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Division of International Communication
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 P.O. Box 38...
 Fair... AP 775-160
 Phone... 529... Fax... 74-7554

Total Project Cost	\$88,275
Approved	\$88,578,000
Required	,000
	Chair, F&L & LMC

MEMORANDUM

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Research and Teaching Faculty
 by the Chair of LMC is required for this project.
 appreciated

Affirmation

Prior approvals:

Preliminary Administrative Approval
Project Agreement
Formal Project Approval
Schematic Design Approval

August 15, 2006
December 6, 2006
February 18, 2010
November 9, 2011

Action Requested

[REDACTED]

for the Life Sciences Classroom and Laboratory Facility

Supporting Documents

- One Page Budget
- Civil Site Plan (showing connections to buildings)

Project Cha Approval:

2.10.12

[REDACTED]

Date: _____



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UNIVERSITY OF ALASKA

Project Name: Life Sciences Classroom and Lab Facility

MAU: UAF

Building: Life Sciences Facility

Date: 10/24/2011

Campus: Fairbanks

Prepared by: Wohlford

Project #: 2010100 LFRF

Acct #: 512035-50216

Total GFE Affected by Project:

07007 101100

PROJECT BUDGET

REVISIONS SHALL BE MADE BY
SPACE ALL SHEET BOARDS
IN SURFACE REVISIONS MARK
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OF PLUMB SHEET OLD

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- 568



LFRF
NEW LIFE
SCIENCES BUILDING

OF UNIVERSITY

DS
Engineering Services Group

GROUP
Professional Engineering Services Group

PROJECT NO. 100000000
DATE: 10/15/00

NO.	DATE	DESCRIPTION
1	10/15/00	ISSUED FOR PERMIT
2	10/15/00	ISSUED FOR PERMIT
3	10/15/00	ISSUED FOR PERMIT
4	10/15/00	ISSUED FOR PERMIT
5	10/15/00	ISSUED FOR PERMIT
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7	10/15/00	ISSUED FOR PERMIT
8	10/15/00	ISSUED FOR PERMIT
9	10/15/00	ISSUED FOR PERMIT
10	10/15/00	ISSUED FOR PERMIT



SEWER MAIN PLAN
AND PROFILE (3 OF 3)

DATE: 10/15/00
PROJECT NO. 100000000
C2.3

Division of Design & Construction
 590 University Avenue
 P.O. Box 308160
 Fairbanks, AK 99775-8160
 Phone (907) 474-5299 Fax (907) 474-7554

Total Project Cost	\$3,500,000
Approval Required	AVPF

MORANDUM

President
 Facilities Services

Vice President
 Design & Construction

S. Bauer 2/1/12

J. Stumpe 1/31/12

Application for
 Pattenena Roof Replacement R&R
 2012

Approval by the Associate Vice President of Facilities is
 granted. The cost of this project would be approximately \$3,500,000.

PIRFR (101)



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Background

The Patty Ice Arena was constructed in 1979 and is presently 32 years old. The roof system is original to the building. The existing roof system consists of a rag felt membrane, rag felt being organic (cotton) rag ground up and inserted as a binder in a felt roofing sheet. In the era it was installed (1979), using a rag felt membrane was acceptable. Most of those roofs have been replaced. The Patty Ice roof has received several patches to its membrane over the last couple of years. Currently, a well designed and constructed roof system is expected to last 20-25 years, with normal maintenance. This roof is the number one priority as it has caused recurring damage to the ice rink below. There is a concern that the structure could be compromised if replacement does not occur quickly.

Project Scope

Remove the existing roof system and replace with a new built up asphalt roof system.

Variance Report

None

Proposed Total Project Cost and Funding Source(s)

COMING IN FEBRUARY

Articles in this issue include: [Illegible text]

RESEARCH REPORTS

[Illegible text]

RESEARCH REPORTS

[Illegible text]

[Illegible text]

[Illegible text]



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SCHEMATIC DESIGN APPROVAL

Name of Project: Patty Ice Arena

UNIVERSITY OF FAIRBANKS
201203#-PIRFR

103010-571316

Total GSF Affected by Project: 33100

PROJECT BUDGET

FPA Budget

SDA Budget

A. Professional Services

Advance Planning, Program Development

\$0

Consultant: Design Services

\$98,714

Consultant: Construction Phase Services

\$30,000

Consul: Extra Services (List: _____)





SCHMATIC DESIGN APPROVAL

Name of Project: Atkinson Power Plant Renewal Phase 2

Location of Project: UAF, Fairbanks Campus

Project Number: 2012032BARN

Date of Request: February 1, 2012

Total Project Cost:	\$1,927,000 (Phase 2)
Approval Required:	Associate Vice President of
Prior Approvals:	Preliminary Administrative Formal Project Approval: J

POLICY CITATION

In accordance with Regents' Policy 05.12.043, Schematic Design Approval includes the location of the facility, its relationship to other facilities, the function of the facility, the basic design including construction materials, mechanical, electrical, telecommunication systems, and any other changes to the project since

Unless otherwise designated by the approval authority or a Material Change Order subsequently identified, SDA also represents approval of the 2011 project and authorization to complete the Construction Document within the approved budget, and to proceed to completion of

For the Schematic Design Approval if there has been no Material Change Order Project Approval, approval levels shall be as follows:

- x TPC > \$4 million will require approval by the Facilities and
- x TPC > \$2 million but < \$4 million will require approval by
- x TPC < \$2 million will require approval by the university's (AVP).

estimated cost for total replacement. This is mainly due to increases in electrical equipment costs and installation problems that were not originally identified.

The aerator replacement and critical piping changes are estimated to be approximately \$800,000 less than originally estimated. This is primarily due to a different piping approach than was anticipated in the concept stage. The

Procurement method

Management of the contract

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Contract management and control

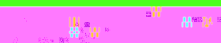
Contract management and control



Contract management and control



Contract management and control



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Contract management and control

SCHEMATIC DESIGN APPROVAL

Name of Project: Atkinson Power Plant Renewal Phase 2

Location of Project: UAF, Fairbanks Campus

Project

UNIVERSITY OF ALASKA		
Project Name: Ben Atkinson Heating Plant Renewal Phase 2		
MAU: UAF		
Building: FS802	Date:	January, 2012
Campus: Fairbanks	Prepared By:	Mike Ruckhaus
Project#: 2012032BARN2	Account No.:	514498/5713180216
Total GSF Affected by Project:		N/A
PROJECT BUDGET	FPA Budget	SDA Budget
A. Professional Services		
Advance Planning Program Development		\$0
Consultant Design Services		\$180,000
Consultant Construction Phase Services		\$60,000
Consult Extra Services (List: _____)		\$0
Site Survey		\$0
Soils Testing & Engineering		\$0
Special Inspections		\$15,000
Plan Review Fees/ Permits		\$0
Other		\$0
Professional Services Subtotal		\$255,000
B. Construction		
General Construction Contract(s)		\$900,000
Other Contractors (List: _____)		\$0
Construction Contingency		\$149,000
Construction Subtotal		\$1,049,000
Construction Cost per GSF		N/A
C. Building Completion Activity		
Equipment		\$400,000
Fixtures		\$0
Furnishings		\$0
Signage not in construction contract		\$0
Move Out Cost/Temp Reloc. Costs		\$0
Move In Costs		\$0
Art		\$0
Other (List: _____)		\$0
OIT Support		\$0
Maintenance/Operator Support		\$0
Building Completion Activity Subtotal		\$400,000
D. Owner Activities & Administrative Cost		
Project Planning and Staff Support		\$76,680
Project Management		\$146,100
Misc Expenses Advertising, Printing, Supplies		\$0
Owner Activities & Administrative Cost Subtotal		\$222,780
E. Total Project Cost		\$1,926,780
Total Project Cost per GSF		N/A
F. Total Appropriation(s)		\$1,927,500

Atkinson Heat and Power Plant Renewal Scope January 2012

The following table shows the items in their approximate order of priority to the operational mission and their status:

Atkinson Renewal Items for FY11 allocation of \$2.6M:

Item	Item needed if new plant is constructed	Cost	Description
Partial replace boiler tubes for Boilers 1&2 (Project: BAST-Complete)	No	\$990,000	Replace superheater tubes (approximately 25% of the total tubes) which inspection has shown to be in the worst condition. Also perform ultrasonic testing on the remainder of the tubes and other parts to ascertain their condition.
Replace Boiler No. 4 air pre heater (Project: BAPH4 complete)	Yes	\$245,000	A recent inspection has revealed that this heater is near failure. If it fails, boiler No. 4 will not be able to provide steam which significantly reduces the steam plant redundancy.
Additional domestic water aerator (Phase 1 (BARN1)-80% complete)	Yes	\$1,495,000	This item provides installation of a second parallel unit to enable extended shutdown of the existing tank and its internal components for inspection and repair. It requires a small addition to the building.

Atkinson Renewal Items for FY12 allocation of \$1,927,500 (\$927,500 GF+ \$1,000,000 Bond):

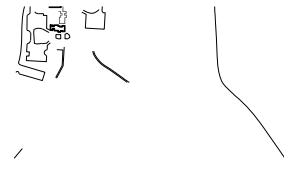
Item	Item needed if new plant is constructed	Cost	Description
Add second deaerator tank	Yes	\$860,000	Existing unit has been in service in excess of 40 years. Install new unit in parallel with existing. Partial emergency repairs were completed in 2011 but replacement is needed.
Replace feedwater heater	Yes	\$180,000	Existing feedwater heater is approaching the end of its useful life and is a potential single point of failure.
Eliminate single points of failure in critical piping (partial scope)	Yes	\$520,000	Eliminate single points of failure in critical piping: A large portion of the piping system is on the order of 40 years old.
Replace existing variable frequency drives (partial scope)	Yes	\$367,500	Replace 25 year old variable frequency drives as parts are not available to repair
TOTAL		\$1,927,500	

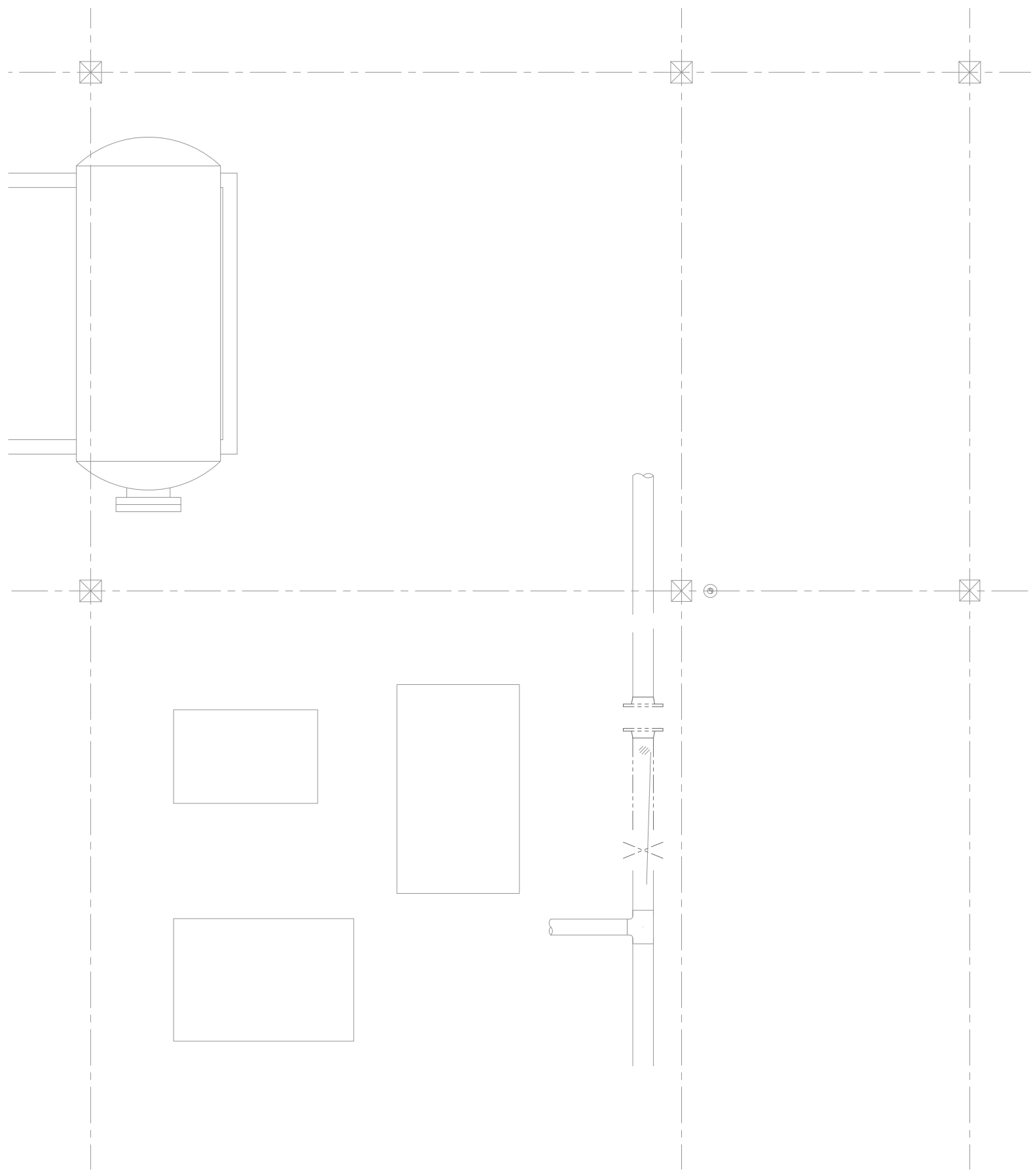
Atkinson Plant Renewal Items (FY13-17), in order of priority:

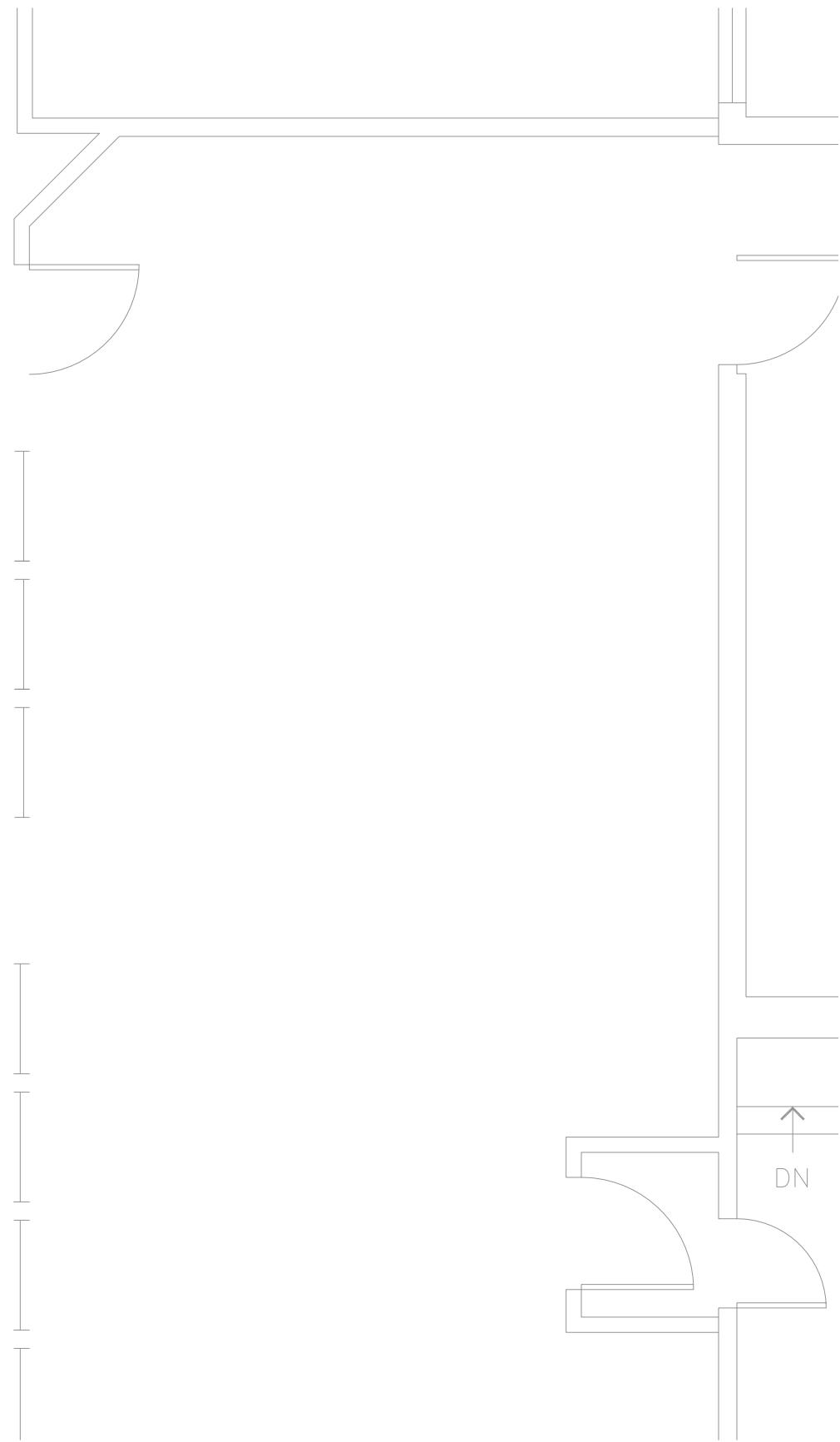
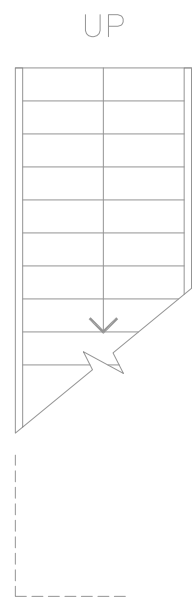
Item (Phase to be Determined)	Item needed if new plant is constructed	Cost	Description
Replace existing variable frequency drives (partial scope)	Yes	\$1,362,500	Replace 25 year old variable frequency drives as parts are not available to repair
Continuous emissions monitoring for Boiler No. 4	Yes	\$425,000	Continuous Emissions Monitoring for Boiler No. 4: Existing air permit includes 10% capacity constraint for Boiler #4 that would be lifted with installation of continuous monitoring.
Eliminate single points of failure in critical piping (partial scope)	Yes	\$648,000	Eliminate single points of failure in critical piping: A large portion of the piping system is on the order of 40 years old.
Eliminate single points of failure in condensate system	Yes	\$337,000	This measure would provide the ability to handle condensate from a second holding tank location, allowing the existing 1964 vintage steel tank to be taken down for inspection and repair.
Increase RO capacity	Yes	\$350,000	Reverse Osmosis is used in water treatment for make-up water in the steam generation process.

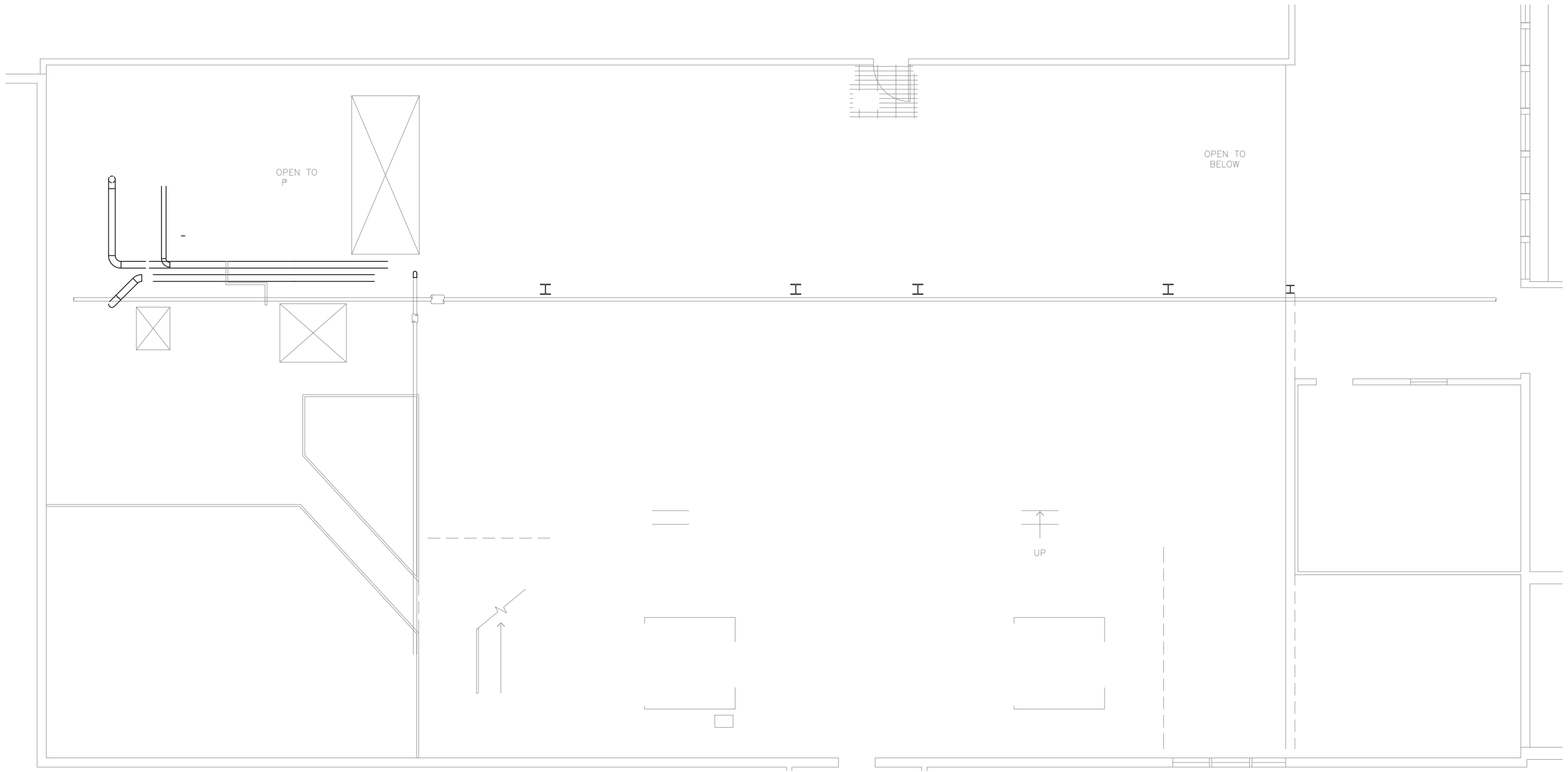
Replace existing demineralizer	Yes	\$425,000	Demineralized water is used as make up in the steam generation process. Existing unit is approaching useful design life. The new demineralizer could supply the new power plant.
Replace obsolete control system	Yes	\$2,500,000	This is an aging plant control system (1980's vintage). This system runs the bulk of the steam generation facility. Controllers are becoming difficult to obtain due to product obsolescence.
Expansion of ash silo	No	\$4,000,000	The new coal boiler project would eliminate the need for this project.
Rail spur maintenance	Yes	\$250,000	Because the University's rail spur is used as the primary conduit for coal, it has been in near continuous service for over 40 years and is in need of maintenance.
Reconstruct feedwater pumping station	No	\$750,000	This measure would remove the abandoned 1960's vintage feedwater pumping station and replace it with new technology multistage pumps.
Additional water storage tank for redundancy	Yes	\$2,500,000	Additional water storage tank for redundancy: This is a reliability.0024 cd(mm3ry coO

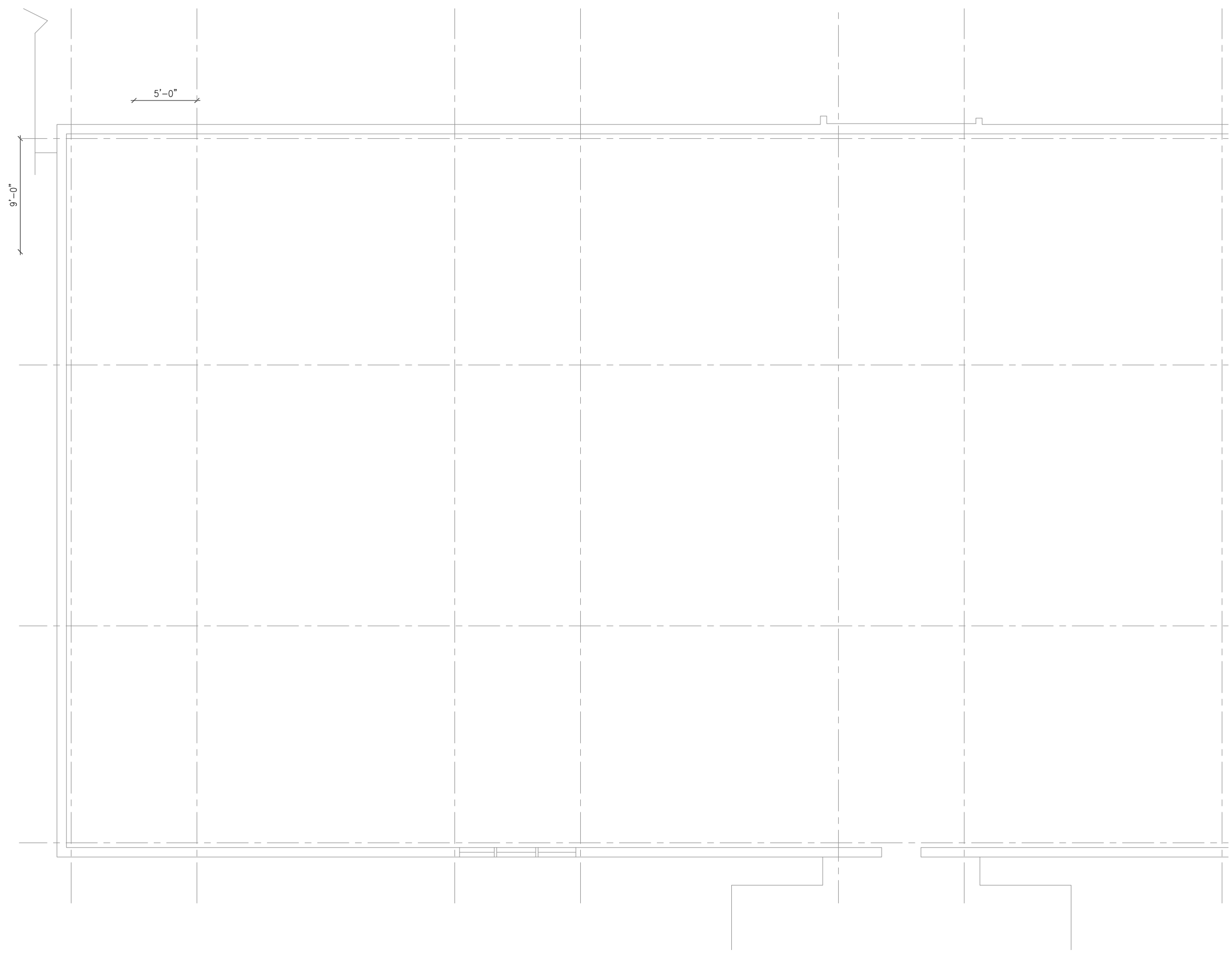
Improve domestic water taste (membrane filtration)	Yes	\$425,000	Improve Domestic water taste (membrane filtration): This measure would install point-of-use membrane filtration units in key locations to reduce consumer concern about taste.
Back-up cooling water	No	\$350,000	This is a reliability measure to provide redundancy in a system that is critical to operation of power generation. Existing single wall unit is in excess of design life.
Convert Boiler No. 3 to dual fuel (natural gas and oil)	Yes	\$500,000	Add current natural gas burner technology to Unit #3 to allow operation with less expensive fuel source. Operation with natural gas may have a positive impact on the University's air quality permit application. (These are contained in the Natural Gas Strategy Capital Costs in Appendix A Section).
Replace thinwall steel chilled water piping on Lower Campus	Yes	\$1,750,000	Replace thin wall steel chilled water piping on Lower Campus: Piping in portions of the existing chilled water distribution system on lower campus was constructed of a thin wall material subject to corrosion and failure.
Additional condenser capacity	No	\$1,500,000	Additional condensers will allow the steam turbine to increase its output in the summer.
Replace steam and condensate lines to U-Park	Yes	\$5,000,000	The pipes are near the end of their useful life.
New water plant controls	Yes	\$200,000	Existing controls are not supported by the manufacturer and are at the end of their life.
Raw water pumping station re-build	Yes	\$250,000	
Central air compressor replacement	Yes	\$250,000	

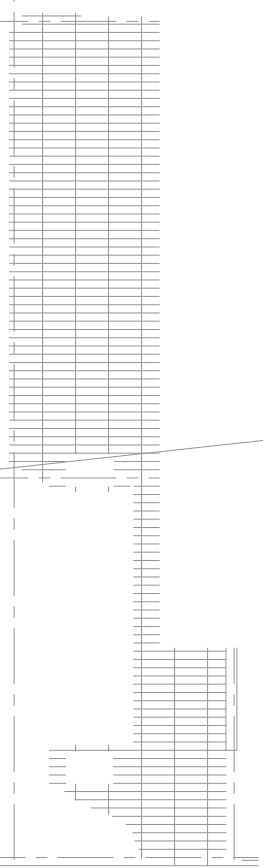
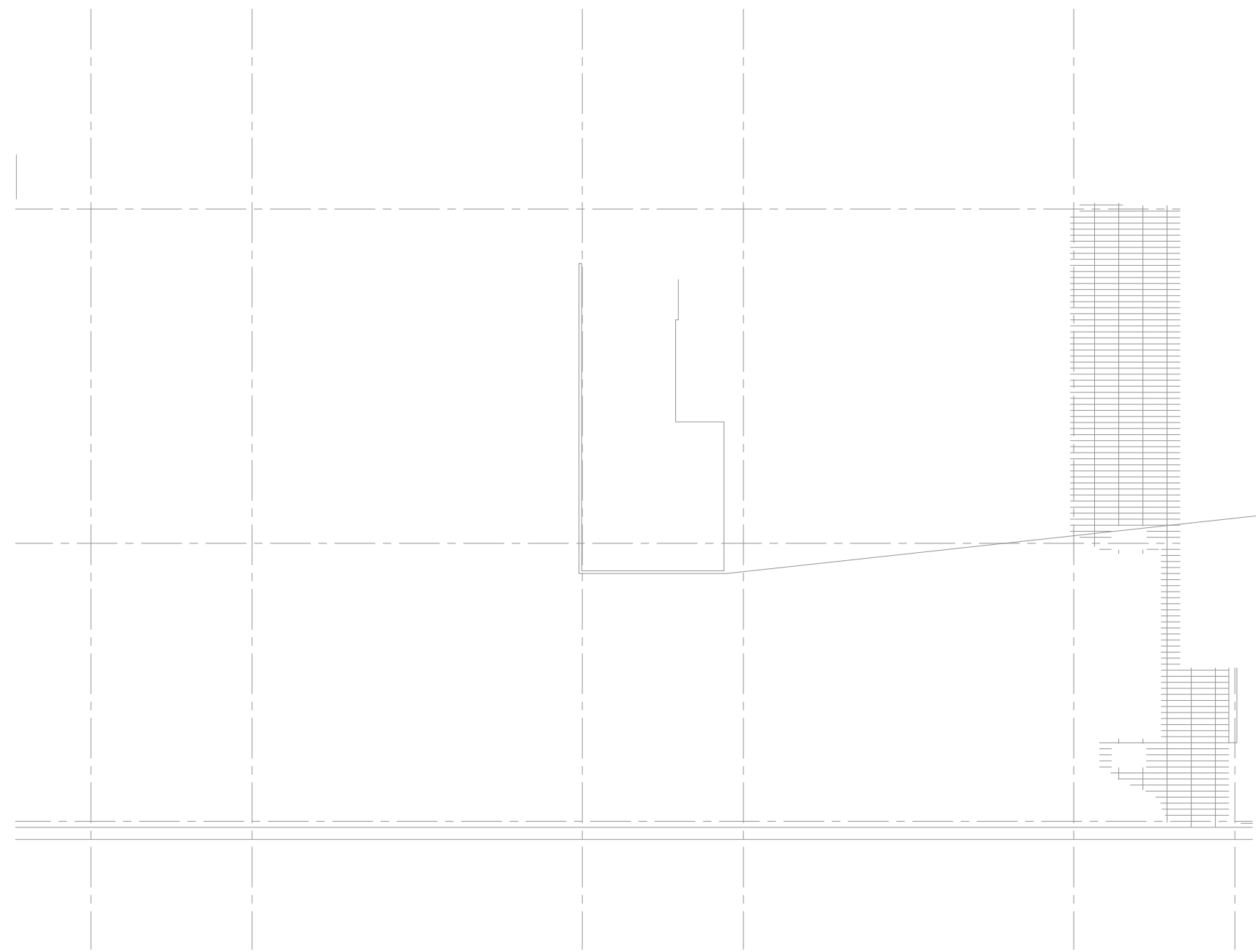


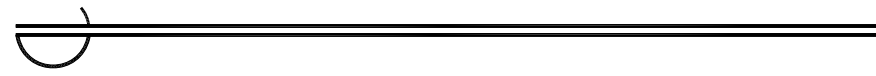
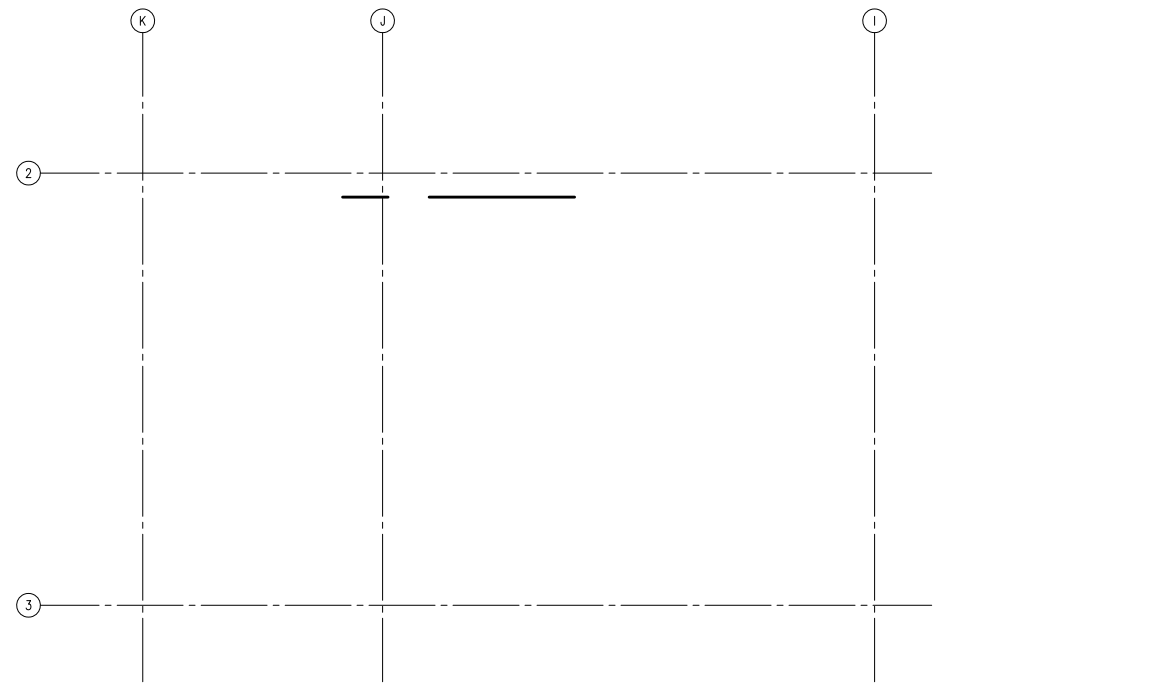


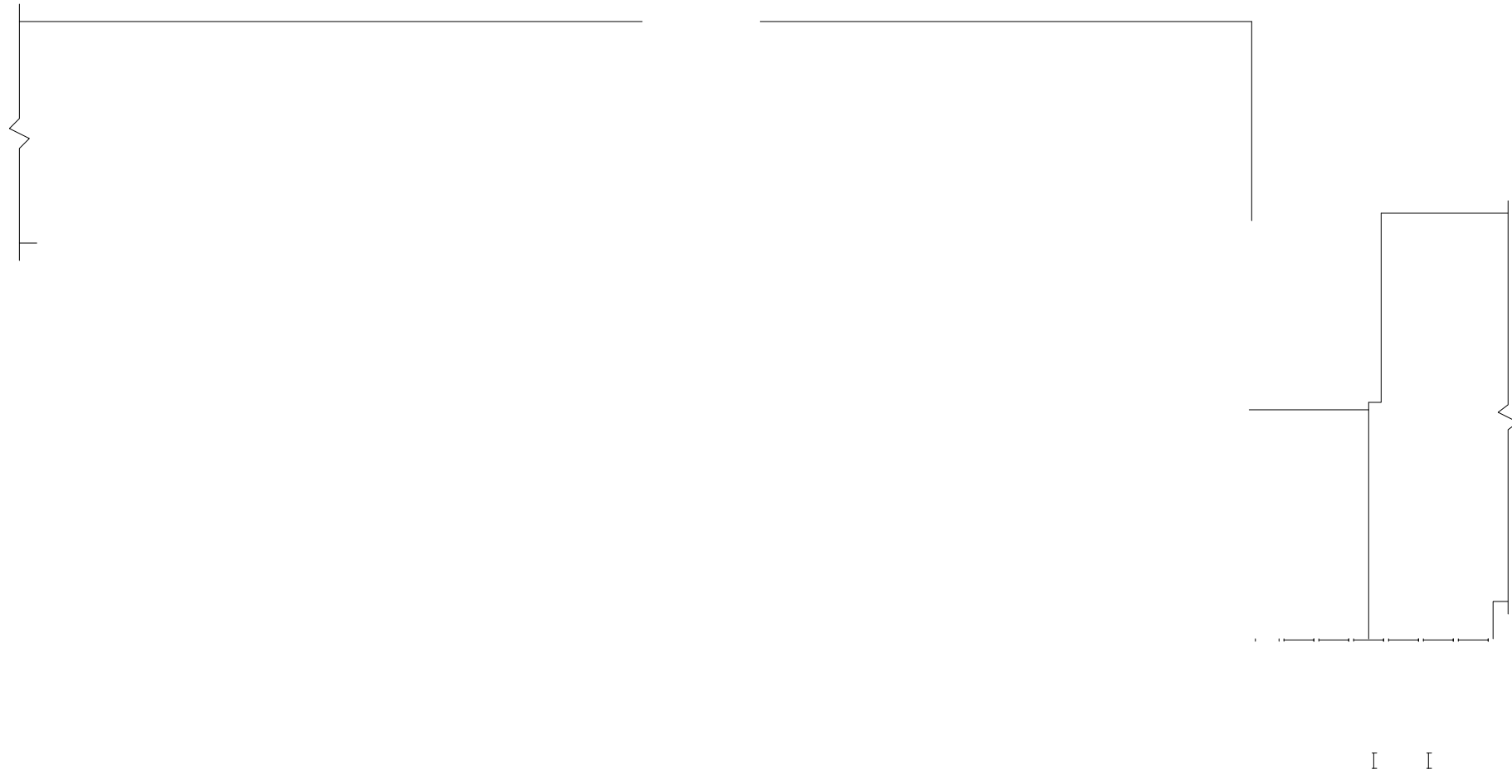


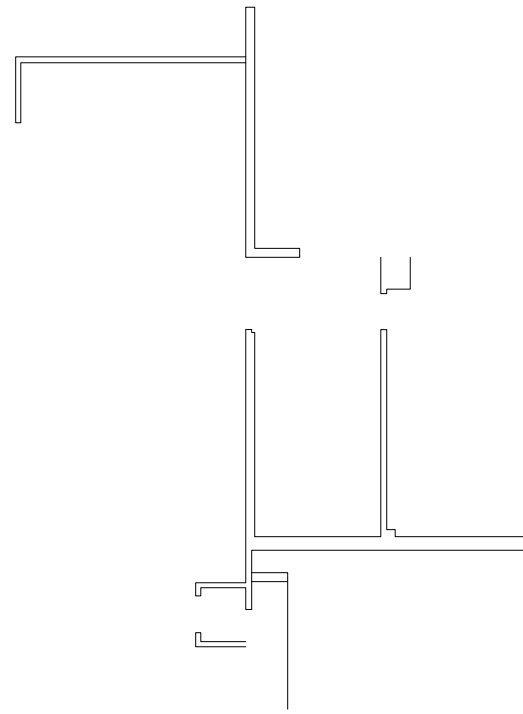


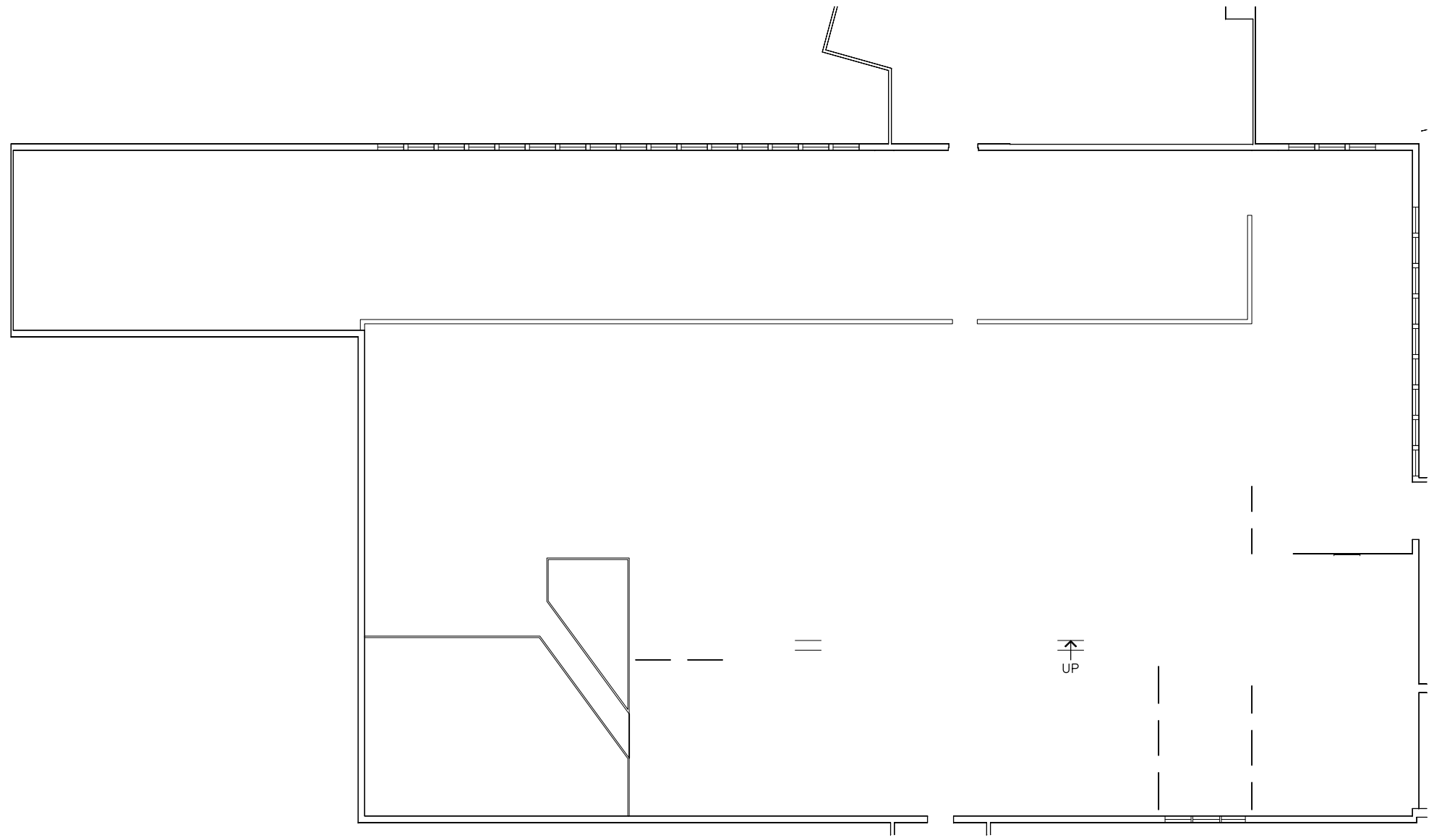


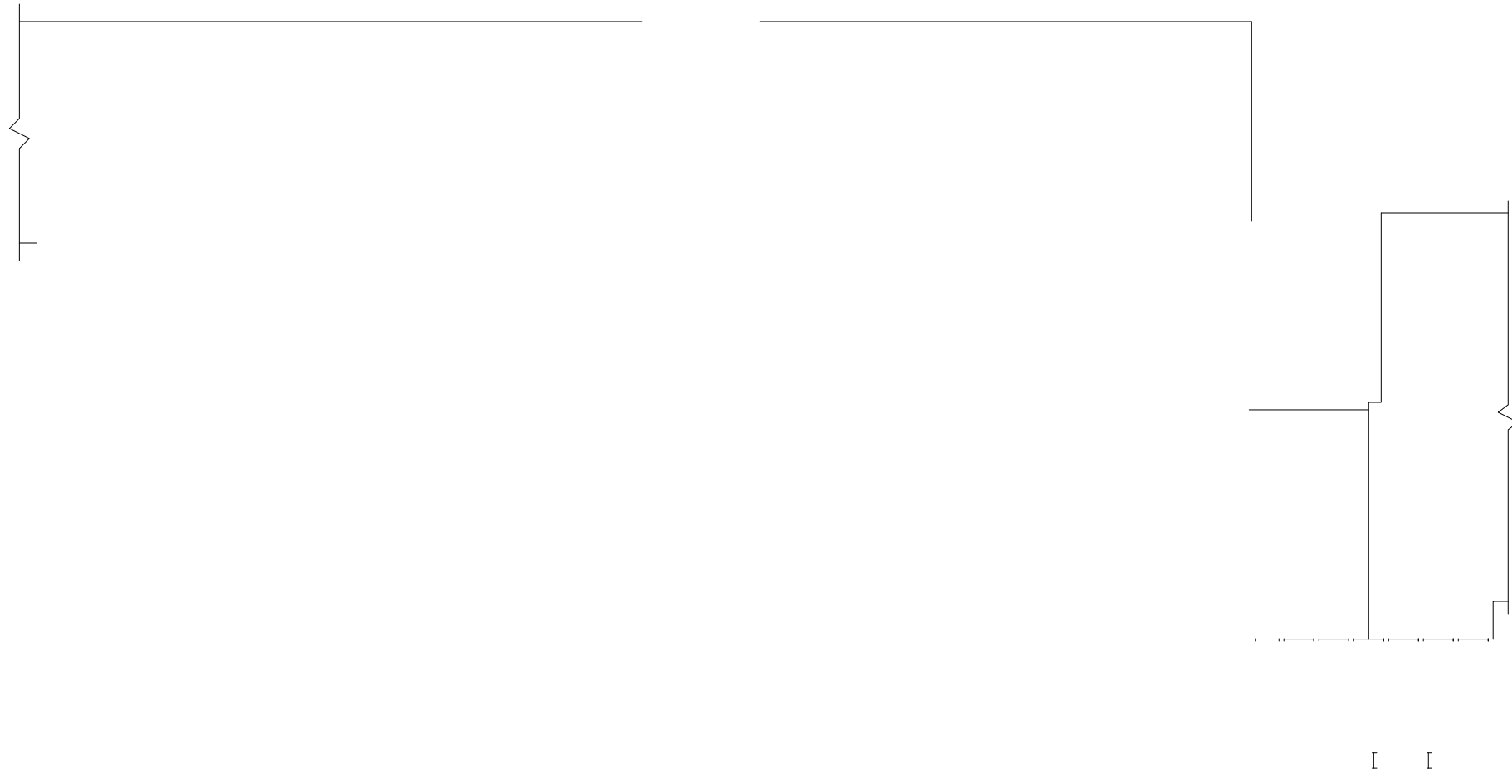












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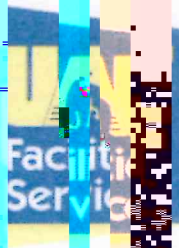
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PROJECT CHANGE APPROVAL

Name of Project: Arctic Health CANHR Health Clinic

Location of Project: UAF, Fairbanks Campus

Project Number: 2010128AHCHC

Date of Request: February 9, 2012

In accordance with Regents' Policy 05.12.047, approvals required for changes in the source of

MEMORANDUM

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SUBJECT: [Illegible]

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UNIVERSITY OF ALASKA

ProjectName:

MAU: UAF

Building: ArctidHealthRB

Campus: Fairbanks

Project#: 20101128AHCHC

TotalGSFAffectedby Project:

6000

6000

PROJECT BUDGET

SDA Budget

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