HERC TASK FORCE
450 STERLING HWY
HOMER, ALASKA

JUNE 26, 2018
TUESDAY, 3:00 PM
HERC BUILDINGS
(WOODSIDE ENTRANCE)

NOTICE OF MEETING

WORKSESSION AGENDA

1. **Call to Order – HERC Buildings Walk-Thru (use Woodside entrance)**

2. **Memorandum from Deputy City Planner Re: June 26th Work Session w/Attachments**
   - **HERC Plans**
   - **2007ECI Hyer Report**

3. **Informational Items**
   a. **2017 HERC Statistics**

4. **ADJOURNMENT NEXT REGULAR MEETING IS SCHEDULED FOR TUESDAY, JULY 10, 2018** at 3:00 p.m. at the City Hall Cowles Council Chambers, 491 E. Pioneer Avenue, Homer, Alaska.

City of Homer
www.cityofhomer-ak.gov

Planning
491 East Pioneer Avenue
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TO: HERC Task Force
FROM: Julie Engebretsen, Deputy City Planner
DATE: June 21, 2018
SUBJECT: June 26th Work Session

I have been busy! Here is a recap of HERC things that happened since the last meeting:

- Building plans for both buildings are provided in this packet. The smaller building is known as HERC 2. The 2007 Report is also attached.
- The work session will also include a walkthrough of HERC 2.
- I met with Chair Slone on future agendas so we have a bit of a roadmap
- I talked with State Fire Marshal Tim Fisher about current occupancy of the HERC. The college had a class B occupancy for the upstairs area. The gym is an A occupancy, and the City is undergoing review for the Zumba room
- I invited Homer Fire Chief Kadel to attend; he will likely be out of town. He also said he is not an expert in the occupancy code area.
- I'm scheduled to meet with Michael Haines about the PARC needs assessment, which ties into task #4, what would it cost to build a new facility that meets recreation needs of the community?
- Communicated with Crisi re; building occupancies and how they work.
- Began tracking down budget information for operating costs
- Researched historical info on land donations for the school site. Information will be provided in the future on the City website.

~ Council decides on Monday whether or not to amend the task force membership

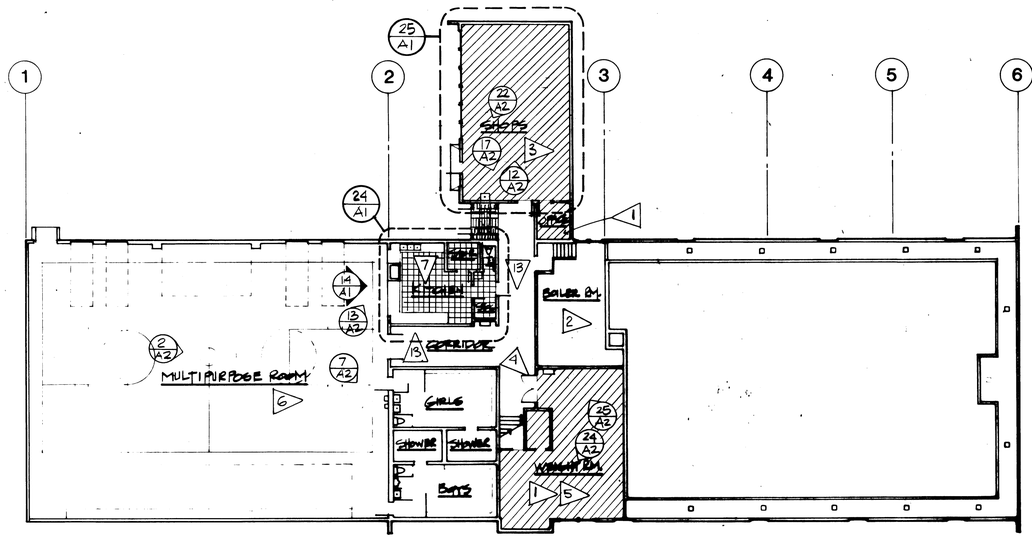
Goal at this work session:

1. Walk through the buildings, become familiar with what we have and its condition today.
2. Think of your questions you would want to ask Stantec (our consultant) or the Fire Marshal, or other info you would like. Email to staff or provide questions in writing to staff. I will organize the questions for the next meeting, and provide what answers I can.

Attachments

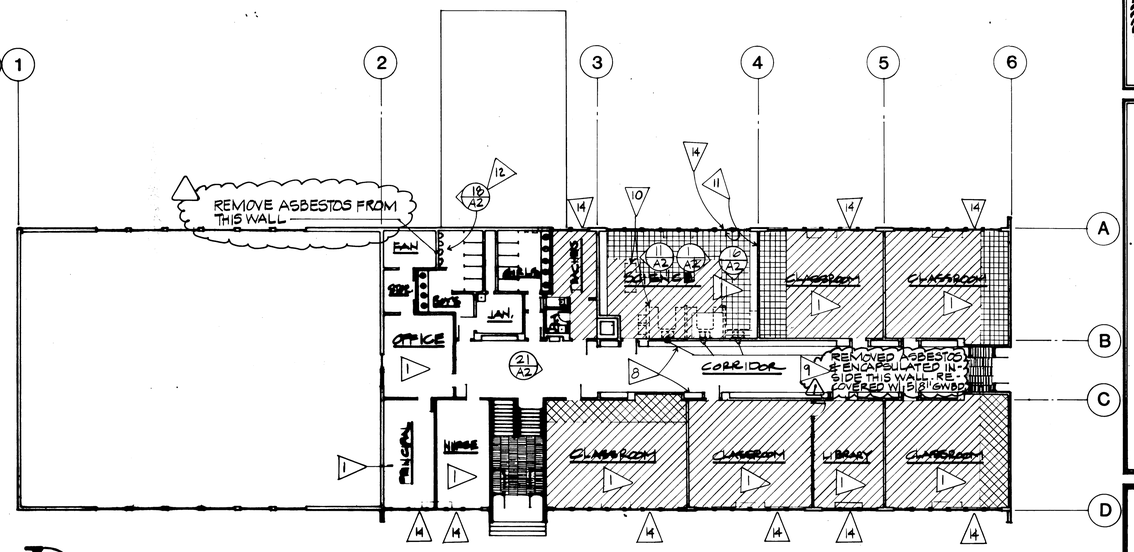
1. HERC building plans

2. HERC 2 Plans
3. 2007 ECI/Hyer Report



EXISTING HOMER MIDDLE SCHOOL • GROUND FLOOR PLAN (12)

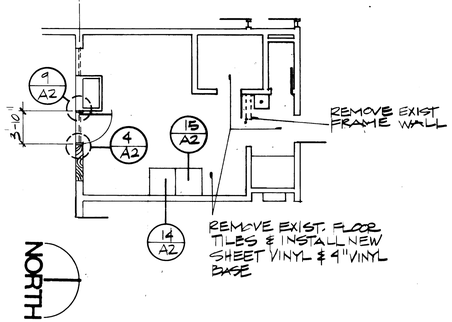
1/16" = 1'-0"



HOMER MIDDLE SCHOOL • FIRST FLOOR PLAN (2)

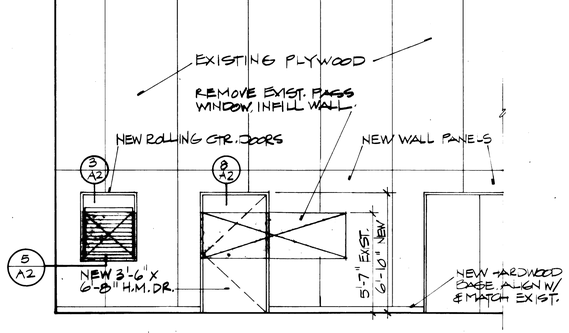
1/16" = 1'-0"

NOTES:
- PAINT EXISTING WALLS & CEILING
- SEE SHEET F1 FOR NEW KITCHEN LAYOUT



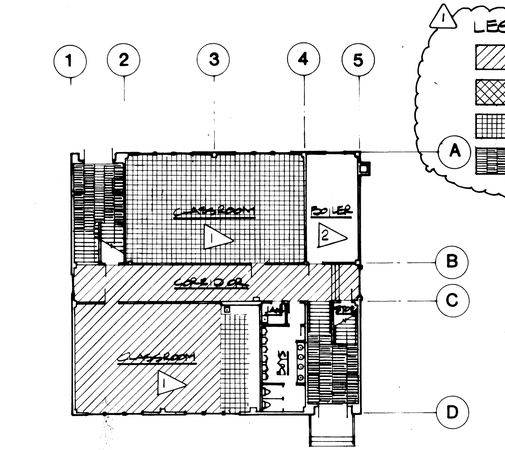
KITCHEN PLAN (24)

1/8" = 1'-0"



N.W. ELEVATION MULTIPURPOSE ROOM (14)

1/4" = 1'-0"

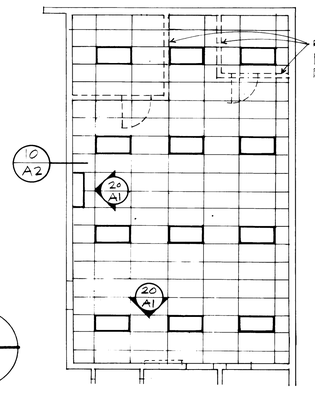


HOMER LOWER SCHOOL GROUND FLOOR PLAN (8)

1/16" = 1'-0"

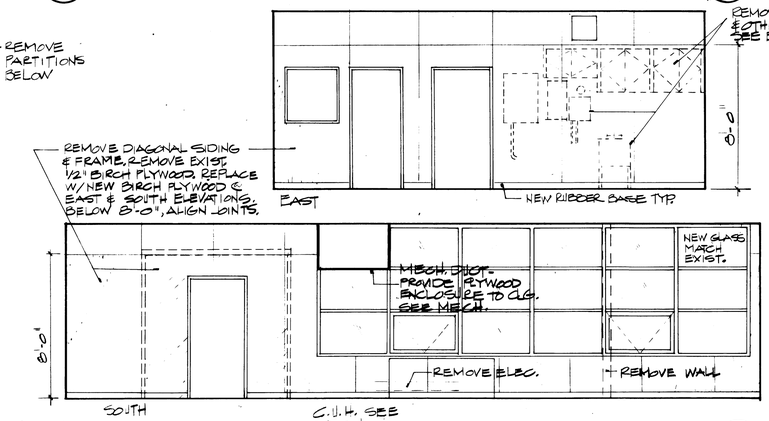
HOMER LOWER SCHOOL FIRST FLOOR PLAN (4)

1/16" = 1'-0"



SHOP REFLECTED CLG. PLAN (25)

1/8" = 1'-0"



SHOP ELEVATIONS (20)

1/4" = 1'-0"

GENERAL NOTES

1. INSTALL NEW CARPET AND RUBBER BASE. REMOVE EXISTING CARPET AND BASE. SEE PHOTOGRAPHS FOR SCIENCE, WEIGHT ROOM AND SHOPS.
2. ASBESTOS WORK - SEE SPECIFICATIONS FOR SCOPE.
3. SHOP AREA TO BE CONVERTED INTO CLASSROOM AREA. ~~PATCH ANY LOOSE EXISTING 12" X 12" FLOOR TILE~~ AND REMOVE RUBBER BASE. INSTALL NEW CARPET AND RUBBER BASE SUSPENDED ACOUSTICAL TILE CEILING WITH LAY-IN ELECTRICAL FIXTURES. SEE ELECTRICAL AND MECHANICAL DRAWINGS.
4. INSTALL NEW 20-MIN. RATED WOOD DOORS IN EXISTING H.M. FRAME.
5. WEIGHT ROOM TO BE CONVERTED INTO TEACHER WORKROOM. CLEAN AND REPAIR WALL SURFACES, PAINT WALLS AND CEILING. SEE PHOTOGRAPHS. (NO PAINT REQUIRED AT CORK WALL FINISH.)
6. REMOVE EXISTING MARLITE PANELS AND DRINKING FOUNTAINS ON NORTH WALL. REPAIR SUBSTRATE AND REPLACE WITH NEW MARLITE PANELS. SEE PHOTOGRAPHS.
7. SEE ENLARGED KITCHEN PLAN DETAIL 14 AND 24 ON SHEET A1 AND SHEET F1 FOR WORK REQUIRED IN THIS AREA.
8. LOCKERS - ALTERNATE 3 - REPLACE 109 EXISTING RECESSED 12" X 60" X 15" DEEP WALL LOCKERS WITH NEW ONES.
9. REPLACE APPROX. 45 EXISTING DAMAGED 12" X 12" ACOUSTIC TILES, MATCH EXISTING PATTERN. PAINT CORRIDOR CEILING, SPEAKER BOXES AND WIREMOLD.
10. REMOVE EXISTING SCIENCE CABINETS AND LAB SET-UPS NORTH AND EAST WALLS AS WELL AS INSTRUCTOR'S COUNTER. SEE PHOTOGRAPHS SHEET A2.
11. REMOVE MARLITE PANELS FROM ALL ELEVATIONS AND INSTALL NEW 1/2" FULL HEIGHT GWB AND PAINT. SCRIBE TO EXISTING COUNTER TOP AND CABINETS REMAINING AND PROVIDE METAL EDGE.
12. LOWER 2 URINALS. SEE 18/A2.
13. REMOVE AND REPLACE EXISTING ACOUSTICAL TILE AND GWB AS REQUIRED FOR THE REMOVAL AND REPLACEMENT OF PIPING ABOVE. SEE MECH. RE-INSTALL FIXTURES, SPEAKERS, ETC. AS REQUIRED.
14. NEW WINDOW. SEE DETAIL 20/A2.

1 REMOVED ALL 12"x12" TILE

PROJECT RECORD DRAWINGS FROM INFORMATION SUPPLIED BY DERLETH BUILDERS
DATE 4/6/88

STATE OF ALASKA 19th REGISTERED ARCHITECT Lee D. McGlothlin 3874

McGLOTHLIN BALIVET CO. ARCHITECTS & PLANNERS

MODIFICATIONS TO HOMER LOWER SCHOOL AND MIDDLE SCHOOL

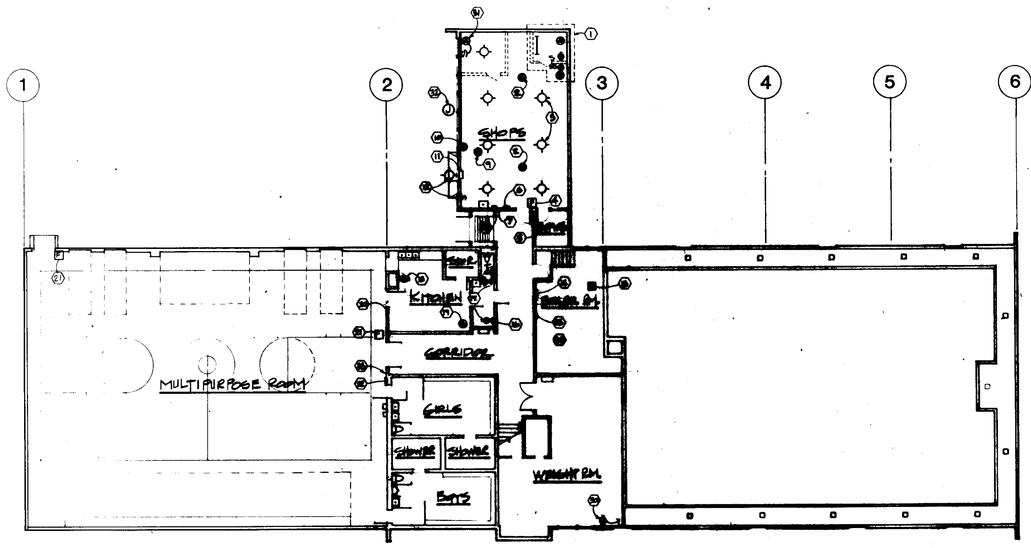
Kenai Peninsula Borough School District

RECORD INFO. PROVIDED BY CONTRACTOR

Sheet Title: FLOOR PLANS 2927

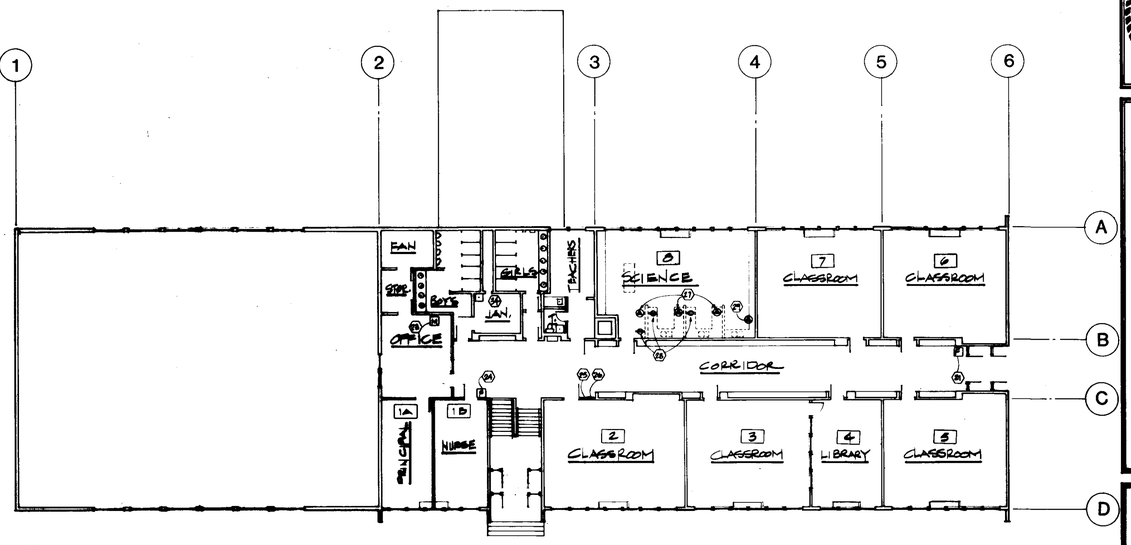
Drawn By M.B.
Checked By L.M.
Project No 410
Date 5-3-85

Sheet No: A1



HOMER MIDDLE SCHOOL • GROUND FLOOR PLAN (12)

1/16"=1'-0"



HOMER MIDDLE SCHOOL • FIRST FLOOR PLAN (2)

1/16"=1'-0"

DEMOLITION NOTES

1. REFERENCE ARCHITECTURAL FOR PARTITION REMOVAL. REMOVE ALL ELECTRICAL MOUNTED ON PARTITIONS TO BE REMOVED AND SHOWN, INCLUDING ONE FLUORESCENT FIXTURE, TWO EXHAUST FANS, THREE SWITCHES, TWO RECEPTACLE OUTLETS, AND RELATED RACEWAY AND CONDUCTORS. RETAIN LIGHTING SYSTEM JUNCTION BOX AT CEILING FOR USE WITH REPLACEMENT LAY-IN TROFFERS.
2. REMOVE ELECTRICAL CONNECTIONS TO UNIT HEATERS. RETAIN RACEWAY AND HOME RUN TO PANEL 'BP' FOR REUSE WITH NEW HEATING EQUIPMENT.
3. REMOVE SEVEN INCANDESCENT LIGHTING FIXTURES. RETAIN RACEWAY, TWO LIGHTING CONTROL SWITCHES AT EAST DOOR, AND HOME RUN TO PANEL 'A' FOR REUSE WITH REPLACEMENT LAY-IN TROFFERS.
4. REMOVE FIRE ALARM PULL STATION AND HORN. RETAIN RACEWAY HOME RUN TO BOILER ROOM FIRE ALARM PANEL LOCATION FOR REUSE.
5. REMOVE PANEL 'SP' EMERGENCY SHUTDOWN CONTROL SWITCH AND CONDUCTORS.
6. REMOVE PANEL 'SP'. REMOVE ALL FEEDER AND BRANCH CIRCUIT CONDUCTORS. REMOVE PANEL ENCLOSURE AND ALL RACEWAY PROTRUDING BEYOND THE PLANE OF THE WALL. ABANDON ALL RACEWAY INSIDE THE WALL WHICH IS NOT REUSEABLE.
7. REMOVE ALL ELECTRICAL CONNECTIONS TO MECHANICAL CONTROLS. RETAIN RACEWAY AS REQUIRED FOR REUSE WITH NEW HEATING EQUIPMENT. COORDINATE WITH MECHANICAL FOR REUSE REQUIREMENTS.
8. REMOVE SURFACE-MOUNTED PANELBOARD AND ALL RELATED RACEWAY AND CONDUCTORS.
9. REMOVE ELECTRICAL CONNECTIONS TO EXHUAST FAN. REMOVE ALL RELATED RACEWAY AND CONDUCTORS.
10. REMOVE THREE-PHASE, FOUR-WIRE PLUG-IN BUSWAY AND ACCESSORIES. REMOVE FEEDER CONDUCTORS TO PANEL 'SP'. CUT FEEDER RACEWAY SMOOTH AND FLUSH WITH FLOOR AND PLUG WITH GROUT.
11. REMOVE SURFACE-MOUNTED EXIT SIGN AND SURFACE RACEWAY TO EXTERIOR LIGHTING CONTROL SWITCH AT EAST SIDE OF EXTERIOR DOOR.
12. REMOVE EXTERIOR LIGHTING FIXTURE, RELATED CONTROL SWITCH AND HOME RUN TO PANEL 'SP'. RETAIN RACEWAY AND CONDUCTOR AS REQUIRED FOR INSTALLATION OF NEW LIGHTING FIXTURE AND RECONNECTION TO ROOM LIGHTING BRANCH CIRCUIT.
13. LOCATION OF BUILDING MAIN ELECTRICAL DISTRIBUTION BOARD. REMOVE 100-AMPERE FEEDER TO PANEL 'SP'. RETAIN 100-AMPERE FEEDER CIRCUIT BREAKER AND MARK AS 'SPARE'.
14. LOCATION OF TWO-SECTION PANEL 'BP'. REMOVE EXISTING PANEL INTERIORS, DEAD FRONTS, AND COVERS. RETAIN ALL BRANCH CIRCIT AND FEEDER CONDUCTORS NOT REQUIRED TO BE REMOVED ELSEWHERE IN THIS WORK.
15. LOCATION OF FIRE ALARM CONTROL PANEL. REMOVE PANEL AND CONTROLS. RETAIN RACEWAY AS REQUIRED FOR INSTALLATION OF NEW CIRCUITING AND EQUIPMENT.
16. LOCATION OF PANEL 'A'. REMOVE EXISTING PANEL INTERIOR, DEAD FRONT, AND COVER. RETAIN ALL BRANCH CIRCUIT CONDUCTORS NOT REQUIRED TO BE REMOVED ELSEWHERE IN THIS WORK.
17. REMOVE SURFACE MOUNTED PANELBOARD AND ALL RELATED SURFACE-MOUNTED RACEWAY AND DEVICES, INCLUDING RECEPTACLE OUTLETS LOCATED AT THE PANEL LOCATION AND THE RECEPTACLE OUTLET LOCATED ABOVE THE REFRIGERATOR.
18. REMOVE SURFACE-MOUNTED RECEPTACLE OUTLET AND RELATED RACEWAY AND CONDUCTORS TO PANELBOARD REMOVED IN 17, ABOVE.
19. REMOVE CONNECTION TO CONVECTION OVEN AND RELATED RACEWAY AND CONDUCTORS TO PANELBOARD REMOVED IN 17, ABOVE.
20. RELOCATE CONCEALED RACEWAYS AND CONDUCTORS AS NECESSARY TO ALLOW INSTALLATION OF DOORWAY. PROVIDE ADDITIONAL CONDUCTOR AND RACEWAY AS REQUIRED TO MAINTAIN CONTINUITY OF CIRCUITS RELOCATED.
21. REMOVE FIRE ALARM MANUAL PULL STATION AND ALARM HORN. RETAIN RACEWAY AND CONDUCTORS AS REQUIRED FOR FIRE ALARM SYSTEM REHABILITATION.
22. LOCATION OF PANEL'B'. REMOVE EXISTING PANEL INTERIOR, DEAD FRONTS, AND COVER. RETAIN ALL BRANCH CIRCUIT AND FEEDER CONDUCTORS NOT REQUIRED TO BE REMOVED ELSEWHERE IN THIS WORK.
23. REMOVE FIRE ALARM MANUAL PULL STATION. RETAIN RACEWAY AND CONDUCTORS AS REQUIRED FOR FIRE ALARM SYSTEM REHABILITATION.
24. REMOVE FIRE ALARM MANUAL PULL STATION, ALARM HORN, SURFACE RACEWAY, AND CONDUCTORS.
25. LOCATION OF PANEL 'X'. REMOVE EXISTING PANEL INTERIOR, DEAD FRONT, AND COVER. RETAIN ALL BRANCH CIRCUIT AND FEEDER CONDUCTORS NOT REQUIRED TO BE REMOVED ELSEWHERE IN THIS WORK.
26. LOCATION OF PANEL '1A'. REMOVE EXISTING PANEL INTERIOR, DEAD FRONT, AND COVER. RETAIN ALL BRANCH CIRCUIT AND FEEDER CONDUCTORS NOT REQUIRED TO BE REMOVED ELSEWHERE IN THIS WORK.
27. REMOVE RANGE OUTLETS AND CONDUCTORS TO PANEL 'BP'. REMOVE RACEWAY FLUSH TO WALL OR FLOOR. PROVIDE FLUSH CUT-OFF AS REQUIRED TO ALLOW NEW SURFACE FINISH.
28. REMOVE DUPLEX RECEPTACLE OUTLETS, RACEWAY AND CONDUCTOR. PROVIDE RACEWAY AND CONDUCTOR AS REQUIRED TO MAINTAIN CONTINUITY OF CIRCUITS INTERRUPTED BY THESE REMOVALS.
29. REMOVE RANGE OUTLET AND CONDUCTORS TO PANEL 'BP'.
30. REMOVE SURFACE-MOUNTED DUPLEX RECEPTACLE AND SURFACE-MOUNTED RACEWAY AS REQUIRED TO ALLOW INSTALLATION OF MULTIPLE OUTLET ASSEMBLY.
31. REMOVE EXHAUST FAN, SURFACE-MOUNTED CONTROL SWITCH, AND RELATED RACEWAY AND CONDUCTOR. RETAIN RACEWAY AND CONDUCTORS ONLY AS REQUIRED FOR REUSE IN OTHER PARTS OF THIS WORK.
32. REMOVE SURFACE-MOUNTED JUNCTION BOX AND CONNECTION TO BUSWAY REMOVED IN ITEM 10, ABOVE. REMOVE CONDUCTORS TO ADJACENT SHED AND REMOVE RACEWAY TO GROUND LEVEL.
33. LOCATION OF TWO LIGHTING CONTROL SWITCHES. REMOVE UPPER CONTROL SWITCH AND RELATED CONDUCTORS TO PANEC 'B'. RETAIN RACEWAY AND OUTLET BOX FOR REUSE WITH NEW CEILING FAN CONTROLS.
34. COORDINATE WITH MECHANICAL FOR ELECTRICAL WORK REQUIRED FOR REMOVAL OF MECHANICAL EQUIPMENT IN BOILER ROOM AND FAN ROOM ABOVE JANITOR'S CLOSET.

CONSTRUCTION NOTES (CONTINUED FROM SHEET E2)

28. PROVIDE NEW WIREMOLD MULTIPLE OUTLET ASSEMBLY MOUNTED AT +40" AT EAST WALL AS SHOWN. PROVIDE CONNECTION TO EXISTING CIRCUIT THAT SERVED RECEPTACLE OUTLET REMOVED FROM THIS WALL.
29. EXISTING MASTER CLOCK. PROVIDE BRANCH CIRCUIT CONNECTION FROM BRANCH CIRCUIT SERVING CLOCK TO NEW FIRE ALARM CONTROL PANEL PROVIDED UNDER ITEM 18. IF POSSIBLE, PROVIDE THIS CIRCUIT CONCEALED IN EXISTING WALL BY FISHING NEW RACEWAY TO THE FIRE ALARM PANEL LOCATION FROM THE OFFICE CEILING SPACE.
30. COORDINATE WITH MECHANICAL FOR CONNECTION OF REPLACEMENT FAN EF-2 TO EXISTING BRANCH CIRCUIT FEEDING ORIGINAL EF-2. PROVIDE OVERLOADS AS REQUIRED TO COORDINATE WITH NEW EF-2 MOTOR LOAD REQUIREMENTS. COORDINATE WITH MECHANICAL FOR REPLACEMENT OF EF-1 FAN MOTOR WITH NEW TWO-SPEED MOTOR AND NEW TWO-SPEED COMBINATION CONTROLLER. PROVIDE CONNECTION OF NEW MOTOR AND CONTROLLER TO BRANCH CIRCUIT FEEDING ORIGINAL EF-1. ASSURE THAT OVERLOADS IN NEW TWO-SPEED CONTROLLER ARE MATCHED TO MOTOR REQUIREMENTS.
31. COORDINATE WITH MECHANICAL TO PROVIDE CONNECTION OF NEW CABINET UNIT HEATERS TO BRANCH CIRCUITS SUPPLYING ORIGINAL CABINET UNIT HEATERS. PROVIDE DISCONNECTING SWITCH IF NONE IS FURNISHED WITH NEW UNIT.
32. PROVIDE ELECTRICAL CONNECTION AND #12AWG BRANCH CIRCUITING AS SHOWN TO NEW CIRCULATING FANS AT GYMNASIUM CEILING. PROVIDE CONCEALED RACEWAY IN AS MUCH AS POSSIBLE TO CONTROLLER LOCATION AT GYMNASIUM WALL ADJACENT TO PANEL 'B'.
33. PROVIDE NEW ADDITIONAL SINGLE-GANG BOX AND HOMERUN TO PANEL 'B' AS REQUIRED FOR NEW CEILING CIRCULATING FANS PROVIDED IN ITEM 32. INSTALL FAN CONTROLLERS FURNISHED BY MECHANICAL. TERMINATE HOMERUN AT PANEL 'B' PER SCHEDULE. SEE DEMOLITION ITEM 33.
34. PROVIDE BRANCH CIRCUIT CONNECTION TO NEW CABINET UNIT HEATER FROM EXISTING BRANCH CIRCUIT FORMERLY SUPPLYING CEILING UNIT HEATERS. PROVIDE DISCONNECTING SWITCH IN UNIT HEATER IF NONE IS FURNISHED WITH NEW UNIT.
35. PROVIDE DISCONNECTING SWITCHES AND CONNECTIONS TO NEW CIRCULATING PUMPS HWCP-1 AND HWCP-2. PROVIDE ¾"C WITH 2-#12AWG HOME RUN TO PANEL 'BP' WITH CONNECTION AT PANEL PER SCHEDULE.
36. PROVIDE MANUAL MOTOR STARTER AND CONNECTION TO NEW CIRCULATING PUMP CP-3. PROVIDE ¾"C WITH 3-#12AWG HOMERUN TO PANEL 'BP' WITH CONNECTION AT PANEL PER SCHEDULE.
37. PROVIDE COMBINATION STARTERS AND CONNECTIONS TO NEW CIRCULATING PUMPS CP-1 AND CP-2. PROVIDE ¾"C WITH 3-#12AWG HOMERUN TO PANEL 'BP' WITH CONNECTION AT PANEL PER SCHEDULE.
38. PROVIDE ¾"C WITH 2-#12AWG BRANCH CIRCUIT EXTENSION TO PROVIDE POWER FOR DOOR RELEASE MECHANISMS. COORDINATE WITH DOOR HARDWARE SCHEDULE AND SUPPLIER FOR CONNECTION REQUIREMENTS.

2934

PROJECT RECORD DRAWINGS
FROM INFORMATION SUPPLIED
BY DERLETH BUILDERS
DATE 1/6/86

STATE OF ALASKA — 49TH — EE 4117

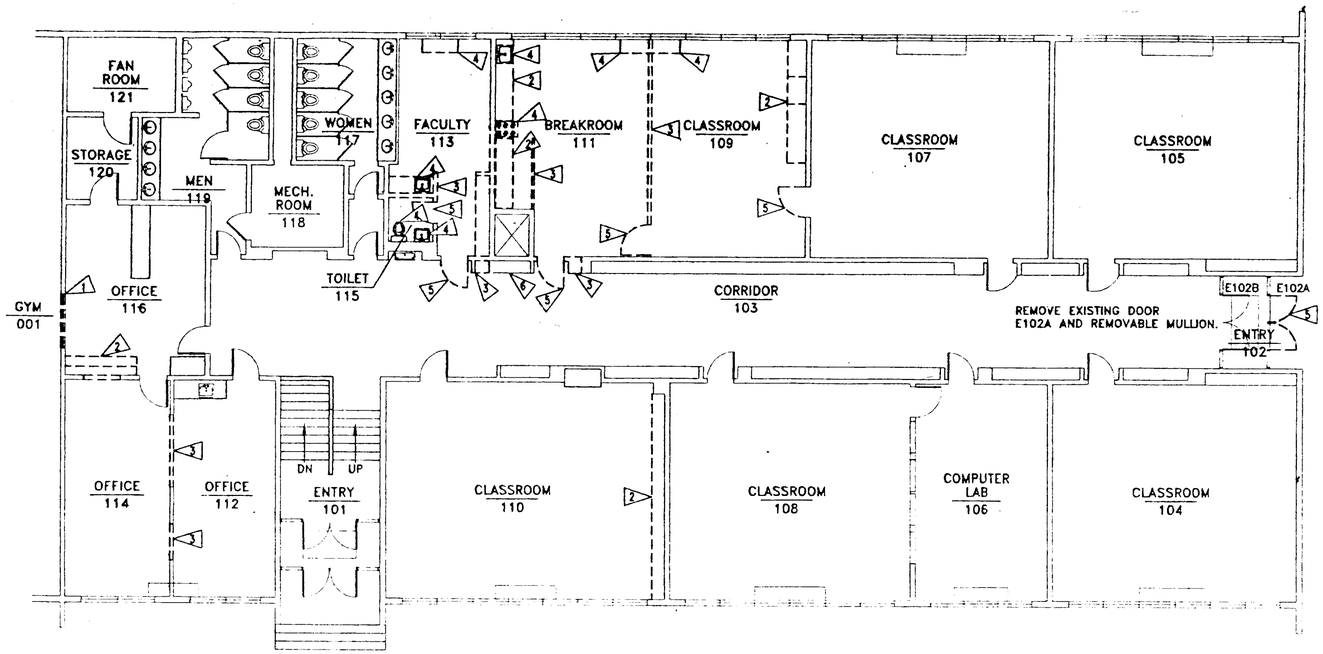
McGLOTHLIN BALIVET CO. ARCHITECTS & PLANNERS

MODIFICATIONS TO HOMER LOWER SCHOOL AND MIDDLE SCHOOL
Kenai Peninsula Borough School District

Sheet Title: ELECTRICAL DEMOLITION PLANS

Drawn By: L. JOULE
Checked By: R. McDOWELL P.E.
Project No: 410
Date: 5-3-85

Sheet No: E1



DEMOLITION PLAN

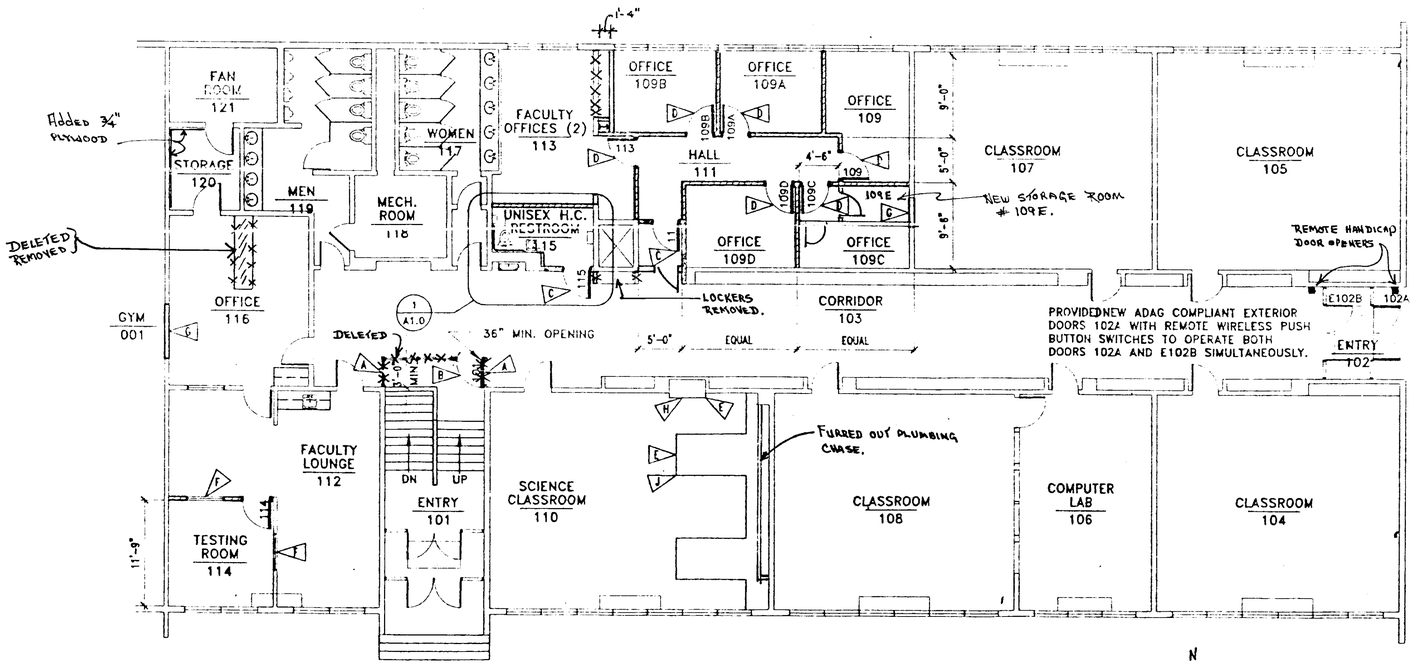
SCALE: 1/8"=1'-0"

REFERENCED DEMOLITION NOTES

1. REMOVED EXISTING WINDOW AND INFILL TO MATCH CONSTRUCTION
2. REMOVED EXISTING CASEWORK
3. REMOVED EXISTING WALL OR SEGMENT
4. REMOVED EXISTING MECHANICAL EQUIPMENT OR FIXTURES
5. REMOVED EXISTING DOOR AND FRAME AND INFILL TO MATCH CONSTRUCTION
6. REMOVE ~~EXISTING~~ LOCKERS ~~AS REQUIRED~~ THIS AREA.

REFERENCED CONSTRUCTION NOTES

1. ~~PROVIDE SECURITY ENCLOSURE, COORDINATE WITH OWNER FOR ENCLOSURE TYPE.~~
2. ~~PROVIDE PANIC EXIT DEVICE HARDWARE. THIS IS A REQUIRED EXIT.~~
3. 20 MINUTE RATED DOOR AND FRAME. DOOR 115 HARDWARE: ANSI F21; DOOR 111 HARDWARE: ANSI F09
4. NONRATED DOORS. PROVIDE ENTRANCE TYPE HARDWARE (ANSI NO. F21).
5. CONTRACTOR TO COORDINATE WITH OWNER FOR TYPE, SIZE AND OPTIONS.
6. NEW RELITE 4'x4' HOLLOW METAL FRAME WITH 1/4" LAMINATED SAFETY GLASS
7. MATCH EXISTING CONSTRUCTION AND INFILL WALL. MATCH EXISTING FINISH.
8. NEW FUME HOOD IN EXISTING CHASE TO EXTERIOR (THROUGH ROOF) REFER TO MECH/ELEC.
9. SCIENCE LAB ISLANDS: COORDINATE WITH OWNER AND MECH/ELEC.
10. FURR WALL AS REQUIRED TO PROVIDE WALL AREA FOR LAV INSTALLATION.

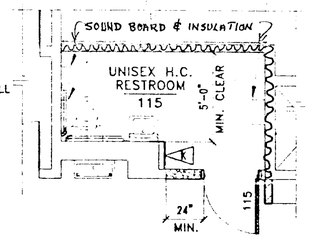


FLOOR PLAN

SCALE: 1/8"=1'-0"

PLAN LEGEND

- ITEMS TO BE REMOVED SHOWN DASHED
- 1 HR. WALLS, METAL STUDS TO MATCH WALL WIDTH WITH 5/8" GWB EACH SIDE. THESE WALLS BUILT TO STRUCTURE ABOVE.
- NEW WALLS, 3 5/8" METAL STUDS WITH 5/8" GWB EACH SIDE, TO UNDERSIDE OF CEILING.
- NEW ITEMS SHOWN BOLD
- EXISTING ITEMS SHOWN LIGHT

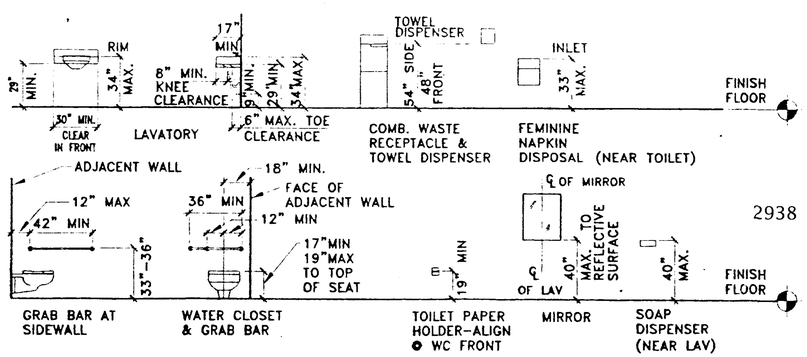


REFER TO TOILET ROOM ACCESSORIES AND FIXTURES MOUNTING CLEARANCES PER 2/A1.0.

PROVIDE HANDICAPPED FIXTURES AND ACCESSORIES ADAG COMPLIANT

1/A1.0 ENLARGED RESTROOM PLAN

SCALE: 1/4"=1'-0"



2/A1.0 ACCESSIBLE FIXTURE MOUNTING LOCATIONS

ADAFIXDI.DWG: SCALE FACTOR 48

SCALE: 1/4" = 1'-0"

DESCRIPTION OF WORK

1. THE GENERAL SCOPE OF WORK IS TO REMODEL THE EXISTING SPACES FOR THE USE OF THE KACHEMAK BAY CAMPUS LEARNING/CAREER SERVICE CENTER. THIS CONSISTS OF CONVERTING A REGULAR CLASSROOM INTO A SCIENCE LAB, CONVERTING A CLASSROOM AND BREAKROOM INTO FIVE (5) PRIVATE OFFICES, ENLARGING A TOILET ROOM INTO A ADAG COMPLIANT UNISEX TOILET ROOM, CONVERTING THE FACULTY ROOM INTO AN OFFICE FOR TWO (2) FACULTY STAFF, CONVERTING TWO (2) OFFICES INTO A FACULTY LOUNGE/VISITING STAFF OFFICE AND A STUDENT TESTING ROOM. THE EXISTING COMPUTER ROOM WILL BE USED "AS-IS" AS WELL AS THE BALANCE OF THE SCHOOL SPACES ON THE UPPER FLOOR. THE LOWER LEVEL IS NOT PART OF THIS PROJECT, HOWEVER AN ADDITIONAL WALL/DOOR IS ADDED AT THE TOP OF THE STAIRS TO PROVIDE SECURITY TO THE UPPER FLOOR DURING AFTER SCHOOL HOURS.

GENERAL DEMOLITION NOTES

1. THIS DRAWING SHOWS THE GENERAL AREAS OF DEMOLITION. PERFORM ALL OTHER DEMOLITION WORK REQUIRED TO COMPLETE THE WORK DESCRIBED IN THE CONTRACT DOCUMENTS.
2. COORDINATE THE DEMOLITION WORK OF ALL TRADES TO MINIMIZE DAMAGE AND DISRUPTION TO THE EXISTING FACILITY. ALL DAMAGED AREAS MUST BE REPAIRED TO MATCH ADJACENT FINISHES.
3. REFERENCE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
4. THIS DRAWING SHOWS THE GENERAL AREAS OF DEMOLITON. PERFORM MINOR DEMOLITION INCIDENTAL AS REQUIRED TO COMPLETE THE WORK DESCRIBED.
5. REFERENCE MECHANICAL AND ELECTRICAL DRAWINGS FOR ADDITIONAL REQUIREMENTS.
6. ALL EXISTING CONDITIONS THAT ARE DISTURBED AS A RESULT OF THE DEMOLITON OR NEW CONSTRUCTION SHALL BE REPLACED OR REPAIRED TO PRE-EXISTING CONDITIONS.
7. ALL MATERIAL GENERATED BY DEMOLITON SHALL BE DISPOSED OF OFF-SITE AT A CONTRACTOR PROVIDED DISPOSAL SITE.
8. REMOVE EXISTING MATERIAL AND PREPARE SUBSTRATES TO RECEIVE NEW MATERIAL AND FINISHES. PREPARATION OF SUBSTRATE SHALL BE ACCOMPLISHED IN A MANNER TO CONFORM TO APPLICATION REQUIREMENTS OF THE MANUFACTURER OF THE FINISHES AND MATERIALS.
9. REMOVE FLOOR FINISH MATERIALS IN AREAS OF REMODEL. PREPARE SUBSTRATE FOR RECEIVING NEW FLOOR MATERIALS. NEW FLOOR MATERIALS SHALL BE PROVIDED AND INSTALLED BY THE OWNER.

GENERAL NOTES

1. DIMENSIONS ARE FACE OF FRAMING MEMBER UNLESS NOTED OTHERWISE.
2. PATCH AND REFINISH ALL SURFACES AFFECTED BY DEMOLITION FLUSH WITH ADJACENT SURFACES. EXISING PAINTED SURFACES RECEIVING PATCHES SHALL BE REPAINTED OVER THE ENTIRE SURFACE (TO MATCH EXISTING) TO THE NEXT ADJACENT BREAK IN THE WALL OR CEILING PLANE. REFER TO THE MECHANICAL AND ELECTRICAL DRAWINGS FOR REMOVAL OR INSTALLATION OF PIPING, DUCT WORK, FIXTURES, CONDUIT, ETC. IN EXISTING WALLS OR CEILINGS.
3. REMOVE WALL MOUNTED EQUIPMENT AND FURNISHINGS SUCH AS TACKBOARDS, SHELVING, CABINETS, ETC. FROM ALL ROOMS SCHEDULED FOR DEMOLITION OR REMODEL. REINSTALL AS DIRECTED BY THE OWNER.

JOB NO: 9501.2.06 | CHECK: DGG
DESIGN: GHM
DRAWN: DD,GHM
DATE: 07-29-97
REVISIONS: -

McCOOL CARLSON GREEN
ARCHITECTURE INTERIOR DESIGN SPACE PLANNING
901 W. 29TH AVENUE, ANCHORAGE, AK (907) 563-8474

SCHEMATIC DESIGN - NOT FOR CONSTRUCTION

KACHEMAK BAY CAMPUS - REMODEL
HOMER, ALASKA
UNIVERSITY OF ALASKA ANCHORAGE

DEMO PLAN, FLOOR PLAN
DEMO NOTES, CONSTRUCTION NOTES

SHEET NO. A1.0

DEMOLITION NOTES.

DRAWING SYMBOL ON PLANS & SECTIONS

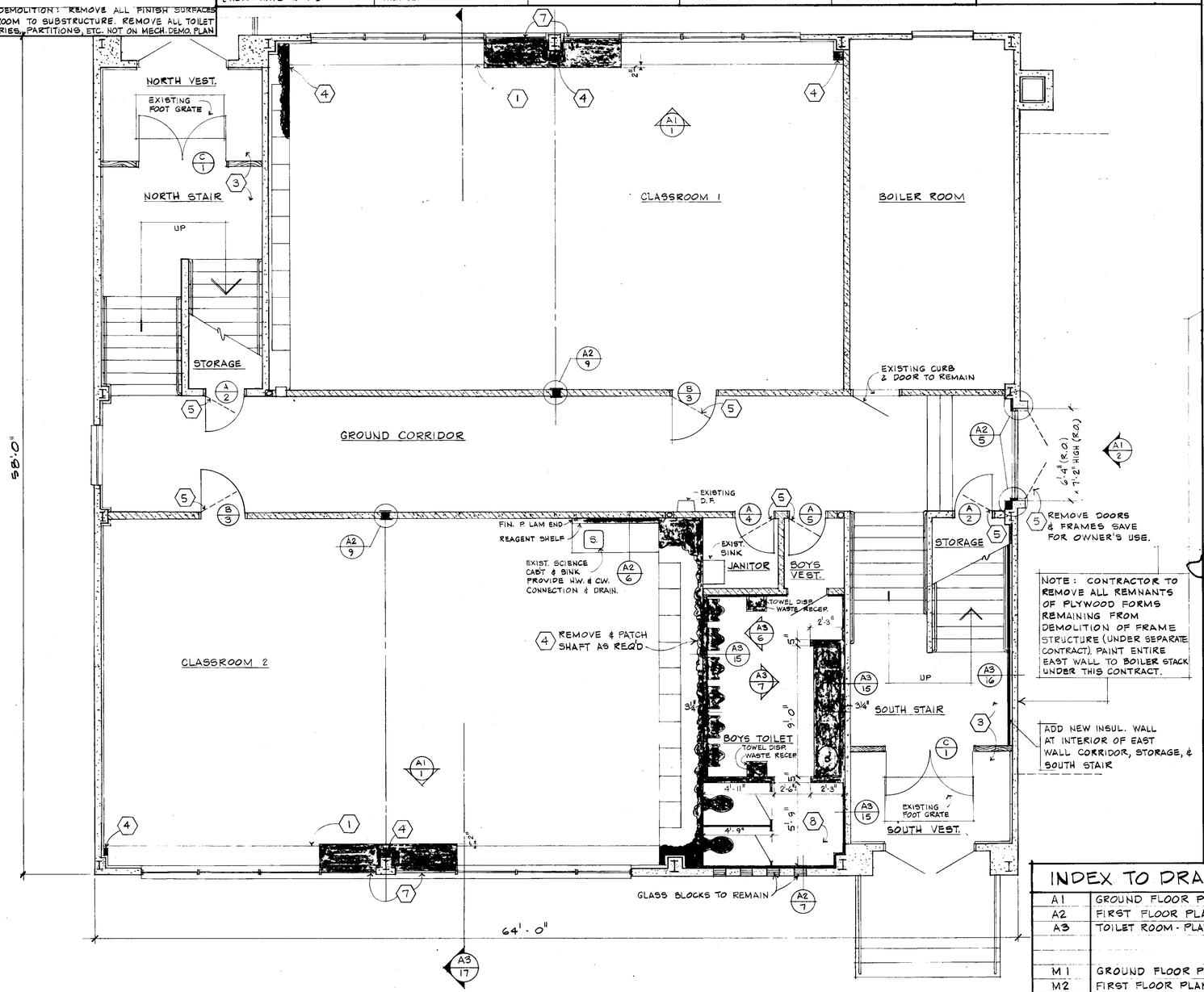
1. REMOVE ALL SHELVES UNDER WINDOWS. STORE FOR FUTURE REINSTALLATION.
2. REMOVE CEILING TILES AND BACKER BOARD TO FURRING STRIPS.
3. REMOVE EXISTING CARPET ON FLOOR.
4. REMOVE MINIMUM SURFACE TO ACCOMODATE MECH CNTR. PATCH TO MATCH EXISTING. SEE GENERAL NOTE 2.
5. REMOVE DOOR. RELOCATE DOOR IF INDICATED. FRAME TO REMAIN UNLESS INDICATED OTHERWISE.
6. REMOVE ENTIRE WALL INCLUDING STUDS AND PLATES.
7. REMOVE OPERABLE WINDOW SASH. FRAME TO REMAIN.
8. TOILET DEMOLITION: REMOVE ALL FINISH SURFACES WITHIN ROOM TO SUBSTRUCTURE. REMOVE ALL TOILET ACCESSORIES, PARTITIONS, ETC. NOT ON MECH. DEMO. PLAN

ROOM PREPARATION & FINISH SCHEDULE

ROOM(S)	FLOOR	BASE	WALL	CEILING
CLASSROOMS 1, 2, 3, 4	EXISTING V.A.T. TO REMAIN. CARPET NO. 1.	REMOVE VINYL BASE AT WINDOW WALL. 6" COVELESS VINYL BASE TO MATCH EXISTING.	PAINT ALL WALLS AND WINDOWS.	REMOVE EXISTING CEILING. 2'x4' AC. TILE IN EXPOSED SUSPENSION SYSTEM. (1-HR. RATED)
GROUND & FIRST CORRIDORS	EXISTING V.A.T. TO REMAIN. CARPET NO. 1.	PATCH EXISTING 6" VINYL BASE AS REQUIRED.	PAINT ALL WALLS AND WINDOWS.	2'x4' AC. TILE IN EXPOSED SUSPENSION SYSTEM (1-HR. RATED)
NORTH & SOUTH STAIRS, NORTH & SOUTH VESTIBULES	REMOVE EXISTING CARPET. CARPET NO. 1 AT TREADS, RISERS, AND LANDINGS.	PATCH EXISTING 6" VINYL BASE AS REQUIRED.	PAINT ALL WALLS AND STORE-FRONTS.	PAINT EXISTING EXPOSED CEILING.
BOYS TOILET AND VESTIBULE GIRLS TOILET AND VESTIBULE	REMOVE ALL V.A.T. TO CONCRETE. CERAMIC TILE - THIN SET	REMOVE EXISTING VINYL BASE. 4" CERAMIC TILE BASE.	REMOVE ALL MARLITE. ENAMELED ASBESTOS CEMENT BOARD.	PAINTED MOISTURE RESISTANT GYPSUM BOARD ON FURR. STRIPS. (1-HOUR RATED) SEE DET. A2/7
BOYS TOILET (1956 BLDG) GIRLS TOILET (1956 BLDG) [ALTERNATE № 1]	REMOVE V.A.T. & FLOOR SHEATHING. CERAMIC TILE - THIN SET.	REMOVE EXISTING VINYL BASE. 4" CERAMIC TILE BASE.	REMOVE ALL MARLITE. ENAMELED ASBESTOS CEMENT BOARD.	PAINTED MOISTURE RESISTANT GYPSUM BOARD ON EXISTING FURRING STRIPS.

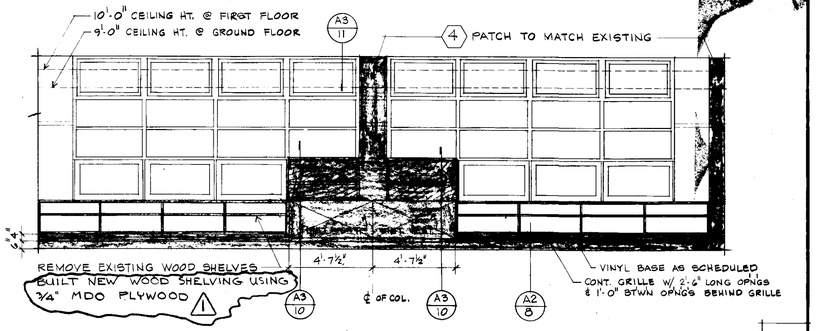
GENERAL NOTE

1. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO BEGINNING WORK AND ORDERING MATERIALS. REPORT ANY DISCREPANCIES THAT AFFECT DESIGN TO ARCHITECT.
2. WHEN REMOVING SURFACES OR ITEMS TO BE RELOCATED IN THE WORK, SUCH AS WOOD MOLDING, TRIM, SHELVES, ETC., DO NOT DAMAGE THEM DURING REMOVAL OR STORAGE.
3. DIMENSIONS TO FINISH SURFACES, UNLESS OTHERWISE NOTED.

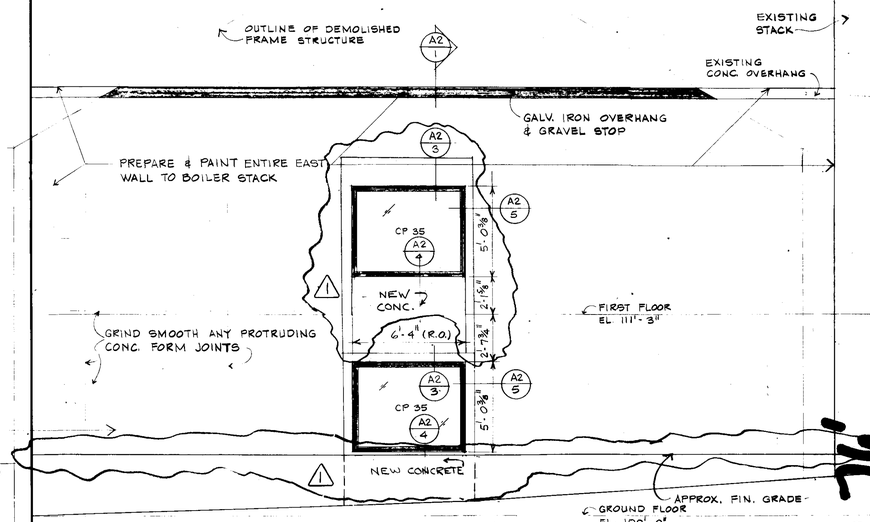


GROUND FLOOR PLAN
SCALE: 1/4" = 1'-0"

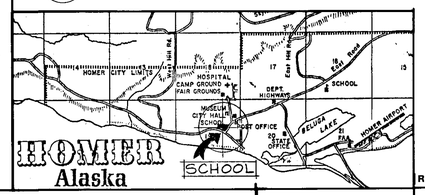
= NEW CONSTRUCTION OR ITEM (SHADED)



A1/1 CLASSROOM WINDOW WALL ELEVATION
SCALE: 1/4" = 1'-0"



A1/2 PARTIAL EAST ELEVATION
SCALE: 1/4" = 1'-0"



INDEX TO DRAWINGS

2942

5-19-77 1

REVISION	DATE	NO.

GROUND FLOOR PLAN; ELEVATIONS; FINISH SCHE.

ALTERATIONS TO
HOMER JR. HIGH SCHOOL
HOMER, ALASKA

DATE: APRIL 21, 1976
IN CHARGE: R.O.
DRAWN BY: T.J., R.O.
CHECKED BY: E.T.
COMM. NO.: 7307-742A

SHEET NO.: A1

ELLERBE · ALASKA
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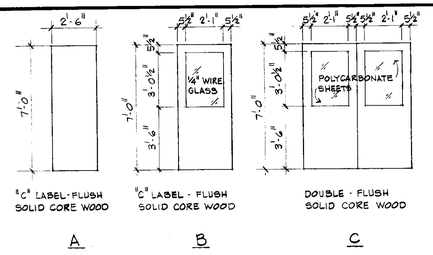
STATE OF ALASKA 49TH
Gordon H. Edberg NO 3940A
REGISTERED PROFESSIONAL ARCHITECT

Ellerbe

8



"C" LABEL-FLUSH SOLID CORE WOOD — A

"C" LABEL - FLUSH SOLID CORE WOOD — B

DOUBLE - FLUSH SOLID CORE WOOD — C

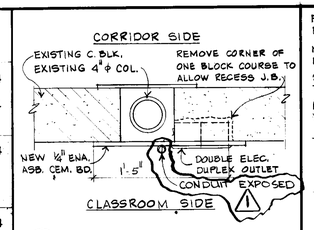
DOOR LEGEND & NOTES:

B — DOOR TYPE AT LEFT
2 — HARDWARE GROUP AT RIGHT

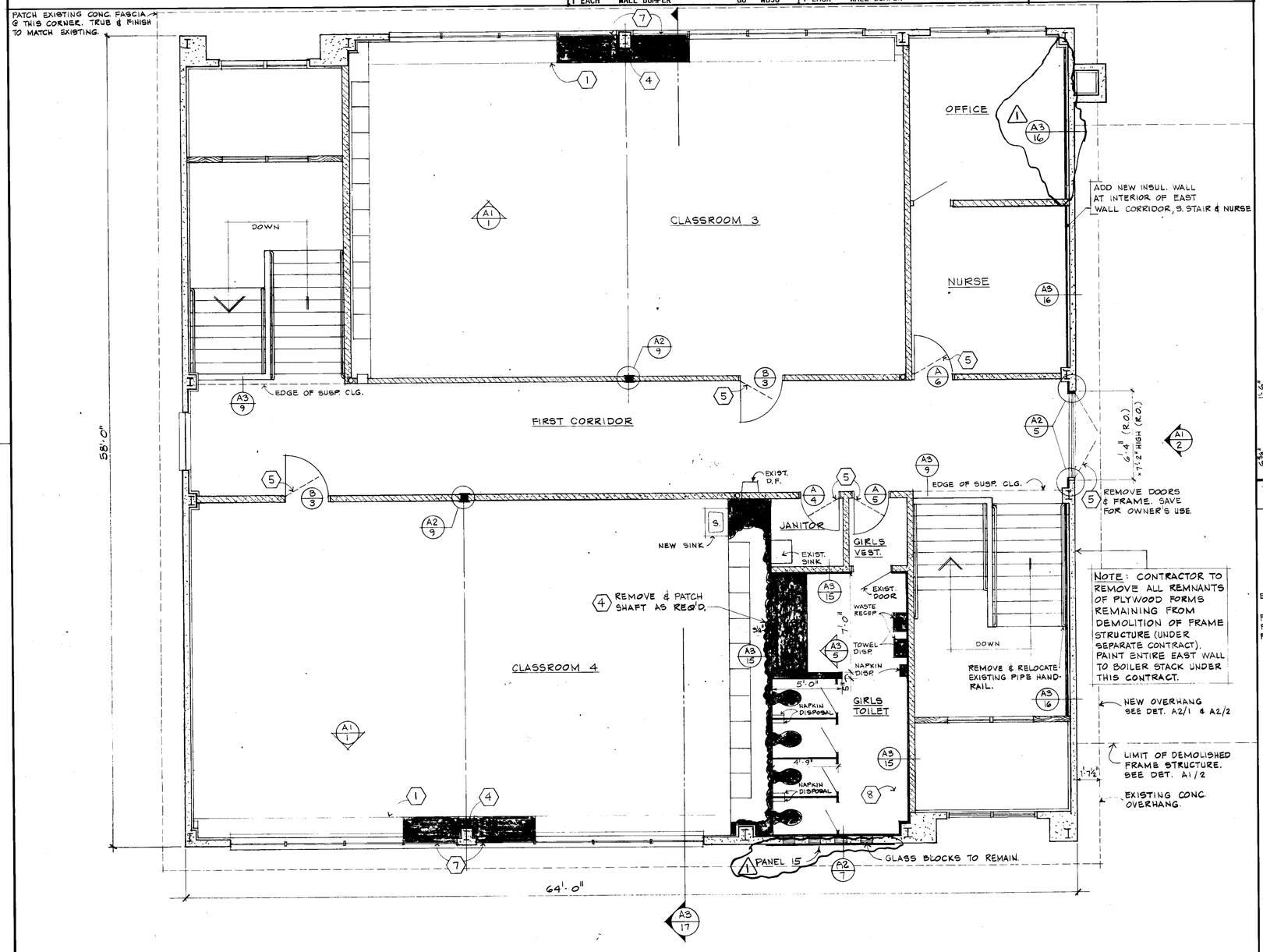
1. ALL FRAMES TO REMAIN. REPAINT TO MATCH WALLS.
2. CONTRACTOR SHALL VERIFY EXISTING DOOR SIZES BEFORE ORDERING NEW DOORS.
3. LABEL DOORS SHALL HAVE LABEL AS REQUIRED.

HARDWARE GROUPS (SEE SPECIFICATIONS FOR ABBREVIATIONS)

HW-1			
2 EACH	BUTTS	MC	T4A3786
2 EACH	PUSH BARS	CI	2445S
2 EACH	PULL PLATE	VO	8800T
2 EACH	DOOR CLOSER	RU	P2810
2 EACH	KICK PLATE	CI	5024
2 EACH	FLOOR STOP & HOLDER	GJ	F40
HW-2			
1 EACH	BUTTS	MC	TA2714
1 EACH	LOCKSET	SC	D51PD
1 EACH	DOOR CLOSER	RU	P2810
1 EACH	KICK PLATE	CI	5024
1 EACH	WALL BUMPER	GJ	WB50
HW-3			
1 EACH	BUTTS	MC	TA2714
1 EACH	LOCKSET	SC	D70PD
1 EACH	DOOR CLOSER	RU	P2810
1 EACH	KICK PLATE	CI	5024
1 EACH	WALL BUMPER	GJ	WB50
HW-4			
1 EACH	BUTTS	MC	TA2714
1 EACH	LOCKSET	SC	D51PD
1 EACH	DOOR CLOSER	RU	2810FL
1 EACH	KICK PLATE	CI	5024
1 EACH	WALL BUMPER	GJ	WB60
HW-5			
1 EACH	BUTTS	MC	TA2714
1 EACH	LOCKSET	SC	D70PD
1 EACH	DOOR CLOSER	RU	2810
1 EACH	KICK PLATE	CI	5024
1 EACH	WALL BUMPER	GJ	WB50
HW-6			
1 EACH	BUTTS	MC	TA2714
1 EACH	LOCKSET	SC	D51PD
1 EACH	DOOR CLOSER	RU	2810
1 EACH	KICK PLATE	CI	5024
1 EACH	WALL BUMPER	GJ	WB60



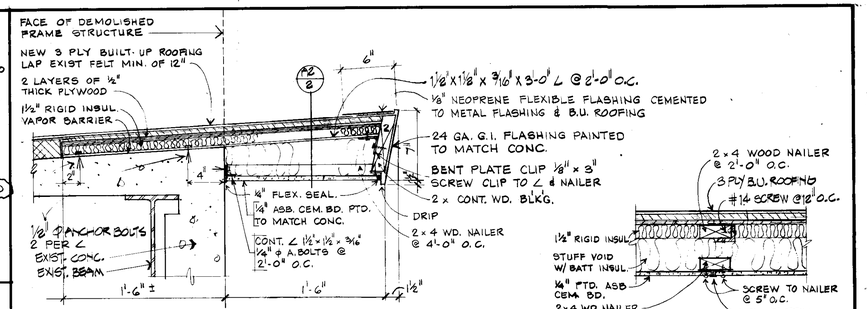
A2/9 CONDUIT @ COLUMN
1½" = 1'-0"



N

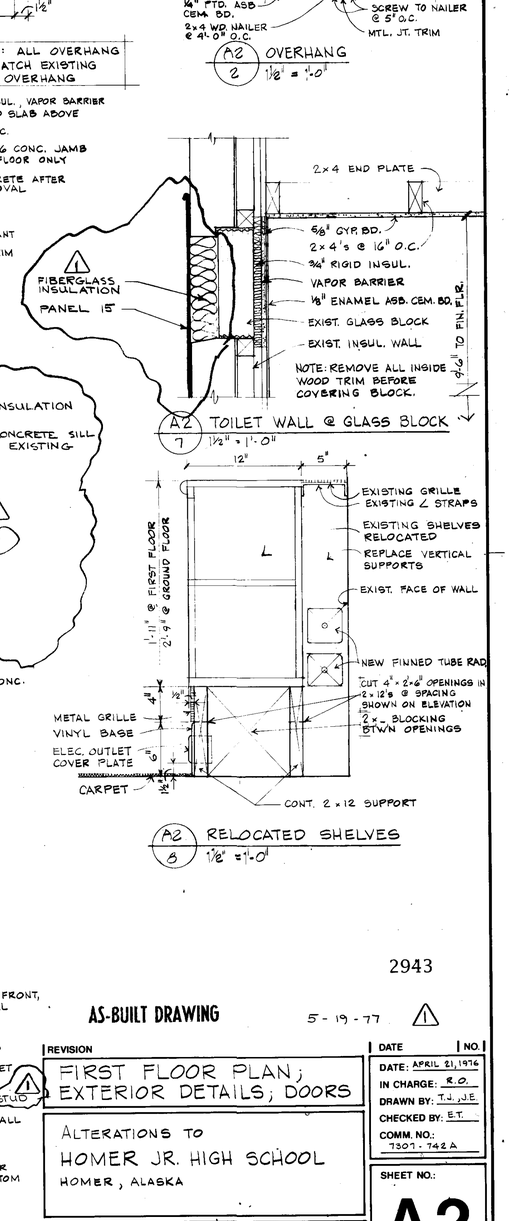
FIRST FLOOR PLAN
SCALE: 1/4" = 1'-0"

(SHADED) = NEW CONSTRUCTION OR ITEM



A2/1 OVERHANG
1½" = 1'-0"

DIMENSION NOTE: ALL OVERHANG DIMENSIONS TO MATCH EXISTING ADJACENT CONC. OVERHANG



A2/3 HEAD
1½" = 1'-0"

A2/4 SILL
1½" = 1'-0"

A2/5 JAMB
1½" = 1'-0"

A2/6 REASENT SHELF
¾" = 1'-0"

A2/2 OVERHANG
1½" = 1'-0"

A2/7 TOILET WALL @ GLASS BLOCK
1½" = 1'-0"

A2/8 RELOCATED SHELVES
1½" = 1'-0"

2943

AS-BUILT DRAWING 5 - 19 - 77 ⚠

REVISION	DATE	NO.
FIRST FLOOR PLAN; EXTERIOR DETAILS; DOORS	DATE: APRIL 21, 1976	
	IN CHARGE: R.O.	
	DRAWN BY: T.J., J.E.	
	CHECKED BY: E.T.	
	COMM. NO.: 7307-742A	

ALTERATIONS TO
HOMER JR. HIGH SCHOOL
HOMER, ALASKA

SHEET NO.: **A2**

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Ellerbe

Homer Secondary School
Condition Overview

ECI/Hyer, Inc.
April 3, 2007

Acknowledgements

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907-283-3583

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Richard S. Armstrong, PE, LLC
2321 Merrill Field Drive C-6
Anchorage, AK 99501
907-222-3000

Executive Summary

On February 26, 2007 a team of architects and engineers visited the old Homer Secondary School. The purpose of the visit was to assess the general condition of the building and determine what upgrades would be required to convert the building to house City government functions.

The building currently provides classroom and office space to the Kachemak Campus of the University of Alaska and to the Homer Boys and Girls Club. As-built drawings for the building, provided by the City of Homer, were reviewed to determine the type of systems present in the building. These were confirmed, in part, by a field visit to the facility. Conclusions and recommendations included in this report are contingent upon limited investigation.

In general, it was determined that renovations and upgrades needed to make the old School an appropriate location for Civic Offices and an Assembly Hall would be approximately the same as construction of a new building on a site with reasonably good soils. Total project cost for upgrades is estimated at $478 per square foot in 2007 dollars (corresponding to a construction cost of $359 per square foot). Please refer to the cost analysis included at the end of this report.

It should be noted that the existing facility provides an excellent home for the Boys and Girls Club, and the classrooms on the upper level function very well as classrooms. The costs of relocating these functions should be taken into consideration when determining the future of the building.

Introduction

Originally constructed in 1956 as the Homer High School, the two-story structure is located at the corner of Pioneer Avenue and Stirling Highway. Neighboring land is occupied by the middle school, a veterinary clinic, a hotel and other small businesses.

Since approximately 1998 the upper level has been occupied by an extension of the Kachemak Bay Campus of the Kenai Peninsula College. The lower level is occupied by the Homer Clubhouse, a program administered by the Boys and Girls Club of the Kenai Peninsula.

Exterior Enclosure

The exterior wall and window assemblies appear to be original.

Windows are wood-framed with ½" insulating units consisting of 2 layers of 1/8" glass separated by a ¼" airspace. Operable lower and upper windows are provided at classrooms, most of which appear to be functioning.

The typical exterior wall assembly is comprised of the following layers:

- heavy-gage galvanized/painted metal siding (composite siding with battens surrounding major areas of glazing)
- kraft paper
- 5/8" plywood sheathing
- 2x6 wood studs at 16" o.c. (2x8 wood studs at gymnasium)
- 2" batt insulation
- vapor retarder
- ½" finish plywood or marlite sheathing

The typical low-slope roof assembly is comprised of the following layers:

- built-up roof membrane
- 2" rigid insulation
- vapor retarder (assumed to be present but not confirmed)
- tongue-and-groove decking
- structural members (glulams at classroom areas and long-span steel joists at gym)

In general the exterior enclosure is in very good condition considering its age. The roof membrane appears to be due for refurbishment, but we were not made aware of any roof leaks and none were immediately evident. The primary concern with the roof is a lack of overflow drains. Under current code requirements overflow drains are required to prevent overloading the roof structure in case of drain blockage. Considerable amounts of water could potentially build up on the roof if the roof drain system were to fail. This would add significant stress to the roof structure.

The metal siding has been dented in multiple locations, particularly at the south side of the building, but appears to be performing well in terms of weather protection for the building. Paint is beginning to chip and peel off the siding in multiple locations, particularly at the base of walls and where damage has occurred. This situation is most prevalent along the eastern wall base where soil and lawn is up against the material. In general the paint is tired and faded. The composite siding also appears to be in good condition, but is in need of a coat of paint.

Concrete retaining walls are present along several portions of the building. In discussions with City staff, we learned that these walls have been the source of moisture migration into the first level of the building, particularly along the east wall where the water service enters the building and along the north wall of the lower level classroom. The adjacent grade slopes towards both of these locations causing ponding during break-up.

While the exterior enclosure is in surprisingly good condition, it performs very poorly in terms of energy efficiency. Existing insulation in exterior stud walls can be expected to provide an overall R-value of no more than R-5. Insulation at the roof can be expected to provide an overall R-value of no more than R-7, assuming the insulation has retained some of its original thermal properties. The national energy code recommends a minimum value of R-13 at walls and R-15 at roofs for wood framed commercial structures in our region. The existing windows can be expected to allow more than twice the heat loss and three times the solar gain of modern glazed units. Making matters worse, cantilevered roof decking along the entire building perimeter creates a continuous thermal bridge at the eave level. Considerable heat loss is likely at this location.

Interior Finishes

In general, interior finishes are in very good condition. A large number of wall finishes are original including plywood wall cladding and wood doors in all classroom areas. Flooring and a number of common space wall finishes were upgraded when the Kachemak Bay Campus moved into the building approximately eight years ago. Wood windows are showing deterioration in some locations but are in surprisingly good condition considering their age.

Asbestos containing materials were not specifically identified, but should be anticipated throughout the building due to its age. Materials of concern may include flooring and other adhesives, resilient floor tiles that may be present under newer carpet and sheet vinyl, wall joint compounds, mechanical insulation, roofing materials, and other areas to be determined. A complete hazmat survey is recommended before any major renovations are undertaken.

Structural: Existing Conditions

The building consists of three distinct structural areas: The Classroom Wing; the Central Core and the Gymnasium.

Classroom Wing Structural Systems

The one story classroom wing measures approximately 99 feet x 63 feet. The structure is of wood construction with a concrete slab on grade floor and poured concrete foundation walls on continuous concrete footings. Gravity loads, including snow load and building dead load are supported by perimeter and interior post and beams and interior bearing walls. The roof is sheathed with structural tongue and groove planks applied diagonally to the roof beams. Beam spans and column grids vary from 24 feet to 36 feet along the longitudinal axis of the classroom wing. The beam span and column grid coincide with the original classroom partition walls, although subsequent remodeling of a portion of the classroom area has resulted in the construction of additional non-bearing partition walls. Beams are spaced at approximately 8 feet on center.

Two interior bearing walls, with 2x6 studs spaced at 16" form the corridor along the building's central axis. The notes on the structural drawings state that lateral loads are transferred to braced interior partitions, although no bracing details for the partitions were found on the drawings. Section details for the walls indicate that the walls are sheathed with 5/8" gypsum wallboard. Plywood sheathing is not indicated for the interior corridor walls.

Non-bearing end walls are framed with 2x wood studs with plywood sheathing.

A concrete utilidor around the perimeter of the classroom wing provides access to under floor mechanical systems.

Central Core Structural Systems

The central core measures approximately 25 feet x 111 feet. A two story section of the central cores, measuring 63 feet x 25 feet aligns with the classroom wing and gymnasium. A one story section of the central core extends to the north approximately 48 feet. The central core structure consists of poured. Reinforced concrete walls with continuous concrete footings. The ground floor is a concrete slab on grade and is located one story below the main floor of the classroom addition. The second floor structure consists of steel bar joists with a steel deck sheathing and concrete topping slab. The steel joists are supported by the concrete bearing walls and steel beam headers.

Gymnasium Structural Systems

The gymnasium measures approximately 97 feet x 63 feet. The roof structure consists of steel joists spanning across the 63 foot dimension with nominal two inch thick tongue and groove plank sheathing The steel joists are supported by 8x8 wood columns. The walls are formed by 2x8 wood studs spaced at 16" o/c and spanning full height from floor to roof deck. The perimeter columns and wall studs are supported on reinforce concrete foundation walls and continuous concrete footings.

The gymnasium structural floor consists of a concrete slab on grade. The finish floor is hardwood planks set on sleepers over the structural slab.

Structural: General Building Condition

Roof Structure

The underside of the roof structure was observed at one location from the existing science lab in the classroom wing.

Structural: Loading

Notes contained on the original drawings indicate the criteria used to design structural systems and are summarized as follows:

Floor Live Load (Classrooms/Offices):	50 psf
Floor Live Load: (Entrances/stairs)	100 psf
Design Snow Load:	30 psf
Wind Load:	30 psf
Seismic Coefficient:	C=0.133

Snow Loads

Ground snow loads have exceeded 30 psf during the life of the structure and will probably have and will continue to reach the current Homer design snow load of 50 psf. It is likely that the roof structure has not been subjected to loads in excess of the 30 psf design due to the unventilated 'hot roof' design of the thermal envelope. Poorly insulated hot roof systems typically lose enough heat to melt snow and to prevent accumulation of deep snow pack. Increasing the thermal resistance of the roof in order to reduce future energy costs would increase the effective snow load on the structure.

Floor Live Loads

The slab on grade in the gymnasium, classroom wing and ground floor of the central core would be adequate for proposed office use. The second floor of the central core area may be adequate for 50 psf office floor live load, although further investigation would be warranted to determine if the floor is capable of supporting the design live load plus a Code prescribed allowance of 20 psf for interior partitions.

Wind Loads

The 30 psf wind load used for design of the original building appear to be adequate to meet wind horizontal wind load requirements of 2003 IBC. Further investigation would be required to determine if the structure could meet current wind uplift requirements.

Seismic Loads

Seismic Loads are determined as the product of the building's dead weight plus a percentage of design snow load, multiplied by the seismic coefficient. Increased building dead load that would result from the addition of roof insulation, along with the increased design snow load and increased seismic coefficient would result in the structure being subjected to seismic loads significantly larger than assumed for the original design.

Structural: Potential Upgrade Requirements

The increased snow load requirement and provision of an improved thermal envelope will result in the need to increase the structural capacity of the roof framing.

Class Room Wing

In the classroom area, this could be accomplished by either adding columns to shorten the span of existing beams, or by adding additional lines of beams and columns to reduce the tributary load area for existing beams or, by some combination of these two options. It may be necessary to provide additional lines of beams if the roof decking is incapable of supporting the increased snow load.

In either case, it would be necessary to cut the existing floor slab to provide additional footings under new columns or to increase the load carrying capacity of footings at existing columns.

New columns could most likely be located to coincide with new partitions required for the change of use from classroom space to office space. Existing suspended ceiling grids, lighting and wiring would need to be removed and replaced in order to add new beams.

The structural capacity of the roof diaphragm will need to be augmented by adding a layer of plywood sheathing over the existing tongue and groove sheathing. Existing roofing materials and roof insulation will need to be removed in order to apply the new plywood sheathing directly to the existing decking.

The shear capacity of the existing interior corridor bearing walls will need to be increased in order to handle the increased seismic loading. Gypsum wallboard will need to be removed in order to expose the wood framing and to apply plywood sheathing and seismic hold downs.

Central Core

The snow load capacity of the roof in the central core area will need to be increased. The most practical way to provide additional capacity may be to add a vaulted roof over the central core. The roof could be vaulted with wood trusses designed to span across the 25 foot dimension of the core. The trusses would be supported on existing concrete walls.

The lateral load shear capacity of the existing concrete walls is adequate, although the connection between the roof diaphragm and the walls may need to be strengthened to meet current codes.

Gymnasium

The load capacity of the gymnasium roof could be increased by adding a line of structural columns at midspan of the roof trusses. The truss bearing points would need to be reinforced and it would be necessary to either overlay the existing decking with another layer of diagonal decking to increase the snow load capacity. The new columns would be supported by new square concrete pad footings cut into the existing floor slab.

The lateral load capacity of the existing walls is probably adequate to meet current codes.

Structural: Site Conditions

The exterior grading around the school appears to be fine with the exception of the north wind of the central core area. This portion of the building is partially underground. Floor level at one side is at grade level and at the opposite side floor level is about 5 or 6 feet below grade. Reportedly, groundwater has leaked into the floor along the sub-grade wall in the past. The leak is probably the result of groundwater flowing down gradient and accumulating against the subgrade wall. The situation could be corrected by installing a sub surface drain along the wall and extending it to daylight in the drainage swale lying north of the building. The ground surface should also be regarded to direct surface water away from this area.

Structural: Summary

The old Homer High School could be converted to offices with the following upgrades:

1. Increased snow load will require structural upgrades to roof framing.

   Snow Load: 30psf-Original Design 50 psf Current City of Homer Code

2. Increased Seismic load requirements will require upgrades to interior shear walls in the classroom wing.

   Seismic Coefficient: C=0.133-Original Design C=0.154- 2003 IBC

3. Diagonal T&G Roof Diaphragm may not provide adequate capacity to resist lateral loads.
4. Drawings refer to 'braced' interior shear walls but bracing is not detailed on the drawings. Interior shear walls will likely need to be reinforced with plywood sheathing to meet seismic requirements.
5. Site should be re-graded in wing area of central core to direct surface flow away from structure.
6. Subdrain should be installed on uphill side of 'wing' to intercept groundwater flow and direct it towards drainage swale.

Mechanical systems

1. **Fire protection system**
   a. Sprinkler system: There was no fire suppression system observed at the school. It is possible that the Fire Marshal could construe a requirement for fire suppression at the building because an A-3 occupancy over 12,000 SF requires fire suppression. The gym downstairs is an A-3 occupancy, and if a court room is put in the building, it too would be an A-3. The International Building Code defines civic administration as well as education occupancies beyond 12th grade as a B occupancy, so while the upstairs occupancy may not change occupancy classifications, the remodel may create a need for compliance with current code
2. **Fuel system**
   a. Fuel tank: There is an above grade steel fuel tank in the rear of the building. The age and size of the tank are unknown, but the tank visually appears to be in good condition.
3. **Roof drains**
   a. The roof is relatively flat, with a designed slope of 4" from the edge of the roof to the center. There is also a 3" cant strip edge around the perimeter, which could create a 7" deep pond (worse case in the center) if the main roof drains were to clog. The original design shows four main roof drains, with no overflow drains, all piped to a main 6" rain leader leaving the building with no relief drain. The IBC requires that overflow roof drains be installed with an inlet weir 2" above the main drain, but no overflow drains are installed. Either overflow drains with independent piping out of the building need to be installed, or structural calcs need to be prepared to show that the roof can support the total possible amount of water that can collect on the roof in the event of a blockage of the main roof drains.
4. **Heat generation**
   a. The building is heated using a 1958 vintage cast iron boiler that was originally steam, but now is converted to a hydronic boiler. The interior of the boiler has some loose fire brick, but the unit appears in relatively good condition for its age. The useful life of the boiler has been exceeded, and so it is recommended that the boiler be replaced with a new, more energy efficient unit if the building is to remain in service for any length of time. The boiler most likely has asbestos insulation around the outside and asbestos rope between the castings.
   b. The condition of the boiler flue is unknown. It is recommended that a chimney expert be employed to examine the chimney to avoid a potential fire or blockage. As viewed from the outside, the masonry chimney has rust stains, indicating possible corrosion of the rebar in the concrete. This could have caused internal sloughing of concrete into the chimney, potentially blocking the flue.
   c. The burner for the boiler is in good condition, as it was apparently replaced at some point during the last 10 years. The burner is rated at 12 gallons per hour, and it appears to be sized adequately

to heat the building. Unless a city hall occupancy requires significantly more outside air ventilation, the boiler sizing should be adequate for an occupancy change.

5. Heat distribution

a. There was a conversion from steam to hydronic around 1996 based on the age of the water heater. The conversion appears to be in good condition, with relatively new pumps, expansion tanks, and specialties. The age and condition of the piping within the building is unknown, however. According to the original plans, there is a perimeter utilidor under the floor that carries the heating piping around the edge of the building that can then be routed up to each classroom ventilator. We could not get access to the utilidor during the visit, so the condition of this area is unknown.

6. System controls

a. The building heating and ventilation systems are controlled using the original pneumatic controls, with a upgraded compressor and air dryer. The upstairs classrooms are controlled using original or replacement pneumatic thermostats that are apparently still in operational condition. In order to achieve energy savings, a new direct digital control system should be considered.

7. Combustion air

a. Combustion air for the boiler is ducted down directly from above the room into the mechanical room. The system appears to be adequate based on 50 years of performance, and no observed sooting in the boiler room.

8. Cooling and Ventilation

a. Air handling: There are no air handlers in the building. Each of the classrooms is heated and ventilated using a Nesbitt classroom ventilator located under the windows. The device is designed to take outside air from below the unit at the outside wall, and duct air up into the bottom of the ventilator, where it can also be mixed with return air from the classroom itself using mixing dampers. When one enters the building, a musty smell is evident. This suggests that the classroom ventilators are not taking in any outside air, so the same room air is recirculating. While there are operable windows in the classrooms, it is not likely that they are opened or effective during cold, windy winter months. If the owner wishes to convert the classrooms to more of an office environment as expected in a city hall, than it is probable that the rooms will overheat due to the additional heat load generated by the electronic equipment typical of any office. The original construction, which appears to be still in place, has a design for fixed exhaust air coming out of each classroom totaling 4,525 CFM for all classrooms. The multipurpose room has an exhaust fan sized at 4,300 CFM. The toilet rooms exhaust 1,410 CFM, and the kitchen exhausted 1,900 CFM by design. The amount of actual exhaust air is unknown, although one of the exhaust fans was visited and it was operational. The system has been maintained amazingly well for its age, but it is not at all efficient.

b. VAV option: If a more responsive centralized air handling system is desired, such that it can satisfy different and varying cooling loads to different spaces, than a medium pressure variable air volume (VAV) system should be considered. This type of system would require a more sophisticated control system, a new air handler and duct system, with VAV boxes for each space served that will vary the amount of cooling air depending on each space need. If this type of system is desired, than a split system air conditioner is also recommended, with the direct expansion compressor or chiller located outside. A reheat coil could be placed in each zone served, and the main supply air would be kept to 55 degrees (with a cold deck reset) with the amount of cooling air varied according to demand. Alternatively, separate unit ventilators could be installed at each space with cooling capability that would eliminate the need for a new ducted system centralized.

9. Plumbing fixtures

a. Lavs: The restrooms are all equipped with china lay-in lavs that appear to be ADA compliant and in good condition. No changes are recommended for the lavs, except for replacement of the faucets with automatic closure, motion detector activated faucets that will save water. Metered

faucets are code required for occupancies serving a transient public, such as an airport, but they are not a code requirement for this or a city hall occupancy per UPC 402.4, so this is just a water saving suggestion.

b. The urinals in the men's room appear to be in good condition, and would work well for present or future occupancies.

c. Water closets: The toilets appear to be in good condition, and would work well for present or future occupancies. There is also an ADA unisex toilet room on the second floor that appears to be in good condition, and would work well for a city hall environment serving the public.

d. Sinks; There is a three compartment sink in the old kitchen downstairs.

10. Kitchen Facility

a. Ranges: Ductwork in the old kitchen adjacent to the MPR has been capped off, and any ranges have been removed.

b. Convection ovens: There remains only two convection ovens that are ducted to the existing ductwork. It appears that the facility once had a full commercial kitchen that has been removed now, and that no food preparation is presently being done with the possible exception of some heating of food in the convection ovens.

Electrical systems

1. Electrical service

a. Size: The original design requirement for the electrical service was 120/208 volts, three phase, and 800 amps capacity. This size of service should be adequate for both the existing occupancy as well as any planned conversion to a city hall.

b. Age/condition: The main distribution panel is original equipment, as well as panels in the upstairs hallway. The main service should be replaced due to obsolesce and unreliability of the old service equipment.

2. Power distribution

a. Type: All power is distributed throughout the building through a main distribution panel.

b. Condition: Power distribution that was visible is in conduit, and appears to be done professionally.

c. Panels: Panels located in the boiler room are of a newer vintage than the remaining panels observed in the upstairs corridors. It is likely that parts are no longer available for the original electrical equipment, so all original panels should be replaced. It is not possible to determine the condition of the existing wiring, because the relative age of the wiring is not known. Original wiring is most likely at the end of its useful life and should be replaced, especially if the occupancy changes to a more energy intensive city hall environment.

3. Electrical devices

a. Interior outlets: The interior outlets appeared to be in good condition, although continuity and polarity testing was not done on the outlets to confirm proper wiring. The upstairs classrooms have had additional outlets installed, piped with surface conduit. With the additional receptacles, there are now four receptacles per classroom. This will not be adequate for a city hall office environment, so significant electrical upgrades will be necessary.

4. Lighting systems

a. Exterior Lighting: There are exterior lights on the front and sides of the building.

b. Interior lighting: The classroom lighting, and hall lighting uses 4' T-12 fluorescent lamps, with magnetic ballasts. These fixtures can all be replaced with newer technology T-8 lamps with matching electronic ballasts. A lighting retrofit could save up to 50% of lighting energy is the proper ballast/lamp combination is selected. There is a definite opportunity for energy savings with a lighting upgrade, regardless of the intended occupancy.

c. Light switching: Lights are switched off and on manually. Dual technology occupancy sensors can automatically shut off lighting in classrooms, restrooms, janitor closets, offices, and other places,

resulting in huge potential energy savings. Many of the classrooms were vacant during our visit, but most of the lights were on.

d. Emergency egress lighting: The emergency egress lighting system needs to be checked when it is dark outside to determine if adequate light is available along the egress path. Also, current codes require that emergency egress lighting in places that require two exits (this is the case here) require that the lighting continues to the outside. This means that remote emergency heads need to be installed outside each exit as well as along the egress path.

5. Signage

a. Exit signs: There are a few exit signs, however there needs to be a survey of all signage, and an upgrade of the exit signs throughout the facility to bring it up to code. A person should be able to see two exit signs from any place he is standing.

Homer Secondary School -- Conversion to Civic Offices and Assembly Hall					
Feasibility Study					
Order of Magnitude Cost Estimate					
Building Areas					
Gym Area			5700	sf	
Lower Level Area			2800	sf	
Upper Level Area			8300	sf	
Total Building Area			16800	sf	
Architectural					
Replace Siding, Windows, Insulation	11880	sf	$55	psf	$653,400
Damproof Foundation Walls, Upgrade Fdn Drain, Regrade	660	lf	$85	plf	$56,100
Renovations: Gym	5700	sf	$110	psf	$627,000
Renovations: Lower Level	2800	sf	$80	psf	$224,000
Renovations: Upper Level	8300	sf	$80	psf	$664,000
Replace Roofing Assembly, Complete	15200	sf	$25	psf	$380,000
Architectural Subtotal					$2,604,500
Structural					
Upgrade Roof Structure	15200	sf	$15	psf	$228,000
Upgrade Shear Walls: Upper Level	480	lf	$140	plf	$67,200
Upgrade Shear Walls: Lower Level	230	lf	$240	plf	$55,200
Structural Subtotal					$350,400
Mechanical					
New Sprinkler System	16800	sf	$8	psf	$134,400
New Boilers & Heating Distribution System	16800	sf	$17	psf	$285,600
New Air Handlers & VAV Air Distribution System	16800	sf	$23	psf	$386,400
New Bathrooms: Lower Level	2	@	$75,000	per	$150,000
Add Roof Overflow Drain System With Heat Trace	16800	@	$3	psf	$50,400
Mechanical Subtotal					$1,006,800
Electrical					
Replace Power Distribution System	16800	sf	$8	psf	$134,400
Replace All Lighting	16800	sf	$14	psf	$235,200
New Fire Alarm System	16800	sf	$4	psf	$67,200
New Telecom Distribution System	16800	sf	$8	psf	$134,400
Electrical Subtotal					$571,200

General Contractor Costs		
Construction Subtotal		$4,532,900
General Conditions	10%	$453,290
Hazmat Abatement (allowance)		$500,000
Contractor Overhead & Profit	10%	$548,619
Total Estimated Construction Cost (2007 Dollars)		**$6,034,809**
Total Construction Cost Per Square Foot (2007 Dollars)		$359
Permits and Fees	2%	$120,696
Design	10%	$603,481
Construction Admin & Management	5%	$301,740
Furniture, Fixtures, Equipment	5%	$301,740
1% For Art	1%	$60,348
Project Contingency	10%	$603,481
Total Estimated Project Cost (2007 Dollars)		**$8,026,296**
Total Project Cost Per Square Foot (2007 Dollars)		$478

Comparison of Construction Cost Per Square Foot in 2007 Dollars

Convert Homer Secondary School to Civic Office & Assembly Use	$359
New Construction Estimate: Steel-framed Class A Office in Homer	$336
Homer Library Construction Cost Escalated to 2007 Dollars	$385
Girdwood Library Construction Cost (Bid in February 2007)	$392

Homer Secondary School -- Conversion to Civic Offices and Assembly Hall			03.12.2007
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Order of Magnitude Cost Estimate			
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Renovations: Upper Level	8300 sf	$80 psf	$664,000
Replace Roofing Assembly, Complete	15200 sf	$25 psf	$380,000
Architectural Subtotal			$2,604,500
Structural			
Upgrade Roof Structure	15200 sf	$15 psf	$228,000
Upgrade Shear Walls: Upper Level	480 lf	$140 plf	$67,200
Upgrade Shear Walls: Lower Level	230 lf	$240 plf	$55,200
Structural Subtotal			$350,400
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2017 HERC Gym Statistics

	Youth Participants	Adult Participants	Total Visits	Volunteers	Vol. Hours	Vol. Value	Users Fees
Pickleball	3	45	3270	8	988	$ 27,179.88	$ 9,809.00
gymnastics*	89		556				$ 1,588.00
Zumba*	3	12	230				$ 502.00
Zumba Youth	5		40				$ 50.00
Morning Basketball*	20	36	495	1	234	$ 6,437.34	$ 1,236.00
Youth Basketball	49		768			$ -	$ 1,056.00
Bruins Basketball	26		104			$ -	$ 237.00
Youth Soccer	15		60	1	25	$ 687.75	$ 146.00
Total:	210	93	5523	10	1247	$ 34,304.97	**$ 14,624.00**

*These programs meet at Homer High and the HERC on different days.

Total Class fees collected from all program in 2017:		**$38,700**
Total Class fees collected from programs at HERC gym:		**$14,624**

This is 38% of all 2017 CR class fees.