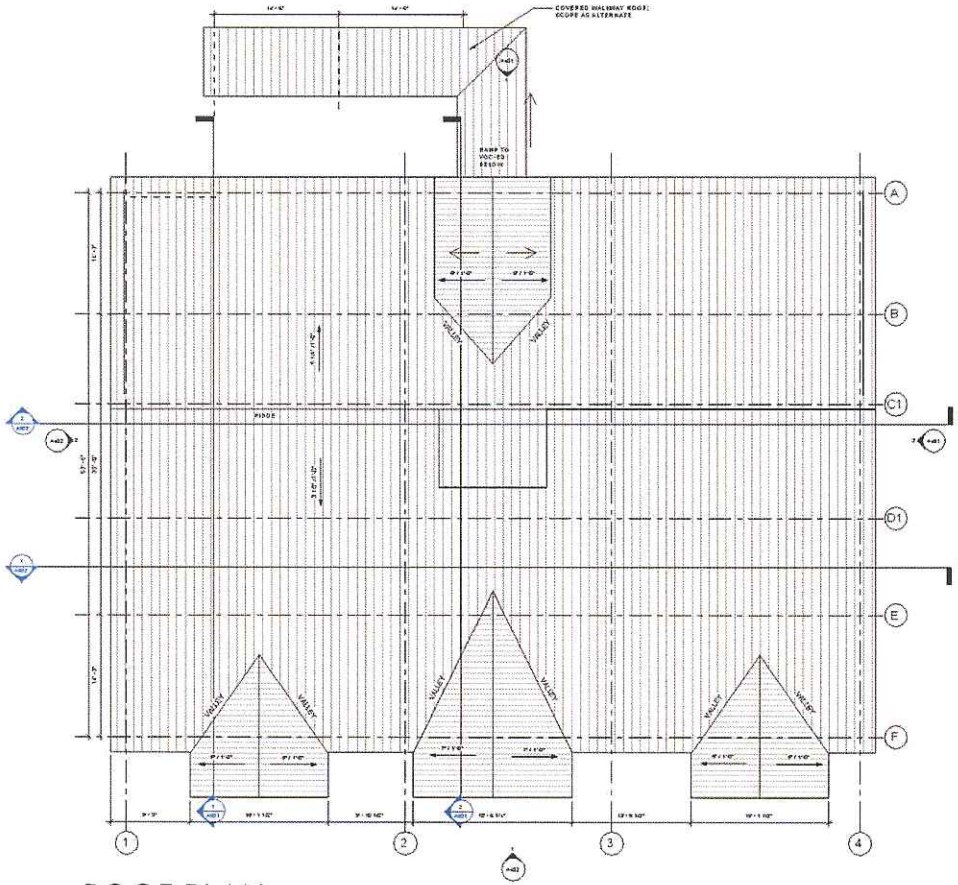




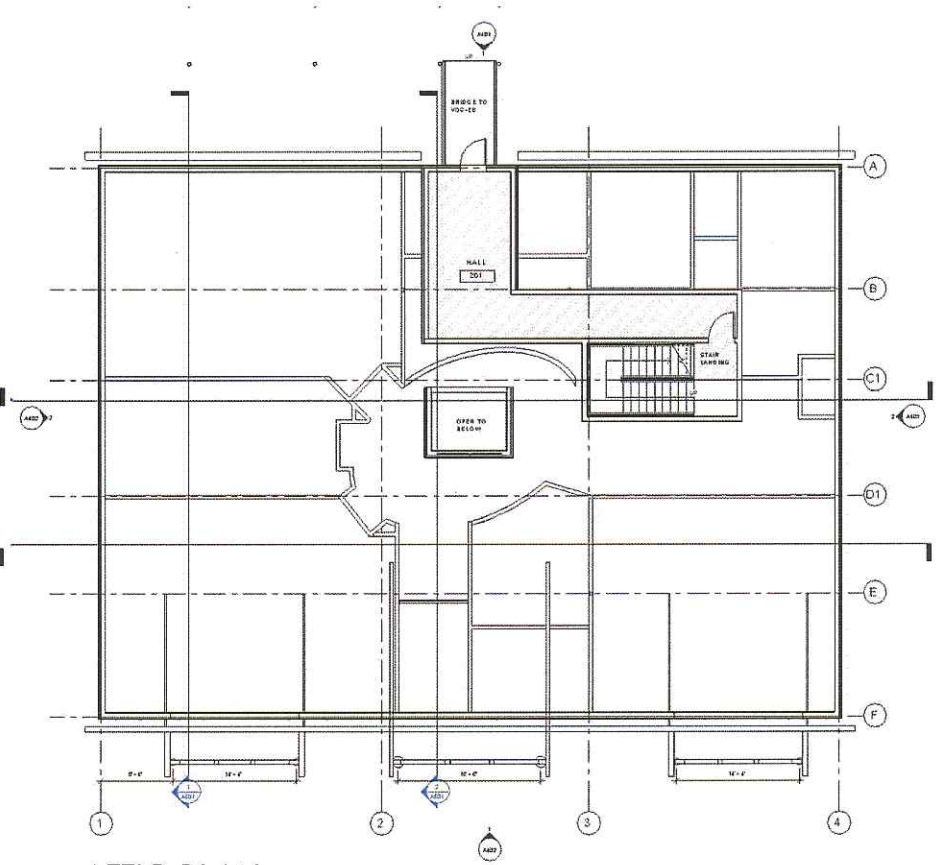


Pacific High School Renewal - Sloped Roof Alternate Rendering

McCool Carlson Green Architects
www.mcgalaska.com



ROOF PLAN



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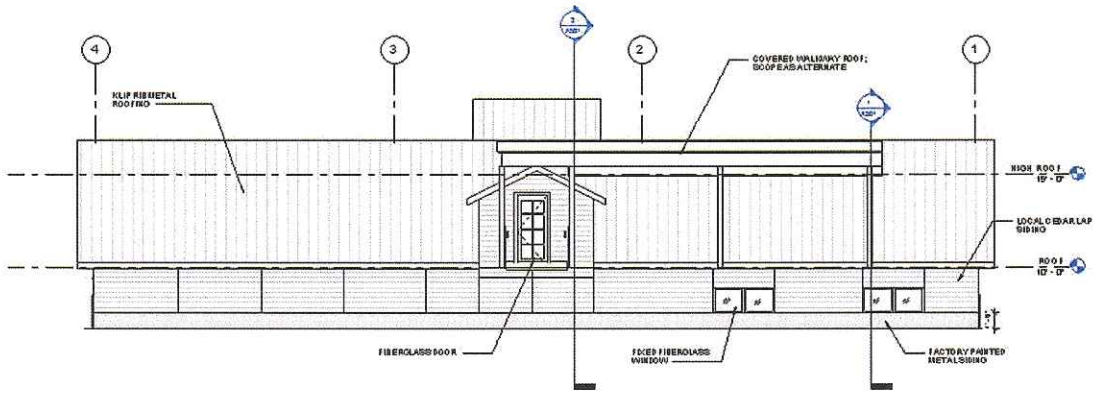
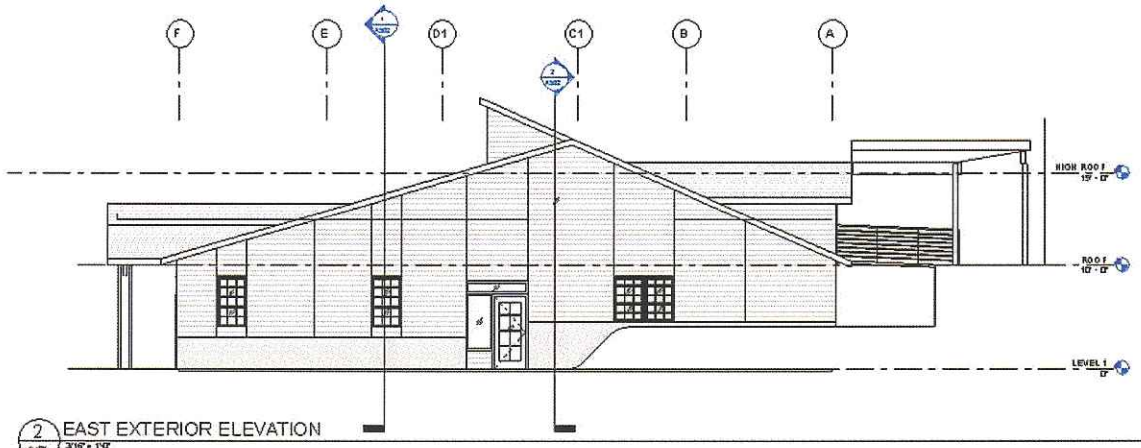
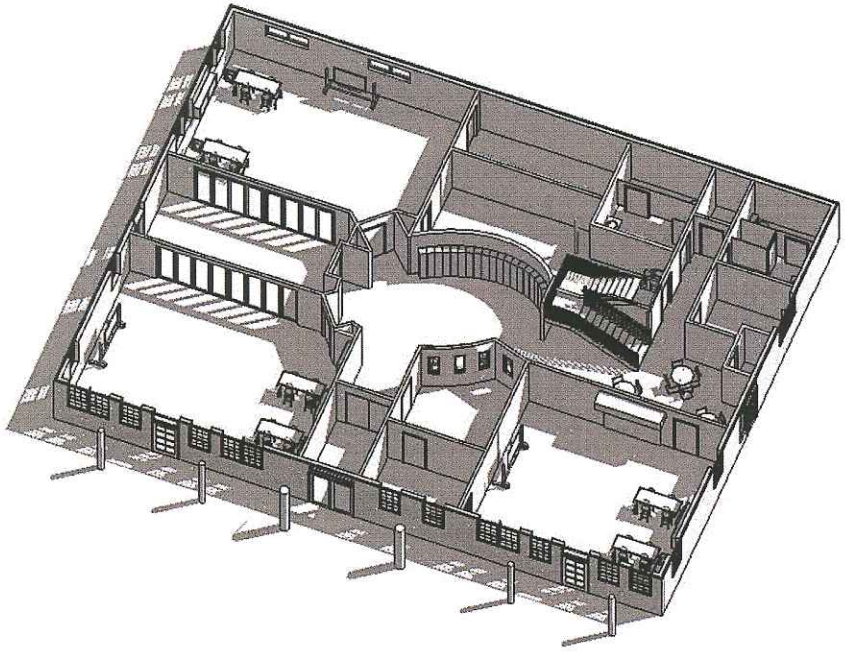
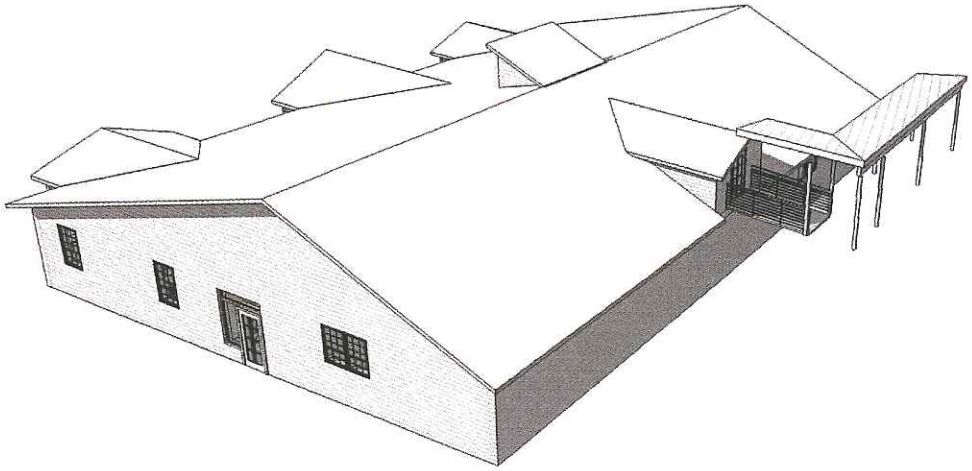


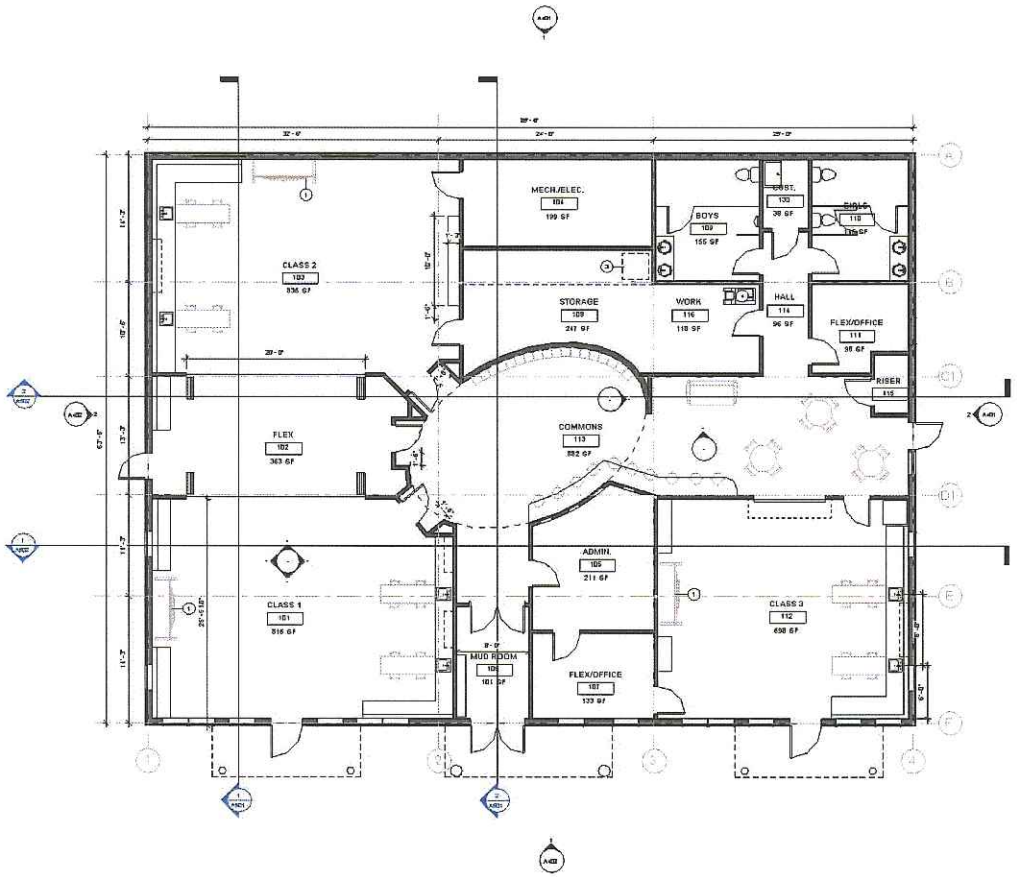
1 NORTH EXTERIOR ELEVATION
A401 3/16" = 1'-0"



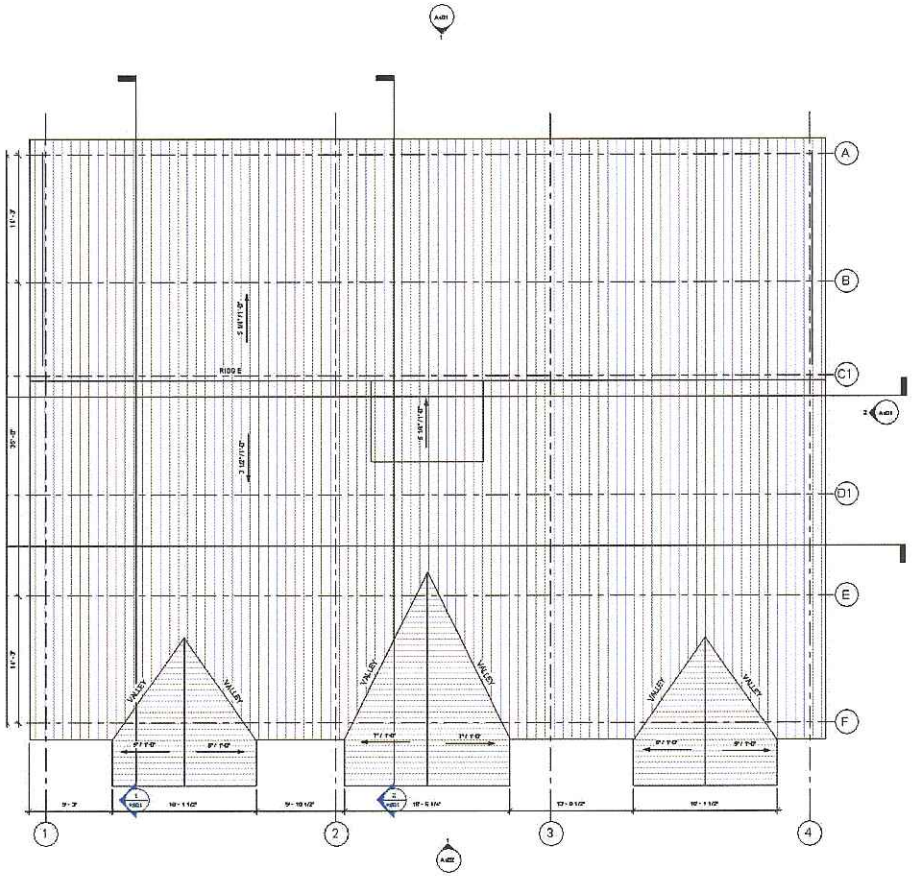
2 EAST EXTERIOR ELEVATION
A401 3/16" = 1'-0"



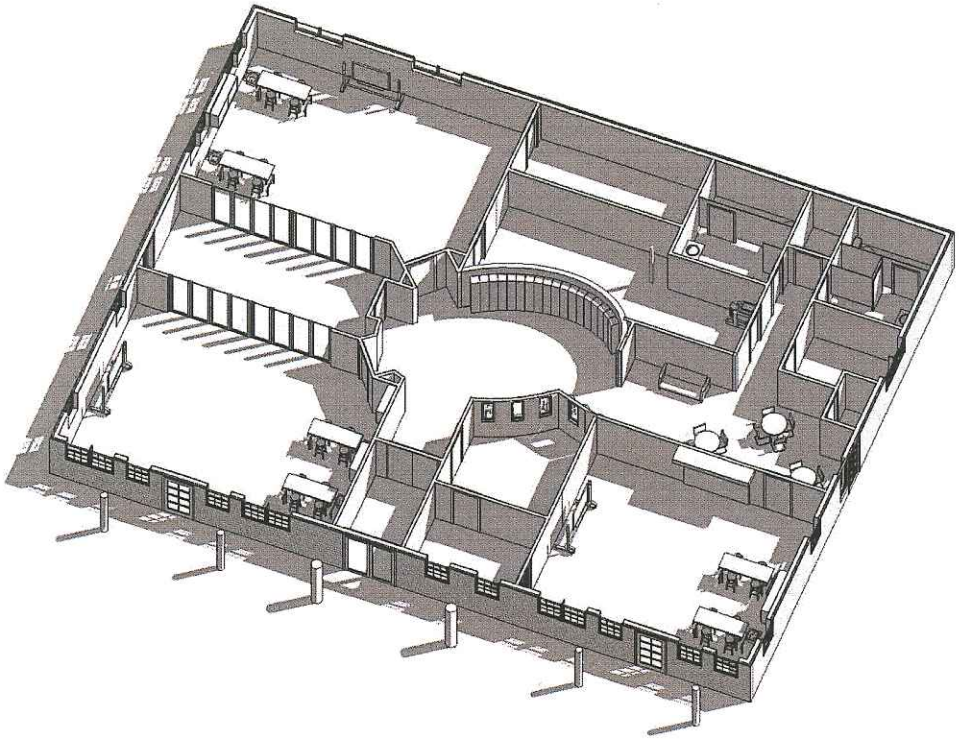


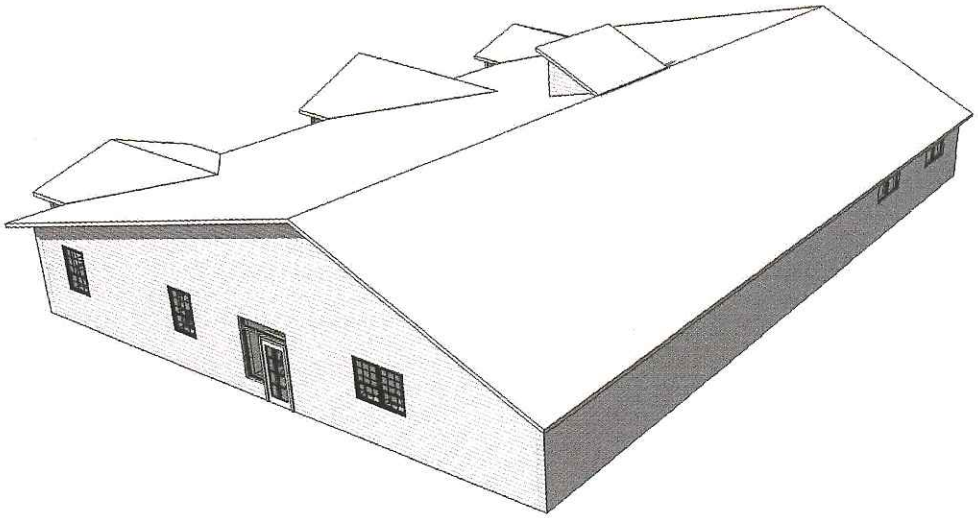


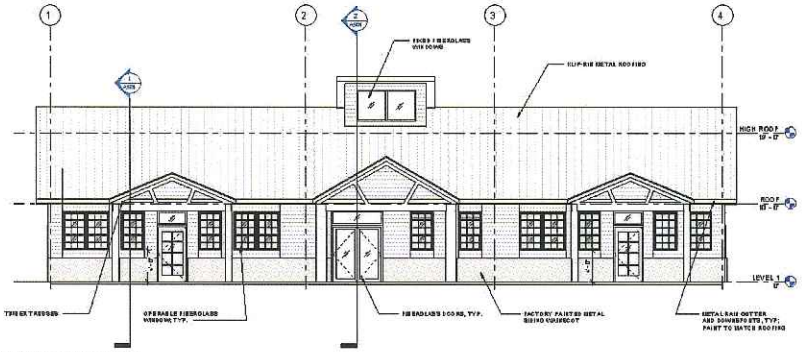
FLOOR PLAN



ROOF PLAN







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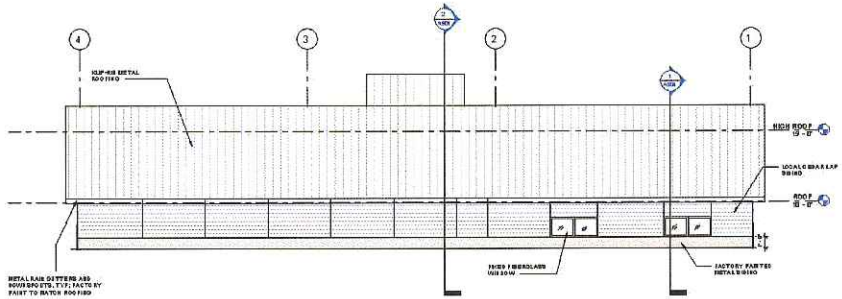

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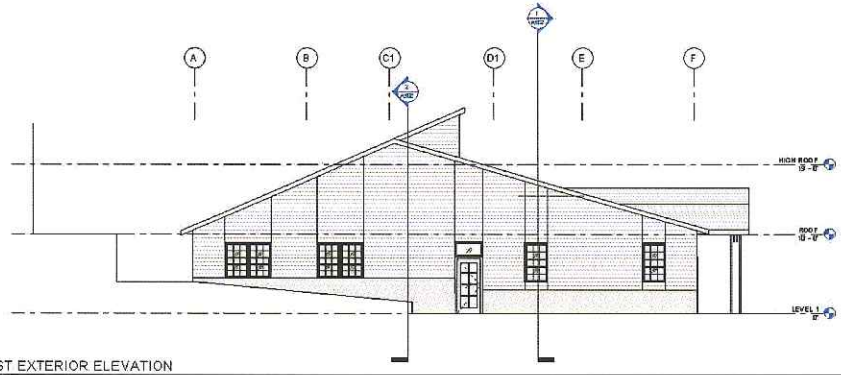
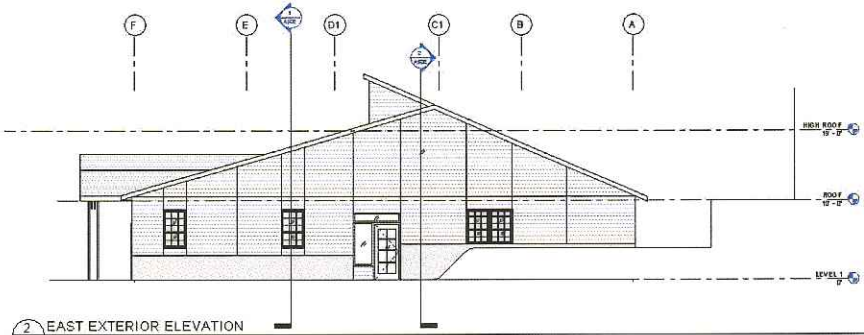


2 WEST EXTERIOR ELEVATION



2 EAST EXTERIOR ELEVATION