

INVITATION TO BID

Department of Family & Community Services Anchorage Pioneer Home - 3rd Floor Resident Renovations ANC 23-26C

Bidders are invited to submit sealed bids, in single copy.

This state funded project consists of upgrades to the 3rd floor resident neighborhood of the Anchorage Pioneer Home. The 3rd floor will be converted from an R-2 Occupancy to an I-1 Condition 2. The base work includes enhancement to horizontal smoke and fire protection in all bedrooms on the 3rd floor. The work also includes renovations to 35 bedrooms/bathroom suites and supporting areas including common areas. Three smoke compartments are being formed on the 3rd floor to support the I-1 occupancy. All work is to be performed in accordance with the plans and specifications associated with this document.

A Pre-Bid walk through is scheduled for Thursday June 1, 2023, at 10:00 a.m. at the Anchorage Pioneer Home. Bidders are strongly encouraged to attend. Please meet in the main lobby located at 923 W. 11th Avenue Anchorage, AK 99503

Project related questions or clarifications: Mark Moon, Project Manager at (907) 269-7812 or mark.moon@alaska.gov

Bid Deadline is 2:00pm June 20, 2023, local time.

Bids will be opened publicly at 2:00 pm local time June 20 2023, at 3601 C Street Suite 390 Anchorage, AK 99503

Bids, modifications or withdrawals transmitted by mail must be received no later than 30 minutes prior to the scheduled time of bid opening.

Mark Moon at 3601 C Street - Suite 390 Anchorage Alaska 99503 must receive hand-delivered bids, modifications or withdrawals prior to the scheduled time of bid opening.

Faxed bid modifications must be addressed to:

DHSS/FMS/Facilities - ATTN: Mark Moon - Fax number: (907) 334-2689

The Engineer's Estimate: Between \$1,500,000 and \$2,000,000

The Project completion date: 210 Days after NTP

Plans and Specifications may be printed by the Bidder from:

- the State of Alaska website (www.state.ak.us) Public Notices Online button, click on the More Public Notices button, Browse Active Public Notice button, then Health & Social Services, and Procurement

OR

- the Bidder may forward the project website location/address information to the print shop of their choice for printing – all associated printing costs are payable by the Bidder

Bidders are responsible for checking this website for addenda. Not acknowledging addenda at the time of bid will deem the Bidder non-responsive.

Issued: May 23, 2023

Department of Family & Community Services
3rd Floor Resident Renovations
Project No.: ANC 23-26C

TABLE OF CONTENTS

BIDDING AND CONTRACT REQUIREMENTS - STATE FUNDED PROJECTS

BIDDING REQUIREMENTS

00020 - Invitation for Bids - Form 25D-7 (7/03)
00100 - Information to Bidders - 25D-3
00120 - Required Documents, 25D-4 (8/01)
00310 - Proposal and Non-Collusion Affidavit - Form 25D-9 (7/03)
00311 – Alaska Bidders Preference Certificate – Form 25D-19
 Veterans Preference Affidavit
 Alaska Products Preference Worksheet

00312 - Bid Schedule
00410 – Bid Security Form 25D-14 (8/01)
00420 - Bid Modification – Form 25D-16 (8/01)
00430 - Subcontractor List - Form 25D-5 (8/01)

CONTRACT FORMS

00510 - Construction Contract - Form 25D-10a (8/01)
00610 - Performance Bond - Form 25D-13 (8/01)
00620 - Payment Bond - Form 25D-12 (8/01)
00670 - Contractor's Questionnaire - Form 25D-8 (8/01)

PROVISIONS OF THE CONTRACT

00700 - General Conditions of the Construction Contract for Buildings
00800 - Supplementary General Conditions
00830 - Laborers' and Mechanics' Minimum Rates of Pay

STATE LABORERS' AND MECHANICS' MINIMUM RATES OF PAY

State wages can be obtained at <http://www.labor.state.ak.us/lss/pamp600.htm> Use the State wage rate that are in effect 10 days before Bid Opening.

0850 - Drawings

TECHNICAL SPECIFICATIONS

DIVISION 1 - GENERAL REQUIREMENTS

01005 – Administrative Provisions
01010 - Summary of Work
01020 - Intent of Documents
01027 - Applications for Payment
01028 - Change Order Procedures
01040 - Coordination
01045 - Cutting and Patching
01073 – Explanations Drawings and Specifications
01090 - Referenced Standards
01120 – Alteration Project Procedures
01126 - Contractor's Certification of Subcontractors
 -Subcontractor Certification Form

Department of Family & Community Services
3rd Floor Resident Renovations
Project No.: ANC 23-26C

01200 - Project Meetings
01230 - Alternates
01300 – Submittals
013545 – Airborne Contaminant Control
01400 - Quality Control
01500 - Construction Facilities and Temporary Controls
01540 - Security
01600 - Material and Equipment
01700 - Contract Closeout

01 11 00 Summary of Work
01 35 45 Airborne Contaminant Control

DIVISION 2 – SITE WORK

02 26 00 Hazardous Materials Assessment
02 41 19 Selective Demolition
02 82 33 Removal and Disposal of Asbestos Containing Materials
02 83 33 Removal and Disposal of Materials Containing Lead
02 84 18 Removal and Disposal of Chemical Hazards

DIVISION 5 – METALS

05 50 00 Metal Fabrications

DIVISION 7 – THERMAL and MOISTURE PROTECTION

07 21 00 Insulation
07 84 00 Firestopping
0792 00 Joint Sealants

DIVISION 8 - DOORS AND WINDOWS

08 31 16 Access Panels and Frames
08 71 00 Door Hardware

DIVISION 9 - FINISHES

09 29 16 Gypsum Board Assemblies
09 30 13 Ceramic Tile
09 51 00 Acoustical Ceiling
09 65 00 Resilient Flooring
09 91 00 Interior Painting

DIVISION 10 – SPECIALTIES

10 26 13 Corner Guards
10 28 00 Toilet and Bath Accessories
10 44 16 Fire Extinguishers

DIVISION 11 – EQUIPMENT

11 73 00 Ceiling Mounted Patient Lift System

Department of Family & Community Services
3rd Floor Resident Renovations
Project No.: ANC 23-26C

DIVISION 12 – FURNISHINGS

12 30 00 Manufactured Casework

MECHANICAL AND PLUMBING SPECIFICATIONS sheet M1.0

Z1020 – Administrative Requirements
D2000 – Plumbing Systems
D2010 – Domestic Water Systems
D2020 – Sanitary Drainage and Vent Systems
D3060 – Ductwork Systems
D3090 – Testing, Adjusting, And Balancing
D8000 – Controls and Instrumentations

ELECTRICAL SPECIFICATIONS sheet E0.2

DIVISION 26 – ELECTRICAL

26 05 00 Common Work Results
26 05 05 Selective Demolition for Electrical
26 05 19 Wire and Cable
26 05 29 Hangers and Supports for Electrical Systems
26 05 33 Raceway and Boxes for Electrical Systems
26 05 53 Identification for Electrical Systems
26 24 16 Panelboards
26 27 26 Wiring Devices
26 50 00 Lighting Fixtures
26 31 00 Addressable Fire Alarms and Smoke Detection Systems

End of Table of Contents



STATE OF ALASKA
DEPARTMENT OF FAMILY & COMMUNITY SERVICES

INVITATION TO BID
for Construction Contract

Date 5/23/26

Anchorage Pioneer Home – 3rd Floor Resident Renovations No.: ANC 23-26C

Project Name and Number

Location of Project: Anchorage, Alaska
Contracting Officer: Janelle Earls, Contracting Officer
Issuing Office: Dept. of Family & Community Services, Office of the Commissioner, Finance & Management Services
State Funded ☒ Federal Aid ☐

Description of Work: This state funded project consists of upgrades to the 3rd floor resident neighborhood of the Anchorage Pioneer Home. The 3rd floor will be converted from an R-2 Occupancy to an I-1 Condition 2. The base work includes enhancement to horizontal smoke and fire protection in all bedrooms on the 3rd floor. The work also includes renovations to 35 bedrooms/bathroom suites and supporting areas including common areas. Three smoke compartments are being formed on the 3rd floor to support the I-1 occupancy. All work is to be performed in accordance with the plans and specifications associated with this document.

The Engineer's Estimate is between:

\$1,500,000 and \$2,000,000

All work shall be completed in 210 Calendar Days, or by _____.
Interim Completion dates, if applicable, will be shown in the Special Provisions.

Bidders are invited to submit sealed bids, in single copy, for furnishing all labor, equipment, and materials and for performing all work for the project described above. Bids will be opened publicly at 2:00 pm local time, at 3601 C Street, Suite 390 Anchorage, Alaska 99503 on the 20th of June 2023.

SUBMISSION OF BIDS

ALL BIDS INCLUDING ANY AMENDMENTS OR WITHDRAWALS MUST BE RECEIVED PRIOR TO BID OPENING. BIDS SHALL BE SUBMITTED ON THE FORMS FURNISHED AND MUST BE IN A SEALED ENVELOPE MARKED AS FOLLOWS:

Bid for Project: ANC 23-26C Anchorage Pioneer Home 3 rd Floor Resident Renovations	ATTN: Mark Moon State of Alaska Department of Family & Community Services Facilities Office 3601 C Street Suite 390 Anchorage, AK 99503

Bids, amendments, or withdrawals transmitted by mail must be received at the above specified address no later than **30 minutes** prior to the scheduled time of bid opening. Hand-delivered bids, amendments or withdrawals must be received at **3601 C Street – Suite 390 Anchorage, Alaska 99503** prior to the scheduled time of bid opening. Faxed bid amendments must be addressed to **Mark Moon**. Fax number: (907) 334-2689.

A bid guaranty is required with each bid in the amount of 5% of the amount bid. (Alternate bid items as well as supplemental bid items appearing on the bid schedule shall be included as part of the total amount bid when determining the amount of bid guaranty required for the project.)

The Department hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this Invitation, Disadvantaged Business Enterprises (DBEs) will be afforded full opportunity to submit bids and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

NOTICE TO BIDDERS

Bidders are hereby notified that data to assist in preparing bids is available as follows:

Plans and Specifications may be printed by the Bidder from:

- The State of Alaska website (www.state.ak.us) Public Notices Online button, click on the More Public Notices button, Browse Active Public Notice button, then Family & Community Services, and Procurement.

OR

- The Bidder may forward the project website location/address information to the print shop of their choice for printing – all associated printing costs are payable by the Bidder

All questions relating to technical aspects of the project should be directed to the following:

Project Manager: Mark Moon, DFCS Facilities Manager I

Phone: (907) 907 269-7812 Email: mark.moon@alaska.gov

All questions concerning bidding procedures should be directed to:

ATTN: Mark Moon

State of Alaska

Department of Family & Community Services

Facilities Office

3601 C Street, Suite 390 Anchorage, AK 99503

907 269-7812

**STATE OF ALASKA
DEPARTMENT OF HEALTH & SOCIAL SERVICES**

INFORMATION TO BIDDERS

The Department is concerned over the manner in which bids are submitted. Bidders are requested to study and follow the bid assembly instructions as to the method and form for submitting bids so there will be no reason to reject a bid.

EXAMINATION OF CONTRACT REQUIREMENTS

Bidders are expected to examine carefully the plans, specifications and all other documents incorporated in the contract to determine the requirements thereof before preparing bids.

Any explanation desired by bidders regarding the meaning or interpretation of drawings and specifications must be requested in writing and with sufficient time allowed for a reply to reach them before the submission of their bids. Oral explanations or instructions given before the award of the contract will not be binding. Any interpretation made will be in the form of an addendum to the specifications or drawings and will be furnished to all bidders and its receipt by the bidder shall be acknowledged.

CONDITIONS AT SITE OF WORK

Bidders are expected to visit the site to ascertain pertinent local conditions such as the location, accessibility and character of the site, labor conditions, the character and extent of the existing work within or adjacent thereto, and any other work being performed thereon.

PREPARATION OF BIDS

- (a) Bids shall be submitted on the forms furnished, and must be manually signed in ink. If erasures or other changes appear on the forms, each such erasure or change must be initialed by the person signing the proposal.
- (b) The bid schedule will provide for quotation of a price or prices for one or more pay items which may include unit price or lump sum items and alternative, optional or supplemental price schedules or a combination thereof which will result in a total bid amount for the proposed construction.

Where required on the bid form, bidders must quote on all items and **THEY ARE WARNED** that failure to do so will disqualify them. When quotations on all items are not required, bidders should insert the words "no bid" in the space provided for any item not requiring a quotation and for which no quotation is made.

- (c) The bidder shall specify the price or prices bid in figures. On unit price contracts the bidder shall also show the products of the respective unit prices and quantities written in figures in the column provided for the purpose and the total amount of the proposal obtained by adding the amounts of the several items. All the figures shall be in ink or typed.

- (d) Neither conditional nor alternative bids will be considered unless called for.
- (e) Unless specifically called for, telegraphic or telefacsimile bids will not be considered.
- (f) Bid Schedule form should be enclosed in a separate sealed envelope and enclosed with all other bidding forms required at the opening.

BID SECURITY

All bids shall be accompanied by a bid security in the form of an acceptable Bid Bond (Form 06D-14), or a certified check, cashier's check or money order made payable to the State of Alaska. The amount of the bid security is specified on the Invitation to Bid.

Bid Bonds must be accompanied by a legible Power of Attorney.

If the bidder fails to furnish an acceptable bid security with the bid, the bid shall be rejected as non-responsive. Telegraphic notification of execution of Bid Bond does not meet the requirement of bid security accompanying the bid. An individual surety will not be accepted as a bid security.

The bid securities of the two lowest bidders will be held by the Department until the Contract has been executed, after which such bid securities will be returned. All other bid securities will be returned as soon as practicable. If all bids are rejected, all bid securities will be returned as soon as practicable.

BIDDERS QUALIFICATIONS

Before a bid is considered for award, the bidder may be requested by the Department to submit a statement of facts, in detail, as to his previous experience in performing comparable work, his business and technical organization, financial resources, and plant available to be used in performing the contemplated work.

SUBMISSION OF BIDS

Bids must be submitted as directed on the Invitation for Bids. Do not include in the envelope any bids for other work.

ADDENDA REQUIREMENTS

The bid documents provide for acknowledgement individually of all addenda to the drawings and/or specifications on the signature page of the Proposal. All addenda shall be acknowledged on the Proposal or by telegram prior to the scheduled time of bid opening. If no addenda are received by the bidder, the word "None" should be shown as specified.

Every effort will be made by the Department to ensure that Contractors receive all addenda when issued. Addenda will be issued to the individual or company to whom bidding documents were issued. Addenda may be issued by any reasonable method such as hand delivery, mail, telefacsimile, telegraph, email, internet download, courier and in special circumstances by phone. Addenda will be issued to the address, telefacsimile number or phone number as stated on the planholder's list unless picked up in person or included with the bid documents. It is the bidder's responsibility to insure that he has received all addenda affecting the Invitation for Bids. No claim or protest will be allowed based on the bidder's allegation that he did not receive all of the addenda

for an Invitation for Bids. The Department is not responsible for issuing addenda to non-registered bidders.

WITHDRAWAL OR REVISION OF BIDS

A bidder may withdraw or revise a bid after it has been deposited with the Department, provided that the request for such withdrawal or revision is received by the designated office, in writing, by telegram, or by telefacsimile, before the time set for opening of bids.

Telegraphic or telefacsimile modifications shall include both the modification of the unit bid price and the total modification of each item modified but shall not reveal the amount of the total original or revised bids. Form 06D-16 shall be used to submit such modifications.

RECEIPT AND OPENING OF BIDS

- (a) All bids, including any amendment or withdrawal must be received by the Department prior to the scheduled time of bid opening. Any bid, amendment, or withdrawal that has not been actually received by the Department prior to the time of the scheduled bid opening will not be considered.
- (b) No responsibility will be attached to any officer or employee of the Department for the premature opening of, or failure to open, a bid improperly addressed or identified.
- (c) The Department reserves the right to waive any technicality in bids received when such waiver is in the interest of the State.

BIDDERS PRESENT

At the time fixed for bid opening, bids will be publicly opened and read for the information of bidders and others properly interested, who may be present either in person or by representative. The amount of the bid and the name of the bidder shall be compiled and distributed as soon as possible after bid opening. Bids are not open for public inspection until after the Notice of Intent to Award is issued.

BIDDERS INTERESTED IN MORE THAN ONE BID

If more than one bid is offered by any one party, by or in the name of his or their clerk or partner, all such bids will be rejected. A party who has quoted prices to a bidder is not thereby disqualified from quoting prices to other bidders or from submitting a bid directly for the work.

REJECTION OF BIDS

The Department reserves the right to reject any and all bids when such rejection is in the best interest of the State; to reject the bid of a bidder who has previously failed to perform properly, or complete on time, contracts of a similar nature; to reject the bid of a bidder who is not, in the opinion of the Contracting Officer, in a position to perform the contract; and to reject a bid as non-responsive where the bidder fails to furnish the required documents, fails to complete required documents in the manner directed, or makes unauthorized alterations to the bid documents.

AWARD OF CONTRACT

- (a) The letter of award, if the contract is to be awarded, will be issued to the lowest responsible and responsive bidder as soon as practical and usually within 40 calendar days after opening of proposals.
- (b) The successful bidder will be notified of the Department's intent to award the contract and requested to execute certain documents, including the contract form and bonds.
- (c) The contract will be awarded to the successful bidder following receipt by the Department of all required documents, properly executed, within the time specified in the intent to award. Failure to enter into a contract within the specified time shall be grounds for forfeiture of the bid security and consideration of the second low bidder for award.

Other Information:

PROPRIETARY INFORMATION: Proposers should not include proprietary information in proposals if such information should not be disclosed to the public. Any language within a submittal purporting to render all or portions of a proposal confidential will be disregarded. Proprietary information which may be provided after selection for contract negotiations will be confidential if expressly agreed to by the Contracting Agency (AS 36.30.230).

COST INCURRED PRIOR TO CONTRACT: Proposers are specifically advised that a contract shall not be in effect until a written agreement is executed by an authorized agent of the Contracting Agency. The Contracting Agency shall not be liable for any cost incurred by a Proposer in response to this solicitation, including any work done, even in good faith, prior to execution of a contract and issuance of a Notice to Proceed.

MINOR INFORMALITIES: The Contracting Agency expressly reserves the right to waive minor informalities, negotiate changes or reject any and all proposals and to not award the proposed contract, if in its best interest. "Minor Informalities" means matters of form rather than substance which are evident from the submittal, or are insignificant matters that have a negligible effect on price, quantity, quality, delivery, or contractual conditions and can be waived or corrected without prejudice to other Offerors (2 AAC 12.990).



STATE OF ALASKA
DEPARTMENT OF FAMILY & COMMUNITY SERVICES

REQUIRED DOCUMENTS
State Funded Contracts

Anchorage Pioneer Home 3rd Floor Resident Renovations, ANC 23-26C

REQUIRED FOR BID. Bids will not be considered if the following documents are not filled out and submitted at the time of bidding:

1. **Bid Form (Form 25D-9S)**
2. **Bid Schedule**
3. **Bid Security (Form 25D-14)**

REQUIRED FOR BID MODIFICATIONS. Any bid revisions must be submitted by the bidder prior to bid opening on the following form:

4. **Bid Modification (Form 25D-16)**

REQUIRED FOR CLAIMED PROCUREMENT PREFERENCE. The Department will not consider a claimed procurement preference unless a bidder submits the appropriate, signed certification(s) for the claimed preference at the time of bidding:

5. **Alaska Bidder Preference Certification (Form 25D-19)**
 6. **Alaska Veteran Preference Certification (Form 25D-17)**
 7. **Alaska Products Preference Certification (Form 25D-20)**
-

REQUIRED AFTER NOTICE OF APPARENT LOW BIDDER. The apparent low bidder is required to complete and submit the following document within 5 working days after receipt of written notification:

1. **Subcontractor List (Form 25D-5)**
-

REQUIRED FOR AWARD. In order to be awarded the contract, the successful bidder must completely fill out and submit the following documents within the time specified in the intent to award letter:

1. **Construction Contract (Form 25D-10A)**
2. **Payment Bond (Form 25D-12)**
3. **Performance Bond (Form 25D-13)**
4. **Contractor's Questionnaire (Form 25D-8)**
5. **Contractor's Certification of Subcontractors**
6. **Certificate of Insurance (from carrier)**
7. **Dept. of Labor – Notice of Work Form**



STATE OF ALASKA
DEPARTMENT OF FAMILY & COMMUNITY SERVICES

Proposal

for
Anchorage Pioneer Home – 3rd Floor Resident Renovations # ANC 23-26C

Project Name and Number

By

Company Name

Company Address (Street or PO Box, City, State, Zip)

**To the CONTRACTING OFFICER,
DEPARTMENT OF FAMILY & COMMUNITY SERVICES**

In compliance with your Invitation for Bids dated _____, the Undersigned proposes to furnish and deliver all the materials and do all the work and labor required in the construction of the above-referenced Project, located at or near **Anchorage, Alaska**, according to the plans and specifications and for the amount and prices named herein as indicated on the Bid Schedule consisting of _____ sheet(s), which is made a part of this Bid.

The Undersigned declares that he has carefully examined the contract requirements and that he has made a personal examination of the site of the work; that he understands that the quantities, where such are specified in the Bid Schedule or on the plans for this project, are approximate only and subject to increase or decrease, and that he is willing to perform increased or decreased quantities of work at unit prices bid under the conditions set forth in the Contract Documents.

The Undersigned hereby agrees to execute the said contract and bonds within fifteen calendar days, or such further time as may be allowed in writing by the Contracting Officer, after receiving notification of the acceptance of this bid, and it is hereby mutually understood and agreed that in case the Undersigned does not, the accompanying bid guarantee shall be forfeited to the State of Alaska, Department of Health & Social Services as liquidated damages, and the said Contracting Officer may proceed to award the contract to others.

The Undersigned agrees to commence the work within 10 calendar days and to complete the work by **210** calendar days, after the effective date of the Notice to Proceed or by _____, unless extended in writing by the Contracting Officer.

The Undersigned proposes to furnish Payment Bond in the amount of **100%** and Performance Bond in the amount of **100%** (of the contract), as surety conditioned for the full, complete, and faithful performance of this contract.

The Undersigned acknowledges receipt of the following addenda to the drawings and/or specifications
(Give number and date of each).

Addenda Number	Date Issued

Addenda Number	Date Issued

Addenda Number	Date Issued

NON-COLLUSION AFFIDAVIT

The Undersigned declares, under penalty of perjury under the laws of the United States, that neither he, nor the firm, association, or corporation of which he is a member, has, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this bid.

The Undersigned has read the foregoing proposal and hereby agrees to the conditions stated therein by affixing his signature below:

Signature of Authorized Company Representative

Typed or Printed Name and Title

Phone Number

Fax Number

Email Address



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES

ALASKA BIDDER PREFERENCE CERTIFICATION

In response to the advertised procurement for:

Project Name and Number: _____

Bidder/Proposer (company name): _____

Operation of Alaska Bidder Preference

Procurement preferences under the Alaska Procurement Code are benefits that the State grants only to qualified bidders. Under AS 36.30.990(2), if a bidder is an eligible "Alaska Bidder", the Department will apply a five percent preference to the price of the bidder's proposal.

Instructions regarding Alaska Bidder Preference

A bidder that claims the Alaska Bidder Preference must review and then certify that each statement appearing under the heading "Alaska Bidder Certification" is true. The individual that signs the certification shall include his/her printed name and position within bidder's organization, *e.g.*, sole proprietor, partner, etc. If a bidder fails to submit a signed certification, the Department will not apply the claimed preference.

Alaska Bidder Certification

The bidding entity for which I am the duly authorized representative:

- (A) Holds a current Alaska business license;
- (B) Is submitting a bid or proposal for goods, services, or construction under the name appearing on the bidder's current Alaska business license;
- (C) Has maintained a place of business in the State staffed by the bidder or an employee of the bidder for a period of six months immediately preceding the date of the proposal;
- (D) Is incorporated or qualified to do business under the laws of the State, is a sole proprietorship and the proprietor is a resident of the State, is a limited liability company organized under AS 10.50 and all members are residents of the State, or is a partnership under former AS 32.05, AS 32.06, or AS 32.11 and all partners are residents of the State; and
- (E) If a joint venture, is composed entirely of ventures that qualify under the four preceding paragraphs of this Alaska Bidder Certification.

By applying my signature below, I certify under penalty of perjury that I am the duly appointed representative of this bidder, which has authorized and empowered me to legally bind it concerning its proposal, and that the foregoing statements are true and correct.

By (signature)

Date

Printed name

Alaska Business License Number

Title:



STATE OF ALASKA
DEPARTMENT OF FAMILY & COMMUNITY SERVICES

ALASKA VETERAN'S PREFERENCE AFFIDAVIT

In response to the Invitation to Bid for: **Department of Family & Community Services**
Project Name and Number: **Anchorage Pioneer Home – 3rd Floor Resident Renovations,**
Project # ANC 23-26C

I certify under penalty of perjury that _____
(Name) qualifies for the Alaska Veteran's Preference under the following conditions:

(a) If a bidder qualifies under AS 36.30.170(b) as an Alaska bidder and is a qualifying entity, a five percent bid preference shall be applied to the bid price (preference may not exceed \$5,000). In this subsection, "qualifying entity" means a:

- (1) Sole proprietorship owned by an Alaska Veteran;
- (2) Partnership under AS 32.06 or AS 32.11 if a majority of the members are Alaska Veterans.
- (3) Limited Liability Company organized under AS 10.50 if a majority of the individuals are Alaska Veterans.

(b) To qualify for a preference under this section, a bidder must add value by the bidder itself actually performing, controlling, managing and supervising a significant part of the services provided, or the bidder must have sold supplies of the general nature solicited to other state agencies, governments, or the general public.

(c) In this section, "Alaska Veteran" means an individual who is a:

- (1) Resident of this state; and
- (2) Veteran; means an individual who:

(A) Served in the:

- (i) Armed Forces of the United States, including a reserve unit of the United States armed forces; or
- (ii) Alaska Territorial Guard, the Alaska Army National Guard, the Alaska Air National Guard, or the Alaska Naval Militia; and

(B) Was separated from the service under a condition that was not dishonorable.

Authorized Signature

Printed Name

Date

INSTRUCTIONS FOR ALASKA PRODUCTS PREFERENCE WORKSHEET

Special Note:

All procurements, except those funded from Federal sources, shall contain Contract provisions for the preference of Alaska products. The products listed by the Bidder on this worksheet have been selected for the referenced project from the "Alaska Product Preference List" which was in force 30 days prior to the advertisement date of this contract.

Bidders may obtain a copy of the appropriate listing "Alaska Preference List" by contacting their local DCED office or by writing: Dept. of Commerce & Economic Development, Alaska Products Preference Listing, P.O. Box D, Juneau, AK 99811.

BIDDERS INSTRUCTIONS:

A. **General.** The Contracting Agency may request documentation to support entries made on this form. False presentations may be subject to AS 36.30.687. All Bidder's entries must conform to the requirements covering bid preparations in general. Discrepancies in price extensions shall be resolved by multiplying the declared total value times the preference percentage and adjusting any resulting computation accordingly.

B. **Form Completion - BASIC BIDS.**

(1) Enter project number and name, the words "Basic Bid" and the CONTRACTOR'S name in the heading of each page as provided.

(2) The Bidder shall compare those candidate products appearing on the preference listing (see Special Notice comments above) against the requirements of the technical specifications appearing in the contract documents. If the Bidder determines that a candidate product can suitably meet the contract requirements, then that product may be included in the worksheet as follows.

(3) For each suitable product submitted under the "Basic Bid" enter:

- ! the product name, generic description and its corresponding technical specification section number under the heading "PRODUCT",
- ! the company name of the Alaska producer under the heading "MANUFACTURER", and,
- ! the product class (I, II, or III) and preference percentage (3, 5, or 7%, respectively) under the "CLASS/%" heading.

(4) For each product appearing on the list and to be utilized by the CONTRACTOR enter:

- ! under the heading "TOTAL DECLARED VALUE" the manufacturer's quoted price of the product, (caution: this value is to be the manufacturer's quoted price at the place of origin and shall not include costs for freight, handling or miscellaneous charges of incorporating the product into the Work), and
- ! the resulting preference--ie.: the preference percentage times the total declared value amount -- under the heading "REDUCTION AMOUNT".

(5) Continue for all "suitable" basic bid products. If the listing exceeds one page enter the words "Page #___SUB" in front of the word "TOTAL" and on the first entry line of the following page enter "SUBTOTAL OF REDUCTION AMOUNT FROM PREVIOUS PAGE".

(6) On the final page of the listing enter "BASIC BID PREFERENCE GRAND" immediately before the word "TOTAL".

(7) Total the entries in the "REDUCTION AMOUNT" column for each page by commencing at the first entry for that page. If a continuation page exists, ensure that the subtotal from the previous page is computed into the running total. Number pages as appropriate.

(8) Compute a Grand Total for the Basic Bid Preference. Enter this amount on the final page of the worksheet and at line or column "C" on the Bid Schedule or Bid Schedule Summary Sheet as appropriate. Submit worksheet(s) with Bid Schedule Summary Sheet.

C. **Forms Completion - ALTERNATE BIDS.**

(1) Enter project number and name, the words "ALTERNATE BID #_____", and CONTRACTOR'S name in the heading of each page as provided.

(2) On the first entry line enter "ADDITIONAL ALASKA PRODUCTS FOR ALTERNATE BID

#_____", and repeat procedures 2 through 5 under part B of these Bidder's instructions except that references to "Basic Bid" shall be replaced with the words "Alternate Bid #_____".

(3) Following the listing of all additional Alaska products enter the words "ADDITIONAL PRODUCTS PREFERENCE FOR ALTERNATE BID #____--SUBTOTAL" and enter a subtotal amount for all additional products as listed. Subtotal amount to be determined by adding all additional product entries in the "REDUCTION AMOUNT" column.

(4) Skip three lines and enter "LESS THE FOLLOWING NON-APPLICABLE ALASKA PRODUCTS".

(5) Beginning on the next line enter the product name and manufacturer of each Alaska Product appearing on the "Basic Bid" listing which would be deleted or reduced from the Project should the "Alternate Bid" be selected. Details of entry need only be sufficient to clearly reference the subject product. (ie. "Prehung Doors by Alaska Door Co. in lieu of "Prehung Solid Core Wood Door, model "Super Door", Section 08210, by Alaska Door Co., Anchorage.) Products being reduced shall specify the amount of the reduction. Should no products require deletion enter "None". When a product is listed as a "NON-APPLICABLE ALASKA PRODUCT" for this alternate bid and if under the basic bid the Bidder received a preference on his basic bid as a result of that product, then the applicable entries under the headings "TOTAL DECLARED VALUE" and "REDUCTION AMOUNT" (for each product and from the basic bid listing) shall also be entered into the corresponding headings of this form. Where only a portion of the product has been deleted, the entry (which will differ from those on the basic bid listing) may be "pro-rated" or as otherwise substantiated.

(6) Following the listing of all non-applicable Alaska products enter the words "NON-APPLICABLE PRODUCTS PREFERENCE FORM BASIC BID --SUBTOTAL" and enter a subtotal amount for all non-applicable products as listed. Subtotal amount to be determined by adding all non-applicable entries in the "REDUCTION AMOUNT" column.

(7) At the bottom of the final page enter the words "ALTERNATE BID #____PREFERENCE GRAND" immediately before the word "TOTAL".

(8) Compute a Grand Total for the Alternate Bid Preference (for Alternate #____) by subtracting the non-applicable product preference subtotal from the additional product preference subtotal. Enter on the final page as provided and at the corresponding line in column "C" on the Bid Schedule Summary Sheet. Submit worksheet(s) with the Bid Schedule Summary Sheet.

(9) A separate listing for each alternate bid is required.

BID SCHEDULE
Anchorage Pioneer Home - 3rd Floor Resident Renovations
Project No.: ANC 23-26C

Proposers Please Note: Before preparing this bid schedule, read carefully, "Information to Proposers", and the following:

The Proposer shall insert a fixed price in figures opposite each pay item that appears in the bid schedule to furnish all labor, material, equipment, supervision and provide all work for each item listed. No price is to be entered or tendered for any item not appearing in the bid schedule.

Conditioned or qualified bids will be considered non-responsive.

PAY ITEM	DESCRIPTION OF PAY ITEM	TOTAL BID PRICE, IN FIGURES
1. Total Bid	All work described in the Total Bid description in Section 011113, Paragraph 1.05 and Project Plans. This Lump Sum Price is for the Basic Bid :	(a) 1. \$ _____
	Insert cost of one (1) bedroom vanity - Unit Price B:	(a) 2. \$ _____
	Alaska Bidder's Preference: (5% of a.)	(b) \$ _____
	Alaska Veteran-Owned Business Preference: (5% of a. Not To Exceed \$5,000.00)	(c) \$ _____
	Alaska Products Preference: (Attach worksheet(s))	(d) \$ _____
	Adjusted Total Bid Amount: (a1 + a2- b - c - d)	(e) \$ _____

Contractor's Name (Printed)

Alaska Contractor's Registration #

Expires

Alaska Business License #

Expires

BID SCHEDULE
Anchorage Pioneer Home – 3rd Floor Resident Renovations
Project No.: ANC 23-26C

2. **Unit Pricing A** All firestopping work described in the Specifications and Construction Documents including their associated components on the quantity listed on the following page. All unit pricing is to include material, surface preparation and firestopping installation for this project.

UNIT PRICING ITEM	UNIT	EACH	UNIT PRICING
Intumescent Firestop Sealants and Caulks	10 oz cartridge	_____	\$ _____
Latex Firestop Sealant	10 oz cartridge	_____	\$ _____
Silicone Firestop Sealants and Caulks	10 oz cartridge	_____	\$ _____
Firestop Putty	2 lb. cube	_____	\$ _____
Firestop Collars	Per box	_____	\$ _____
Wrap Strips	Per box	_____	\$ _____
Firestop Mortar	Per box	_____	\$ _____

3. **Unit Pricing B** This unit price is limited to the area surrounding the bedroom vanities. **The base bid includes** removing the existing case work and gypsum board as noted on the drawings. Following installation of the new in-floor dampers the walls are to be rebuilt as indicated and the existing casework, mirrors, lighting and lavatories are to be reinstalled. **Unit pricing for the vanity area requires** the replacement of the casework, mirrors, lighting, and lavatories as illustrated. The provided unit price will be all inclusive of the new products and their buildout for one (1) typical vanity area. Additional bedroom vanity areas will be added as funding allows.



STATE OF ALASKA
DEPARTMENT OF FAMILY & COMMUNITY SERVICES

BID BOND

For

Anchorage Pioneer Home – 3rd Floor Resident Renovations, ANC 23-26C

Project Name and Number

DATE BOND EXECUTED: _____

PRINCIPAL (Legal name and business address):

TYPE OF ORGANIZATION:

	☐ Individual	☐ Partnership
	☐ Joint Venture	☐ Corporation
STATE OF INCORPORATION:		

SURETY(IES) (Name and business address):

A.	B.	C.
PENAL SUM OF BOND:		DATE OF BID:

We, the PRINCIPAL and SURETY above named, are held and firmly bound to the State (State of Alaska), in the penal sum of the amount stated above, for the payment of which sum will be made, we bind ourselves and our legal representatives and successors, jointly and severally, by this instrument.

THE CONDITION OF THE FOREGOING OBLIGATION is that the Principal has submitted the accompanying bid in writing, date as shown above, on above-referenced Project in accordance with contract documents filed in the office of the Contracting Officer, and under the Invitation for Bids therefore, and is required to furnish a bond in the amount stated above.

If the Principal's bid is accepted and he is offered the proposed contract for award, and if the Principal fails to enter into the contract, then the obligation to the State created by this bond shall be in full force and effect.

If the Principal enters into the contract, then the foregoing obligation is null and void.

PRINCIPAL

Signature(s)	1.	2.	3.
Name(s) & Title(s) (Typed)	1.	2.	3.

Corporate
Seal

See Instructions on Reverse

CORPORATE SURETY(IES)

Surety A	Name of Corporation	State of Incorporation	Liability Limit \$
Signature(s)	1.	2.	Corporate Seal
Name(s) & Titles (Typed)	1.	2.	

Surety B	Name of Corporation	State of Incorporation	Liability Limit \$
Signature(s)	1.	2.	Corporate Seal
Name(s) & Titles (Typed)	1.	2.	

Surety C	Name of Corporation	State of Incorporation	Liability Limit \$
Signature(s)	1.	2.	Corporate Seal
Name(s) & Titles (Typed)	1.	2.	

INSTRUCTIONS

1. This form shall be used whenever a bid bond is submitted.
2. Insert the full legal name and business address of the Principal in the space designated. If the Principal is a partnership or joint venture, the names of all principal parties must be included (e.g., "Smith Construction, Inc. and Jones Contracting, Inc. DBA Smith/Jones Builders, a joint venture"). If the Principal is a corporation, the name of the state in which incorporated shall be inserted in the space provided.
3. Insert the full legal name and business address of the Surety in the space designated. The Surety on the bond may be any corporation or partnership authorized to do business in Alaska as an insurer under AS 21.09. Individual sureties will not be accepted.
4. The penal amount of the bond may be shown either as an amount (in words and figures) or as a percent of the contract bid price (a not-to-exceed amount may be included).
5. The scheduled bid opening date shall be entered in the space marked Date of Bid.
6. The bond shall be executed by authorized representatives of the Principal and Surety. Corporations executing the bond shall also affix their corporate seal.
7. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.
8. The states of incorporation and the limits of liability of each surety shall be indicated in the spaces provided.
9. The date that bond is executed must not be later than the bid opening date.

STATE OF ALASKA
DEPARTMENT OF FAMILY & COMMUNITY SERVICES



BID MODIFICATION

Anchorage Pioneer Home – 3rd Floor Resident Renovations, ANC 23-26C

Project Name and Number

Modification Number: _____

Note: Use this form to modify Manual (paper) bids only.

- Group items and provide subtotals by bid schedule section.
- All revisions shall be made to the adjusted bid amount(s)
- Changes to the adjusted bid amounts will be computed by the Department.

PAY ITEM NO.	PAY ITEM DESCRIPTION	REVISION TO UNIT BID PRICE +/-	REVISION TO BID AMOUNT +/-
		N/A	

TOTAL REVISION: \$ _____

Name of Bidding Firm

Responsible Party Signature

Date

This form may be duplicated if additional pages are needed.

**STATE OF ALASKA
DEPARTMENT OF FAMILY & COMMUNITY SERVICES**

SUBCONTRACTOR LIST

Project Name and Number

Anchorage Pioneer Home – 3rd Floor Resident Renovations, ANC 23-26C

The apparent low bidder shall complete this form and submit it so as to be received by the Contracting Officer prior to the close of business on the fifth working day after receipt of written notice from the Department.

Failure to submit this form with all required information by the due date will result in the bidder being declared non-responsive and may result in the forfeiture of the Bid Security.

Scope of work must be clearly defined. If an item of work is to be performed by more than one firm, indicate the portion or percent of work to be done by each.

Check as applicable: ☐ All work on the below-referenced project will be accomplished without subcontracts greater than ½ of 1% of the contract amount.
OR
☐ Subcontractor List is as follows:

FIRM NAME, ADDRESS, & PHONE No.	AK BUSINESS LICENSE No. & CONTRACTOR'S REGISTRATION No.	SCOPE OF WORK TO BE PERFORMED

CONTINUE SUBCONTRACTOR INFORMATION ON REVERSE

I hereby certify the listed Alaska Business licenses and Contractor's registrations were valid at the time bids were opened for this project.

Signature of Authorized Company Representative

Title

Company Name

Company Address (Street or PO Box, City, State, Zip)

Date

Phone Number

FIRM NAME, ADDRESS, & PHONE No.	AK BUSINESS LICENSE No. & CONTRACTOR'S REGISTRATION No.	SCOPE OF WORK TO BE PERFORMED



STATE OF ALASKA
DEPARTMENT OF FAMILY & COMMUNITY SERVICES

CONSTRUCTION CONTRACT

Anchorage Pioneer Home – 3rd Floor Resident Renovations, ANC 23-26C
Project Name and Number

This CONTRACT, between the STATE OF ALASKA, DEPARTMENT OF HEALTH & SOCIAL SERVICES, herein called the Department, acting by and through its Contracting Officer, and

Company Name

Company Address (Street or PO Box, City, State, Zip)

a/an ☐ Individual ☐ Partnership ☐ Joint Venture ☐ Sole Proprietorship ☐ Corporation incorporated under the laws of the State of _____, its successors and assigns, herein called the Contractor, is effective the date of the signature of the Contracting Officer on this document.

WITNESSETH: That the Contractor, for and in consideration of the payment or payments herein specified and agreed to by the Department, hereby covenants and agrees to furnish and deliver all the materials and to do and perform all the work and labor required in the construction of the above-referenced project at the prices bid by the Contractor for the respective estimated quantities aggregating approximately the sum of

_____ Dollars
(\$ _____), and such other items as are mentioned in the original Bid, which Bid and prices named, together with the Contract Documents are made a part of this Contract and accepted as such.

It is distinctly understood and agreed that no claim for additional work or materials, done or furnished by the Contractor and not specifically herein provided for, will be allowed by the Department, nor shall the Contractor do any work or furnish any material not covered by this Contract, unless such work is ordered in writing by the Department. In no event shall the Department be liable for any materials furnished or used, or for any work or labor done, unless the materials, work, or labor are required by the Contract or on written order furnished by the Department. Any such work or materials which may be done or furnished by the Contractor without written order first being given shall be at the Contractor's own risk, cost, and expense and the Contractor hereby covenants and agrees to make no claim for compensation for work or materials done or furnished without such written order.

The Contractor further covenants and agrees that all materials shall be furnished and delivered, and all labor shall be done and performed, in every respect, to the satisfaction of the Department, on or before: _____. It is expressly understood and agreed that in case of the failure on the part of the Contractor, for any reason, except with the written consent of the Department, to complete the furnishing and delivery of materials and the doing and performance of the work before the aforesaid date, the Department shall have the right to deduct from any money due or which may become due the Contractor, or if no money shall be due, the Department shall have the right to recover

Five Hundred dollars (\$500.00) per day for each calendar day elapsing between the time stipulated for the completion and the actual date of completion in accordance with the terms hereof; such deduction to be made, or sum to be recovered, not as a penalty but as liquidated damages.

The bonds given by the Contractor in the sum of \$_____ Payment Bond, and \$_____ Performance Bond, to secure the proper compliance with the terms and provisions of this Contract, are submitted herewith and made a part hereof.

IN WITNESS WHEREOF, the parties hereto have executed this Contract and hereby agree to its terms and conditions.

CONTRACTOR

Company Name

Signature of Authorized Company Representative

Typed or Printed Name and Title

Date

(Corporate Seal)

**STATE OF ALASKA
DEPARTMENT OF FAMILY & COMMUNITY SERVICES**

Signature of Contracting Officer

Typed or Printed Name

Date



STATE OF ALASKA
DEPARTMENT OF FAMILY & COMMUNITY SERVICES

PERFORMANCE BOND

Bond No. _____

For

Anchorage Pioneer Home – 3rd Floor Resident Renovations, ANC 23-26C
Project Name and Number

KNOW ALL WHO SHALL SEE THESE PRESENTS:

That _____
of _____ as Principal,
and _____
of _____ as Surety,
firmly bound and held unto the State of Alaska in the penal sum of _____ Dollars

(\$ _____) good and lawful money of the United States of America for the payment whereof,
well and truly to be paid to the State of Alaska, we bind ourselves, our heirs, successors, executors, administrators, and assigns,
jointly and severally, firmly by these presents.

WHEREAS, the said Principal has entered into a written contract with said State of Alaska, on the _____ of _____
A.D., 20____, for construction of the above-named project, said work to be done according to the terms of said contract.

Now, THEREFORE, the conditions of the foregoing obligation are such that if the said Principal shall well and truly perform and
complete all obligations and work under said contract and if the Principal shall reimburse upon demand of the Department of
Transportation and Public Facilities any sums paid him which exceed the final payment determined to be due upon completion of the
project, then these presents shall become null and void; otherwise they shall remain in full force and effect.

IN WITNESS WHEREOF, we have hereunto set our hands and seals at _____,
_____ this _____ day of _____ A.D., 20____.

Principal: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

Surety: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

The offered bond has been checked for adequacy under the applicable statutes and regulations:

Alaska Department of Family & Community Services Authorized Representative

Date

See Instructions on Reverse

INSTRUCTIONS

1. This form shall be used whenever a performance bond is required. There shall be no deviation from this form without approval from the Contracting Officer.
2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be typed on the face of the form. Where more than a single surety is involved, a separate form shall be executed for each surety.
3. The penal amount of the bond, or in the case of more than one surety the amount of obligation, shall be typed in words and in figures.
4. Where individual sureties are involved, a completed Affidavit of Individual Surety shall accompany the bond. Such forms are available upon request from the Contracting Officer.
5. The bond shall be signed by authorized persons. Where such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of authority must be furnished.



STATE OF ALASKA
DEPARTMENT OF FAMILY & COMMUNITY SERVICES

PAYMENT BOND

Bond No. _____

For

Anchorage Pioneer Home – 3rd Floor Resident Renovations, ANC 23-26C
Project Name and Number

KNOW ALL WHO SHALL SEE THESE PRESENTS:

That _____
of _____ as Principal,
and _____
of _____ as Surety,
firmly bound and held unto the State of Alaska in the penal sum of _____ Dollars

(\$ _____) good and lawful money of the United States of America for the payment whereof,
well and truly to be paid to the State of Alaska, we bind ourselves, our heirs, successors, executors, administrators, and assigns,
jointly and severally, firmly by these presents.

WHEREAS, the said Principal has entered into a written contract with said State of Alaska, on the _____ of _____
A.D., 20____, for construction of the above-referenced project, said work to be done according to the terms of said contract.

Now, THEREFORE, the conditions of the foregoing obligation are such that if the said Principal shall comply with all requirements
of law and pay, as they become due, all just claims for labor performed and materials and supplies furnished upon or for the work
under said contract, whether said labor be performed and said materials and supplies be furnished under the original contract, any
subcontract, or any and all duly authorized modifications thereto, then these presents shall become null and void; otherwise they
shall remain in full force and effect.

IN WITNESS WHEREOF, we have hereunto set our hands and seals at _____,
_____ this _____ day of _____ A.D., 20____.

Principal: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

Surety: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

The offered bond has been checked for adequacy under the applicable statutes and regulations:

Alaska Department of Family & Community Authorized Representative

Date

INSTRUCTIONS

1. This form, for the protection of persons supplying labor and material, shall be used whenever a payment bond is required. There shall be no deviation from this form without approval from the Contracting Officer.
2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be typed on the face of the form. Where more than a single surety is involved, a separate form shall be executed for each surety.
3. The penal amount of the bond, or in the case of more than one surety the amount of obligation, shall be typed in words and in figures.
4. Where individual sureties are involved, a completed Affidavit of Individual Surety shall accompany the bond. Such forms are available upon request from the Contracting Officer.
5. The bond shall be signed by authorized persons. Where such persons are signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of authority must be furnished.

2. What percent of the total value of this contract do you intend to subcontract? _____ %

3. Do you propose to purchase any equipment for use on this project?
[] No [] Yes If YES, describe type, quantity, and approximate cost:

4. Do you propose to rent any equipment for this work?
[] No [] Yes If YES, describe type and quantity:

5. Is your bid based on firm offers for all materials necessary for this project?
[] Yes [] No If NO, please explain:

C. EXPERIENCE

1. Have you had previous construction contracts or subcontracts with the State of Alaska?
[] Yes [] No

Describe the most recent or current contract, its completion date, and scope of work:

2. List, as an attachment to this questionnaire, other construction projects you have completed, the dates of completion, scope of work, and total contract amount for each project completed in the past 12 months.

I hereby certify that the above statements are true and complete.

Name of Contractor

Name and Title of Person Signing

Signature

Date

**STATE OF ALASKA
DEPARTMENT OF FAMILY & COMMUNITY SERVICES
DOCUMENT 00700 -**

**GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT FOR
BUILDINGS**

- ARTICLE 1 - DEFINITIONS**
- ARTICLE 2 - AUTHORITIES AND LIMITATIONS**
- 2.1 Authorities and Limitations
- 2.2 Evaluations by Contracting Officer
- 2.3 Means and Methods
- 2.4 Visits to Site
- ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE**
- 3.1 Incomplete Contract Documents
- 3.2 Copies of Contract Documents
- 3.3 Scope of Work
- 3.4 Intent of Contract Documents
- 3.5 Discrepancy in Contract Documents
- 3.6 Clarifications and Interpretations
- 3.7 Reuse of Documents
- ARTICLE 4 - LANDS AND PHYSICAL CONDITIONS**
- 4.1 Availability of Lands
- 4.2 Visit to Site/Place of Business
- 4.3 Explorations and Reports
- 4.4 Utilities
- 4.5 Damaged Utilities
- 4.6 Utilities Not Shown or Indicated
- 4.7 Survey Control
- ARTICLE 5 - BONDS AND INSURANCE**
- 5.1 Delivery of Bonds
- 5.2 Bonds
- 5.3 Replacement of Bond and Surety
- 5.4 Insurance Requirements
- 5.5 Indemnification
- ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES**
- 6.1 Supervision of Work
- 6.2 Superintendence by CONTRACTOR
- 6.3 Character of Workers
- 6.4 CONTRACTOR to Furnish
- 6.5 Materials and Equipment
- 6.6 Anticipated Schedules
- 6.7 Finalizing Schedules¹
- 6.8 Adjusting Schedules
- 6.9 Substitutes or "Or-Equal" Items
- 6.10 Substitute Means and Methods
- 6.11 Evaluation of Substitution
- 6.12 Dividing the Work
- 6.13 Subcontractors
- 6.14 Use of Premises
- 6.15 Structural Loading
- 6.16 Record Documents
- 6.17 Safety and Protection
- 6.18 Safety Representative
- 6.19 Emergencies

	6.20	Shop Drawings and Samples
	6.21	Shop Drawing and Sample Review
	6.22	Maintenance During Construction
	6.23	Continuing the Work
	6.24	Consent to Assignment
	6.25	Use of Explosives
	6.26	CONTRACTOR's Records
ARTICLE	7 -	LAWS AND REGULATIONS
	7.1	Laws to be Observed
	7.2	Permits, Licenses, and Taxes
	7.3	Patented Devices, Materials and Processes
	7.4	Compliance of Specifications and Drawings
	7.5	Accident Prevention
	7.6	Sanitary Provisions
	7.7	Business Registration
	7.8	Professional Registration and Certification
	7.9	Local Building Codes
	7.10	Air Quality Control
	7.11	Archaeological or Paleontological Discoveries
	7.12	Applicable Alaska Preferences
	7.13	Preferential Employment
	7.14	Wages and Hours of Labor
	7.15	Overtime Work Hours and Compensation
	7.16	Covenant Against Contingent Fees
	7.17	Officials Not to Benefit
	7.18	Personal Liability of Public Officials
ARTICLE	8 -	OTHER WORK
	8.1	Related Work at Site
	8.2	Access, Cutting, and Patching
	8.3	Defective Work by Others
	8.4	Coordination
ARTICLE	9 -	CHANGES
	9.1	DEPARTMENT's Right to Change
	9.2	Authorization of Changes within the General Scope
	9.3	Directive
	9.4	Change Order
	9.5	Shop Drawing Variations
	9.6	Changes Outside the General Scope; Supplemental Agreement
	9.7	Unauthorized Work
	9.8	Notification of Surety
	9.9	Differing Site Conditions
ARTICLE	10-	CONTRACT PRICE; COMPUTATION AND CHANGE
	10.1	Contract Price
	10.2	Claim for Price Change
	10.3	Change Order Price Determination
	10.4	Cost of the Work
	10.5	Excluded Costs
	10.6	CONTRACTOR's Fee
	10.7	Cost Breakdown
	10.8	Cash Allowances
	10.9	Unit Price Work
	10.10	Determinations for Unit Prices
	10.11	Disadvantaged and Women Business Enterprises (DBE and WBE) Program
ARTICLE	11-	CONTRACT TIME, COMPUTATION AND CHANGE

- 11.1 Commencement of Contract Time; Notice to Proceed
- 11.2 Starting the Work
- 11.3 Computation of Contract Time
- 11.4 Time Change
- 11.5 Extension Due to Delays
- 11.6 Essence of Contract
- 11.7 Reasonable Completion Time
- 11.8 Delay Damages

ARTICLE 12 - QUALITY ASSURANCE

- 12.1 Warranty and Guaranty
- 12.2 Access to Work
- 12.3 Tests and Inspections
- 12.4 Uncovering Work
- 12.5 DEPARTMENT May Stop the Work
- 12.6 Correction or Removal of Defective Work
- 12.7 One Year Correction Period
- 12.8 Acceptance of Defective Work
- 12.9 DEPARTMENT may Correct Defective Work

ARTICLE 13- PAYMENTS TO CONTRACTOR AND COMPLETION

- 13.1 Schedule of Values
- 13.2 Preliminary Payments
- 13.3 Application for Progress Payment
- 13.4 Review of Applications for Progress Payments
- 13.5 Stored Materials and Equipment
- 13.6 CONTRACTOR's Warranty of Title
- 13.7 Withholding of Payments
- 13.8 Retainage
- 13.9 Request for Release of funds
- 13.10 Substantial Completion
- 13.11 Access Following Substantial Completion
- 13.12 Final Inspection
- 13.13 Final Completion and Application for Payment
- 13.14 Final Payment
- 13.15 Final Acceptance
- 13.16 CONTRACTOR's Continuing Obligation
- 13.17 Waiver of Claims by CONTRACTOR
- 13.18 No Waiver of Legal Rights

ARTICLE 14- SUSPENSION OF WORK AND TERMINATION

- 14.1 DEPARTMENT May Suspend Work
- 14.2 Default of Contract
- 14.3 Rights or Remedies
- 14.4 Convenience Termination

ARTICLE 15- CLAIMS AND DISPUTES

- 15.1 Notification
- 15.2 Presenting Claim
- 15.3 Claim Validity, Additional Information & Project Manager's Action
- 15.4 Contracting Officer's Decision

ACKNOWLEDGMENT

"The State of Alaska, General Conditions of the Construction Contract for Buildings " is based on the "Standard General Conditions of the Construction Contract" as published by the National Society of Professional Engineers (document number 1910-8, 1983 edition) on behalf of the Engineers Joint Construction Documents Committee. Portions of the NSPE General Conditions are reprinted herein by the express permission of NSPE. Modifications to the NSPE text are made to provide for State laws, regulations, and established procedures.

The granting of permission by NSPE to allow the State of Alaska to preprint portions of the NSPE document 1910-8, 1983 edition does not constitute approval of the State of Alaska General Conditions of the Construction Contract for Buildings.

ARTICLE 1 - DEFINITIONS

Wherever used in the Contract Documents the following terms, or pronouns in place of them, are used, the intent and meaning, unless a different intent or meaning is clearly indicated, shall be interpreted as set forth below.

The titles and headings of the articles, sections, and subsections herein are intended for convenience of reference and shall not be considered as having bearing on their interpretation.

Whenever used in the Specifications or other Contract Documents the following terms have the meaning indicated which are applicable to both the singular and plural thereof. Working titles which have a masculine gender, are intended to refer to persons of either sex.

Terms not defined below shall have their ordinary accepted meanings within the context which they are used. Words which have a well-known technical or trade meaning when used to describe work, materials or equipment shall be interpreted in accordance with such meaning. Words defined in Article 1 are capitalized throughout these General Conditions.

Addenda - All clarifications, corrections, or changes issued graphically or in writing by the DEPARTMENT after the Advertisement but prior to the opening of Proposals.

Advertisement - The public announcement, as required by law, inviting bids for Work to be performed or materials to be furnished.

Application for Payment - The form provided by the DEPARTMENT which is to be used by the CONTRACTOR in requesting progress or final payments and which is to include such supporting documentation as is required by the Contract Documents.

Approved or Approval - Means written approval by the Contracting Officer or his authorized representative as defined in Article 2.1.

A.S - Initials which stand for Alaska Statute.

Award - The acceptance, by the DEPARTMENT, of the successful bid.

Bid Bond - A type of Proposal Guaranty.

Bidder - Any individual, firm, corporation or any acceptable combination thereof, or joint venture submitting a bid for the advertised Work.

Calendar Day - Every day shown on the calendar, beginning and ending at midnight.

Change Order - A written order by the DEPARTMENT directing changes to the Contract Documents, within their general scope.

Conditions of the Contract - Those portions of the Contract Documents which define the rights and responsibilities of the contracting parties and of others involved in the Work. The Conditions of the Contract include General Conditions, Supplementary Conditions and other conditions.

Consultant - The person, firm, or corporation retained directly by the DEPARTMENT to prepare Contract Documents, perform construction administration services, or other Project related services.

Contingent Sum Work Item - When the bid schedule contains a Contingent Sum Work Item, the Work covered shall be performed only upon the written Directive of the Project Manager. Payment shall be made as provided in the Directive.

Contract - The written agreement between the DEPARTMENT and the CONTRACTOR setting forth the obligations of the parties and covering the Work to be performed, all as required by the Contract Documents.

Contract Documents - The Contract form, Addenda, the bidding requirements and CONTRACTOR's bid (including all appropriate bid tender forms), the bonds, the Conditions of the Contract and all other Contract requirements, the Specifications, and the Drawings furnished by the DEPARTMENT to the CONTRACTOR, together with all Change Orders and documents approved by the Contracting Officer, for inclusion, modifications and supplements issued on or after the Effective Date of the Contract.

Contracting Officer - The person authorized by the Commissioner to enter into and administer the Contract on behalf of the DEPARTMENT. He has authority to make findings, determinations and decisions with respect to the Contract and, when necessary, to modify or terminate the Contract. The Contracting Officer is identified on the construction Contract.

CONTRACTOR - The individual, firm, corporation or any acceptable combination thereof, contracting with the DEPARTMENT for performance of the Work.

Contract Price - The total moneys payable by the DEPARTMENT to the CONTRACTOR under the terms of the Contract Documents.

Contract Time - The number of Calendar Days or the date specified in the construction Contract and authorized time extensions which identify how much time the CONTRACTOR is allowed to achieve Final Completion.

Controlling Item - Any feature of the Work considered at the time by the Contracting Officer as essential to the orderly completion of the Work and which, if delayed, will delay the time of Final Completion of the Contract (such as an item of Work on the critical path of a network schedule).

Defective - An adjective which refers to Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or Approval referred to in the Contract Documents, or has been damaged prior to the DEPARTMENT's Approval.

DEPARTMENT - The Alaska Department of Health and Social Services. References to "Owner", "State", "Contracting Agency", mean the DEPARTMENT.

Directive - A written communication to the CONTRACTOR from the Contracting Officer interpreting or enforcing a Contract requirement or ordering commencement of an item of Work.

Drawings - The Drawings which show the character and scope of the Work to be performed and which have been furnished by the DEPARTMENT or the DEPARTMENT's Consultant and are by reference made a part of the Contract Documents.

Effective Date of the Contract - The date on which the Contract is fully executed by both CONTRACTOR and the DEPARTMENT.

Final Acceptance - The DEPARTMENT's written acceptance of the Work following Final Completion and the performance of all Contract requirements by the CONTRACTOR.

Final Completion - The Project (or specified part thereof) has progressed to the point that all required Work is complete as determined by the Contracting Officer.

General Requirements - Sections of Division I of the Specifications which contain administrative and procedural requirements as well as requirements for temporary facilities which apply to Specification Divisions 2 through 16.

Holidays - In the State of Alaska, Legal Holidays occur on:

1. New Years Day - January 1
2. Martin Luther King's Birthday - Third Monday in January
3. President's Day - Third Monday in February
4. Seward's Day - Last Monday in March
5. Memorial Day - Last Monday in May
6. Independence Day - July 4
7. Labor Day - First Monday in September
8. Alaska Day - October 18
9. Veteran's Day - November 11
10. Thanksgiving Day - Fourth Thursday in November
11. Christmas Day - December 25
12. Every Sunday
13. Every day designated by public proclamation by the President of the United States or the Governor of the State as a legal Holiday.

If any Holiday listed above falls on a Saturday, Saturday and the preceding Friday are both legal Holidays. If the Holiday should fall on a Sunday, except (12) above, Sunday and the following Monday are both legal Holidays. See Title 44, Alaska Statutes.

Install - Means to build into the Work, ready to be used in complete and operable condition and in compliance with Contract Documents.

Invitation for Bids - A portion of the bidding documents soliciting bids for the Work to be performed.

Notice of Intent to Award - The written notice by the DEPARTMENT to all Bidders identifying the apparent successful Bidder and establishing the DEPARTMENT's intent to execute the Contract when all conditions required for execution of the Contract are met.

Notice to Proceed - A written notice to the CONTRACTOR to begin the Work and establishing the date on which the Contract Time begins.

Payment Bond - The security furnished by the CONTRACTOR and his Surety to guarantee payment of the debts covered by the bond.

Performance Bond - The security furnished by the CONTRACTOR and his Surety to guarantee performance and completion of the Work in accordance with the Contract.

Project - The total construction, of which the Work performed under the Contract Documents is the whole or a part, where such total construction may be performed by more than one CONTRACTOR.

Project Manager - The authorized representative of the Contracting Officer who is responsible for administration of the Contract.

Proposal - The offer of a Bidder, on the prescribed forms, to perform the Work at the prices quoted.

Proposal Guaranty - The security furnished with a Proposal to guarantee that the bidder will enter into a Contract if his Proposal is accepted by the DEPARTMENT.

Regulatory Requirements - Laws, rules, regulations, ordinances, codes and/or orders.

Schedule of Values - The DEPARTMENT's document, submitted by the CONTRACTOR and reviewed by the Contracting Officer, which shall serve as the basis for computing payment and for establishing the value of separate items of Work which comprise the Contract Price.

Shop Drawings - All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for the CONTRACTOR to illustrate some portion of the Work and all illustrations, brochures, standard schedules,

performance charts, instructions, diagrams and other information prepared by a Supplier and submitted by the CONTRACTOR to illustrate material, equipment, fabrication, or erection for some portion of the Work.

Specifications - Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative and procedural details applicable thereto.

Subcontractor - An individual, firm, or corporation to whom the CONTRACTOR or any other Subcontractor sublets part of the Contract.

Substantial Completion - Although not fully completed, the Work (or a specified part thereof) has progressed to the point where, in the opinion of the Contracting Officer, as evidence by the DEPARTMENT's written notice, it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it is intended. The terms "Substantially Complete" and "Substantially Completed" as applied to any Work refer to Substantial Completion thereof.

Supplemental Agreement - A written agreement between the CONTRACTOR and the DEPARTMENT covering work that is not within the general scope of the Contract.

Supplementary Conditions - The part of the Contract Documents which amends or supplements these General Conditions.

Supplier - A manufacturer, fabricator, distributor, materialman or vendor of materials or equipment.

Surety - The corporation, partnership, or individual, other than the CONTRACTOR, executing a bond furnished by the CONTRACTOR.

Unit Price Work - Work to be paid for on the basis of unit prices.

Using Agency - The entity who will occupy or use the completed Project.

Work - Work is the act of, and the result of, performing services, furnishing labor, furnishing and incorporating materials and equipment into the Project and performing other duties and obligations, all as required by the Contract Documents. Such Work, however incremental, will culminate in the entire completed Project, or the various separately identifiable parts thereof.

ARTICLE 2 - AUTHORIZATION AND LIMITATIONS

2.1 Authorities and Limitations

- 2.1.1 The Contracting Officer alone, shall have the power to bind the DEPARTMENT and to exercise the rights, responsibilities, authorities and functions vested in the Contracting Officer by the Contract Documents, except that the Contracting Officer shall have the right to designate in writing authorized representatives to act for him. Wherever any provision of the Contract Documents specifies an individual or organization, whether governmental or private, to perform any act on behalf of or in the interest of the DEPARTMENT that individual or organization shall be deemed to be the Contracting Officer's authorized representative under this Contract but only to the extent so specified. The Contracting Officer may, at any time during the performance of this Contract, vest in any such authorized representatives additional power and authority to act for the Contracting Officer or designate additional representatives, specifying the extent of their authority to act for the Contracting Officer; a copy of each document vesting additional authority in or removing that authority from an authorized representative or designating an additional authorized representative shall be furnished to the CONTRACTOR. The head of the Contracting Agency reserves the right to appoint a new Contracting Officer without affecting any of the CONTRACTOR's obligations to the DEPARTMENT under this Contract.
- 2.1.2 The CONTRACTOR shall perform the Work in accordance with any written order (including but not limited to instruction, direction, interpretation or determination) issued by an authorized representative in accordance with the authorized representative's authority to act for the Contracting Officer. The CONTRACTOR assumes all the risk and consequences of performing the Work in accordance with any order (including but not limited to instruction, direction, interpretation or determination) of anyone not authorized to issue such order, and of any order not in writing.

- 2.1.3 Should the Contracting Officer or his authorized representative designate Consultant(s) to act for the DEPARTMENT as provided for in Paragraph 2.1.1, the performance or nonperformance of the Consultant under such authority to act, shall not give rise to any contractual obligation or duty of the Consultant to the CONTRACTOR, any Subcontractor, any Supplier, or any other organization performing any of the Work or any Surety representing them.
- 2.1.4 The term "Contracting Officer" when used in the text of these General Conditions or other Contract Documents following this section shall also mean any duly authorized representative of the Contracting Officer when authorized in accordance with Paragraph 2.1.1.

2.2 Evaluations by Contracting Officer:

- 2.2.1 The Contracting Officer will decide all questions which may arise as to:
- a. Quality and acceptability of materials furnished;
 - b. Quality and acceptability of Work performed;
 - c. Compliance with the schedule of progress;
 - d. Interpretation of Contract Documents;
 - e. Acceptable fulfillment of the Contract on the part of the CONTRACTOR.
- 2.2.2 In order to avoid cumbersome terms and confusing repetition of expressions in the Contract Documents the terms "as ordered", "as directed", "as required", "as approved" or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper" or "satisfactory" or adjectives of like effect or import are used it shall be understood as if the expression were followed by the words "the Contracting Officer".
- When such terms are used to describe a requirement, direction, review or judgment of the Contracting Officer as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise).
- 2.2.3 The use of any such term or adjective shall not be effective to assign to the DEPARTMENT any duty of authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraphs 2.3 or 2.4.

2.3 Means & Methods:

The means, methods, techniques, sequences or procedures of construction, or safety precautions and the program incident thereto, and the failure to perform or furnish the Work in accordance with the Contract Documents are the sole responsibility of the CONTRACTOR.

2.4 Visits to Site/Place of Business:

The Contracting Officer will make visits to the site and approved remote storage sites at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. The Contracting Officer may, at reasonable times, inspect that part of the plant or place of business of the CONTRACTOR or Subcontractor that is related to the performance of the Contract. Such observations or the lack of such observations shall in no way relieve the CONTRACTOR from his duty to perform the Work in accordance with the Contract Documents.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.1 Incomplete Contract Documents:

The submission of a bid by the Bidder is considered a representation that the Bidder examined the Contract Documents to make certain that all sheets and pages were provided and that the Bidder is satisfied as to the conditions to be encountered in performing the Work. The DEPARTMENT expressly denies any responsibility or liability for a bid submitted on the basis of an incomplete set of Contract Documents.

3.2 Copies of Contract Documents:

The DEPARTMENT shall furnish to the CONTRACTOR up to ten copies of the Contract Documents. Additional copies will be furnished, upon request, at the cost of reproduction.

3.3 Scope of Work:

The Contract Documents comprise the entire Contract between the DEPARTMENT and the CONTRACTOR concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the Regulatory Requirements of the place of the Project.

It is specifically agreed between the parties executing this Contract that it is not intended by any of the provisions of the Contract to create in the public or any member thereof a third party benefit, or to authorize anyone not a party to this Contract to maintain a suit pursuant to the terms or provisions of the Contract.

3.4 Intent of Contract Documents:

- 3.4.1 It is the intent of the Contract Documents to describe a functionally complete Project to be constructed in accordance with the Contract Documents. Any Work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result will be supplied, without any adjustment in Contract Price or Contract Time, whether or not specifically called for.
- 3.4.2 Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the Regulatory Requirements of any governmental authority, whether such reference be specific or by implication, shall mean the edition stated in the Contract Documents or if not stated the latest standard specification, manual, code or Regulatory Requirements in effect at the time of Advertisement for the Project (or, on the Effective Date of the Contract if there was no Advertisement). However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of the DEPARTMENT and the CONTRACTOR, or any of their consultants, agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to the DEPARTMENT or any of the DEPARTMENT's Consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraphs 2.3 or 2.4.

3.5 Discrepancy in Contract Documents:

- 3.5.1 Before undertaking the Work, the CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures, and dimensions shown thereon and all applicable field measurements. Work in the area by the CONTRACTOR shall imply verification of figures, dimensions and field measurements. If, during the above study or during the performance of the Work, the CONTRACTOR finds a conflict, error, discrepancy or omission in the Contract Documents, or a discrepancy between the Contract Documents and any standard specification, manual, code, or Regulatory Requirement which affects the Work, the CONTRACTOR shall promptly report such discrepancy in writing to the Contracting Officer. The CONTRACTOR shall obtain a written interpretation or clarification from the Contracting Officer before proceeding with any Work affected thereby. Any adjustment made by the CONTRACTOR without this determination shall be at his own risk and expense. However, the CONTRACTOR shall not be liable to the DEPARTMENT for failure to report any conflict, error or discrepancy in the Contract Documents unless the CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

3.5.2 Discrepancy - Order of Precedence:

When conflicts, errors, or discrepancies within the Contract Documents exist, the order of precedence from most governing to least governing will be as follows:

- Contents of Addenda
- Supplementary Conditions
- General Conditions
- General Requirements
- Technical Specifications
- Drawings
- Recorded dimensions will govern over scaled dimensions
- Large scale details over small scale details
- Schedules over plans
- Architectural drawings over structural drawings Structural drawings over mechanical and electrical drawings

3.6 Clarifications and Interpretations:

The Contracting Officer will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents as the Contracting Officer may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents.

3.7 Reuse of Documents:

Neither the CONTRACTOR nor any Subcontractor, or Supplier or other person or organization performing or furnishing any of the Work under a direct or indirect contract with the DEPARTMENT shall have or acquire any title to or ownership rights in any of the Contract Documents (or copies thereof) prepared by or for the DEPARTMENT and they shall not reuse any of the Contract Documents on extensions of the Project or any other project without written consent of the Contracting Officer.

Contract Documents prepared by the CONTRACTOR in connection with the Work shall become the property of the DEPARTMENT.

ARTICLE 4 - LANDS AND PHYSICAL CONDITIONS

4.1 Availability of Lands:

The DEPARTMENT shall furnish as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for use of the CONTRACTOR in connection with the Work. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by the DEPARTMENT, unless otherwise provided in the Contract Documents. The CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.2 Visit to Site:

The submission of a bid by the CONTRACTOR is considered a representation that the CONTRACTOR has visited and carefully examined the site and is satisfied as to the conditions to be encountered in performing the Work and as to the requirements of the Contract Documents.

4.3 Explorations and Reports:

1. Reference is made to the Supplementary Conditions for identification of those reports of explorations and tests of subsurface conditions at the site that have been utilized by the DEPARTMENT in preparation of the Contract Documents. The CONTRACTOR may for his purposes rely upon the accuracy of the factual data contained in such reports, but not upon interpretations or opinions drawn from such factual data contained therein or for the completeness or sufficiency thereof. Except as indicated in the immediately preceding sentence and in paragraphs 4.4 and 9.9, CONTRACTOR shall have full responsibility with respect to surface and subsurface conditions at the site.

2. **Hazardous Materials:**

The CONTRACTOR is to be aware under 29 CFR 1926.1101(k)(2)(ii) Construction Industry Standards, any building or facility constructed prior to 1980 may contain suspected Hazardous Materials. All known or perceived known Hazardous Materials information will be provided by the DEPARTMENT's facility staff to the CONTRACTOR upon request. Any new suspected Hazardous Materials encountered by the CONTRACTOR shall be made known to the DEPARTMENT within 3 business days of discovery. Once notified the DEPARTMENT will have an Environmental Assessment completed to verify if hazardous materials exist.

4.4 Utilities:

The horizontal and vertical locations of known underground utilities as shown or indicated by the Contract Documents are approximate and are based on information and data furnished to the DEPARTMENT by the owners of such underground utilities.

4.4.2 The CONTRACTOR shall have full responsibility for:

- a. Reviewing and checking all information and data concerning utilities.
- b. Locating all underground utilities shown or indicated in the Contract Documents which are affected by the Work.
- c. Coordination of the Work with the owners of all utilities during construction.
- d. Safety and protection of all utilities as provided in paragraph 6.17.
- e. Repair of any damage to utilities resulting from the Work in accordance with 4.4.4 and 4.5.

4.4.3 If Work is to be performed by any utility owner, the CONTRACTOR shall cooperate with such owners to facilitate the Work.

4.4.4 In the event of interruption to any utility service as a result of accidental breakage or as result of being exposed or unsupported, the CONTRACTOR shall promptly notify the utility owner and the Contracting Officer. If service is interrupted, repair work shall be continuous until the service is restored. No Work shall be undertaken around fire hydrants until provisions for continued service has been approved by the local fire authority.

4.5 Damaged Utilities:

When utilities are damaged by the CONTRACTOR, the utility owner shall have the choice of repairing the utility or having the CONTRACTOR repair the utility. In the following circumstances, the CONTRACTOR shall reimburse the utility owner for repair costs or provide at no cost to the utility owner or the DEPARTMENT, all materials, equipment and labor necessary to complete repair of the damage:

- a. When the utility is shown or indicated in the Contract Documents.
- b. When the utility has been located by the utility owner.
- c. When no locate was requested by the CONTRACTOR for utilities shown or indicated in the Contract Documents.
- d. All visible utilities.
- e. When the CONTRACTOR could have, otherwise, reasonably been expected to be aware of such utility.

4.6 Utilities Not Shown or Indicated:

If, while directly performing the Work, an underground utility is uncovered or revealed at the site which was not shown or indicated in the Contract Documents and which the CONTRACTOR could not reasonably have

been expected to be aware of, the CONTRACTOR shall, promptly after becoming aware thereof and before performing any Work affected thereby (except in an emergency as permitted by paragraph 6.19) identify the owner of such underground utility and give written notice thereof to that owner and to the Contracting Officer. The Contracting Officer will promptly review the underground utility to determine the extent to which the Contract Documents and the Work should be modified to reflect the impacts of the discovered utility. The Contract Documents will be amended or supplemented in accordance with paragraph 9.2 and to the extent necessary through the issuance of a change document by the Contracting Officer. During such time, the CONTRACTOR shall be responsible for the safety and protection of such underground utility as provided in paragraph 6.17. The CONTRACTOR may be allowed an increase in the Contract Price or an extension of the Contract Time, or both, to the extent that they are directly attributable to the existence of any underground utility that was not shown or indicated in the Contract Documents and which the CONTRACTOR could not reasonably have been expected to be aware of.

4.7 Survey Control:

The DEPARTMENT will identify sufficient horizontal and vertical control data to enable the CONTRACTOR to survey and layout the Work. All survey work shall be performed under the direct supervision of a registered land surveyor when required by paragraph 7.8. Copies of all survey notes will be provided the DEPARTMENT on a weekly basis with variations between the Contract Documents and actual field conditions identified. Survey notes are to be in a format acceptable to the DEPARTMENT.

ARTICLE 5 - BONDS, INSURANCE, AND INDEMNIFICATION

5.1 Delivery of Bonds:

When the CONTRACTOR delivers the executed Contract to the Contracting Officer, the CONTRACTOR shall also deliver to the Contracting Officer such bonds as the CONTRACTOR may be required to furnish in accordance with paragraph 5.2.

5.2 Bonds:

5.2.1 The CONTRACTOR shall furnish Performance and Payment Bonds, each in an amount as shown on the Contract as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These bonds shall remain in effect for one year after the date of Final Acceptance and until all obligations under this Contract, except special guarantees as per 12.7, have been met. All bonds shall be furnished on forms provided by the DEPARTMENT (or copies thereof) and shall be executed by such Sureties as are authorized to do business in the State of Alaska. The Contracting Officer may at his option copy the Surety with notice of any potential default or liability.

5.2.2 At the option of the CONTRACTOR, bonds may be provided by individual Surety the adequacy of which shall be determined by the Contracting Officer. Any costs incurred by the CONTRACTOR or individual Surety shall be borne by the CONTRACTOR. Where individual Sureties are used, two individual Sureties must each provide the State of Alaska with security equal to the amount of each bond by one, or a combination of, the following methods:

- a. Escrow account in the name of the DEPARTMENT for the duration of the Contract. Acceptable securities would include, but not necessarily be limited to: Cash; treasury notes; bearer instruments having a specific value, or; money market certificates.
- b. First *Deed of Trust* with the DEPARTMENT designated as beneficiary, against the unencumbered value of the real property located within the State of Alaska or an agreement by any second party, including deeds of trust, mortgage, lien or judgment interests to subrogate their interests to that of the State of Alaska in the real property which has been offered by the individual Surety.

A title insurance policy with the State of Alaska as a named beneficiary and a current (within 3 months) professional appraisal or assessed valuation will be required to ascertain the true value of the property offered as collateral. If buildings or other valued improvements are involved then fire and

casualty insurance with the State of Alaska as a named insured and in limits and coverages acceptable to the Contracting Officer shall be required. The appraiser shall acknowledge in writing that the appraisal is prepared for the benefit of the DEPARTMENT and the DEPARTMENT has the right to rely on its contents. This *Deed* must be recorded in the recording office where the property is located.

With respect to clauses “a” and “b” above the *Deed of Trust* or other accepted security shall not be released until 12 months after Final Acceptance of the Project and settlement of all outstanding claims.

5.3 Replacement of Bond and Surety:

If the Surety on any bond furnished in connection with this Contract is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of paragraph 5.2, or otherwise becomes unacceptable to the DEPARTMENT, or if any such Surety fails to furnish reports as to his financial condition as requested by the DEPARTMENT, the CONTRACTOR shall within five days thereafter substitute another bond and Surety, both of which must be acceptable to DEPARTMENT.

An individual Surety may be replaced by a corporate Surety during the course of the Contract period. If the Surety desires to dispose of the collateral posted, the DEPARTMENT may, at its option, accept substitute collateral.

5.4 Insurance Requirements:

5.4.1 The CONTRACTOR shall provide evidence of insurance with a carrier or carriers satisfactory to the DEPARTMENT covering injury to persons and/or property suffered by the State of Alaska or a third party, as a result of operations which arise both out of and during the course of this Contract by the CONTRACTOR or by any Subcontractor. This coverage will also provide protection against injuries to all employees of the CONTRACTOR and the employees of any Subcontractor engaged in Work under this Contract.

5.4.2 The CONTRACTOR shall maintain in force at all times during the performance of Work under this agreement the following policies of insurance. Where specific limits and coverages are shown, it is understood that they shall be the minimum acceptable. The requirements of this paragraph shall not limit the CONTRACTOR’s responsibility to indemnify under paragraph 5.5. Additional insurance requirements specific to this Contract are contained in the Supplementary Conditions, when applicable.

a. Worker’s Compensation Insurance:

The Contractor shall provide and maintain, for all employees engaged in work under this contract, statutory limits coverage as required by AS 23.30.045.

The policy must waive subrogation against the State and include Employer’s Liability Protection with policy limits not less than:

\$500,000 each accident,
\$500,000 each disease.

b. Commercial General Liability Insurance: on an occurrence policy form covering all operations by or on behalf of the CONTRACTOR with combined single limits not less than:

\$1,000,000 each occurrence

\$1,000,000 for Personal Injury Liability

\$2,000,000 aggregate for Products-Completed Operations

\$2,000,000 general aggregate

The State of Alaska shall be named as additional insured. This insurance shall be considered to be primary and non-contributory to any other insurance carried by the State through self insurance or otherwise.

- c. Automobile Liability Insurance: covering all vehicles used by the Contractor in the performance of services under this agreement with combined single limits not less than:

\$1,000,000 each occurrence

- d.

- e. Other Coverages: As specified in the Supplementary Conditions.

- 5.4.3 All insurance policies shall comply with, and be issued by insurers licensed to transact the business of insurance under AS 21. Failure to maintain insurance may, at the option of the Contracting Officer, be deemed Defective Work and remedied in accordance with the Contract.

Evidence of Insurance, consisting of a certificate of insurance or the policy declaration page with required endorsements attached thereto - all of which have been executed by the insurer's representative and issued to the DEPARTMENT - shall denote the type, amount, class of operations covered, effective (and retroactive) dates, and dates of expiration. Evidence of Insurance must provide for a 30-day prior notice of cancellation, nonrenewal or material change of conditions.

Evidence pertaining to Worker's Compensation, Commercial General Liability, or Automobile Liability is required for Award. All other coverages shall be evidenced prior to commencement of WORK. Acceptance by the DEPARTMENT of deficient evidence does not constitute a waiver of Contract requirements as provided for the Conditions of the Contract.

If a certificate of insurance is submitted as evidence it shall contain the following statement:

"This is to certify that the policies described herein comply with all aspects of the insurance requirements of (Contract Name and Number, and Project Number)."

5.5 Indemnification:

The CONTRACTOR shall indemnify, save harmless, and defend the DEPARTMENT, its agents and its employees from any and all claims, actions, or liabilities for injuries or damages sustained by any person or property arising directly or indirectly from the CONTRACTOR or SUBCONTRACTOR's performance of WORK under this Contract; however, this provision has no effect if, but only if, the sole proximate cause of the injury or damage is the DEPARTMENT's negligence.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.1 Supervision of Work:

The CONTRACTOR shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. All Work under this Contract shall be performed in a skillful and workmanlike manner. The CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction.

6.2 Superintendence by CONTRACTOR:

The CONTRACTOR shall keep on the Work at all times during its progress a competent resident superintendent. The Contracting Officer shall be advised in writing of the superintendent's name, local address, and telephone number. This written advice is to be kept current until Final Acceptance by the DEPARTMENT. The superintendent will be the CONTRACTOR's representative at the site and shall have full authority to act and sign documents on behalf of the CONTRACTOR.

All communications given to the superintendent shall be as binding as if given to the CONTRACTOR. The CONTRACTOR shall cooperate with the Contracting Officer in every way possible.

6.3 Character of Workers:

The CONTRACTOR shall provide a sufficient number of competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. The CONTRACTOR shall at all times maintain good discipline and order at the site. The Contracting Officer may, in writing, require the CONTRACTOR to remove from the Work any employee the Contracting Officer deems incompetent, careless, or otherwise detrimental to the progress of the Work, but the Contracting Officer shall have no duty to exercise this right.

6.4 CONTRACTOR to Furnish:

Unless otherwise specified in the General Requirements, the CONTRACTOR shall furnish and assume full responsibility for all materials, equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance testing, start-up and completion of the Work.

6.5 Materials and Equipment:

All materials and equipment shall be of specified quality and new, except as otherwise provided in the Contract Documents. If required by the Contracting Officer, the CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents; but no provision of any such instructions will be effective to assign to the DEPARTMENT or any of the DEPARTMENT's Consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraphs 2.3 or 2.4.

6.6 Anticipated Schedules:

6.6.1 Within reasonable time prior to the preconstruction conference the CONTRACTOR shall submit to the Contracting Officer for review an anticipated progress schedule indicating the starting and completion dates of the various stages of the Work.

6.6.2 Within fifteen days after the date of the Notice to Proceed, the CONTRACTOR shall submit to the Contracting Officer for review:

Anticipated schedule of Shop Drawing submissions; and

Anticipated Schedule of Values for all of the Work which will include quantities and prices of items aggregating the Contract Price and will subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work which will be confirmed in writing by the CONTRACTOR at the time of submission.

6.7 Finalizing Schedules:

Prior to processing the first Application for Payment the Contracting Officer and the CONTRACTOR will finalize schedules required by paragraph 6.6. The finalized progress schedule will be acceptable to the DEPARTMENT as providing information related to the orderly progression of the Work to completion within the Contract Time; but such acceptance will neither impose on the DEPARTMENT nor relieve the CONTRACTOR from full responsibility for the progress or scheduling of the Work. If accepted, the finalized schedule of Shop Drawing and other required submissions will be acknowledgment by the DEPARTMENT as providing a workable arrangement for processing the submissions. If accepted, the finalized Schedule of Values will be acknowledgment by the DEPARTMENT as an approximation of anticipated value of Work accomplished over the anticipated Contract Time. Receipt and acceptance of a schedule submitted by the CONTRACTOR shall not be construed to assign responsibility for performance or contingencies to the DEPARTMENT or relieve the CONTRACTOR of his responsibility to adjust his forces, equipment, and work

schedules as may be necessary to insure completion of the Work within prescribed Contract Time. Should the prosecution of the Work be discontinued for any reason, the CONTRACTOR shall notify the Contracting Officer at least 24 hours in advance of resuming operations.

6.8 Adjusting Schedules:

Upon substantial changes to the schedule or upon request the CONTRACTOR shall submit to the Contracting Officer for acceptance (to the extent indicated in paragraph 6.7 and the General Requirements) adjustments in the schedules to reflect the actual present and anticipated progress of the Work.

6.9 Substitutes or "Or-Equal" Items:

- 6.9.1 Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier the naming of the item is intended to establish the type, function and quality required. Unless the name is followed by words indicating that substitution is limited or not permitted, materials or equipment of other Suppliers may be accepted by the Contracting Officer only if sufficient information is submitted by the CONTRACTOR which clearly demonstrates to the Contracting Officer that the material or equipment proposed is equivalent or equal in all aspects to that named. The procedure for review by the Contracting Officer will include the following as supplemented in the General Requirements.
- 6.9.2 Requests for review of substitute items of material and equipment will not be accepted by the Contracting Officer from anyone other than the CONTRACTOR.
- 6.9.3 If the CONTRACTOR wishes to furnish or use a substitute item of material or equipment, the CONTRACTOR shall make written application to the Contracting Officer for Approval thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as the specified. The application will state that the evaluation and Approval of the proposed substitute will not delay the CONTRACTOR's timely achievement of Substantial or Final Completion, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with the DEPARTMENT for Work on the Project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty.
- 6.9.4 All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by the DEPARTMENT in evaluating the proposed substitute. The DEPARTMENT may require the CONTRACTOR to furnish at the CONTRACTOR's expense additional data about the proposed substitute. The Contracting Officer may reject any substitution request which the Contracting Officer determines is not in the best interest of the DEPARTMENT.

6.10 Substitute Means and Methods:

If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, the CONTRACTOR may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to the Contracting Officer, if the CONTRACTOR submits sufficient information to allow the Contracting Officer to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedure for review by the Contracting Officer will be similar to that provided in paragraph 6.9 as applied by the Contracting Officer and as may be supplemented in the General Requirements.

6.11 Evaluation of Substitution:

The Contracting Officer will be allowed a reasonable time within which to evaluate each proposed substitute. The Contracting Officer will be the sole judge of acceptability, and no substitute will be ordered, installed or utilized without the Contracting Officer's prior written Approval which will be evidenced by either a Change Order or a Shop Drawing Approved in accordance with Sections 6.20 and 6.21. The Contracting Officer may

require the CONTRACTOR to furnish at the CONTRACTOR's expense a special performance guarantee or other Surety with respect to any substitute.

6.12 Dividing the Work:

The divisions and sections of the Specifications and the identifications of any Drawings shall not control the CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

6.13 Subcontractors:

The CONTRACTOR may utilize the services of appropriately licensed Subcontractors on those parts of the Work which, under normal contracting practices, are performed by Subcontractors, in accordance with the following conditions:

- 6.13.1 The CONTRACTOR shall not award any Work to any Subcontractor without prior written Approval of the Contracting Officer. This Approval will not be given until the CONTRACTOR submits to the Contracting Officer a written statement concerning the proposed award to the Subcontractor which shall contain required Equal Employment Opportunity documents, evidence of insurance whose limits are acceptable to the CONTRACTOR, and an executed copy of the subcontract. All subcontracts submitted for Approval must contain provisions for payment for Work done by the Subcontractor within 7 days of receipt of payment by the CONTRACTOR. No acceptance by the Contracting Officer of any such Subcontractor shall constitute a waiver of any right of the DEPARTMENT to reject Defective Work.
- 6.13.2 The CONTRACTOR shall be fully responsible to the DEPARTMENT for all acts and omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions.
- 6.13.3 All Work performed for CONTRACTOR by a Subcontractor will be pursuant to an appropriate written agreement between CONTRACTOR and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the DEPARTMENT and contains waiver provisions as required by paragraph 13.17 and termination provisions as required by Article 14.
- 6.13.4 Nothing in the Contract Documents shall create any contractual relationship between the DEPARTMENT and any such Subcontractor, Supplier or other person or organization, nor shall it create any obligation on the part of the DEPARTMENT to pay or to see to the payment of any moneys due any such Subcontractor, Supplier or other person or organization except as may otherwise be required by Regulatory Requirements. The DEPARTMENT will not undertake to settle any differences between or among the CONTRACTOR, Subcontractors, or Suppliers.
- 6.13.5 The CONTRACTOR and Subcontractors shall coordinate their work and cooperate with other trades so to facilitate general progress of Work. Each trade shall afford other trades every reasonable opportunity for installation of their work and storage of materials. If cooperative work of one trade must be altered due to lack of proper supervision, or failure to make proper provisions in time by another trade, such conditions shall be remedied by the CONTRACTOR with no change in Contract Price or Contract Time.
- 6.13.6 The CONTRACTOR shall include on his own payrolls any person or persons working on this Contract who are not covered by written subcontract, and shall ensure that all Subcontractors include on their payrolls all persons performing Work under the direction of the Subcontractor.

6.14 Use of Premises:

The CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Project limits and approved remote storage sites and lands and areas identified in and permitted by Regulatory Requirements, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. The CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or

of any land or areas contiguous thereto, resulting from the performance of the Work. Should any claim be made against the DEPARTMENT by any such owner or occupant because of the performance of the Work, the CONTRACTOR shall hold the DEPARTMENT harmless.

6.15 Structural Loading:

The CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall the CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.16 Record Documents:

The CONTRACTOR shall maintain in a safe place at the site one record copy of all Drawings, Specifications, Addenda, Directives, Change Orders, Supplemental Agreements, and written interpretations and clarifications (issued pursuant to paragraph 3.6) in good order and annotated to show all changes made during construction. These record documents together with all Approved samples and a counterpart of all Approved Shop Drawings will be available to the Contracting Officer for reference and copying. Upon completion of the Work, the annotated record documents, samples and Shop Drawings will be delivered to the Contracting Officer. Record documents shall accurately record variations in the Work which vary from requirements shown or indicated in the Contract Documents.

6.17 Safety and Protection:

The CONTRACTOR alone shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. The CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

- 6.17.1 All employees on the Work and other persons and organizations who may be affected thereby;
- 6.17.2 All the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and
- 6.17.3 Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation or replacement in the course of construction.

The CONTRACTOR shall comply with all applicable Regulatory Requirements of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. The CONTRACTOR shall notify owners of adjacent property and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. All damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the CONTRACTOR, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by the CONTRACTOR with no change in Contract Price or Contract Time except as stated in 4.6, except damage or loss attributable to unforeseeable causes beyond the control of and without the fault or negligence of the CONTRACTOR, including but not restricted to acts of God, of the public enemy or governmental authorities. The CONTRACTOR's duties and responsibilities for the safety and protection of the Work shall continue until Final Acceptance (except as otherwise expressly provided in connection with Substantial Completion).

6.18 Safety Representative:

The CONTRACTOR shall designate a responsible safety representative at the site. This person shall be the CONTRACTOR's superintendent unless otherwise designated in writing by the CONTRACTOR to the Contracting Officer.

6.19 Emergencies:

In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the DEPARTMENT, is obligated to act to prevent threatened damage, injury or loss. The CONTRACTOR shall give the Contracting Officer prompt written notice if the CONTRACTOR believes that any significant changes in the Work or

variations from the Contract Documents have been caused thereby. If the DEPARTMENT determines that a change in the Contract Documents is required because of the action taken in response to an emergency, a change will be authorized by one of the methods indicated in Paragraph 9.2, as determined appropriate by the Contracting Officer.

6.20 Shop Drawings and Samples:

- 6.20.1 After checking and verifying all field measurements and after complying with applicable procedures specified in the General Requirements, the CONTRACTOR shall submit to the Contracting Officer for review and Approval in accordance with the accepted schedule of Shop Drawing submissions the required number of all Shop Drawings, which will bear a stamp or specific written indication that the CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission. All submissions will be identified as the Contracting Officer may require. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable the Contracting Officer to review the information as required.
- 6.20.2 The CONTRACTOR shall also submit to the Contracting Officer for review and Approval with such promptness as to cause no delay in Work, all samples required by the Contract Documents. All samples will have been checked by and accompanied by a specific written indication that the CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission and will be identified clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended.
- 6.20.3 Before submission of each Shop Drawing or sample the CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto and reviewed or coordinated each Shop Drawing or sample with other Shop Drawings and samples and with the requirements of the Work and the Contract Documents.
- 6.20.4 At the time of each submission the CONTRACTOR shall give the Contracting Officer specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on each Shop Drawing submitted to the Contracting Officer for review and Approval of each such variation. All variations of the proposed Shop Drawing from that specified will be identified in the submission and available maintenance, repair and replacement service will be indicated. The submittal will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such variation, including costs of redesign and claims of other Contractors affected by the resulting change, all of which shall be considered by the DEPARTMENT in evaluating the proposed variation. If the variation may result in a change of Contract Time or Price, or Contract responsibility, and is not minor in nature; the CONTRACTOR must submit a written request for Change Order with the variation to notify the DEPARTMENT of his intent. The DEPARTMENT may require the CONTRACTOR to furnish at the CONTRACTOR's expense additional data about the proposed variation. The Contracting Officer may reject any variation request which the Contracting Officer determines is not in the best interest of the DEPARTMENT.

6.21 Shop Drawing and Sample Review:

- 6.21.1 The Contracting Officer will review with reasonable promptness Shop Drawings and samples, but the Contracting Officer's review will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences or procedures of construction (except where a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents) or to safety precautions or programs incident thereto. The review of a separate item as such will not indicate acceptance of the assembly in which the item functions. The CONTRACTOR shall make corrections required by the Contracting Officer and shall return the required number of corrected copies of Shop Drawings and submit as required new samples for review. The CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by the Contracting Officer on previous submittals.

- 6.21.2 The Contracting Officer's review of Shop Drawings or samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless the CONTRACTOR has in writing advised the Contracting Officer of each such variation at the time of submission as required by paragraph 6.20.4. The Contracting Officer if he so determines, may give written Approval of each such variation by Change Order, except that, if the variation is minor and no Change Order has been requested a specific written notation thereof incorporated in or accompanying the Shop Drawing or sample review comments shall suffice as a modification. Approval by the Contracting Officer will not relieve the CONTRACTOR from responsibility for errors or omissions in the Shop Drawings or from responsibility for having complied with the provisions of paragraph 6.20.3.
- 6.21.3 The DEPARTMENT shall be responsible for all DEPARTMENT review costs resulting from the initial submission and the resubmittal. The CONTRACTOR shall, at the discretion of the Contracting Agency, pay all review costs incurred by the DEPARTMENT as a result of any additional re-submittals.
- 6.21.4 Where a Shop Drawing or sample is required by the Specifications, any related Work performed prior to the Contracting Officer's review and Approval of the pertinent submission will be the sole expense and responsibility of the CONTRACTOR.

6.22 Maintenance During Construction:

The CONTRACTOR shall maintain the Work during construction and until Substantial Completion, at which time the responsibility for maintenance shall be established in accordance with paragraph 13.10.

6.23 Continuing the Work:

The CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with the DEPARTMENT. No Work shall be delayed or postponed pending resolution of any disputes, disagreements, or claims except as the CONTRACTOR and the Contracting Officer may otherwise agree in writing.

6.24 Consent to Assignment:

The CONTRACTOR shall obtain the prior written consent of the Contracting Officer to any proposed assignment of any interest in, or part of this Contract. The consent to any assignment or transfer shall not operate to relieve the CONTRACTOR or his Sureties of any of his or its obligations under this Contract or the Performance Bonds. Nothing herein contained shall be construed to hinder, prevent, or affect an assignment of monies due, or to become due hereunder, made for the benefit of the CONTRACTOR's creditors pursuant to law.

6.25 Use of Explosives:

- 6.25.1 When the use of explosives is necessary for the prosecution of the Work, the CONTRACTOR shall exercise the utmost care not to endanger life or property, including new Work and shall follow all Regulatory Requirements applicable to the use of explosives. The CONTRACTOR shall be responsible for all damage resulting from the use of explosives.
- 6.25.2 All explosives shall be stored in a secure manner in compliance with all Regulatory Requirements, and all such storage places shall be clearly marked. Where no Regulatory Requirements apply, safe storage shall be provided not closer than 1,000 feet from any building, camping area, or place of human occupancy.
- 6.25.3 The CONTRACTOR shall notify each public utility owner having structures in proximity to the site of his intention to use explosives. Such notice shall be given sufficiently in advance to enable utility owners to take such steps as they may deem necessary to protect their property from injury. However, the CONTRACTOR shall be responsible for all damage resulting from the use of the explosives, whether or not, utility owners act to protect their property.

6.26 CONTRACTOR's Records:

- 6.26.1 Records of the CONTRACTOR and Subcontractors relating to personnel, payrolls, invoices of materials, and any and all other data relevant to the performance of this Contract, must be kept on a generally recognized accounting system. Such records must be available during normal work hours to the

Contracting Officer for purposes of investigation to ascertain compliance with Regulatory Requirements and provisions of the Contract Documents.

- 6.26.2 Payroll records must contain the name and address of each employee, his correct classification, rate of pay, daily and weekly number of hours of work, deductions made, and actual wages paid. The CONTRACTOR and Subcontractors shall make employment records available for inspection by the Contracting Officer and representatives of the U.S. and/or State Department of Labor and will permit such representatives to interview employees during working hours on the Project.
- 6.26.3 Records of all communications between the DEPARTMENT and the CONTRACTOR and other parties, where such communications affected performance of this Contract, must be kept by the CONTRACTOR and maintained for a period of three years from Final Acceptance. The DEPARTMENT or its assigned representative may perform an audit of these records during normal work hours after written notice to the CONTRACTOR.

ARTICLE 7 - LAWS AND REGULATIONS

7.1 Laws to be Observed

The CONTRACTOR shall keep fully informed of all federal and state Regulatory Requirements and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the Work, or which in any way affect the conduct of the Work. The CONTRACTOR shall at all times observe and comply with all such Regulatory Requirements, orders and decrees; and shall protect and indemnify the DEPARTMENT and its representatives against claim or liability arising from or based on the violation of any such Regulatory Requirement, order, or decree whether by the CONTRACTOR, Subcontractor, or any employee of either. Except where otherwise expressly required by applicable Regulatory Requirements, the DEPARTMENT shall not be responsible for monitoring CONTRACTOR's compliance with any Regulatory Requirements.

7.2 Permits, Licenses, and Taxes

- 7.2.1 The CONTRACTOR shall procure all permits and licenses, pay all charges, fees and taxes, and give all notices necessary and incidental to the due and lawful prosecution of the Work. As a condition of performance of this Contract, the CONTRACTOR shall pay all federal, state and local taxes incurred by the CONTRACTOR, in the performance of this Contract. Proof of payment of these taxes is a condition precedent to final payment by the DEPARTMENT under this Contract.
- 7.2.2 The CONTRACTOR's certification that taxes have been paid (as contained in the *Release of Contract*) will be verified with the Department of Revenue and Department of Labor, prior to final payment.
- 7.2.3 If any federal, state or local tax is imposed, charged, or repealed after the date of bid opening and is made applicable to and paid by the CONTRACTOR on the articles or supplies herein contracted for, then the Contract shall be increased or decreased accordingly by a Change Order.

7.3 Patented Devices, Materials and Processes

If the CONTRACTOR employs any design, device, material, or process covered by letters of patent, trademark or copyright, the CONTRACTOR shall provide for such use by suitable legal agreement with the patentee or owner. The CONTRACTOR and the Surety shall indemnify and save harmless the DEPARTMENT, any affected third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the DEPARTMENT for any costs, expenses, and damages which it may be obliged to pay by reason of any infringement, at any time during the prosecution or after the completion of the Work.

7.4 Compliance of Specifications and Drawings:

If the CONTRACTOR observes that the Specifications and Drawings supplied by the DEPARTMENT are at variance with any Regulatory Requirements, CONTRACTOR shall give the Contracting Officer prompt written notice thereof, and any necessary changes will be authorized by one of the methods indicated in paragraph 9.2. as determined appropriate by the Contracting Officer. If the CONTRACTOR performs any Work knowing or having reason to know that it is contrary to such Regulatory Requirements, and without such notice to the

Contracting Officer, the CONTRACTOR shall bear all costs arising therefrom; however, it shall not be the CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings supplied by the DEPARTMENT are in accordance with such Regulatory Requirements.

7.5 Accident Prevention:

The CONTRACTOR shall comply with AS 18.60.075 and all pertinent provisions of the Construction Code Occupational Safety and Health Standards issued by the Alaska Department of Labor.

7.6 Sanitary Provisions:

The CONTRACTOR shall provide and maintain in a neat and sanitary condition such accommodations for the use of his employees and DEPARTMENT representatives as may be necessary to comply with the requirements of the State and local Boards of Health, or of other bodies or tribunals having jurisdiction.

7.7 Business Registration:

Comply with AS 08.18.011, as follows: "it is unlawful for a person to submit a bid or work as a contractor until he has been issued a certificate of registration by the Department of Commerce. A partnership or joint venture shall be considered registered if one of the general partners or venturers whose name appears in the name under which the partnership or venture does business is registered."

7.8 Professional Registration and Certification:

All craft trades, architects, engineers and land surveyors, electrical administrators, and explosive handlers employed under the Contract shall specifically comply with applicable provisions of AS 08.18, 08.48, 08.40, and 08.52. Provide copies of individual licenses within seven days following a request from the Contracting Officer.

7.9 Local Building Codes:

The CONTRACTOR shall comply with AS 35.10.025 which requires construction in accordance with applicable local building codes to include the obtaining of required permits.

7.10 Air Quality Control:

The CONTRACTOR shall comply with all applicable provisions of AS 46.03.04 as pertains to Air Pollution Control.

7.11 Archaeological or Paleontological Discoveries:

When the CONTRACTOR's operation encounters prehistoric artifacts, burials, remains of dwelling sites, or paleontological remains, such as shell heaps, land or sea mammal bones or tusks, the CONTRACTOR shall cease operations immediately and notify the Contracting Officer. No artifacts or specimens shall be further disturbed or removed from the ground and no further operations shall be performed at the site until so directed. Should the Contracting Officer order suspension of the CONTRACTOR's operations in order to protect an archaeological or historical finding, or order the CONTRACTOR to perform extra Work, such shall be covered by an appropriate Contract change document.

7.12 Applicable Alaska Preferences:

- 7.12.1 In determining the low bidder for State funded projects, a 5% bid preference has been given to "Alaska bidders", as required under AS 36.30.170. "Alaska bidder" means a person who:
- (1) holds a current Alaska business license;
 - (2) submits a bid for goods, services, or construction under the name as appearing on the person's current Alaska business license
 - (3) has maintained a place of business within the state staffed by the bidder or an employee of the bidder for a period of six months immediately preceding the date of the bid;
 - (4) is incorporated or qualified to do business under the laws of the state, is a sole proprietorship, and the proprietor is a resident of the state or is a partnership, and all partners are residents of the state; and
 - (5) if a joint venture, is composed entirely of ventures that qualify under (1) through (4), above.

- 7.12.2 In determining the low bidder for State funded projects, a 5% bid preference has been given to "Alaska Veteran bidders", as required under AS 36.30.175 for Alaska veteran-owned businesses. To qualify for the Veterans Preference (per AS 36.30.175), the bidder must:
- (1) Qualify for the Alaska Bidder's Preference
 - (2) Add value by actually performing the services or have prior experience in selling the supplies
 - (3) Qualify as an Alaska Veteran
 - (4) The value of the preference cannot exceed \$5,000.
- 7.12.3 In determining the low bidder for State funded projects, an "Alaska products" preference has been given as required under AS 36.30.326 - 36.30.332, when the bid documents designate the use of Alaska products. If the successful Bidder/CONTRACTOR proposes to use an Alaska product and does not do so, a penalty will be assessed against the successful Bidder/CONTRACTOR in an amount equal to the product preference percentage granted to the successful Bidder/CONTRACTOR plus one percent multiplied by the total declared value of the Alaska products proposed but not used.
- 7.12.4 Pursuant to AS 36.15.050 and AS 36.30.322, "agricultural/wood" products harvested in Alaska shall be used in State funded projects whenever they are priced no more than seven percent above agricultural/wood products harvested outside the state and are of a like quality as compared with agricultural/wood products harvested outside the state, when such products are not utilized, the CONTRACTOR shall document the efforts he made towards obtaining agricultural/wood products harvested in Alaska and include in this documentation a written statement that he contacted the manufacturers and suppliers identified on the Department of Commerce and Economic Development's list of suppliers of Alaska forest products concerning the availability of agricultural/wood products harvested in Alaska and, if available, the product prices. The CONTRACTOR's use of agricultural/wood products that fail to meet the requirements of this section shall be subject to the provisions of paragraphs 12.6 through 12.9 relating to Defective Work.
- 7.12.5 The CONTRACTOR shall maintain records, in a format acceptable to the Contracting Officer, which establish the type and extent of "agricultural/wood" and "Alaska" products utilized. All record keeping and documentation associated with the requirements 7.12.2 and 7.12.3 of this paragraph, must be provided to the DEPARTMENT upon written request or as otherwise provided within the Contract Documents.

7.13 Preferential Employment:

The CONTRACTOR shall comply with all applicable and valid laws and regulations regarding the hiring of Alaska residents now in effect or that might subsequently take effect during the term of this Contract. In order to ensure that CONTRACTOR's Subcontractors will comply with all applicable laws and regulations regarding the hiring of Alaska residents now in effect or that might subsequently take effect, the CONTRACTOR shall include in its contracts with Subcontractors under this Contract language that is substantially the same as the first sentence of this provision.

7.14 Wages and Hours of Labor:

- 7.14.1 One certified copy of all payrolls shall be submitted weekly to the State Department of Labor and, upon request, to the Contracting Officer to assure to assure compliance with AS 36.05.040, *Filing Schedule of Employees Wages Paid and Other Information*. The CONTRACTOR shall be responsible for the submission of certified copies of payrolls of all Subcontractors. The certification shall affirm that the payrolls are current and complete, that the wage rates contained therein are not less than the applicable rates referenced in these Contract Documents, and that the classification set forth for each laborer or mechanic conforms with the Work he performed. The CONTRACTOR and his Subcontractors shall attend all hearings and conferences and produce such books, papers, and documents all as requested by the Department of Labor. Should federal funds be involved, the appropriate federal agency shall also receive a copy of the CONTRACTOR's certified payrolls.
- 7.14.2 The following labor provisions shall also apply to this Contract:
- a. The CONTRACTOR and his Subcontractors shall pay all employees unconditionally and not less than once a week;

- b. wages may not be less than those stated under AS 36.05.010, regardless of the contractual relationship between the CONTRACTOR or Subcontractors and laborers, mechanics, or field surveyors;
- c. the scale of wages to be paid shall be posted by the CONTRACTOR in a prominent and easily accessible place at the site of the Work;
- d. the DEPARTMENT shall withhold so much of the accrued payments as is necessary to pay to laborers, mechanics, or field surveyors employed by the CONTRACTOR or Subcontractors the difference between
 - 1. The rates of wages required by the Contract to be paid laborers, mechanics, or field surveyors on the Work, and
 - 2. The rates of wages in fact received by laborers, mechanics or field surveyors.

7.15 Overtime Work Hours and Compensation:

Pursuant to 40 U.S.C. 327-330 and AS 23.10.060 -.110, the CONTRACTOR shall not require nor permit any laborer or mechanic in any workweek in which he is employed on any Work under this Contract to work in excess of eight hours in any Calendar Day or in excess of forty hours in such workweek on Work subject to the provisions of the *Contract Work Hours and Safety Standards Act* unless such laborer or mechanic receives compensation at a rate not less than one and one half times his basic rate of pay for all such hours worked in excess of eight hours in any Calendar Day or in excess of forty hours in such workweek whichever is the greater number of overtime hours. In the event of any violation of this provision, the CONTRACTOR shall be liable to any affected employee for any amounts due and penalties and to the DEPARTMENT for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of this provision in the sum of \$10.00 for each Calendar Day on which such employee was required or permitted to be employed on such Work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by this paragraph.

7.16 Covenant Against Contingent Fees:

The CONTRACTOR warrants that no person or selling agent has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the CONTRACTOR for the purpose of securing business. For breach or violation of this warrant, the DEPARTMENT shall have the right to annul this Contract without liability or, in its discretion, to deduct price of consideration from the Contract or otherwise recover the full amount of such commission, percentage, brokerage, or contingent fee.

7.17 Officials Not to Benefit:

No member of or delegate to the U.S. Congress, the Alaska State Legislature or other state official shall be admitted to any share or part of this Contract, nor to any benefit that may arise there from. However, this provision shall not be construed to extend to this Contract if made with a corporation for its general benefit.

7.18 Personal Liability of Public Officials:

In carrying out any of the provisions thereof, or in exercising any power or authority granted to the Contracting Officer by the Contract, there will be no liability upon the Contracting Officer nor upon state employees authorized as his representatives, either personally or as officials of the State of Alaska, it being always understood that in such matters they act as agents and representatives of the DEPARTMENT.

ARTICLE 8 - OTHER WORK

8.1 Related Work at Site:

- 8.1.1 The DEPARTMENT reserves the right at any time to contract for and perform other or additional work on or near the Work covered by the Contract.
- 8.1.2 When separate contracts are let within the limits of the Project, the CONTRACTOR shall conduct his Work so as not to interfere with or hinder the work being performed by other contractors. The

CONTRACTOR when working on the same Project with other contractors shall cooperate with such other contractors. The CONTRACTOR shall join his Work with that of the others in an acceptable manner and shall perform it in proper sequence to that of others.

- 8.1.3 If the fact that other such work is to be performed is identified or shown in the Contract Documents the CONTRACTOR shall assume all liability, financial or otherwise, in connection with this Contract and indemnify and save harmless the DEPARTMENT from any and all damages or claims that may arise because of inconvenience, delay, or loss experienced by the CONTRACTOR because of the presence and operations of other contractors.
- 8.1.4 If the fact that such other work is to be performed was not identified or shown in the Contract Documents, written notice thereof will be given to the CONTRACTOR prior to starting any such other work. If the CONTRACTOR believes that such performance will require an increase in Contract Price or Contract Time, the CONTRACTOR shall notify the Contracting Officer of such required increase within fifteen (15) calendar days following receipt of the Contracting Officer's notice. Should the Contracting Officer find such increase(s) to be justified, a Change Order will be executed.

8.2 Access, Cutting, and Patching:

The CONTRACTOR shall afford each utility owner and any other contractor who is a party to such a direct contract with the DEPARTMENT (or the DEPARTMENT, if the DEPARTMENT is performing the additional work with the DEPARTMENT's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect and coordinate the Work with the work of others. The CONTRACTOR shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work, the CONTRACTOR shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter such other work with the written consent of the Contracting Officer. The duties and responsibilities of the CONTRACTOR under this paragraph are for the benefit of other contractors to the extent that there are comparable provisions for the benefit of the CONTRACTOR in said direct contracts between the DEPARTMENT and other contractors.

8.3 Defective Work by Others:

If any part of the CONTRACTOR's Work depends for proper execution or results upon the work of any such other contractor, utility owner, or the DEPARTMENT, the CONTRACTOR shall inspect and promptly report to the Contracting Officer in writing any delays, defects or deficiencies in such work that render it unavailable or unsuitable for such proper execution and results. The CONTRACTOR's failure to so report will constitute an acceptance of the other work as fit and proper for integration with CONTRACTOR's Work except for latent or nonapparent defects and deficiencies in the other work.

8.4 Coordination:

If the DEPARTMENT contracts with others for the performance of other work at the site, Contracting Officer will have authority and responsibility for coordination of the activities among the various prime contractors.

ARTICLE 9 - CHANGES

9.1 DEPARTMENT's Right to Change

Without invalidating the Contract and without notice to any Surety, the DEPARTMENT may, at any time or from time to time, order additions, deletions or revisions in the Work within the general scope of the Contract, including but not limited to changes:

- 9.1.1 In the Contract Documents;
- 9.1.2 In the method or manner of performance of the Work;
- 9.1.3 In State-furnished facilities, equipment, materials, services, or site;
- 9.1.4 Directing acceleration in the performance of the Work.

9.2 Authorization of Changes within the General Scope.

Additions, deletions, or revisions in the Work within the general scope of the Contract as specified in 9.1 shall be authorized by one or more of following ways:

- 9.2.1 Directive (pursuant to paragraph 9.3)
- 9.2.2 A Change Order (pursuant to paragraph 9.4)
- 9.2.3 DEPARTMENT's acceptance of Shop Drawing variations from the Contract Documents as specifically identified by the CONTRACTOR as required by paragraph 6.20.4.

9.3 Directive

- 9.3.1 The Contracting Officer shall provide written clarification or interpretation of the Contract Documents (pursuant to paragraph 3.6).
- 9.3.2 The Contracting Officer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents.
- 9.3.3 The Contracting Officer may order the Contractor to correct Defective Work or methods which are not in conformance with the Contract Documents.
- 9.3.4 The Contracting Officer may direct the commencement or suspension of Work or emergency related Work (as provided in paragraph 6.19).
- 9.3.5 Upon the issuance of a Directive to the CONTRACTOR by the Contracting Officer, the CONTRACTOR shall proceed with the performance of the Work as prescribed by such Directive.
- 9.3.6 If the CONTRACTOR believes that the changes noted in a Directive may cause an increase in the Contract Price or an extension of Contract Time, the CONTRACTOR shall immediately provide written notice to the Contracting Officer depicting such increases before proceeding with the Directive, except in the case of an emergency. If the Contracting Officer finds the increase in Contract Price or the extension of Contract Time justified, a Change Order will be issued. If however, the Contracting Officer does not find that a Change Order is justified, the Contracting Officer may direct the CONTRACTOR to proceed with the Work. The CONTRACTOR shall cooperate with the Contracting Officer in keeping complete daily records of the cost of such Work. If a Change Order is ultimately determined to be justified, in the absence of agreed prices and unit prices, payment for such Work will be made on a "cost of the work basis" as provided in 10.4

9.4 Change Order

A change in Contract Time, Contract Price, or responsibility may be made for changes within the scope of the Work only by Change Order. Upon receipt of an executed Change Order, the CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents except as otherwise specifically provided. Changes in Contract Price and Contract Time shall be made in accordance with Articles 10 and 11.

9.5 Shop Drawing Variations

Variations by shop drawings shall only be eligible for consideration under 9.4 when the conditions affecting the price, time, or responsibility are identified by the CONTRACTOR in writing and a request for a Change Order is submitted as per 6.20.4.

9.6 Changes Outside the General Scope; Supplemental Agreement

Any change which is outside the general scope of the Contract, as determined by the Contracting Officer, must be authorized by a Supplemental Agreement signed by the appropriate representatives of the DEPARTMENT and the CONTRACTOR.

9.7 Unauthorized Work:

The CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in this Article 9, except in the case of an emergency as provided in paragraph 6.19 and except in the case of uncovering Work as provided in paragraph 12.4.2.

9.8 Notification of Surety:

If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Time) is required by the provisions of any bond to be given to a Surety, the giving of any such notice will be the CONTRACTOR's responsibility, and the amount of each applicable bond will be adjusted accordingly.

9.9 Differing Site Conditions:

- 9.9.1 The CONTRACTOR shall promptly, and before such conditions are disturbed (except in an emergency as permitted by paragraph 6.19), notify the Contracting Officer in writing of: (1) subsurface or latent physical conditions at the site differing materially from those indicated in the Contract, and which could not have been discovered by a careful examination of the site, or (2) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract. The Contracting Officer shall promptly investigate the conditions, and if the Contracting Officer finds that such conditions do materially so differ and cause an increase or decrease in the CONTRACTOR's cost of, or time required for, performance of this Contract, an equitable adjustment shall be made and the Contract modified in writing accordingly.
- 9.9.2 Any claim for additional compensation by the CONTRACTOR under this clause shall be made in accordance with Article 15. In the event that the Contracting Officer and the CONTRACTOR are unable to reach an agreement concerning an alleged differing site condition, the CONTRACTOR will be required to keep an accurate and detailed record which will indicate the actual "cost of the work" done under the alleged differing site condition. Failure to keep such a record shall be a bar to any recovery by reason of such alleged differing site conditions. The Contracting Officer shall be given the opportunity to supervise and check the keeping of such records.

ARTICLE 10 - CONTRACT PRICE; COMPUTATION AND CHANGE

10.1 Contract Price:

The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to the CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by the CONTRACTOR shall be at his expense without change in the Contract Price. The Contract Price may only be changed by a Change Order or Supplemental Agreement.

10.2 Claim for Price Change:

Any claim for an increase or decrease in the Contract Price shall be submitted in accordance with the terms of Article 15, and shall not be allowed unless notice requirements of this Contract have been met.

10.3 Change Order Price Determination:

The value of any Work covered by a Change Order for an increase or decrease in the Contract Price shall be determined in one of the following ways:

- 10.3.1 Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved (subject to the provisions of subparagraphs 10.9.1 through 10.9.3, inclusive).
- 10.3.2 By mutual acceptance of a lump sum price which includes overhead and profit.

- 10.3.3 When 10.3.1 and 10.3.2 are inapplicable, on the basis of the "cost of the work" (determined as provided in paragraphs 10.4 and 10.5) plus a CONTRACTOR's fee for overhead and profit (determined as provided in paragraph 10.6).
- 10.3.4 Before a Change Order or Supplemental Agreement is Approved, the CONTRACTOR shall submit cost or pricing data regarding the changed or extra Work. The CONTRACTOR shall certify that the data submitted is, to his best knowledge and belief, accurate, complete and current as of a mutually determined specified date and that such data will continue to be accurate and complete during the performance of the changed or extra Work.

10.4 Cost of the Work:

The term "cost of the work" means the sum of all costs necessarily incurred and paid by the CONTRACTOR in the proper performance of the Work. Except as otherwise may be agreed to in writing by the DEPARTMENT, such costs shall be in amount no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in subparagraph 10.5:

- 10.4.1 Payroll costs for employees in the direct employ of the CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by the DEPARTMENT and the CONTRACTOR. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' or workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing Work after regular working hours, on Saturday, Sunday or legal holidays, shall be included in the above to the extent authorized by the DEPARTMENT.
- 10.4.2 Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to the CONTRACTOR unless the DEPARTMENT deposits funds with the CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to the DEPARTMENT. All trade discounts, rebates and refunds and all returns from sale of surplus materials and equipment shall accrue to the DEPARTMENT, and the CONTRACTOR shall make provisions so that they may be obtained.
- 10.4.3 Payments made by the CONTRACTOR to Subcontractors for Work performed by Subcontractors. If required by the DEPARTMENT, CONTRACTOR shall obtain competitive quotes from Subcontractors or Suppliers acceptable to the CONTRACTOR and shall deliver such quotes to the DEPARTMENT who will then determine which quotes will be accepted. If a subcontract provides that the Subcontractor is to be paid on the basis of "cost of the work" plus a fee, the Subcontractor's "cost of the work" shall be determined in the same manner as the CONTRACTOR's "cost of work" as described in paragraphs 10.4 through 10.5; and the Subcontractor's fee shall be established as provided for under subparagraph 10.6.2 clause b. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.
- 10.4.4 Costs of special consultants (including but not limited to engineers, architects, testing laboratories, and surveyors) employed for services necessary for the completion of the Work.
- 10.4.5 Supplemental costs including the following:
- a. The proportion of necessary transportation, travel and subsistence expenses of the CONTRACTOR's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed which remain the property of the CONTRACTOR.
 - c. Rentals of all construction equipment and machinery and the parts thereof whether rented from the CONTRACTOR or others in accordance with rental agreements Approved by the DEPARTMENT and the costs of transportation, loading, unloading, installation, dismantling and removal thereof - all in accordance

with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.

- d. Sales, consumer, use or similar taxes related to the Work, and for which the CONTRACTOR is liable, imposed by Regulatory Requirements.
- e. Deposits lost for causes other than negligence of the CONTRACTOR, any Subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses), not compensated by insurance or otherwise, to the Work or otherwise sustained by the CONTRACTOR in connection with the performance and furnishing of the Work provided they have resulted from causes other than the negligence of the CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and Approval of the DEPARTMENT. No such losses, damages and expenses shall be included in the "cost of the work" for the purpose of determining the CONTRACTOR's fee. If, however, any such loss or damage requires reconstruction and the CONTRACTOR is placed in charge thereof, the CONTRACTOR shall be paid for services a fee proportionate to that stated in paragraphs 10.6.2.a and 10.6.2.b.
- g. The cost of utilities, fuel and sanitary facilities at the site.
- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.
- I. Cost of premiums for additional bonds and insurance required because of changes in the Work and premiums for property insurance coverage within the limits of the deductible amounts established by the DEPARTMENT in accordance with Article 5.

10.5 Excluded Costs:

The term "cost of the work" shall not include any of the following:

- 10.5.1 Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agency, expeditors, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in CONTRACTOR's principal or a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 10.4.1 or specifically covered by paragraph 10.4.4 all of which are to be considered administrative costs covered by the CONTRACTOR's fee.
- 10.5.2 Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.
- 10.5.3 Any part of CONTRACTOR's capital expenses including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.
- 10.5.4 Cost of premiums for all bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by subparagraph 10.4.5.i above).
- 10.5.5 Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of Defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.
- 10.5.6 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 10.4.

10.6 CONTRACTOR's Fee:

The CONTRACTOR's fee allowed to CONTRACTOR for overhead and profit shall be determined as follows.

- 10.6.1 A mutually acceptable fixed fee; or if none can be agreed upon.
- 10.6.2 A fee based on the following percentages of the various portions of the "cost of the work":
- a. For costs incurred under paragraphs 10.4.1 and 10.4.2, the CONTRACTOR's fee shall be twenty percent;
 - b. For costs incurred under paragraph 10.4.3, the CONTRACTOR's fee shall be ten percent; and if a subcontract is on the basis of "cost of the work" plus a fee, the maximum allowable to CONTRACTOR on account of overhead and profit of all Subcontractors and multiple tiers thereof shall be fifteen percent;
 - c. No fee shall be payable on the basis of costs itemized under paragraphs 10.4.4, 10.4.5 and 10.5;
 - d. The amount of credit to be allowed by the CONTRACTOR to the DEPARTMENT for any such change which results in a net decrease in cost will be the amount of the actual net decrease plus a deduction in CONTRACTOR's fee by an amount equal to ten percent of the net decrease; and
 - e. When both additions and credits are involved in any one change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with paragraphs 10.6.2.a through 10.6.2.d, inclusive.

10.7 Cost Breakdown:

Whenever the cost of any Work is to be determined pursuant to paragraphs 10.4 and 10.5, the CONTRACTOR will submit in a form acceptable to the DEPARTMENT an itemized cost breakdown together with supporting data.

10.8 Cash Allowances:

It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be done by such Subcontractors or Suppliers and for such sums within the limit of the allowances as may be acceptable to the Contracting Officer. CONTRACTOR agrees that:

- 10.8.1 The allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the site, and all applicable taxes; and
- 10.8.2 CONTRACTOR's cost for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances. No demand for additional payment on account of any thereof will be valid.

Prior to final payment, an appropriate Change Order will be issued to reflect actual amounts due the CONTRACTOR on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

10.9 Unit Price Work:

- 10.9.1 Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Contract. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by the CONTRACTOR will be made by the DEPARTMENT in accordance with paragraph 10.10.
- 10.9.2 Each unit price will be deemed to include an amount considered by the CONTRACTOR to be adequate to cover the CONTRACTOR's overhead and profit for each separately identified item. If the "Basis of Payment" clause in the Contract Documents relating to any unit price in the bid schedule requires that the said unit price cover and be considered compensation for certain work or material essential to the item, this same work or material will not also be measured or paid for under any other pay item which may appear elsewhere in the Contract Documents.

- 10.9.3 Payment to the CONTRACTOR shall be made only for the actual quantities of Work performed and accepted or materials furnished, in conformance with the Contract Documents. When the accepted quantities of Work or materials vary from the quantities stated in the bid schedule, or change documents, the CONTRACTOR shall accept as payment in full, payment at the stated unit prices for the accepted quantities of Work and materials furnished, completed and accepted; except as provided below:
- a. When the quantity of Work to be done or material to be furnished under any item, for which the total cost of the item exceeds 10% of the total Contract Price, is increased by more than 25 percent of the quantity stated in the bid schedule, or change documents, either party to the Contract, upon demand, shall be entitled to an equitable unit price adjustment on that portion of the Work above 125 percent of the quantity stated in the bid schedule.
 - b. When the quantity of Work to be done or material to be furnished under any major item, for which the total cost of the item exceeds 10% of the total Contract Price, is decreased by more than 25 percent of the quantity stated in the bid schedule, or change documents either party to the Contract, upon demand, shall be entitled to an equitable price adjustment for the quantity of Work performed or material furnished, limited to a total payment of not more than 75 percent of the amount originally bid for the item.

10.10 Determinations for Unit Prices:

The Contracting Officer will determine the actual quantities and classifications of Unit Price Work performed by the CONTRACTOR. The Contracting Officer will review with the CONTRACTOR preliminary determinations on such matters before finalizing the costs and quantities on the Schedule of Values. The Contracting Officer's acknowledgment thereof will be final and binding on the CONTRACTOR, unless, within 10 days after the date of any such decisions, the CONTRACTOR delivers to the Contracting Officer written notice of intention to appeal from such a decision.

10.11 Disadvantaged and Women Business Enterprises (DBE & WBE) Program:

The Contract Price shall be adjusted by such means as provided in the section entitled "Phase III - Determination of Liquidated Damages and Bonuses", DISADVANTAGED AND WOMEN BUSINESS ENTERPRISE (DBE & WBE) PROGRAM, Form 25A300.

ARTICLE 11 - CONTRACT TIME; COMPUTATION AND CHANGE

11.1 Commencement of Contract Time; Notice to Proceed:

The Contract Time will commence to run on the day indicated in the Notice to Proceed.

11.2 Starting the Work:

No Work on Contract items shall be performed before the effective date of the Notice to Proceed. The CONTRACTOR shall notify the Contracting Officer at least 24 hours in advance of the time actual construction operations will begin. The CONTRACTOR may request a limited Notice to Proceed after Award has been made, to permit him to order long lead materials which could cause delays in Project completion. However, granting is within the sole discretion of the Contracting Officer, and refusal or failure to grant a limited Notice to Proceed shall not be a basis for claiming for delay, extension of time, or alteration of price.

11.3 Computation of Contract Time:

- 11.3.1 When the Contract Time is specified on a Calendar Day basis, all Work under the Contract shall be completed within the number of Calendar Days specified. The count of Contract Time begins on the day following receipt of the Notice to Proceed by the CONTRACTOR, if no starting day is stipulated therein.

Calendar Days shall continue to be counted against Contract Time until and including the date of Final Completion of the Work.

- 11.3.2 When the Contract completion time is specified as a fixed calendar date, it shall be the date of Final Completion.

11.4 Time Change:

The Contract Time may only be changed by a Change Order or Supplemental Agreement.

11.5 Extension Due to Delays:

The right of the CONTRACTOR to proceed shall not be terminated nor the CONTRACTOR charged with liquidated or actual damages because of delays to the completion of the Work due to unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including, but not restricted to the following: acts of God or of the public enemy, acts of the DEPARTMENT in its contractual capacity, acts of another contractor in the performance of a contract with the DEPARTMENT, floods, fires, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather and delays of Subcontractors or Suppliers due to such causes. Any delay in receipt of materials on the site, caused by other than one of the specifically mentioned occurrences above, does not of itself justify a time extension, provided that the CONTRACTOR shall within twenty four (24) hours from the beginning of any such delay (unless the Contracting Officer shall grant a further period of the time prior to the date of final settlement of the Contract), notify the Contracting Officer in writing of the cause of delay. The Contracting Officer shall ascertain the facts and the extent of the delay and extend the time for completing the Work when the findings of fact justify such an extension.

11.6 Essence of Contract:

All time limits stated in the Contract Documents are of the essence of the Contract.

11.7 Reasonable Completion Time:

It is expressly understood and agreed by and between the CONTRACTOR and the DEPARTMENT that the date of beginning and the time for Final Completion of the Work described herein are reasonable times for the completion of the Work.

11.8 Delay Damages:

Whether or not the CONTRACTOR's right to proceed with the Work is terminated, he and his Sureties shall be liable for damages resulting from his refusal or failure to complete the Work within the specified time.

Liquidated and actual damages for delay shall be paid by the CONTRACTOR or his Surety to the DEPARTMENT in the amount as specified in the Supplementary Conditions for each Calendar Day the completion of the Work or any part thereof is delayed beyond the time required by the Contract, or any extension thereof. If a listing of incidents resulting from a delay and expected to give rise to actual or liquidated damages is not established by the Contract Documents, then the CONTRACTOR and his Surety shall be liable to the DEPARTMENT for any actual damages occasioned by such delay. The CONTRACTOR acknowledges that the liquidated damages established herein are not a penalty but rather constitute an estimate of damages that the DEPARTMENT will sustain by reason of delayed completion. These liquidated and actual damages are intended as compensation for losses anticipated to arise, and include those items enumerated in the Supplementary Conditions.

These damages will continue to run both before and after termination in the event of default termination. These liquidated damages do not cover excess costs of completion or DEPARTMENT costs, fees, and charges related to reprourement. If a default termination occurs, the CONTRACTOR or his Surety shall pay in addition to these damages, all excess costs and expenses related to completion as provided by Article 14.2.5.

ARTICLE 12 - QUALITY ASSURANCE

12.1 Warranty and Guaranty:

The CONTRACTOR warrants and guarantees to the DEPARTMENT that all Work will be in accordance with the Contract Documents and will not be Defective. Prompt notice of all defects shall be given to the CONTRACTOR. All Defective Work, whether or not in place, may be rejected, corrected or accepted as provided for in this article.

12.2 Access to Work:

The DEPARTMENT and the DEPARTMENT's representatives, testing agencies and governmental agencies with jurisdiction interests will have access to the Work at reasonable times for their observation, inspecting and testing. The CONTRACTOR shall provide proper and safe conditions for such access.

12.3 Tests and Inspections:

- 12.3.1 The CONTRACTOR shall give the Contracting Officer timely notice of readiness of the Work for all required inspections, tests or Approvals.
- 12.3.2 If Regulatory Requirements of any public body having jurisdiction require any Work (or part thereof) to specifically be inspected, tested or approved, the CONTRACTOR shall assume full responsibility therefor, pay all costs in connection therewith and furnish the Contracting Officer the required certificates of inspection, testing or approval. The CONTRACTOR shall also be responsible for and shall pay all costs in connection with any inspection or testing required in connection with DEPARTMENT's acceptance of a Supplier of materials or equipment proposed to be incorporated in the Work, or of materials or equipment submitted for Approval prior to the CONTRACTOR's purchase thereof for incorporation in the Work. The cost of all inspections, tests and approvals in addition to the above which are required by the Contract Documents shall be paid by the CONTRACTOR. The DEPARTMENT may perform additional tests and inspections which it deems necessary to insure quality control. All such failed tests or inspections shall be at the CONTRACTOR's expense.
- 12.3.4 If any Work (including the work of others) that is to be inspected, tested or Approved is covered without written concurrence of the Contracting Officer, it must, if requested by the Contracting Officer, be uncovered for observation. Such uncovering shall be at the CONTRACTOR's expense unless the CONTRACTOR has given the Contracting Officer timely notice of CONTRACTOR's intention to cover the same and the Contracting Officer has not acted with reasonable promptness in response to such notice.
- 12.3.5 Neither observations nor inspections, tests or Approvals by the DEPARTMENT or others shall relieve the CONTRACTOR from the CONTRACTOR's obligations to perform the Work in accordance with the Contract Documents.

12.4 Uncovering Work:

- 12.4.1 If any Work is covered contrary to the written request of the Contracting Officer, it must, if requested by the Contracting Officer, be uncovered for the Contracting Officer's observation and replaced at the CONTRACTOR's expense.
- 12.4.2 If the Contracting Officer considers it necessary or advisable that covered Work be observed inspected or tested, the CONTRACTOR, at the Contracting Officer's request, shall uncover, expose or otherwise make available for observation, inspection or testing as the Contracting Officer may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is Defective, the CONTRACTOR shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) and the DEPARTMENT shall be entitled to an appropriate decrease in the Contract Price. If, however, such Work is not found to be Defective, the CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction.

12.5 DEPARTMENT May Stop the Work:

If the Work is Defective, or the CONTRACTOR fails to supply suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, the Contracting Officer may order the CONTRACTOR to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the Contracting Officer to stop the Work shall not give rise to any duty on the part of the Contracting Officer to exercise this right for the benefit of the CONTRACTOR or any other party.

12.6 Correction or Removal of Defective Work:

If required by the Contracting Officer, the CONTRACTOR shall promptly, as directed, either correct all Defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by the Contracting Officer, remove it from the site and replace it with Work which conforms to the requirements of the Contract Documents. The CONTRACTOR shall bear all direct, indirect and consequential costs of such correction or removal (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) made necessary thereby.

12.7 One Year Correction Period:

If within one year after the date of Final Completion or such longer period of time as may be prescribed by Regulatory Requirements or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be Defective, the CONTRACTOR shall promptly, without cost to the DEPARTMENT and in accordance with the Contracting Officer's written instructions, either correct such Defective Work, or, if it has been rejected by the Contracting Officer, remove it from the site and replace it with conforming Work. If the CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, the DEPARTMENT may have the Defective Work corrected or the rejected Work removed and replaced, and all direct, indirect and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) will be paid by the CONTRACTOR. In special circumstances where a particular item of equipment is placed in continuous service for the benefit of the DEPARTMENT before Substantial Completion of all the Work, the correction period for that item may begin on an earlier date if so provided in the Specifications or by Change Order. Provisions of this paragraph are not intended to shorten the statute of limitations for bringing an action.

12.8 Acceptance of Defective Work:

Instead of requiring correction or removal and replacement of Defective Work, the Contracting Officer may accept Defective Work, the CONTRACTOR shall bear all direct, indirect and consequential costs attributable to the Contracting Officer's evaluation of and determination to accept such Defective Work (costs to include but not be limited to fees and charges of engineers, architects, attorneys and other professionals). If any such acceptance occurs prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and the DEPARTMENT shall be entitled to an appropriate decrease in the Contract Price. If the DEPARTMENT has already made final payment to the CONTRACTOR, an appropriate amount shall be paid by the CONTRACTOR or his Surety to the DEPARTMENT.

12.9 DEPARTMENT May Correct Defective Work:

If the CONTRACTOR fails within a reasonable time after written notice from the Contracting Officer to proceed to correct Defective Work or to remove and replace rejected Work as required by the Contracting Officer in accordance with paragraph 12.6, or if the CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if the CONTRACTOR fails to comply with any other provision of the Contract Documents, the DEPARTMENT may, after 7 days' written notice to the CONTRACTOR, correct and remedy any such deficiency. In exercising the rights and remedies under this paragraph the DEPARTMENT shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, the Contracting Officer may exclude the CONTRACTOR from all or part of the site, take possession of all or part of the Work, and suspend the CONTRACTOR's services related thereto, take possession of the CONTRACTOR's tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or approved remote storage sites or for which the DEPARTMENT has paid the CONTRACTOR but which are stored elsewhere. The CONTRACTOR shall allow the Contracting Officer and his authorized representatives such access to the site as may be necessary to enable the Contracting Officer to exercise the rights and remedies under this paragraph. All direct, indirect and consequential costs of the DEPARTMENT in exercising such rights and remedies will be charged against the CONTRACTOR, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and the DEPARTMENT shall be entitled to an appropriate decrease in the Contract Price. Such direct, indirect and consequential costs will include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, all court and arbitration costs and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of the CONTRACTOR's Defective Work. The CONTRACTOR shall not be allowed an extension of time because of

any delay in performance of the work attributable to the exercise, by the Contracting Officer, of the DEPARTMENT's rights and remedies hereunder.

ARTICLE 13 - PAYMENTS TO CONTRACTOR AND COMPLETION

13.1 Schedule of Values:

The Schedule of Values established as provided in paragraph 6.6 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to the Contracting Officer. Progress payments on account of Unit Price Work will be based on the number of units completed.

13.2 Preliminary Payments:

Upon approval of the Schedule of Values the CONTRACTOR may be paid for direct costs substantiated by paid invoices and other prerequisite documents required by the General Requirements. Direct costs shall include the cost of bonds, insurance, approved materials stored on the site or at approved remote storage sites, deposits required by a Supplier prior to fabricating materials, and other approved direct mobilization costs substantiated as indicated above. These payments shall be included as a part of the total Contract Price as stated in the Contract.

13.3 Application for Progress Payment:

The CONTRACTOR shall submit to the Contracting Officer for review an Application for Payment filled out and signed by the CONTRACTOR covering the Work completed as of the date of the Application for Payment and accompanied by such supporting documentation as is required by the Contract Documents. Progress payments will be made as the Work progresses on a monthly basis or twice a month when requested by the CONTRACTOR, but only when the approved invoice exceeds \$10,000.00.

13.4 Review of Applications for Progress Payment:

Contracting Officer will either indicate in writing a recommendation of payment or return the Application for Payment to the CONTRACTOR indicating in writing the Contracting Officer's reasons for refusing to recommend payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the Application for Payment.

13.5 Stored Materials and Equipment:

If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, paid invoice or other documentation warranting that the DEPARTMENT has received the materials and equipment free and clear of all charges, security interests and encumbrances and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect the DEPARTMENT's interest therein, all of which will be satisfactory to the Contracting Officer. No payment will be made for perishable materials that could be rendered useless because of long storage periods. No progress payment will be made for living plant materials until planted.

13.6 CONTRACTOR's Warranty of Title:

The CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to the DEPARTMENT no later than the time of payment free and clear of any claims, liens, security interests and further obligations.

13.7 Withholding of Payments:

The DEPARTMENT may withhold or refuse payment for any of the reasons listed below provided it gives written notice of its intent to withhold and of the basis for withholding:

- 13.7.1 The Work is Defective, or completed Work has been damaged requiring correction or replacement, or has been installed without Approval of Shop Drawings, or by an unapproved Subcontractor, or for unsuitable storage of materials and equipment.
- 13.7.2 The Contract Price has been reduced by Change Order,

- 13.7.3 The DEPARTMENT has been required to correct Defective Work or complete Work in accordance with paragraph 12.9.
- 13.7.4 The DEPARTMENT's actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.2.1.a through 14.2.1.k inclusive.
- 13.7.5 Claims have been made against the DEPARTMENT or against the funds held by the DEPARTMENT on account of the CONTRACTOR's actions or inactions in performing this Contract, or there are other items entitling the DEPARTMENT to a set off.
- 13.7.6 Subsequently discovered evidence or the results of subsequent inspections or test, nullify any previous payments for reasons stated in subparagraphs 13.7.1 through 13.7.5.
- 13.7.7 The CONTRACTOR has failed to fulfill or is in violation of any of his obligations under any provision of this Contract.

13.8 Retainage:

At any time the DEPARTMENT finds that satisfactory progress is not being made it may in addition to the amounts withheld under 13.7 retain a maximum amount equal to 10% of the total amount earned on all subsequent progress payments. This retainage may be released at such time as the Contracting Officer finds that satisfactory progress is being made.

13.9 Request for Release of Funds:

If the CONTRACTOR believes the basis for withholding is invalid or no longer exists, immediate written notice of the facts and Contract provisions on which the CONTRACTOR relies, shall be given to the DEPARTMENT, together with a request for release of funds and adequate documentary evidence proving that the problem has been cured. In the case of withholding which has occurred at the request of the Department of Labor, the CONTRACTOR shall provide a letter from the Department of Labor stating that withholding is no longer requested. Following such a submittal by the CONTRACTOR, the DEPARTMENT shall have a reasonable time to investigate and verify the facts and seek additional assurances before determining whether release of withheld payments is justified.

13.10 Substantial Completion:

When the CONTRACTOR considers the Work ready for its intended use the CONTRACTOR shall notify the Contracting Officer in writing that the Work or a portion of Work which has been specifically identified in the Contract Documents is substantially complete (except for items specifically listed by the CONTRACTOR as incomplete) and request that the DEPARTMENT issue a certificate of Substantial Completion. Within a reasonable time thereafter, the Contracting Officer, the CONTRACTOR and appropriate Consultant(s) shall make an inspection of the Work to determine the status of completion. If the Contracting Officer does not consider the Work substantially complete, the Contracting Officer will notify the CONTRACTOR in writing giving the reasons therefor. If the Contracting Officer considers the Work substantially complete, the Contracting Officer will within fourteen days execute and deliver to the CONTRACTOR a certificate of Substantial Completion with tentative list of items to be completed or corrected. At the time of delivery of the certificate of Substantial Completion the Contracting Officer will deliver to the CONTRACTOR a written division of responsibilities pending Final Completion with respect to security, operation, safety, maintenance, heat, utilities, insurance and warranties which shall be consistent with the terms of the Contract Documents.

The DEPARTMENT shall be responsible for all DEPARTMENT costs resulting from the initial inspection and the first re-inspection, the CONTRACTOR shall pay all costs incurred by the DEPARTMENT resulting from re-inspections, thereafter.

13.11 Access Following Substantial Completion:

The DEPARTMENT shall have the right to exclude the CONTRACTOR from the Work after the date of Substantial Completion, but the DEPARTMENT shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

13.12 Final Inspection:

Upon written notice from the CONTRACTOR that the entire Work or an agreed portion thereof is complete, the Contracting Officer will make a final inspection with the CONTRACTOR and appropriate Consultant(s) and will notify the CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or Defective. The CONTRACTOR shall immediately take such measures as are necessary to remedy such deficiencies. The CONTRACTOR shall pay for all costs incurred by the DEPARTMENT resulting from re-inspections.

13.13 Final Completion and Application for Payment:

After the CONTRACTOR has completed all such corrections to the satisfaction of the Contracting Officer and delivered all maintenance and operating instructions, schedules, guarantees, bonds, certificates of payment to all laborers, Subcontractors and Suppliers, certificates of inspection, marked-up record documents and other documents - all as required by the Contract Documents; and after the Contracting Officer has indicated in writing that the Work has met the requirements for Final Completion, and subject to the provisions of paragraph 13.18, the CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all remaining certificates, warranties, guarantees, releases, affidavits, and other documentation required by the Contract Documents.

13.14 Final Payment:

13.14.1 If on the basis of the Contracting Officer's observation of the Work during construction and final inspection, and the Contracting Officer's review of the final Application for Payment and accompanying documentation - all as required by the Contract Documents; and the Contracting Officer is satisfied that the Work has been completed and the CONTRACTOR's other obligations under the Contract Documents have been fulfilled, the DEPARTMENT will process final Application for Payment. Otherwise, the Contracting Officer will return the Application for Payment to the CONTRACTOR, indicating in writing the reasons for refusing to process final payment, in which case the CONTRACTOR shall make the necessary corrections and resubmit the final Application for Payment.

13.14.2 If, through no fault of the CONTRACTOR, Final Completion of the Work is significantly delayed, the Contracting Officer shall, upon receipt of the CONTRACTOR's final Application for Payment, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by the DEPARTMENT for Work not fully completed or corrected is less than the retainage provided for in paragraph 13.9, and if bonds have been furnished as required in paragraph 5.1, the written consent of the Surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the CONTRACTOR to the DEPARTMENT with the application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

13.15 Final Acceptance:

Following certification of payment of payroll and revenue taxes, and final payment to the CONTRACTOR, the DEPARTMENT will issue a letter of Final Acceptance, releasing the CONTRACTOR from further obligations under the Contract, except as provided in paragraph 13.17.

13.16 CONTRACTOR's Continuing Obligation:

The CONTRACTOR's obligation to perform and complete the Work and pay all laborers, Subcontractors, and materialmen in accordance with the Contract Documents shall be absolute. Neither any progress or final payment by the DEPARTMENT, nor the issuance of a certificate of Substantial Completion, nor any use or occupancy of the Work or any part thereof by the DEPARTMENT or Using Agency, nor any act of acceptance by the DEPARTMENT nor any failure to do so, nor any review and Approval of a Shop Drawing or sample submission, nor any correction of Defective Work by the DEPARTMENT will constitute an acceptance of

Work not in accordance with the Contract Documents or a release of the CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents.

13.17 Waiver of Claims by CONTRACTOR:

The making and acceptance of final payment will constitute a waiver of all claims by the CONTRACTOR against the DEPARTMENT other than those previously made in writing and still unsettled.

13.18 No Waiver of Legal Rights:

The DEPARTMENT shall not be precluded or be estopped by any payment, measurement, estimate, or certificate made either before or after the completion and acceptance of the Work and payment therefor, from showing the true amount and character of the Work performed and materials furnished by the CONTRACTOR, nor from showing that any payment, measurement, estimate or certificate is untrue or is incorrectly made, or that the Work or materials are Defective. The DEPARTMENT shall not be precluded or estopped, notwithstanding any such measurement, estimate, or certificate and payment in accordance therewith, from recovering from the CONTRACTOR or his Sureties, or both, such damages as it may sustain by reason of his failure to comply with requirements of the Contract Documents. Neither the acceptance by the DEPARTMENT, or any representative of the DEPARTMENT, nor any payment for or acceptance of the whole or any part of the Work, nor any extension of the Contract Time, nor any possession taken by the DEPARTMENT, shall operate as a waiver of any portion of the Contract or of any power herein reserved, or of any right to damages. A waiver by the DEPARTMENT of any breach of the Contract shall not be held to be a waiver of any other subsequent breach.

ARTICLE 14 - SUSPENSION OF WORK, DEFAULT AND TERMINATION

14.1 DEPARTMENT May Suspend Work:

- 14.1.1 The DEPARTMENT may, at any time, suspend the Work or any portion thereof by notice in writing to the CONTRACTOR. If the Work is suspended without cause the CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if the CONTRACTOR makes an Approved claim therefor as provided in Article 15. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that suspension is due to the fault or negligence of the CONTRACTOR, or that suspension is necessary for Contract compliance, or that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the CONTRACTOR.
- 14.1.2 In case of suspension of Work, the CONTRACTOR shall be responsible for preventing damage to or loss of any of the Work already performed and of all materials whether stored on or off the site or Approved remote storage sites.

14.2 Default of Contract:

- 14.2.1 If the CONTRACTOR:
- a. Fails to begin the Work under the Contract within the time specified in the Proposal, or
 - b. Fails to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficiently skilled workmen, suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 6.6 as revised from time to time), or
 - c. Performs the Work unsuitably or neglects or refuses to remove materials or to correct Defective Work, or
 - d. Discontinues the prosecution of the Work, or
 - e. Fails to resume Work which has been discontinued within a reasonable time after notice to do so, or
 - f. Becomes insolvent, except that if the CONTRACTOR declares bankruptcy termination in accordance with all U.S.C. 362 and/or 11 U.S.C. 365. In the event the CONTRACTOR declares bankruptcy the CONTRACTOR agrees that the Contract will be assumed or rejected in a timely manner so that the Contract will be completed by the date specified in the Contract Documents, or

- g. Allows any final judgment to stand against him unsatisfied for period of 60 days, or
 - h. Makes an assignment for the benefit of creditors without the consent of the Contracting Officer, or
 - i. Disregards Regulatory Requirements of any public body having jurisdiction, or
 - j. Otherwise violates in any substantial way any provisions of the Contract Documents, or
 - k. For any cause whatsoever, fails to carry on the Work in an acceptable manner, the Contracting Officer may give notice in writing to the CONTRACTOR and his Surety of such delay, neglect, or default.
- 14.2.2 If the CONTRACTOR or Surety, within the time specified in the above notice of default, shall not proceed in accordance therewith, then the DEPARTMENT may, upon written notification from the Contracting Officer of the fact of such delay, neglect or default and the CONTRACTOR's failure to comply with such notice, have full power and authority without violating the Contract, to take the prosecution of the Work out of the hands of the CONTRACTOR. The DEPARTMENT may terminate the services of the CONTRACTOR, exclude the CONTRACTOR from the site and take possession of the Work and of all the CONTRACTOR's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by the CONTRACTOR (without liability to the CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which the DEPARTMENT has paid the CONTRACTOR but which are stored elsewhere, and finish the Work as the DEPARTMENT may deem expedient. The DEPARTMENT may enter into an agreement for the completion of said Contract according to the terms and provisions thereof, or use such other methods that in the opinion of the Contracting Officer are required for the completion of said Contract in an acceptable manner.
- 14.2.3 The Contracting Officer may, by written notice to the CONTRACTOR and his Surety or his representative, transfer the employment of the Work from the CONTRACTOR to the Surety, or if the CONTRACTOR abandons the Work undertaken under the Contract, the Contracting Officer may, at his option with written notice to the Surety and without any written notice to the CONTRACTOR, transfer the employment for said Work directly to the Surety. The Surety shall submit its plan for completion of the Work, including any contracts or agreements with third parties for such completion, to the DEPARTMENT for Approval prior to beginning completion of the Work. Approval of such contracts shall be in accordance with all applicable requirements and procedures for Approval of subcontracts as stated in the Contract Documents.
- 14.2.4 Upon receipt of the notice terminating the services of the CONTRACTOR, the Surety shall enter upon the premises and take possession of all materials, tools, and appliances thereon for the purpose of completing the Work included under the Contract and employ by contract or otherwise any person or persons to finish the Work and provide the materials therefor, without termination of the continuing full force and effect of this Contract. In case of such transfer of employment to the Surety, the Surety shall be paid in its own name on estimates covering Work subsequently performed under the terms of the Contract and according to the terms thereof without any right of the CONTRACTOR to make any claim for the same or any part thereof.
- 14.2.5 If the Contract is terminated for default, the CONTRACTOR and the Surety shall be jointly and severally liable for damages for delay as provided by paragraph 11.8, and for the excess cost of completion, and all costs and expenses incurred by the DEPARTMENT in completing the Work or arranging for completion of the Work, including but not limited to costs of assessing the Work to be done, costs associated with advertising, soliciting or negotiating for bids or proposals for completion, and other procurement costs. Following termination the CONTRACTOR shall not be entitled to receive any further balance of the amount to be paid under the Contract until the Work is fully finished and accepted, at which time if the unpaid balance exceeds the amount due the DEPARTMENT and any amounts due to persons for whose benefit the DEPARTMENT has withheld funds, such excess shall be paid by the DEPARTMENT to the CONTRACTOR. If the damages, costs, and expenses due the DEPARTMENT exceed the unpaid balance, the CONTRACTOR and his Surety shall pay the difference.
- 14.2.6 If, after notice of termination of the CONTRACTOR's right to proceed under the provisions of this clause, it is determined for any reason that the CONTRACTOR was not in default under the provisions of this

clause, or that the delay was excusable under the provisions of this clause, or that termination was wrongful, the rights and obligations of the parties shall be determined in accordance with the clause providing for convenience termination.

14.3 Rights or Remedies:

Where the CONTRACTOR's services have been so terminated by the DEPARTMENT, the termination will not affect any rights or remedies of the DEPARTMENT against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due the CONTRACTOR by the DEPARTMENT will not release the CONTRACTOR from liability.

14.4 Convenience Termination:

- 14.4.1 The performance of the Work may be terminated by the DEPARTMENT in accordance with this section in whole or in part, whenever, for any reason the Contracting Officer shall determine that such termination is in the best interest of the DEPARTMENT. Any such termination shall be effected by delivery to the CONTRACTOR of a *Notice of Termination*, specifying termination is for the convenience of the DEPARTMENT the extent to which performance of Work is terminated, and the date upon which such termination becomes effective.

Immediately upon receipt of a *Notice of Termination* and except as otherwise directed by the Contracting Officer, the CONTRACTOR shall:

- a. Stop Work on the date and to the extent specified in the *Notice of Termination*;
- b. Place no further orders or subcontracts for materials, services, or facilities except as may be necessary for completion of such portion of the Work as is not terminated;
- c. Terminate all orders and subcontracts to the extent that they relate to the performance of Work terminated by the *Notice of Termination*;
- d. With the written Approval of the Contracting Officer, to the extent he may require, settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, the cost of which would be reimbursable, in whole, or in part, in accordance with the provisions of the Contract;
- e. Submit to the Contracting Officer a list, certified as to quantity and quality, of any or all items of termination inventory exclusive of items the disposition of which had been directed or authorized by the Contracting Officer;
- f. Transfer to the Contracting Officer the completed or partially completed record drawings, Shop Drawings, information, and other property which, if the Contract had been completed, would be required to be furnished to the DEPARTMENT;
- g. Take such action as may be necessary, or as the Contracting Officer may direct, for the protection and preservation of the property related to the Contract which is in the possession of the CONTRACTOR and in which the DEPARTMENT has or may acquire any interest.

The CONTRACTOR shall proceed immediately with the performance of the above obligations.

- 14.4.2 When the DEPARTMENT orders termination of the Work effective on a certain date, all Work in place as of that date will be paid for in accordance with Article 13 of the Contract. Materials required for completion and on hand but not incorporated in the Work will be paid for at invoice cost plus 15 % with materials becoming the property of the DEPARTMENT - or the CONTRACTOR may retain title to the materials and be paid an agreed upon lump sum. Materials on order shall be cancelled, and the DEPARTMENT shall pay reasonable factory cancellation charges with the option of taking delivery of the materials in lieu of payment of cancellation charges. The CONTRACTOR shall be paid 10% of the cost, freight not included, of materials cancelled, and direct expenses only for CONTRACTOR chartered freight transport which cannot be cancelled without charges, to the extent that the CONTRACTOR can establish them. The extra costs due to cancellation of bonds and insurance and that part of job start-up and phase-out costs not amortized by the amount of Work accomplished shall be paid by the DEPARTMENT. Charges for loss of profit or consequential damages shall not be recoverable except as provided above.

- 14.4.3 The termination claim shall be submitted promptly, but in no event later than 90 days from the effective date of termination, unless extensions in writing are granted by the Contracting Officer upon written request of the CONTRACTOR made within the 90 day period. Upon failure of the CONTRACTOR to submit his termination claim within the time allowed, the Contracting Officer may determine, on the basis of information available to him, the amount, if any, due to the CONTRACTOR by reason of the termination and shall thereupon pay to the CONTRACTOR the amount so determined.
- 14.4.4 The CONTRACTOR and the Contracting Officer may agree upon whole or any part of the amount or amounts to be paid to the CONTRACTOR by reason of the total or partial termination of Work pursuant to this section. The Contract shall be amended accordingly, and the CONTRACTOR shall be paid the agreed amount.

In the event of the failure of the CONTRACTOR and the Contracting Officer to agree in whole or in part, as provided heretofore, as to the amounts with respect to costs to be paid to the CONTRACTOR in connection with the termination of the Work the Contracting Officer shall determine, on the basis of information available to him, the amount, if any, due to the CONTRACTOR by reason of the termination and shall pay to the CONTRACTOR the amount determined as follows:

- a. All costs and expenses reimbursable in accordance with the Contract not previously paid to the CONTRACTOR for the performance of the Work prior to the effective date of the *Notice of Termination*;
 - b. So far as not included under "a" above, the cost of settling and paying claims arising out of the termination of the Work under subcontracts or orders which are properly chargeable to the terminated portions of the Contract;
 - c. The reasonable costs of settlement with respect to the terminated portion of the Contract heretofore, to the extent that these costs have not been covered under the payment provisions of the Contract.
- 14.4.5 The CONTRACTOR shall have the right of appeal under the DEPARTMENT's claim procedures, as defined in Article 15, for any determination made by the Contracting Officer, except if the CONTRACTOR has failed to submit his claim within the time provided and has failed to request extension of such time, CONTRACTOR shall have no such right of appeal.

In arriving at the amount due the CONTRACTOR under this section, there shall be deducted:

- a. All previous payments made to the CONTRACTOR for the performance of Work under the Contract prior to termination;
 - b. Any claim for which the DEPARTMENT may have against the CONTRACTOR;
 - c. The agreed price for, or the proceeds of sale of, any materials, supplies, or other things acquired by the CONTRACTOR or sold pursuant to the provisions of this section and not otherwise recovered by or credited to the DEPARTMENT; and,
 - d. All progress payments made to the CONTRACTOR under the provisions of this section.
- 14.4.6 Where the Work has been terminated by the DEPARTMENT said termination shall not affect or terminate any of the rights of the DEPARTMENT against the CONTRACTOR or his Surety then existing or which may thereafter accrue because of such default. Any retention or payment of monies by the DEPARTMENT due to the CONTRACTOR under the terms of the Contract shall not release the CONTRACTOR or his Surety from liability.

Unless otherwise provided for in the Contract Documents, or by applicable statute, the CONTRACTOR, from the effective date of termination and for a period of three years after final settlement under this Contract, shall preserve and make available to the DEPARTMENT at all reasonable times at the office of the CONTRACTOR, all its books, records, documents, and other evidence bearing on the cost and expenses of the CONTRACTOR under his Contract and relating to the Work terminated hereunder.

ARTICLE 15 - CLAIMS AND DISPUTES

15.1 Notification:

In addition to the notice requirements set out elsewhere in this Contract, if the CONTRACTOR becomes aware of any act or occurrence which may form the basis of a claim by the CONTRACTOR for additional compensation or an extension of time for performance, or if any dispute arises regarding a question of fact or interpretation of the Contract, the CONTRACTOR shall immediately inform the Project Manager. If the matter cannot be resolved by agreement within 7 days, the CONTRACTOR shall, within the next 14 days, submit an "Intent to Claim" in writing to the Project Manager.

The claim, if not resolved, shall be presented to the Project Manager, in writing, within 60 days following receipt of the "Intent to Claim". Receipt of the claim will be acknowledged in writing by the Project Manager.

The CONTRACTOR agrees that unless these written notices are provided, the CONTRACTOR will have no entitlement to additional time or compensation for such act, event or condition. The CONTRACTOR shall in any case continue diligent performance of the Contract.

15.2 Presenting Claim:

The claim shall specifically include the following:

- 15.2.1 The act, event or condition giving rise to the claim.
- 15.2.2 The Contract provisions which apply to the claim and under which relief is provided.
- 15.2.3 The item or items of Contract Work affected and how they are affected.
- 15.2.4 The specific relief requested, including Contract Time if applicable, and the basis upon which it was calculated.

15.3 Claim Validity, Additional Information, and Project Manager's Actions:

The claim, in order to be valid, must not only show that the CONTRACTOR suffered damages or delay but that those conditions were actually a result of the act, event or condition complained of and that the Contract provides entitlement to relief to the CONTRACTOR for such act, event, or condition. The Project Manager reserves the right to make written request to the CONTRACTOR at any time for additional information which the CONTRACTOR may possess relative to the claim. The CONTRACTOR agrees to provide the Project Manager such additional information within 30 days of receipt of such a request. Failure to furnish such additional information may be regarded as a waiver of the claim. The Claim, if not resolved by agreement within 60 days of its receipt, will automatically be forwarded to the Contracting Officer for formal written decision.

15.4 Contracting Officer's Decision:

The CONTRACTOR will be furnished the Contracting Officers decision within the next 90 days, unless additional information is requested by the Contracting Officer. The Contracting Officer's decision is final and conclusive unless fraudulent as to the claim or unless, within 14 days of receipt of the decision, the CONTRACTOR delivers a written Notice of Appeal to the Appeals Officer. Procedures for appeals and hearings are covered under AS 36.30.625 and AS 36.30.630.

INDEX TO GENERAL CONDITIONS

A

Article or Paragraph Number

Acceptance of Insurance.....	5.3
Access to the Work.....	8.2; 13.11; 12.2
Actual Damages	11.8
Addenda-definition of	Article 1
Advertisement - definition of	Article 1
Alaska Agricultural/Wood Products.....	7.12.3
Alaska Bidder - definition of	7.12.1
Alaska Preferences	7.12
Alaska Products.....	7.12.2
Application for Payment-definition of.....	Article 1
Application for Payment, Final	13.2
Application for Progress Payment.....	13.3
Application for Progress Payment-review of	13.4
Approved or Approval -definition of.....	Article 1
Authorized Minor Variations in Work	9.3.2
Availability of Lands.....	4.1
Award-defined.....	Article 1

B

Before Starting Construction	11.2
Bid Bonds-definition of.....	Article 1
Bidder-definition of	Article 1
Bonds and insurances-in general	Article 5
Bonds, Delivery of	5.1
Bonds, Performance and Other.....	5.2
Builder's Risk Insurance ("ALL RISK")	5.4.3.d

C

Cash Allowances	10.8
Change Order-definition of	Article 1
Change Orders-to be executed.....	9.4
Changes in the Work	9.1
Claims, Waiver of-on Final Payment	13.17
Clarifications and Interpretations	2.2.1.d; 3.6
Cleaning	6.5
Completion, Final.....	13.14

Completion, Substantial.....	13.10
Conferences, Preconstruction	6.6.1
Conflict, Error, Discrepancy-CONTRACTOR to Report.....	3.5
Construction Machinery, Equipment, etc	6.4
Consultant-definition of.....	Article 1
Continuing the Work	6.23
Contract-definition of	Article 1
Contract Documents-amending and Supplementing.....	9.1; 9.4; 9.6
Contract Documents- definition of	Article 1
Contract Documents-Intent.....	3.4
Contract Documents-Reuse of.....	3.7
Contract Price, Change of.....	9.4; 9.6; 10.1
Contract Price-definition of	Article 1
Contracting Officer's Authorities and Limitations.....	2.1
Contracting Officer- definition of.....	Article 1
Contracting Officer's Evaluations.....	2.2
Contract Time, Change of.....	9.4; 9.6; 11.4
Contract Time, Commencement of.....	11.1
Contract Time-definition of.....	Article 1
CONTRACTOR-definition of	Article 1
CONTRACTOR May Stop Work or Terminate.....	3.5.1; 4.6; 14.4.1
CONTRACTOR'S Continuing Obligation	13.5
CONTRACTOR'S Duty to Report Discrepancy in Documents	3.5
CONTRACTOR'S Fee-Cost Plus	10.3.3
CONTRACTOR'S Liability Insurance	5.4.3
CONTRACTOR'S Records	6.26
CONTRACTOR'S Responsibilities-in general.....	Article 6
CONTRACTOR'S Warranty to Title.....	13.6
Contractors-other	8.1; 8.2
Contractual Liability Insurance	5.4.3.b
Coordination	6.13.5; 8.4
Copies of Contract Documents	3.2
Correction or Removal of Defective Work.....	12.6
Correction Period, One Year	12.7
Correction, Removal or Acceptance of Defective Work-in general	12.6; 12.8
Cost and Pricing Data	10.3.4
Cost-net decrease	10.6.2.d; 10.6.2.e
Cost of Work	10.4
Costs, Supplemental	10.4.5

D

Day, Calendar-definition of.....	Article 1
Defective-definition of	Article 1
Defective Work, Acceptance of.....	12.8
Defective Work, Correction or Removal of.....	12.6; 12.9
Defective Work-in general	12.6; 12.8
Defective Work, Rejecting	12.4.2; 12.5
Definitions	Article 1
Delivery of Bonds	5.1
DEPARTMENT-definition of	Article 1
DEPARTMENT May Correct Defective Work.....	12.9
DEPARTMENT May Stop Work.....	12.5
DEPARTMENT May Suspend Work	14.1
DEPARTMENT'S Liability Insurance	5.4.3.d
DEPARTMENT'S Responsibilities-in general.....	2.1
DEPARTMENT'S Separate Representative at site.....	2.1.1; 2.1.3
Determination for Unit Prices.....	10.10
Differing Site Conditions	9.9
Directive-definition of	Article 1
Directive-to be executed.....	9.3
Directive-required performance	9.3.5
Disadvantaged and Women Business Enterprise.....	10.11
Disputes, Decisions by Contracting Officer	2.2.1; 15.4
Documents, Copies of Contract.....	3.2
Documents, Record	6.16; 13.13
Documents, Reuse	3.7
Drawings-definition of	Article 1

E

Easements	4.1
Effective date of Contract-definition of.....	Article 1
Emergencies	6.19
Equipment, Labor, Materials and	6.3; 6.4; 6.5
Equivalent Materials and Equipment	6.9
Explorations of physical conditions	4.3
Explosives	6.25

F

Fee, CONTRACTOR'S-Costs Plus	10.3.3

Final Acceptance	13.15
Final Acceptance- definition of	Article 1
Final Completion and Application for Payment	13.13
Final Completion- definition of	Article 1
Final Inspection	13.12
Final Payment	13.14
Final Payment, Processing of	13.14

G

General Requirements-definition of	Article 1
Giving Notice	3.5.1; 4.4.4; 4.6; 5.4.2; 6.17.3; 6.19; 6.20.4; 7.4; 7.11; 8.1.4; 8.3; 9.3.6; 9.8; 9.9; 10.10; 11.1; 11.2; 11.5; 12.1; 12.3.1; 12.3.4; 12.9; 13.10; 13.12; 14.1.1; 14.2.1 thru 14.2.4; 14.4.1; 14.4.3; 15.1; 15.5
Guarantee of Work-by CONTRACTOR	12.1

I

Indemnification.....	7.1; 7.3; 5.5
Inspection, Final	13.12
Inspection, Tests and	12.3
Install-definition of	Article 1
Insurance, Bonds and- in general.....	Article 5
Insurance, Certification of	5.4.2
Insurance, Completed Operations.....	5.4.3.b
Insurance, CONTRACTOR'S Liability	5.4.3.b
Insurance, Contractual Liability	5.4.3.b
Insurance, Owner's Liability	5.4.1
Insurance, Property Damage.....	5.4.3.b
Insurance, Waiver of Subrogation Rights.....	5.4.1
Intent of Contract Documents.....	3.4
Interpretations and Clarifications	2.2.1.3; 3.6
Investigations of physical conditions.....	4.3
Invitation for Bids- definition of.....	Article 1

L

Labor, Materials and Equipment	6.3; 6.4; 6.5

Laws and Regulations- general.....	Article 7
Liability Insurance- CONTRACTOR'S.....	5.4.1
Liability Insurance-Owner's	5.4.1
Liens, Resulting Judgements	14.2.1.g
Liquidated Damages	11.8

M

Materials and equipment- furnished by CONTRACTOR	6.4
Materials and equipment- incorporated in Work	6.5
Materials or equipment- equivalent.....	6.9
Multi-prime contracts	8.1

N

Notice, Giving of (See Giving Notice)	
Notice of Final Acceptance	13.15
Notice of Intent to Award-definition of.....	Article 1
Notice to Proceed-definition of	Article 1
Notice to Proceed-giving of.....	11.1; 11.2; 11.3

O

"Or-Equal" Item.....	6.9
Other contractors	Article 8
Other work.....	8.1.1
Overtime Work-authorization of	7.15; 10.4.1
Owner-definition of (See DEPARTMENT).....	Article 1

P

Partial Utilization	13.10
Partial Utilization (See Substantial Completion)- definition of.....	Article 1
Partial Utilization- Property Insurance	13.10
Patent Fees and Royalties	7.3
Payment, Recommendation of.....	13.4
Payments to CONTRACTOR-in general	Article 13
Payments of CONTRACTOR- withholding.....	13.7
Performance and other Bonds.....	5.2
Permits.....	7.2
Physical Conditions-in general.....	Article 4
Physical Conditions- Contracting officer's review	9.9
Physical Conditions- existing structures.....	4.3
Physical Conditions- explorations and reports	4.3

Physical Conditions-possible document change	9.9
Physical Conditions-price and time adjustments	9.9
Physical Conditions-report of differing	4.6; 9.9
Physical Conditions- Underground Utilities	4.4
Preconstruction Conference.....	6.6.1
Premises, Use of	6.14
Price, Change of Contract.....	10.1
Price, Contract-definition of	Article 1
Progress Payment, Application for	13.1
Progress Payment-retainage.....	13.8
Progress schedule	6.6; 6.7; 6.8
Project-definition of.....	Article 1
Project Manager-definition of.....	Article 1
Project Representation- provision for	2.1.1
Project, Starting the	11.2
Property Insurance.....	5.4.3
Property Insurance- Partial Utilization	13.10
Protection, Safety and.....	6.17
Punch list	13.10

R

Recommendation of Progress Payment	13.4
Record Documents	6.16
Reference Points.....	4.7
Regulations, Laws and.....	Article 7
Rejecting Defective Work	12.4.2; 12.5
Related Work at Site.....	3.4.1
Removal or Correction of Defective Work.....	12.6; 12.9
Responsibilities, CONTRACTOR'S-in general.....	Article 6
Retainage	13.8
Reuse of Documents.....	3.7
Review of Shop Drawings and Samples.....	6.21
Right of Ways.....	4.1
Royalties, Patent Fees and	7.3

S

Safety and Protection.....	6.17
Samples	6.20; 6.21
Schedule of Progress	6.6; 6.7; 6.8
Schedule of Shop Drawing submissions.....	6.6; 6.7; 6.8; 6.20.1

Schedule of Values- definition	Article1
Schedule of Values	6.6; 6.7; 6.8
Schedules, Finalizing.....	6.7
Shop Drawings and Samples	6.20; 6.21
Shop Drawings-definition of	Article 1
Shop Drawings, use to approve substitutions	6.9.4; 6.20.4
Site, Visits to-by Contracting Officer	2.4
Specifications-definition of	Article 1
Starting Construction, Before	6.6.1
Starting the Project	11.2
Stopping Work-by CONTRACTOR	3.5.1; 4.6; 14.4.1
Stopping Work-by Owner	12.5; 14.1
Subcontractor-definition of.....	Article 1
Subcontractors-in general	6.13
Subcontracts-required provisions	6.13.1; 6.13.3
Substantial Completion- certification of.....	13.10
Substantial Completion- definition of	Article 1
Substitute or "Or-Equal" Items.....	6.9
Subsurface Conditions.....	Article 4' 9.9
Supplemental Agreement- definition of	Article 1
Supplemental Agreement- general use	9.6
Supplemental costs	10.4.5
Supplementary Conditions- definition of	Article 1
Supplementary Conditions- principal references to.....	3.5; 4.3; 5.4; 11.8
Supplier-definition of	Article 1
Supplier-principal references.....	2.1.3; 3.7; 6.9; 6.12; 6.13.2; 6.20; 6.21
Surety-consent to payment	13.14.2
Surety-Consultant has no duty to.....	2.13
Surety-notice to	9.8; 14.2
Surety-qualification of.....	5.2; 5.3
Surety Replacement.....	5.3
Suspending Work, by Owner.....	14.1
Suspension of Work and Termination-in general	Article 14
Superintendent-CONTRACTOR's	6.2
Supervision and Superintendence.....	6.1; 6.2

T

Taxes-Payment by CONTRACTOR	7.2

Termination-by Owner	14.4.1
Termination, Suspension of Work and-in general	Article 14
Tests and Inspections.....	12.3
Time, Change of Contract.....	9.4; 11.4
Time, Computations of.....	11.3
Time, Contract-definition of.....	Article 1

U

Uncovering Work	12.4
Underground Utilities- general.....	4.4
Underground Utilities-not shown or indicated	4.6
Underground Utilities- protection of	4.4.2.d
Underground Utilities- shown or indicated.....	4.4.1
Unit Price Work-definition of.....	Article 1
Unit Price Work-general.....	10.9
Unit Prices	10.9.1
Unit Prices, Determination for.....	10.10
Use of Promises	6.14
Utility Owner's Notification	4.4.2.c; 4.4.3; 4.4.4; 4.5; 4.6
Utility, Damaged	4.5

V

Values, Schedule of	6.6; 6.7; 6.8
Variations in Work- Authorized	9.2
Visits to Site-by Contracting Officer	2.4

W

Waiver of Claims-on Final Payment	13.17
Waiver of Rights by insured parties	13.18
Warranty and Guarantee-by CONTRACTOR.....	12.1
Warranty of Title, CONTRACTOR'S	13.6
Work, Access to.....	8.2; 13.11; 12.2
Work-by others-general	Article 8
Work Continuing During Disputes	6.23
Work, Cost of	10.4
Work-definition of.....	Article 1
Work, Neglected by CONTRACTOR	14.2.1.c
Work, Stopping by CONTRACTOR.....	3.5.1; 4.6
Work, Stopping by Owner	12.5; 14.1

SECTION 00800
SUPPLEMENTARY CONDITIONS
MODIFICATIONS TO THE GENERAL CONDITIONS
(STATE FUNDED CONTRACTS)

The following supplements modify, change, delete from, add to the "General Conditions of the Construction Contract for Buildings", revised December, 1987 (c) 4/96. Where any article of the General Conditions is modified, or and Paragraph, Subparagraph, or Clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph, of Clause shall remain in effect.

SC-1-DEFINITIONS

At General Conditions Article 1, add the following definitions:

“APPROVED. ‘Approved’ or ‘Approval’ as used in this contract document shall mean that the Department has received a document, form or submittal from the contractor and that the Department has taken “No exceptions” to the item submitted. Unless the context clearly indicates otherwise, approved or approval shall not mean that the Department approves of the methods or means, or that the item or form submitted meets the requirements of the contract or constitutes acceptance of the Contractor’s work. Where approved or approval means acceptance, then such approval must be set forth in writing and signed by the contracting officer or his designee.

ARCHITECT. Where used in the contract documents, “ARCHITECT” shall mean the DEPARTMENT’S ENGINEER.

ARCHITECT/ENGINEER. Where used in the contract documents, “ARCHITECT/ENGINEER” shall mean the DEPARTMENT’S ENGINEER.

ENGINEER. The DEPARTMENT’S authorized representative of the Contracting Officer, as defined in the DEPARTMENT’S *delegation of authority letter* to be issued after notice-to-proceed, who is responsible for administration of the contract.

EQUIPMENT. All machinery together with the necessary supplies for upkeep and maintenance, and also tools and apparatus necessary for the proper construction and acceptable completion of the work.

FURNISH. To procure, transport, and deliver to the project site materials, labor, or equipment, for installation or use on the project.

INSPECTOR. The Engineer's authorized representative assigned to make detailed observations relating to contract performance.

INTERIM WORK AUTHORIZATION. A written order by the Engineer initiating changes to the Contract, within its general scope, until a subsequent Change Order is executed.

LABORATORY. The official testing laboratories of the DEPARTMENT or such other laboratories as may be designated by the Engineer or identified in the contract documents.

MATERIALS. Any substances specified for use in the construction of the project.

PRECONSTRUCTION CONFERENCE. A meeting between the CONTRACTOR and the Engineer, and other parties affected by the construction, to discuss the project before the CONTRACTOR begins work.

QUALITY ASSURANCE (QA). Where referred to in the technical specifications (Divisions 2 through 16), Quality Assurance refers to measures to be provided by the CONTRACTOR as specified.

QUALITY CONTROL (QC). Tests and inspections by the CONTRACTOR to insure the acceptability of materials incorporated into the work. QC test reports are used as a basis upon which to determine whether the Work conforms to the requirements of the Contract Documents and to determine its acceptability for payment.

TRAFFIC CONTROL PLAN (TCP). A drawing of one or more specific plans that detail the routing of pedestrian, and/or vehicular traffic through or around a construction area.

UTILITY. The privately, publicly or cooperatively owned lines, facilities and systems for producing, transmitting or distributing communications, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway or street drainage, and other similar commodities, including publicly owned fire and police signal systems, street lighting systems, and railroads which directly or indirectly serve the public or any part thereof. The term "utility" shall also mean the utility company, inclusive of any wholly owned or controlled subsidiary."

At General Conditions Article 1, definition of **Contract Time**, last sentence, Replace "...Final Completion..." with:

"...Substantial Completion..."

At General Conditions Article 1, definition of **Conditions of the Contract**: Delete the text of this definition in its entirety.

At General Conditions Article 1, definition of **Contract Time**: Delete the text of this definition and replace with the following:

"The number of Calendar Days following issuance of Notice-to-Proceed in which the project shall be rendered Substantially Complete, or if specified as a calendar date, the Substantial Completion date specified in the Contract Documents."

At General Conditions Article 1, definition of **Controlling Item**: Delete the text of this definition and replace with the following:

"Any feature of the Work on the critical path of a network schedule."

At General Conditions Article 1, definition of **Defective**: Delete the text of this definition and replace with the following:

"Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents."

At General Conditions Article 1, definition of **Effective Date of the Contract**: Delete the text of this definition in its entirety.

At General Conditions Article 1, definition **Shop Drawings**: Add the following text:

"Where used in the Contract Documents, "Shop Drawings" shall also mean "Submittals"."

At General Conditions Article 1, second paragraph: Delete this paragraph in its entirety and replace with the following:

"The titles and headings of the articles, sections, and subsections herein are intended for convenience of reference."

At General Conditions Article 1, third paragraph starting with "Whenever used in the Specifications....", Delete this paragraph in its entirety.

At General Conditions Article 1, fourth paragraph, last sentence: Revise it to read as follows:

"Words defined in Article 1 are to be interpreted as defined."

SC-2.1-AUTHORITIES AND LIMITATIONS

At General Conditions Article 2.1.1, delete this paragraph in its entirety and replace with the following:

"The Contracting Officer alone, shall have the power to bind the DEPARTMENT and to exercise the rights, responsibilities, authorities and functions vested in the Contracting Officer by the Contract Documents. The Contracting Officer shall have the right to designate in writing authorized representatives to act for him. Wherever any provision of the Contract Documents specifies an individual or organization, whether governmental or private, to perform any act on behalf of or in the interest of the DEPARTMENT that individual or organization shall be deemed to be the Contracting Officer's authorized representative under this Contract but only to the extent so specified. "

At General Conditions Article 2.1.4 starting with "The term of "Contracting Officer" when used...", delete this article in its entirety.

SC-2.4-VISITS TO SITE/PLACE OF BUSINESS

At General Conditions Article 2.4, delete this article in its entirety.

SC-4.1-AVAILABILITY OF LANDS

At General Conditions Article 4.1, add the following:

"The CONTRACTOR shall provide all waste and disposal areas, including disposal areas for hazardous or contaminated materials, at no additional cost to the DEPARTMENT."

SC-4.3-EXPLORATIONS AND REPORTS

At General Conditions Article 4.3, add the following text:

"A copy of the geotechnical reports and addendum that were used in the preparation of these contract documents (See Section 00300 , Information Available to Bidders) is provided to all planholders listed with the DEPARTMENT as General Contractors, and is available to other planholders upon request. While referenced by or provided with the Contract Documents; the recommendations, engineering details, and other information contained in these reports of explorations shall not be construed to supercede or constitute conditions of the Contract Documents."

SC-4.7-SURVEY CONTROL

At General Conditions Article 4.7, delete the third sentence and substitute the following text:

"Copies of all survey notes shall be provided to the DEPARTMENT at an interval determined by the Project Manager. The Project Manager may request submission on a weekly or longer period at his discretion. Any variations between the Contract Documents and actual field conditions shall be identified in the survey notes."

SC-5.2-BONDS

At General Condition Article 5.2, delete the second, third, fourth, fifth, and sixth paragraphs in their entirety.

SC-5.4.2-INSURANCE REQUIREMENTS, GENERAL

At General Condition Article 5.4.2, revise the first sentence to read as follows:

"The CONTRACTOR shall maintain in force at all times during the performance of the work under this agreement the following policies and minimum limits of liability."

SC-5.4.2a-WORKMANS COMPENSATION INSURANCE

At General Condition Article 5.4.2a, replace paragraph "a" in its entirety and replace it with the following:

- "a. Workers' Compensation Insurance: The Contractor shall provide and maintain, for all employees of the Contractor engaged in work under this contract, Workers' Compensation Insurance as required by AS 23.30.045. The Contractor shall be responsible for Workers' Compensation Insurance for any subcontractor who provides services under this contract, to include:
1. Waiver of subrogation against the State and Employer's Liability Protection in the amount of \$500,000 each accident/\$500,000 each disease.
 2. If the Contractor directly utilizes labor outside of the State of Alaska in the prosecution of the work, "Other States" endorsement shall be required as a condition of the contract.
 3. Whenever the work involves activity on or about navigable waters, the Workers' Compensation policy shall contain a United States Longshoreman's and Harbor Worker's Act endorsement, and when appropriate, a Maritime Employer's Liability (Jones Act) endorsement with a minimum limit of \$1,000,000."

SC-5.4b-COMPREHENSIVE GENERAL LIABILITY INSURANCE

At General Conditions Article 5.4b, delete minimum limits of liability items 1 and 2 in their entirety and substitute the following text:

- "1. If the CONTRACTOR carries a *Comprehensive General Liability* policy, the limits of liability shall not be less than a Combined Single Limit for bodily injury, property damage and Personal Injury Liability of:
- \$1,000,000 each occurrence
\$2,000,00 aggregate
2. If the CONTRATOR carries a *Commercial General Liability* policy, the limits of liability shall not be less than:

\$1,000,000 each occurrence (Combined Single Limit for bodily injury and property damage)
\$1,000,000 for Personal Injury Liability

\$2,000,000 aggregate for Products-Completed Operations
\$2,000,000 general aggregate

The State of Alaska, DEPARTMENT of Health & Social Services shall be named as an "Additional Insured" under all liability coverages listed above."

SC-5.4.2d-BUILDERS RISK INSURANCE (SUBCONTRACTORS)

At General Condition Article 5.4.2d, revise the last sentence to read as follows:

"Builders Risk Insurance will only be required of subcontractors if so stated in the Supplementary Conditions."

SC-5.4.3-INSURANCE REQUIREMENTS, EVIDENCE OF INSURANCE

At General Conditions Article 5.4.3, delete this subsection and replace with the following:

"In addition to providing the above coverages the Contractor shall, in any contract or agreement with subcontractors performing work, require that all indemnities and waivers of subrogation it obtains, and that any stipulation to be named as an additional insured it obtains, also be extended to waive rights of subrogation against the State of Alaska and to add the State of Alaska as additional named indemnitee and as additional insured.

Evidence of insurance shall be furnished to the Department prior to the award of the contract. Such evidence, executed by the carrier's representative and issued to the Department, shall consist of a certificate of insurance or the policy declaration page with required endorsements attached thereto which denote the type, amount, class of operations covered, effective (and retroactive) dates, and dates of expiration. Acceptance by the Department of deficient evidence does not constitute a waiver of contract requirements.

When a certificate of insurance is furnished, it shall contain the following statement:
"This is to certify that the policies described herein comply with all aspects of the insurance requirements of (Project Name and Number)."

SC-6.6.1-PROGRESS SCHEDULE

At General Condition Article 6.6.1, change the phrase "Within reasonable time prior to the Pre-Construction Conference..." to read:

"Within seven days after the Pre-Construction Conference."

SC-6.6.2-SCHEDULE OF SHOP DRAWINGS AND SCHEDULE OF VALUES

At General Condition Article 6.6.2, change the phrase "Within fifteen days after the date of the Notice To Proceed,..." to read:

"Prior to submitting the CONTRACTOR's first Application for Payment..."

SC-6.9-SUBSTITUTES "OR EQUAL" ITEMS

Add the following article:

"6.9.5 - Substitutions shall be permitted during or after the bid period as allowed and in accordance with Document 00020 - Invitation for Bids, Document 00700 – General Conditions, and Document 01630 - Product Options and Substitutions."

SC-6.13.1-SUBCONTRACT PROVISIONS

At General Condition Article 6.13.1, delete the third sentence and add the following text:

"All subcontracts shall contain provisions for prompt payment, release of retainage, and interest on late payment amounts and retainage as specified in A.S. 36.90.210. Contracts between subcontractors, regardless of tier, must also contain these provisions."

SC-6.27-LOAD RESTRICTIONS

Add new General Conditions Article 6.27 as follows:

"6.27 Load Restrictions

The CONTRACTOR shall comply with all load restrictions as set forth in the "Administrative Permit Manual", and Title 17, Chapter 25, of the Alaska Administrative Code in the hauling of materials on public roads, beyond the limits of the project, and on all public roads within the project limits that are scheduled to remain in use upon completion of the project.

Overload permits may, at the discretion of the State, be issued for travel beyond the project limits for purposes of mobilization and/or demobilization. Issuance of such a permit will not relieve the CONTRACTOR of liability for damage which may result from the moving of equipment.

The operation of equipment of such weight or so loaded as to cause damage to any type of construction will not be permitted. No overloads will be permitted on the base course or surface course under construction. No loads will be permitted on a concrete pavement, base or structure before the expiration of the curing period. The CONTRACTOR shall be responsible for all damage done by his equipment."

SC-7.12-APPLICABLE ALASKA PREFERENCES

At General Condition Article 7.12.2, delete the last portion of the first sentence commencing at the words, "...when the bid documents designate..." and replace with the words:

"...when the bidder designates the use of Alaska products. The Bidder shall complete the Alaska Products Preference Worksheet per its instructions and submit it with the Bid Proposal." Continue with existing second sentence.

SC-7.13-PREFERENTIAL EMPLOYMENT

At General Condition Article 7.13, delete the text of this article in its entirety.

SC-7.14.1-CERTIFIED PAYROLLS

At General Condition Article 7.14.1, add the following text:

"Regardless of project funding source, copies of all certified payrolls supplied to the State DEPARTMENT of Labor by the CONTRACTOR shall be supplied also to the Project Manager upon request, including submittals made by, or on behalf of, subcontractors."

Add General Condition Article 7.14.3, as follows:

"Within three calendar days of award of a construction contract, the CONTRACTOR shall file a "Notice of Work" with the Department of Labor and shall pay all related fees. The Contracting Officer will not issue Notice to Proceed to the CONTRACTOR until such notice and fees have been paid to the Department of Labor. Failure of the CONTRACTOR to file the Notice of Work and pay fees within this timeframe shall not constitute grounds for an extension of contract time or adjustment of contract price."

SC-7.16-COVENANT AGAINST CONTINGENT FEES

At General Conditions Article 7.16, delete the text of this article in its entirety.

SC-7.17-OFFICIALS NOT TO BENEFIT

At General Conditions Article 7.17, delete the text of this article in its entirety.

SC-7.18-PERSONAL LIABILITY OF PUBLIC OFFICIALS

At General Conditions Article 7.18, delete the text of this article in its entirety.

SC-9.4-CHANGE ORDER

At General Conditions Article 9.4, change the first sentence to read:

"A change in Contract Time, Contract Price, or responsibility may be made for changes within the scope of the Work by Change Order."

At General Conditions Article 9.4, add the following sentence:

"A Change Order shall be considered executed when it is signed by the DEPARTMENT."

SC-9.10-INTERIM WORK AUTHORIZATION

At General Conditions Article 9.10, add the following new paragraph:

"9.10 Interim Work Authorization

An Interim Work Authorization may be used to establish a change within the scope of the Work; however, only a Change Order shall establish associated changes in Contract Time and Price. Work authorized by Interim Work Authorization shall be converted to a Change Order. The basis of payment shall be as stated in the Interim Work Authorization, unless it states that the basis of payment has not been established and is to be negotiated, in which case the Cost of the Work shall be documented pursuant to Article 10.4, to establish a basis for negotiating a lump sum price for the Change Order."

SC-10.3.2-CHANGE ORDER PRICE DETERMINATION FOR LUMP SUM CHANGE ORDERS

At General Conditions Article 10.3.2, Delete this paragraph in its entirety and replace it with the following.

"10.3.2 By mutual acceptance of a lump sum price which includes overhead and profit. The following maximum rates of cost markup (to cover both overhead and profit of the CONTRACTOR) shall be used in the negotiation of a Lump Sum Change Order:

-
- a. 17% - where a cost is borne directly by prime contractor (first tier contractor).
 - b. 10% - where a cost is borne by a subcontractor (lower tier contractor).

Where the cost is borne by a subcontractor acting as a first tier contractor, the allowable overhead and profit markup for lump sum change orders shall not exceed 17%. Any lower tier subcontractors, including the CONTRACTOR in this case, for whom the first tier subcontractor performs the work, shall be allowed an overhead and profit markup that does not exceed 10%.

SC-10.4-COST OF THE WORK

At General Conditions Article 10.4.1, replace the second sentence from the end of the paragraph with the following:

"Such employees shall include manual workers up through the level of foreman but shall not include general foremen, superintendents, and non-manual employees."

At General Conditions Article 10.4.2, replace the first sentence with the following:

"Cost of all materials and equipment furnished and incorporated or consumed in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith."

SC-10.4.5.c-COST OF THE WORK (SUPPLEMENTAL COSTS)

At General Condition Article 10.4.5.c, add the following:

"For any machinery or special equipment (other than small tools) which has been authorized by the Project Manager, the CONTRACTOR shall receive the rental rates in the current edition and appropriate volume of the "Rental Rate Blue Book for Construction Equipment", published by Dataquest, Inc., 1290 Ridder Park Drive, San Jose, CA 95131. Hourly rental rates shall be determined as follows:

The established hourly rental rate shall be equal to the adjusted monthly rate for the basic equipment plus the adjusted monthly rate for applicable attachments, both divided by 176, and multiplied by the area adjustment factor, plus the estimated hourly operating cost.

The adjusted monthly rate is that resulting from application of the rate adjustment formula in order to eliminate replacement cost allowances in machine depreciation and contingency cost allowances.

Attachments shall not be included unless required for the time and materials work.

For equipment not listed in The Blue Book, the CONTRACTOR shall receive a rental rate as agreed upon before such work is begun. If agreement cannot be reached, the DEPARTMENT reserves the right to establish a rate based on similar equipment in the Blue Book or prevailing commercial rates in the area.

These rates shall apply for equipment used during the CONTRACTOR's regular shift of 10 hours per day. Where the equipment is used more than 10 hours per day, either on the CONTRACTOR's normal work or on time and materials, and either on single or multiple shifts, an overtime rate, computed as follows, shall apply:

The hourly overtime rate shall be equal to the adjusted monthly rate for the basic equipment plus the adjusted monthly rate for applicable attachments, both divided by 352, and multiplied by the area adjustment factor, plus the estimated hourly operating cost.

Equipment which must be rented or leased specifically for work required under this section shall be authorized in writing by the Project Manager. The CONTRACTOR shall be paid invoice price plus 15%.

When it is necessary to obtain equipment from sources beyond the project limits exclusively for time and materials, work, the actual cost of transferring the equipment to the site of the work and return will be allowed as an additional item of expense. Where the move is made by common carrier, the move-in allowance will be limited to the amount of the freight bill or invoice. If the CONTRACTOR hauls the equipment with his own forces, the allowance will be limited to the rental rate for the hauling unit plus operator wages. In the event that the equipment is transferred under its own power, the moving allowance will be limited to one-half of the normal hourly rental rate plus operator's wages. In the event that the move-out is to a different location, payment will in no instance exceed the amount of the move-in. Move-in allowance shall not be made for equipment brought to the project for time and materials work which is subsequently retained on the project and utilized for completion of contract items, camp maintenance, or related work.

Equipment ordered to be on a stand-by basis shall be paid for at the stand-by rental rate for the number of hours in the CONTRACTOR'S normal work shift, but not to exceed 8 hours per day. The stand-by rental rate shall be computed as follows:

The hourly stand-by rate shall be equal to the adjusted monthly rate for the basic equipment plus the adjusted monthly rate for applicable attachments, both divided by 352, all multiplied by the area adjustment factor.

Time will be recorded to the nearest one-quarter hour for purposes of computing compensation to the CONTRACTOR for equipment utilized under these rates.

The equipment rates as determined above shall be full compensation, including overhead and profit, for providing the required equipment and no additional compensation will be made for other costs such as, but not limited to, fuels, lubricants, replacement parts or maintenance costs. Cost of repairs, both major and minor, as well as charges for mechanic's time utilized in servicing equipment to ready it for use prior to moving to the project and similar charges will not be allowed."

SC-10.11-DISADVANTAGED BUSINESSS ENTERPRISE PROGRAM

At General Conditions Article 10.11, Delete this paragraph in its entirety for this State Funded Contract.

SC-11.3-COMPUTATION OF CONTRACT TIME

At General Condition Article 11.3.1, third sentence, change "...the date of Final Completion..." to:

"...the date of Substantial Completion..."

At General Condition Article 11.3.2, first sentence, change "...the date of Final Completion..." to:

"...the date of Substantial Completion."

Add General Condition Article 11.3.3, to state as follows:

" The Contract Time shall be as stated on form 25D-9, Proposal."

SC-11.8-DELAY DAMAGES

At General Condition Article 11.8, add the following:

"For each calendar day that the work remains incomplete after the expiration of the Contract Time,

liquidated damages in the amount of \$500 per calendar day shall be assessed to the CONTRACTOR. If no money is due the CONTRACTOR, the DEPARTMENT shall have the right to recover said sum from the CONTRACTOR, the surety or both. The amount of these deductions is to reimburse the DEPARTMENT for estimated liquidated damages incurred as a result of the CONTRACTOR's failure to complete the work within the time specified. As liquidated damages, such deductions are not to be considered as penalties.

Permitting the CONTRACTOR to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the DEPARTMENT of any of its rights under the Contract."

SC 12-ONE YEAR CORRECTION PERIOD

At General Condition Article 12.7, in the first sentence, change the phrase " Final Completion" to:

"Substantial Completion of the relevant portion of the Work..."

SC 13.3-APPLICATION FOR PROGRESS PAYMENT

At General Conditions Article 13.3, revise the last sentence to read as follows:

"Progress payments will be made as the Work progresses on a monthly basis."

SC 13.13-FINAL COMPLETION AND APPLICATION FOR PAYMENT

At General Conditions Article 13.13, first sentence, delete the following items:

"maintenance and operating instructions
certificates of inspection
marked up record documents"

The preceding items are some of the requirements for Substantial Completion, as addressed in Section 01701.

SC 13.16-CONTRACTOR'S CONTINUING OBLIGATION

At General Condition Article 13.16, add the following paragraph:

"When it is anticipated that restarting, testing, adjusting, or balancing of systems will be required following Final Acceptance and said requirements are noted in Section(s) 01650, such Work shall constitute a continuing obligation under the Contract."

SC 14.2-DEFAULT OF CONTRACT

At General Conditions Article 4.2, delete this section in its entirety and replace with the following:

"14.2.1 The Contracting Officer may give the contractor and his surety a written Notice to Cure Default if the contractor:

- a. fails to begin work in the time specified,
- b. fails to use sufficient resources to assure prompt completion of the work,
- c. performs the work unsuitably or neglect or refuse to remove and replace rejected materials or work,
- d. stops work,
- e. fails to resume stopped work after receiving notice to do so,

-
- f. becomes insolvent (except that if you declare bankruptcy, termination will be under Title 11 US Code 362 and/or 365. Your bankruptcy does not relieve the surety of any obligations to assume the Contract and complete the work in a timely manner.
 - g. Allows any final judgment to stand against him unsatisfied for period of 60 days, or
 - h. Makes an assignment for the benefit of creditors without the consent of the Contracting Officer, or
 - i. Disregards Regulatory Requirements of any public body having jurisdiction, or
 - j. Otherwise violates in any substantial way any provisions of the Contract Documents, or
 - k. fails to comply with Contract minimum wage payments or civil rights requirements, or
 - l. are party to fraud, deception, misrepresentation , or
 - m. for any cause whatsoever, fails to carry on the Work in an acceptable manner.
- 14.2.2 The Notice to Cure Default will detail the conditions determined to be in default, the time within which to cure the default and may, in the Contracting Officer's discretion, specify the actions necessary to cure the default. Failure to cure the delay, neglect or default within the time specified in the Contracting Officer's written notice to cure authorizes the Department to terminate the contract. The Contracting Officer may allow more time to cure than originally stated in the Notice to Cure Default if he deems it to be in the best interests of the Department. The Department will provide you and your surety with a written Notice of Default Termination that details the default and the failure to cure it.
- 14.2.3 If the CONTRACTOR or Surety, within the time specified in the above notice of default, shall not proceed in accordance therewith, then the DEPARTMENT may, upon written notification from the Contracting Officer of the fact of such delay, neglect or default and the CONTRACTOR's failure to comply with such notice, have full power and authority without violating the Contract, to take the prosecution of the Work out of the hands of the CONTRACTOR. The DEPARTMENT may terminate the services of the CONTRACTOR, exclude the CONTRACTOR from the site and take possession of the Work and of all the CONTRACTOR's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by the CONTRACTOR (without liability to the CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which the DEPARTMENT has paid the CONTRACTOR but which are stored elsewhere, and finish the Work as the DEPARTMENT may deem expedient. The DEPARTMENT may enter into an agreement for the completion of said Contract according to the terms and provisions thereof, or use such other methods that in the opinion of the Contracting Officer are required for the completion of said Contract in an acceptable manner.
- 14.2.4 The Contracting Officer may, by written notice to the CONTRACTOR and his Surety or his representative, transfer the employment of the Work from the CONTRACTOR to the Surety, or if the CONTRACTOR abandons the Work undertaken under the Contract, the Contracting Officer may, at his option with written notice to the Surety and without any written notice to the CONTRACTOR, transfer the employment for said Work directly to the Surety. The Surety shall submit its plan for completion of the Work, including any contracts or agreements with third parties for such completion, to the DEPARTMENT for Approval prior to beginning completion of the Work. Approval of such contracts shall be in accordance with all applicable requirements and procedures for Approval of subcontracts as stated in the Contract Documents.
- 14.2.5 After the notice of termination is issued, the Department may take over the work and complete it by contract or otherwise and may take possession of and use materials, appliances, equipment or plant on the work site necessary for completing the work.
- 14.2.6 Rather than taking over the work itself, the Department may transfer the obligation to perform the work from the contractor to your surety. The surety must submit its plan for completion of the work, including any contracts or agreements with third parties for completion, to the
-

Department for approval prior to beginning work. The surety must follow the Contract requirements for approval of subcontracts, except that the limitation on percent of work subcontracted will not apply.

- 14.2.7 On receipt of the transfer notice, the surety must take possession of all materials, tools, and appliances at the work site, employ an appropriate work force, and complete the Contract work, as specified. The Contract specifications and requirements shall remain in effect. However the Department will make subsequent Contract payments directly to the Surety for work performed under the terms of the Contract. You forfeit any right to claim for the same work or any part thereof. You are not entitled to receive any further balance of the amount to be paid under the Contract.
- 14.2.8 Upon receipt of the notice terminating the services of the CONTRACTOR, the Surety shall enter upon the premises and take possession of all materials, tools, and appliances thereon for the purpose of completing the Work included under the Contract and employ by contract or otherwise any person or persons to finish the Work and provide the materials therefor, without termination of the continuing full force and effect of this Contract. In case of such transfer of employment to the Surety, the Surety shall be paid in its own name on estimates covering Work subsequently performed under the terms of the Contract and according to the terms thereof without any right of the CONTRACTOR to make any claim for the same or any part thereof.
- 14.2.9 If the Contract is terminated for default, the CONTRACTOR and the Surety shall be jointly and severally liable for damages for delay as provided by paragraph 11.8, and for the excess cost of completion, and all costs and expenses incurred by the DEPARTMENT in completing the Work or arranging for completion of the Work, including but not limited to costs of assessing the Work to be done, costs associated with advertising, soliciting or negotiating for bids or proposals for completion, and other procurement costs. Following termination the CONTRACTOR shall not be entitled to receive any further balance of the amount to be paid under the Contract until the Work is fully finished and accepted, at which time if the unpaid balance exceeds the amount due the DEPARTMENT and any amounts due to persons for whose benefit the DEPARTMENT has withheld funds, such excess shall be paid by the DEPARTMENT to the CONTRACTOR. If the damages, costs, and expenses due the DEPARTMENT exceed the unpaid balance, the CONTRACTOR and his Surety shall pay the difference.
- 14.2.10 If, after notice of termination of the CONTRACTOR's right to proceed under the provisions of this clause, it is determined for any reason that the CONTRACTOR was not in default under the provisions of this clause, or that the delay was excusable under the provisions of this clause, or that termination was wrongful, the rights and obligations of the parties shall be determined in accordance with the clause providing for convenience termination.

14.3 Rights or Remedies:

Where the CONTRACTOR's services have been so terminated by the DEPARTMENT, the termination will not affect any rights or remedies of the DEPARTMENT against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due the CONTRACTOR by the DEPARTMENT will not release the CONTRACTOR from liability.

14.4 Convenience Termination:

- 14.4.1 The performance of the Work may be terminated by the DEPARTMENT in accordance with this section in whole or in part, whenever, for any reason the Contracting Officer shall determine that such termination is in the best interest of the DEPARTMENT. Any such termination shall be effected by delivery to the CONTRACTOR of a Notice of Termination, specifying termination is for the convenience of the DEPARTMENT the extent to which performance of Work is terminated, and the date upon which such termination becomes effective.

14.4.2 Immediately upon receipt of a Notice of Termination and except as otherwise directed by the Contracting Officer, the CONTRACTOR shall:

- a. Stop Work on the date and to the extent specified in the Notice of Termination;
- b. Place no further orders or subcontracts for materials, services, or facilities except as may be necessary for completion of such portion of the Work as is not terminated;
- c. Terminate all orders and subcontracts to the extent that they relate to the performance of Work terminated by the Notice of Termination;
- d. With the written Approval of the Contracting Officer, to the extent he may require, settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, the cost of which would be reimbursable, in whole, or in part, in accordance with the provisions of the Contract;
- e. Submit to the Contracting Officer a list, certified as to quantity and quality, of any or all items of termination inventory exclusive of items the disposition of which had been directed or authorized by the Contracting Officer;
- f. Transfer to the Contracting Officer the completed or partially completed record drawings, Shop Drawings, information, and other property which, if the Contract had been completed, would be required to be furnished to the DEPARTMENT;
- g. Take such action as may be necessary, or as the Contracting Officer may direct, for the protection and preservation of the property related to the Contract which is in the possession of the CONTRACTOR and in which the DEPARTMENT has or may acquire any interest.

The CONTRACTOR shall proceed immediately with the performance of the above obligations.

14.4.3 When the DEPARTMENT orders termination of the Work effective on a certain date, all Work in place as of that date will be paid for in accordance with Article 13 of the Contract. Materials required for completion and on hand but not incorporated in the Work will be paid for at invoice cost plus 15 % with materials becoming the property of the DEPARTMENT - or the CONTRACTOR may retain title to the materials and be paid an agreed upon lump sum. Materials on order shall be cancelled, and the DEPARTMENT shall pay reasonable factory cancellation charges with the option of taking delivery of the materials in lieu of payment of cancellation charges. The CONTRACTOR shall be paid 10% of the cost, freight not included, of materials cancelled, and direct expenses only for CONTRACTOR chartered freight transport which cannot be cancelled without charges, to the extent that the CONTRACTOR can establish them. The extra costs due to cancellation of bonds and insurance and that part of job start-up and phase-out costs not amortized by the amount of Work accomplished shall be paid by the DEPARTMENT. Charges for loss of profit or consequential damages shall not be recoverable except as provided above.

- a. The following costs are not payable under a termination settlement agreement or Contracting Officer's determination of the termination claim:
 1. Loss of anticipated profits or consequential or compensatory damages
 2. Unabsorbed home office overhead (also termed "General & Administrative Expense") related to ongoing business operations
 3. Bidding and project investigative costs
 4. Direct costs of repairing equipment to render it operable for use on the terminated work

14.4.4 The termination claim shall be submitted promptly, but in no event later than 90 days from the effective date of termination, unless extensions in writing are granted by the Contracting Officer upon written request of the CONTRACTOR made within the 90 day period. Upon

failure of the CONTRACTOR to submit his termination claim within the time allowed, the Contracting Officer may determine, on the basis of information available to him, the amount, if any, due to the CONTRACTOR by reason of the termination and shall thereupon pay to the CONTRACTOR the amount so determined.

- 14.4.5 The CONTRACTOR and the Contracting Officer may agree upon whole or any part of the amount or amounts to be paid to the CONTRACTOR by reason of the total or partial termination of Work pursuant to this section. The Contract shall be amended accordingly, and the CONTRACTOR shall be paid the agreed amount.
- 14.4.6 In the event of the failure of the CONTRACTOR and the Contracting Officer to agree in whole or in part, as provided heretofore, as to the amounts with respect to costs to be paid to the CONTRACTOR in connection with the termination of the Work the Contracting Officer shall determine, on the basis of information available to him, the amount, if any, due to the CONTRACTOR by reason of the termination and shall pay to the CONTRACTOR the amount determined as follows:
- a. All costs and expenses reimbursable in accordance with the Contract not previously paid to the CONTRACTOR for the performance of the Work prior to the effective date of the Notice of Termination;
 - b. So far as not included under "a" above, the cost of settling and paying claims arising out of the termination of the Work under subcontracts or orders which are properly chargeable to the terminated portions of the Contract;
 - c. So far as practicable, claims by the contractor for idled or stand-by equipment shall be made as follows: Equipment claims will be reimbursed as follows:
 1. Contractor-owned equipment usage, based on the contractor's ownership and operating costs for each piece of equipment as determined from the contractor's accounting records. Under no circumstance, may the contractor base equipment claims on published rental rates.
 2. Idle or stand-by time for Contractor-owned equipment, based on your internal ownership and depreciation costs. Idle or stand-by equipment time is limited to the actual period of time equipment is idle or on stand-by as a direct result of the termination, not to exceed 30 days. Operating expenses will not be included for payment of idle or stand-by equipment time.
 3. Rented equipment, based on reasonable, actual rental costs. Equipment leased under "capital leases" as defined in Financial Accounting Standard No. 13 will be considered Contractor-owned equipment. Equipment leased from an affiliate, division, subsidiary or other organization under common control with you will be considered Contractor-owned equipment, unless the lessor has an established record of leasing to unaffiliated lessees at competitive rates consistent with the rates you have agreed to pay and no more than forty percent of the lessor's leasing business, measured in dollars, is with organizations affiliated with the lessor.
- 14.4.7 The CONTRACTOR shall have the right of appeal under the DEPARTMENT's claim procedures, as defined in Article 15, for any determination made by the Contracting Officer, except if the CONTRACTOR has failed to submit his claim within the time provided and has failed to request extension of such time, CONTRACTOR shall have no such right of appeal. In arriving at the amount due the CONTRACTOR under this section, there shall be deducted:
- a. All previous payments made to the CONTRACTOR for the performance of Work under the Contract prior to termination;
 - b. Any claim for which the DEPARTMENT may have against the CONTRACTOR;
 - c. The agreed price for, or the proceeds of sale of, any materials, supplies, or other things acquired by the CONTRACTOR or sold pursuant to the provisions of this section and not otherwise recovered by or credited to the DEPARTMENT; and,

-
- d. All progress payments made to the CONTRACTOR under the provisions of this section.
- 14.4.8 Where the Work has been terminated by the DEPARTMENT said termination shall not affect or terminate any of the rights of the DEPARTMENT against the CONTRACTOR or his Surety then existing or which may thereafter accrue because of such default. Any retention or payment of monies by the DEPARTMENT due to the CONTRACTOR under the terms of the Contract shall not release the CONTRACTOR or his Surety from liability.
- 14.4.9 The contractor's termination claim may not include claims that pre dated the notice for termination for convenience. Those claims shall be prosecuted by the contractor under Article 15.
- 14.4.10 The contractor's termination claim may not exceed the total dollar value of the contract as awarded plus agreed upon change orders less the amounts that have been paid for work completed.
- a. Unless otherwise provided for in the Contract Documents, or by applicable statute, the CONTRACTOR, from the effective date of termination and for a period of three years after final settlement under this Contract, shall preserve and make available to the DEPARTMENT at all reasonable times at the office of the CONTRACTOR, all its books, records, documents, and other evidence bearing on the cost and expenses of the CONTRACTOR under his Contract and relating to the Work terminated hereunder.
 - b. Definitions. In this Subsection 108-1.09, the term "cost" and the term "expense" mean a monetary amount in U.S. Dollars actually incurred by you, actually reflected in your contemporaneously maintained accounting or other financial records and supported by original source documentation.
 - c. Cost Principles. The Department may use the federal cost principles at 48 CFR §§ 31.201-1 to 31.205-52 (or succeeding cost principles for fixed price contracts) as guidelines in determining allowable costs under this Subsection to the extent they are applicable to construction contracts and consistent with the specifications of this Contract. The provisions of this contract control where they are more restrictive than, or inconsistent with, these federal cost principles."

SC-15-CLAIMS AND DISPUTES

At General Conditions Article 15 – Claims and Disputes, delete this section in its entirety and substitute the following text:

"ARTICLE 15 - CLAIMS FOR ADJUSTMENT AND DISPUTES

15.1 Notification

- 15.1.1 The CONTRACTOR shall notify the DEPARTMENT in writing as soon as the CONTRACTOR becomes aware of any act or occurrence which may form the basis of a claim for additional compensation or an extension of Contract Time or of any dispute regarding a question of fact or interpretation of the Contract. The DEPARTMENT has no obligation to investigate any fact or occurrence that might form the basis of a claim or to provide any additional compensation or extension of Contract Time unless the CONTRACTOR has notified the DEPARTMENT in writing in a timely manner of all facts the CONTRACTOR believes form the basis for the claim.
- 15.1.2 If the CONTRACTOR believes that he is entitled to an extension of Contract Time, then the CONTRACTOR must state the contract section on which he basis his extension request, provide the DEPARTMENT with sufficient information to demonstrate that the CONTRACTOR has suffered excusable delay, and show the specific amount of time to which the CONTRACTOR is entitled. The DEPARTMENT will not grant an extension of Contract Time if the CONTRACTOR does not timely submit revised schedules under **Section 01310**.

-
- 15.1.3 If the matter is not resolved by agreement within 7 days, the CONTRACTOR shall submit an Intent to Claim, in writing, to the DEPARTMENT within the next 14 days.
- 15.1.4 If the CONTRACTOR believes additional compensation or time is warranted, then he must immediately begin keeping complete, accurate, and specific daily records concerning every detail of the potential claim including actual costs incurred. The CONTRACTOR shall provide the DEPARTMENT access to any such records and furnish the DEPARTMENT copies, if requested. Equipment costs must be based on the CONTRACTOR's internal rates for ownership, depreciation, and operating expenses and not on published rental rates. In computing damages, or costs claimed for a change order, or for any other claim against the Department for additional time, compensation or both, the contractor must prove actual damages based on internal costs for equipment, labor or efficiencies. Total cost, modified total cost or jury verdict forms of presentation of damage claims are not permissible to show damages. Labor inefficiencies must be shown to actually have occurred and can be proven solely based on job records. Theoretical studies are not a permissible means of showing labor inefficiencies. Home office overhead will not be allowed as a component of any claim against the Department.
- 15.1.5 If the claim or dispute is not resolved by the DEPARTMENT, then the CONTRACTOR shall submit a written Claim to the Contracting Officer within 90 days after the CONTRACTOR becomes aware of the basis of the claim or should have known the basis of the claim, whichever is earlier. The Contracting Officer will issue written acknowledge of the receipt of the Claim.
- 15.1.6 The CONTRACTOR waives any right to claim if the DEPARTMENT was not notified properly or afforded the opportunity to inspect conditions or monitor actual costs or if the Claim is not filed on the date required.

15.2 Presenting the Claim

- 15.2.1 The Claim must include all of the following:
- a. The act, event, or condition the claim is based on
 - b. The Contract provisions which apply to the claim and provide relief
 - c. The item or items of Contract work affected and how they are affected
 - d. The specific relief requested, including Contract Time if applicable, and the basis upon which it was calculated
 - e. A statement certifying that the claim is made in good faith, that the supporting cost and pricing data are accurate and complete to the best of your knowledge and belief, and that the amount requested accurately reflects the Contract adjustment which the CONTRACTOR believes is due.

15.3 Claim Validity, Additional Information, and DEPARTMENT's Action

- 15.3.1 The Claim, in order to be valid, must not only show that the CONTRACTOR suffered damages or delay but that it was caused by the act, event, or condition complained of and that the Contract provides entitlement to relief for such act, event, or condition.
- 15.3.2 The DEPARTMENT can make written request to the CONTRACTOR at any time for additional information relative to the Claim. The CONTRACTOR shall provide the DEPARTMENT the additional information within 30 days of receipt of such a request. Failure to furnish the additional information may be regarded as a waiver of the Claim.

15.4 Contracting Officer's Decision

The CONTRACTOR will be furnished the Contracting Officer's Decision within 90 days, unless the Contracting Officer requests additional information or gives the CONTRACTOR notice that the time for issuing a decision is being extended for a specified period under AS 36.30.620. The Contracting Officer's decision is final and conclusive unless, within 14 days of receipt of the decision, the

CONTRACTOR delivers a Notice of Appeal to the Appeals Officer. Procedures for appeals are covered under AS 36.30.625 and AS 36.30.630.

15.5 Fraud and Misrepresentation in Making Claims

Criminal and Civil penalties authorized under AS 36.30.687 (including, but not limited to, forfeiture of all claimed amounts) may be imposed on the CONTRACTOR if the CONTRACTOR makes or uses a misrepresentation in support of a claim or defraud or attempt to defraud the DEPARTMENT at any stage of prosecuting a claim under this Contract."

END OF SECTION

THIS PAGE INTENTIONALLY LEFT BLANK

SECTION 01005
ADMINISTRATIVE PROVISIONS

PART I GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Local Conditions
- B. Permits, Fees, and Inspections
- C. Alternates
- D. Preconstruction Meeting
- E. Applications for Payment
- F. Contractor Use of Premises
- G. Owner Occupancy
- H. Owner - Furnished Products
- I. Coordination
- J. Reference Standards

1.02 RELATED REQUIREMENTS

- A. General and Special Conditions

1.03 LOCAL CONDITIONS

- A. Bidders shall familiarize themselves with the Contract Documents and existing conditions, which affect Work, required by the Contract Documents. It will be assumed that bidders have made a personal examination of the jobsite, existing conditions, and documents for prior construction projects associated with this facility made available by the Owner for review by Bidders during the bid period.
- B. Failure to visit the jobsite, to review existing conditions, or to review documents for prior construction projects associated with this facility made available by the Owner for review by Bidders during the bid period will in no way relieve the successful Bidder from the necessity of furnishing any materials or performing any Work that may be required to complete the Work in accordance with the Contract Documents with no additional cost to the Owner.
- C. For building access and for access to the documents for prior construction projects associated with this facility contact:

Charles Gielow, Maintenance Foreman, 907 343-7253
Charles.gielow@alaska.gov

1.04 PERMITS, FEES, AND INSPECTIONS

- A. Obtain, pay for, and comply with the requirements of all permits, fees, and inspections required by public authorities.
- B. Transmit copies of permit applications, permits received, and public authority inspection reports to the Contracting Officer within three days of making permit application or receiving permits or reports.

1.05 ALTERNATES

- A. Alternates will be exercised at the option of Owner as specified on Bid Schedule. Accepted alternates will be indicated on the Contract and included within the conformed Contract Documents.
- B. Coordinate related work and modify surrounding work affected by accepted alternates as required to complete the Work.
- C. Provide all Work as part of the Base Bid except that Work specifically indicated to be provided as part of an alternate.

1.06 PRECONSTRUCTION MEETING

- A. Attend Owner initiated preconstruction meeting.

1.07 APPLICATIONS FOR PAYMENT

- A. Submit two copies of each application under procedures of Section 01027.
- B. Content and Format: That specified for schedule of values in Section 01027.

1.08 CONTRACTOR USE OF PREMISES

- A. Limit use of premises for Work and for construction operations, to allow for Owner occupancy, Work of other Contractors, and public access.
- B. Limit areas of construction operations to those areas requiring renovation only.
- C. Give written notice two weeks in advance of beginning of Work in any Work area.
- D. Do not smoke except in specifically designated smoking areas.
- E. Take reasonable and adequate precautions to protect the Owner's property from damage during execution of Work. Restore any damage to Owner property resulting from execution of Work or replace in a manner satisfactory to the Contracting Officer.
- F. Take reasonable and adequate precautions to protect the Owner's property from damage during execution of Work. Restore any damage to Owner property resulting from execution of Work or replace in a manner satisfactory to the Contracting Officer.
- G. Limit construction activities which generate noise levels in excess of NC=40 in classrooms, NC=50 in office areas, and NC=60 in other areas.
- H. Limit construction access to building to the location indicated. Keep construction access points locked at all times.
- I. Move Owner tools, equipment, shelving, stored materials, etc. as required to accomplish Work. Return to original location as soon as possible.
- J. Protect Owner tools, equipment, shelving, stored materials, and equipment, etc. from Work.
- K. In Owner occupied areas:

1. Limit use of premises for Work and for construction operations to between 7:30 a.m. and 5:00 p.m. Monday through Friday. If requested by the Contractor and approved by the Project Manager, the Contractor may work on the project outside these hours if the Contractor's activities do not interfere with owner operations.
 2. Cover and protect from dust and debris, at the start of each work day, electronic office equipment such as personal computers, computer terminals, facsimile machines, copiers, printers, postage meters, VCRs, monitors, typewriters, etc. Remove protection at the end of each work day.
 3. Do not use furniture, such as countertops, desks, filing cabinets, book shelves, and tables as work surfaces or as steps to access Work.
 4. At the end of each workday, move back to original location equipment and furniture moved to accommodate Work. Do not move electronic equipment unless absolutely necessary to accomplish Work.
 5. At the end of each workday replace ceiling tiles removed to access Work.
 6. At the end of each work day, clean work areas, including floors with a vacuum, and remove tools, equipment, and construction material from work areas.
- M. Coordinate temporary shutdowns of any of the existing facilities' mechanical or electrical systems affecting systems in Owner occupied areas with the Contracting Officer. Schedule shutdowns for nights and weekends. Provide a minimum five-day notice.
- N. Existing systems shall be fully operational for intended purpose at the beginning of each Owner workday.

1.09 OWNER OCCUPANCY

- A. The Owner will occupy premises during entire period of construction for the conduct of its normal operations.
- B. Maintain IBC complying access to and through corridors, stairways, and building exits at all times.
- C. Cooperate with Owner to minimize conflict and to facilitate its operations. In case of conflict accept Contracting Officer's direction as final and adjust use of premises accordingly.
- D. Coordinate Work in and use of premises with the Owner

1.10 COORDINATION

- A. Coordinate Work of the various Sections of Specifications prior to ordering materials and fabrication to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items installed later. Notify Contracting Officer of conflicts between elements prior to installation of any element.
- B. Verify characteristics of elements of interrelated operating equipment are compatible;

coordinate Work of various Sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.

- C. Coordinate space requirements and installation of mechanical and electrical Work, which is indicated diagrammatically on Drawings. Follow routing shown for ducts and conduits as closely as practical. Make piping, duct, and conduit runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. In finished areas, unless otherwise indicated, conceal pipes, ducts, and wiring in the construction.
- E. After Owner acceptance of Work, coordinate access to site by various trades for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner activities.

1.11 REFERENCE STANDARDS

- A. For products or workmanship specified by association, trades, or regulatory agency standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Obtain a copy of standards referenced. Maintain a copy at the jobsite during execution of Work to which the standard applies.
- C. The date of the standard is that in effect as of the bid date except when a specific date is specified.

1.12 ONE YEAR CORRECTION PERIOD

- A. If within one year after the date of Final Completion or such longer period of time as may be prescribed by Regulatory Requirements or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work, materials, or products are found to be defective, the Contractor shall promptly, without cost to the Owner and in accordance with the Contracting Officer's written instructions, either correct such defective Work, or, if it has been rejected by the Contracting Officer, remove it from the site and replace it with conforming Work.
- B. If the Contractor does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, the Owner may have the defective Work corrected or the rejected Work removed and replaced, and all direct, indirect, and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys, and other professionals) will be paid by the Contractor.
- C. In special circumstances where a particular item of equipment is placed in continuous service for the benefit of the Owner before Substantial Completion of all the Work, the correction period for that item may begin on an earlier date if so provided in the Specifications of by Change Order.
- D. Provisions of this paragraph are not intended to shorten the statute of limitations for bringing an action.

Anchorage Pioneer Home
3rd Floor Resident Renovations
ANC 23-26C

SECTION 01005
ADMINISTRATIVE PROVISIONS

PART 2	PRODUCTS	Not Used
PART 3	PARTS	Not Used

END OF SECTION

SECTION 01010
SUMMARY OF WORK

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Basic Bid.
- B. Work by Others.
- C. Hazardous Materials
- D. Work Inside Facility
- E. Work Plans and Access to Facility, Individual Work Areas
- F. Shut Offs/Disruptions to Service
- G. Use of Premises.
- H. Using Agency Occupancy.
- I. Coordination
- J. Parking/Staging

1.02 RELATED REQUIREMENTS

- A. Document 00200 – Information available to bidders.
- B. Document 00700 - General Conditions: Provisions for use of site, and Using Agency occupancy. Relations of CONTRACTOR- Subcontractors.
- C. Document 00800 - Supplementary Conditions: Modifications to General Conditions.
- D. Section 01400 – Quality Control
- E. Section 01540 – Security.

1.03 WORK COVERED BY CONTRACT DOCUMENTS

- A. Work covered by the contract documents is located
- B. The DEPARTMENT is acting for the State of Alaska.

1.04 CONTRACT METHOD

- A. Construct the Work under a single lump sum Contract.

1.05 BASIC BID

- A. That portion of the Work described within these documents (taken as a whole) as the Basic Bid scope. Basic Bid work includes all work shown on the plans and specifications.
- B. Project will be constructed under a general construction contract.

1.06 WORKS BY OTHERS

- A. Cooperate with other Contractors and the DEPARTMENT to minimize conflict with construction operation.

1.07 HAZARDOUS MATERIALS

- A. All light fixtures to be removed shall be treated as positive for containing PCBs unless proven

otherwise.

- B. CONTRACTOR to be aware that other hazardous materials may be within the facility. See Section 00700 Article 4.3.

1.08 WORK INSIDE FACILITY

- A. Work within the facility shall be conducted only between the hours of 7:30 am and 5:30 pm, unless specifically approved by the Maintenance Supervisor. Requests for work outside of these hours must be submitted in writing 24 hours in advance.
- B. CONTRACTOR shall not under any circumstances leave tools or equipment unattended within the limits of the project site unless secured in a locked tool storage shed/box or vehicle. CONTRACTOR will be liable for any damages to persons and/or property resulting from unattended tools or equipment.
- C. No firearms or ammunition allowed on the grounds, to include locked vehicles.
- D. The use of powder-activated tools must be approved by the project manager. Request for such tools must be submitted to the Maintenance Supervisor in writing three (3) working days in advance.

1.09 SHUTOFFS / DISRUPTIONS TO SERVICE

- A. Work with the Maintenance Supervisor to schedule disruption for a time, which minimizes impact on facility operations. Provide the Engineer written notification of any disruption to service at least 24 hours in advance of scheduled disruption or shutoff.
- B. Plan work to minimize down time. Work with DEPARTMENT to schedule disruption for a time that minimizes impact on USING AGENCY's operations.
- C. Provide written work plan and schedule for disruptions to service that exceed one hour.
- D. Contractor must provide protection as stated in Municipal Fire Codes and Safety Codes while working on the fire protection system.

1.10 CONTRACTOR'S USE OF PREMISES

- A. Coordinate use of the premises under direction of DEPARTMENT.
- B. Assume full responsibility for protection and safekeeping of products under this Contract.
- C. Assume full responsibility for the protection of the existing facility and contents, from damage due to construction operations.

1.11 USING AGENCY OCCUPANCY

- A. The User Agency will continue operations adjacent to the site during entire construction period. Cooperate with DEPARTMENT in scheduling operations to minimize conflict and to facilitate the User Agency's operations.
- B. CONTRACTOR shall provide Material Safety Data Sheets for all products that may produce unpleasant odors.

1.12 COORDINATION

- A. Coordinate Work of the various elements of the plans to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items installed later.

- B. Verify if characteristics of elements of interrelated operating equipment are compatible; coordinate Work of various trades having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- C. Coordinate space requirements and installation of mechanical and electrical work, which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduits, as closely as practicable; make runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs. Coordinate work with existing elements in the building. Do not locate piping, conduit or other products where they will block access to equipment or junction boxes.
- D. In finished areas except as otherwise shown, conceal pipes, ducts, and wiring in the construction. .
- E. Execute cutting and patching to integrate elements of Work, provide openings for penetrations of existing surfaces. Seal penetrations through floors, walls, partitions, and ceilings.

1.13 PARKING / STAGING

- A. CONTRACTOR to coordinate staging area with Facility Maintenance Supervisor.
- B. CONTRACTOR may use established facility parking.
- C. CONTRACTOR will be responsible for all additional required storage/staging and parking off site at no charge to the Department.

PART 2 PRODUCTS	Not Used
PART 3 EXECUTION	Not used

END OF SECTION

SECTION 01020
INTENT OF DOCUMENTS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Explanation of intent and terminology of the Construction Documents.

1.02 RELATED REQUIREMENTS

- A. Document 00700 - General Conditions: Article 1 Definitions relating to 'Drawings' and 'Specifications'.
- B. Document 00700 - General Conditions: Article 3 Contract Documents relating to Intent, Amending, and Reuse.

1.03 SPECIFICATION FORMAT AND COMPOSITION

- A. Specifications are divided into Divisions and Sections for the convenience of writing and using. Titles are not intended to imply a particular trade jurisdiction. DEPARTMENT is not bound to define the limits of any subcontract and will not enter into disputes between the CONTRACTOR and his employees, including Subcontractors.
- B. Pages are numbered independently for each Section and recorded in the Table of Contents. Section number is shown with the page number at the bottom of each page. The end of each Section of the specifications is ended by "End of Section". It is CONTRACTOR'S responsibility to verify that Contract Documents received for bidding and/or construction are complete in accordance with Table of Contents.
- C. The language employed in the Contract Documents is addressed directly to the CONTRACTOR. Imperative or indicative language is generally employed throughout, and requirements expressed are the mandatory responsibility of the CONTRACTOR, even though the work specified may be accomplished by specialty subcontractors engaged by the CONTRACTOR. References to third parties in this regard shall not be interpreted in any way as to relieve the CONTRACTOR of his or her responsibility under this Contract.
- D. These Specifications are of the abbreviated or "streamlined" type and may include incomplete sentences.
- E. Omissions of words or phrases such as "the CONTRACTOR shall," "in conformity therewith," "shall be," "as noted on the Drawings," "according to the Drawings," "a," "an," "the" and "all" are intentional.
- F. Omitted words or phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the Drawings.

1.04 DRAWINGS: CONTENT EXPLANATION

- A. Drawings, Dimensions and Measurements.
 - 1. Contract Documents do not purport to describe in detail, absolute and complete construction information. In some instances, drawings are diagrammatic.

2. CONTRACTOR shall provide verification of actual site conditions and shall provide complete and operational systems as specified when drawings do not provide full detail.
3. Where on any of the Drawings a portion of the work is drawn out and the remainder is indicated in outline, the parts drawn out shall apply also to all other portions of the Work.
4. Wherever a detail is referenced and developed for a specific condition, same or similar detail shall apply to identical or similar conditions elsewhere on Project even though not specifically referenced.
5. Where the word "similar" occurs on the Drawings, it shall be interpreted in its general sense and not as meaning identical, all details shall be worked out in relation to their location and their connection with other parts of the work.
6. The figured dimensions on the Drawings or notes indicating dimensions shall be used instead of measurements of the Drawings by scale.
7. No scale measurements shall be used as a dimension to work with except on "full size" Drawings not dimensioned.

1.05 COMMON TERMINOLOGY

A. Certain items used generally throughout the Specifications and Drawings are used as follows:

1. Indicated: The term "indicated" is a cross reference to details, notes or schedules on the Drawings, other paragraphs or schedules in the Specifications, and similar means of recording requirements in the Contract Documents. Where terms such as "shown", "noted", "schedules", and "specified" are used in lieu of "indicate", it is for the purpose of helping the reader accomplish the cross reference, and no limitation of location is intended except as specifically noted.
2. Installer: The person or entity engaged by CONTRACTOR, his Subcontractor or sub-subcontractor for the performance of a particular unit of Work at the Project site, including installation, erection, application, and similar required operations. It is a general requirement that installers be recognized experts in the work they are engaged to perform.
3. Furnish: Except as otherwise defined in greater detail, the term "furnish" is used to mean "...supply and deliver to the Project site, ready for unpacking, assembly and installation..."
4. Provide: Except to the extent further defined, the term "provide" means to furnish and install, complete and ready for the intended use.
5. Guarantee and Warranty: "Warranty" is generally used in conjunction with products manufactured or fabricated away from the Project site, and "guarantee" is generally used in conjunction with units of work which require both products and substantial amounts of labor at the Project site. The resulting difference is that warranties are frequently issued by manufacturers, and guarantees are generally issued by CONTRACTOR and frequently supported (partially) by product warranties from manufacturers.

1.06 CONFLICTS

- A. Report any conflicts to Contracting Officer for clarification.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SECTION - 01027
APPLICATIONS FOR PAYMENT

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures for preparation and submittal of Applications for Payment.

1.02 RELATED REQUIREMENTS

- A. Document 00510 - Construction Contract - Contract Form 06D-10a and Bid Schedule: Method of Payment and Contract Price and Amounts of Liquidated Damages.
- B. Document 00700 - General Conditions: Progress Payments, and Final Payment.
- C. Section 00800 – Supplementary Conditions to General Conditions of the Construction Contract for Buildings: SC-11.2 and SC-11.8.
- D. Section 01300 - Submittals: Procedures, Schedule of Values .
- E. Section 01700 - Contract Closeout: Closeout Procedures.

1.03 FORMAT

- A. Application for Payment form in format approved by the DEPARTMENT.

1.04 PREPARATION OF APPLICATIONS

- A. Type required information on Application for Payment form approved by DEPARTMENT.
- B. Execute certification by original signature of authorized officer upon each copy of the Application for Payment.
- C. Submit names of individuals authorized to be responsible for information submitted on application for payment.
- D. Indicate breakdown of costs for each item of the Work on accepted schedule of values. Provide dollar value in each column for each line item for portion of Work performed and for stored products.
- E. List each authorized Change Order as an extension on continuation sheet, listing Change Order number and dollar amount as for an original item of Work.
- F. Prepare Application for Final Payment as specified in Section 01700.

1.05 SUBMITTAL PROCEDURES

- A. Submit two copies of each Application for Payment at times stipulated in Contract.
- B. Submit under transmittal letter specified in Section 01300.

1.06 SUBSTANTIATING DATA

- A. When DEPARTMENT requires substantiating information, submit data justifying line item amounts in question.
- B. Substantiating data required under 7.12.3 and 7.12.4 shall be submitted (or updated) when the Application for Payment includes a current request for payment on an item of Work required to include Alaska "agricultural/wood" products.
- C. Provide one copy of data with cover letter for each copy of Application. Show Application number and date, and line item by number and description.

1.07 SUBMITTALS WITH APPLICATION FOR PAYMENT

- A. Submit the following with each Application for Payment.
 - 1. Updated construction schedule as required by Section 01300 - Submittals.
 - 2. Updated Schedule of Values as required by Section 01300 – Submittals: Schedule of Values.
 - 3. The contractor's as-builts will be reviewed prior to approving each application for payment.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SECTION 01028
CHANGE ORDER PROCEDURES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures for processing Change Orders.

1.02 RELATED REQUIREMENTS

- A. Document 00312 - Bid Schedule: Total amount bid for lump sum items
- B. Document 00510 - Contract Form: Total amount of Contract Price, as awarded
- C. Document 00700 - General Conditions: Governing requirements for changes in the Work, in Contract Price, and Contract Time.
- D. Document 00800 - Supplementary Conditions: Modifications to Document 00700 - General Conditions.
- E. Section 01027 - Applications for Payment.
- F. Section 01300 - Submittals: Construction Progress Schedules, Schedule of Values.
- G. Section 01600 – Material and Equipment: Product Options, Substitutions.
- H. Section 01700 – Contract Closeout: Project Record Documents.

1.03 SUBMITTALS

- A. Submit name of the individual authorized to accept changes, and to be responsible for informing others in CONTRACTOR's employ of changes in the Work.
- B. Change Order Forms will be prepared by the DEPARTMENT.

1.04 DOCUMENTATION OF CHANGE IN CONTRACT PRICE AND CONTRACT TIME

- A. Maintain detailed records of work done on a Cost of the Work plus a Fee basis. Provide full information required for evaluation of proposed changes, and to substantiate costs of changes in the Work. Incomplete or unsubstantiated costs will be disallowed.
- B. CONTRACTOR shall submit a complete, detailed, itemized cost breakdown addressing impact on Contract Time and Contract Price with each proposal.
- C. On request, provide additional data to support computations:
 - 1. Quantities of products, labor, and equipment.
 - 2. Taxes, insurance and bonds.
 - 3. Overhead and profit.

4. Justification for any change in Contract Time.
 5. Credit for deletions from Contract, similarly documented.
- D. Support each claim for additional costs, and for work done on a cost of the Work plus a Fee basis, with additional information:
1. Origin and date of claim.
 2. Dates and times work was performed, and by whom.
 3. Time records and wage rates paid.
 4. Invoices and receipts for products, equipment, and subcontracts, similarly documented.

1.05 PRELIMINARY PROCEDURES

- A. DEPARTMENT may submit a Proposal Request which includes Detailed description of change with supplementary or revised Drawings and Specifications, the projected time for executing the change, with a stipulation of any overtime work required, and the period of time during which the requested price will be considered valid.
- B. CONTRACTOR may initiate a change by submittal of a request to DEPARTMENT describing the proposed change with a statement of the reason for the change, and the effect on Contract Price and Contract Time with full documentation.

1.06 CONSTRUCTION CHANGE AUTHORIZATION

- A. Shall be in accordance with Article 9 - Changes: in Document 00700 - General Conditions.

1.07 FIXED PRICE CHANGE ORDER

- A. CONTRACTOR shall submit an itemized price proposal in sufficient detail to fully explain the basis for the proposal. Attach invoices and receipts for products, equipment, subcontracts and as requested by the DEPARTMENT. CONTRACTOR and the DEPARTMENT shall then negotiate an equitable price (and time adjustment if appropriate) in good faith. The Change Order will reflect the results of those negotiations. If negotiations break down CONTRACTOR may be directed to perform the work under COST OF THE WORK CHANGE ORDER.

1.08 UNIT PRICE CHANGE ORDER

- A. For pre-determined Unit Prices and quantities, Change Order will be executed on a lump sum basis.
- B. For unit costs or quantities of units of Work which are not predetermined, execute Work under a Directive. Changes in Contract Price or Contract Time will be computed as specified for cost of the Work plus fee via Change Order.

1.09 COST OF THE WORK CHANGE ORDER

- A. CONTRACTOR shall submit documentation required in 1.04 daily for certification by the Project Manager. Project Manager will indicate by signature that the submitted documentation is acceptable.

- B. After completion of the change and within 14 Calendar Days, unless extended by the Project Manager, the CONTRACTOR shall submit in final form an itemized account with support data of all costs. Support data shall have been certified by the Project Manager, as required above in paragraph A.

1.10 EXECUTION OF CHANGE ORDERS

- A. DEPARTMENT will issue Change Orders for signatures of parties as provided in Conditions of the Contract.

1.11 CORRELATION OF CONTRACTOR SUBMITTALS

- A. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Price as shown on Change Order.
- B. Promptly revise progress schedules to reflect any change in Contract Time, revise sub schedules to adjust times for other items of Work affected by the change, and resubmit.
- C. Promptly enter changes in project record documents.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SECTION 01040
COORDINATION

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Coordination of Work of Contract.

1.02 RELATED REQUIREMENTS

- A. Section 01010 - Summary of Work.
- B. Section 01045 – Cutting and Patching.
- C. Section 01200 – Project Meetings.
- D. Section 01600 – Material and Equipment: Substitutions.
- E. Section 10701 – Contract Closeout Procedures.

1.03 DESCRIPTION

- A. Coordinate scheduling, submittals, and work of the various sections of Specifications to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later.
- B. Coordinate sequence of Work to accommodate Using Agency occupancy as specified in Section 01005.

1.04 MEETINGS

- A. Coordinate sequence of Work to accommodate Using Agency occupancy as specified in Section 01005.

1.05 COORDINATION OF SUBMITTALS

- A. Schedule and coordinate submittals specified in Section 01300.
- B. Coordinate Work of various sections having interdependent responsibilities for installing connecting to, and placing in service, such equipment.
- C. Coordinated requests for substitutions to assure compatibility of space, of operating elements, and effect on Work of other sections.

1.06 COORDINATION OF SPACE

- A. Coordinate use of Project space and sequence of installation of mechanical and electrical Work which is indicated diagrammatically on Drawings. Follow routings shown for pipes, ducts, and conduits as closely as practicable, with due allowance for available physical space; make runs parallel with lines of building. Utilize space efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- B. In finished areas, except as otherwise shown, conceal pipes, ducts, and wiring in the construction. Coordinate locations of fixtures and outlets with finish elements.

1.07 COORDINATION OF CONTRACT CLOSEOUT

- A. Coordinate completion and cleanup of Work of separate sections in preparation for Substantial Completion.
- B. After Using Agency occupancy of premises, coordinate access to site by various sections for correction of Defective Work and Work not in accordance with Contract Documents, to minimize disruption of Using Agency activities.
- C. Assemble and coordinate close submittal specified in Section 01701.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SECTION 01045
CUTTING AND PATCHING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Requirements and limitations for cutting and patching of Work.

1.02 RELATED REQUIREMENTS

- A. Section 01005 – Administrative Provisions
- B. Section 01010 - Summary of Work.
- C. Section 01600 - Materials and Equipment: Substitutions.
- D. Individual Specifications Sections:
 - 1. Cutting and patching incidental to Work of the section.
 - 2. Advance notification to other sections of openings required in Work of those sections.
 - 3. Limitations on cutting structural members.

1.03 SUBMITTALS

- A. Submit written request in advance of cutting or alteration which affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather-exposed or moisture-resistant element.
 - 3. Efficiency, maintenance, or safety of any operational element.
 - 4. Visual qualities of sight-exposed elements.
 - 5. Work of DEPARTMENT or separate Contractor.
- B. Include in request:
 - 1. Identification of Project and DEPARTMENT's Project number.
 - 2. Location and description of affected Work.
 - 3. Necessity for cutting or alteration.
 - 4. Description of proposed Work, and products to be used.
 - 5. Alternatives to cutting and patching.
 - 6. Effect on Work of DEPARTMENT or separate Contractor.
 - 7. Written permission of affected separate Contractor.
 - 8. Date and time Work will be executed.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Those required for original installation.
- B. For any change in materials, submit request for substitution under provisions of Section 01600.

3.01 GENERAL

- A. Execute cutting, fitting, and patching to complete Work, and to:
 - 1. Fit the several parts together, to integrate with other Work.
 - 2. Uncover Work to install ill-timed Work.
 - 3. Remove and replace non-conforming and Defective Work.
 - 4. Remove samples of installed Work for testing.
 - 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.

3.02 INSPECTION

- A. Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
- B. Notify the Department immediately of any suspected hazardous materials.
- C. After uncovering, inspect conditions affecting performance of work.
- D. Beginning of cutting or patching means acceptance of existing conditions.

3.03 PREPARATION

- A. Provide supports to assure structural integrity of surroundings; devices and methods to protect other portions of Project from damage.
- B. Provide protection from elements for areas which may be exposed by uncovering Work; maintain excavations free of water.

3.04 PERFORMANCE

- A. Execute Work by methods to avoid damage to other Work, and which will provide proper surfaces to receive patching and finishing.
- B. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval. Cutting structural reinforcement with heat is strictly forbidden without prior written approval.
- C. Restore Work with new products in accordance with requirements of Contract Documents.
- D. Fit Work tightly to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- E. At penetrations of fire-rated wall, ceiling, or floor construction, completely seal voids with fire-rated material, full thickness of the construction element or in accordance with listed U.L. assembly requirements.
- F. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit.

END OF SECTION

SECTION 01073
EXPLANATIONS: DRAWINGS AND SPECIFICATIONS

PART 1 GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Explanation of terminology used within the Drawings and Specifications.

1.2 RELATED REQUIREMENTS

- A. Section 01005 - Administrative Provisions
- B. Section 01010 - Summary of Work
- C. Section 01020 - Intent of Documents

1.3 SPECIFICATION FORMAT AND COMPOSITION

- A. Specifications are divided into Divisions and Sections for the convenience of writing and using. Titles are not intended to imply a particular meaning or to fully describe the Work of each Division or Section and are not an integral part of the text that specifies the requirements. Contracting Officer is not bound to define the limits of any subcontract and will not enter into disputes between the Contractor and his employees, including subcontractors.
- B. Pages are numbered independently for each Section. Section number is shown with the page number at the bottom of each page. "End of Section" is noted on the last page of each Section. It is Contractor's responsibility to verify that Contract Documents received for bidding and construction are complete in accordance with Table of Contents.
- C. These Specifications are of the abbreviated, or "streamlined" type, and include incomplete sentences.
- D. Omissions of words or phrases such as "the Contractor shall," "in conformity therewith," "shall be," "as noted on the Drawings," "according to the Drawings," "a," "an," "the" and "all" are intentional.
- E. Omitted words or phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the Drawings.

1.4 DRAWINGS: CONTENT EXPLANATION

- A. Where on any of the Drawings a portion of the Work is drawn out and the remainder is indicated in outline, the parts drawn out shall apply also to all other portions of the Work.
- B. Wherever a detail is referenced and developed for a specific condition, same or similar detail shall apply to identical or similar conditions elsewhere on Project even though not specifically referenced.
- C. Where the word "similar" occurs on the Drawings, it shall be interpreted in its general sense and not as meaning identical, all details shall be worked out in relation to their location and their connection with other parts of the Work.

- D. The figured dimensions on the Drawings or notes indicating dimensions shall be used instead of measurements of the Drawings by scale. No scale measurements shall be used as a dimension.
- E. Provide piping, ductwork, equipment, and accessories indicated on the Drawings unless it is specifically indicated that the piping, ductwork, equipment, or accessory is existing.
- F. Unless otherwise indicated, abbreviations and symbols used in the Drawings and Specifications are intended to have the meaning commonly accepted in the construction industry. Contact the Contracting Officer for definition if any question arises concerning them.
- G. Certain items used generally throughout the Specifications and Drawings are used as follows:
 - 1. Indicated: The term "indicated" is a cross reference to details, notes or schedules on the Drawings, other paragraphs or schedules in the Specifications, and similar means of recording requirements in the Contract Documents. Where terms such as "shown", "noted", "schedules", and "specified" are used in lieu of "indicate", it is for the purpose of helping the reader accomplish the cross reference, and no limitation of location is intended except as specifically noted.
 - 2. Installer: The person or entity engaged by Contractor, his subcontractor or sub-subcontractor for the performance of a particular unit of work at the Project site, including installation, erection, application, and similar required operations. It is a general requirement that installers be recognized experts in the Work they are engaged to perform.
 - 3. Provide: Except to the extent further defined, the term "provide" means to supply and install, complete and ready for the intended use.
 - 4. Furnish: Except as otherwise defined in greater detail, the term "furnish" is used to mean the same as "provide".
 - 5. Guarantee and Warranty: "Warranty" is generally used in conjunction with products manufactured or fabricated away from the Project site, and "guarantee" is generally used in conjunction with units of work which require both products and substantial amounts of labor at the Project site. The resulting difference is that warranties are frequently issued by manufacturers, and guarantees are generally issued by Contractor and frequently supported (partially) by product warranties from manufacturers.
 - 6. Work: Work is the act of, and the result of, performing services, furnishing labor, furnishing and incorporating materials and equipment into the Project and performing other duties and obligations, all as required by the Contract Documents. Such Work, however incremental, shall culminate in the entire completed Project, or the various separately identifiable parts thereof.
 - 7. Contracting Officer: Contracting Officer means Contracting Officer or Contracting Officer's Representative.

1.5 CONFLICTS

- A. Report any conflicts to Contracting Officer for clarification.

Anchorage Pioneer Home
3rd Floor Resident Renovations
ANC 23-26C

Section 01073
Explanations: Drawings and Specifications

PART 2 **PRODUCTS**
[Not Used]

PART 3 **EXECUTION**
[Not Used]

END OF SECTION

SECTION 01090
REFERENCE STANDARDS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Quality Assurance.
- B. Applicability of Reference Standards.
- C. Provision of Reference Standards at site.
- D. Acronyms used in Contract Documents for Reference Standards. Source of Reference Standards.

1.02 RELATED REQUIREMENTS

- A. Document 00700 - General Conditions: Paragraph 3.4.2.

1.03 QUALITY ASSURANCE

- A. For products or workmanship specified by association, trade, or Federal Standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. The date of the standard is that in effect as of the Project Advertisement date, or Effective Date of the Contract when there was no Advertisement, except when a specific date is specified.
- C. When required by an individual Specification section, obtain copy of standard. Maintain copy at site during submittals, planning, and progress of the specific Work, until Final Completion.
- D. Should specified reference standards conflict with Contract Documents, request clarification from the Architect/Engineer before proceeding. Local code requirements, where more stringent than referenced standards, shall govern.
- E. Neither the contractual relationship, duties, nor responsibilities of the parties in Contract nor those of the Architect/Engineer shall be altered by the Contract Documents by mention or inference otherwise in any reference document.

1.04 SCHEDULE OF REFERENCES

AA	Aluminum Association 818 Connecticut Avenue, N.W. Washington, DC 20006
AABC	Associated Air Balance Council 1000 Vermont Avenue, N.W. Washington, DC 20005
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, N.W. Washington, DC 20001
ACI	American Concrete Institute Box 19150 Reford Station Detroit, MI 48219

ADC	Air Diffusion Council 230 North Michigan Avenue Chicago, IL 60601
AGC	Associated General Contractors America 1957 E Street, N.W. Washington, DC 20006
AI	Asphalt Institute Asphalt Institute Building College Park, MD 20740
AITC	American Institute of Timber Construction 333 W. Hampden Avenue Englewood, CO 80110
AISC	American Institute of Steel Construction 400 North Michigan Avenue Eighth Floor Chicago, IL 60611
AISI	American iron and Steel Institute 1000 16th Street, N.W. Washington, DC 20036
AMCA	Air Movement and Control Association 30 West University Drive Arlington Heights, IL 60004
ANSI	American National Standards Institute 1430 Broadway New York, NY 10018
APA	American Plywood Association Box 11700 Tacoma, WA 98411
ARI	Air-Conditioning and Refrigeration Institute 1815 North Fort Myer Drive Arlington, VA 22209
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers 1791 Tullie Circle, N.E. Atlanta, GA 30329
ASME	American Society of Mechanical Engineers 345 East 47th Street New York, NY 10017
ASPA	American Sod Producers Association Association Building Ninth and Minnesota Hastings, NE 68901

ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235
AWI	Architectural Woodwork Institute 2310 South Walter Reed Drive Arlington, VA 22206
AWPA	American Wood-Preservers' Association 7735 Old Georgetown Road Bethesda, MD 20014
AWS	American Welding Society 550 LeJeune Road Miami, FL 33135
CDA	Copper Development Association 57th Floor, Chrysler Building 405 Lexington Avenue New York, NY 10174
CLFMI	Chain Link Fence Manufacturers Institute 1101 Connecticut Avenue, N.W. Washington, DC 20036
CRSI	Concrete Reinforcing Steel Institute 933 Plum Grove Road Schaumburg, IL 60195
EJMA	Expansion Joint Manufacturers Association 707 Westchester Avenue White Plains, NY 10604
FGMA	Flat Glass Marketing Association 3310 Harrison White Lakes Professional Building Topeka, KS 66611
FM	Factory Mutual System 1151 Boston-Providence Turnpike Norwood, MA 02062
FS	Federal Specification General Services Administration Specifications and Consumer Information Distribution Section (WFSIS) Washington Navy Yard, Building 197 Washington, DC 20407

GA	Gypsum Association 1603 Orrington Avenue Evanston, IL 60201
IEEE	Institute of Electrical and Electronics Engineers 345 East 47th Street New York, NY 10017
IMIAC	International Masonry Industry All-Weather Council International Masonry Institute 815 15th Street, N.W. Washington, DC 20005
MFMA	Maple Flooring Manufacturers Association 2400 East Devon Suite 205 Des Plaines, IL 60018
MIL	Military Specification Naval Publications and Forms Center 5801 Tabor Avenue Philadelphia, PA 19120
ML/SFA	Metal Lath/Steel Framing Association Metal Manufacturers 221 North LaSalle Street Chicago, IL 60601
NAAMM	National Association of Architectural Metal Manufacturers 221 North LaSalle Street Chicago, IL 60601
NEBB	National Environmental Balancing Bureau 8224 Old Courthouse Road Vienna, VA 22180
NEMA	National Electrical Manufacturers' Association 2101 L Street, N.W. Washington, DC 20037
NFPA	National Fire Protection Association Battery March Park Quincy, MA 02269
NFPA	National Forest Products Association 1619 Massachusetts Avenue, N.W. Washington, DC 20036
NSWMA	National Solid Wastes Management Association 1120 Connecticut Avenue, N.W. Washington, DC 20036
NTMA	National Terrazzo and Mosaic Association 3166 Des Plaines Avenue Des Plaines, IL 60018

PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077
PCI	Prestressed Concrete Institute 201 North Wacker Drive Chicago, IL 60606
PS	Product Standard U.S. Department of Commerce Washington, DC 20203
RIS	Redwood Inspection Service One Lombard Street San Francisco, CA 94111
RCSHSB	Red Cedar Shingle and Handsplit Shake Bureau 515 116th Avenue Bellevue, WA 98004
SDI	Steel Deck Institute Box 3812 St. Louis, MO 63122
SDI	Steel Door Institute 712 Lakewood Center North Cleveland, OH 44107
SIGMA	Sealed Insulating Glass Manufacturers Association 111 East Wacker Drive Chicago, IL 60601
SJI	Steel Joist Institute 1703 Parham Road Suite 204 Richmond, VA 23229
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association 8224 Old Court House Road Vienna, VA 22180
SSPC	Steel Structures Painting Council 4400 Fifth Avenue Pittsburgh, PA 15213
TAS	Technical Aids Series Construction Specifications Institute 601 North Madison Street Alexandria, VA 22314
TCA	Tile Council of America, Inc. Box 326 Princeton, NJ 08540

UL	Underwriters' Laboratories, Inc. 333 Pfingston Road Northbrook, IL 60062
WCLIB	West Cost Lumber Inspection Bureau Box 23145 Portland, OR 97223

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

END OF SECTION

SECTION 01120
ALTERATION PROJECT PROCEDURES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedural requirements.
- B. Rehabilitation and renovation of existing spaces and materials.

1.02 RELATED REQUIREMENTS

- A. Section 01005 - Administrative Provisions
- B. Section 01010 – Summary of Work
- C. Section 01045 - Cutting and Patching

PART 2 PRODUCTS

2.01 PRODUCTS FOR PATCHING AND EXTENDING WORK

- A. New Materials: As specified in individual Specification Sections.
- B. Match existing products and work for patching and extending Work.
- C. Determine type and quality of existing products by inspection and any necessary testing, and workmanship by use of existing as a standard. Presence of a product, finish, or type of Work, requires that patching, extending, or matching shall be performed as necessary to make Work complete and consistent with existing quality and Contract Documents.

PART 3 EXECUTION

3.01 GENERAL

- A. Remove existing work, materials and items as indicated on the Drawings, as required by job site conditions, as scheduled, and as specified herein, to accomplish new Work and alteration in the existing building.
- B. Remove work carefully and only to the extent required for the final Work. Minimize damage to adjacent materials.
- C. When portions of existing conditions are shown, it is not meant to indicate that all existing conditions are shown.
- D. Patch existing surfaces which are made defective in appearance or function by the execution of Work.
- E. Cut rigid materials using masonry saw or core drill. Pneumatic tools and electric hammers are not permitted.
- F. Conduct all operations with a minimum of noise.
- G. Take reasonable and adequate precautions to protect the Owner's property from

damage during demolition Work, moving of debris, and damage by the elements. Restore any damage to Owner property due to the aforesaid work or replace in a manner satisfactory to the Contracting Officer.

- H. Provide and maintain suitable barricades, shelters, lights, and danger signals during the progress of the Work. Provide barricades meeting the requirements of the applicable building codes. Assume the responsibility of barriers to completion of Contract and remove at completion of Contract.
- I. Locate penetrations to avoid structural members.

3.02 INSPECTION

- A. Verify that demolition is complete, and areas are ready for installation of new Work.
- B. Beginning of restoration Work means acceptance of existing conditions.

3.03 PREPARATION

- A. Plan all work in advance, informing Contracting Officer of procedure and schedule.
- B. Verify existing conditions affecting Work including existing sizes and materials indicated prior to beginning Work or ordering materials that are affected by existing conditions. Notify Contracting Officer of conflicts in writing.
- C. Erect dust-proof partitions where demolition work is in progress and as directed. Such partitions shall remain in place until their removal is directed.
- D. Where openings are to be cut in existing structures, cut such openings with care. Where materials, equipment, frames, etc., are to be removed, remove such items with care to minimize damage to adjacent materials.
- E. Cut, move, or remove items as necessary for access to alterations and renovations Work; replace and restore at completion.
- F. Cut pockets, openings, chases, depressions, etc., to install or allow for installation of materials or equipment.
- G. Remove from site unsuitable material not marked for salvage, such as rotted wood, rusted metals, and deteriorated masonry and concrete; replace materials as specified for finished Work.
- H. Remove from site, including concealed spaces, debris and abandoned items resulting from demolition operations from the site promptly. No accumulation of debris will be permitted.
- I. Prepare surfaces and remove surface finishes to provide for proper installation of new Work and new finishes.
- J. Close openings in exterior surfaces to protect existing work and salvage items from weather and extremes of temperature and humidity. Insulate ductwork and piping to prevent condensation in exposed areas.

3.04 INSTALLATION

- A. Coordinate Work of alterations and renovations to expedite completion and to accommodate Owner occupancy. Remove, cut, and patch Work in a manner to

minimize damage and to provide means of restoring products and finishes to original condition.

- B. Refinish visible existing surfaces to remain in renovated rooms and spaces with a neat transition to adjacent new finishes.
- C. In addition to specified replacement of equipment restore existing mechanical and electrical systems to full operational condition.
- D. Install products as specified in individual Specification Sections.

3.05 TRANSITIONS

- A. Where new Work abuts or aligns with existing, make a smooth and even transition. Patched Work shall match existing adjacent work in texture and appearance.
- B. When finished surfaces are cut so that a smooth transition with new Work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Contracting Officer.

3.06 ADJUSTMENTS

- A. Where removal of partitions results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads. Where a change of plane of 1/4 inch or more occurs, submit recommendation for providing a smooth transition for Contracting Officer review.
- B. Trim existing doors as necessary to clear new floor finishes; refinish trimmed areas.
- C. Fit Work at penetrations of surfaces as specified in Sections 01005 and 01045.

3.07 REPAIR OF DAMAGED SURFACES

- A. Patch or replace portions of existing surfaces which are disturbed, damaged, or otherwise made defective in appearance or function by the execution of Work under this Contract. Restore to original condition.
- B. Repair substrate prior to patching finish.

3.08 FINISHES

- A. Finish surfaces as specified in individual Sections.
- B. Finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.

3.09 CLEANING

- A. In addition to cleaning specified in Section 01500, clean Owner-occupied areas of Work daily.
- B. After the demolition Work in any area is completed, clean the area before new construction is started.

END OF SECTION

SECTION 01126 - CONTRACTOR'S CERTIFICATION OF SUBCONTRACTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Procedures for preparing, submitting and accepting subcontracts.

1.2 RELATED REQUIREMENTS

- A. Bidding and Contract Requirement Document 00100 - Instructions to Bidders, Requirements of Apparent Low Bidder.
- B. Bidding and Contract Requirement Document 00101 – Supplemental Information to Bidders.
- C. Bidding and Contract Requirement Document 00430 - Subcontractor List
- D. Bidding and Contract Requirement Section 00700 - General Conditions: Article 6.13 - Subcontractors.
- E. Bidding and Contract Requirement Section 00800 – Supplementary Conditions: Paragraph SC-6.13 – Replacing Subcontractors
- F. Section 01300 - Submittals: Submittal Procedures.
- G. Section 01305 – Submittal Register Form.

1.3 SUBMITTALS

- A. Submit under transmittal letter specified in Section 01300 Submittals.
- B. CONTRACTOR shall submit the initial and final Subcontractor Certification Form(s).

1.4 PREPARATION OF CERTIFICATION

- A. CONTRACTOR to prepare and sign certification forms for all subcontractors regardless of subcontract amount (see Section 00700, Paragraph 6.13.1).
- B. Submit certification form to the DEPARTMENT for approval prior to the subcontractor's start of work. Attach additional information to the certification form where required,
- C. Certification Forms: Use only forms provided by the DEPARTMENT.
- D. The DEPARTMENT will reject substitute certification forms.

1.5 CONSIDERATION OF CERTIFICATION

- A. The DEPARTMENT will review each certification form after receipt and within a reasonable period of time, for the following:
 - 1. Completeness, including the attachments.
 - 2. Proper execution (signatures), including the attachments.
 - 3. Contractor restrictions for adding subcontractors, changing subcontractors, and value of contract.
- B. The DEPARTMENT will return any submittals that are incomplete or not properly executed under a transmittal letter denoting the deficiencies found. The CONTRACTOR shall correct and resubmit according to Section 01300 Submittals.
- C. SUBCONTRACTORS NOT APPROVED BY THE DEPARTMENT SHALL NOT BE ALLOWED ON SITE.
- D. The DEPARTMENT will not process payments for work performed by a non-certified subcontractor.

1.6 ACKNOWLEDGEMENT OF CERTIFICATION

- A. Submittals examined by the DEPARTMENT and determined to be complete and properly executed shall be acknowledged as such by the DEPARTMENT on the approval line of the certification form and returned to the CONTRACTOR.

1.7 CHANGES TO APPROVED SUBCONTRACTORS LIST

- A. Deletion or replacement of subcontractors listed on approved form 06D-5, or the addition of subcontractors not listed on approved form 06D-5 shall be in accordance with Bidding and Contract Requirement Document 00101, Supplementary Information to Bidders.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION 01126

STATE OF ALASKA Department of Family & Community Services FMS Facilities	SUBCONTRACTOR CERTIFICATION	

Note: The Contractor shall provide this form for ALL subcontractors working on this project. This form is applicable to all projects, including Small Procurement Contracts, and must be completed in full.

PROJECT: DFCS/DOH AOB_CPB Office Renovations

PROJ. #: ANC 23-23C

PRIME CONTRACTOR: _____

Pursuant to the Contract Documents, we hereby stipulate the following concerning the award of Work to the last Subcontractor on the following list:

1. First Tier Subcontractor: _____ DBE? Yes ☐ No ☐
 Second Tier: _____ DBE? Yes ☐ No ☐
 Third Tier: _____ DBE? Yes ☐ No ☐
 Fourth Tier: _____ DBE? Yes ☐ No ☐
2. Date of Subcontract: _____
3. Amount of Subcontract: \$ _____
4. Scope of Work: _____

5. Are the following documents kept on file by both the Contractor and the Subcontractor (check the appropriate answer)?

EEO-1 Certification (Form 25A304), federally funded projects only	Yes ☐	No ☐
Contract Minimum Wage Schedule	Yes ☐	No ☐
Civil Rights Representative (Form 25A302)	Yes ☐	No ☐
6. Does the Subcontract contain provisions for prompt payment, release of retainage, and interest on late payment and retainage conforming to AS 36.90.210?
 Yes ☐ No ☐
7. Does the Subcontract specifically bind the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the Department and does it contain waiver provisions and termination provisions as required by the Contract Documents?
 Yes ☐ No ☐
8. a. Does the Subcontractor have adequate insurance coverages as specified in the Contract Documents?
 Yes ☐ No ☐
 If not, does the Contractor stipulate that the insurance limits of the Subcontractor are acceptable to the Contractor and that he has notified his insurance carrier of the reduced insurance limits?
 Yes ☐ No ☐
 b. Does the evidence of insurance certify that the policies described thereon comply with all aspects of the insurance requirements for this project?
 Yes ☐ No ☐

Subcontractor Name: _____

c. Does the evidence of insurance list the Department as an "Additional Insured" or "Certificate Holder"?

Yes ☐ No ☐

d. Does the evidence of insurance commit to providing 30 day written notice of cancellation or reduction of any coverage?

Yes ☐ No ☐

e. Insurance Expiration dates:

Comprehensive or Commercial General Liability: _____

Automobile: _____ Workers' Compensation: _____

(Other): _____

9. Copies of the following professional certifications, licenses, and registrations are attached (circle all that apply):

Business License (mandatory)

Contractor License (mandatory)

Land Surveyor's License

Electrical Administrator's License (mandatory for electrical subs)

Mechanical Administrator's License (mandatory for mechanical subs)

Engineer/Architect

Other: _____

10. Exceptions to any of the above are explained as follows: _____

CERTIFICATION (to be completed and signed by PRIME CONTRACTOR): I certify all the above to be true and correct.

CONTRACTOR'S Signature: _____

CONTRACTOR'S Printed Name: _____

CONTRACTOR'S Company: _____

Date: _____

DEPARTMENT'S APPROVAL/DISAPPROVAL

The subject subcontract is **APPROVED**. Nothing in this approval should be construed as relieving the Prime Contractor of the responsibility for complete performance of the work or as a waiver of any right of the Department to reject defective work.

SIGNATURE: _____ **DATE:** _____
Janelle Earls, DFCS Contracting OfficerThe subject subcontract is **NOT APPROVED** for the following reasons:_____
_____**SIGNATURE:** _____ **DATE:** _____
Project Manager

SECTION 01200
PROJECT MEETINGS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. CONTRACTOR participation in preconstruction conferences.
- B. CONTRACTOR administration of progress meetings.

1.02 RELATED REQUIREMENTS

- A. Document 00120 - Supplementary Instructions to Bidders: Pre-Bid Conference.
- B. Section 01010 – Summary of Work: Coordination.
- C. Section 01300 - Submittals: Construction Progress Schedules, Shop drawings, Product data, and Samples.
- D. Section 01400 - Quality Control.
- E. Section 01700 - Contract Closeout: Project Record Documents, Operation and Maintenance Data.

1.03 PRECONSTRUCTION CONFERENCES.

- A. DEPARTMENT will administer preconstruction conference for execution of Contract and exchange of preliminary submittals and review of administrative procedures.
- B. DEPARTMENT will administer site mobilization conference at Project site for clarification of CONTRACTOR responsibilities in use of site and coordination with Using Agency for occupancy throughout the duration of the work. CONTRACTOR shall provide the detailed written work plan in preparation for this meeting.

1.04 PROGRESS MEETINGS

- A. Contractor shall schedule and administer weekly Project meetings throughout progress of the Work (unless this requirement is waived by the Project Manager), and other meetings as required to coordinate work, and preinstallation conferences.
- B. Attendance: Job superintendent, major Subcontractors and Suppliers; DEPARTMENT and Consultants as appropriate to agenda topics for each meeting.
- C. Minimum Required Agenda: Review of Work progress, status of progress schedule and adjustments thereto, Work anticipated in the next week, delivery schedules, submittals, maintenance of quality standards, pending changes and substitutions, and other items affecting progress of Work.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SECTION 01230
ALTERNATES

PART 1 GENERAL

1.01 SUMMARY

- A. This Section includes administrative and procedural requirements for alternates.

1.02 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the Bidding Requirements that may be added to or deducted from the Base Bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.03 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, the owner will notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A Schedule of Alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.01 SCHEDULE OF ALTERNATES

- A. Not Applicable to this project

END OF SECTION

SECTION 01300
SUBMITTALS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures.
- B. Construction Progress Schedules.
- C. Schedule of Values.
- D. Shop Drawings, Product Data, and Samples.
- E. Field Samples.

1.02 RELATED REQUIREMENTS

- A. Section 01010 - Summary of Work.
- B. Section 01027 - Applications for Payment.
- C. Section 01400 - Quality Control: Manufacturers' Field Services, Testing Laboratory Services.
- D. Section 01600 - Material and Equipment: Products List.
- E. Section 01700 - Contract Closeout: Closeout Procedures.

1.03 PROCEDURES

- A. Deliver submittals to DEPARTMENT as directed.
- B. Transmit each item under DEPARTMENT accepted form. Identify Project, CONTRACTOR, Subcontractor, Major Supplier, identify pertinent Drawing sheet and detail number, and Specification section number, as appropriate. Identify deviations from Contract Documents by submitting a DEPARTMENT supplied Substitution Request Form. Provide a minimum of 8 1/2" x 5 1/2" blank space on the front page for CONTRACTOR, and Consultant review stamps.
- C. Submit initial progress schedules and Schedule of Values in five copies in accordance with paragraph SC6.6 of Document 00800 - Supplementary Conditions prior to submitting first Application for Payment. Form and content shall be reviewed by the DEPARTMENT. After review by DEPARTMENT revise and resubmit as required. Submit subsequent updated schedules (10) days prior to each Application for Payment.
- D. Comply with progress schedule for submittals related to Work progress. Coordinate submittal of related items.
- E. After DEPARTMENT review of submittal, revise and resubmit as required, identifying changes made since previous submittal. Provide total number of submittals as required for the first submission, if 6 are required and 4 were returned for revisions, submit 6 again. The DEPARTMENT and Consultants will not return the first or revised copies of rejected submittals for re-use. DO NOT submit partial copies of submittals for incorporation into rejected submittal packages which have been kept by the DEPARTMENT and/or Consultants. Provide COMPLETE copies for each review.
- F. If drawings, product submittals, samples, mock-ups, or other required submittals are incomplete or not properly submitted, the DEPARTMENT will not review the submittal

and will immediately return submittal to CONTRACTOR. DEPARTMENT will review a submittal no more than three times (incomplete or improper submittals count as one). CONTRACTOR shall pay all review costs associated with more than three reviews, unless a resubmittal is required due to new comments addressing previously submitted information.

1.04 CONSTRUCTION PROGRESS SCHEDULES

A. Submit horizontal bar Gantt chart (see below for electronic version requirements). Schedule shall show:

1. Separate bar for each major trade or operation, identifying the duration of each activity and precedent activities.
2. Complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Show each work plan and separate work area as a separate activity or group of activities.
3. Submittal dates for required for Shop Drawings, product data, and samples, and product delivery dates, including those furnished by DEPARTMENT and those under allowances.
4. All required submittals and indicating the date for each required submittal.
5. Show projected percentages of completion for each item of Work and submittal as of time of each Application for Progress Payment. See below for electronic version requirements.
6. **ELECTRONIC VERSION: REQUIRED FOR ALL PROJECTS WHEN THE ORIGINAL CONTRACT AMOUNT IS EQUAL TO OR GREATER THAN \$500,000.00.** Submit Progress Schedule plotted on paper no larger than 24" x 36" and no smaller than 8 1/2" x 11" from the electronic program. Provide in electronic form on CD for IBM and compatible using Microsoft Project 2000 version 9.0. CD will not be returned by the DEPARTMENT.
7. Submit Progress Schedule percentages in Tracking Gantt form plotted from and in electronic form as stated above.

1.05 SCHEDULE OF VALUES

A. FORMAT

1. Form and content must be acceptable to DEPARTMENT.
2. CONTRACTOR's standard form or media-driven printout will be considered on request.
3. Follow table of contents of Project manual for listing component parts. Identify each line item by number and title of listed Specification sections.

B. CONTENT

1. List installed value of each major item of Work and each subcontracted item of Work as a separate line item to serve as a basis for computing values for progress payments. Round off values to nearest dollar.
2. For each major subcontract, list products and operations of that subcontract as separate line items.
3. Coordinate listings with progress schedule.
4. Component listings shall each include a directly proportional amount of

CONTRACTOR's overhead and profit.

5. For items on which payments will be requested for stored products, list sub-values for cost of stored products with taxes paid.
6. Specific line-item Values as indicated below shall be minimum acceptable amounts and must be included on all approved Schedules of Values and Applications for Payment.
 - a. **Section 01700 - Contract Closeout. Value of all required Substantial Completion Submittals and Closeout Submittals shall be not less than 10% of the final contracted amount.**
 - b. No progress payments will be made for Substantial Completion Submittals and Closeout Submittals until **all** submittals have been submitted to and accepted by the DEPARTMENT.
7. The sum of values listed shall equal total Contract Price.

C. SUBMITTAL

1. Submit four copies of Schedule prior to submitting the CONTRACTOR's first Application for Payment. Subsequent updated Schedule of Values shall be presented for review ten days prior to each Application for Payment.
2. Transmit under DEPARTMENT accepted form transmittal letter. Identify Project by DEPARTMENT title and Project number; identify Contract by DEPARTMENT Contract number.

D. SUBSTANTIATING DATA

1. When DEPARTMENT requires substantiating information, submit data justifying line-item amounts in question.
2. Provide one copy of data with cover letter for each copy of the Application for Payment. Show application number and date, and line item by number and description.

1.06 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

A. SHOP DRAWINGS:

1. Present in a clear and thorough manner. Label each Shop Drawing with DEPARTMENT's Project name and Project number; identify each element of the Shop Drawings by reference to sheet number and detail, schedule, or room number of Contract Documents.
2. Identify field dimensions; show relation to adjacent or critical features or Work or products.
3. Minimum Sheet Size: 8-1/2"x11". Larger sheets may be submitted in multiples of 8-1/2"x11".

B. PRODUCT DATA

1. Submit only pages which are pertinent; mark each copy of standard printed data to identify pertinent products, referenced to Specification section and Article number. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.
2. Modify manufacturer's standard schematic drawings and diagrams to supplement standard information and to provide information specifically applicable to the Work.

Delete information not applicable.

C. SAMPLES

1. Submit full range of manufacturer's standard finishes except when more restrictive requirements are specified, indicating colors, textures, and patterns, for DEPARTMENT selection.
2. Submit samples to illustrate functional characteristics of products, including parts and attachments.
3. Approved samples, which may be used in the Work, are indicated in the Specification section.
4. Label each sample with identification required for transmittal letter.
5. Provide field samples of finishes at Project, at location acceptable to DEPARTMENT, as required by individual Specification section. Install each sample complete and finished. Acceptable finishes in place may be retained in completed Work.

D. MANUFACTURER'S INSTRUCTIONS

1. When required in individual Specification Section, submit manufacturer's printed instructions for delivery, storage, assembly, installation start-up, adjusting, and finishing, in quantities specified for product data.
2. Manufacturer's instructions for storage, preparation, assembly, installation, start-up, adjusting, balancing, and finishing under provisions of Section 01400.

E. CONTRACTOR REVIEW

1. Review submittals prior to transmittal; determine and verify field measurements, field construction criteria, manufacturer's catalog numbers, and conformance of submittal with requirements of Contract Documents.
2. Coordinate submittals with requirements of Work and of Contract Documents.
3. Sign or initial each sheet of Shop Drawings and product data, and each sample label to certify compliance with requirements of Contract Documents. Notify DEPARTMENT in writing at time of submittal, of any deviations from requirements of Contract Documents.
4. Do not fabricate products or begin Work that requires submittals until return of submittal with DEPARTMENT acceptance.

F. SUBMITTAL REQUIREMENTS

1. Each submittal to be numbered by Specification Section and Paragraph. Revisions shall be identified by a hyphen after the paragraph, with a letter designator. Example: 1st submittal "01010 1.08A" 2nd submittal 01010 1.08A - A".
2. Transmit submittals in accordance with the required submittal schedule and in such sequence to avoid delay in the Work.
3. Provide 8 1/2" x 5 1/2" blank space on each submittal for CONTRACTOR and Consultant stamps.
4. Apply CONTRACTOR'S stamp, signed or initialed, certifying to review, verification of products, field dimensions and field construction criteria, and coordination of information with requirements of Work and Contract Documents.
5. Coordinate submittals into logical groupings to facilitate interrelation of the several items:

- a. Finishes which involve DEPARTMENT selection of colors, textures, or patterns.
 - b. Associated items that require correlation for efficient function or for installation.
6. Submit number of opaque reproductions of shop drawings CONTRACTOR requires, plus six that will be retained by DEPARTMENT.
7. Submit number of copies of product data and manufacturer's instructions CONTRACTOR requires, plus three copies, which will be retained by DEPARTMENT.
8. Submit number of samples specified in individual Specifications sections.
9. Submit under DEPARTMENT accepted transmittal form letter. Identify Project by title and DEPARTMENT Project number; identify Contract by DEPARTMENT contract number. Identify Work and product by Specification section and Article number.
10. Each submittal shall have as its face document a completed DEPARTMENT furnished Submittal Summary form.
11. Each submittal shall include the manufacturer's name and address, and supplier's name, address and telephone number.

G. RESUBMITTALS

1. After DEPARTMENT review of submittal, revise and resubmit as required, identifying changes made since previous submittal. Provide total number of submittals as required for the first submission, if 6 are required and 4 were returned for revisions, submit 6 again. The DEPARTMENT and Consultants will not return the first or revised copies of rejected submittals for re-use. DO NOT submit partial copies of submittals for incorporation into rejected submittal packages which have been kept by the DEPARTMENT and/or Consultants. Provide COMPLETE copies for each review.

H. DEPARTMENT REVIEW

1. DEPARTMENT or authorized agent will review Shop Drawings, product data, and samples and return submittals within (14) working days.
2. DEPARTMENT or authorized agent will examine shop drawings for general arrangement, overall dimensions, and suitability, and will return to the CONTRACTOR marked as follows.
 - "No Exceptions Taken" - denotes that the submittal generally meets the requirements of the Contract Documents. "No Exceptions Taken" does not indicate a review of the CONTRACTOR's design except for general compliance with the requirements of the Contract Documents.
 - "Make Corrections Noted" - denotes review is conditional on compliance with notes made on the submittal.
 - "Revise and Resubmit" - denotes that revisions are required in the submittal in order for the submittal to be generally consistent with the requirements of the Contract Documents. Required revisions will be

identified to the CONTRACTOR.

- "Rejected" - denotes that the submittal does not meet the requirements of the Contract Documents and shall not be used in the Work. Reasons for rejection will be identified to the CONTRACTOR.

3. Review by the DEPARTMENT of shop and erection drawings shall not be construed as a complete check but will indicate only that the general method of construction and detailing is consistent with the requirements of the Contract Documents. Review of such drawings shall not relieve the CONTRACTOR of the responsibility for errors, dimensions, and detail design.
4. DEPARTMENT will require submittal of all required color and finish samples to approve any on color or finish.

I. DISTRIBUTION

1. Duplicate and distribute reproductions of Shop Drawings, copies of product data, and samples, which bear Consultant's stamp, to job site file, record documents file, Subcontractors, Suppliers, and other entities requiring information.

J. SCHEDULE OF SUBMITTALS

1. Submittal Register Form to be completed by CONTRACTOR and approved by DEPARTMENT prior to submittal of any items.
2. Submit shop drawings, product data and samples as required for each specification section.
3. Format.

a. Submittal schedule form as provided by DEPARTMENT.

1.07 FIELD SAMPLES

- A. Provide field samples of finishes at Project as required by individual Specifications section. Install sample complete and finished. Acceptable samples in place may be retained in completed Work.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SECTION 01400
QUALITY CONTROL

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. General Quality Control.
- B. Workmanship.
- C. Manufacturer's Instructions.
- D. Manufacturer's Certificates.
- E. Mockups.
- F. Manufacturers' Field Services.
- G. Testing Laboratory Services.
- H. Departmental Inspection Services.

1.02 RELATED REQUIREMENTS

- A. Document 00700 - General Conditions: Inspection and testing required by governing authorities.
- B. Section 01010 – Summary of Work: Work Plans and Access to Facility, Individual Work Areas, and Tests required for inspection of the existing roof deck and structural members.
- C. Section 01090 - Reference Standards: Applicability of Reference Standards.
- D. Section 01300 - Submittals: Shop Drawings, Product Data, and Samples

1.03 QUALITY CONTROL, GENERAL

- A. Maintain quality control over Suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.

1.04 WORKMANSHIP

- A. Comply with industry standards except when more restrictive tolerances or specified requirements indicate more rigid standards or more precise workmanship.
- B. Perform Work by persons qualified to produce workmanship of specified quality.
- C. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, and racking.

1.05 MANUFACTURERS' INSTRUCTIONS

- A. Comply with instructions in full detail, including each step in sequence. Should instructions conflict with Contract Documents, request clarification from DEPARTMENT before proceeding.

1.06 MANUFACTURERS' CERTIFICATES

- A. When required by individual Specifications section, submit manufacturer's certificate, in duplicate, that products meet or exceed specified requirements.

1.07 MOCKUPS

- A. When required by individual Specifications section, erect complete, full-scale mockup of assembly at site, perform required tests, and remove mockup at completion, when approved by DEPARTMENT.

1.08 MANUFACTURERS' FIELD SERVICES

- A. When required by manufacturer or when specified in respective Specification sections, require manufacturer to provide qualified personnel to observe field conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment as applicable, and to make appropriate recommendations.
- B. Require manufacturer's representative to submit written report to DEPARTMENT listing observations and recommendations.

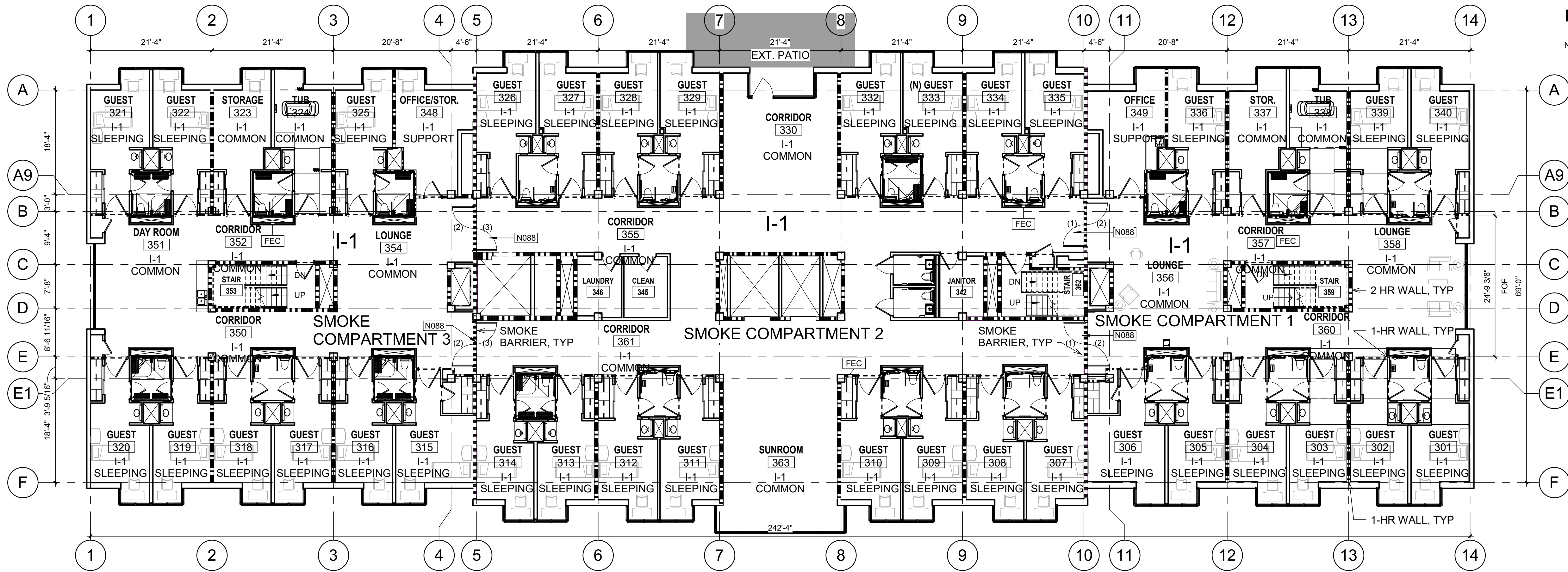
PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

ANCHORAGE PIONEER HOME ANC 23-26C RESIDENT RENOVATIONS

DATE: 03/20/2023

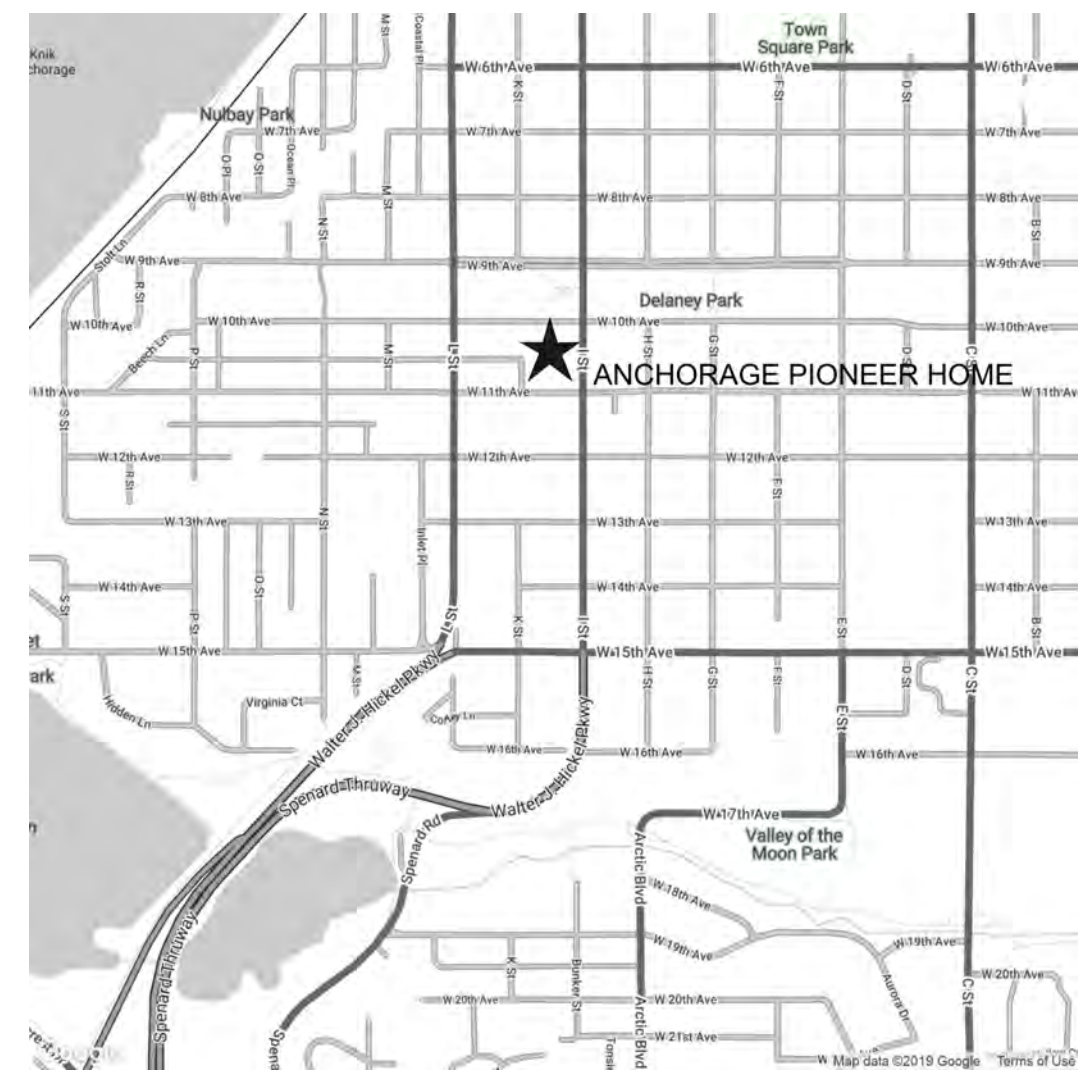


① 3RD FLOOR CODE PLAN
3/32" = 1'-0"

LOCATION MAP



VICINITY MAP



DRAWING INDEX

GENERAL SHEETS		ARCHITECTURAL SHEETS		ELECTRICAL SHEETS	
G0	ANCHORAGE PIONEER HOME	A11.1	3RD FLOOR FINISH PLAN & SCHEDULES	E0.1	ELECTRICAL LEGEND AND SCHEDULES
G0.0	PROJECT INFORMATION & CODE PLAN	A12.1	DOOR SCHEDULE	E0.2	ELECTRICAL SPECIFICATIONS
HAZARDS ABATEMENT SHEETS		MECHANICAL SHEETS		E1.1	ELECTRICAL DEMOLITION PLAN AREA 1
H0.1	HAZARDS ABATEMENT GENERAL NOTES SHEET NOTES	M1.0	MECHANICAL LEGEND AND NOTES	E1.2	ELECTRICAL DEMOLITION PLAN AREA 2
H1.0	HAZARDS ABATEMENT 3RD FLOOR PLAN	M1.1	MECHANICAL EQUIPMENT SCHEDULES	E1.3	ELECTRICAL DEMOLITION PLAN AREA 3
ARCHITECTURAL SHEETS		M1.2	AS-BUILT REFERENCE THIRD FLOOR	E2.1	ELECTRICAL REMODEL PLAN - AREA 1
A1.1	CODE SUMMARY	M1.3	AS-BUILT REFERENCE TYPICAL AREA PLANS AND VIEWS	E2.2	ELECTRICAL REMODEL PLAN - AREA 2
A1.2	ABBREVIATIONS, SYMBOL LEGEND, WALL AND PARTITION TYPES	M2.0	REFERENCE PLAN, FOURTH FLOOR, THIS PROJECT	E2.3	ELECTRICAL REMODEL PLAN - AREA 3
A2.0	3RD FLOOR PLAN - DEMOLITION	M2.1	MECHANICAL PLAN, THIRD FLOOR WEST, DEMOLITION	E3.1	ELECTRICAL PANEL SCHEDULES
A2.1	3RD FLOOR - TYPICAL ENLARGED GUEST ROOM DEMOLITION PLANS	M2.2	MECHANICAL PLAN, THIRD FLOOR CENTER, DEMOLITION		
A2.2	3RD FLOOR PLAN - NEW	M2.3	MECHANICAL PLAN, THIRD FLOOR EAST, DEMOLITION		
A2.3	3RD FLOOR - TYPICAL ENLARGED PLANS - BASE BID	M2.4	MECHANICAL PLAN, THIRD FLOOR WEST, NEW WORK		
A2.4	3RD FLOOR - TYPICAL ENLARGED PLANS - BASE BID	M2.5	MECHANICAL PLAN, THIRD FLOOR CENTER, NEW WORK		
A3.1	INTERIOR ELEVATIONS & MISC DETAILS	M2.6	MECHANICAL PLAN, THIRD FLOOR EAST, NEW WORK		
A9.1	3RD FLOOR REFLECTED CEILING - DEMOLITION AND NEW	M3.1	TYPICAL VARIANT 1 AREA PLANS, VIEWS		
		M3.2	TYPICAL VARIANT 2 AREA PLANS, VIEWS		
		M3.3	VARIANT 3 AREA PLANS, VIEWS		
		M3.4	VARIANT 4 AREA PLANS, VIEWS		

GENERAL NOTES

1.

THE HAZARDS ABATEMENT PORTION OF THIS PROJECT INCLUDES THE DISTURBANCE AND/OR REMOVAL AND DISPOSAL OF SELECTED ASBESTOS-CONTAINING MATERIALS, POLYCHLORINATED BIPHENYL (PCB) CONTAINING LIGHT BALLASTS, MERCURY-CONTAINING MATERIALS, LEAD-CONTAINING MATERIALS AND ITEMS CONTAINING RADIOACTIVE COMPOUNDS. THE PURPOSE OF THE HAZARDS ABATEMENT PORTION OF THE WORK IS TO REMOVE THESE MATERIALS FROM THE THIRD FLOOR OF THE MAIN TOWER OF THE ANCHORAGE PIONEER HOME PRIOR TO RENOVATION OR DEMOLITION SO THAT PERSONNEL CAN SAFELY PERFORM THEIR WORK WITHOUT CREATING HAZARDS TO HEALTH OR THE ENVIRONMENT.
2.

THE WORK DOES NOT INCLUDE REMOVAL OF ALL HAZARDOUS MATERIALS IN THE BUILDING. REMOVE HAZARDOUS MATERIALS COORDINATING WITH OTHER TRADES, AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS, OUTLINED IN THE SPECIFICATIONS, AND AS REQUIRED TO COMPLETE THE WORK. "REMOVAL" INCLUDES PROPER HANDLING, PACKAGING AND DISPOSAL OF MATERIALS REMOVED.
3.

POTENTIALLY HAZARDOUS MATERIALS SUCH AS MERCURY-CONTAINING LAMPS, SMOKE DETECTORS CONTAINING RADIOACTIVE COMPONENTS, METALLIC LEAD ITEMS, REFRIGERANTS, HEATING SYSTEM FLUIDS AND PCB CONTAINING BALLASTS AFFECTED BY THE PROJECT ARE TO BE REMOVED AND DISPOSED OF PROPERLY. REFER TO SPECIFICATIONS AND THE CONTRACTOR'S APPROVED WORK PLAN FOR HAZARDOUS MATERIALS REMOVAL, DISTURBANCE, CLEARANCE, AND DISPOSAL PROCEDURES.
4.

LEAD-BASED PAINTS (PAINT CONTAINING EQUAL TO OR GREATER THAN 1.0 mg/cm²) WERE NOT IDENTIFIED DURING THE LIMITED LEAD TESTING SHOWN IN THE HAZMAT SURVEY, BUT CERAMIC AND FORMICA MATERIALS DID HAVE LEAD CONTENT AT LEVELS EXCEEDING 1.0 mg/cm2. LEAD-BASED PAINTS MAY BE PRESENT AT OTHER LOCATIONS NOT TESTED. LOW LEVELS OF LEAD FOUND BY XRF TESTING DOES NOT MEAN THE PAINTS ARE FREE OF LEAD. THE PAINTS MAY CONTAIN MEASURABLE AMOUNTS OF LEAD. LEAD-CONTAINING MATERIALS INCLUDE ALL PAINTED SURFACES, CERAMIC TILES, AND METALLIC LEAD, AS WELL AS LEAD-CONTAINING DUSTS. THIS IS NOT A LEAD ABATEMENT PROJECT, AND ALL TRADES WILL LIKELY DISTURB SOME LEAD-CONTAINING MATERIALS. CONTROL WORKER EXPOSURES USING LEAD-SAFE WORK PRACTICES AND CHOICE OF MEANS AND METHODS OF CONDUCTING THE WORK TO COMPLY WITH 29 CFR 1926.62 AND TO AVOID CONTAMINATION OF THE WORK AREA AND SITE.
5.

PERFORM INITIAL AIR MONITORING TESTS ON ALL TASKS THAT DISTURB ASBESTOS OR LEAD-CONTAINING MATERIALS, DUST OR PAINT TO DETERMINE THE APPROPRIATE WORKER AND SITE PROTECTION PROCEDURES REQUIRED. DUE TO THE AGE OF THE BUILDING, METALLIC LEAD IS ASSUMED PRESENT IN BELL AND SPIGOT PIPE JOINTS AND IN SOLDER ON COPPER PIPES.
6.

SETTLED AND CONCEALED DUST ON ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND MECHANICAL COMPONENTS THROUGHOUT THE PROJECT AREA(S) IS ASSUMED TO CONTAIN REGULATED AIR CONTAMINANTS INCLUDING ASBESTOS AND LEAD. WORK OF ALL TRADES MAY INCLUDE DISTURBANCE OF ASBESTOS AND LEAD AND MAY RESULT IN WORKER EXPOSURE TO ASBESTOS AND LEAD ABOVE THE OSHA ACTION LEVEL OR PERMISSIBLE EXPOSURE LIMITS FOR ASBESTOS OR LEAD IF PROPER WORK PRACTICES AND/OR ENGINEERING CONTROLS ARE NOT USED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHOOSE APPROPRIATE WORKER AND SITE PROTECTION PROCEDURES SO THAT THEIR WORKERS ARE NOT EXPOSED ABOVE THOSE LIMITS AND THAT WORK IS PERFORMED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. THE PRESENCE OF ASBESTOS OR LEAD IN DUSTS DOES NOT NECESSARILY MAKE THEM A HAZARD TO WORKERS OR A HAZARDOUS WASTE.
7.

THE CONTRACTOR'S INDEPENDENT LABORATORY SHALL PROVIDE ALL INSPECTIONS, MONITORING, SAMPLING, ANALYSES AND REPORTING SERVICES AS SPECIFIED. CLEARANCE AIR MONITORING SHALL BE CONDUCTED IN ACCORDANCE WITH 40 CFR 763. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION ON SAMPLING.
8.

LOCATIONS OF MATERIALS SHOWN ON THESE DRAWINGS ARE SCHEMATIC AND APPROXIMATE. FIELD VERIFY AND COORDINATE CONSTRUCTION DETAILS, DIMENSIONS, WORK CONDITIONS, AND LOCATIONS WHICH WILL AFFECT THE REMOVAL OR DISTURBANCE OF HAZARDOUS MATERIALS. HAZARDOUS MATERIALS MAY HAVE COME LOOSE AND FALLEN ONTO FLOORS, CEILINGS, CHASES, OR WALL CAVITIES. THE QUANTITIES SHOWN IN THE SHEET SUMMARY ARE APPROXIMATE AND MAY VARY DEPENDING ON THE CONTRACTOR'S MEANS AND METHODS. REQUIRE ALL TRADES TO COORDINATE WITH EACH OTHER AND TO CONDUCT THEIR WORK TO PREVENT WORKER EXPOSURE OR SITE CONTAMINATION. SEE DRAWINGS OF ALL DISCIPLINES FOR ADDITIONAL INFORMATION RELATING TO HAZARDOUS MATERIALS. IMMEDIATELY COMMUNICATE ALL DISCREPANCIES IN QUANTITIES TO THE OWNER. REFER TO HAZARDOUS MATERIALS ASSESSMENT FOR MORE INFORMATION ABOUT POTENTIALLY HAZARDOUS MATERIALS THAT ARE NOT SCHEDULED FOR DISTURBANCE BY THIS PROJECT. FURNISH ALL WORK AND MATERIALS REQUIRED FOR A FINISHED PROJECT AS DESCRIBED IN THE CONTRACT DOCUMENTS. QUANTITIES LISTED WITH A * MAY VARY DEPENDING ON THE CONTRACTOR'S MEANS AND METHODS. CONTRACTOR'S MEANS AND METHODS RESULTING IN ADDITIONAL MATERIALS REMOVAL SHALL NOT RESULT IN ADDED CONTRACT COSTS TO THE OWNER.
9.

PROVIDE ALL WASTE TESTING, PACKAGING, HANDLING, TRANSPORTATION AND DISPOSAL. ALL COSTS FOR DISPOSAL SHALL BE BORNE BY THE CONTRACTOR. PERFORM TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP) TEST(S) OF WASTE(S) CONTAINING LEAD OR PAINTED WITH LEAD-CONTAINING PAINT TO CHARACTERIZE THE WASTE(S) AS HAZARDOUS OR NON-HAZARDOUS PRIOR TO DISPOSAL. PERFORM TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP) TEST(S) OF HEAT TRANSFER FLUIDS (GLYCOL OR WATER) IN HEATING SYSTEM TO CHARACTERIZE THE WASTE(S) AS HAZARDOUS OR NON-HAZARDOUS PRIOR TO DISPOSAL. COORDINATE REQUIREMENTS OF LANDFILL(S) REGARDING MATERIALS PACKAGING, HANDLING, AND DISPOSAL REQUIREMENTS PRIOR TO SUBMITTING BID.
10.

REFER TO THE DEDUCTIVE ALTERNATES SHOWN BY DRAWINGS AND DESCRIPTIONS OF OTHER TRADES. COORDINATE QUANTITIES, LOCATIONS, OF HAZARDS ABATEMENT WITH ALL TRADES.

SHEET NOTES

- HAZARDS ABATEMENT DRAWINGS DO NOT SHOW ALL DETAILS OF WORK REQUIRED. ALL TRADES SHALL EXAMINE DRAWINGS OF OTHER TRADES AND COORDINATE WITH EACH OTHER TO DETERMINE EXTENT, TIMING AND LOCATIONS OF MATERIALS AFFECTED BY THE PROJECT.
- 1

REMOVE ASBESTOS-CONTAINING SHEET VINYL AND COMPLETELY REMOVE ASBESTOS-CONTAINING OR CONTAMINATED MASTIC.
- 2

REMOVE OR DISTURB CERAMIC TILE FLOORING OVER REMNANTS OF ASBESTOS-CONTAINING SHEET VINYL BACKING ONLY AS NECESSARY TO COMPLETE THE WORK.
- 3

REMOVE GYPSUM WALL BOARD WITH ASBESTOS-CONTAINING JOINT COMPOUND AT WALLS AND CEILINGS OF BATHROOMS AND PORTIONS OF GUEST ROOMS. ALL WALLS BUT THE SIDE OPPOSITE THE SHOWER AND TOILET IN THE PHASE II AREA HAVE AN ASBESTOS-CONTAINING MASTIC HOLDING ON THE ORIGINAL "MARLITE" WALL COVERING (WHICH IS COVERED WITH NEWER FIBER REINFORCED PLASTIC (FRP) PANELS.
- 4

CREATE PENETRATIONS AND REMOVE GYPSUM WALL BOARD ON WALLS WITH ASBESTOS-CONTAINING JOINT COMPOUND AS NECESSARY TO ACCESS AND ACCOMPLISH THE WORK SHOWN BY OTHER TRADES. ORIGINAL GYPSUM WALL BOARD WALLS AND CEILINGS WITH ASBESTOS JOINT COMPOUND ARE ONLY SHOWN WHERE ANTICIPATED TO REQUIRE DISTURBANCE. APPLY BRIDGING ENCAPSULANT TO CUT EDGES, SO THAT NO ADDITIONAL DISTURBANCE OF THE GYPSUM BOARD IS NECESSARY BY OTHER TRADES. EXACT EXTENT OF REMOVAL NOT SHOWN HERE, BUT INCLUDES BOTH WALLS AND CEILINGS FOR PIPING, DUCTWORK, AND ELECTRICAL, ETC. PLUMBING WORK INCLUDES 2 RISERS BEING INSTALLED IN CHASES NEAR GRIDS C-4 AND C-11 FROM THE 3RD FLOOR TO THE 1ST FLOOR.
- 5

REMOVE OR DISTURB ASBESTOS-CONTAINING TAN OR GRAY/GREEN MASTIC HOLDING CEILING GRID "L" CHANNELS TO BRICK, CONCRETE OR GYPSUM BOARD WALLS ONLY AS NECESSARY TO COMPLETE THE WORK. COORDINATE EXTENT WITH OTHER TRADES.
- 6

REMOVE LIGHT FIXTURE WITH ASBESTOS-CONTAINING WIRING AND/OR ASBESTOS-CONTAINING HEAT SHIELD.
- 7

REMOVE EPOXY-GRIT FLOORING, AND COMPLETELY REMOVE REMNANTS OF ASBESTOS-CONTAINING SHEET VINYL FLOORING AND MASTICS, INCLUDING AT SELF COVING BASE.
- 8

AVOID DISTURBANCE OF ASBESTOS-CONTAINING LIGHT TAN MASTIC AT SHEET METAL TRIM AT PERIMETER OF CEILING TO WALL CONNECTION IN PHASE II AREAS.
- 9

REMOVE ASBESTOS-CONTAINING BROWN MASTIC HOLDING MIRRORS TO GYPSUM WALL BOARD IN PHASE II AREAS.
- 10

AVOID DISTURBANCE OF CEMENT ASBESTOS BOARD INSULATED SANDWICH PANELS ABOVE AND BELOW WINDOWS, AND OTHER MATERIALS IDENTIFIED IN THE HAZARDOUS MATERIALS ASSESSMENT. NOT SHOWN HERE, NOT LIKELY TO BE AFFECTED BY THE WORK. REFER TO 02 26 00 HAZARDOUS MATERIALS ASSESSMENT FOR ADDITIONAL INFORMATION.
- 11

REMOVE FLUORESCENT LIGHT FIXTURES WITH PCB-CONTAINING BALLASTS AND MERCURY-CONTAINING LIGHT TUBES. PCB-CONTAINING BALLASTS TYPICALLY FOUND AT 2 FOOT LONG LIGHTS ABOVE THE SINKS. NOT SHOWN HERE, COORDINATE WITH OTHER TRADES.
- 12

REMOVE INCANDESCENT LIGHTS WITH ASBESTOS-CONTAINING "PIGTAIL" WIRING INSULATION AND/OR ASBESTOS-CONTAINING HEAT SHIELDS.
- 13

REMOVE SINK WITH ASBESTOS-CONTAINING UNDERCOATING.

LEGEND

- REMOVAL OF ASBESTOS-CONTAINING SHEET VINYL FLOORING AND COMPLETE REMOVAL OF ASBESTOS-CONTAMINATED MASTIC.
- AVOID DISTURBANCE OF NEWER CERAMIC TILE FLOORING OVER REMNANTS OF ASBESTOS-CONTAINING SHEET VINYL BACKING.
- REMOVAL(BOLD) OR DISTURB AS NECESSARY (SHADED) GYPSUM WALL BOARD CEILINGS WITH ASBESTOS-CONTAINING JOINT COMPOUND.
- REMOVAL OF GYPSUM WALL BOARD WITH ASBESTOS-CONTAINING JOINT COMPOUND AT WALLS. BATHROOM WALLS IN PHASE II, 1975 ERA ALSO HAVE ASBESTOS-CONTAINING MASTIC TO MARLITE. COORDINATE EXTENT OF GWB REMOVAL AT WALLS TO FACILITATE WORK FOR MECHANICAL DUCTS, MISCELLANEOUS PENETRATIONS, ETC. FOR MECHANICAL AND ELECTRICAL WORK OFTEN NOT SHOWN. GYPSUM WALL BOARD HAS ASBESTOS-CONTAINING JOINT COMPOUND THROUGHOUT THE 3RD FLOOR.
- INCANDESCENT LIGHT WITH ASBESTOS -CONTAINING HEAT SHIELD AND/OR ASBESTOS INSULATED WIRING TO BE REMOVED.
- SINK WITH ASBESTOS-CONTAINING UNDERCOATING TO REMAIN AND BE DISTURBED ONLY AS NECESSARY TO COMPLETE THE WORK.

ESTIMATED QUANTITIES TO BE REMOVED (ENTIRE PROJECT)

INCIDENTAL QUANTITIES OF MATERIALS, INCLUDING LEAD-CONTAINING MATERIALS, THAT ARE REQUIRED TO BE REMOVED TO COMPLETE THE WORK, BUT OTHERWISE ARE TO REMAIN, ARE NOT INCLUDED HERE, AS THEY WILL VARY DEPENDING ON THE CONTRACTOR'S CHOICE OF MEANS AND METHODS.

- 6,660

SQUARE FEET OF GYPSUM WALLBOARD WITH ASBESTOS-CONTAINING JOINT COMPOUND, INCLUDING 2 BATHROOMS WHERE GWB IS COVERED WITH CERAMIC TILE
- 150*

ALLOWANCE OF SQUARE FEET FOR MINOR DISTURBANCE OF GYPSUM WALLBOARD WITH ASBESTOS-CONTAINING JOINT COMPOUND IN PREVIOUSLY RENOVATED ROOMS
- 250

SQUARE FEET OF ASBESTOS-CONTAINING SHEET VINYL AND MASTIC
- 120

SQUARE FEET OF ASBESTOS-CONTAINING SHEET VINYL REMNANTS COVERED BY EPOXY FLOORING, INCLUDING COVING
- 20*

ALLOWANCE OF SQUARE FEET OF MINOR DISTURBANCE OF CERAMIC FLOORING WITH REMNANTS OF ASBESTOS-CONTAINING SHEET VINYL AND MASTIC
- 35*

ALLOWANCE OF LINEAR FEET FOR DISTURBANCE OF ASBESTOS-CONTAINING "L" CHANNEL CEILING GRID MASTIC
- 2

INCANDESCENT LIGHTS WITH ASBESTOS-CONTAINING HEAT SHIELDS AND WIRE INSULATION AT PIG-TAILS
- 9

INCANDESCENT LIGHTS WITH ASBESTOS-CONTAINING WIRE INSULATION AT PIG-TAILS
- 1

LOT ASBESTOS-CONTAINING GASKETS AND VALVE PACKINGS ON PIPING
- 120

MERCURY-CONTAINING FLUORESCENT LAMPS AND COMPACT FLUORESCENT LAMPS
- 0*

SELF ILLUMINATING EXIT RADIOACTIVE SIGNS
- 0*

EMERGENCY LIGHTS OR OTHER EQUIPMENT WITH UNIVERSAL WASTE BATTERIES
- 7

FLUORESCENT LIGHTS WITH PCB-CONTAINING BALLASTS

NOTIFICATION OF POTENTIAL HAZARDS

ASBESTOS, LEAD, AND OTHER HAZARDOUS MATERIALS ARE PRESENT IN THE BUILDING AND MAY IMPACT THE WORK OF ALL TRADES. REGULATED AIR CONTAMINANTS, INCLUDING ASBESTOS AND LEAD, ARE ALSO PRESENT IN SETTLED AND CONCEALED DUST IN AND ON ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS OR SYSTEMS THROUGHOUT THE BUILDING. ALL TRADES SHALL COORDINATE WITH OTHER TRADES AND CONDUCT THEIR WORK TO PREVENT WORKER EXPOSURE OR SITE CONTAMINATION. REFER TO SPECIFICATION DIVISIONS 0, 1, AND 2 FOR SPECIFIC INFORMATION CONCERNING DISTURBING, REMOVING, AND DISPOSING OF THESE MATERIALS AND THE INSTALLATION OF NEW MATERIALS OR COMPONENTS. THIS NOTIFICATION IS PROVIDED IN ACCORDANCE WITH EPA AND OSHA REQUIREMENTS.



Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Revisions:

Drawn By:

JHL

Checked By:

RAF

Date:

03-20-2023

Phase:

PERMIT DOCUMENTS

Job No:

SHEET TITLE:

HAZARDS ABATEMENT
GENERAL NOTES
SHEET NOTES AND
ESTIMATED
QUANTITIES

SHEET NO:

H0.1

LEGEND

- REMOVAL OF ASBESTOS-CONTAINING SHEET VINYL FLOORING AND COMPLETE REMOVAL OF ASBESTOS-CONTAMINATED MASTIC.
- AVOID DISTURBANCE OF NEWER CERAMIC TILE FLOORING OVER REMNANTS OF ASBESTOS-CONTAINING SHEET VINYL BACKING.
- REMOVAL(BOLD) OR DISTURB AS NECESSARY (SHADED) GYPSUM WALL BOARD CEILINGS WITH ASBESTOS-CONTAINING JOINT COMPOUND.
- REMOVAL OF GYPSUM WALL BOARD WITH ASBESTOS-CONTAINING JOINT COMPOUND AT WALLS . BATHROOM WALLS IN PHASE II, 1975 ERA ALSO HAVE ASBESTOS-CONTAINING MASTIC TO MARLITE. COORDINATE EXTENT OF GWB REMOVAL AT WALLS TO FACILITATE WORK FOR MECHANICAL DUCTS. MISCELLANEOUS PENETRATIONS, ETC. FOR MECHANICAL AND ELECTRICAL WORK OFTEN NOT SHOWN. GYPSUM WALL BOARD HAS ASBESTOS-CONTAINING JOINT COMPOUND THROUGHOUT THE 3RD FLOOR.
- A

INCANDESCENT LIGHT WITH ASBESTOS -CONTAINING HEAT SHIELD AND/OR ASBESTOS INSULATED WIRING TO BE REMOVED.
- SINK WITH ASBESTOS-CONTAINING UNDERCOATING TO REMAIN AND BE DISTURBED ONLY AS NECESSARY TO COMPLETE THE WORK.

SHEET NOTES

- HAZARDS ABATEMENT DRAWINGS DO NOT SHOW ALL DETAILS OF WORK REQUIRED. ALL TRADES SHALL EXAMINE DRAWINGS OF OTHER TRADES AND COORDINATE WITH EACH OTHER TO DETERMINE EXTENT, TIMING AND LOCATIONS OF MATERIALS AFFECTED BY THE PROJECT.
- 1

REMOVE ASBESTOS-CONTAINING SHEET VINYL AND COMPLETELY REMOVE ASBESTOS-CONTAINING OR CONTAMINATED MASTIC.
- 2

REMOVE OR DISTURB CERAMIC TILE FLOORING OVER REMNANTS OF ASBESTOS-CONTAINING SHEET VINYL BACKING ONLY AS NECESSARY TO COMPLETE THE WORK.
- 3

REMOVE GYPSUM WALL BOARD WITH ASBESTOS-CONTAINING JOINT COMPOUND AT WALLS AND CEILINGS OF BATHROOMS AND PORTIONS OF GUEST ROOMS ALL WALLS BUT THE SIDE OPPOSITE THE SHOWER AND TOILET IN THE PHASE II AREA HAVE AN ASBESTOS-CONTAINING MASTIC HOLDING ON THE ORIGINAL "MARLITE" WALL COVERING (WHICH IS COVERED WITH NEWER FIBER REINFORCED PLASTIC (FRP) PANELS.
- 4

CREATE PENETRATIONS AND REMOVE GYPSUM WALL BOARD ON WALLS WITH ASBESTOS-CONTAINING JOINT COMPOUND AS NECESSARY TO ACCESS AND ACCOMPLISH THE WORK SHOWN BY OTHER TRADES. ORIGINAL GYPSUM WALL BOARD WALLS AND CEILINGS WITH ASBESTOS JOINT COMPOUND ARE ONLY SHOWN WHERE ANTICIPATED TO REQUIRE DISTURBANCE. APPLY BRIDGING ENCAPSULANT TO CUT EDGES. SO THAT NO ADDITIONAL DISTURBANCE OF THE GYPSUM BOARD IS NECESSARY BY OTHER TRADES. EXACT EXTENT OF REMOVAL NOT SHOWN HERE. BUT INCLUDES BOTH WALLS AND CEILINGS FOR PIPING, DUCTWORK, AND ELECTRICAL, ETC. PLUMBING WORK INCLUDES 2 RISERS BEING INSTALLED IN CHASES NEAR GRIDS C-4 AND C-11 FROM THE 3RD FLOOR TO THE 1ST FLOOR.
- 5

REMOVE OR DISTURB ASBESTOS-CONTAINING TAN OR GRAY/GREEN MASTIC HOLDING CEILING GRID "L" CHANNELS TO BRICK, CONCRETE OR GYPSUM BOARD WALLS ONLY AS NECESSARY TO COMPLETE THE WORK. COORDINATE EXTENT WITH OTHER TRADES.
- 6

REMOVE LIGHT FIXTURE WITH ASBESTOS-CONTAINING WIRING AND/OR ASBESTOS-CONTAINING HEAT SHIELD.
- 7

REMOVE EPOXY-GRIT FLOORING, AND COMPLETELY REMOVE REMNANTS OF ASBESTOS-CONTAINING SHEET VINYL FLOORING AND MASTICS, INCLUDING AT SELF COVING BASE.
- 8

AVOID DISTURBANCE OF ASBESTOS-CONTAINING LIGHT TAN MASTIC AT SHEET METAL TRIM AT PERIMETER OF CEILING TO WALL CONNECTION IN PHASE II AREAS.
- 9

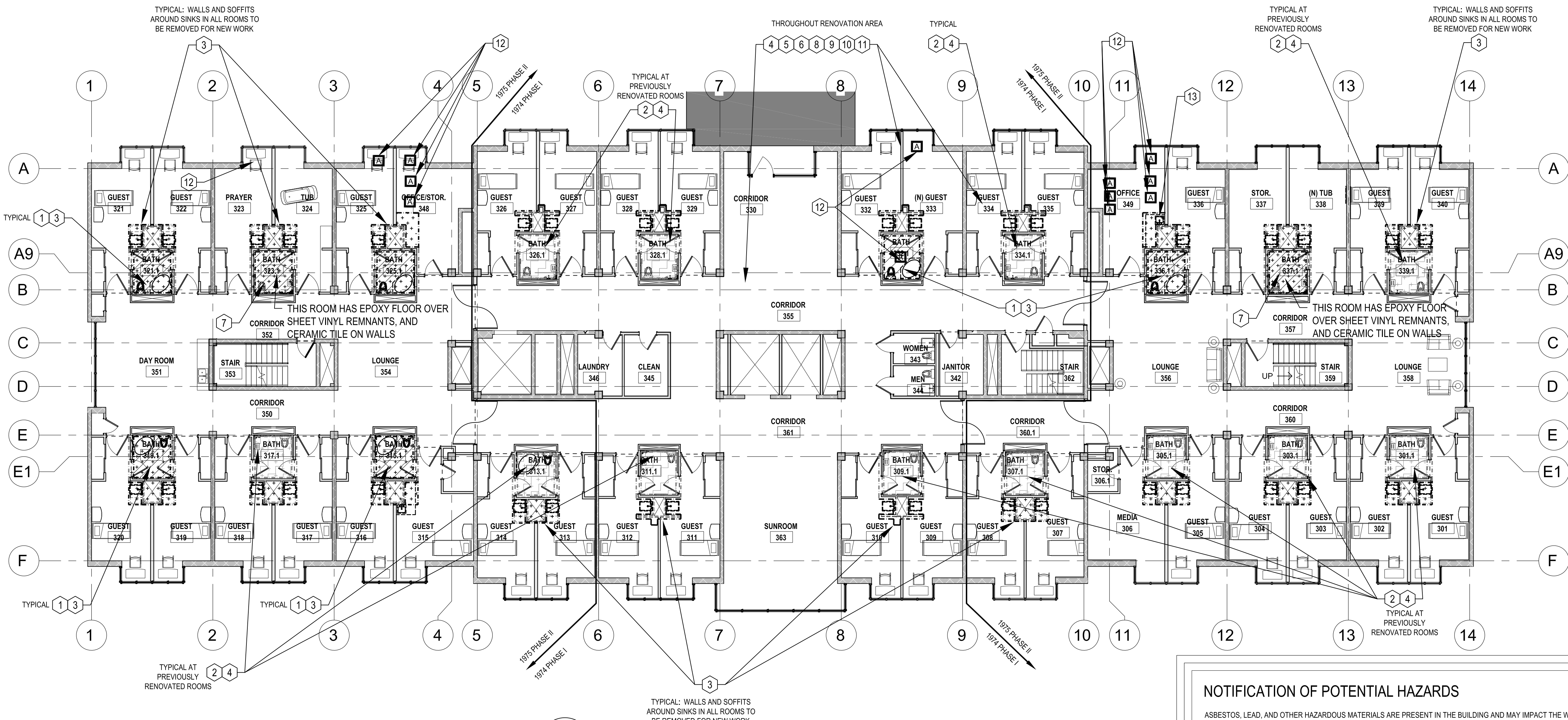
REMOVE ASBESTOS-CONTAINING BROWN MASTIC HOLDING MIRRORS TO GYPSUM WALL BOARD IN PHASE II AREAS.
- 10

AVOID DISTURBANCE OF CEMENT ASBESTOS BOARD INSULATED SANDWICH PANELS ABOVE AND BELOW WINDOWS, AND OTHER MATERIALS IDENTIFIED IN THE HAZARDOUS MATERIALS ASSESSMENT. NOT SHOWN HERE, NOT LIKELY TO BE AFFECTED BY THE WORK. REFER TO 02 26 00 HAZARDOUS MATERIALS ASSESSMENT FOR ADDITIONAL INFORMATION.
- 11

REMOVE FLUORESCENT LIGHT FIXTURES WITH PCB-CONTAINING BALLASTS AND MERCURY-CONTAINING LIGHT TUBES. PCB-CONTAINING BALLASTS TYPICALLY FOUND AT 2 FOOT LONG LIGHTS ABOVE THE SINKS. NOT SHOWN HERE, COORDINATE WITH OTHER TRADES.
- 12

REMOVE INCANDESCENT LIGHTS WITH ASBESTOS-CONTAINING "PIGTAIL" WIRING INSULATION AND/OR ASBESTOS-CONTAINING HEAT SHIELDS.
- 13

REMOVE SINK WITH ASBESTOS-CONTAINING UNDERCOATING.



NOTIFICATION OF POTENTIAL HAZARDS

ASBESTOS, LEAD, AND OTHER HAZARDOUS MATERIALS ARE PRESENT IN THE BUILDING AND MAY IMPACT THE WORK OF ALL TRADES. REGULATED AIR CONTAMINANTS, INCLUDING ASBESTOS AND LEAD, ARE ALSO PRESENT IN SETTLED AND CONCEALED DUST IN AND ON ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS OR SYSTEMS THROUGHOUT THE BUILDING. ALL TRADES SHALL COORDINATE WITH OTHER TRADES AND CONDUCT THEIR WORK TO PREVENT WORKER EXPOSURE OR SITE CONTAMINATION. REFER TO SPECIFICATION DIVISIONS 0, 1, AND 2 FOR SPECIFIC INFORMATION CONCERNING DISTURBING, REMOVING, AND DISPOSING OF THESE MATERIALS AND THE INSTALLATION OF NEW MATERIALS OR COMPONENTS. THIS NOTIFICATION IS PROVIDED IN ACCORDANCE WITH EPA AND OSHA REQUIREMENTS.

STATE OF ALASKA
49 TH
REGISTERED PROFESSIONAL
Robert A. French
3-20-2023
No. ME123

EHS ALASKA
INCORPORATED

ENGINEERING, HEALTH & SAFETY CONSULTANTS
11901 Business Blvd, Suite 200,
Eagle River, AK 99577-7701
PH: 907-494-1383 FAX: 907-494-1382
LICENSING# ABC0689 www.ehs-alaska.com

Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Revisions:

Drawn By: JHL
Date: 03-20-2023

Checked By: RAF

Phase: PERMIT DOCUMENTS

Job No:

SHEET TITLE: HAZARDS ABATEMENT 3RD FLOOR PLAN

SHEET NO: H1.0

Code Summary

The following Codes and Standards are provided for general reference and are the basis for this document. Per discussions with the Muni the 2018 IBC will be used for the occupancy classification due to the refined definitions for the I-1 condition 2 occupancy types. The 2018 includes condition 1 and condition 2 under the occupancy type to describe the abilities of the occupants to respond to and exit the building during an emergency.

Codes

International Building Code, 2018 (2018 for occupancy condition 2)
International Existing Building Code, 2018
International Fire Code, 2018 edition
International Mechanical Code, 2018
Uniform Plumbing Code, 2018
National Electrical Code, 2017
Accessible and Usable Buildings and Facilities, ICC/ANSI A117.1, 2017 (Considered more restrictive than that adopted in the defered jurisdiction)

Prior Code Summary

The building was built under the 1973 Uniform Building Code

IEBC Summary –

Chapter 3 – Provisions for all Compliance Methods

Section 305 – Accessibility for Existing Buildings

305.4.1 – Provide accessible route, new sleeping units to comply with 1107 IBC and Chapter 9 IBC for visible alarms (only to added spaces)

305.7 - The route to the primary function shall be accessible, to include drinking fountains, and toilets. Exception 1. limits the expense of upgrades to 20% of the budget. This project is upgrading the resident room toilet / shower rooms, drinking fountains and other areas to be accessible. The public toilets at the core are ***not*** being upgraded to comply with the new accessibility requirements. The finishes are being replaced and the existing level of accessibility is being maintained. The rooms were designed to comply with the 1991 ADA where the sink/lavatory could encroach into the clear area for the toilet.

Chapter 10 – Change of Occupancy

Section 1006 – Structural - Gravity loads –
Structural elements carrying tributary live loads from an area with a change of occupancy shall satisfy the requirements of Section 1607 of the IBC. Design live loads for areas of new occupancy shall be based on Section 1607 of the IBC. Design live loads for other areas shall be permitted to use previously approved design live loads.
Exception: Structural elements whose demand-capacity ratio considering the change of occupancy is not more than 10 % greater than the demand-capacity ratio based on previously approved live loads.

Section 1011 – Change of Occupancy Classification

1011.1.1.2 – Change of Occupancy Classification with separation:
• If separated form the rest of the building per IBC then the portion being changed will be protected throughout per chapter 9 for the new occupancy classification.
Tables 1011.4, 1011.5, 1011.6 = I-1, R-2, and R-4 are the same relative hazard.

1011.4.2 – Existing elements shall comply with requirements of Section 905 – New construction shall comply with Chapter 10 of the IBC.

1011.4.3 – Egress capacity shall comply with the IBC for the new occupancy.

1011.4.4 – Handrails: handrail 1 side up to 66 inches required width – handrail both sides greater than 66 inches in required width. Handrails to be designed per IBC.

1011.4.5 – Guards: stairs and landings above 30 inches above the floor or grade shall be provided with a guard. Areas above 30 inches that do not have a guard or the existing guard is in danger of collapsing shall be provided with a guard designed and installed per the IBC. The existing guards are sound and do not need to be replaced. Existing guards comply with the standards of the applicable code at the time of construction.

1011.5.1.2 – New occupancy is equal risk: Height area of existing building is considered allowable.

1011.6.2 – Exterior Wall – Exterior walls, including openings, are accepted as constructed.

1011.7.2 – Stairways: Existing stairway enclosures are acceptable if protected in accordance with the IBC.

1011.7.3 – Other vertical shafts: Existing enclosure is acceptable.

IBC Summary

The existing Anchorage Pioneer Home was built in several phases. The available documents indicate that the building has the equivalent construction type of a Type I-B under the current code.

Chapter 3 - Building Occupancy:

A-2 – Dining and Kitchen - Level 5
A-3 – Multipurpose Rooms and Staff Lounge - Level 5
B - Partial Level 1
R-2 per existing code review - existing resident rooms on Levels 1, 2,
I-1 Condition 2 (2018 IBC) - Level 3 to be converted
I-1 Condition 2 (2018 IBC) – Level 4

The original 5 story South building was built in three phases. The South building was built and classified as an R-2 occupancy. To serve the needs of the community an addition was built to the north to house an I-1 occupancy (equivalent to an I-2 under the 2018 IBC) The project is located on the 3rd floor of the South Building (5 story building). There is an existing 3-hour separation wall between the two buildings.

Chapter 4 - Special Detailed Requirements

Section 420, Group I-1
420.2 – walls between sleeping units and the building shall be constructed as fire partitions in accordance with Section 708
Exception 2 – where sleeping units are constructed as suites, walls between bedrooms within the sleeping unit and the walls between the bedrooms and associated living spaces are not required to be constructed as fire partitions.
420.3 Horizontal separation – constructed in accordance with Section 711

420.6 – Smoke barriers in Group I-1, Condition 2. (not required if we design for Condition 1)

Divide floor into two smoke compartments – max travel distance 200 feet. (smoke barrier per section 709) – 3rd floor will be divided into three smoke compartments.

420.7 – Group I-1 assisted living housing units.

Group living spaces, meeting or multipurpose therapeutic spaces can be open to the corridor if constructed with the following criteria:

1. The walls and ceilings constructed as required for corridors.
2. The spaces are not occupied as sleeping rooms, treatment rooms, incidental uses in accordance with Section 509.
3. Protected by an automatic fire detection system in accordance with Section 907.
4. Group 1 – Condition 2 - Corridor is in the same smoke compartment, protected by automatic fire detection system in accordance with Section 907, or the spaces are equipped throughout with quick response sprinklers in accordance with section 903.3.2
5. Space is arranged so as not to obstruct access to the required exits.

Chapter 5 - General Building Heights and Areas

Allowable per IIBC 1012.5.1.2 , see above.

Occupancy separation

Table 508.4
R-2 to I-1 – condition 2: 1 hour separation

Level 2 is R-2 occupancy and Level 4 has I-1 occupancy. Existing floors will provide the 1 hour separation, any penetrations and gaps will be verified to provide required fire protection.

Chapter 6 - Types of Construction

Type I-B construction.

Table 601 – Fire-Resistance Rating Requirements for Building Elements

Type I-B:	
Structural Frame	
Floor Framing:	2 hours
Roof Framing:	1 hour
Bearing Walls Interior and Exterior	2 hours

Floor Construction 2 hours

Roof Construction 1 hour

Table 602 – Fire-Resistance Rating Requirements for Exterior Walls Based on Fire Separation Distance:

Chapter 7 - Fire-Resistance-Rated Construction

Section 707 – Fire Barriers
Fire Areas – not used
Shaft Enclosure – see section 713 for rating
Table 707.3.10 – A, I, and R occupancies = 2 hour
Continuity = top of floor below to bottom of floor slab or roof deck above (continuous through concealed spaces)

Section 708 – Fire Partitions
Walls between Dwelling Units = 1 hour
Section 709 – Smoke Barriers
Smoke Barriers shall form an effective membrane from top of the floor to the underside of the floor above.
709.4.1 – smoke barrier shall be continuous from outside wall to outside wall.
709.5 – Openings – Exception 1 – In Group I-1, Condition 2, cross corridor pair of doors swinging in opposite directions do not need to protected in accordance with 716.
• The doors shall be close fitting within operational tolerances, and shall not have a center mullion or undercuts in excess of ¾". The doors shall have head and jamb stops, and astragals or rabbets at the meeting edges. Where permitted by the door manufacturer's listing, positive-latching devices are not required. Factory-applied or field-applied protective plates are not required to be labeled.

Section 712 – Vertical Openings
Same enclosure requirements per Section 713.

Section 713 – Shaft Enclosures
713.4 – 2 hour at more than 4 stories and 2 hours at 2 hour floor construction.

Section 716 – Opening Protectives
Table 716.5 (2012 IBC) / Table 716.1(2) (2018 IBC)
Corridor doors for 1 hour wall are 20 minute rated doors and sidelight/transom are 45 minute rated.

Chapter 8 - Interior Finishes

Class B (Flame Spread 26-75, Smoke-developed 0-450)
Class B (Flame Spread 76-200, Smoke-developed 0-450)

Table 803.13
R-2: Interior Exits, Corridors and Room - Class C
I-1: Interior Exits - Class B, Corridors and Rooms - Class C

Section 806 Decorative Materials and Trim
R-2 and I-1
806.2
I-1: Combustible decorative materials suspended from walls or ceilings shall comply with Section 806.4 and shall not exceed 10 percent of the specific wall or ceiling. (Exception 2) R-2 : limited to 50 percent in sleeping and dwelling units since building is fully sprinkled.

806.4
Flame propegation Test 1 or 2, as appropriate, of NFPA 701 or less than heat release less than 100kW when tested per NFPA 289 using the 20kW ignition source.

Chapter 9 - Fire Protection Systems

Sprinklers provided per NFPA 13

Section 905
Class 1 Stand Pipes –required
Section 906 – Portable Fire Extinguishers – as per the International Fire Code

Section 907 – Fire Alarm and Detection Systems – provided per 907.2.1 through 907.2.23

Section 909.21 – Hoistway supplied with air to provide 0.10–0.25 in water positive pressure with respect to adjacent occupied spaces on all floors.

Chapter 10 - Means of Egress

Section 1004.1.1 – Occupant Load per table 1004.1.1:

- Business Areas = 100 gross
- Sleeping Areas = 120 gross
- Assembly – chairs and tables = 15 net

Table 1014.3 (Table 1006.2.1 - IBC 2018)
• Common Path of Travel = 75' maximum

1016.2.5 Egress Through Intervening Spaces, Exception 1: Means of egress are not prohibited through a kitchen area serving adjoining rooms constituting part of the same dwelling unit or sleeping unit.

Table 1017.2 Exit Access Travel Distance: 250 feet for Group I-1

Table 1018.1 – Corridor Fire Resistance Rating
• 1 hour rated for I-1 occupancy
• 0 hour rated for A and B occupancies

Section 1024 – Luminous Egress Path Markings – Not a high rise – not required

Section 1025 – Horizontal Exits – Can be provided by a firer barrier per Section 707 and a horizontal assembly per Section 711.

Chapter 11 - Accessibility

This project is required to comply with ICC /ANSI 117.51 and ADA requirements.

1107.5.1 – Units shall be Accessible and Type B units
1107.5.1.1 – Accessible: I-1 Condition 1 = 4%, I-1 Condition 2 = 10% but not less than 1. Use 10%, 34 units, 10% = 3.4; 4 toilet rooms considered Accessible
1107.5.1.2 – Type B: All units not considered Accessible are Type B units.

Chapter 12 – Interior Environment

Minimum ceiling heights = 7'-6"

Elevators:

Chapter 30 – Elevators and Conveying Systems

Section 3006.1 – Elevator lobby not required.
Section 3006.2 – Hoistway opening protection required. Hoistway door opening shall be protected in accordance with 3006.3.3 – additional smoke protection shall be provided by pressurizing elevator hoistway per Section 909.21 – building contains a group I-1, Condition 2 occupancy.

IFC Summary

Chapter 7 Fire-Resistance-Rated Construction

Section 704 – Floor Openings: new floor openings to comply with IBC.

Chapter 8 – Interior Finish, Decorative Materials and Furnishings

Table 803 – finishes the same as IBC Table 803.9

Section 805 (IFC 2018) – Upholstered Furniture and Mattresses in New and Existing Buildings (Group I-1, Condition 2 – 2018 IFC)
• Newly introduced upholstered furniture shall meet ignition and heat release rate requirements.
• Newly introduced mattresses shall meet ignition and heat release rate requirements.

Section 807 (IFC 2018) – Decorative Materials and Artificial Decorative Vegetation in New and Existing Buildings:
Section 807.2 (IFC 2018) – Decorative Materials:

1. Combustible decorative materials hung from the wall shall not exceed 10% (shall be tested by an approved agency and meet the flame propagation performance criteria of Test Method 1 or Test Method 2 as appropriate of NFPA 701)
 - a. I-1 Condition 1 – sleeping units – decorative materials placed on walls shall be limited to not more than 50%.
 - b. I-1 Condition 1 – other than sleeping units - decorative materials placed on walls shall be limited to not more than 30%.
 - c. I-1 Condition 2 – sleeping units – decorative materials placed on walls shall be limited to not more than 30%.
 - d. I-1 Condition 2 – other than sleeping units - decorative materials placed on walls shall be limited to not present a hazard of fire development or spread.
 - e. Dormitories in R-2 – within sleeping units - - decorative materials placed on walls shall be limited to not present a hazard of fire development or spread.

Section 808 (IFC 2018) – Furnishings Other Than Upholstered Furniture and Mattresses or Decorative Materials in New and Existing Buildings

1. Waste baskets and linin containers in group I-1:
 - a. Constructed on non-combustible materials or materials not exceeding a peek release of 300kW/M² when tested in accordance with ASTM E1354
 - b. Metal waste baskets and other metal waste containers with a capacity of 20 gallons or more shall be listed in accordance with UL 1315 and shall have a non-combustible lid.

Portable containers exceeding 32 gallons shall be stored in an area classified as a waste and linen collection room and constructed per Table 509 IBC.



Steve Fishback Architect

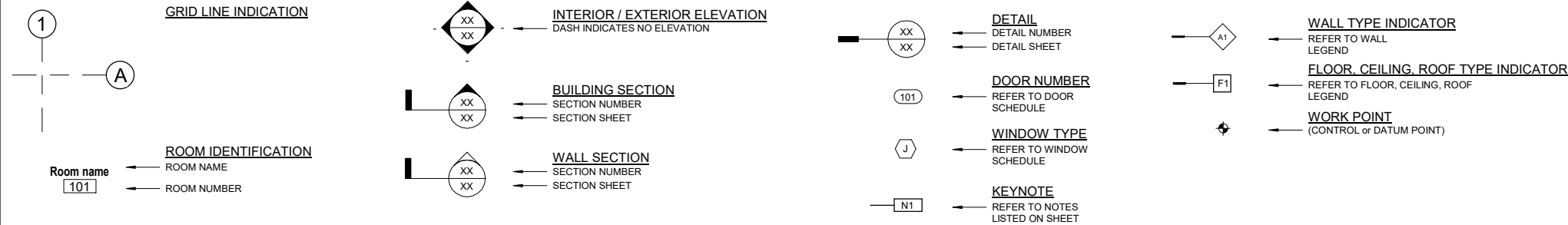
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 23-26C RESIDENT RENOVATIONS

923 W 11TH AVE, ANCHORAGE AK 99501

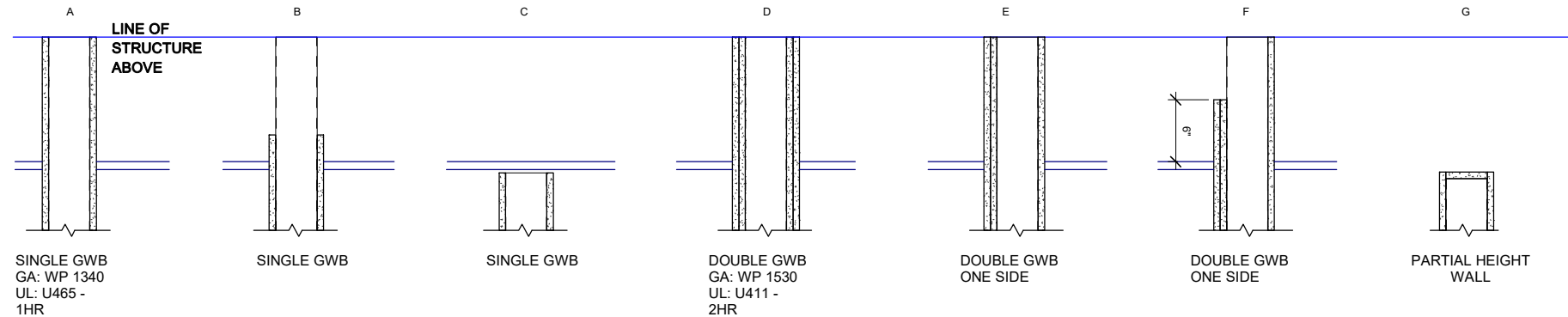
Revisions:	
Drawn By: CWR	Checked By: SHC
Date: 03/20/2023	
Phase: PERMIT DOCUMENTS	
Job No:	
SHEET TITLE: CODE SUMMARY	
SHEET NO: A1.1	

SYMBOLS

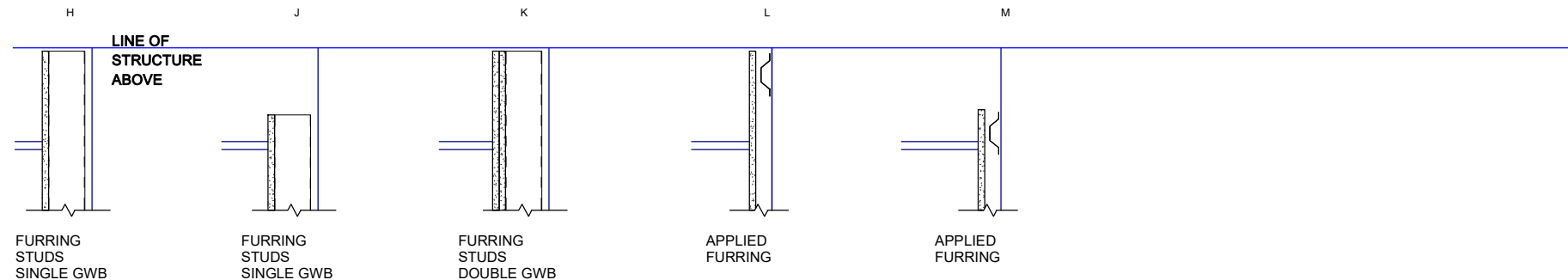


PARTITION TYPES

STANDARD PARTITIONS



FURRINGS

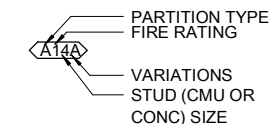


PARTITION TYPE NOTES

- GWB IS 5/8" TYPE X UNO.
- PROVIDE DEFLECTION TRACK AT FULL HEIGHT WALLS
- SHAFT WALL STUD SPACING IS 24" OC. ALL OTHER STUD SPACING IS 16" OC.
- ALL STUDS ARE 20 GAUGE UNO.
- SHAFT WALL STUDS ARE C-H TYPE UNO.
- 5/8" TILE BACKER REPLACES ONE LAYER OF GYPSUM BOARD ON WALLS WITH CERMIC TILE.
- FIRE WALL, FIRE BARRIERS, FIRE PARTITIONS, SMOKE BARRIERS AND SMOKE PARTITIONS OR ANY OTHER WALL OR CEILING REQUIRED TO HAVE PROTECTED OPENINGS SHALL BE IDENTIFIED WITH SIGNS OR STENCILING AS REQUIRED BY IBC 2009, SECTION 703.6, *MARKINGS AND IDENTIFICATION*
- PROVIDE ACOUSTICAL SEALANT AT ALL PENETRATIONS AND PIPING THROUGH PARTITIONS THAT ARE NOTED TO RECEIVE ACOUSTICAL INSULATION

PARTITION TYPE SYMBOL

SIMPLE PARTITIONS



FIRE RATINGS:

- 0 NON-RATED
- 1 1-HR RATED
- 2 2-HR RATED
- 3 3-HR RATED
- 4 4-HR RATED
- 5 0.5 (1/2) HR RATED

CMU (OR CONC) SIZES:

- 4 4" NOMINAL
- 6 6" NOMINAL
- 8 8" NOMINAL
- 0 10" NOMINAL
- 2 12" NOMINAL

METAL STUD SIZES:

- 0 7/8" FURRING
- 1 1 5/8" FURRING OR STUD
- 2 2 1/2" STUD
- 3 3 5/8" STUD
- 4 4" STUD
- 6 6" STUD
- 8 8" STUD

NOT USED

WOOD STUD SIZES
XXXXXX
XXXXXX
XXXXXX
XXXXXX
XXXXXX
XXXXXX
XXXXXX

VARIATION CODES

- A ACOUSTICAL INSULATION- 3 1/2" ACOUSTICAL BLANKET INSULATION FULL HEIGHT OF PARTITION, PLUS ACOUSTICAL SEALANT BEADS WHERE TOP & BOTTOM TRACKS CONTACT STRUCT.
- B SMOKE BARRIER- SEE CODE PLANS.
- G STUD GAUGE VARIATION- SUCH AS G25, G16, ETC.
- X NOT USED
- XX NOT USED
- XX NOT USED
- R RESILIENT CHANNELS- USE 5/8" RC AT 24" OC ONE SIDE
- RR RESILIENT CHANNELS TWO SIDES- USE 5/8" RC AT 24" OC BOTH SIDES
- S SMOKE SEALED PARTITION- WITH SMOKE RESISTANT OPENINGS.
- T THERMAL INSULATION- PROVIDE R-13 BATT INSULATION PLUS R-7.5 CONTINUOUS RIGID INSULATION UNO.
- V VAPOR RETARDER INCLUDED IN INTERIOR PARTITION
- XX NOT USED
- Z STAGGERED STUDS- STUDS IN OVERSIZED TRACK AT "STUD SIZE" IN TAG INDICATES TRACK SIZE: 16" OC EACH SIDE 3 = 3 5/8" TRACK WITH 2 1/2" STUDS. 4 = 4" TRACK WITH 2 1/2" STUDS. 6 = 6" TRACK WITH 3 5/8" OR 4" STUDS. 8 = 8" TRACK WITH 6" STUDS. INCLUDE ACOUSTICAL INSULATION AND SEALANT AS SHOWN FOR VARIATION 'A'.

GENERAL NOTES

- CONSTRUCTION SHALL BE IN COMPLIANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
- CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK AND NOTIFY ARCHITECT OF ANY DISCREPANCIES WITH AS-BUILT CONDITIONS AS SHOWN IN THE DOCUMENTS.
- DIMENSIONS TO NEW PARTITIONS ARE FACE OF STUD AND FACE OF FINISH TO EXISTING PARTITIONS. "CLR" REFERS TO FACE OF FINISH EACH SIDE UNLESS NOTED OTHERWISE.
- WORK AREAS WILL BE LEFT CLEAN AND FREE OF ANY DEBRIS OR DUST AT THE END OF EACH SHIFT.
- ALL TOOLS, CONSTRUCTION MATERIALS, AND EQUIPMENT ARE TO BE PROPERLY STORED AT THE END OF EACH SHIFT. CONTRACTOR IS SOLELY RESPONSIBLE FOR THE SECURITY OF ALL SUCH ITEMS.
- THE CONTRACTOR SHALL CREATE A CLEAN, DRY SPACE TO STORE MATERIALS ON SITE TO ALLOW ACCLIMATION AS RECOMMENDED BY EACH MANUFACTURER.
- THE CONTRACTOR SHALL PROVIDE REFUSE SERVICES. A LOCATION NEAR THE BUILDING WILL BE DESIGNATED FOR THE DUMPSTER. DELIVERIES AND STORAGE REQUIREMENTS ARE TO BE COODINATED WITH OWNER'S FACILITIES PERSONNEL.
- PROTECT EXISTING-TO-REMAIN CONSTRUCTION FROM DAMAGE AT ALL TIMES DURING WORK.



Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 23-26C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Revisions:

Drawn By:	CWR	Checked By:	SHC
Date:	03/20/2023		
Phase:	PERMIT DOCUMENTS		
Job No:			
Sheet Title:	ABBREVIATIONS, SYMBOL LEGEND, WALL AND PARTITION TYPES		
Sheet No:	A1.2		

DEMOLITION LEGEND

- EXISTING TO REMAIN
- EXISTING TO BE DEMOLISHED/REMOVED

NOTIFICATION OF POTENTIAL HAZARDS

ASBESTOS, LEAD, AND OTHER HAZARDOUS MATERIALS ARE PRESENT IN THE BUILDING AND MAY IMPACT THE WORK OF ALL TRADES. REGULATED AIR CONTAMINATES, INCLUDING ASBESTOS AND LEAD, ARE ALSO PRESENT IN SETTLED AND CONCEALED DUST IN AND ON ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS OR SYSTEMS THROUGHOUT THE BUILDING. ALL TRADES SHALL COORDINATE WITH OTHER TRADES AND CONDUCT THEIR WORK TO PREVENT WORKER EXPOSURE OR SITE CONTAMINATION. REFER TO SPECIFICATION DIVISIONS 0, 1, AND 2 FOR SPECIFIC INFORMATION CONCERNING DISTURBING, REMOVING, AND DISPOSING OF THESE MATERIALS AND THE INSTALLATION OF NEW MATERIALS OR COMPONENTS. THIS NOTIFICATION IS PROVIDED IN ACCORDANCE WITH EPA AND OSHA REQUIREMENTS.

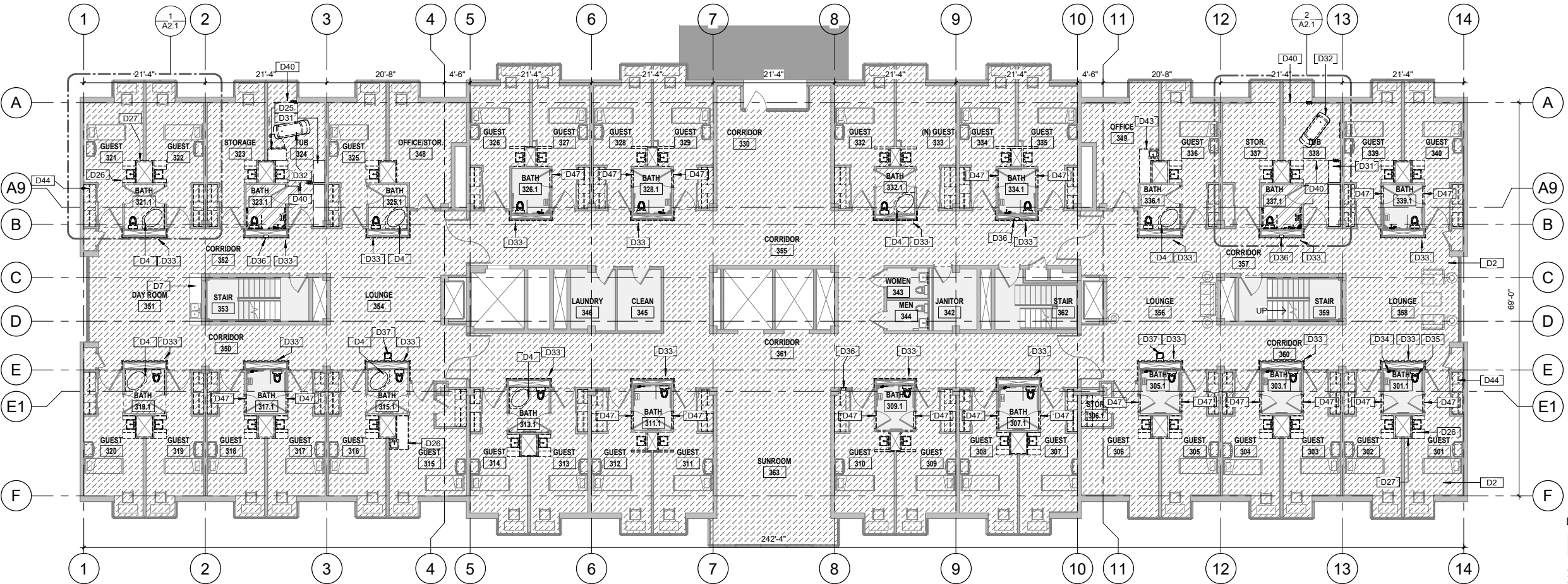
DEMOLITION GENERAL NOTES

- FIELD VERIFY ALL DIMENSIONS AND EQUIPMENT LOCATIONS. NOTIFY ARCHITECT OF DISCREPANCIES BETWEEN THE DOCUMENTS AND FIELD CONDITIONS
- COORDINATE SCOPE OF DEMOLITION WORK WITH NEW CONSTRUCTION - REMOVE EXISTING FINISHES AS REQUIRED TO INSTALL NEW FINISHES AND EQUIPMENT
- REPAIR DEMOLITION PERFORMED IN EXCESS OF THAT REQUIRED, REPAIR, PATCH, AND PAINT AS NEEDED, SURFACES WHICH ARE TO REMAIN BUT HAVE BECOME SOILED OR DAMAGED BY DEMOLITION WORK, TO LIKE NEW CONDITION
- INSPECT PENETRATIONS THROUGH THE FLOOR AND RATED WALL ASSEMBLIES - NOTIFY THE ARCHITECT OF GAPS AND/OR MISSING FIRE STOPPING AT THROUGH PENETRATIONS.
- FIELD VERIFY DOOR UNDER-CUTS AT ALL EXISTING DOORS TO REMAIN. VERIFY THERE IS ADEQUATE CLEARANCE FOR THE DOOR TO OPEN WITH NEW FLOOR FINISHES AND SLOPES. MODIFY EXISTING DOORS AS REQUIRED.
- EXISTING FURNITURE SHOWN FOR REFERENCE ONLY.

KEYNOTES

- D2 REMOVE EXISTING FINISH FLOORING IN COMMON SPACES AND GUEST ROOMS AS SHADED- NOTE: ONLY REMOVE FLOORING FOR ACCEPTED ALTERNATES. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- D4 REMOVE ALL FIXTURES AND FINISHES FROM BATHROOM. REMOVE AND REPLACE GWB.
- D7 REMOVE AND DISPOSE CABINET PULLS FROM ALL DOORS AND DRAWERS; EXISTING COUNTER, SINK AND CABINET TO REMAIN - PROTECT PER SPECIFICATIONS
- D25 REMOVE EXISTING CASEWORK. REMOVE AND STORE TOWEL DRYER
- D26 REMOVE EXISTING CASEWORK AND SINK (LAVATORIES/VANITIES) AS REQUIRED TO INSTALL NEW 1 HOUR SHAFTWALL, TYP ALL ROOMS.
- D27 REMOVE CHASE WALL - TYPICAL
- D31 REMOVE AND REPLACE CASEWORK; REMOVE AND DISPOSE OF COUNTER TOP AS NEEDED.
- D32 REMOVE AND REINSTALL EXISTING TUB
- D33 REMOVE AND REINSTALL WOOD HAND RAIL; REMOVE AND DISPOSE EXTRUDED ALUMINUM BUMPER
- D34 REMOVE AND DISPOSE SHOWER HEAD, ROD, AND MOUNT - TYP IN ALL BATHROOMS. REPAIR DAMAGED TILE TO MATCH SURROUNDING WALL.
- D35 REMOVE, SALVAGE AND REINSTALL TOILET PER MECHANICAL, TYP ALL BATH ROOMS; OPEN WALL AS REQUIRED FOR NEW PLUMBING - SEE MECHANICAL DRAWINGS FOR PLUMBING AND FIXTURE SCOPE
- D36 REMOVE AND REPLACE FEC - PATCH AND PAINT WALL AS NECESSARY TO INSTALL NEW RATED FEC
- D37 REMOVE AND REPLACE DRINKING FOUNTAIN PER MECH - PATCH AND PAINT WALL AS NECESSARY TO INSTALL NEW FIXTURE
- D40 REMOVE AND REINSTALL SHOWER CURTAINS AND CEILING TRACK
- D43 REMOVE AND SALVAGE SINK. REMOVE AND DISPOSE COUNTERTOP AND CASEWORK
- D44 REMOVE EXISTING CLOSET CASEWORK OR SHELVING AS WELL AS ALL SUPPORTS AND FASTENERS, TYP. IN ALL ROOMS
- D47 REMOVE & DISPOSE DOOR THRESHOLD (TYP.); REPAIR BATHROOM FLOORING AS NEEDED.

- DEMO FLOOR FINISH LEGEND
- EXISTING FLOORING TO REMAIN
- EXISTING FLOORING TO BE REMOVED



1 3RD FLOOR PLAN - DEMOLITION COORDINATION
3/32" = 1'-0"



Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 23-26C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Drawn By:	CWR	Checked By:	SHC
Date:	03/20/2023		
Phase:	PERMIT DOCUMENTS		
Job No:			
Sheet Title:	3RD FLOOR PLAN - DEMOLITION		
Sheet No:	A2.0		

D1	BASE BID - REMOVE, SALVAGE AND REINSTALL EXISTING PLUMBING FIXTURES - SEE MECHANICAL FOR ADDITIONAL DEMOLITION NOTES (UNIT PRICE A1 - REMOVE EXISTING PLUMBING FIXTURES - SEE MECHANICAL FOR ADDITIONAL DEMOLITION NOTES)
D3	BASE BID - REMOVE, SALVAGE AND REINSTALL EXISTING CASEWORK, TYP ALL ROOMS (UNIT PRICE - REMOVE EXISTING CASEWORK, TYP ALL ROOMS)
D13	REMOVE EXISTING FLOORING AND WALL BASE; PREPARE FLOOR SLAB AS REQUIRED FOR NEW FLOORING - SEE NEW FLOOR PLAN
D18	REMOVE DOOR, MODIFY DOOR UNDERCUT AS NECESSARY FOR NEW DOOR SLOPES AND FINISHES - REINSTALL DOOR
D21	UNIT PRICE A1 - REMOVE EXISTING GYPSUM BOARD CEILING SOFFIT AND FRAMING; SELECTIVELY REMOVE AND RETAIN CEILING TILES AND ACT GRID AS NEEDED FOR NEW WORK - PROTECT EXISTING ACT TO REMAIN

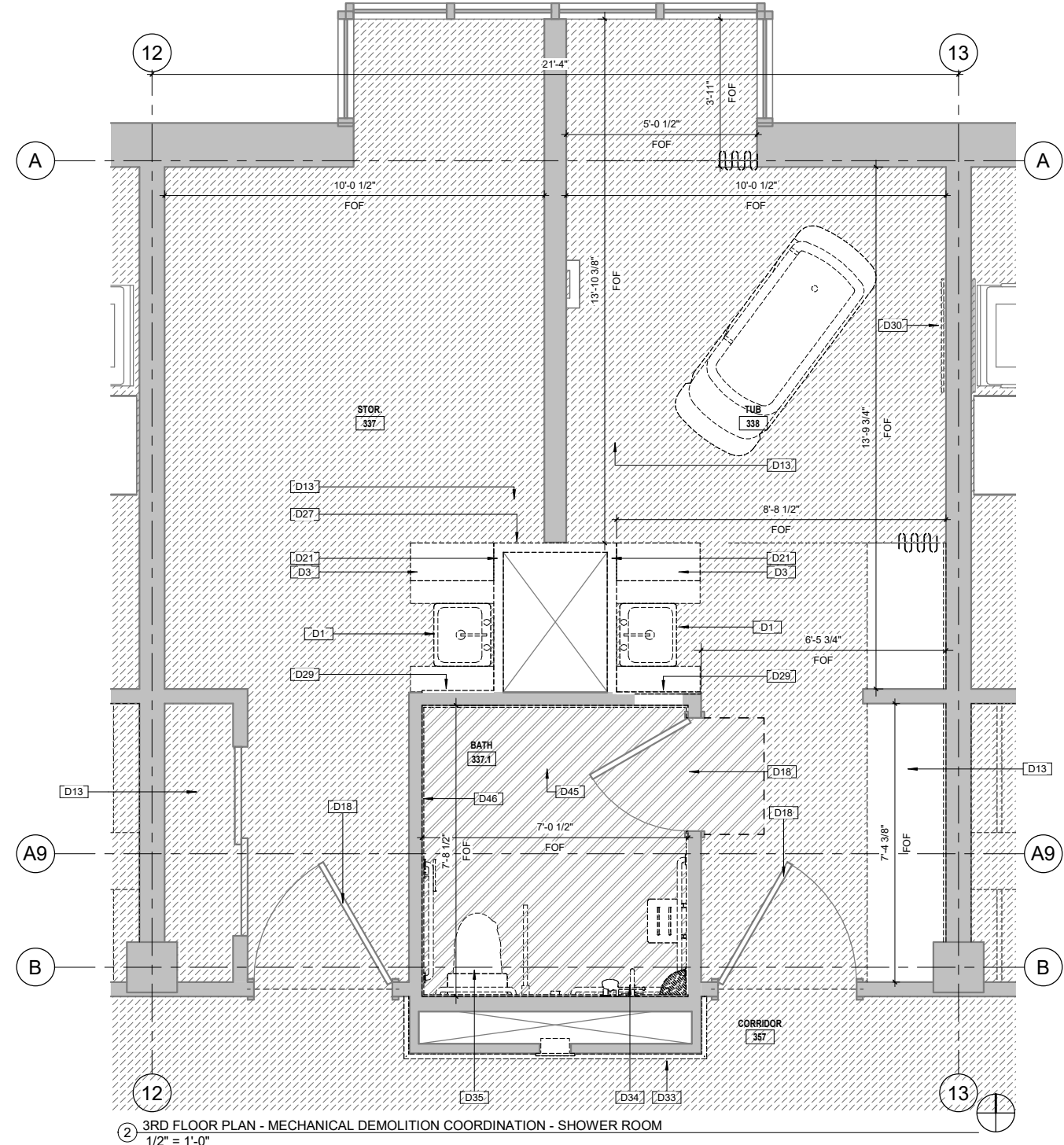
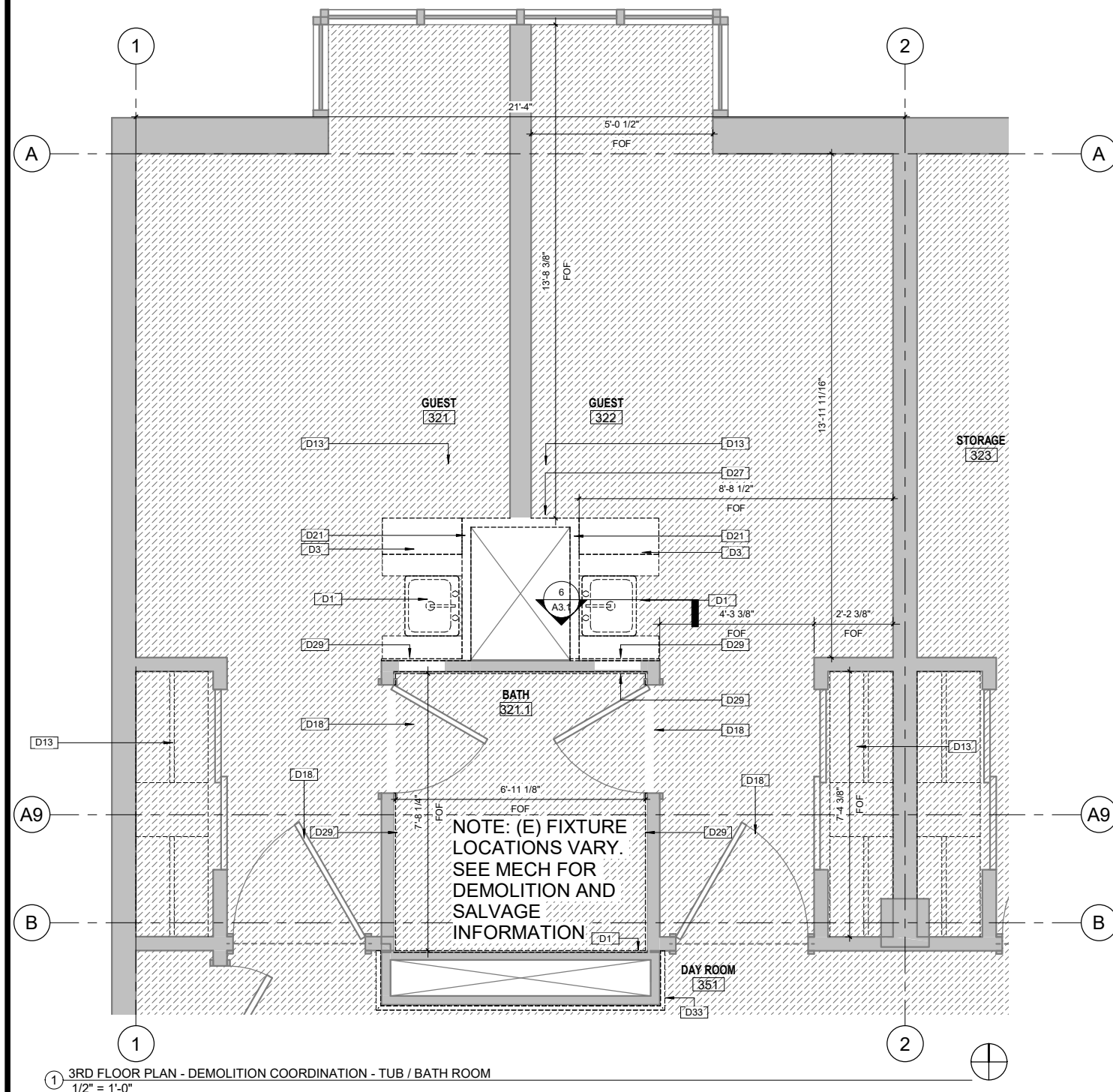
D27 REMOVE CHASE WALL - TYPICAL
D29 REMOVE GWB ONLY
D30 REMOVE HEADBOARD, REPAIR WALL
D33 REMOVE AND REINSTALL WOOD HAND RAIL; REMOVE AND
DISPOSE EXISTING ALUMINUM BUMPER
D34 REMOVE AND DISPOSE SHOWER HEAD, ROD, AND MOUNT -
TYP IN ALL BATHROOMS. REPAIR DAMAGED TILE TO MATCH
SURROUNDING WALL
D35 REMOVE, SALVAGE AND REINSTALL TOILET PER MECHANICAL,
TYP ALL BATH ROOMS; OPEN WALL AS REQUIRED FOR NEW
PLUMBING - SEE MECHANICAL DRAWINGS FOR PLUMBING AND
FIXTURE SCOPE
D45 SCOUR (E) EPOXY FLOORING TO PREP FOR (N) FLOORING;
PREPARE BASE FOR NEW FLOORING
D46 REMOVE EXISTING WALL TILE AND GYPSUM SHEATHING,
EXISTING STUDS TO REMAIN

EXISTING TO REMAIN

EXISTING TO BE DEMOLISHED/REMOVED

ASBESTOS, LEAD, AND OTHER HAZARDOUS MATERIALS ARE PRESENT IN THE BUILDING AND MAY IMPACT THE WORK OF ALL TRADES. REGULATED AIR CONTAMINATES INCLUDING ASBESTOS AND LEAD, ARE ALSO PRESENT IN SETTLED AND CONCEALED DUST IN AND ON ARCHITECTURAL SURFACES. THE IDENTIFICATION OF ELECTRICAL COMPONENTS OR SYSTEMS THROUGHOUT THE BUILDING, ALL TRADES SHALL COORDINATE WITH OTHER TRADES AND CONDUCT THEIR WORK TO PREVENT WORKER EXPOSURE OR SITE CONTAMINATION. REFER TO SPECIFICATION DIVISIONS 01, 1, AND 2 FOR SPECIFIC INFORMATION CONCERNING DISTURBANCE, REMOVAL, AND DISPOSAL OF THESE MATERIALS AND THE INSTALLATION OF NEW MATERIALS OR COMPONENTS. THIS NOTIFICATION IS PROVIDED IN ACCORDANCE WITH EPA AND OSHA REQUIREMENTS.

1. FIELD VERIFY ALL DIMENSIONS AND EQUIPMENT LOCATIONS. NOTIFY ARCHITECT OF DISCREPANCIES BETWEEN THE DOCUMENTS AND FIELD CONDITIONS
2. COORDINATE SCOPE OF DEMOLITION WORK WITH - NEW CONSTRUCTION - REMOVE EXISTING FINISHES AS REQUIRED TO INSTALL NEW FINISHES AND EQUIPMENT
3. REPAIR DEMOLITION PERFORMED IN EXCESS OF THAT REQUIRED. REPAIR, PATCH, AND PAINT AS NEEDED. SURFACES WHICH ARE TO REMAIN BUT HAVE BECOME SOILED OR DAMAGED BY DEMOLITION WORK, TO LIKE NEW CONDITION
4. INSPECT PENETRATIONS THROUGH THE FLOOR AND RATED WALL ASSEMBLIES - NOTIFY THE ARCHITECT OF GAPS AND/OR MISSING FIRE STOPPING AT THROUGH PENETRATIONS.
5. FIELD VERIFY DOOR UNDER-CUTS AT ALL EXISTING DOORS TO REMAIN. VERIFY THERE IS ADEQUATE CLEARANCE FOR THE DOOR TO OPEN WITH NEW FLOOR FINISHES AND SLOPES. MODIFY EXISTING DOORS AS REQUIRED.
6. EXISTING FURNITURE SHOWN FOR REFERENCE ONLY.



Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 23-26C RESIDENT RENOVATIONS
923 W 11TH AVE., ANCHORAGE AK 99501

Permits:	
Drawn By: CWR	Checked By: SHC
Date: 03/20/2023	
Project: PERMIT DOCUMENTS	
Job No:	
SHEET TITLE: 3RD FLOOR - TYPICAL ENLARGED GUEST ROOM DEMOLITION PLANS	
SHEET NO:	

A2.1

NEW WORK LEGEND

EXISTING TO REMAIN
NEW CONSTRUCTION

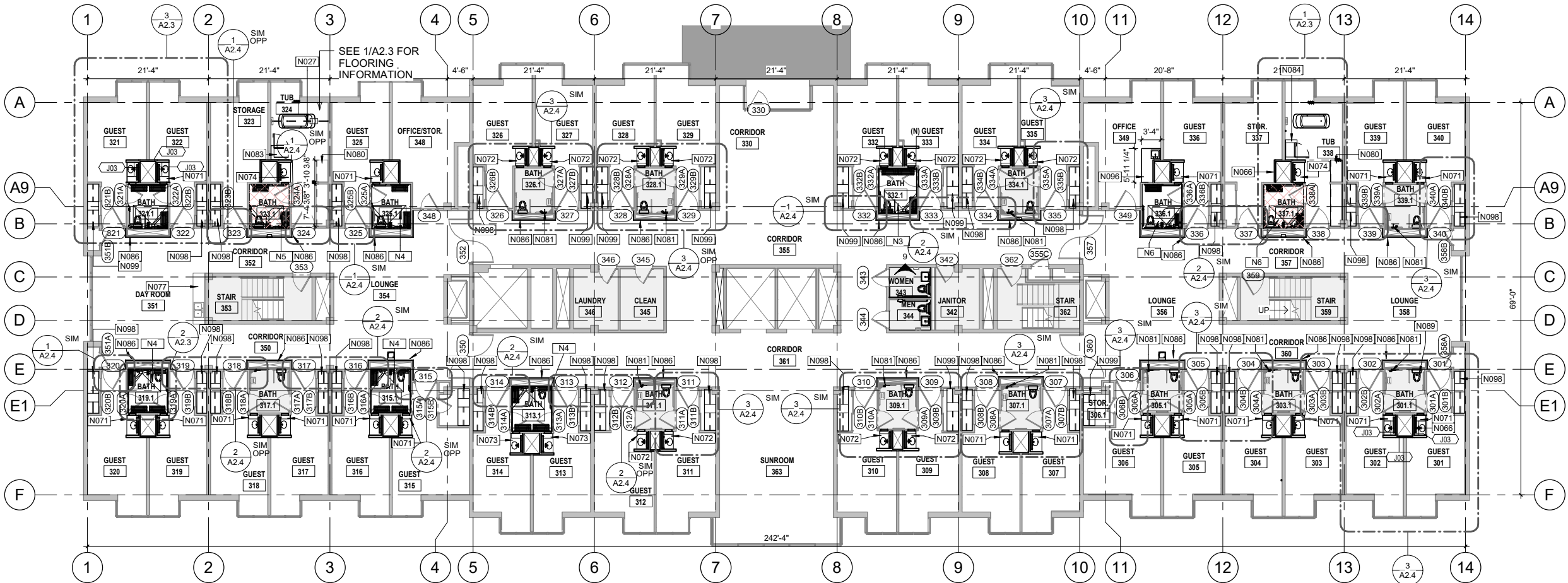
BASE BID IN RESIDENT ROOMS IS TO REMOVE, SALVAGE AND REINSTALL CABINETS AND SINKS. SOFFIT ABOVE SINK IS TO REMAIN. UNIT PRICE A1 IS TO REMOVE EXISTING CABINETS AND SINKS AND INSTALL NEW CABINETS, SINKS AND CEILING AS INDICATED ON THE DRAWING.

NOTIFICATION OF POTENTIAL HAZARDS

ASBESTOS, LEAD, AND OTHER HAZARDOUS MATERIALS ARE PRESENT IN THE BUILDING AND MAY IMPACT THE WORK OF ALL TRADES. REGULATED AIR CONTAMINANTS, INCLUDING ASBESTOS AND LEAD, ARE ALSO PRESENT IN SETTLED AND CONCEALED DUST IN AND ON ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS OR SYSTEMS THROUGHOUT THE BUILDING. ALL TRADES SHALL COORDINATE WITH OTHER TRADES AND CONDUCT THEIR WORK TO PREVENT WORKER EXPOSURE OR SITE CONTAMINATION. REFER TO SPECIFICATION DIVISIONS 0, 1, AND 2 FOR SPECIFIC INFORMATION CONCERNING DISTURBING, REMOVING, AND DISPOSING OF THESE MATERIALS AND THE INSTALLATION OF NEW MATERIALS OR COMPONENTS. THIS NOTIFICATION IS PROVIDED IN ACCORDANCE WITH EPA AND OSHA REQUIREMENTS.

KEYNOTES

- N3 NEW BATHROOM WORK - ARRANGEMENT A; SEE ENLARGED PLANS
- N4 NEW BATHROOM WORK - ARRANGEMENT B; SEE ENLARGED PLANS
- N5 NEW BATHROOM WORK - ARRANGEMENT C; SEE ENLARGED PLANS
- N6 NEW BATHROOM WORK - ARRANGEMENT D; SEE ENLARGED PLANS
- N027 CEILING MOUNTED PATIENT LIFT - ALIGN TO TUB PER MANUF. IN FIELD
- N066 (N) 1-HR SHAFT PARTITION, TYP AT WALLS BETWEEN I-1 SLEEPING ROOMS AND I-1 COMMON ROOMS. SEE CODE PLAN AND WALL ASSEMBLIES
- N071 UNIT PRICE A1 - LAVATORY ASSEMBLY 1: ONE, 12" 4-DRAWER BASE CABINETS WITH ONE, 30" ADA KNEE PROTECTION BASE CABINET, ALIGN DRAWERS TO BATHROOM WALL - INSTALL SPACERS AS NEEDED. COUNTERTOP, SINK, AND FIXTURES PER SPEC; ALIGN SINK WITH CENTER OF 30" CABINET
- N072 UNIT PRICE A1 - LAVATORY ASSEMBLY 2: ONE, 6" 4-DRAWER BASE CABINET WITH ONE, 30" ADA KNEE PROTECTION BASE CABINET, ALIGN DRAWERS TO BATHROOM WALL - INSTALL SPACERS AS NEEDED. COUNTERTOP, SINK, AND FIXTURES PER SPEC; ALIGN SINK WITH CENTER OF 30" CABINET
- N073 UNIT PRICE A1 - LAVATORY ASSEMBLY 3: ONE, 10" 4-DRAWER BASE CABINET WITH ONE, 30" ADA KNEE PROTECTION BASE CABINET, ALIGN DRAWERS TO BATHROOM WALL - INSTALL SPACERS AS NEEDED. COUNTERTOP, SINK, AND FIXTURES PER SPEC; ALIGN SINK WITH CENTER OF 30" CABINET
- N074 LAVATORY ASSEMBLY 4: ONE, 42" ADA KNEE PROTECTION BASE CABINET - INSTALL SPACERS AS NEEDED. COUNTERTOP, SINK, AND FIXTURES PER SPEC; ALIGN SINK WITH CENTER OF 42" CABINET.
- N077 INSTALL NEW CABINET PULLS PER SPEC ON ALL DOORS AND DRAWERS. EXISTING COUNTER, SINK AND CABINET TO REMAIN - PROTECT PER SPECIFICATIONS
- N080 REMOVE AND REPLACE COUNTER AND CASEWORK; INSTALL NEW BASE CABINETS PER MANUF. SEE SPEC FOR FINISH
- N081 ADJUSTABLE-HEIGHT HAND-HELD SHOWER HEAD - TYPICAL
- N083 CONSTRUCT NEW 42" WIDE, 31" DEEP SOLID SURFACE COUNTER @ 2'-10" A.F.F. WITH TWO-DOOR TWO-DRAWER BASE CABINET. REINSTALL TOWEL DRYER
- N084 CONSTRUCT NEW 42" WIDE, 25" DEEP SOLID SURFACE COUNTER @ 2'-10" A.F.F. WITH TWO-DOOR TWO-DRAWER BASE CABINET. REINSTALL TOWEL DRYER
- N086 REFINISH AND REINSTALL WOOD HAND RAIL IN SAME LOCATION. INSTALL 1X6 OAK WOOD TRIM BUMPER TO REPLACE REMOVED ALUMINUM EXTRUSION - MOUNT AT SAME HEIGHT. STAIN BUMPER TO MATCH HANDRAIL
- N089 WALL-MOUNTED TOILET PER SPEC, TYP ALL ROOMS - SEE MECHANICAL
- N096 INSTALL (N) 21" DEEP 34" HIGH COUNTER AND CASEWORK PER MANUF. INSTALL (N) SINK IN (E) LOCATION - SEE MECHANICAL
- N098 INSTALL (N) CLOSET CASEWORK (C21) - 21" DEPTH; SEE INT. ELEVATIONS
- N099 INSTALL (N) CLOSET CASEWORK (C24) - 24" DEPTH; SEE INT. ELEVATIONS



1 3RD FLOOR PLAN - NEW
3/32" = 1'-0"

SCOPING LEGEND

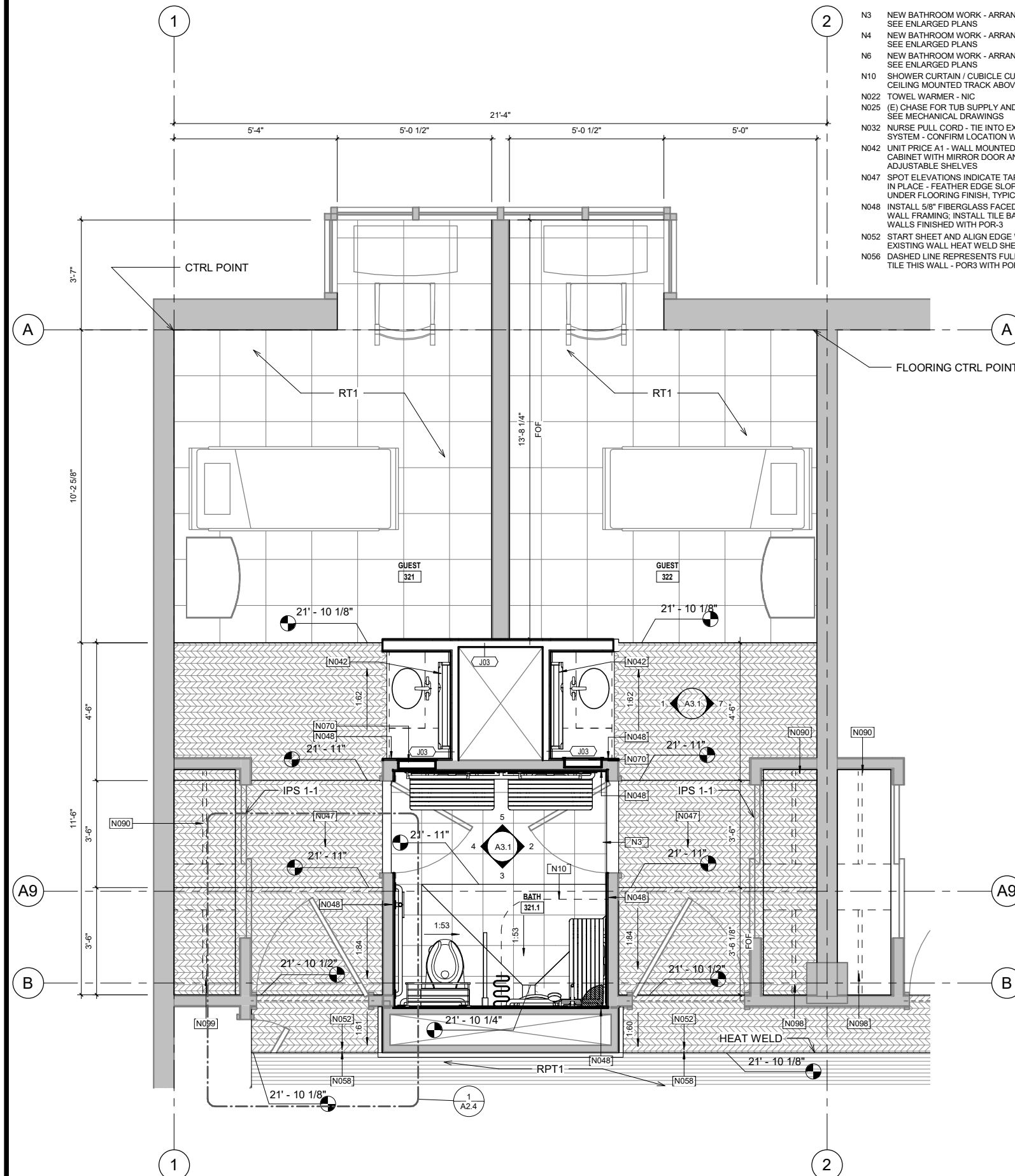
*WORK IN SHADED BATHROOMS LIMITED TO REMOVAL AND REPLACEMENT OF SHOWER HEAD AND TOILET



Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 23-26C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Revisions:	
Drawn By: CWR	Checked By: SHC
Date: 03/20/2023	
Phase: PERMIT DOCUMENTS	
Job No:	
SHEET TITLE: 3RD FLOOR PLAN - NEW	
SHEET NO: A2.2	



③ LEVEL 3 TYP GUEST SUITE - (N) BATH ROOM (INCLUDES TYPE A ARRANGEMENT)
1/2" = 1'-0"

KEYNOTES

- N3 NEW BATHROOM WORK - ARRANGEMENT A;
SEE ENLARGED PLANS
- N4 NEW BATHROOM WORK - ARRANGEMENT B;
SEE ENLARGED PLANS
- N6 NEW BATHROOM WORK - ARRANGEMENT
SEE ENLARGED PLANS
- N10 SHOWER CURTAIN / CUBICLE CURTAIN -
CEILING MOUNTED TRACK ABOVE
- N022 TOWEL WARMER - NIC
- N025 (E) CHASE FOR TUB SUPPLY AND DRAIN -
SEE MECHANICAL AND PLUMBING
- N032 NURSE CALL CORD - TIE INTO EXISTING
SYSTEM - CONFIRM LOCATION WITH OWNER
- N042 UNIT PRICE A1 - WALL MOUNTED MEDICINE
CABINET WITH MIRROR DOOR AND
ADJUSTABLE SHELVES
- N047 SPOT ELEVATIONS INDICATE TAPERED CAST
IN PLACE - FEATHER EDGE SLOPED TOPPING
UNDER FLOORING FINISH. TYPICAL
- N048 INSTALL 5/8" FIBERGLASS FACED GWR ON (E)
WALL FRAMING - 1/2" TILE BACKER ON
WALLS FINISHED WITH POR-3
- N052 START SHEET AND ALIGN EDGE WITH
EXISTING WALL HEAT WELD SHEET TO VINYL
- N056 DASHED LINE REPRESENTS FULL HEIGHT
TILE THIS WALL - POR3 WITH POR2 BASE

KEYNOTES

- N057 FULL HEIGHT STAINLESS STEEL CORNER GUARD, MOUNT OVER EXPOSED EDGE OF WALL TILE
- N058 START VINYL PLANK AND ALIGN EDGE WITH EXISTING WALL; HEAT WELD PLANK TO SHEET
- N070 UNIT PRICE A1 - RECESSED SOLID SURFACE WALL SHELVING; THREE FIXED SHELVES - SEE SPEC FOR INFORMATION
- N074 LAVATORY ASSEMBLY 4; ONE, 24" ADA KNEE PROTECTION BASE CABINET - INSTALL SPACERS AS NEEDED. COUNTERTOP, SINK, AND FIXTURES PER SPEC; ALIGN SINK WITH CENTER OF 42" CABINET.
- N080 REMOVE AND REPLACE COUNTER AND CASEWORK; INSTALL NEW BASE CABINETS PER MANUF. SEE SPEC FOR FINISH
- N084 CONSTRUCT NEW 42" WIDE, 25" DEEP SOLID SURFACE SINK WITH 1/2" OVERHANG WITH TWO-DOOR TWO-DRAWER BASE CABINET. REINSTALL TOWEL DRYER.
- N085 PATIENT TUB - OWNER SUPPLIED
- N090 IN ALL ROOMS INSTALL CLOSET STORAGE CASEWORK AS DRAWN. SEE SPEC FOR QUALITY AND FINISH. INSTALL OVER FINISHED FLOOR. SEE PLANS FOR UNIT SEPT. (EITHER 21" OR 24"). CASEWORK CONSISTS OF SINGLE TOWER OF 3 SHELVES AND 3 DRAWERS, TWO ADJUSTABLE HANGER RODS ON THE ROOM SIDE, ONE FIXED ADJUSTABLE HANGER ROD AND ONE FIXED SHELF ON THE CORRIDOR SIDE, AND A HANGABLE SHELF OVER ENTRY ASSEMBLY. PROVIDE HOLES IN CRITICAL S. SUPPORTS FOR ADJUSTABLE RODS AND SHELVES BUT NOT FOR FIXED SHELF AND ROD. ALIGN TOWER TO ONE SIDE OF SIDING CLOSET DOORS SO THAT DRAWERS CAN OPEN WHEN DOOR IS SLID TO ONE SIDE. FASTEN ASSEMBLY TO (E) FRAMED WALLS PER MANUF. - DO NOT FASTEN TO BRICK WALLS. CUT FIXED SHELF AND WALL SUPPORT TO GO AROUND COLUMNS.
- N098 INSTALL (N) CLOSET CASEWORK (C21) - 21" DEPTH. SEE INT. ELEVATIONS
- N099 INSTALL (N) CLOSET CASEWORK (C24) - 24" DEPTH. SEE INT. ELEVATIONS

KEYNOTES

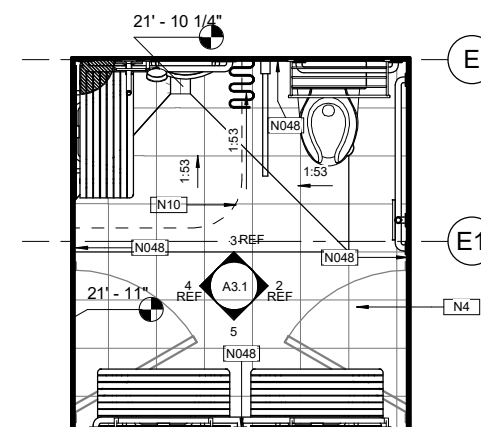
NEW WORK LEGEND

- EXISTING TO REMAIN
- NEW CONSTRUCTION

BASE BID IN RESIDENT ROOMS IS TO REMOVE, SALVAGE AND REINSTALL CABINETS AND SINKS. SOFFIT ABOVE SINK IS TO REMAIN. UNIT PRICE A1 IS TO REMOVE EXISTING CABINETS AND SINKS AND INSTALL NEW CABINETS, SINKS AND CEILING AS INDICATED ON THE DRAWING.

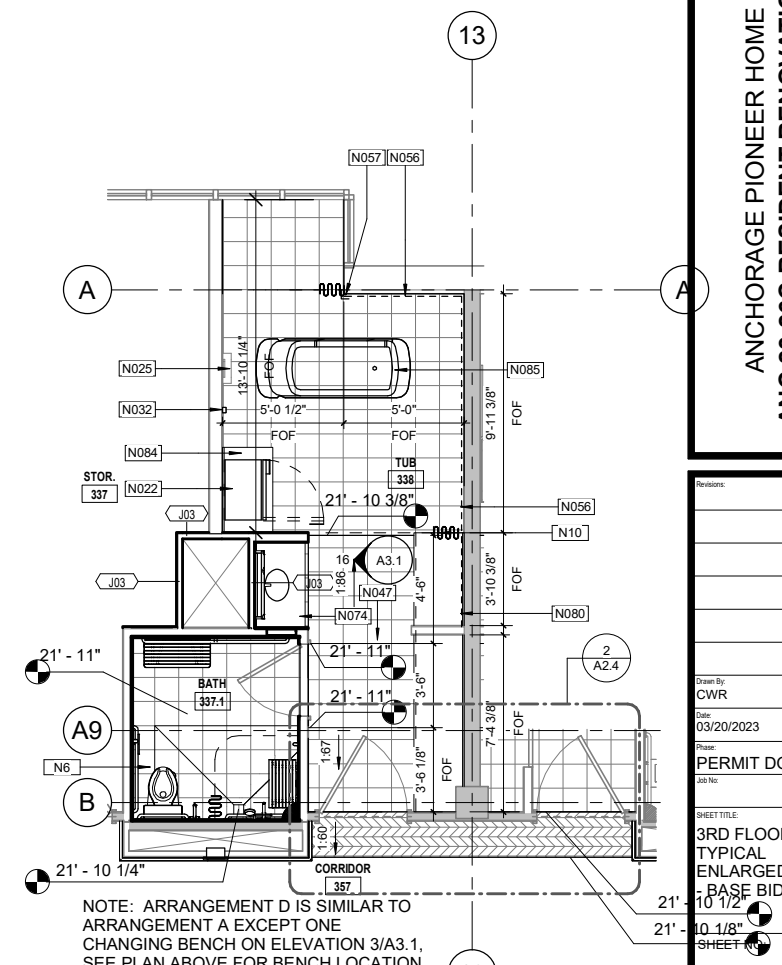
NOTIFICATION OF POTENTIAL HAZARDS

ASBESTOS, LEAD, AND OTHER HAZARDOUS MATERIALS ARE PRESENT IN THE BUILDING AND MAY IMPACT THE WORK OF ALL TRADES. REGULATED AIR CONTAMINANTS, INCLUDING ASBESTOS AND LEAD, ARE ALSO PRESENT IN SETTLED AND CONCEALED DUST IN AND ON ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS OR SYSTEMS THROUGHOUT THE BUILDING. CONTRACTORS MUST COORDINATE WITH OTHER TRADES AND CONSIDER THEIR WORK TO PREVENT WORKER EXPOSURE OR SITE CONTAMINATION. REFER TO SPECIFICATION DIVISIONS 0, 1, AND 2 FOR SPECIFIC INFORMATION CONCERNING DISTURBING, REMOVING, AND DISPOSING OF THESE MATERIALS, AND THE USE OF SPECIAL MATERIALS OR COMPONENTS. THIS NOTIFICATION IS PROVIDED IN ACCORDANCE WITH EPA AND OSHA REQUIREMENTS.



NOTE: FLIP FIXTURES ON
PLUMBING WALL FROM
ARRANGEMENT A FOR
ARRANGEMENT B.

ENLARGED BATHROOM PLAN - TYPE B
ARRANGEMENT



NOTE: ARRANGEMENT D IS SIMILAR TO
ARRANGEMENT A EXCEPT ONE
CHANGING BENCH ON ELEVATION 3/A3.1,
SEE PLAN ABOVE FOR BENCH LOCATION.

① LEVEL 3 (N) BATHING SUITE
1/4" = 1'-0"



Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 23-26C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

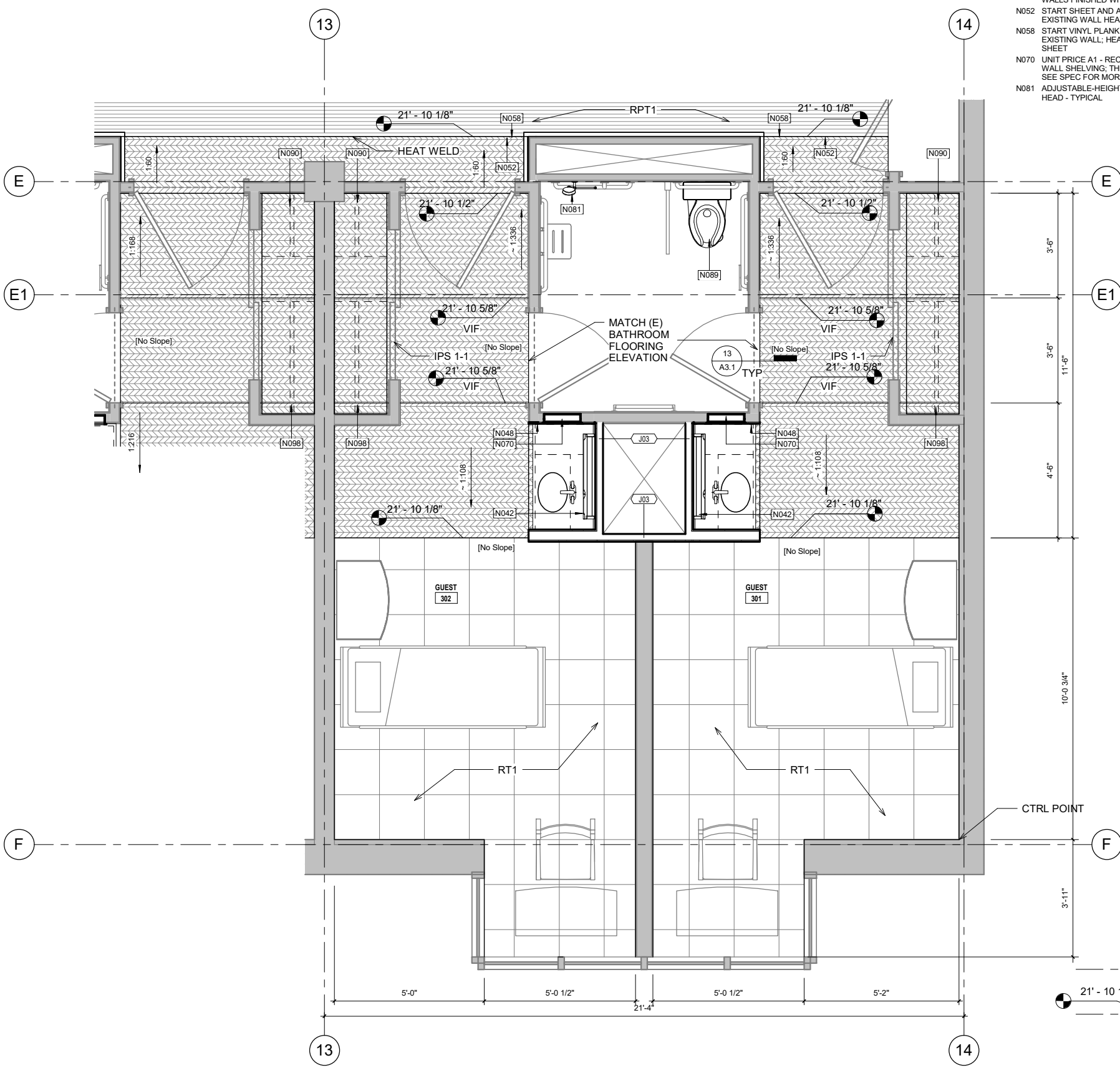
Revisions:

Drawn By: CWR	Checked By: SHC
Date: 03/20/2023	
Phase:	
PERMIT DOCUMENTS	

SHEET TITLE:

3RD FLOOR -
TYPICAL
ENLARGED PLANS
- BASE BID
10 1/2"
0 1/8"
SHEET NO.

A2.3



KEYNOTES

- N042 UNIT PRICE A1 - WALL MOUNTED MEDICINE CABINET WITH MIRROR DOOR AND ADJUSTABLE SHELVES
- N048 INSTALL 5/8" FIBERGLASS FACED GWB ON (E) WALL FRAMING. INSTALL TILE BACKER ON WALLS FINISHED WITH POR-3
- N052 START SHEET AND ALIGN EDGE WITH EXISTING WALL HEAT WELD SHEET TO VINYL
- N058 START VINYL PLANK AND ALIGN EDGE WITH EXISTING WALL; HEAT WELD PLANK TO SHEET
- N070 UNIT PRICE A1 - RECESSED SOLID SURFACE WALL SHELVING; THREE FIXED SHELVES - SEE SPEC FOR MORE INFORMATION
- N081 ADJUSTABLE-HEIGHT HAND-HELD SHOWER HEAD - TYPICAL

KEYNOTES

- N089 WALL-MOUNTED TOILET PER SPEC, TYP ALL ROOMS - SEE MECHANICAL
- N090 IN ALL ROOMS INSTALL CLOSET STORAGE CASEWORK AS DRAWN; SEE SPEC FOR QUALITY AND FINISH. INSTALL OVER FINISHED FLOOR. SEE PLANS FOR UNIT DEPTH (EITHER 21" OR 24"). CASEWORK CONSISTS OF SINGLE TOWER OF 3 SHELVES AND 3 DRAWERS. TWO ADJUSTABLE HANGER RODS ON THE ROOM SIDE, ONE FIXED ADJUSTABLE HANGER ROD AND ONE FIXED SHELF ON THE CORRIDOR SIDE, AND A SINGLE SHELF OVER ENTIRE ASSEMBLY. PROVIDE HOLES IN VERTICAL SUPPORTS FOR ADJUSTABLE RODS AND SHELVES BUT NOT FOR FIXED SHELF AND ROD. ALIGN TOWER TO ONE SIDE OF SIDING CLOSET DOORS SO THAT DRAWERS CAN OPEN WHEN DOOR IS SLID TO ONE SIDE. FASTEN ASSEMBLY TO (E) FRAMED WALLS PER MANUF. - DO NOT FASTEN TO BRICK WALLS. CUT FIXED SHELF AND WALL SUPPORT TO GO AROUND COLUMNS.
- N098 INSTALL (N) CLOSET CASEWORK (C21) - 21" DEPTH; SEE INT. ELEVATIONS

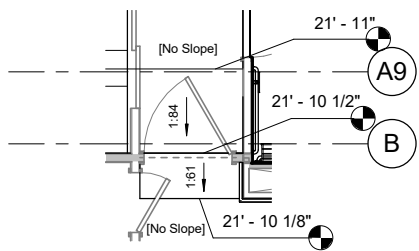
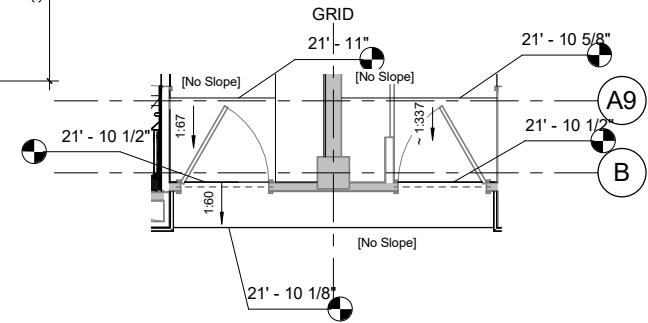
NEW WORK LEGEND

- EXISTING TO REMAIN
- NEW CONSTRUCTION

BASE BID IN RESIDENT ROOMS IS TO REMOVE, SALVAGE AND REINSTALL CABINETS AND SINKS. SOFFIT ABOVE SINK IS TO REMAIN. UNIT PRICE A1 IS TO REMOVE EXISTING CABINETS AND SINKS AND INSTALL NEW CABINETS, SINKS AND CEILING AS INDICATED ON THE DRAWING.

NOTIFICATION OF POTENTIAL HAZARDS

ASBESTOS, LEAD, AND OTHER HAZARDOUS MATERIALS ARE PRESENT IN THE BUILDING AND MAY IMPACT THE WORK OF ALL TRADES. REGULATED AIR CONTAMINATES, INCLUDING ASBESTOS AND LEAD, ARE ALSO PRESENT IN SETTLED AND CONCEALED DUST IN AND ON ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS OR SYSTEMS THROUGHOUT THE BUILDING. ALL TRADES SHALL COORDINATE WITH OTHER TRADES AND CONDUCT THEIR WORK TO PREVENT WORKER EXPOSURE OR SITE CONTAMINATION. REFER TO SPECIFICATION DIVISIONS 0, 1, AND 2 FOR SPECIFIC INFORMATION CONCERNING DISTURBING, REMOVING, AND DISPOSING OF THESE MATERIALS AND THE INSTALLATION OF NEW MATERIALS OR COMPONENTS. THIS NOTIFICATION IS PROVIDED IN ACCORDANCE WITH EPA AND OSHA REQUIREMENTS.



3 LEVEL 3 TYP GUEST SUITE - (E) BATHROOM
1/2" = 1'-0"

2 TYPICAL PARTIAL SLOPED ENTRY
1/4" = 1'-0"

1 SINGLE HIGH-SLOPED ENTRY
1/4" = 1'-0"



Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

**ANCHORAGE PIONEER HOME
ANC 23-26C RESIDENT RENOVATIONS**
923 W 11TH AVE, ANCHORAGE AK 99501

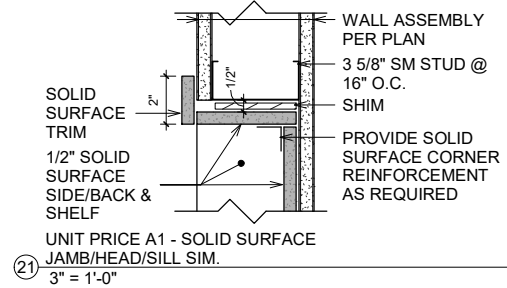
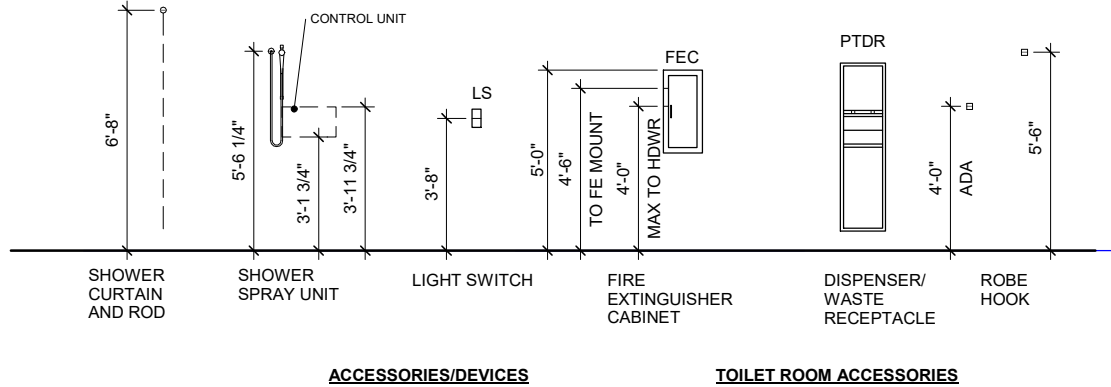
Revisions:

Drawn By:	Author	Checked By:	Checker
Date:	04/05/23		
Phase:	PERMIT DOCUMENTS		
Job No:			
SHEET TITLE:	3RD FLOOR - TYPICAL ENLARGED PLANS - BASE BID		
SHEET NO:			

A2.4

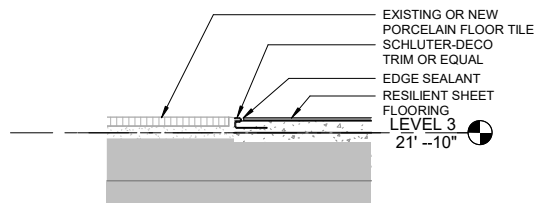
MOUNTING HEIGHT NOTES

1. PROVIDE SOLID BACKING FOR ALL ACCESSORIES.
2. ELEVATIONS SHOWN HEREIN REPRESENT TYPICAL REQUIREMENTS.
3. INSTALLATION OF ALL SANITARY FACILITIES ACCESSIBLE TO THE DISABLED SHALL COMPLY WITH THIS DETAIL & APPLICABLE REGULATORY REQUIREMENTS.

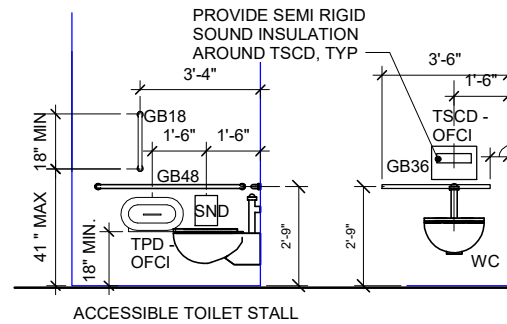


KEYNOTES

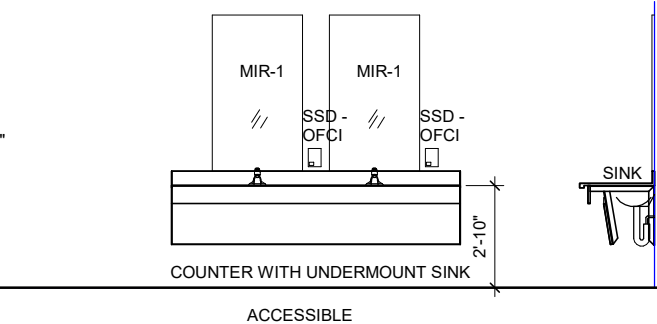
- N7 FOLD-DOWN SHOWER SEAT, MOUNT AT 18" A.F.F. TYPICAL
- N10 SHOWER CURTAIN / CUBICLE CURTAIN - CEILING MOUNTED TRACK ABOVE
- N11 REINSTALL (E) WALL MOUNTED EMERGENCY CALL BOX WITH PULL STRING AT ORIGINAL HEIGHT
- N12 72" GRAB BAR - TYPICAL
- N13 36" GRAB BAR - TYPICAL
- N14 42" GRAB BAR - TYPICAL
- N15 30" GRAB BAR - TYPICAL
- N16 24" GRAB BAR: CENTERED OVER WATER CLOSET (TOILET) - TYPICAL. WATER CLOSET CONSIDERED RECESSED WITH FOLD DOWN GRAB BAR REQUESTED FROM OCCUPANT PER INTERPRETATION OF ICC A117.1 604.5.2 EXCEPTION 1. CONSIDERED ALTERNATIVE EQUIVALENT COMPLIANCE FOR CODE SECTION AS FOLD DOWN GRAB BAR PROVIDES ADDITIONAL STABILITY AND SAFETY FOR RESIDENT AND CARE GIVER THAN RECESSED FIXTURE.
- N17 18" GRAB BAR - TYPICAL
- N18 FOLD DOWN GRAB BAR - TYPICAL
- N19 16" GRAB BAR WITH SHELF - TYPICAL
- N20 TOWEL BAR - TYPICAL
- N21 WALL MOUNTED SHOWER CADDY - TYPICAL
- N22 TOILET PAPER HOLDER - TYPICAL
- N23 ROBE HOOK - TYPICAL
- N301 POR2 BASE
- N305 UNIT PRICE A1 - FAUCET - SEE MECHANICAL
- N306 UNIT PRICE A1 - UNDERMOUNT SOLID SURFACE SINK
- N402 UNIT PRICE A1 - WALL MOUNTED MEDICINE CABINET WITH MIRROR DOOR AND ADJUSTABLE SHELVES
- N404 POR3 WALL TILE WITH STAINLESS STEEL EDGE TRIM AT HORIZONTAL AND VERTICAL EDGE TRANSITIONS TO PAINTED WALL SURFACE
- N609 ALIGN TO C.L. OF WALL
- N700 UNIT PRICE A1 - RECESSED SOLID SURFACE WALL SHELVE; THREE FIXED SHELVES - SEE SPEC FOR MORE INFORMATION
- N701 UNIT PRICE A1 - LAVATORY ASSEMBLY 1: ONE, 12" 4-DRAWER BASE CABINETS WITH ONE, 30" ADA KNEE PROTECTION BASE CABINET, ALIGN DRAWERS TO BATHROOM WALL - INSTALL SPACERS AS NEEDED. COUNTERTOP, SINK, AND FIXTURES PER SPEC; ALIGN SINK WITH CENTER OF 30" CABINET
- N702 UNIT PRICE A1 - LAVATORY ASSEMBLY 2: ONE, 8" 4-DRAWER BASE CABINET WITH ONE, 30" ADA KNEE PROTECTION BASE CABINET, ALIGN DRAWERS TO BATHROOM WALL - INSTALL SPACERS AS NEEDED. COUNTERTOP, SINK, AND FIXTURES PER SPEC; ALIGN SINK WITH CENTER OF 30" CABINET
- N703 UNIT PRICE A1 - LAVATORY ASSEMBLY 3: ONE, 10" 4-DRAWER BASE CABINET WITH ONE, 30" ADA KNEE PROTECTION BASE CABINET, ALIGN DRAWERS TO BATHROOM WALL - INSTALL SPACERS AS NEEDED. COUNTERTOP, SINK, AND FIXTURES PER SPEC; ALIGN SINK WITH CENTER OF 30" CABINET
- N704 LAVATORY ASSEMBLY 4: ONE, 42" ADA KNEE PROTECTION BASE CABINET - INSTALL SPACERS AS NEEDED. COUNTERTOP, SINK, AND FIXTURES PER SPEC; ALIGN SINK WITH CENTER OF 42" CABINET.
- N705 ALIGN TO C.L. OF BASE CABINET
- N706 UNIT PRICE A1 - ADA KNEE PROTECTION BASE CABINET
- N708 EXTEND FLOORING UNDER CASEWORK AND FIXTURES WHERE VISIBLE. CUT FLOORING AROUND FIXTURES AND SUPPORT ELEMENTS THAT ARE ANCHORED TO THE FLOOR.
- N801 ADJUSTABLE-HEIGHT HAND-HELD SHOWER HEAD - TYPICAL
- N809 WALL-MOUNTED TOILET PER SPEC, TYP ALL ROOMS - SEE MECHANICAL
- N900 IN ALL ROOMS INSTALL CLOSET STORAGE CASEWORK AS DRAWN. SEE SPEC FOR QUALITY AND FINISH. INSTALL OVER FINISHED FLOOR - SEE PLANS FOR UNIT DEPTH (EITHER 21" OR 24"). CASEWORK CONSISTS OF SINGLE TOWER OF 3 SHELVES AND 3 DRAWERS. TWO ADJUSTABLE HANGER RODS ON THE ROOM SIDE. ONE FIXED ADJUSTABLE HANGER ROD AND ONE FIXED SHELF ON THE CORRIDOR SIDE. AND A SINGLE SHELF OVER ENTIRE ASSEMBLY. PROVIDE HOLES IN VERTICAL SUPPORTS FOR ADJUSTABLE RODS AND SHELVES BUT NOT FOR FIXED SHELF AND ROD. ALIGN TOWER TO ONE SIDE OF SIDING CLOSET DOORS SO THAT DRAWERS CAN OPEN WHEN DOOR IS SLID TO ONE SIDE. FASTEN ASSEMBLY TO (E) FRAMED WALLS PER MANUF. - DO NOT FASTEN TO BRICK WALLS. CUT FIXED SHELF AND WALL SUPPORT TO GO AROUND COLUMNS.
- N903 INSTALL SALVAGED TOILET AND GRAB BARS PER ARCH.
- N905 INSTALL SALVAGED LAV PER MANUF.
- N909 INSTALL (N) CLOSET CASEWORK (C24) - 24" DEPTH; SEE INT. ELEVATIONS



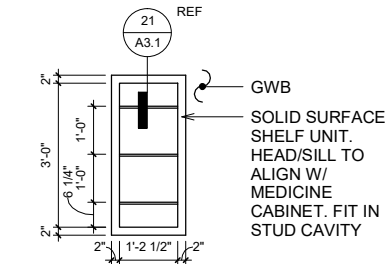
13 FLOOR TRANSITION
3" = 1'-0"



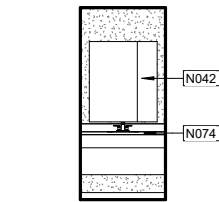
ADA MOUNTING HEIGHTS - RESTROOMS
3/8" = 1'-0"



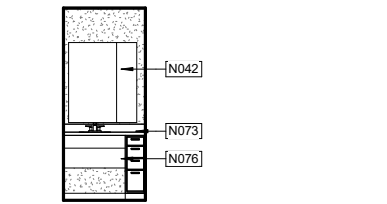
ACCESSIBLE LAVATORY



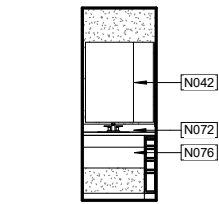
UNIT PRICE A1 - SOLID SURFACE SHELF UNIT ELEVATION
1/2" = 1'-0"



LAV ASSEMBLY 4
1/4" = 1'-0"

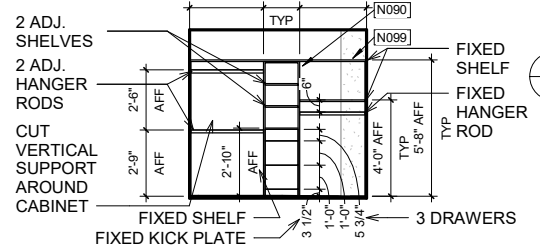


LAV ASSEMBLY 3
1/4" = 1'-0"



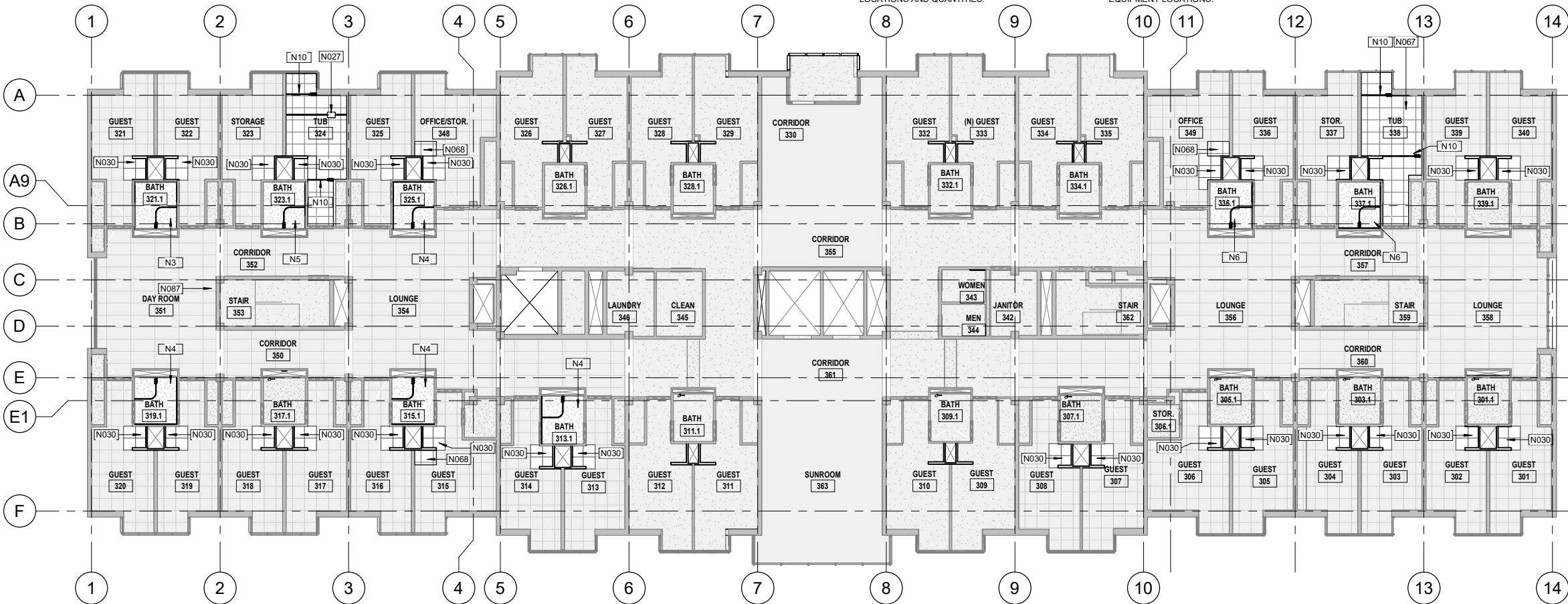
LAV ASSEMBLY 2
1/4" = 1'-0"

PROVIDE HOLES FOR ADJ. MOUNTING HEIGHTS

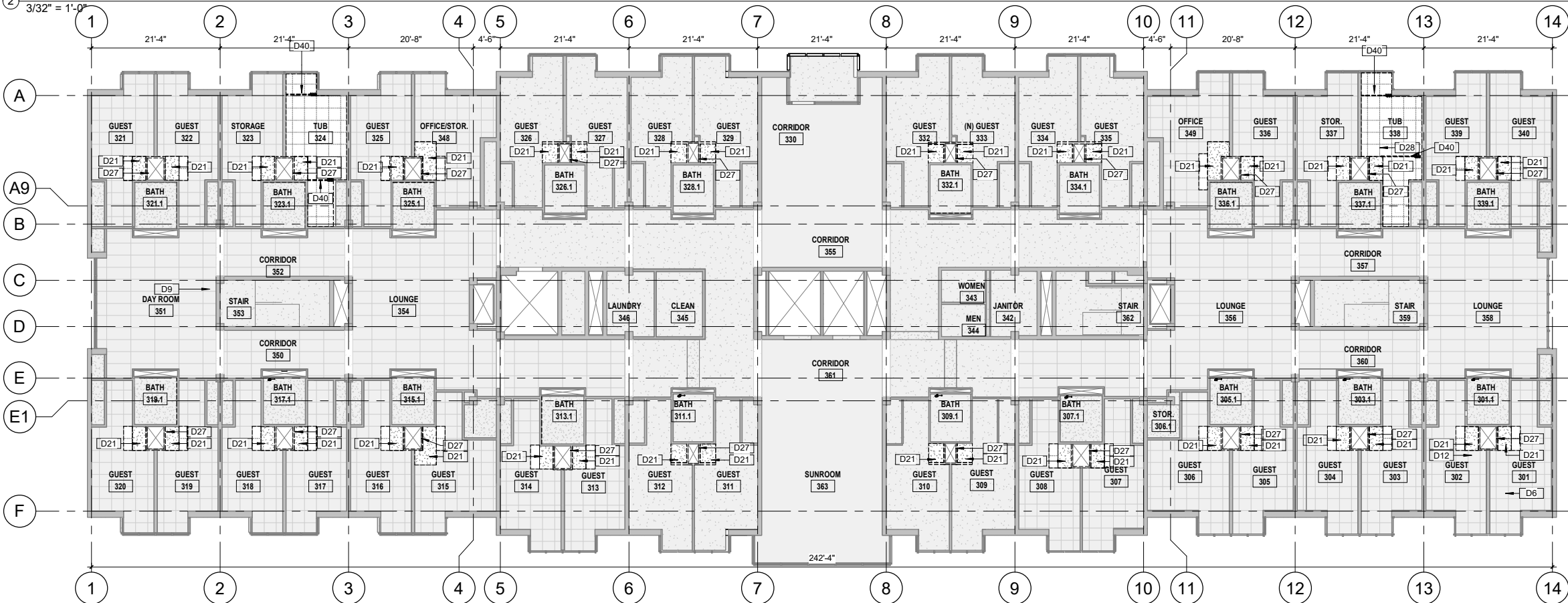


REFLECTED CEILING PLAN GENERAL NOTES

- DIMENSIONS TO LIGHT FIXTURES ARE FROM GRIDLINE TO CENTERLINE OF FIXTURE UNLESS NOTED OTHERWISE. REFER TO ELECTRICAL FOR FIXTURE LOCATIONS AND QUANTITIES.
- LIGHT FIXTURES TO BE CENTERED ON CEILING PANEL UNLESS OTHERWISE NOTED. REFER TO MECHANICAL DRAWINGS FOR SCOPE OF MECHANICAL WORK AND EQUIPMENT LOCATIONS.
- NOT ALL EXISTING LIGHTS AND EQUIPMENT ARE INDICATED ON THE DRAWINGS. FIELD VERIFY EXISTING CONDITIONS.



2 3RD FLOOR RCP - NEW
3/32" = 1'-0"



1 3RD FLOOR RCP - DEMO
3/32" = 1'-0"

REFLECTED CEILING PLAN LEGEND

- 2x2 LIGHT LIGHT FIXTURE - SEE ELECTRICAL
- 2x2 LIGHT LIGHT FIXTURE - SEE ELECTRICAL
- 2x2 LIGHT LIGHT FIXTURE - SEE ELECTRICAL
- CEILING MOUNTED CURTAIN TRACK WITH PRIVACY CURTAIN
- CEILING MOUNTED CURTAIN TRACK WITH SHOWER CURTAIN
- SUPPLY AIR DIFFUSER - SEE MECHANICAL
- ACOUSTICAL CEILING TILE
- GYPSUM BOARD CEILING
- GYPSUM BOARD CEILING
- SUSPENDED CEILING SYSTEM

KEYNOTES

- D6 REMOVE, SALVAGE AND REINSTALL EXISTING SUSPENDED CEILING AS REQUIRED TO INSTALL NEW MECHANICAL SYSTEMS. SEE MECHANICAL DRAWINGS.
- D9 REMOVE (E) LIGHT FIXTURE (SEE ELEC DRAWINGS); CABINET AND WALL FINISH TO REMAIN - PROTECT FROM DAMAGE
- D12 SEE ELECTRICAL AND MECHANICAL DRAWINGS FOR ADDITIONAL CEILING DEMOLITION
- D21 UNIT PRICE A1 - REMOVE EXISTING GYPSUM BOARD CEILING SOFFIT AND FRAMING; SELECTIVELY REMOVE AND RETAIN CEILING TILES AND ACT GRID AS NEEDED FOR NEW WORK - PROTECT EXISTING ACT TO REMAIN
- D27 REMOVE CHASE WALL - TYPICAL
- D28 REMOVE AND DISPOSE OF EXISTING CEILING TILES ONLY - GRID, LIGHT FIXTURES AND EQUIPMENT TO REMAIN
- D40 REMOVE AND REINSTALL SHOWER CURTAINS AND CEILING TRACK
- N3 NEW BATHROOM WORK - ARRANGEMENT A; SEE ENLARGED PLANS
- N4 NEW BATHROOM WORK - ARRANGEMENT B; SEE ENLARGED PLANS
- N5 NEW BATHROOM WORK - ARRANGEMENT C; SEE ENLARGED PLANS
- N6 NEW BATHROOM WORK - ARRANGEMENT D; SEE ENLARGED PLANS
- N10 SHOWER CURTAIN / CUBICLE CURTAIN - CEILING MOUNTED TRACK ABOVE
- N027 CEILING MOUNTED PATIENT LIFT - ALIGN TO TUB PER MANUF. IN FIELD
- N030 UNIT PRICE A1 - EXTEND (E) ACT GRID TO WALLS AROUND VANITY; INSTALL NEW TILES TO MATCH (E) PER FINISH SCHEDULE, TYP
- N067 EXISTING GRID WITH NEW ACOUSTICAL TILE CEILING PANELS - ACT2
- N068 INSTALL NEW ACOUSTICAL TILE CEILING (ACT2) TO MATCH (E)
- N087 INSTALL (N) UNDER CABINET LIGHT FIXTURE - SEE ELEC DRAWINGS.

DEMOLITION LEGEND

- EXISTING TO REMAIN
- EXISTING TO BE DEMOLISHED/REMOVED

NOTIFICATION OF POTENTIAL HAZARDS

ASBESTOS, LEAD, AND OTHER HAZARDOUS MATERIALS ARE PRESENT IN THE BUILDING AND MAY IMPACT THE WORK OF ALL TRADES. REGULATED AIR CONTAMINATES, INCLUDING ASBESTOS AND LEAD, ARE ALSO PRESENT IN SETTLED AND CONCEALED DUST IN AND ON ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS OR SYSTEMS THROUGHOUT THE BUILDING. ALL TRADES SHALL COORDINATE WITH OTHER TRADES AND CONDUCT THEIR WORK TO PREVENT WORKER EXPOSURE OR SITE CONTAMINATION. REFER TO SPECIFICATION DIVISIONS 0, 1, AND 2 FOR SPECIFIC INFORMATION CONCERNING DISTURBING, REMOVING, AND DISPOSING OF THESE MATERIALS AND THE INSTALLATION OF NEW MATERIALS OR COMPONENTS. THIS NOTIFICATION IS PROVIDED IN ACCORDANCE WITH EPA AND OSHA REQUIREMENTS.



Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 23-26C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Revisions:

Drawn By:	CWR	Checked By:	SHC
Date:	03/20/2023		
Phase:	PERMIT DOCUMENTS		
Job No:			
Sheet Title:	3RD FLOOR REFLECTED CEILING - DEMOLITION AND NEW		
Sheet No:	A9.1		

ROOM FINISH SCHEDULE - OTHER ROOMS								
ROOM NUMBER	NAME	FLOOR FINISH	WALL BASE	WALL NORTH	WALL SOUTH	WALL WEST	WALL EAST	CEILING FINISH
301.1	BATH	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
303.1	BATH	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
305.1	BATH	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
306.1	STOR.	RS1	WB1	IPS 1-3	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING
307.1	BATH	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
309.1	BATH	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
311.1	BATH	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
313.1	BATH	POR1	POR2 / POR3	POR3	IPS 1-2	IPS 1-3 / POR3	IPS 1-3 / POR3	IPS 1-3
315.1	BATH	POR1	POR2 / POR3	POR3	IPS 1-2	IPS 1-3 / POR3	IPS 1-3 / POR3	IPS 1-3
317.1	BATH	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
319.1	BATH	POR1	POR2 / POR3	POR3	IPS 1-2	IPS 1-3 / POR3	IPS 1-3 / POR3	IPS 1-3
321.1	BATH	POR1	POR2 / POR3	IPS 1-2	POR3	IPS 1-3 / POR3	IPS 1-3 / POR3	IPS 1-3
323	STORAGE	RS1	WB1	IPS 1-3	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING, SEE RCP
323.1	BATH	POR1 OVER (E)	WB1	IPS 1-2	POR3	IPS 1-3 / POR3	IPS 1-3 / POR3	IPS 1-3
324	TUB	POR1	POR2 / POR3	IPS 1-3 / POR3	IPS 1-3	IPS 1-3	IPS 1-3 / POR3	ACT2
325.1	BATH	POR1	POR2 / POR3	IPS 1-2	POR3	IPS 1-3 / POR3	IPS 1-3 / POR3	IPS 1-3
326.1	BATH	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
328.1	BATH	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
330	CORRIDOR	RPT1	WB1	IPS 1-3	N/A	IPS 1-3	IPS 1-3	EXISTING
332.1	BATH	POR1	POR2 / POR3	IPS 1-2	POR3	IPS 1-3 / POR3	IPS 1-3 / POR3	IPS 1-3
334.1	BATH	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
336.1	BATH	POR1	POR2 / POR3	IPS 1-2	POR3	IPS 1-3 / POR3	IPS 1-3 / POR3	IPS 1-3
337	STOR.	RS1	WB1	IPS 1-3	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING, SEE RCP
337.1	BATH	POR1 OVER (E)	WB1	IPS 1-2	POR3	IPS 1-3 / POR3	IPS 1-3 / POR3	IPS 1-3
338	TUB	POR1	POR2 / POR3	IPS 1-3 / POR3	IPS 1-3	IPS 1-3	IPS 1-3 / POR3	ACT2
339.1	BATH	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
342	JANITOR	EXISTING	WB1	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
343	WOMEN	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
344	MEN	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
345	CLEAN	EXISTING	EXISTING	IPS 1-3	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING
346	LAUNDRY	EXISTING	EXISTING	IPS 1-3	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING
348	OFFICE/ST OR.	RS1	WB1	IPS 1-3	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING, SEE RCP
349	OFFICE	RS1	WB1	IPS 1-3	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING, SEE RCP

ROOM FINISH SCHEDULE - OTHER ROOMS								
ROOM NUMBER	NAME	FLOOR FINISH	WALL BASE	WALL NORTH	WALL SOUTH	WALL WEST	WALL EAST	CEILING FINISH
350	CORRIDOR	RPT1	WB1	IPS 1-3	IPS 1-3	N/A	N/A	EXISTING
351	DAY ROOM	RPT1	WB1	IPS 1-3	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING
352	CORRIDOR	RPT1	WB1	IPS 1-3	IPS 1-3	N/A	N/A	EXISTING
353	STAIR	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
354	LOUNGE	RPT1	WB1	IPS 1-3	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING
355	CORRIDOR	RPT1	WB1	IPS 1-3	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING
356	LOUNGE	RPT1	WB1	IPS 1-3	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING
357	CORRIDOR	RPT1	WB1	IPS 1-3	IPS 1-3	N/A	N/A	EXISTING
358	LOUNGE	RPT1	WB1	IPS 1-3	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING
359	STAIR	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
360	CORRIDOR	RPT1	WB1	IPS 1-3	IPS 1-3	N/A	N/A	EXISTING
361	CORRIDOR	RPT1	WB1	IPS 1-3	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING
362	STAIR	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING	EXISTING
363	SUNROOM	RPT1	WB1	N/A	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING

ROOM FINISH SCHEDULE - GUEST ROOMS								
NAME	FLOOR FINISH	WALL BASE	WALL NORTH	WALL SOUTH	WALL WEST	WALL EAST	CEILING FINISH	
333	(N) GUEST	RS1 / RT1 - SEE ENLARGED PLANS	WB1	IPS 1-3	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING / IPS 1-1, SEE RCP
SEE PLANS	GUEST	RS1 / RT1 - SEE ENLARGED PLANS	WB1	IPS 1-3	IPS 1-3	IPS 1-3	IPS 1-3	EXISTING / IPS 1-1, SEE RCP

CLOSET CASEWORK SCHEDULE		
Room: Number	Type	Mark

301	C21
302	C21
303	C21
304	C21
305	C21
306.1	C24
307	C21
308	C21
309	C24
310	C24
311	C24
312	C24

CLOSET CASEWORK SCHEDULE		
Room: Number	Type	Mark

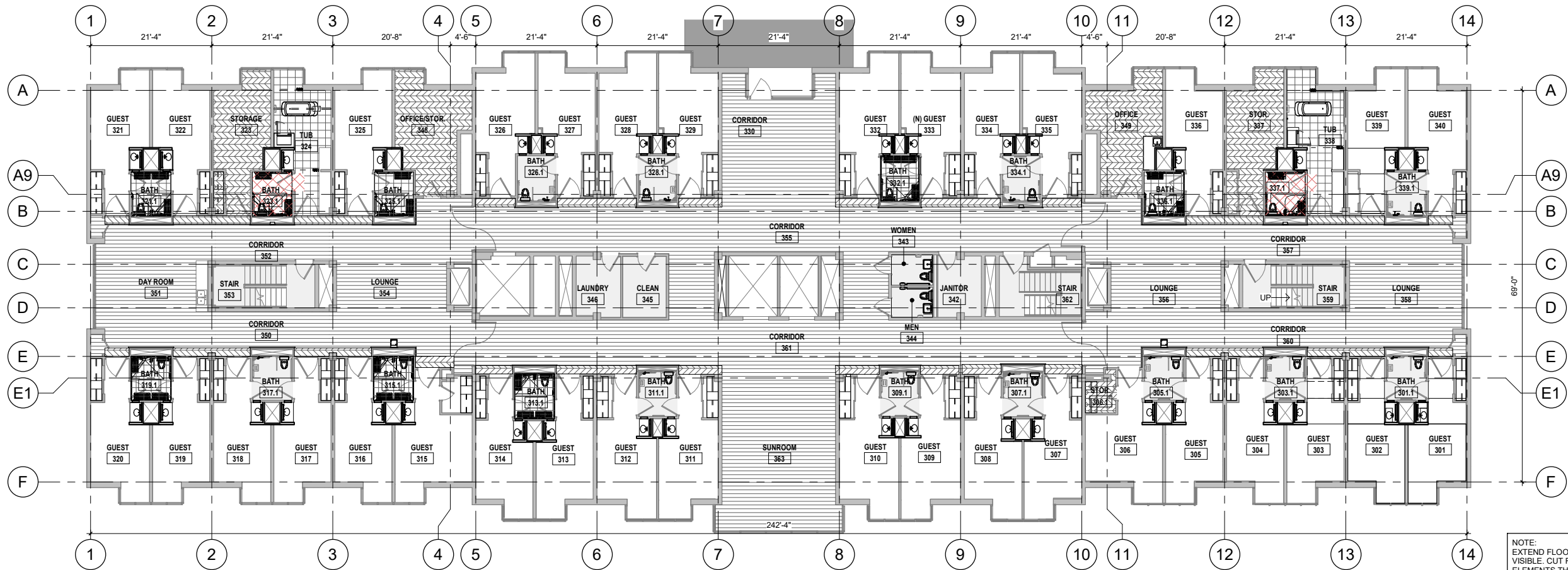
313	C21
314	C21
315	C24
316	C21
317	C21
318	C21
319	C21
320	C24
321	C24
322	C21
323	C21
325	C21

CLOSET CASEWORK SCHEDULE		
Room: Number	Type	Mark

326	C21
327	C24
328	C24
329	C24
332	C24
333	C24
334	C21
335	C21
336	C21
339	C21
340	C21

- NOTES:
- NO PAINT APPLIED TO EXISTING BRICK MATERIAL.
 - MAINTAIN CONSISTANT HEIGHT OF WALL BASE AT SLOPE LOCATIONS. TRIM BOTTOM OF WALL BASE AS REQUIRED.
 - REFER TO FLOOR FINISH PLAN FOR ADDITIONAL CLAIRIFICATION.
 - CONTRACTOR TO PAINT NEW WALLS - EXISTING WALLS WILL BE PAINTED BY THE OWNER

FINISH MATERIAL LEGEND								
MARK	MATERIAL	MANUFACTURER	STYLE / PRODUCT	COLOR	SIZE	FINISH	NOTES	
ACT1	ACOUSTIC CEILING TILE	ARMSTRONG	OPTIMA	-	2' X 4'	-	NON WET AREAS	
ACT2	ACOUSTIC CEILING TILE	ARMSTRONG	OPTIMA HEALTH ZONE	-	2' X 4'	-	WET AREAS	
IPS 1-1	PAINT	SHERWIN WILLIAMS	-	PAINT TO MATCH EXISTING, AS NEEDED FOR WORK	-	PER SPECIFICATION	GENERAL AREAS	
IPS 1-2	PAINT	SHERWIN WILLIAMS	-	SW 6420 - WINDY BLUE	-	PER SPECIFICATION	ACCENT WALLS & BATHROOM DOORS	
IPS 1-3	PAINT	SHERWIN WILLIAMS	-	SW 7004 - SNOWBOUND	-	PER SPECIFICATION	GENERAL WALL / (N) GYP CEILINGS	
IPS 2-1	PAINT	SHERWIN WILLIAMS	-	SW 7004 - SNOWBOUND	-	PER SPECIFICATION	DOOR AND DOOR TRIM	
PL1	PLASTIC LAMINATE	WILSONART	HPL	4942-38 CRISP LINEN	-	-		
POR1	PORCELAIN	ROYAL MOSA	GLOBAL COLLECTION - GLOBAL GRIP AS	75920AS	6' x 6'	PER SPECIFICATION	SHOWER FLOOR TILE	
POR2	PORCELAIN	ROYAL MOSA	GLOBAL COLLECTION - BN (WALL BASE / SKIRTING PROFILE)	75920	12" X 2.8"	PER SPECIFICATION	SHOWER / TOILET ROOM WALL BASE	
POR3	PORCELAIN	ROYAL MOSA	GLOBAL COLLECTION	16870	6" X 12"	PER SPECIFICATION	SHOWER / TOILET ROOM WALL TILE	
RPT1	RESILIENT PLANK TILE FLOORING	SHAW CONTRACT	IN TANDEM 0896V	WHEAT OAK 07220	9.84" x 59.06"	PER SPECIFICATION	ASHLAR INSTALL	
RS1	RESILIENT SHEET FLOORING	SHAW CONTRACT	IN TANDEM 0897V	ZEN 96515	6.59' X 65.62'	PER SPECIFICATION	GUEST ROOMS, WELD ROD 270VS	
RT1	RESILIENT TILE FLOORING	CHILEWICH CONTRACT	BASKETWEAVE	420306-014 OYSTER	18 X 18	PER SPECIFICATION	FELT BACKING	
SSM1	SOLID SURFACE MATERIAL	FORMICA	EVERFORM	742 BLANCO TERRAZZO	-	PER SPECIFICATION	COUNTER TOP	
SSM2	SOLID SURFACE MATERIAL	FORMICA	EVERFORM	102 ARCTIC	-	PER SPECIFICATION	SINK AND SHELIVING	
WB1	WALL BASE	TARKETT	MILLWORK WALL FINISHING SYSTEM - MANDALAY 6"	08 ICICLE	6"H	-	GENERAL AREAS	



FLOOR FINISH LEGEND	
EXISTING	
POR1	
POR1 OVER (E)	
RPT1	
RS1	
RS1 / RT1 - SEE ENLARGED PLANS	

NOTE:
EXTEND FLOORING UNDER CASEWORK AND FIXTURES WHERE VISIBLE. CUT FLOORING AROUND FIXTURES AND SUPPORT ELEMENTS THAT ARE ANCHORED TO THE FLOOR.



Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 23-26C RESIDENT RENOVATIONS
923 W 11TH AVE., ANCHORAGE AK 99501

Revisions:	
Drawn By: CWR/MK	Checked By: SHC
Date: 03/20/2023	
Project: PERMIT DOCUMENTS	
Job No:	
Sheet Title: 3RD FLOOR FINISH PLAN & SCHEDULES	
Sheet No:	

MECHANICAL LEGEND AND ABBREVIATIONS

ABBREVIATIONS		GRAPHICAL REFERENCE	
ADA	AMERICAN W/DISABILITIES ACT	AFF	ABOVE FINISHED FLOOR
APPROX.	APPROXIMATE	BOD	BOTTOM OF DUCT
ARCH	ARCHITECT, ARCHITECTURAL	BOP	BOTTOM OF PIPE
AVG.	AVERAGE	CL	CENTER LINE
BHP	BRAKE HORSEPOWER	ELEV.	ELEVATION
BMS	BUILDING AUTOMATION SYSTEM	FFL	FINISHED FLOOR LEVEL
BTU	BRITISH THERMAL UNIT	INV.	INVERT
BTUH	BTU PER HOUR	TOD	TOP OF DUCT
CFM	CUBIC FEET PER MINUTE	TOP	TOP OF PIPE
CFOI	CONTRACTOR FURNISHED OWNER INSTALL	OC	ON CENTER
CO	CARBON MONOXIDE	POC	POINT OF CONNECTION
CO ₂	CARBON DIOXIDE	POD	POINT OF DISCONNECTION
CU.FT.	CUBIC FEET		
CU.FT.	CUBIC INCHES	DUCT SYSTEMS	
db	DECIBEL	SA	SUPPLY AIR
DB	DRY BULB (AIR)	RA	RETURN AIR
DDC	DIRECT DIGITAL CONTROL	EA	EXHAUST AIR
DEG.	DEGREE	OA	OUTSIDE AIR
DMPR	DAMPER	OWA	OUTSIDE AIR
DN	DOWN	FV	FLUE VENT
DPS	DIFFERENTIAL PRESSURE SENSOR	TA	TRANSFER AIR
DVV	DRAIN WASTE AND VENT		
EA	EACH		
EAT	ENTERING AIR TEMPERATURE		
EGT	ENTERING GLYCOL TEMPERATURE	HYDRONIC SYSTEMS	
ELEC	ELECTRICAL	HWS	HEATING WATER SUPPLY
ESP	EXTERNAL STATIC PRESSURE	HWR	HEATING WATER RETURN
EWT	ENTERING WATER TEMPERATURE	CWS	CHILLED WATER SUPPLY
F	FAHRENHEIT	CWR	CHILLED WATER RETURN
FDC	FIRE DEPARTMENT CONNECTION	HGS	HEATING GLYCOL SUPPLY
FPM	FEET PER MINUTE	HGR	HEATING GLYCOL RETURN
FPS	FEET PER SECOND		
FT	FEET		
FT W.C.	FEET WATER COLUMN	DUCT WORK ACCESSORIES	
FU	FIXTURE UNIT	FD	FIRE DAMPER
GAL	GALLON	FSD	FIRE-SMOKE DAMPER
GALV.	GALVANIZED	BD	BALANCING DAMPER
GPH	GALLON PER HOUR	BDD	BACK DRAFT DAMPER
GPM	GALLON PER MINUTE	CD	CONTROL DAMPER
HEPA	HIGH EFFICIENCY PARTICULATE ARREST (FILTER)		
HP	HORSEPOWER (ELEC.)		
HZ	HERTZ (ELEC.)	SERVICE SYSTEMS	
IAQ	INDOOR AIR QUALITY	CW	DOMESTIC COLD WATER
IN W.C.	INCH WATER COLUMN	HW	DOMESTIC HOT WATER
KW	KILOWATT	HWC	DOMESTIC HOT WATER CIRCULATION
KWH	KILOWATT HOUR	NP	NON-POTABLE
LAT	LEAVING AIR TEMPERATURE		
LB	POUND	WASTE SYSTEMS	
LGT	LEAVING GLYCOL TEMPERATURE	W	SANITARY WASTE
LWT	LEAVING WATER TEMPERATURE	SS	SANITARY SEWER
MAT	MIXED AIR TEMPERATURE	V	SANITARY VENT
MAX	MAXIMUM		
MBH	1,000 BTU PER HOUR	RAIN WATER SYSTEMS	
MECH	MECHANICAL	SD	STORM DRAIN
MIN.	MINIMUM	RL	RAIN LEADER
MISC.	MISCELLANEOUS		
MMBH	1,000,000 BTU PER HOUR	PROCESS WATER SYSTEMS	
NC	NORMALLY CLOSED	CD	CONDENSATE, WATER
NIC	NOT IN CONTRACT	CDX	CONDENSATE, FLUE GAS
NO	NORMALLY OPEN		
NTS	NOT TO SCALE	FUEL GAS SYSTEMS	
OAT	OUTSIDE AIR TEMPERATURE	NG	NATURAL GAS
OFCI	OWNER FURNISHED CONTRACTOR INSTALL	PG	PROPANE
OFOI	OWNER FURNISHED OWNER INSTALL		
PD	PRESSURE DROP	FUEL OIL SYSTEMS	
PG	PROPYLENE GLYCOL	FOR	FUEL OIL RETURN
PH	PHASE (ELEC)	FOS	FUEL OIL SUPPLY
PRES	PRESSURE	FOV	FUEL OIL VENT
PSI	POUND PER SQUARE INCH		
PSIA	PSI ABSOLUTE	REFRIGERANT SYSTEM	
PSIG	PSI GAUGE	RFL	REFRIGERANT, LIQUID
RH	RELATIVE HUMIDITY	RFS	REFRIGERANT, SUCTION
RPM	REVOLUTION PER MINUTE	RFG	REFRIGERANT, GENERAL
S	SWITCH (SYMBOLIC)		
SEC.	SECOND	FIRE PROTECTION SYSTEMS	
SSTL	STAINLESS STEEL	FPO	FIRE PROTECTION - OTHER
T	THERMOSTAT (SYMBOLIC)	FPW	FIRE PROTECTION - WET PIPE SYSTEM
TEMP.	TEMPERATURE	FPD	FIRE PROTECTION - DRY PIPE SYSTEM
TYP.	TYPICAL	FFFA	FIRE PROTECTION - PRE-ACTION SYSTEM
UON	UNLESS OTHERWISE NOTED		
V	VOLT (ELEC.)		
VFD	VARIABLE FREQUENCY DRIVE		
WB	WET BULB (AIR)		

ADDITIONAL ABBREVIATIONS NOTED BY EQUIPMENT TAGS, SYSTEM SYMBOLS, AND ACRONYMS GENERALLY ACCEPTED BY THE INDUSTRY SHALL BE APPLICABLE.

SYSTEM ABBREVIATION/COLOR LEGEND

	SA	SUPPLY AIR SYSTEM		CW	DOMESTIC COLD WATER
	RA	RETURN AIR SYSTEM		HW	DOMESTIC HOT WATER
	EA	EXHAUST AIR SYSTEM		HWC	DOMESTIC HOT WATER CIRCULATION
	OA	OUTSIDE AIR SYSTEM		NP	NON-POTABLE WATER
	CA	COMBUSITION AIR SYSTEM		W	SANITARY WASTE, SANITARY SEWER
	FV	FLUE VENT SYSTEM		V	SANIARY VENT
	HWS	HEATING WATER SUPPLY		SD	STORM DRAIN
	HWR	HEATING WATER RETURN		RL	RAIN LEADER
	CWS	CHILLED WATER SUPPLY		CD	CONDENSATE, WATER
	CWR	CHILLED WATER RETURN		CDX	CONDENSATE, FLUE GAS
	RFG	REFRIGERANT, GENERAL		FOS	FUEL OIL SUPPLY
	RS	REFRIGERANT, SUCTION		FOR	FUEL OIL RETURN
	RL	REFRIGERANT, LIQUID		FOV	FUEL OIL VENT
				NG	NATURAL GAS
				PG	PROPANE
				FP	FIRE PROECTION

CERTAIN PIPING AND EQUIPMENT CONNECTIONS MAY VARY. INTERPRET DRAWINGS FOR INTENDED INSTALLATION OR REQUEST ASSISTANCE FOR ADDITIONAL CLARIFICATION.

MECHANICAL AND PLUMBING SPECIFICATIONS

- Z1020 - ADMINISTRATIVE REQUIREMENTS**
- GENERAL REQUIREMENTS FOR MECHANICAL AND PLUMBING SYSTEMS: ALL WORK SHALL CONFORM TO THE CURRENTLY ADOPTED CODES AND STANDARDS AND AS AMENDED AND/OR REFERENCED.
 - BASIS OF DESIGN: "BASIS OF DESIGN EQUIPMENT IS IDENTIFIED FOR THE PURPOSE OF ESTABLISHING SIGNIFICANT QUALITY, PERFORMANCE, FUNCTION, DIMENSIONS, PHYSICAL PROPERTIES, APPEARANCE, AND OTHER RELEVANT MATERIAL AND PERFORMANCE CHARACTERISTICS. UNLESS OTHERWISE NOTED, THE IDENTIFICATION OF THE "BASIS OF DESIGN" EQUIPMENT IS NOT INTENDED TO PRECLUDE ALTERNATIVE MATERIAL AND EQUIPMENT SELECTIONS. HOWEVER, THE OWNER RETAINS THE RIGHT TO REJECT MATERIAL AND EQUIPMENT DEVIATING FROM THE BASIS OF DESIGN. WHERE MATERIAL AND EQUIPMENT DEVIATION IS ALLOWED, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY MODIFICATIONS NECESSARY TO INCORPORATE THE EQUIPMENT INTO THE PROJECT.
 - DRAWINGS: DRAWINGS ARE INTENDED TO BE DIAGRAMMATIC AND DO NOT NECESSARILY SHOW THE COMPLETE INSTALLATION. INFORMATION HEREIN MAY BE PARTIALLY BASED ON EXISTING BUILDING RECORDS, THE EXTENT OF WHICH MAY NOT REFLECT CURRENT BUILDING CONDITIONS. CONTRACTOR SHALL VERIFY ACTUAL CONDITIONS AND ADJUST AS APPROPRIATE TO COMPLETE THE PROJECT.
 - EQUIPMENT START-UP SERVICES: PROVIDE EQUIPMENT START-UP SERVICES BY THE MANUFACTURER'S QUALIFIED PERSONNEL FOR THE FOLLOWING:
 - SMOKE AND FIRE DAMPER SYSTEM
 - OPERATION AND MAINTENANCE DOCUMENT AND TRAINING: SUBMIT OPERATION AND MAINTENANCE MANUALS FOR THE MECHANICAL EQUIPMENT AND SYSTEMS. PROVIDE TRAINING OF OWNER IN OPERATION AND MAINTENANCE OF BUILDING SYSTEMS:
 - NUMBER OF O&M MANUALS: 2 (TWO) COPIES
 - NUMBER OF SESSION(S): 1 (ONE) SESSION
 - TIME DURATION ANTICIPATED: 2 (TWO) HOURS PER SESSION

- D2000 - PLUMBING SYSTEMS**
- GENERAL REQUIREMENTS
 - HANGERS AND SUPPORTS: HANGERS AND SUPPORTS SHALL CONFORM TO THE REQUIREMENTS OF UNIFORM PLUMBING CODE, APPLICABLE CODES AND STANDARDS, OR MANUFACTURERS' GUIDELINES.
 - SEISMIC AND VIBRATION CONTROLS: PROVIDE SEISMIC AND VIBRATION CONTROLS IN ACCORDANCE WITH THE REQUIREMENTS OF AMERICAN SOCIETY OF CIVIL ENGINEERS, STANDARD 7-10, CHAPTER 13.
 - INSULATION: UNLESS OTHERWISE NOTED IN THE INSULATION SCHEDULE, PROVIDE INSULATION ON PIPING SYSTEMS IN ACCORDANCE WITH THE REQUIREMENTS OF INTERNATIONAL ENERGY CONSERVATION CODE.
 - IDENTIFICATION: PROVIDE COMMERCIALY AVAILABLE PIPING AND EQUIPMENT LABELING SYSTEMS. PAINT STENCILING NOT ALLOWED.
 - FIRESTOP AND SEALANT SYSTEMS: PENETRATIONS OF PIPING THROUGH RATED ASSEMBLIES SHALL BE PROTECTED BY LISTED FIRESTOP AND SEALANT SYSTEMS.
 - SUBMITTAL REQUIREMENTS
 - PROVIDE PRODUCT SUBMITTALS FOR ALL EQUIPMENT IDENTIFIED IN THE DRAWING EQUIPMENT SCHEDULES AND PRODUCTS IDENTIFIED IN THESE SPECIFICATIONS.
 - SUBMIT FIRESTOP ASSEMBLY SCHEDULE AND MANUFACTURER'S LISTING AND INSTALLATION INFORMATION FOR FIRESTOP SYSTEMS TO BE USED FOR THIS PROJECT.

- D2010 - DOMESTIC WATER SYSTEMS**
- GENERAL REQUIREMENTS
 - THIS SECTION INCLUDES THE DOMESTIC WATER SYSTEMS AND ACCESSORIES.
 - SPECIAL REQUIREMENTS FOR COMPLIANCE WITH NSF 61: DOMESTIC WATER SYSTEM PIPING AND EQUIPMENT SHALL CONFORM TO THE REQUIREMENTS OF NSF 61 FOR POTABLE WATER SERVICE.
 - SPECIAL PROVISION FOR STEEL PIPING SYSTEMS: UNLESS OTHERWISE NOTED, STEEL PIPING SYSTEMS SHALL BE LIMITED TO BUILDING WATER SERVICE ENTRANCE.
 - SPECIAL PROVISION FOR NON-METALLIC PIPING SYSTEMS: UNLESS OTHERWISE NOTED, USE OF NON-METALLIC PIPING SYSTEMS SHALL BE SUBJECT TO APPROVAL BY THE OWNER.
 - PRODUCTS
 - DOMESTIC WATER PIPING SYSTEMS
 - ABOVEGROUND PIPING SYSTEMS: HARD COPPER TUBE: ASTM B 88, TYPE L, WATER TUBE, DRAWN TEMPER. COPPER PRESSURE FITTINGS: ASME B16.18, CAST-COPPER ALLOY OR ASME B16.22, WROUGHT-COPPER, SOLDER-JOINTS.
 - DOMESTIC WATER SYSTEM VALVES AND SPECIALTIES
 - VALVES: VALVE PRESSURE AND TEMPERATURE RATINGS SHALL MEET THE REQUIRED SERVICE CONDITIONS.
 - WATER HAMMER ARRESTORS: MECHANICAL BELLOW OR PISTON WATER HAMMER ARRESTORS ONLY. AIR CHAMBER NOT ALLOWED.
 - EXECUTION
 - WATER HAMMER ARRESTORS: PROVIDE MECHANICAL WATER HAMMER ARRESTORS WHERE SHOWN IN THE DRAWINGS OR AT INDIVIDUAL FIXTURE SERVICES.
 - CLEANING, DISINFECTING, AND TESTING: CLEAN AND DISINFECT DOMESTIC WATER SYSTEM IN ACCORDANCE WITH EITHER AWWA C651 OR AWWA C652 OR FOLLOW PROCEDURES DESCRIBED BELOW:
 - FLUSH PIPING SYSTEM WITH CLEAN, POTABLE WATER UNTIL DIRTY WATER DOES NOT APPEAR AT OUTLETS.
 - FILL SYSTEM OR PART THEREOF WITH WATER/CHLORINE SOLUTION WITH AT LEAST 50 PPM OF CHLORINE, ISOLATE WITH VALVES AND ALLOW TO STAND FOR 24 HOURS, OR, FILL SYSTEM OR PART THEREOF WITH WATER/CHLORINE SOLUTION WITH AT LEAST 200 PPM OF CHLORINE, ISOLATE AND ALLOW TO STAND FOR THREE HOURS.
 - FLUSH SYSTEM WITH CLEAN, POTABLE WATER UNTIL NO CHLORINE IS IN WATER COMING FROM SYSTEM AFTER THE STANDING TIME.
 - REPEAT PROCEDURES IF BIOLOGICAL EXAMINATION SHOWS CONTAMINATION. SUBMIT WATER QUALITY TEST REPORT TO THE OWNER FOR DOCUMENTATION AND AUTHORITIES HAVING JURISDICTION.

- D2020 - SANITARY DRAINAGE AND VENT SYSTEMS**
- GENERAL REQUIREMENTS
 - THIS SECTION INCLUDES THE SANITARY DRAINAGE AND VENT SYSTEMS AND ACCESSORIES.
 - PRODUCTS
 - SANITARY WASTE AND VENT PIPING SYSTEMS
 - ABOVEGROUND PIPING SYSTEMS: ASTM A 888 OR CISPI 301. COUPLINGS: ASTM C 1277 ASSEMBLY OF METAL HOUSING, CORROSION-RESISTANT FASTENERS, AND ASTM C 564 RUBBER SLEEVE WITH INTEGRAL, CENTER PIPE STOP.
 - EXECUTION
 - TESTING: TEST SANITARY DRAINAGE AND VENT PIPING SYSTEMS AS FOLLOWS:
 - GENERAL TEST PROCEDURE: CLOSE OPENINGS IN PIPING SYSTEM AND FILL WITH WATER TO POINT OF OVERFLOW, BUT NOT LESS THAN 10-FOOT HEAD OF WATER. FROM 15 MINUTES BEFORE INSPECTION STARTS TO COMPLETION OF INSPECTION, WATER LEVEL MUST NOT DROP. INSPECT JOINTS FOR LEAKS AND REPAIR ACCORDINGLY.

- D3060 - DUCTWORK SYSTEMS**
- GENERAL REQUIREMENTS
 - THIS SECTION INCLUDES THE DUCTWORK SYSTEMS AND ACCESSORIES.
 - DUCTS SHALL CONFORM TO THE REQUIREMENTS OF SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS-METAL AND FLEXIBLE" FOR ACCEPTABLE MATERIALS, MATERIAL THICKNESS, AND DUCT CONSTRUCTION METHODS.
 - PRODUCTS
 - DUCTWORK SYSTEMS:
 - SHEETMETAL DUCT MATERIAL SHALL BE GALVANIZED SHEET STEEL, COMPLYING WITH ASTM A 653/A 653M AND HAVING G90 COATING DESIGNATION.
 - FLEXIBLE DUCTS SHALL BE THERMAFLEX SERIES GKM (R4.2) FLEXIBLE DUCT OR EQUAL.
 - DUCTWORK SYSTEMS ACCESSORIES:
 - DUCTWORK ACCESSORIES INCLUDING BALANCING DAMPERS, CONTROL DAMPERS, EQUIPMENT FLEXIBLE CONNECTORS, ETC. SHALL CONFORM TO APPLICABLE SMACNA DUCTWORK CONSTRUCTION STANDARDS.
 - EXECUTION
 - CLEANING: CLEAN DUCTWORK SYSTEMS THROUGHOUT IN PREPARATION FOR LEAKAGE TESTING AND TESTING, ADJUSTING, AND BALANCING.
 - TESTING: LEAKAGE TESTS: COMPLY WITH SMACNA'S "HVAC AIR DUCT LEAKAGE TEST MANUAL"

- D3090 - TESTING, ADJUSTING, AND BALANCING**
- GENERAL REQUIREMENTS
 - THIS SECTION INCLUDES TESTING, ADJUSTING, AND BALANCING OF THE MECHANICAL SYSTEMS.
 - PROVIDE SERVICES OF AN AABC OR NEBB CERTIFIED TESTING, ADJUSTING, AND BALANCING AGENT TO PERFORM THE TESTING, ADJUSTING, AND BALANCING OF THE FOLLOWING SYSTEMS:
 - VENTILATION SYSTEMS
 - PRODUCT (NOT USED)
 - EXECUTION
 - SUBMIT PRELIMINARY TAB REPORT TO THE OWNER FOR REVIEW AS PART OF THE SUBSTANTIAL COMPLETION PROCESS. SUBMIT FINAL TAB REPORT AFTER THE CORRECTION OF ANY DEFICIENCIES DISCOVERED DURING THE PREPARATION OF THE PRELIMINARY TAB REPORT, IF ANY, AS PART OF THE OPERATION AND MAINTENANCE DOCUMENTATION.

- D8000 - CONTROLS AND INSTRUMENTATIONS**
- GENERAL REQUIREMENTS
 - THIS SECTION INCLUDES REQUIREMENTS FOR THE CONTROL SYSTEMS.
 - SUBMITTAL REQUIREMENTS: PROVIDE SYSTEM CONTROL AND WIRING DIAGRAMS, SEQUENCE OF OPERATIONS, AND PRODUCT DATA FOR COMPONENTS FOR SYSTEMS IDENTIFIED IN THESE SPECIFICATIONS.
 - PRODUCTS (NOT USED)
 - EXECUTION
 - COORDINATE WITH ELECTRICAL TO PROVIDE ALL POWER AND CONTROL CIRCUITS AND CONDUITS TO COMPLETE THE SYSTEM.
 - COORDINATE WITH ALL INTEGRAL EQUIPMENT CONTROLLERS FOR CONTROL INTERFACE REQUIREMENTS.

GENERAL MECHANICAL INFORMATION

APPLICABLE CODES AND STANDARDS

INTERNATIONAL CODE COUNCIL (ICC) SERIES MODEL CODES, 2018 ED., AS ADOPTED
INTERNATIONAL ASSOCIATION OF PLUMBING AND MECHANICAL OFFICIALS (IAPMO), UNIFORM PLUMBING CODE (UPC), 2018 ED.
MUNICIPALITY OF ANCHORAGE CODE AMENDMENTS, POLICIES AND HANDOUTS

COORDINATION - COMBINATION FIRE-SMOKE DAMPER CONTROLS

COORDINATE WITH ELECTRICAL FOR POWER AND FIRE ALARM SYSTEM ACTUATION OF NEW COMBINATION FIRE-SMOKE DAMPERS.

FIRE PROTECTION SPRINKLER SYSTEMS

CONTRACTOR SHALL PROVIDE RETROFIT EXISTING FIRE PROTECTION SPRINKLER SYSTEMS FOR THE PROJECT RENOVATION. SERVICES SHALL INCLUDE DESIGN OF THE SPRINKLER SYSTEM RETROFIT, MUNICIPALITY OF ANCHORAGE PERMIT SUBMITTAL AND FEES, AND INSTALLATION/TESTING OF THE COMPLETED SPRINKLER SYSTEMS.

DESIGN OF SPRINKLER SYSTEM RETROFIT SHALL BE PERFORMED BY A NICET 4 CERTIFIED FIRE PROECTION SYSTEM DESIGNER.

CONTRACTOR SHALL SUBMIT DOCUMENTATION OF PERMIT SUBMITTAL INCLUDING SHOP DRAWINGS AND CALCULATIONS FOR OWNER'S RECORD.

UNLESS OTHERWISE ARRANGED AND COORDINATED WITH THE OWNER, THE BUILDING FIRE PROECTION SPRINKLER SYSTEM SHALL BE MAINTAINED IN FULL OPERATION THROUGHOUT THE PROJECT.

NEW SPRINKLERS SHALL BE TYCO RAVEN PENDENT AND HORIZONTAL SIDEWALL SEMI-RECESSED QUICK RESPONSE/EXTENDED COVERAGE SPRINKLERS.

SEE <https://tyco-fire.com/index.php?P=detailprod&S=6510> FOR ADDITIONAL INFORMATION.

COORDINATE WITH THE OWNER FOR THE TESTING AND RECERTIFICATION OF THE SPRINKLER SYSTEM UPON COMPLETION OF THE PROJECT.

MECHANICAL DESIGN PARAMETERS

BUILDING DOMESTIC WATER SYSTEM

EXISTING WATER SERVICES TO PLUMBING FIXTURES SHALL BE MODIFIED AND REUSED FOR NEW/REPLACEMENT PLUMBING FIXTURES AS APPLICABLE.

TOTAL WATER SERVICES AFFECTED:	125 FIXTURE UNITS THIS PROJECT
BUILDING WATER SERVICE PRESSURE:	45-60 PSI (ASSUMED)
BUILDING WATER METER/SERVICE ENTRANCE:	6 INCH (BUILDING WITH SPRINKLER SERVICE)
DESIGN SYSTEM LENGTH (UPC, TABLE 6-6):	300 FEET (ESTIMATED FROM BUILDING SERVICE ENTRANCE TO THIS PROJECT)

DRAIN, WASTE, AND VENT SYSTEMS

TOTAL PROJECT SEWER SERVICE LOAD: 80 FIXTURE UNITS (THIS PROJECT AREA)

SIZING OF THE BUILDING SANITARY DRAIN, WASTE, AND VENT PIPING SYSTEMS SHALL CONFORM TO UNIFORM PLUMBING CODE, 2018 ED., CHAPTER 7,



Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Revisions:	
Drawn By: WJC/RJW/JTC	Checked By: JTC
Date: 3.20.2023	
Title: PERMIT SET	
Job No.	
SHEET TITLE: MECHANICAL LEGEND AND NOTES	
SHEET NO:	
M1.0	

PERMIT SET / MARCH 20, 2023

NOTE: FOR MOA BUILDING SAFETY PLAN REVIEW ONLY, THE PRINTED VERSION OF THE MECHANICAL AND PLUMBING PLANS ARE NOT APPROVED UNLESS PRINTED IN COLOR.

PLUMBING FIXTURE SCHEDULE, EXISTING

EQ. ID	DESCRIPTION	SERVICE CONNECTIONS (INCH)				COMMENTS
		CW	HW	W	V	
FD-1(D)	FLOOR DRAIN, SHOWER			2"	2"	EXISTING SHOWER DRAIN TO BE REPLACED
FD-2(E)	FLOOR DRAIN			2"	2"	EXISTING FLOOR DRAIN TO REMAIN
FS-1(E)	FLOOR SINK			2"	2"	EXISTING FLOOR SINK TO REMAIN
P-1A(E)	WATER CLOSET, FLUSH TANK, WALL-MOUNTED	1/2"		3"	2"	REMOVE/REINSTALL FIXTURE TO ACCOMMODATE NEW BATHROOM WORK AS APPROPRIATE
P-1B(E)	WATER CLOSET, ADA-COMPLIANT, WALL-MOUNTED, MANUAL FLUSH VALVE, OPEN-FRONT SEAT LESS COVER, COLOR-WHITE	1"		3"	2"	REMOVE/REINSTALL FIXTURE TO ACCOMMODATE NEW BATHROOM WORK AS APPROPRIATE
P-1C(E)	WATER CLOSET, FLUSH TANK, FLOOR-MOUNTED	1/2"		3"	2"	REMOVE/REINSTALL FIXTURE TO ACCOMMODATE NEW BATHROOM WORK AS APPROPRIATE
P-2(E)	LAVATORY	1/2"	1/2"	2"	1 1/2"	BASE BID - EXISTING LAVATORY TO BE REUSE UNDER BASE BID UNIT PRICE A1 - EXISTING FIXTURE TO BE REMOVED AND REPLACED WITH NEW FIXTURE UNDER UNIT PRICE A1
P-3(D)	SHOWER TUB	1/2"	1/2"	1 1/2"	1 1/2"	EXISTING TUB TO BE REMOVED, PREP EXISTING SERVICES FOR NEW FIXTURE
P-4(D)	SHOWER	1/2"	1/2"	1 1/2"	1 1/2"	EXISTING SHOWER TO BE REMOVED, PREP SERVICES FOR NEW SHOWER
P-5(D)	RECLINING BATH SYSTEM					EXISTING UNIT TO BE REMOVED, COORDINATE WITH OWNER FOR SALVAGE/DISPOSAL
P-6(D)	SINK, COUNTER-TOP	1/2"	1/2"	1 1/2"	1 1/2"	EXISTING SINK TO BE REMOVED, PREP EXISTING SERVICES FOR NEW FIXTURE
P-7(E)	SINK, KITCHEN	1/2"	1/2"	1 1/2"	1 1/2"	EXISTING KITCHEN SINK TO REMAIN
P-8(E)	WATER SERVICE OUTLET BOX	1/2"	1/2"			WATER SERVICE OUTLET BOX FOR RECLINING BATH SYSTEM TO REMAIN
P-9(D)	DRINKING FOUNTAIN, WALL-MOUNTED, SEMI-RECESSED	1/2"		1 1/2"	1 1/2"	EXISTING TO BE REMOVED

PLUMBING FIXTURE SCHEDULE, NEW

EQ. ID	DESCRIPTION	SERVICE CONNECTIONS (INCH)				BASIS OF DESIGN: PRIMARY FIXTURE		BASIS OF DESIGN: SECONDARY FIXTURE		COMMENTS
		CW	HW	W	V	MANUFACTURER	MODEL	MANUFACTURER	MODEL	
FD-1(N)	FLOOR DRAIN, SHOWER			2"	2"	KOHLER	CLEARFLO SQUARE SHOWER DRAIN			MODIFY EXISTING DRAIN FOR NEW SHOWER DRAIN, SIZE FLOOR DRAIN TRAP TO MATCH EXISTING CONNECTION TO BUILDING SANITARY DRAIN
P-2(N)	LAVATORY, VANITY, ADA COMPLIANT, WITH ASSE-1070 TEMPERING VALVE	1/2"	1/2"	2"	1 1/2"	FORMICA GROUP	VANITY BOWL 1513	HANSGRÖHE	VIVENIS COUNTER MOUNTED FAUCET WITH POP-UP DRAIN ASSEMBLY	FIXTURE TO BE PROVIDED UNDER UNIT PRICE A1 ONLY EXCEPT AS NOTED BELOW, BASE BID - PROVIDE WATTS LFUSG-B ASSE-1070 TEMPERING VALVE UNDER BASE BID AT SERVICES UNIT PRICE A1 - PROVIDE WATTS LFUSG-B ASSE-1070 TEMPERING VALVE UNDER UNIT PRICE A1
P-4(N)	SHOWER	1/2"	1/2"	1 1/2"	1 1/2"	KOHLER	PURIST SERIES K-22178-G MULTI-FUNCTION SHOWER VALVE KIT, PRESSURE-BALANCED SHOWER VALVE, PURIST SHOWER VALVE TRIM KIT, AND MATCHING CLEARFLO SQUARE SHOWER DRAIN (FD-1(N))			MODIFY EXISITNG CW/HW SERVICES AND DRAIN TO ACCOMMODATE NEW FIXTURE
P-5(N)	RECLINING BATH SYSTEM					ARJO	PARKER SERIES			CONNECT TO EXISTING WATER SERVICES AND ROUTE DRAIN TO EXISITNG FLOOR SINK
P-6(N)	SINK, STAINLESS STEEL, COUNTER MOUNTED, GOOSENECK SWIVEL SPOUT FAUCET WITH WRIST BLADE HANDLES	1/2"	1/2"	1 1/2"	1 1/2"	JUST	SLN-17519-16-GR, 16 ga sstl WITH UNDERCOATING 17 1/2"*X19"(OD), 11 1/2"*X16"*X7 1/2"(D), 2 HOLES, 4" O.C.	JUST	JGN-5 WITH 0.5 GPM AERATOR/FLOW CONTROL, W4 OPTION WRIST BLADES	
P-9(N)	BOTTLE FILLING STATION, HANDS FREE SENSOR OPERATED	1/2"		1 1/2"	1 1/2"	ELKAY	EZWSSM			COORDINATE WITH ELECTRICAL FOR GFCI/AFCI (AS APPLICABLE) 15-AMP RECEPTACLE

FIRE DAMPER/SMOKE FIRE DAMPER SCHEDULE

EQ. ID	DESCRIPTION	BASIS OF DESIGN		COMMENT(S)
		MANUFACTURER	MODEL	
ASD-1(N)	AIRFOIL BLADE SMOKE DAMPER	RUSKIN	SD60 8x8	
ASD-2(N)	AIRFOIL BLADE SMOKE DAMPER	RUSKIN	SD60 12x6	
DFD-1(N)	MULTIPLE BLADE DYNAMIC FIRE DAMPER	RUSKIN	DFD60 8X8	
DFD-2(N)	MULTIPLE BLADE DYNAMIC FIRE DAMPER	RUSKIN	DFD60 12x6	
FSD-1(N)	COMBINATION FIRE AND SMOKE DAMPERS, DUCT-MOUNTED	RUSKIN	FSD35 SERIES - DUCT SIZE 16"X8"	
FSD-2(N)	COMBINATION FIRE AND SMOKE DAMPERS, DUCT-MOUNTED	RUSKIN	FSD35 SERIES - DUCT SIZE 14"X4"	
FSD-3(N)	COMBINATION FIRE AND SMOKE DAMPERS, DUCT-MOUNTED WITH FACE GRILLE	RUSKIN	FSD35G SERIES - GRILLE SIZE 8"X4"	
FSD-4(N)	COMBINATION FIRE AND SMOKE DAMPERS, DUCT-MOUNTED WITH FACE GRILLE	RUSKIN	FSD35G SERUES - GRILLE SIZE 24"X24"	
FSD-5(N)	COMBINATION FIRE AND SMOKE DAMPERS, DUCT-MOUNTED WITH FACE GRILLE	RUSKIN	FSD35G SERIES - GRILLE SIZE 20"X16"	

ACCESS DOOR SCHEDULE

EQ. ID	DESCRIPTION	BASIS OF DESIGN		COMMENT(S)
		MANUFACTURER	MODEL	
AD-1(N)	ACCESS DOOR, 18"X18"	ACUDOR	FB-5015 SERIES	
AD-2(N)	ACCESS DOOR, 6"X4"	SEE COMMENT	SEE COMMENT	SHOP FABRICATED SHEETMETAL ACCESS DOOR FOR DAMPER INSPECTION
AD-3(N)	ACCESS DOOR, 12"X12"	ACUDOR	FB-5015 SERIES	



Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Revisions:

Drawn By: WJC/RJW/JTC
Date: 3.20.2023
Checked By: JTC
Project: PERMIT SET
Job No:

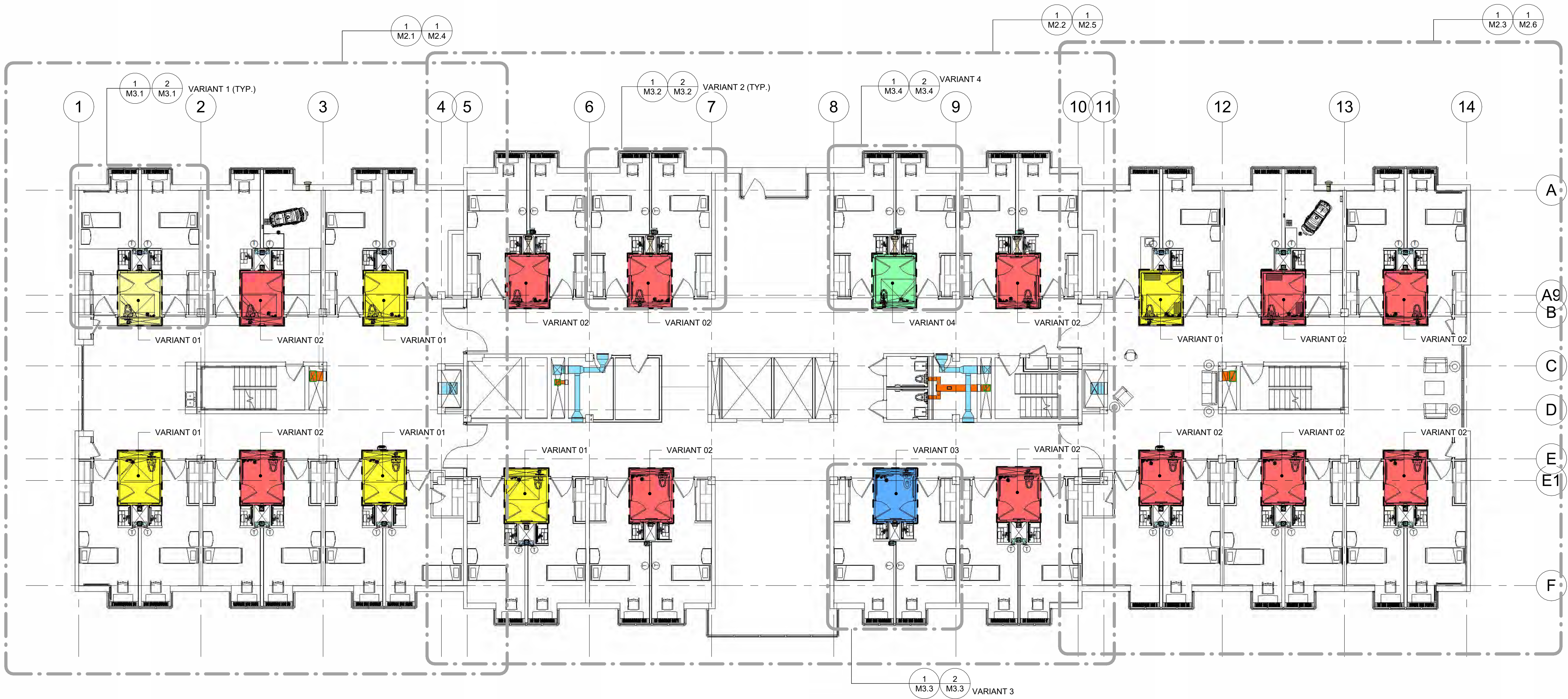
SHEET TITLE:
MECHANICAL
EQUIPMENT
SCHEDULES

SHEET NO:

M1.1

PERMIT SET / MARCH 20, 2023

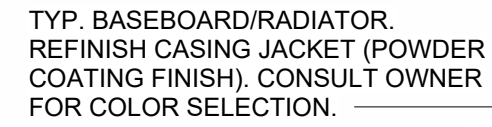
NOTE: FOR MOA BUILDING SAFETY PLAN REVIEW ONLY, THE PRINTED VERSION OF THE MECHANICAL AND PLUMBING PLANS ARE NOT APPROVED UNLESS PRINTED IN COLOR.



1 REFERENCE PLAN, THIRD FLOOR, THIS PROJECT
3/32" = 1'-0"

EXISTING BATHROOM GENERAL SCOPE OF WORK VARIANCE INDEX:

	VARIANT 1:	W/EXISTING FLUSH TANK, WALL-MOUNTED WATER CLOSET TO REMAIN. EXISTING TUB TO BE REPLACED WITH NEW SHOWER
	VARIANT 2:	W/EXISTING FLUSH TANK, WALL-MOUNTED WATER CLOSET TO REMAIN. EXISTING SHOWER TO BE REPLACED WITH NEW SHOWER
	VARIANT 3:	W/EXISTING FLUSH TANK, FLOOR-MOUNTED WATER CLOSET TO REMAIN. EXISTING SHOWER TO BE REPLACED WITH NEW SHOWER
	VARIANT 4:	W/EXISTING FLUSH VALVE, WALL-MOUNTED WATER CLOSET TO REMAIN. EXISTING TUB TO BE REPLACED WITH NEW SHOWER



EXISTING EXHAUST FAN
TO REMAIN

— DEMO/MODIFY EXISTING S/A
GRILLE/DUCTWORK FOR
NEW FIRE-SMOKE DAMPER

20"x16" RA(E)

24"x24" SA(E)-

PREP EXISTING DRINKING FOUNTAIN
SERVICES AND DEMO WALL FOR
NEW BOTTLE FILLING STATION

P-9(D)

1. CONTRACTOR IS ADVISED THE FLOOR SYSTEM IS A POST-TENSIONED SYSTEM WITH EMBEDDED CABLES. FLOOR CUTTING DEMOLITION MUST BE SUPPORTED BY APPROPRIATE METHOD TO PROTECT SLAB STRUCTURAL INTEGRITY.
2. CONTRACTOR TO FIELD VERIFY EXISTING CONCEALED PLUMBING AND MECHANICAL SERVICES AND ADJUST TO ACCOMMODATE NEW PLUMBING FIXTURES, MECHANICAL COMPONENTS, AND ACCESS DOORS AS APPROPRIATE. REFERENCE AS-BUILT DRAWINGS FOR INFORMATION ON EXISTING SERVICES. COORDINATE WITH ARCHITECTURAL WORK FOR NEW SPRINKLER HEAD REPLACEMENTS.

NOTE: FOR MOA BUILDING SAFETY PLAN REVIEW ONLY, THE PRINTED VERSION OF THE MECHANICAL AND PLUMBING PLANS ARE NOT APPROVED UNLESS PRINTED IN COLOR.



ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

size:

Prepared By: JC/RJW/JTC	Checked By: JTC

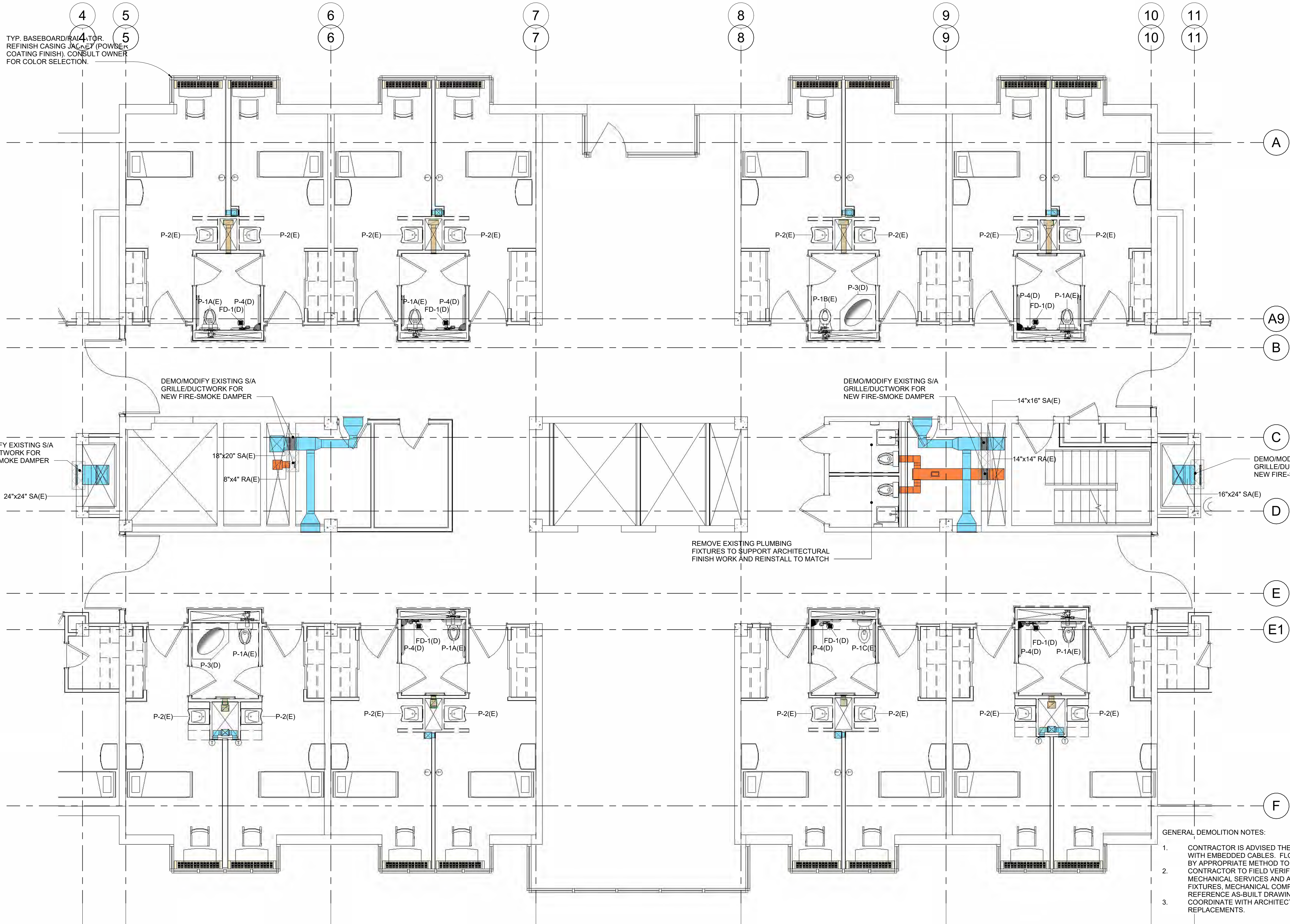
.20.2023

ERMIT SET

MECHANICAL
PLAN, THIRD
FLOOR, WEST
WING, DEMOLITION

SHEET NO:

M2.1



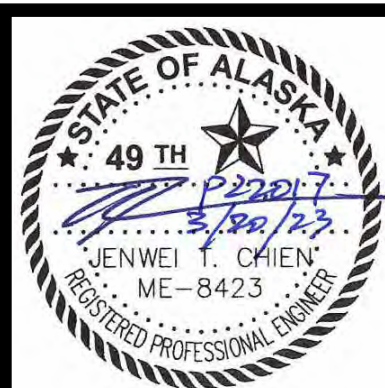
1 MECHANICAL PLAN, THIRD FLOOR, CENTER, DEMOLITION
3/16" = 1'-0"

GENERAL DEMOLITION NOTES:

1. CONTRACTOR IS ADVISED THE FLOOR SYSTEM IS A POST-TENSIONED SYSTEM WITH EMBEDDED CABLES. FLOOR CUTTING DEMOLITION MUST BE SUPPORTED BY APPROPRIATE METHOD TO PROTECT SLAB STRUCTURAL INTEGRITY.
2. CONTRACTOR TO FIELD VERIFY EXISTING CONCEALED PLUMBING AND MECHANICAL SERVICES AND ADJUST TO ACCOMMODATE NEW PLUMBING FIXTURES, MECHANICAL COMPONENTS, AND ACCESS DOORS AS APPROPRIATE. REFERENCE AS-BUILT DRAWINGS FOR INFORMATION ON EXISTING SERVICES.
3. COORDINATE WITH ARCHITECTURAL WORK FOR NEW SPRINKLER HEAD REPLACEMENTS.

PERMIT SET / MARCH 20, 2023

NOTE: FOR MOA BUILDING SAFETY PLAN REVIEW ONLY, THE PRINTED VERSION OF THE MECHANICAL AND PLUMBING PLANS ARE NOT APPROVED UNLESS PRINTED IN COLOR.



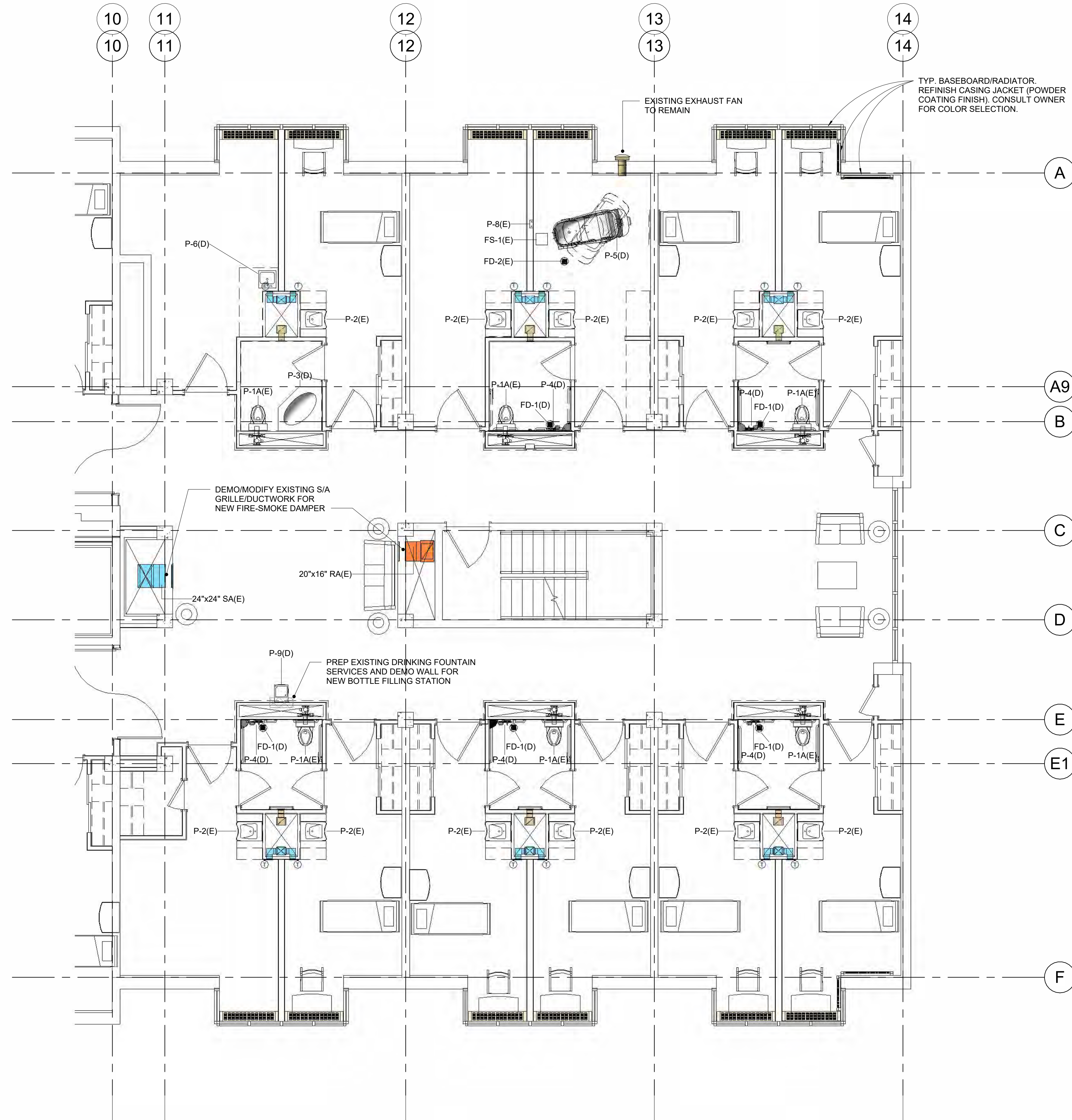
unigroup
engineers, inc.
1000 O'Reilly Road, Suite 200 Anchorage, Alaska 99501
(907) 345-3447 (907) 345-3448 Fax: (907) 345-3449
www.unigroupengineers.com
State of Alaska Certificate of Authorization No. 141

Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Revisions:	
Drawn By:	Checked By:
WJC/RJW/JTC	JTC
Date:	3.20.2023
Project:	PERMIT SET
Sheet No:	
SHEET TITLE:	
MECHANICAL PLAN, THIRD FLOOR, CENTER, DEMOLITION	
SHEET NO:	

M2.2



① MECHANICAL PLAN, THIRD FLOOR, EAST WING, DEMOLITION
3/16" = 1'-0"

GENERAL DEMOLITION NOTES:

1. CONTRACTOR IS ADVISED THE FLOOR SYSTEM IS A POST-TENSIONED SYSTEM WITH EMBEDDED CABLES. FLOOR CUTTING DEMOLITION MUST BE SUPPORTED BY APPROPRIATE METHOD TO PROTECT SLAB STRUCTURAL INTEGRITY.
2. CONTRACTOR TO FIELD VERIFY EXISTING CONCEALED PLUMBING AND MECHANICAL SERVICES AND ADJUST TO ACCOMMODATE NEW PLUMBING FIXTURES, MECHANICAL COMPONENTS, AND ACCESS DOORS AS APPROPRIATE. REFERENCE AS-BUILT DRAWINGS FOR INFORMATION ON EXISTING SERVICES.
3. COORDINATE WITH ARCHITECTURAL WORK FOR NEW SPRINKLER HEAD REPLACEMENTS.

PERMIT SET / MARCH 20, 2023

NOTE: FOR MOA BUILDING SAFETY PLAN REVIEW ONLY, THE PRINTED VERSION OF THE MECHANICAL AND PLUMBING PLANS ARE NOT APPROVED UNLESS PRINTED IN COLOR.



Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Revisions:

Drawn By: WJC/RJW/JTC
Checked By: JTC

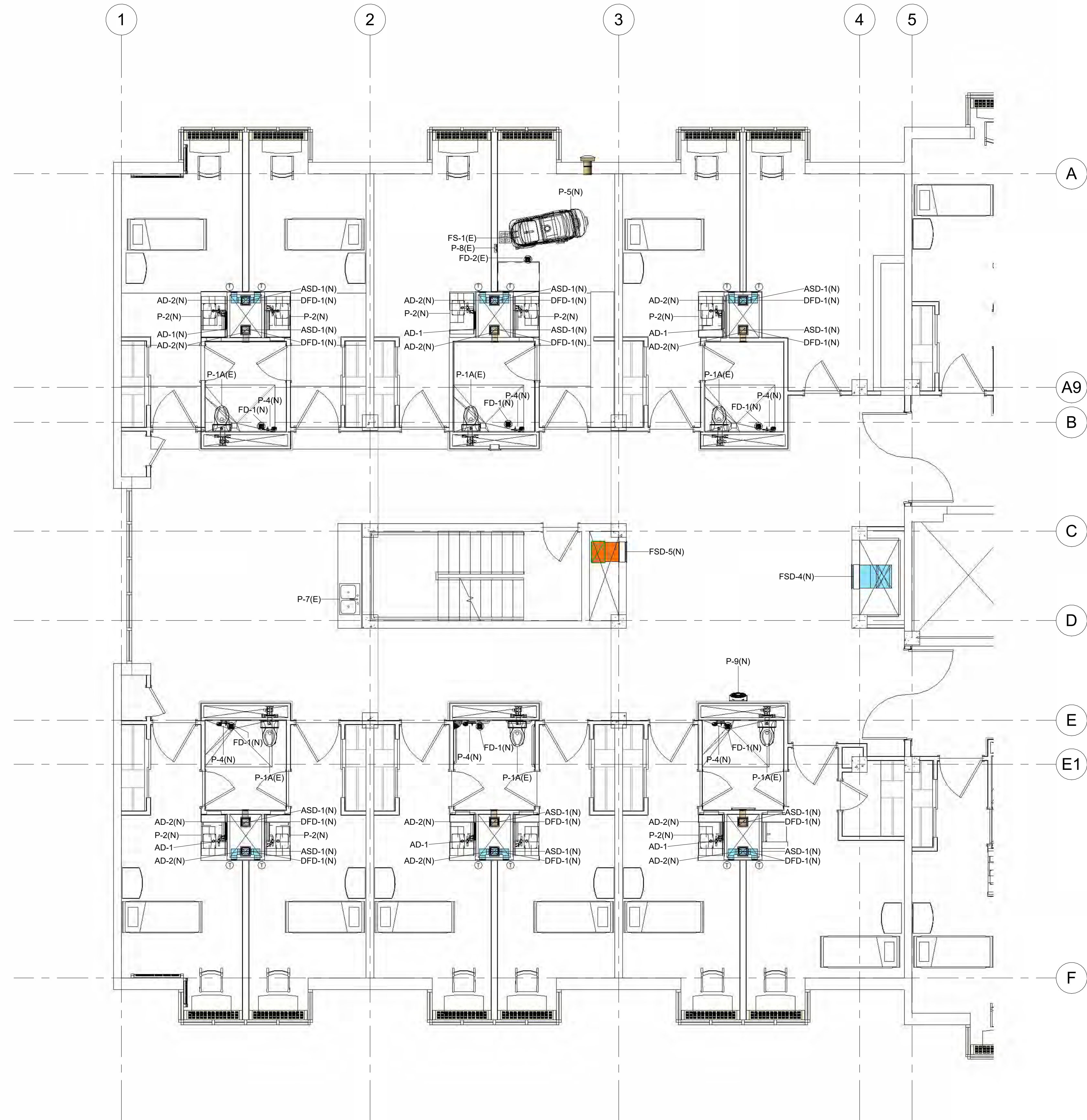
Date: 3.20.2023

Project: PERMIT SET

SHEET TITLE:
MECHANICAL
PLAN, THIRD
FLOOR, EAST
WING, DEMOLITION

SHEET NO:

M2.3



① MECHANICAL PLAN, THIRD FLOOR, WEST WING, NEW WORK
3/16" = 1'-0"

GENERAL DEMOLITION NOTES:

1. CONTRACTOR IS ADVISED THE FLOOR SYSTEM IS A POST-TENSIONED SYSTEM WITH EMBEDDED CABLES. FLOOR CUTTING DEMOLITION MUST BE SUPPORTED BY APPROPRIATE METHOD TO PROTECT SLAB STRUCTURAL INTEGRITY.
2. CONTRACTOR TO FIELD VERIFY EXISTING CONCEALED PLUMBING AND MECHANICAL SERVICES AND ADJUST TO ACCOMMODATE NEW PLUMBING FIXTURES, MECHANICAL COMPONENTS, AND ACCESS DOORS AS APPROPRIATE. REFERENCE AS-BUILT DRAWINGS FOR INFORMATION ON EXISTING SERVICES. COORDINATE WITH ARCHITECTURAL WORK FOR NEW SPRINKLER HEAD REPLACEMENTS.
- 3.

PERMIT SET / MARCH 20, 2023

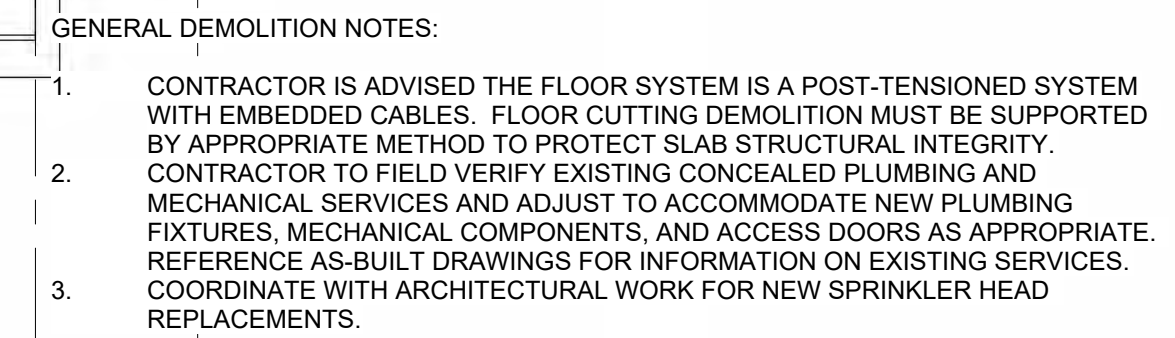
NOTE: FOR MOA BUILDING SAFETY PLAN REVIEW ONLY, THE PRINTED VERSION OF THE MECHANICAL AND PLUMBING PLANS ARE NOT APPROVED UNLESS PRINTED IN COLOR.



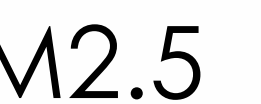
Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Revisions:	
Drawn By:	WJC/RJW/JTC
Checked By:	JTC
Date:	3.20.2023
Project:	PERMIT SET
Job No:	
SHEET TITLE:	
MECHANICAL	
PLAN, THIRD	
FLOOR, WEST	
WING, NEW WORK	
SHEET NO:	
M2.4	



NOTE: FOR MOA BUILDING SAFETY PLAN REVIEW ONLY, THE PRINTED VERSION OF THE MECHANICAL AND PLUMBING PLANS ARE NOT APPROVED UNLESS PRINTED IN COLOR.





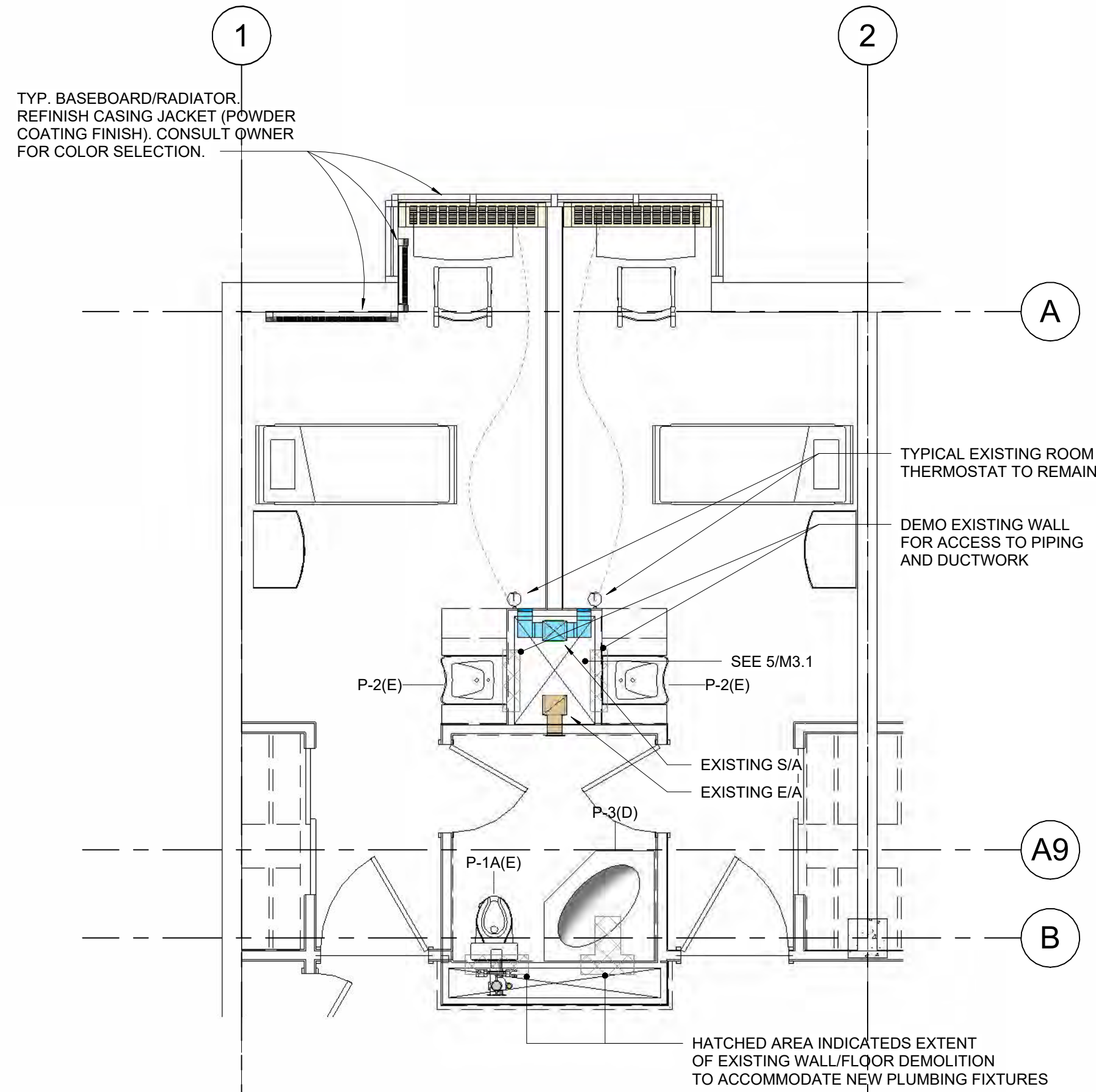
1. CONTRACTOR IS ADVISED THE FLOOR SYSTEM IS A POST-TENSIONED SYSTEM WITH EMBEDDED CABLES. FLOOR CUTTING DEMOLITION MUST BE SUPPORTED BY APPROPRIATE METHOD TO PROTECT SLAB STRUCTURAL INTEGRITY.
2. CONTRACTOR TO FIELD VERIFY EXISTING CONCEALED PLUMBING AND MECHANICAL SERVICES AND ADJUST TO ACCOMMODATE NEW PLUMBING FIXTURES, MECHANICAL COMPONENTS, AND ACCESS DOORS AS APPROPRIATE. REFERENCE AS-BUILT DRAWINGS FOR INFORMATION ON EXISTING SERVICES.
3. COORDINATE WITH ARCHITECTURAL WORK FOR NEW SPRINKLER HEAD REPLACEMENTS.

NOTE: FOR MOA BUILDING SAFETY PLAN REVIEW ONLY, THE PRINTED VERSION OF THE MECHANICAL AND PLUMBING PLANS ARE NOT APPROVED UNLESS PRINTED IN COLOR.



ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

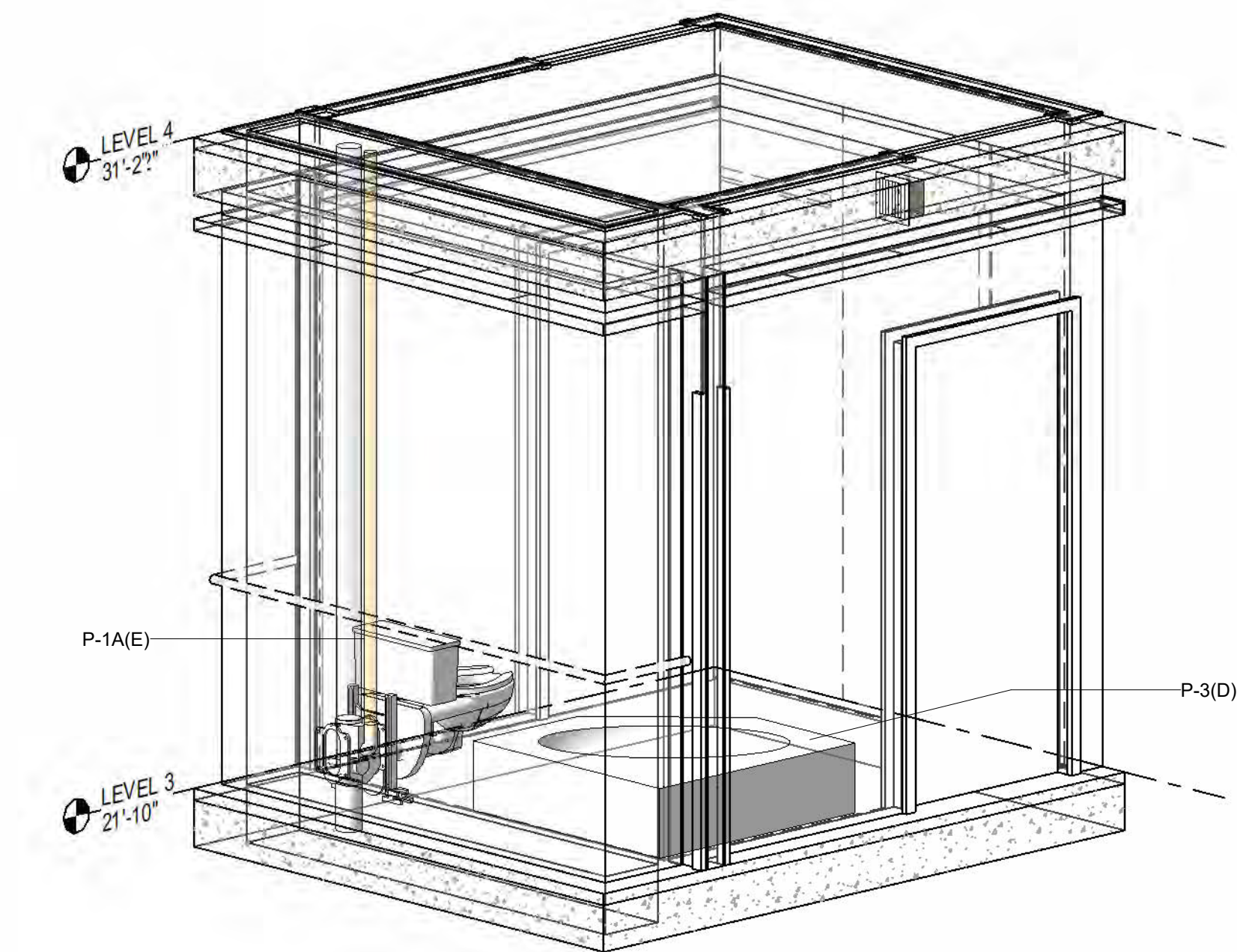
M2.6



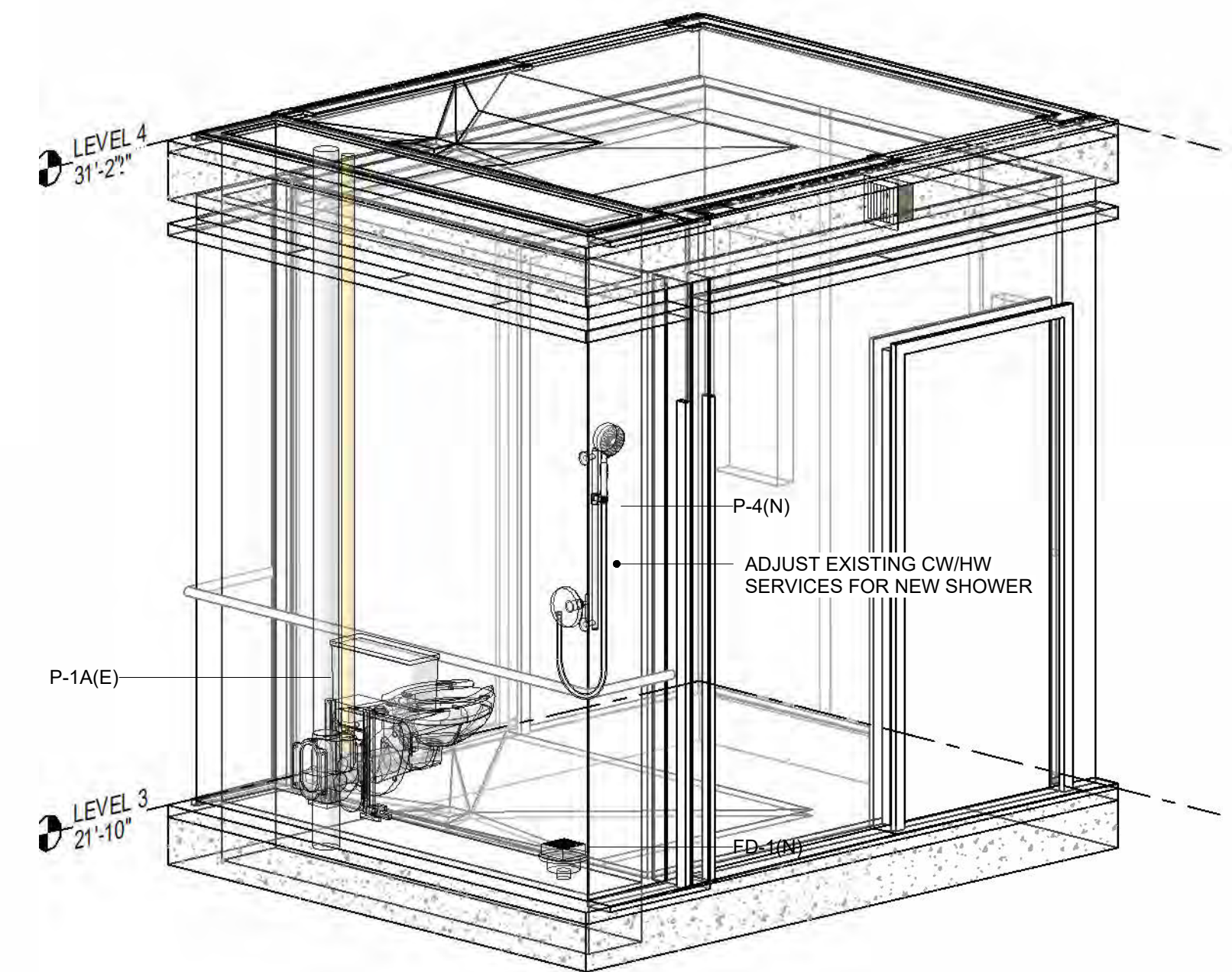
1 MECHANICAL AREA PLAN, TYPICAL VARIANT 1, EXISTING/DEMOLITION
1/4" = 1'-0"

GENERAL DEMOLITION NOTES:

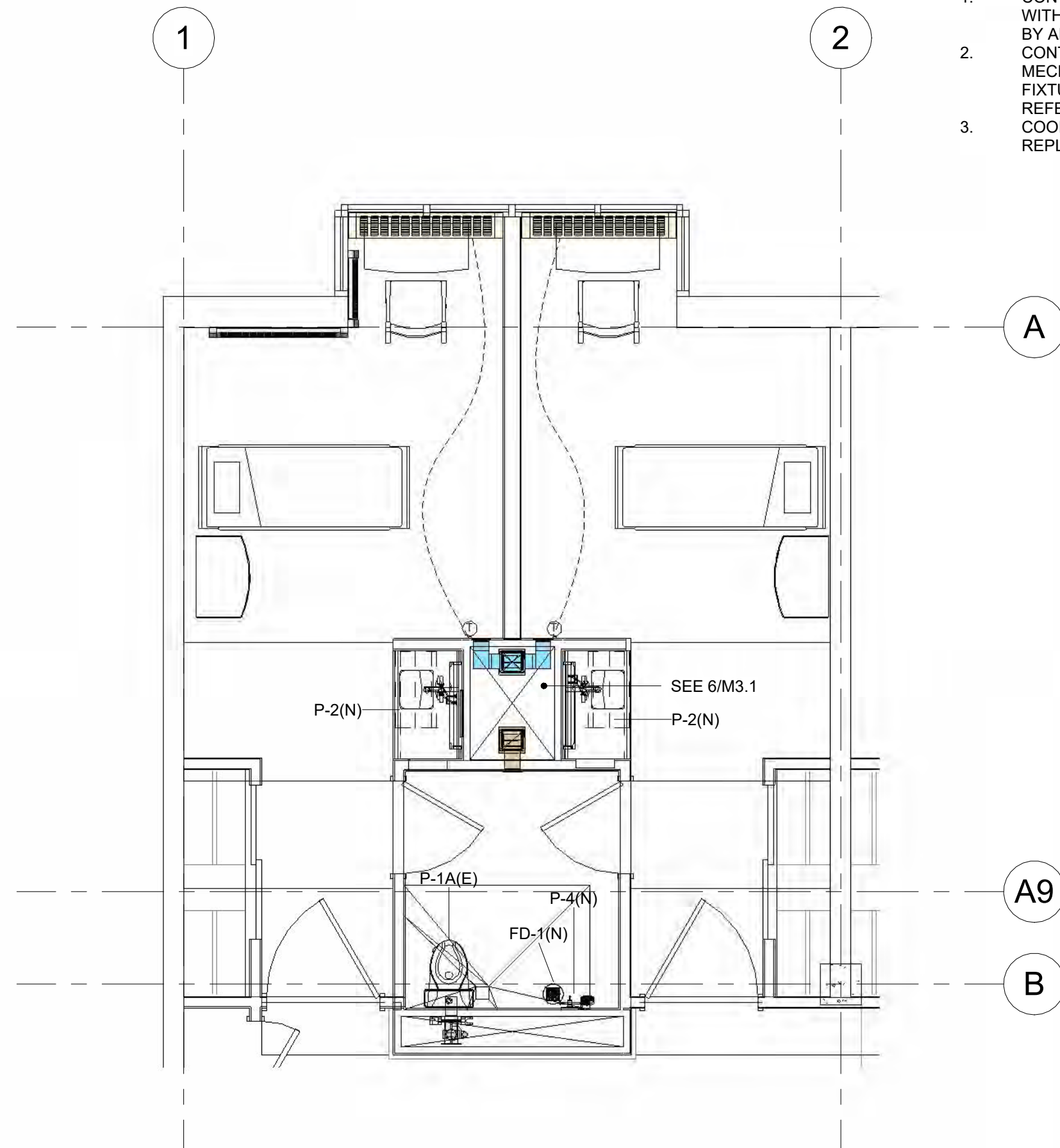
1. CONTRACTOR IS ADVISED THE FLOOR SYSTEM IS A POST-TENSIONED SYSTEM WITH EMBEDDED CABLES. FLOOR CUTTING DEMOLITION MUST BE SUPPORTED BY APPROPRIATE METHOD TO PROTECT SLAB STRUCTURAL INTEGRITY.
2. CONTRACTOR TO FIELD VERIFY EXISTING CONCEALED PLUMBING AND MECHANICAL SERVICES AND ADJUST TO ACCOMMODATE NEW PLUMBING FIXTURES, MECHANICAL COMPONENTS, AND ACCESS DOORS AS APPROPRIATE. REFERENCE AS-BUILT DRAWINGS FOR INFORMATION ON EXISTING SERVICES. COORDINATE WITH ARCHITECTURAL WORK FOR NEW SPRINKLER HEAD REPLACEMENTS.
- 3.



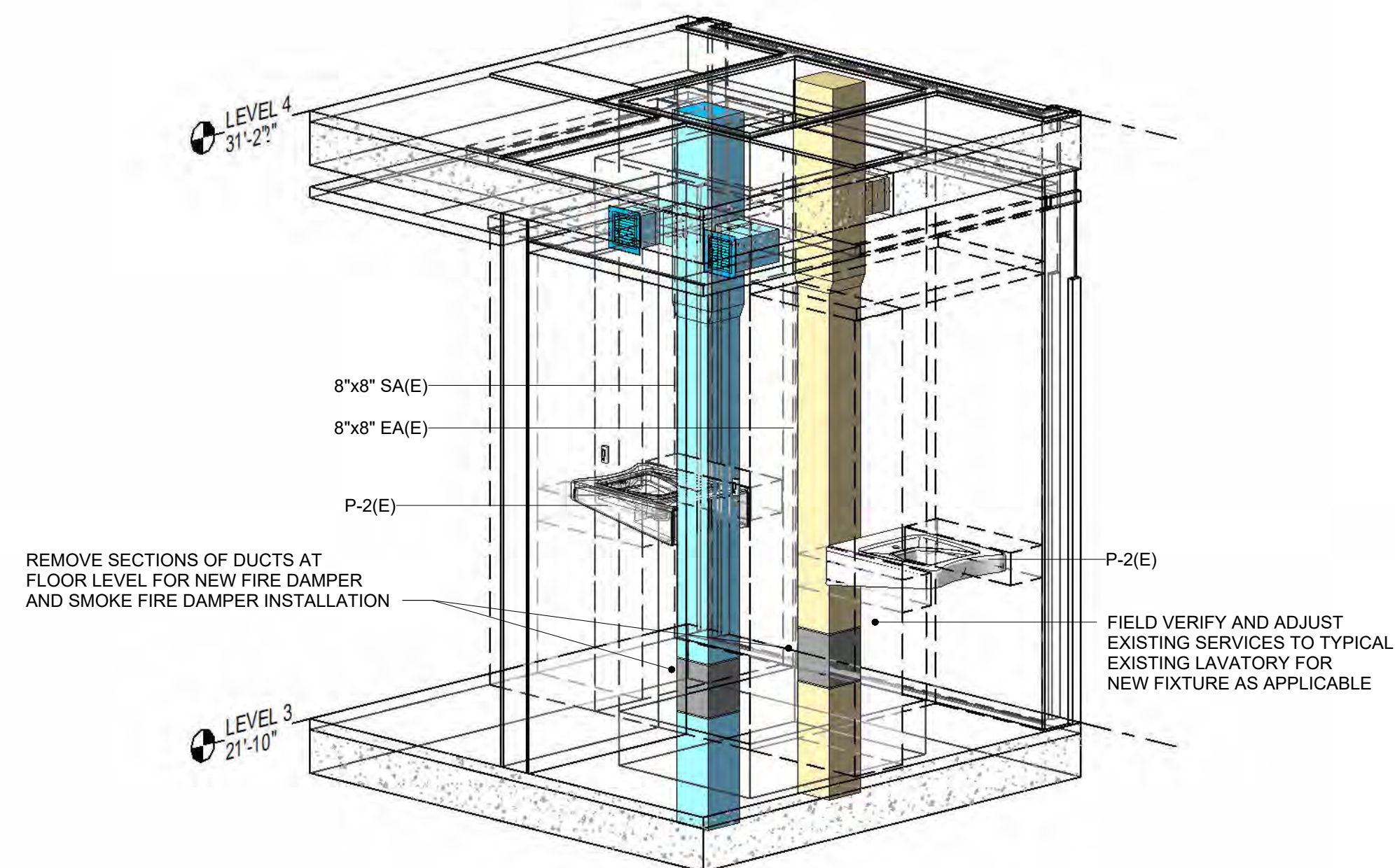
3 VARIANT 1 BATHROOM, EXISTING/DEMOLITION



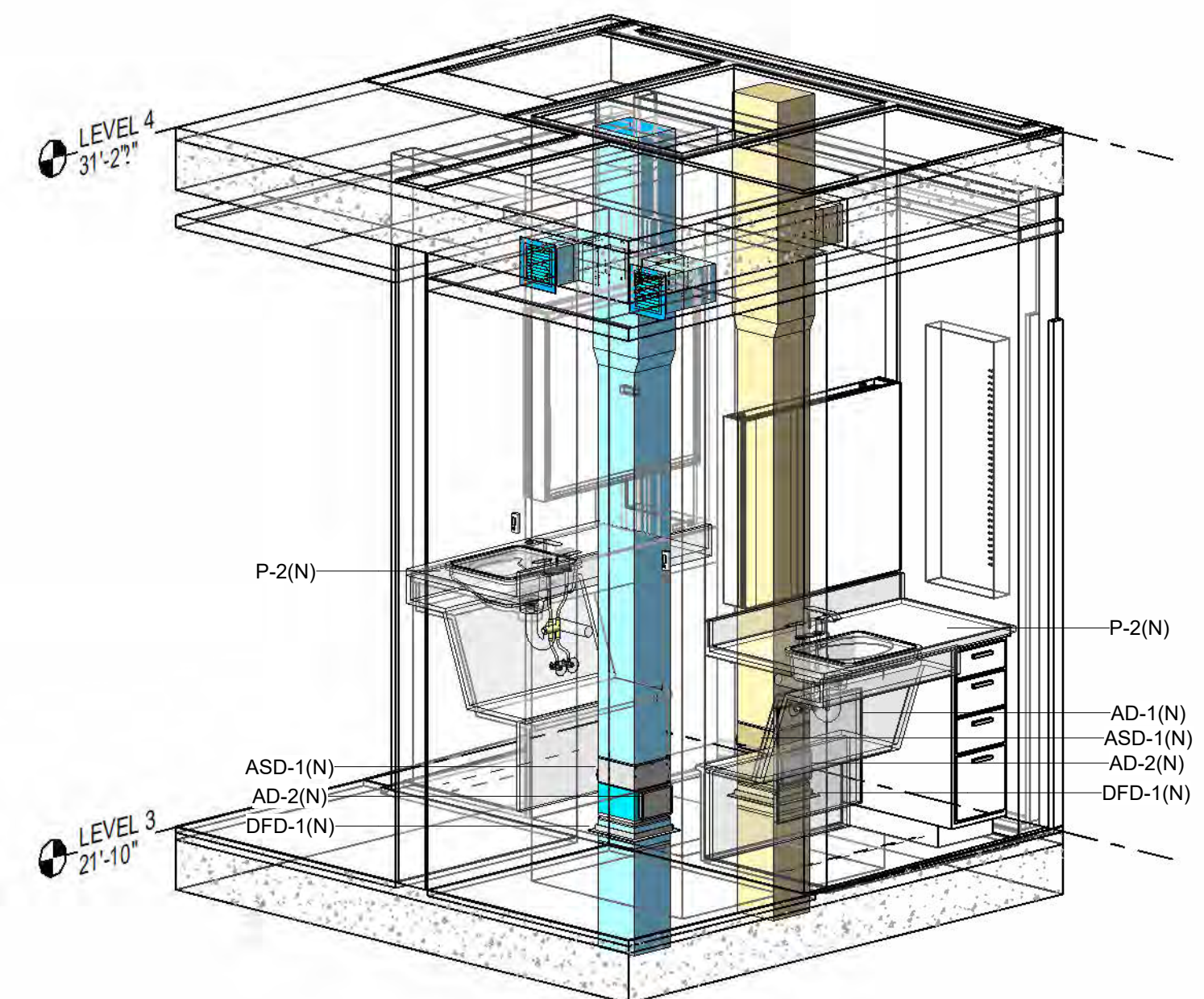
4 VARIANT 1 BATHROOM, NEW WORK



2 MECHANICAL AREA PLAN, TYPICAL VARIANT 1, NEW WORK
1/4" = 1'-0"



5 VARIANT 1 SHAFT, EXISTING/DEMOLITION



6 VARIANT 1 SHAFT, NEW WORK

NOTE: DRAWING DEPICTS UNIT PRICE A1. UNDER BASE BID,
EXISTING LAVATORY P-2(E) TO BE REINSTALLED. COORDINATE
WITH ARCHITECTURAL FOR AFFECTED CASEWORK

PERMIT SET / MARCH 20, 2023
NOTE: FOR MOA BUILDING SAFETY PLAN REVIEW ONLY, THE PRINTED VERSION OF THE
MECHANICAL AND PLUMBING PLANS ARE NOT APPROVED UNLESS PRINTED IN COLOR.



Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

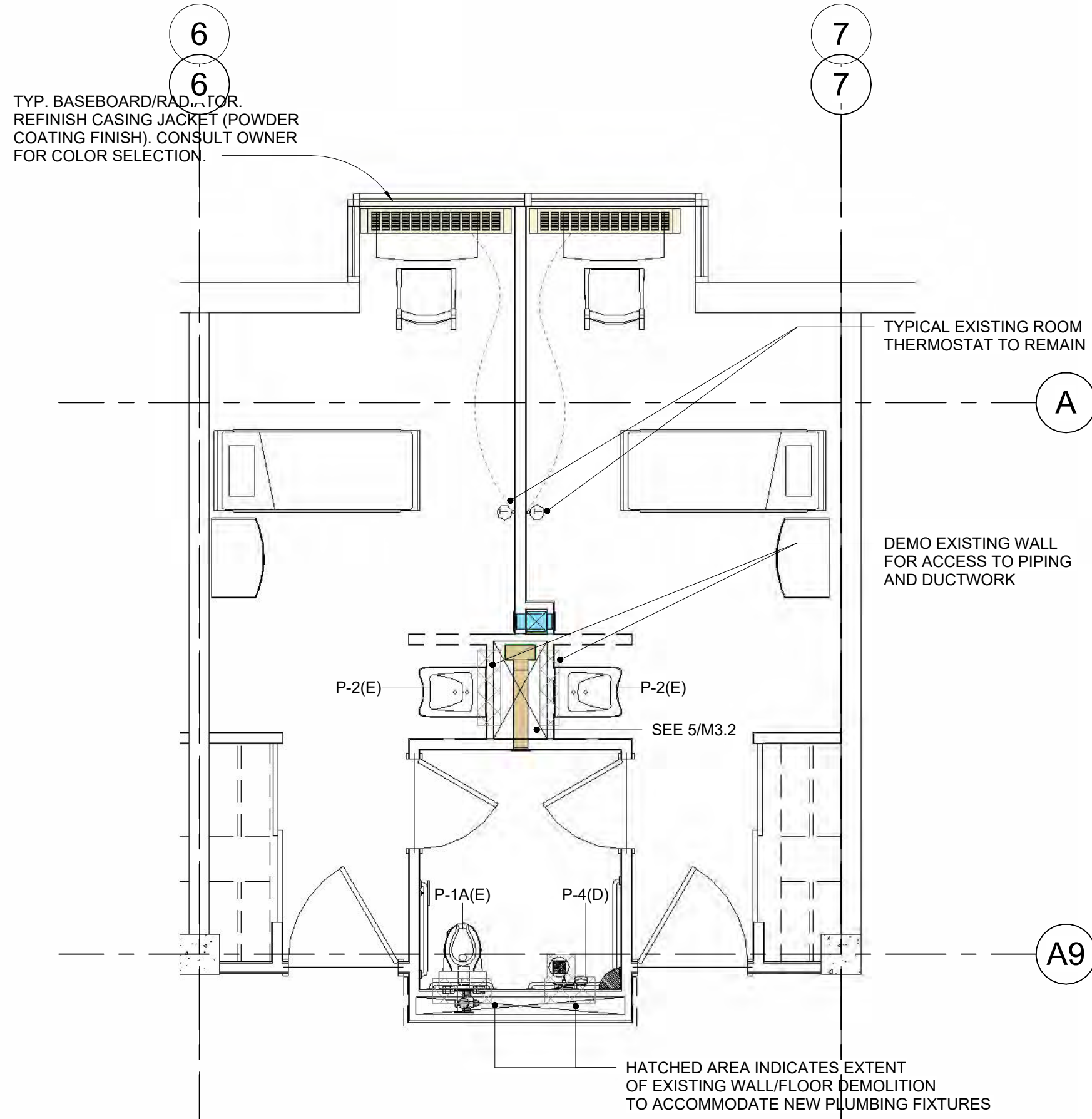
Revisions:

Drawn By:
WJC/RJW/JTC
Checked By:
JTC
Date:
3.20.2023
Project:
PERMIT SET
Job No:

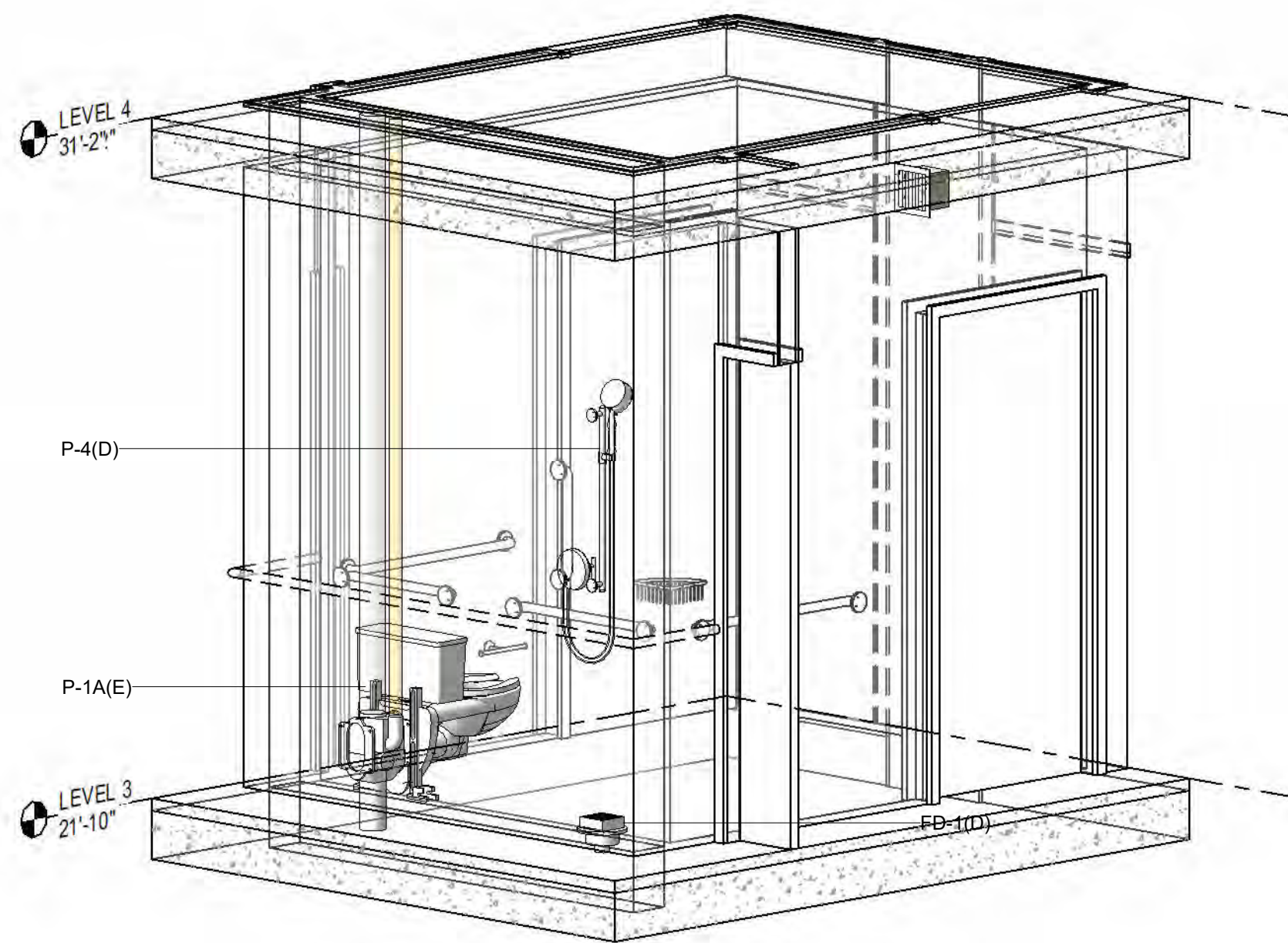
SHEET TITLE:
TYPICAL VARIANT
1 AREA PLANS,
VIEWS

SHEET NO:

M3.1



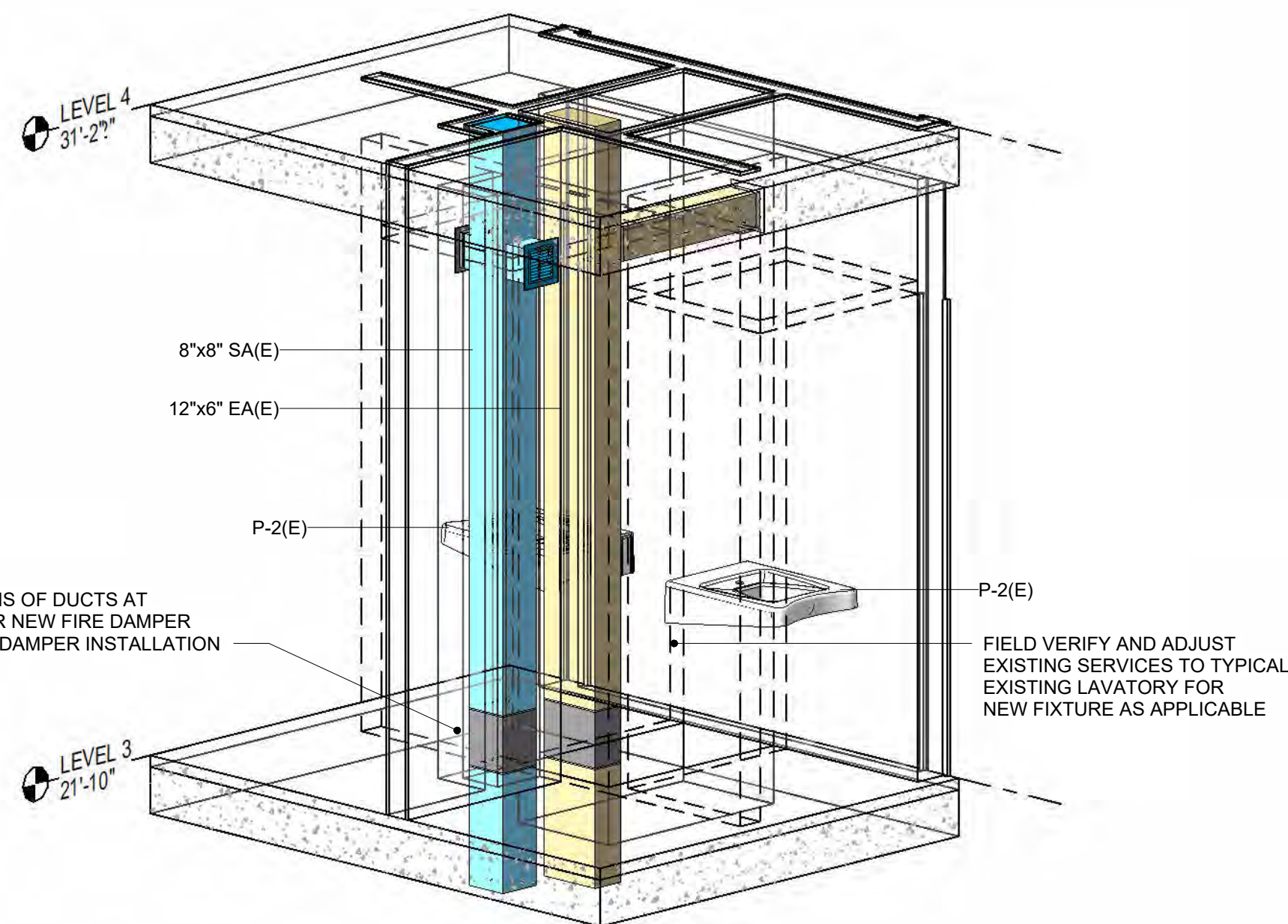
1 MECHANICAL AREA PLAN, TYPICAL VARIANT 2, EXISTING/DEMOLITION
1/4" = 1'-0"



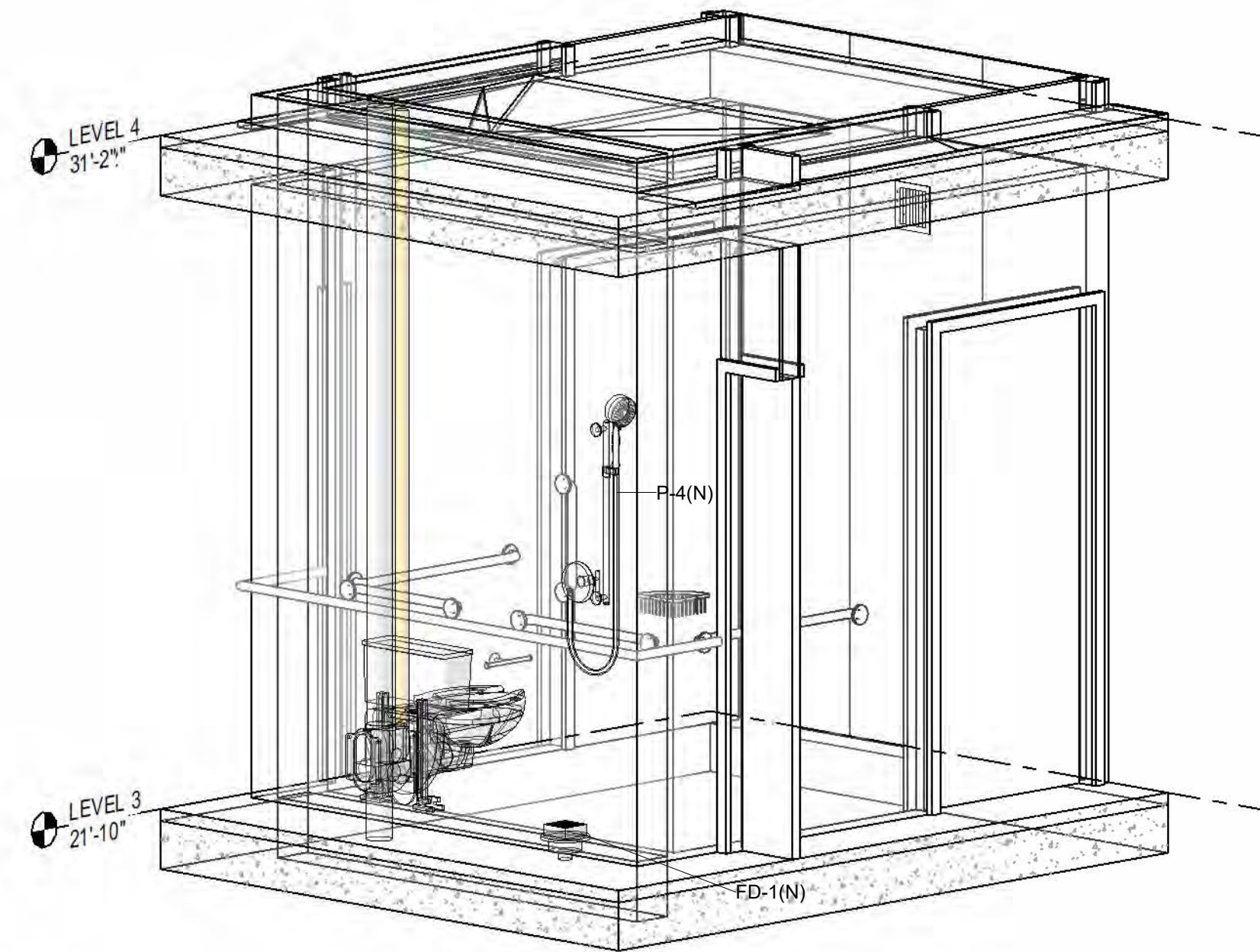
3 VARIANT 2 BATHROOM, EXISTING/DEMOLITION

GENERAL DEMOLITION NOTES:

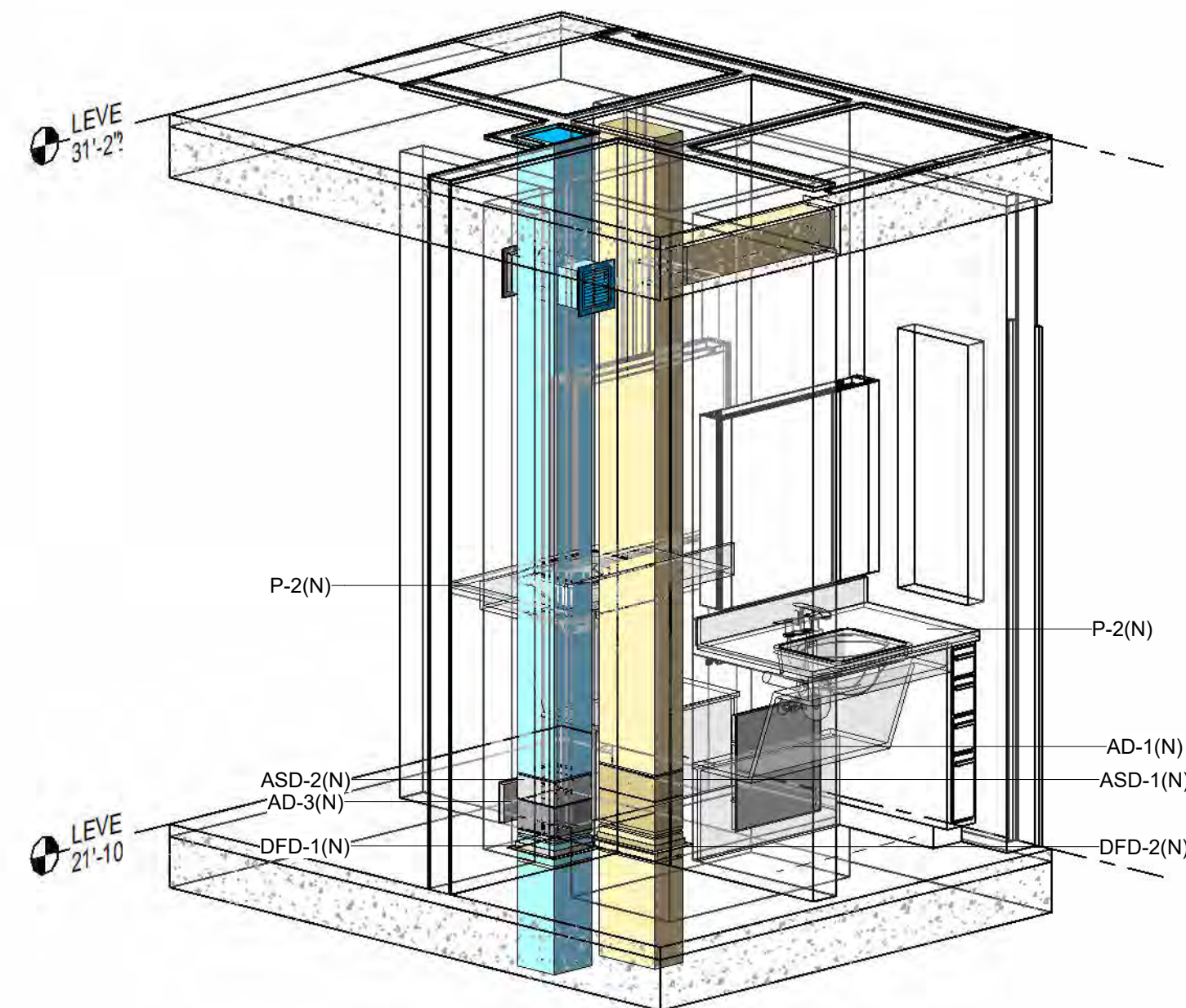
1. CONTRACTOR IS ADVISED THE FLOOR SYSTEM IS A POST-TENSIONED SYSTEM WITH EMBEDDED CABLES. FLOOR CUTTING DEMOLITION MUST BE SUPPORTED BY APPROPRIATE METHOD TO PROTECT SLAB STRUCTURAL INTEGRITY.
2. CONTRACTOR TO FIELD VERIFY EXISTING CONCEALED PLUMBING AND MECHANICAL SERVICES AND ADJUST TO ACCOMMODATE NEW PLUMBING FIXTURES, MECHANICAL COMPONENTS, AND ACCESS DOORS AS APPROPRIATE. REFERENCE AS-BUILT DRAWINGS FOR INFORMATION ON EXISTING SERVICES.
3. COORDINATE WITH ARCHITECTURAL WORK FOR NEW SPRINKLER HEAD REPLACEMENTS.



5 VARIANT 2 SHAFT, EXISTING/DEMOLITION

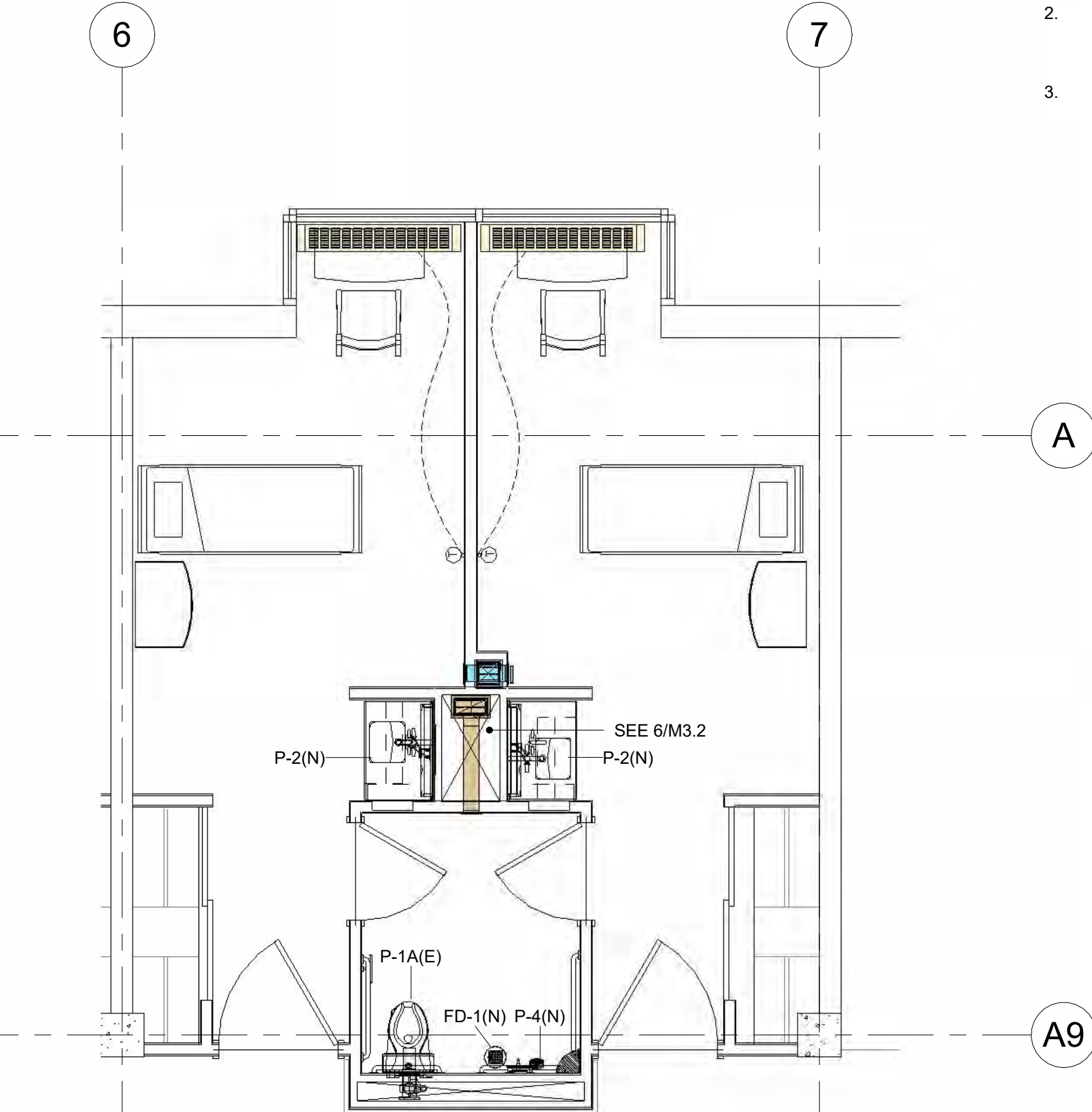


4 VARIANT 2 BATHROOM, NEW WORK



6 VARIANT 2 SHAFT, NEW WORK

NOTE: DRAWING DEPICTS UNIT PRICE A1. UNDER BASE BID, EXISTING LAVATORY P-2(E) TO BE REINSTALLED. COORDINATE WITH ARCHITECTURAL FOR AFFECTED CASEWORK



2 MECHANICAL AREA PLAN, TYPICAL VARIANT 2, NEW WORK
1/4" = 1'-0"

PERMIT SET / MARCH 20, 2023
NOTE: FOR MOA BUILDING SAFETY PLAN REVIEW ONLY, THE PRINTED VERSION OF THE MECHANICAL AND PLUMBING PLANS ARE NOT APPROVED UNLESS PRINTED IN COLOR.



unigroup
engineers, inc.
10000 Old Harbor Road, Suite 200 Anchorage, Alaska 99515
907.345.3647 907.345.3648 Email: unigroup@unigroup.com
State Of Alaska Certificate Of Authorization No. 141

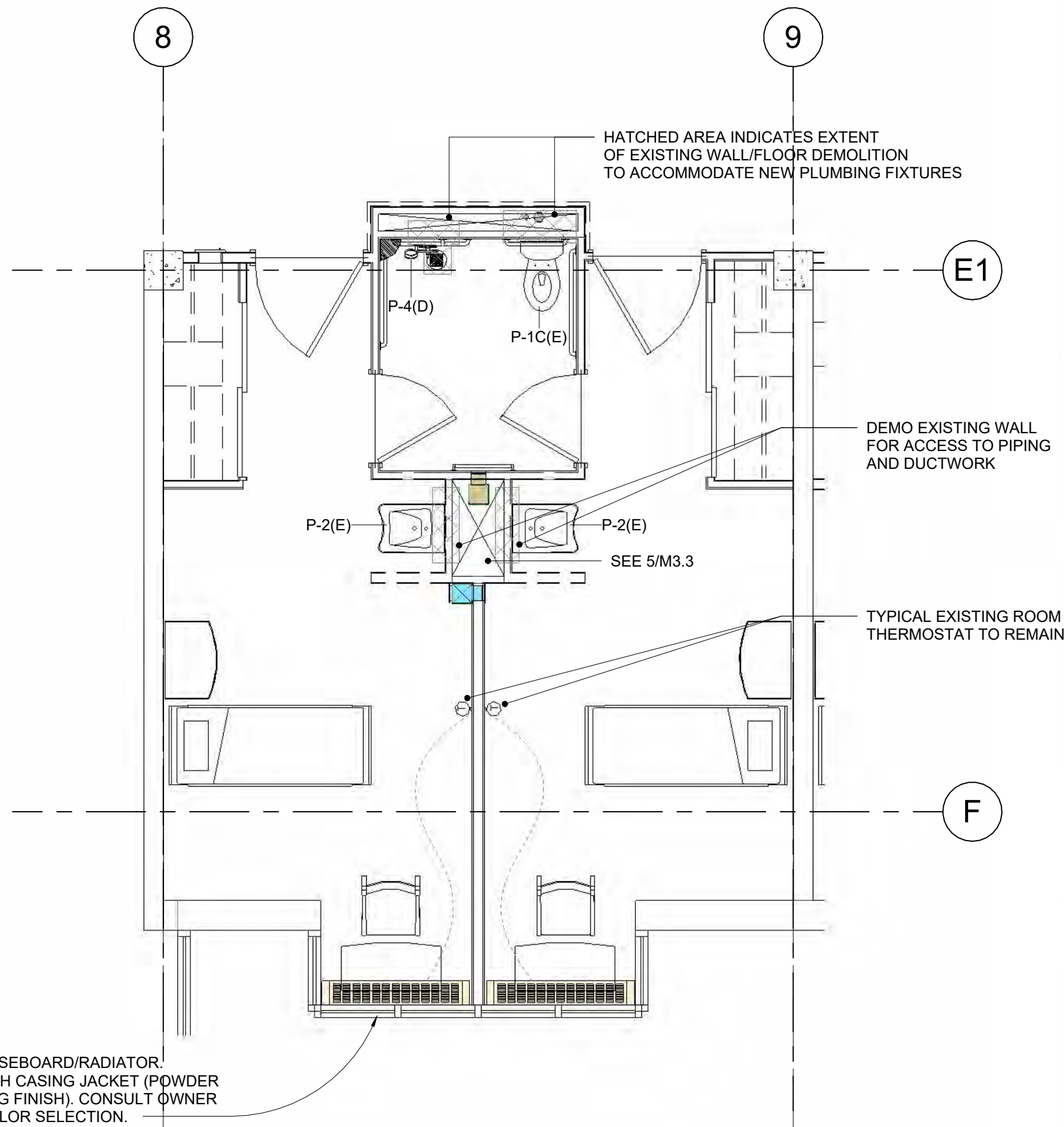
Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

**ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS**
923 W 11TH AVE, ANCHORAGE AK 99501

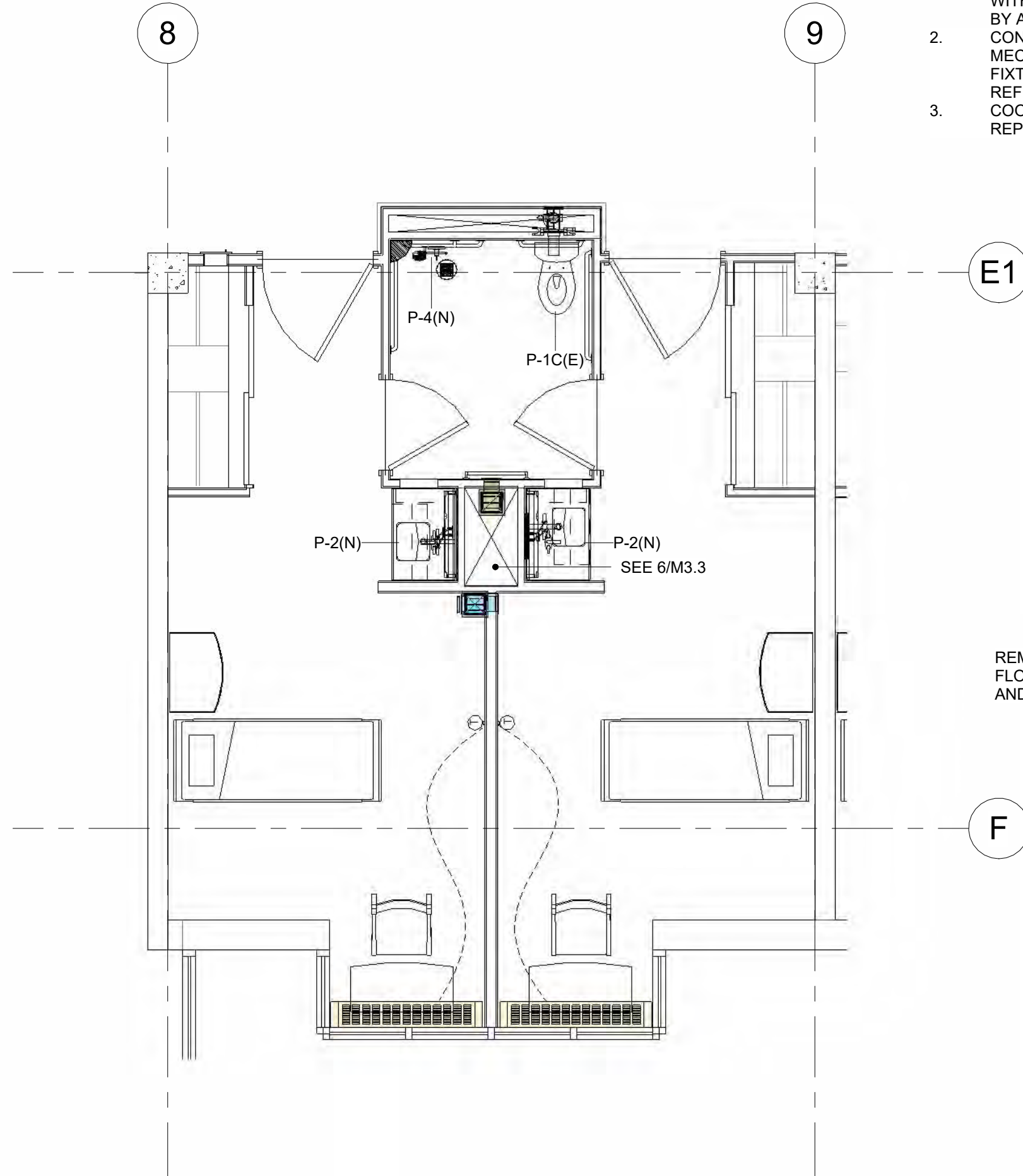
Drawn By:	WJC/RJW/JTC	Checked By:	JTC
Date:	3.20.2023		
Project:	PERMIT SET		
Sheet No:			
Sheet Title:	TYPICAL VARIANT 2 AREA PLANS, VIEWS		

SHEET NO:

M3.2



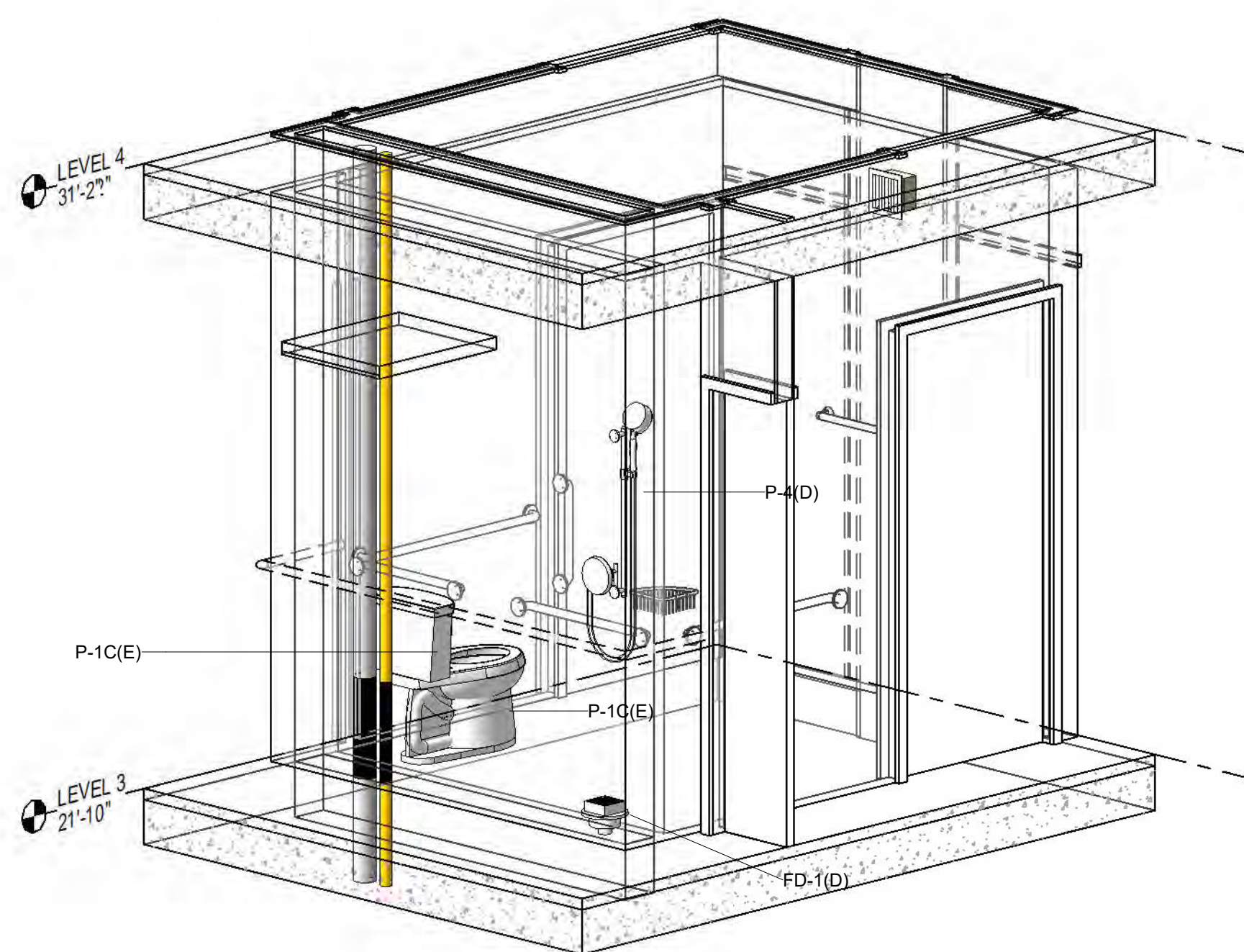
1 MECHANICAL AREA PLAN, VARIANT 3, EXISTING/DEMOLITION
1/4" = 1'-0"



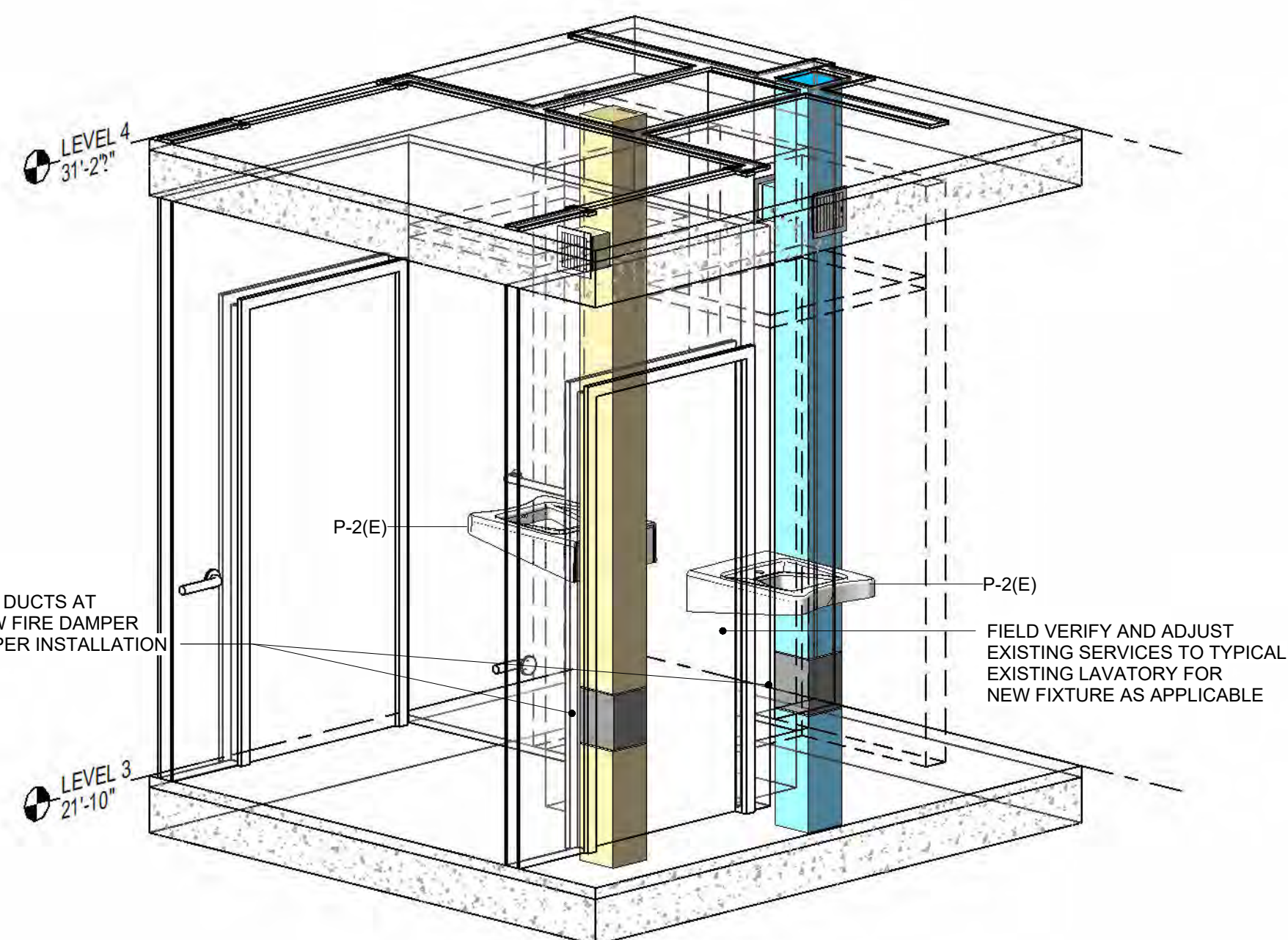
2 MECHANICAL AREA PLAN, VARIANT 3, NEW WORK
1/4" = 1'-0"

GENERAL DEMOLITION NOTES:

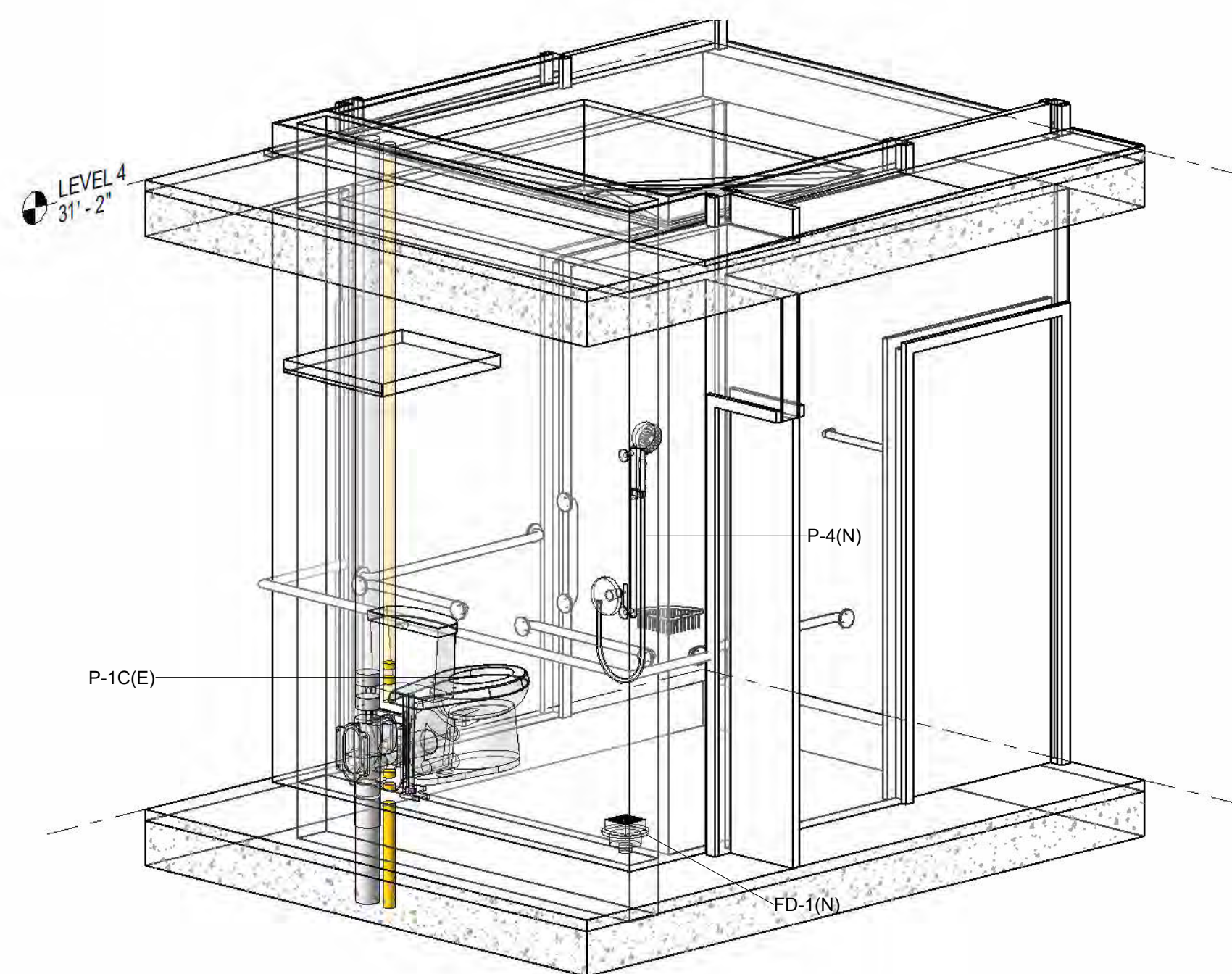
1. CONTRACTOR IS ADVISED THE FLOOR SYSTEM IS A POST-TENSIONED SYSTEM WITH EMBEDDED CABLES. FLOOR CUTTING DEMOLITION MUST BE SUPPORTED BY APPROPRIATE METHOD TO PROTECT SLAB STRUCTURAL INTEGRITY.
2. CONTRACTOR TO FIELD VERIFY EXISTING CONCEALED PLUMBING AND MECHANICAL SERVICES AND ADJUST TO ACCOMMODATE NEW PLUMBING FIXTURES, MECHANICAL COMPONENTS, AND ACCESS DOORS AS APPROPRIATE. REFERENCE AS-BUILT DRAWINGS FOR INFORMATION ON EXISTING SERVICES.
3. COORDINATE WITH ARCHITECTURAL WORK FOR NEW SPRINKLER HEAD REPLACEMENTS.



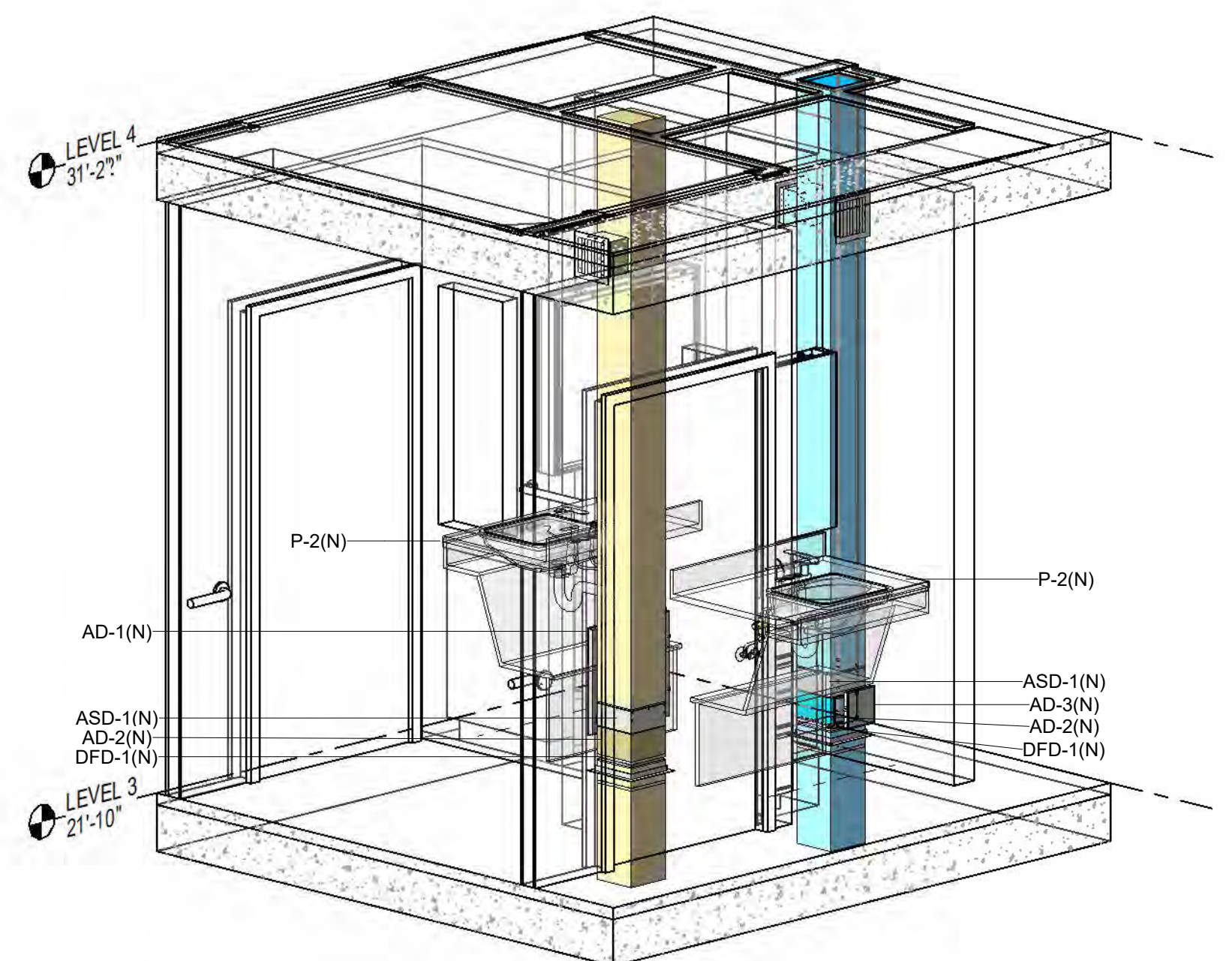
3 VARIANT 3 BATHROOM, EXISTING/DEMOLITION



5 VARIANT 3 SHAFT, EXISTING/DEMOLITION



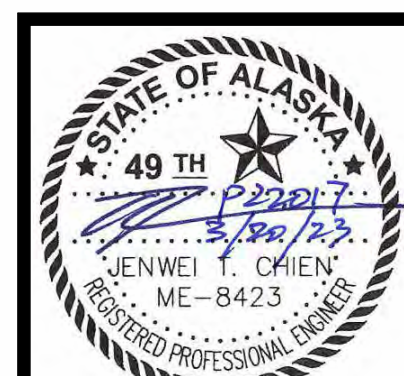
4 VARIANT 3 BATHROOM, NEW WORK



6 VARIANT 3 SHAFT, NEW WORK

PERMIT SET / MARCH 20, 2023

NOTE: FOR MOA BUILDING SAFETY PLAN REVIEW ONLY, THE PRINTED VERSION OF THE MECHANICAL AND PLUMBING PLANS ARE NOT APPROVED UNLESS PRINTED IN COLOR.



unigroup
engineers, inc.
10000 Highway 98, Suite 200 Anchorage, Alaska 99516
(907) 345-3647 (907) 345-3648 Fax: (907) 345-3649
www.unigroupengineers.com
State of Alaska Certified Professional Engineer No. 1141

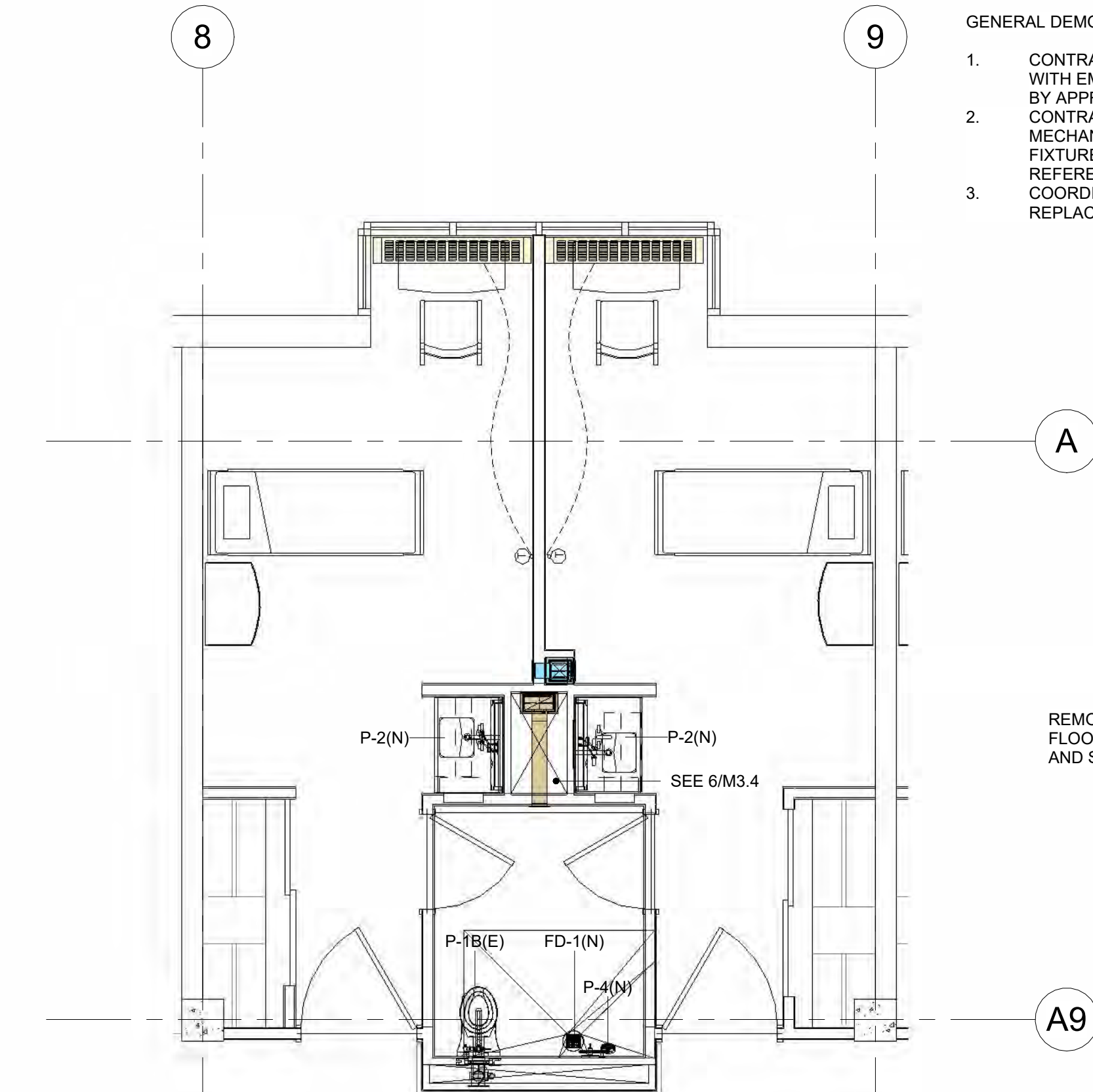
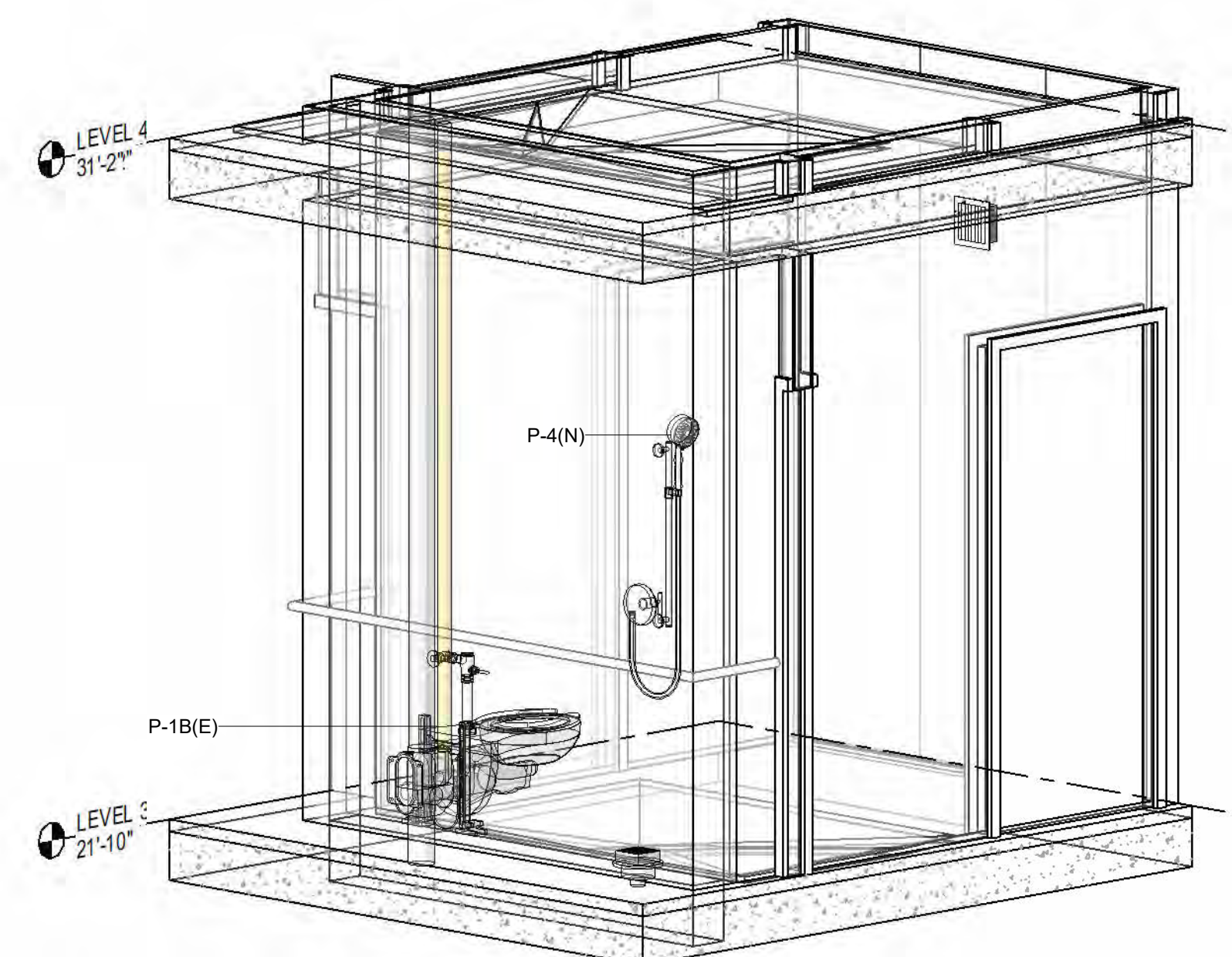
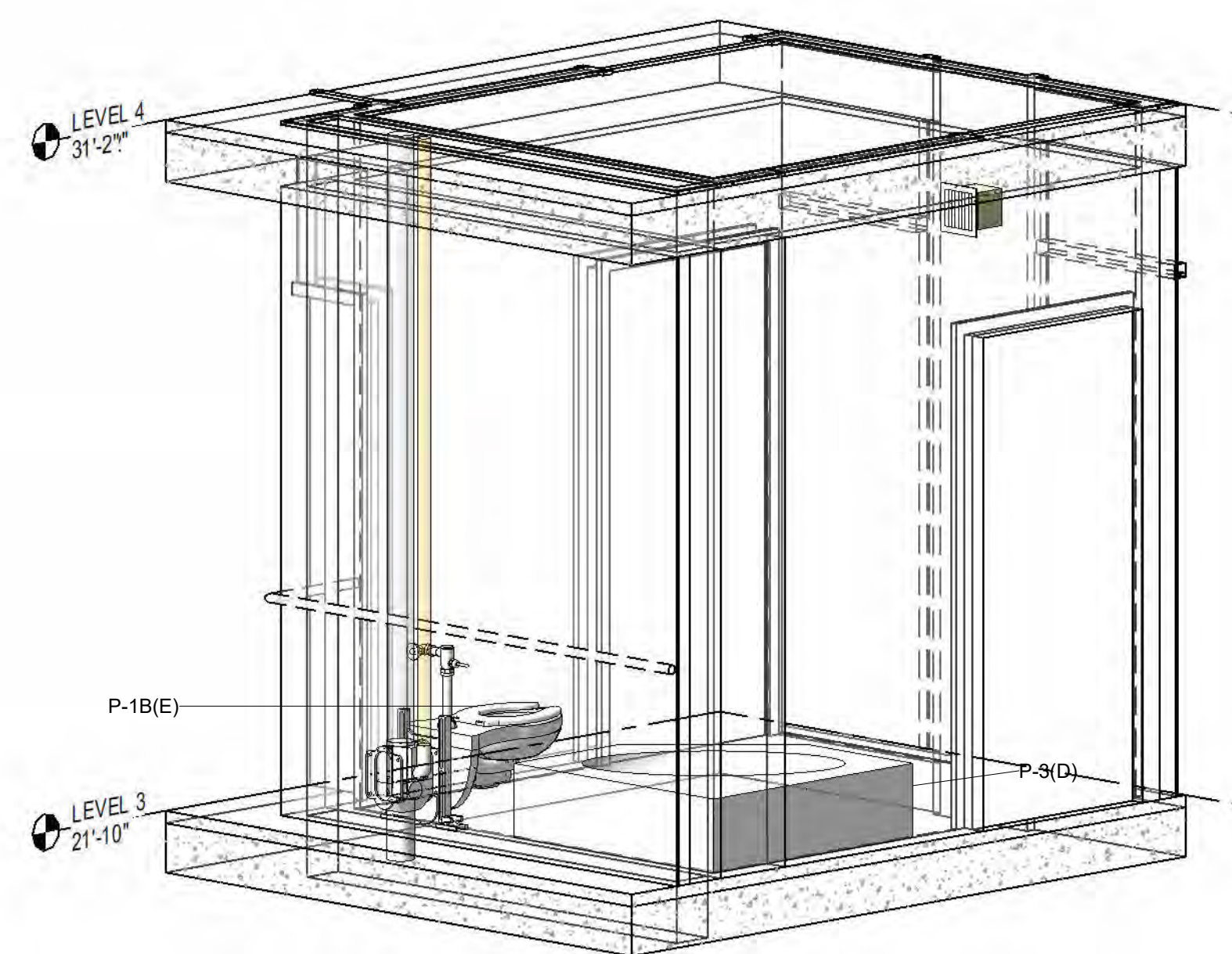
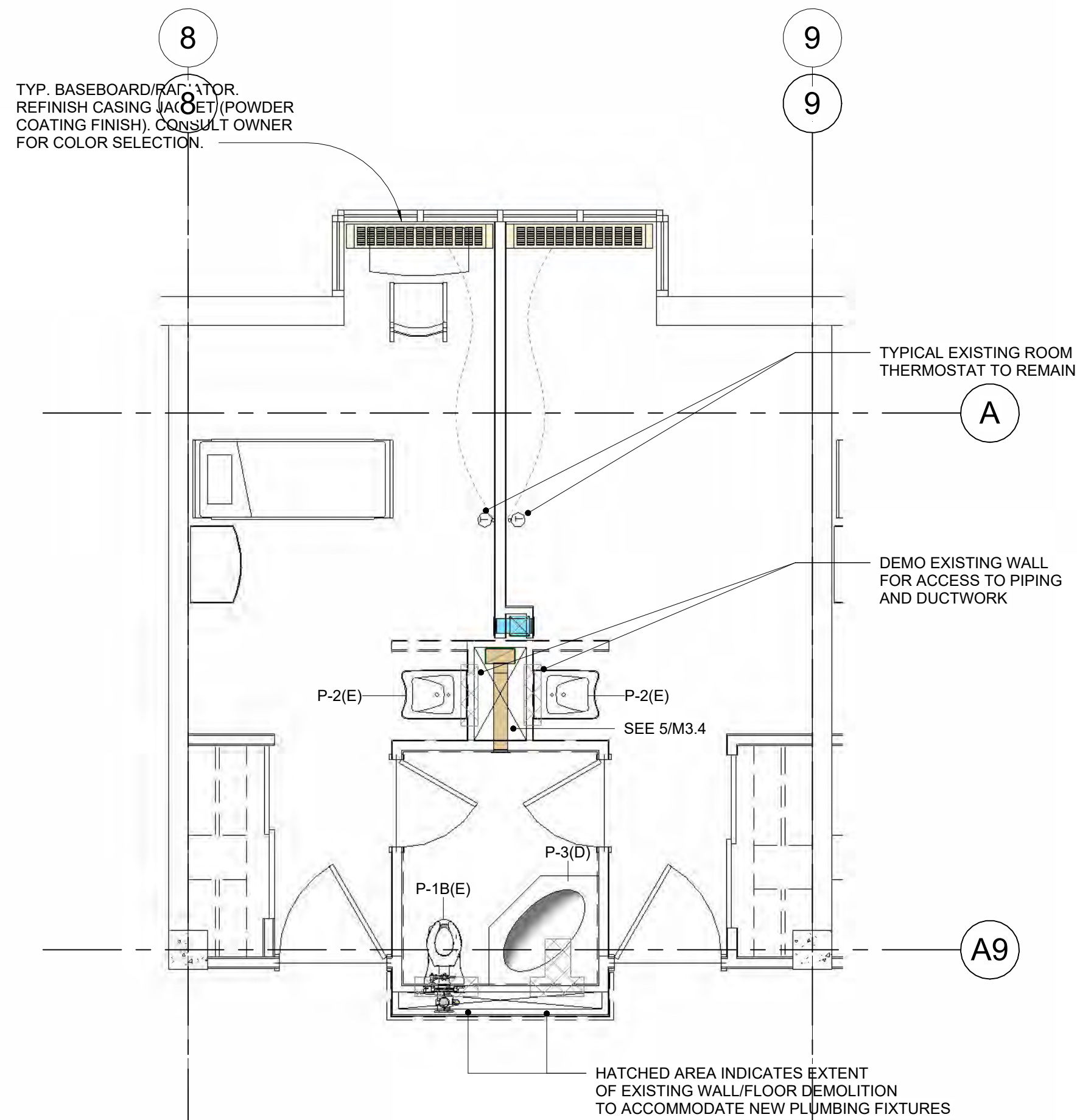
Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

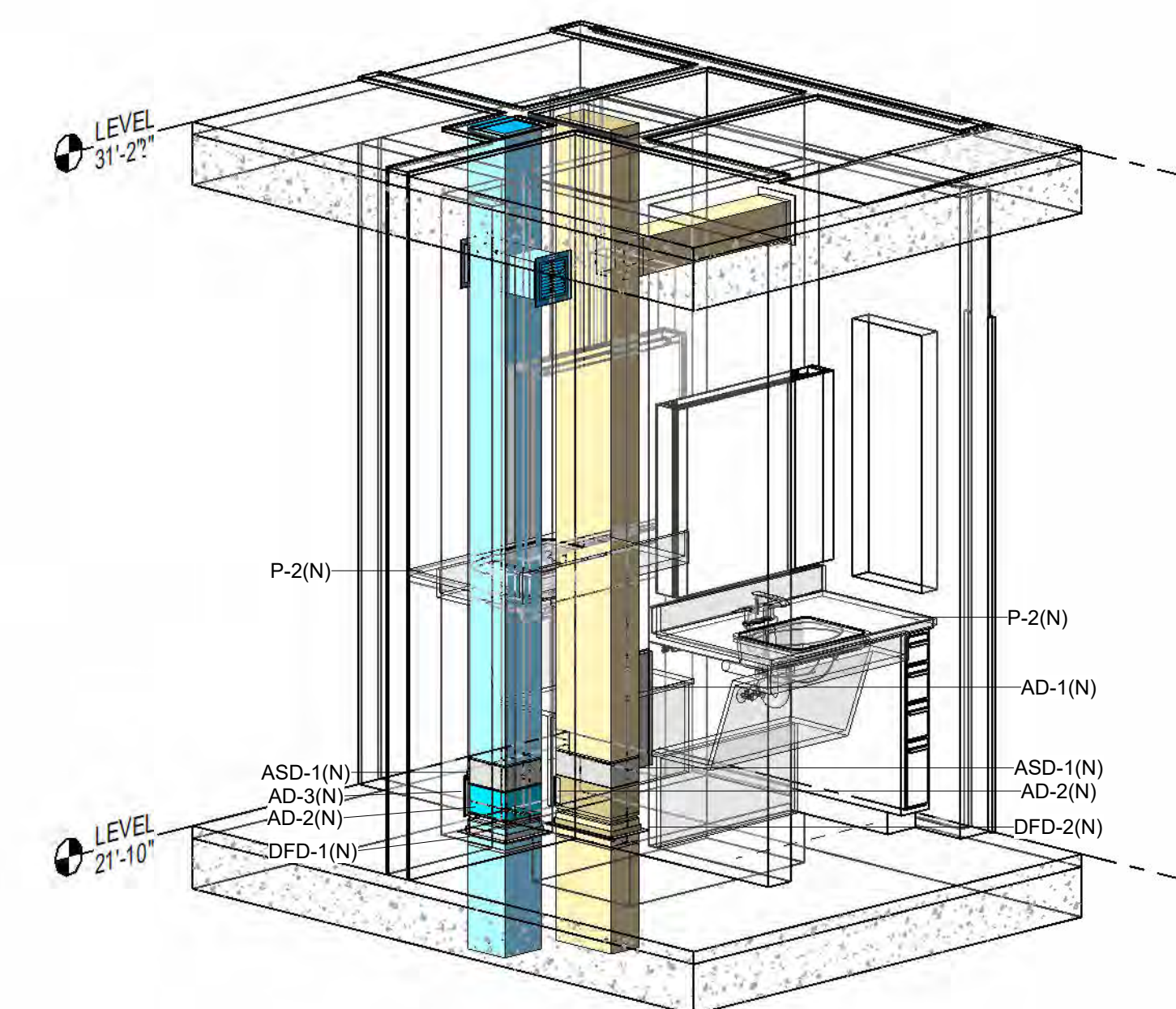
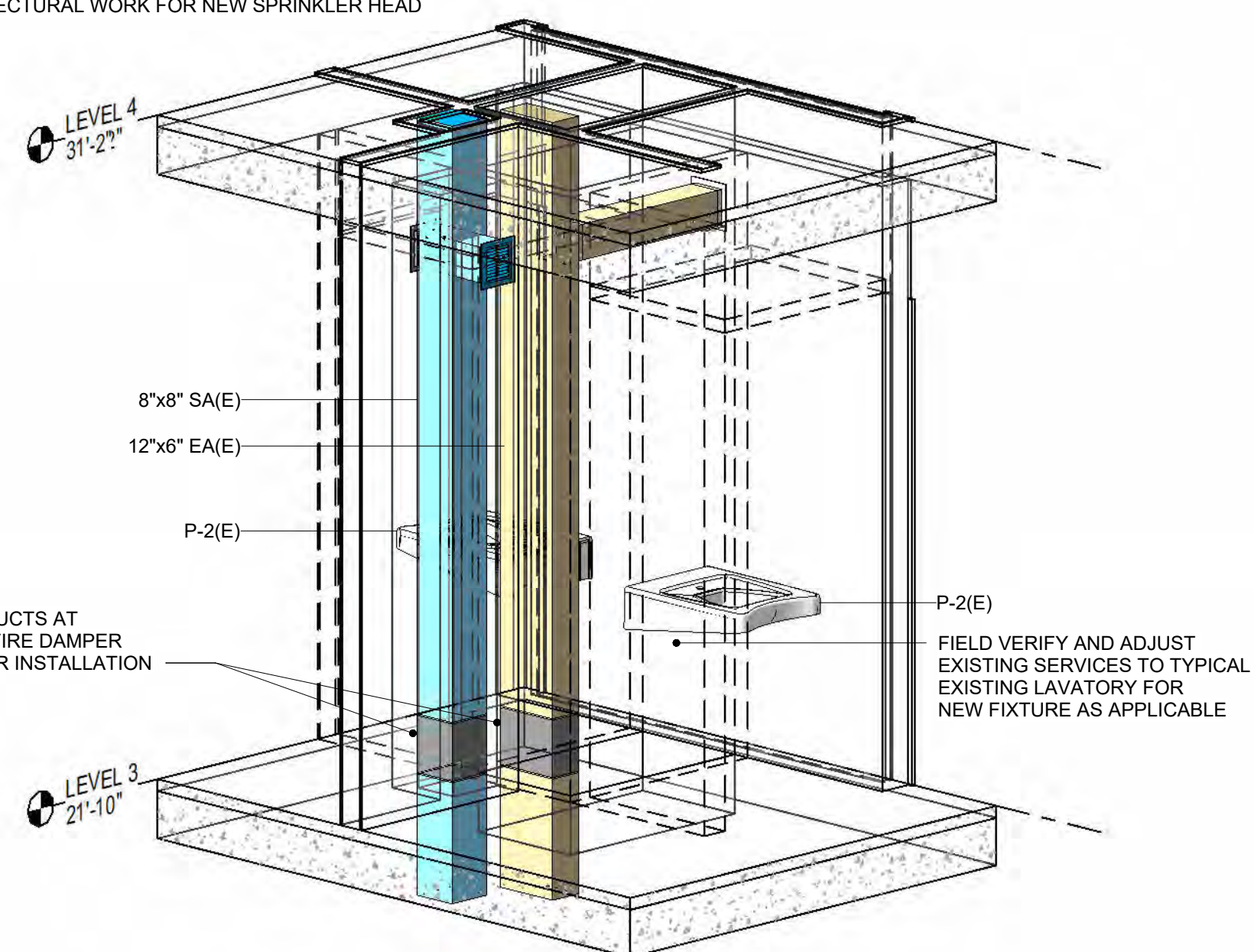
Drawn By:	WJC/RJW/JTC	Checked By:	JTC
Date:	3.20.2023		
Project:	PERMIT SET		
Job No:			
Sheet Title:	VARIANT 3 AREA PLANS, VIEWS		

SHEET NO:

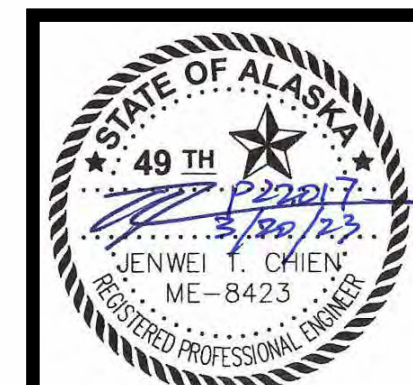
M3.3



- GENERAL DEMOLITION NOTES:



NOTE: DRAWING DEPICTS UNIT PRICE A1. UNDER BASE BID,
EXISTING LAVATORY P-2(E) TO BE REINSTALLED. COORDINATE
WITH ARCHITECTURAL FOR AFFECTED CASEWORK



Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Revelation

SHEET TITLE:
VARIANT 4 AREA
PLANS, VIEWS

SHEET NO:

M3.4

ELECTRICAL SPECIFICATIONS

26 05 00 - COMMON WORK RESULTS FOR ELECTRICAL

- A. SCOPE OF WORK: FURNISH AND INSTALL ALL MATERIAL AND EQUIPMENT FOR AN EXTENSION TO THE EXISTING ELECTRICAL SYSTEM AS INDICATED ON THE DRAWINGS AND IN THESE SPECIFICATIONS.
- B. STANDARDS, CODES AND REGULATIONS: COMPLY WITH THE LATEST ADOPTED EDITION OF THE NATIONAL ELECTRICAL CODE, INTERNATIONAL BUILDING CODE, AND INTERNATIONAL FIRE CODE INCLUDING ALL STATE AND LOCAL AMENDMENTS TO THESE CODES. COMPLY WITH THE LATEST PUBLISHED VERSION OF THE NECA STANDARD OF INSTALLATION.
- C. DRAWINGS: THE DRAWINGS ARE DIAGRAMMATIC, NOT NECESSARILY SHOWING ALL OFFSETS OR EXACT LOCATIONS OF FIXTURES, EQUIPMENT, ETC. UNLESS SPECIFICALLY DIMENSIONED. REVIEW THE DRAWINGS AND SPECIFICATIONS FOR EQUIPMENT FURNISHED BY OTHER CRAFTS BUT INSTALLED IN ACCORDANCE WITH THIS SECTION. BRING QUESTIONABLE OR OBSCURE ITEMS, APPARENT CONFLICTS BETWEEN PLANS AND SPECIFICATIONS, GOVERNING CODES OR UTILITIES REGULATIONS TO THE ATTENTION OF THE OWNER. CODES, ORDINANCES, REGULATIONS, MANUFACTURER'S INSTRUCTIONS OR STANDARDS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH THE DRAWINGS AND SPECIFICATIONS.
- D. RECORD DRAWINGS: MARK UP A CLEAN SET OF DRAWINGS AS THE WORK PROGRESSES TO SHOW THE DIMENSIONED LOCATION AND ROUTING OF ALL ELECTRICAL WORK WHICH WILL BECOME PERMANENTLY CONCEALED. SHOW ROUTING OF WORK IN PERMANENTLY CONCEALED BLIND SPACES WITHIN THE BUILDING. SHOW COMPLETE ROUTING AND SIZING OF ANY SIGNIFICANT REVISIONS TO THE SYSTEMS SHOWN.
- E. WORKMANSHIP: INSTALLATION OF ALL WORK SHALL BE MADE SO THAT ITS SEVERAL COMPONENT PARTS SHALL FUNCTION AS A WORKABLE SYSTEM COMPLETE WITH ALL ACCESSORIES NECESSARY FOR ITS OPERATION. ALL MATERIAL AND EQUIPMENT SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS, INSTRUCTIONS AND/OR INSTALLATION DRAWINGS AND IN ACCORDANCE WITH NECA STANDARDS. MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL CONFORM WITH APPLICABLE INDUSTRY STANDARDS, NEMA STANDARDS AND UNDERWRITERS LABORATORIES STANDARDS WHERE APPLICABLE.
- F. SUBMITTALS: PROVIDE MATERIAL AND EQUIPMENT SUBMITTALS CONTAINING A COMPLETE LISTING OF MATERIAL AND EQUIPMENT SHOWN ON THE DRAWINGS. INCLUDE CATALOG NUMBERS, WIRING DIAGRAMS, ROUGH-IN DIMENSIONS AND PERFORMANCE DATA FOR ALL MATERIAL AND EQUIPMENT. SUBMITTALS SHALL BE IN ELECTRONIC .PDF FORMAT, SEPARATE FROM WORK FURNISHED UNDER OTHER DIVISIONS. INDEX AND CLEARLY IDENTIFY ALL MATERIAL AND EQUIPMENT BY ITEM, NAME OR DESIGNATION USED ON THE DRAWINGS. SUBMITTAL REVIEW IS FOR GENERAL DESIGN AND ARRANGEMENT ONLY AND DOES NOT RELIEVE THE CONTRACTOR FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE SUBMITTALS ARE NOT CHECKED FOR QUANTITY, DIMENSION, OR FOR PROPER OPERATION. WHERE DEVIATIONS OF A SUBSTITUTE PRODUCT OR SYSTEM PERFORMANCE HAVE NOT BEEN SPECIFICALLY NOTED IN THE SUBMITTAL BY THE CONTRACTOR, PROVISIONS OF A COMPLETE AND SATISFACTORY WORKING INSTALLATION IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR.
- G. WARRANTY: THE CONTRACTOR SHALL GUARANTEE ALL WORK EXECUTED UNDER THIS CONTRACT TO BE FREE FROM DEFECTS IN MATERIALS AND WORKMANSHIP FOR A PERIOD OF ONE YEAR FROM BENEFICIAL OCCUPANCY. ANY FAULTY MATERIALS OR WORKMANSHIP SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER DURING THE GUARANTEE PERIOD.
- H. PERMITS: SECURE AND PAY FOR ALL FEES, PERMITS, ETC. REQUIRED BY LOCAL AND STATE AGENCIES.
- I. REFERENCE SYMBOLS: THE ELECTRICAL "LEGEND" ON THE DRAWINGS IS A STANDARDIZED VERSION, AND ALL SYMBOLS SHOWN MAY NOT BE USED. USE THE "LEGEND" AS A REFERENCE FOR THE SYMBOLS USED ON THE DRAWINGS.
- J. PENETRATION OF FIRE BARRIERS: ALL ELECTRICAL PENETRATIONS THROUGH FIRE RATED BARRIERS SHALL BE SEALED IN ACCORDANCE WITH NEC ARTICLE 300.21 AND THE FOLLOWING:
- ALL HOLES OR VOIDS CREATED TO EXTEND ELECTRICAL SYSTEMS THROUGH FIRE RATED FLOORS, WALLS OR CEILING SHALL BE SEALED WITH AN ASBESTOS-FREE INTUMESCENT FIRE STOPPING MATERIAL CAPABLE OF EXPANDING 8 TO 10 TIMES WHEN EXPOSED TO TEMPERATURES 250 DEGREES F OR HIGHER.
 - MATERIALS SHALL BE SUITABLE FOR THE FIRE STOPPING OF PENETRATIONS MADE BY STEEL, GLASS, PLASTIC AND SHALL BE CAPABLE OF MAINTAINING AN EFFECTIVE BARRIER AGAINST FLAME, SMOKE AND GASES IN COMPLIANCE WITH THE REQUIREMENTS OF ASTM E814, UL 1479 AND THE UL FIRE RESISTANCE DIRECTORY REQUIREMENTS FOR THROUGH-PENETRATION FIRESTOP DEVICES (XHCR).
 - THE RATING OF THE FIRE STOPS SHALL BE THE SAME AS THE TIME-RATED FLOOR, WALL OR CEILING ASSEMBLY.
 - INSTALL FIRE STOPPING MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

26 05 05 - SELECTIVE DEMOLITION FOR ELECTRICAL

- A. DEMOLITION DRAWINGS ARE BASED ON CASUAL FIELD OBSERVATIONS AND EXISTING RECORD DRAWINGS. REPORT DISCREPANCIES TO ENGINEER BEFORE DISTURBING THE EXISTING INSTALLATION.
- B. WHEN WORK MUST BE PERFORMED ON ENERGIZED EQUIPMENT OR CIRCUITS, USE PERSONNEL EXPERIENCED IN SUCH OPERATIONS.
- C. REMOVE, RELOCATE AND EXTEND EXISTING INSTALLATIONS TO ACCOMMODATE NEW CONSTRUCTION. REMOVE ABANDONED WIRING TO SOURCE OF SUPPLY. REMOVE EXPOSED ABANDONED CONDUIT, INCLUDING ABANDONED CONDUIT ABOVE ACCESSIBLE CEILING FINISHES. WHERE ABANDONED CONDUIT ENTERS EXISTING SURFACES TO REMAIN, CUT CONDUIT FLUSH WITH WALLS AND FLOORS, AND PATCH SURFACES. DISCONNECT ABANDONED OUTLETS AND REMOVE DEVICES. REMOVE ABANDONED OUTLETS IF CONDUIT SERVICING THEM IS ABANDONED AND REMOVED. PROVIDE BLANK COVER FOR ABANDONED OUTLETS WHICH ARE NOT REMOVED.
- D. DISCONNECT AND REMOVE ELECTRICAL DEVICES AND EQUIPMENT SERVING UTILIZATION EQUIPMENT THAT HAS BEEN REMOVED. REMOVE BRACKETS, STEMS, HANGERS AND OTHER ACCESSORIES. REPAIR ADJACENT CONSTRUCTION AND FINISHES DAMAGED DURING DEMOLITION AND EXTENSION WORK. MAINTAIN ACCESS TO EXISTING ELECTRICAL INSTALLATIONS WHICH REMAIN ACTIVE..

26 05 19 - WIRE AND CABLE

- A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.
- B. MATERIALS:
- ALL CONDUCTORS SHALL BE COPPER WITH TYPE XHHW, THWN, THW OR THHN INSULATION. MINIMUM BRANCH CIRCUIT CONDUCTOR SIZE SHALL BE 12 AWG. MINIMUM CONTROL CIRCUIT CONDUCTOR SIZE SHALL BE #18 AWG.
 - CONTROL CIRCUITS SHALL BE COPPER, STRANDED CONDUCTOR, 600V INSULATION, THHN/THWN, MINIMUM SIZE 18 AWG.
 - TYPE MC CABLE: SOLID COPPER CONDUCTOR, 600 VOLT THERMOPLASTIC INSULATION, RATED 90° C, INSULATED GREEN GROUNDING CONDUCTOR, AND GALVANIZED STEEL ARMOR OVER MYLAR. MC CABLE USED FOR FIRE ALARM WIRING SHALL BE COLORED RED AND LISTED FOR FIRE ALARM USE.
 - 0-10V DIMMING/POWER MC CABLE (TYPE MC-PCS), SIZE 12 THROUGH 10 AWG WITH 16-2 CONTROL CABLES: SOLID COPPER CONDUCTOR, 600 VOLT THERMOPLASTIC INSULATION, RATED 90° C DRY, 75° WET, INSULATED GREEN GROUNDING CONDUCTOR, AND GALVANIZED STEEL OR ALUMINUM ARMOR OVER MYLAR.
- C. INSTALLATION:
- COLOR CODE WIRES BY LINE OR PHASE. COLOR CODE THE 120/208V CONDUCTORS BLACK, RED, BLUE, AND WHITE.
 - DO NOT SHARE NEUTRAL CONDUCTORS. PROVIDE A DEDICATED NEUTRAL CONDUCTOR FOR EACH BRANCH CIRCUIT THAT REQUIRES A NEUTRAL.
 - USE PROPERLY SIZED INSULATED SPRING WIRE CONNECTORS WITH PLASTIC CAPS FOR ALL CONDUCTORS #8 AWG AND SMALLER.
 - INSTALLATION SCHEDULE: BUILDING WIRE IN RACEWAYS AT ALL LOCATIONS UNLESS OTHERWISE NOTED. PROVIDE XHHW-2 FOR EXTERIOR LOCATIONS. TYPE MC CABLE MAY BE USED FOR BRANCH CIRCUIT WIRING IN DRY, INTERIOR LOCATIONS OTHER THAN HOMERUNS. HOMERUNS SHALL BE BUILDING WIRE IN RACEWAY. METAL CLAD CABLE USED FOR BRANCH CIRCUIT WIRING FROM A LIGHT SWITCH OR LIGHTING CONTROL STATION TO THE LIGHT FIXTURE SHALL INCLUDE A SPARE CONDUCTOR FOR FUTURE USE. METAL CLAD CABLE USED FOR BRANCH CIRCUIT WIRING TO LED FIXTURES THAT HAVE 0-10V DIMMING CAPABILITY SHALL BE TYPE MC-PCS.
 - AT THE CONTRACTOR'S OPTION, PORTIONS OF THE FIRE ALARM WIRING IN DRY, CONCEALED LOCATIONS MAY BE INSTALLED IN FIRE ALARM METAL CLAD CABLE.

26 05 29 - HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

- A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.
- B. MATERIAL: SUPPORT CHANNEL SHALL BE GALVANIZED OR PAINTED STEEL. HARDWARE SHALL BE CORROSION RESISTANT.
- C. INSTALLATION: EQUIPMENT WEIGHING MORE THAN 50 POUNDS SHALL BE ADEQUATELY ANCHORED TO THE BUILDING STRUCTURE TO RESIST LATERAL EARTHQUAKE FORCES. PROVIDE SAFETY CHAINS FOR LIGHT FIXTURES, SUPPORTED FROM T-BAR OR OTHER CEILING SUSPENSION SYSTEM, CAPABLE OF SUPPORTING A MINIMUM OF 200 POUNDS. ATTACH SAFETY CHAINS AT EACH CORNER OF FIXTURE CONNECTED SUCH THAT FIXTURE WILL NOT DROP BELOW A HEIGHT OF 7'-6" IN THE EVENT OF A CEILING SUSPENSION SYSTEM FAILURE.

26 05 33 - RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

- A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.
- B. MATERIALS
- RIGID STEEL CONDUIT: ANSI C80.1. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; THREADED TYPE WITH INSULATED THROAT BUSHINGS, MATERIAL TO MATCH CONDUIT.
 - INTERMEDIATE METAL CONDUIT (IMC): GALVANIZED STEEL. FITTINGS AND CONDUIT BODIES: ANSI/NEMA FB 1; USE FITTINGS AND CONDUIT BODIES SPECIFIED ABOVE FOR RIGID STEEL CONDUIT.
 - ELECTRICAL METALLIC TUBING CONDUIT (EMT): ANSI C80.3. GALVANIZED TUBING. FITTINGS AND CONDUIT BODIES: ANSINEMA FB 1; STEEL OR MALLEABLE IRON, COMPRESSION TYPE OR SET SCREW FITTINGS WITH INSULATED THROAT BUSHINGS. DIE-CAST FITTINGS ARE NOT ACCEPTABLE. PROVIDE TOPCOAT RED EMT FOR FIRE ALARM.
 - FLEXIBLE METAL CONDUIT: FS WW-C-566; STEEL, FULL WALL OR REDUCED WALL THICKNESS. FITTINGS AND CONDUIT BODIES: ANSINEMA FB 1; STEEL OR MALLEABLE IRON WITH INSULATED THROAT BUSHINGS. DIE CAST FITTINGS ARE NOT ACCEPTABLE.
 - PROVIDE GALVANIZED OR CADMIUM PLATED, ONE PIECE PRESSED STEEL OUTLET BOXES 4 INCH SQUARE OR OCTAGONAL, 1 1/2 INCHES DEEP MINIMUM SIZE FOR USE IN INTERIOR AREAS.
 - FOR TELECOMMUNICATIONS SYSTEMS, OUTLET BOXES SHALL BE 4-11/16 INCHES SQUARE, 2-1/4 INCHES DEEP MINIMUM.
 - PROVIDE CAST ALUMINUM OR FERALLOY TYPE BOXES WITH GASKETED COVER, THREADED HUBS AND NEMA 3R RATING FOR USE IN EXTERIOR OR WET LOCATIONS.
- C. INSTALLATION:
- INSTALL CONDUIT FOR ALL SYSTEMS UNLESS OTHERWISE NOTED, 1/2 INCH MINIMUM SIZE. EXCEPT CONDUIT FOR SPECIAL SYSTEMS SHALL BE 3/4" MINIMUM. WET INTERIOR LOCATIONS SHALL BE RIGID STEEL CONDUIT OR INTERMEDIATE METAL CONDUIT.
 - EXPOSED DRY INTERIOR LOCATIONS SHALL BE RIGID STEEL CONDUIT OR INTERMEDIATE METAL CONDUIT. ELECTRICAL METALLIC TUBING MAY BE USED EXPOSED WHEN INSTALLED ON THE CEILING, A MINIMUM OF TEN FEET ABOVE THE FLOOR OR WHERE NOT SUBJECT TO PHYSICAL DAMAGE. EMT MAY ALSO BE USED FOR CONCEALED, DRY, INTERIOR LOCATIONS.
 - MOTOR AND EQUIPMENT CONNECTIONS SHALL BE SHORT EXTENSIONS OF FLEXIBLE METAL CONDUIT TO ALLOW FOR VIBRATION. LIQUIDTIGHT FLEXIBLE CONDUIT AND FITTINGS SHALL BE USED FOR THESE CONNECTIONS IN DAMP OR WET LOCATIONS.
 - PAINT ALL EXPOSED CONDUIT TO MATCH SURFACE TO WHICH IT IS ATTACHED OR CROSSES. CLEAN GREASY OR DIRTY CONDUIT PRIOR TO PAINTING IN ACCORDANCE WITH PAINT MANUFACTURER'S INSTRUCTIONS.
 - ALL CONDUIT FOR THE TELECOMMUNICATIONS DISTRIBUTION SYSTEM SHALL BE INSTALLED WITH NO MORE THAN THREE 90-DEGREE BENDS BETWEEN PULLBOXES. PULL BOXES SHALL NOT BE USED IN LIEU OF CONDUIT BENDS. CONDULETS (LB FITTINGS) SHALL NOT BE INSTALLED IN ANY TELECOMMUNICATIONS RACEWAY. PROVIDE OUTLET BOXES AS SHOWN ON THE DRAWINGS, AND AS REQUIRED FOR SPLICES, TAPS, WIRE PULLING, EQUIPMENT CONNECTIONS, DEVICE INSTALLATION AND CODE COMPLIANCE.
 - DO NOT INSTALL BOXES BACK-TO-BACK IN WALLS. PROVIDE A MINIMUM 6 INCH SEPARATION FOR MINIMUM SOUND TRANSMISSION.
 - USE MULTIPLE-GANG BOXES WHERE MORE THAN ONE DEVICE ARE MOUNTED TOGETHER; DO NOT USE SECTIONAL BOXES.

- SUPPORT BOXES INDEPENDENTLY OF CONDUIT.
- COORDINATE MOUNTING HEIGHTS AND LOCATIONS OF OUTLETS MOUNTED ABOVE COUNTERS, BENCHES AND BACKSPLASHES.

26 05 53 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

- A. SUBMITTALS: NONE REQUIRED FOR THIS SECTION.
- B. MATERIALS
- NAMEPLATES: ENGRAVED THREE-LAYER LAMINATED PLASTIC, WHITE LETTERS ON A BLACK BACKGROUND. NAMEPLATES SHALL BE PROVIDED TO IDENTIFY ALL ELECTRICAL DISTRIBUTION AND CONTROL EQUIPMENT AND LOADS SERVED.
 - TAPE LABELS: ADHESIVE TAPE LABELS, WITH 3/16 INCH BOLD BLACK LETTERS ON CLEAR BACKGROUND MADE USING DYMO RHINOPRO 5000 OR EQUAL LABEL PRINTER.
 - WIRE AND CABLE MARKERS: CLOTH MARKERS, SPLIT SLEEVE OR TUBING TYPE.
- C. INSTALLATION:
- GEAR: PROVIDE ENGRAVED THREE-LAYER LAMINATED PLASTIC NAMEPLATES WITH WHITE LETTERS ON A BLACK BACKGROUND TO IDENTIFY ALL ELECTRICAL DISTRIBUTION, CONTROL EQUIPMENT, LOADS SERVED, AND LOW-VOLTAGE SYSTEM PANELS.
 - CONDUITS: MARK ALL CONDUITS ENTERING OR LEAVING PANELBOARDS WITH INDELIBLE BLACK MAGIC MARKER WITH THE CIRCUIT NUMBERS OF THE CIRCUITS CONTAINED INSIDE. LABEL FEEDER CONDUITS AND SPARE CONDUITS AT EACH END WITH SOURCE AND TERMINATION POINT.
 - JUNCTION BOXES: MARK ALL CIRCUIT NUMBERS OF WIRING ON ALL JUNCTION BOXES WITH SHEET STEEL COVERS. MARK WITH INDELIBLE BLACK MARKER. ON EXPOSED JUNCTION BOXES IN PUBLIC AREAS, MARK ON INSIDE OF COVER. MARK ALL FIRE ALARM SYSTEM JUNCTION BOXES WITH SHEET STEEL COVERS WITH "FA." MARK WITH INDELIBLE RED MARKER. MARK ALL OTHER SPECIAL SYSTEM JUNCTION BOXES WITH SHEET STEEL COVERS.
 - WIRE IDENTIFICATION: PROVIDE WIRE MARKERS ON EACH CONDUCTOR IN PANELBOARD GUTTERS, PULL BOXES, OUTLET AND JUNCTION BOXES, AND AT LOAD CONNECTION. MARKERS SHALL BE LOCATED WITHIN ONE INCH OF EACH CABLE END, EXCEPT AT PANELBOARDS, WHERE MARKERS FOR BRANCH CIRCUIT CONDUCTORS SHALL BE VISIBLE WITHOUT REMOVING PANEL DEADFRONT.
 - DEVICE PLATES: LABEL EACH RECEPTACLE DEVICE PLATE OR POINT OF CONNECTION DENOTING THE PANELBOARD NAME AND CIRCUIT NUMBER. INSTALL LABEL ON THE TOP OF EACH PLATE.

26 24 16 - PANELBOARDS

- A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL.
- B. MATERIAL:
- MANUFACTURERS: SQUARE D, GE, EATON, OR EQUAL.
 - PROVIDE DEAD-FRONT CIRCUIT BREAKER PANELBOARDS WITH BUS SIZE, SHORT CIRCUIT RATING, NUMBER AND SIZE OF BRANCH CIRCUITS AS SHOWN ON THE DRAWINGS. BUSSING SHALL BE COPPER. CABINETS SHALL BE 6 INCHES DEEP BY 20 INCHES WIDE MINIMUM. PROVIDE WITH FLUSH OR SURFACE FRONTS, AS NOTED ON THE DRAWINGS, WITH CONCEALED TRIM CLAMPS, CONCEALED HINGE AND FLUSHLOCK. FINISH IN MANUFACTURER'S STANDARD GRAY ENAMEL. PROVIDE INTEGRAL LIGHTING CONTACTOR WHERE NOTED. MOLDED CASE CIRCUIT BREAKERS SHALL BE BOLT-ON THERMAL MAGNETIC TRIP TYPE WITH COMMON TRIP HANDLE FOR ALL POLES. PROVIDE UL CLASS A GROUND FAULT INTERRUPTER CIRCUIT BREAKERS FOR GFCI CIRCUITS AND ARC FAULT CIRCUIT INTERRUPTER CIRCUIT BREAKERS FOR AFCI CIRCUITS AS INDICATED ON THE DRAWINGS.
 - NEW BREAKERS IN EXISTING PANELS: NEMA AB 1; UL LISTED FOR USE IN THE PANEL, AMPERE RATING AND NUMBER OF POLES AS INDICATED ON PLANS. AIC RATING SHALL MATCH THE LOWEST RATED DEVICE IN THE PANEL.
- C. INSTALLATION:
- INSTALL PANELBOARDS PLUMB WITH TOP OF CABINET 6'-6" ABOVE FINISHED FLOOR UNLESS OTHERWISE NOTED ON THE DRAWINGS.
 - PROVIDE TYPED CIRCUIT DIRECTORIES FOR EACH PANELBOARD.
 - ALL PANELBOARDS SHALL HAVE SIGNAGE FOR ARC HAZARD INSTALLED. THE MARKING SHALL BE LOCATED TO BE CLEARLY VISIBLE TO QUALIFIED PERSONNEL BEFORE EXAMINATION, ADJUSTMENT, SERVICING OR MAINTENANCE OF THE EQUIPMENT. AT A MINIMUM THE 3-LINE SIGNAGE SHALL STATE THE FOLLOWING: WARNING - ARC FLASH AND SHOCK HAZARD - APPROPRIATE PPE REQUIRED.
 - INSTALL NEW BREAKER(S) IN EXISTING PANEL(S) AND TEST FOR PROPER OPERATION. UPDATE CIRCUIT DIRECTORY TO REFLECT ALL CHANGES.

26 27 26 - WIRING DEVICES

- A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL.
- B. MATERIALS:
- WALL SWITCHES: SWITCHES FOR LIGHTING CIRCUITS SHALL BE NEMA WD1 AND FEDERAL SPECIFICATION FS W-S-896 AC GENERAL USE SNAP SWITCH WITH TOGGLE HANDLE, RATED 20 AMPERES AND 120-277 VOLTS AC. HANDLE: WHITE NYLON.
 - RECEPTACLES: CONVENIENCE AND STRAIGHT BLADE RECEPTACLES SHALL BE NEMA AND FEDERAL SPECIFICATION FS W-C-596, TYPE 5-20R, WHITE NYLON FACE. SPECIFIC USE RECEPTACLES SHALL BE NEMA WD1 OR WDS; AS REQUIRED TO MATCH LOAD SERVED, BLACK PHENOLIC FACE. GFCI RECEPTACLES SHALL BE 20A, DUPLEX CONVENIENCE RECEPTACLE WITH INTEGRAL CLASS 'A' GROUND FAULT CURRENT INTERRUPTER AND LOCKOUT FEATURE. TAMPERPROOF RECEPTACLES SHALL BE UL 498. WEATHER-RESISTANT RECEPTACLES SHALL BE LISTED TO THE WEATHER-RESISTANT SUPPLEMENT OF UL 498 AND COMPLY WITH THE REQUIREMENTS OF NEC 406.9.
 - WALL DIMMERS FOR 0-10V LED CIRCUITS: UL 1472; NEMA WD 1; DECORA-STYLE, COMMERCIAL GRADE PRESET WALL DIMMER SWITCH, 0-10V CONTROL FOR LED DRIVERS WITH NO POWER PACK REQUIRED TO SWITCH LINE VOLTAGE LOAD (8 A, 120-277 V); ADJUSTABLE HIGH-END AND LOW-END TRIM. COLOR: WHITE. HANDLE: PADDLE SWITCH FOR ON/OFF OPERATION WITH SMALL, DISCRETE, CAPTIVE LINEAR SLIDE FOR DIMMER ADJUSTMENT. PROVIDE SINGLE POLE UNLESS OTHERWISE INDICATED ON PLANS. DIMMER SHALL BE FULLY COMPATIBLE WITH ALL LOADS CONNECTED FOR SMOOTH, FLICKER-FREE DIMMING OPERATION.
 - WALL PLATES: DECORATIVE COVER PLATES IN FINISHED AREAS SHALL BE 430 OR 302 STAINLESS STEEL. WEATHERPROOF COVER PLATES SHALL BE GASKETED STAINLESS STEEL WITH HINGED GASKETED DEVICE COVERS. DEVICE PLATES FOR WET LOCATION RECEPTACLES SHALL BE "IN USE" TYPE. PROVIDE 1/2 INCH RAISED, SQUARE, GALVANIZED OR CADMIUM PLATED, PRESSED STEEL COVER PLATE SUPPORTING DEVICES INDEPENDENT OF THE OUTLET BOX FOR ALL EXPOSED WORK.

- C. INSTALLATION:
- UNLESS OTHERWISE NOTED ON THE DRAWINGS, INSTALL RECEPTACLES 18 INCHES ABOVE FINISH FLOOR, 4 INCHES ABOVE COUNTERS AND BACKSPLASHES WITH GROUNDING POLE ON BOTTOM. UNLESS OTHERWISE NOTED DIMENSIONS ARE TO CENTERLINE OF OUTLET.
 - INSTALL WALL SWITCHES AND DIMMERS 48 INCHES ABOVE FLOOR, OFF POSITION DOWN.
 - INSTALL GALVANIZED STEEL PLATES ON OUTLET BOXES AND JUNCTION BOXES IN UNFINISHED AREAS, ABOVE ACCESSIBLE CEILINGS, AND ON SURFACE-MOUNTED OUTLETS.

26 50 00 - LIGHTING FIXTURES

- A. SUBMITTALS: SUBMIT PRODUCT DATA FOR APPROVAL.
- B. MATERIALS:
- LUMINAIRES: PROVIDE AND INSTALL ALL LIGHTING EQUIPMENT OR APPROVED EQUAL AS SHOWN ON THE DRAWINGS AND DESCRIBED IN THE "FIXTURE SCHEDULE". PROVIDE LIGHTING EQUIPMENT COMPLETE, WIRED, ASSEMBLED, WITH PROPER FLANGES, MOUNTING SUPPORTS, HARDWARE, ETC. ALL LIGHTING EQUIPMENT INSTALLED IN LAY-IN TYPE CEILINGS SHALL BE PROVIDED WITH SAFETY CHAINS, CAPABLE OF SUPPORTING 200 POUNDS, SECURELY FASTENED TO THE LIGHT FIXTURE AND THE BUILDING STRUCTURE SO THAT NO PART OF THE FIXTURE WILL DROP BELOW A HEIGHT OF 7'-6" ABOVE THE FLOOR IN THE EVENT OF A CEILING SUSPENSION SYSTEM FAILURE.
 - LED DRIVERS: PROVIDE UL LISTED POWER SUPPLY AS RECOMMENDED BY THE LED FIXTURE MANUFACTURER FOR OPERATION OF THE SPECIFIED LED LAMPS. POWER SUPPLY SHALL BE INTEGRAL TO THE LUMINAIRE UNLESS OTHERWISE NOTED ON THE PLANS. POWER SUPPLY SHALL OPERATE AT THE SUPPLY VOLTAGE INDICATED ON THE PLANS AND SHALL BE LISTED FOR STARTING AND OPERATING THE LAMPS AT 75F AVERAGE INDOOR TEMPERATURE WHERE INSTALLED OUTDOORS. LED DIMMING DRIVERS: PROVIDE UL LISTED 0-10V DIMMING BALLAST AS RECOMMENDED BY THE LED FIXTURE MANUFACTURER FOR OPERATION OF THE SPECIFIED LED LAMPS, FULLY COMPATIBLE WITH THE DIMMING SYSTEM OR DIMMING SWITCH CONTROLLING THE FIXTURE. DRIVER SHALL BE INTEGRAL TO THE FIXTURE AND CAPABLE OF DIMMING THE LUMINAIRE TO 20% OUTPUT MINIMUM UNLESS OTHERWISE SCHEDULED ON THE PLANS. POWER SUPPLY SHALL BE DUAL VOLTAGE (120/277V) WHERE AVAILABLE AND OPERATE AT THE SUPPLY VOLTAGE INDICATED ON THE PLANS.
 - LED LAMPS: UNLESS OTHERWISE SCHEDULED ON THE PLANS, PROVIDE NOMINAL 4000 K, WITH MINIMUM 75CRI AND A MINIMUM L70 LAMP LIFE OF 50,000 HOURS.
- C. INSTALLATION:
- INSTALL RECESSED LUMINAIRES TO PERMIT REMOVAL FROM BELOW. USE PLASTER FRAMES IN HARD CEILINGS.
 - SUPPORT LUMINAIRES IN SUSPENDED CEILINGS FROM STRUCTURE ABOVE USING A MINIMUM OF (4) ANCHORS IN ACCORDANCE WITH SECTION 26 05 29.
 - PROVIDE LUMINAIRE DISCONNECTING MEANS IN BALLAST/DRIVER CHANNEL OF EACH LIGHT FIXTURE. WHERE THE LUMINAIRE IS FED FROM A MULTI-WIRE BRANCH CIRCUIT, PROVIDE MULTI-POLE DISCONNECT TO SIMULTANEOUSLY BREAK ALL SUPPLY CONDUCTORS TO THE BALLAST, INCLUDING THE GROUNDED CONDUCTOR. AIM ALL LUMINAIRES THAT HAVE ADJUSTABLE LAMPS OR LENSES.

28 31 00 - ADDRESSABLE FIRE ALARM AND SMOKE DETECTION SYSTEMS

- A. SUMMARY: THIS SECTION INCLUDES CONTRACTOR DESIGNED AND INSTALLED EXTENSION OF THE EXISTING ADDRESSABLE FIRE ALARM AND SMOKE DETECTION SYSTEM. THIS IS A PERFORMANCE TYPE SPECIFICATION DESCRIBING THE MINIMUM ACCEPTABLE FIRE ALARM SYSTEM. THE CONTRACTOR SHALL DESIGN AND INSTALL THE FIRE ALARM AND SMOKE DETECTION SYSTEM IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA 72 AND ADA. THE FIRE ALARM DEVICES ON THE DRAWINGS ARE SHOWN IN SUGGESTED LOCATIONS. THE FINAL LOCATIONS OF ALL DEVICES SHALL BE SOLELY DETERMINED BY THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH NFPA 72 AND ADA.
- B. SUBMITTALS: SUBMIT PRODUCT DATA AND SHOP DRAWINGS FOR APPROVAL.
- C. MATERIALS:
- MANUFACTURER: EXISTING CONTROL PANEL IS A NOTIFIER "NFS2-3030". ALL DEVICES PROVIDED SHALL BE LISTED FOR USE WITH THIS PANEL.
 - FIRE ALARM STROBE LIGHTS: NFPA 72 COMPLIANT, FLUSH WALL OR CEILING MOUNTED, SELF-SYNCHRONIZING, XENON, FIRE ALARM STROBE LAMP AND FLASHER WITH FLASHRATE OF ONE FLASH PER SECOND, COMPLYING WITH THE REQUIREMENTS OF ADAG. PROVIDE RED LETTERED FIRE ON CLEAR LENS. THE STROBE SHALL BE CAPABLE OF PROVIDING 177CD OUTPUT IN SLEEPING AREAS, AND 115CD IN NON-SLEEPING.
 - LOW-FREQUENCY FIRE ALARM HORN: 520HZ HORN FOR SLEEPING AREAS. ANSI S3.41 AND NFPA 72 COMPLIANT, FLUSH OR SURFACE MOUNTED FIRE ALARM HORN WITH ADJUSTABLE SOUND OUTPUT LEVEL. PROVIDE INTEGRAL 115CD FIRE ALARM STROBE LIGHT AS SPECIFIED ABOVE WHERE INDICATED ON THE DRAWINGS.
 - CONTROL RELAYS: PROVIDE CONTROL RELAYS/MODULES FOR FIRE/SMOKE DAMPER AND MAGNETIC DOOR HOLDER RELEASE. SEE DRAWINGS FOR NUMBER OF CONTROL ZONES REQUIRED. COORDINATE WITH MECHANICAL AND DOOR HARDWARE SUPPLIERS FOR REQUIRED VOLTAGE AND AMPACITY.
 - NOTIFICATION APPLIANCE CIRCUITS: MINIMUM #12 AWG COPPER BUILDING WIRE, AS SPECIFIED IN SECTION 26 05 19.
 - INITIATING AND SIGNALING LINE CIRCUITS: TWISTED, SHIELDED OR UNSHIELDED FIRE ALARM CABLE AS RECOMMENDED BY THE FIRE ALARM SYSTEM MANUFACTURER. MINIMUM SIZE #16 AWG.
- D. INSTALLATION:
- THE COMPLETE FIRE ALARM SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.
 - MAKE ALL CONNECTIONS TO MAGNETIC DOOR HOLDERS AND FIRE/SMOKE DAMPERS.
 - TEST IN ACCORDANCE WITH NFPA 72 AND LOCAL FIRE DEPARTMENT REQUIREMENTS. PROVIDE A COMPLETED NFPA 72 INSPECTION AND TESTING FORM FOR INCLUSION IN THE OPERATION AND MAINTENANCE MANUAL AT THE COMPLETION OF TESTING AND COMMISSIONING THE FIRE ALARM SYSTEM.
 - INSTALL FIRE ALARM WIRING IN A DEDICATED RACEWAY SYSTEM PER SECTION 26 05 33.

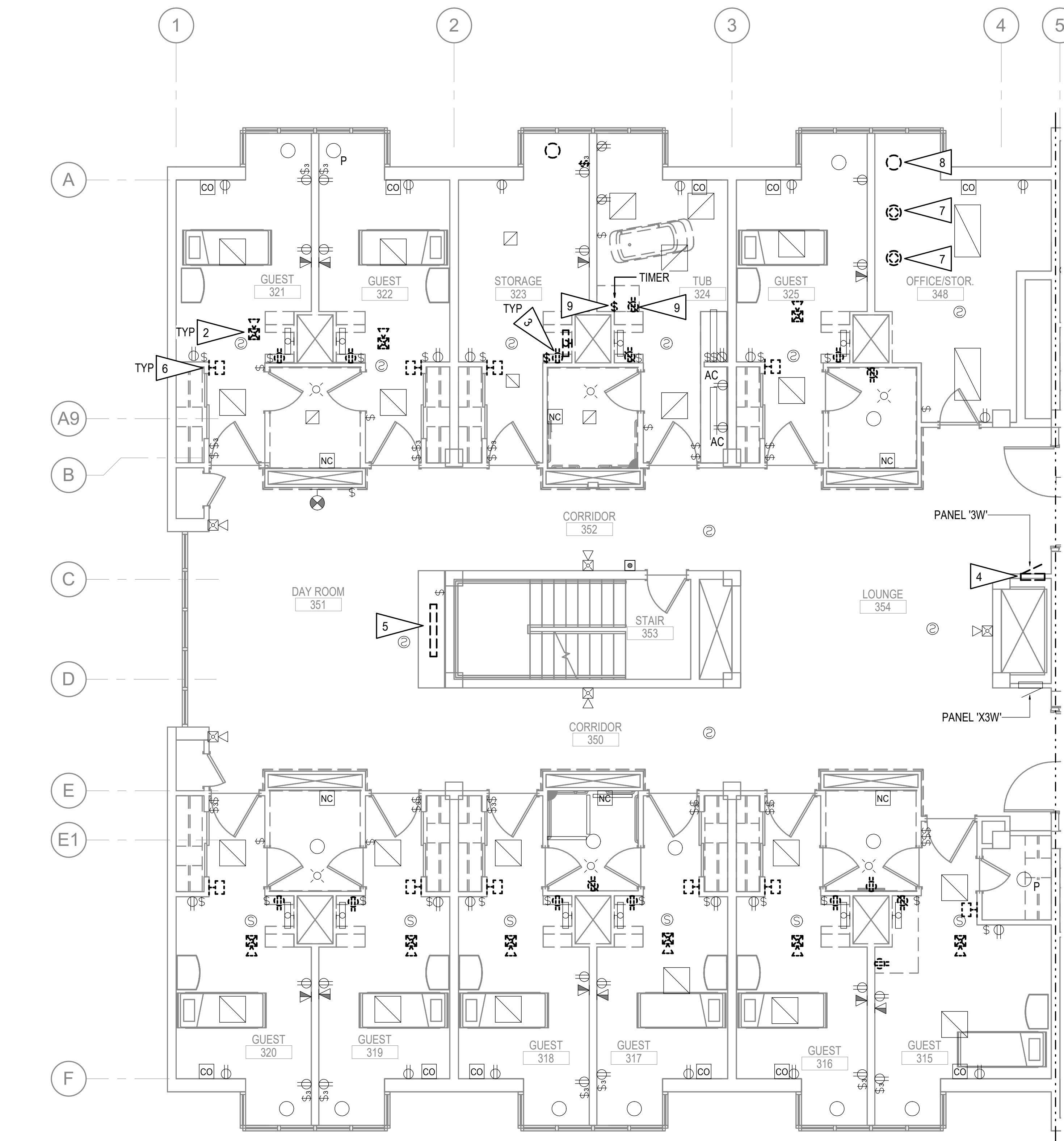


Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS

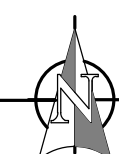
923 W 11TH AVE, ANCHORAGE AK 99501

Reasons:	
Drawn By: CK	Checked By: SB, JAM
Date: March 20, 2023	
Phase: PERMIT DOCUMENTS	
Job No: M2103	
SHEET TITLE: ELECTRICAL SPECIFICATIONS	
SHEET NO:	
E0.2	



1 THIRD FLOOR AREA 1 ELECTRICAL DEMOLITION PLAN
3/16" = 1'-0"

2 UNIT PRICE A1 - TYPICAL VANITY DEMOLITION
1/4" = 1'-0"



KEY PLAN AREA 1
NO SCALE

GENERAL NOTES:

- THE INFORMATION SHOWN ON THIS DRAWING IS TAKEN FROM RECORD DRAWINGS AND A NON-DESTRUCTIVE WALK THROUGH OF THE FACILITY. THERE IS NO WARRANTY OR GUARANTEE AS TO THE ACCURACY OF THE INFORMATION SHOWN HERE-IN. THE CONTRACTOR SHALL FIELD VERIFY ALL ITEMS SCHEDULED FOR DEMOLITION PRIOR TO START OF WORK.
- THE OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL SALVAGEABLE MATERIALS. THE CONTRACTOR SHALL DELIVER SALVAGED MATERIALS AS DIRECTED BY THE OWNER. THE CONTRACTOR SHALL DISPOSE OF, OFF SITE, ALL UNWANTED MATERIALS.
- DASHED OR DOTTED LINES INDICATE ITEMS TO BE REMOVED. SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.
- NURSE CALL STATION LOCATED IN EXISTING GUEST BATHROOMS TO REMAIN. CONTRACTOR TO ADJUST LOCATION OF STATION AS NECESSARY TO ACCOMMODATE NEW RENOVATIONS.
- RECENT PROJECT ON 4TH FLOOR DISCOVERED NEUTRAL WIRES WERE NOT COLOR DESIGNATED WITH PHASE TAPE ON GFCI CIRCUITS. PROVIDE PHASE TAPE TO ALL UNDESIGNATED NEUTRAL WIRES WHERE ENCOUNTERED PER MOA AGREEMENT.
- EXISTING RECEPTACLES IN EXISTING RESTROOMS TO BE DEMOLISHED AS SHOWN ON PLANS. DEMOLISH CONDUCTORS BACK TO NEAREST DEVICE TO REMAIN OR MAINTAIN CIRCUIT CONTINUITY TO EXISTING DOWNSTREAM LOADS TO REMAIN. PROVIDE BLANK COVERPLATE IN EXISTING LOCATION.

SHEET NOTES:

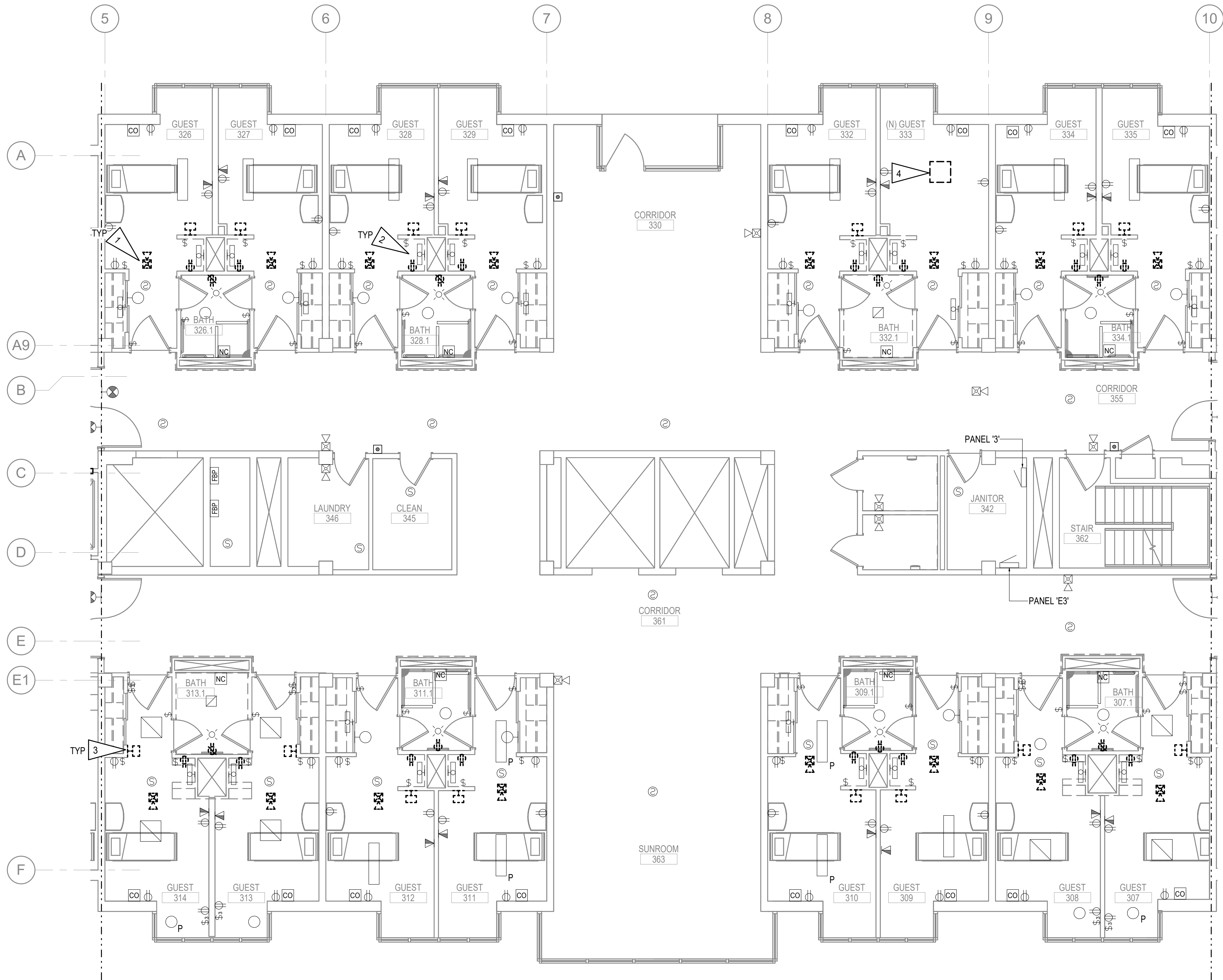
- UNIT PRICE A1: DEMOLISH VANITY LIGHT AND LIGHT SWITCH. TYPICAL FOR ALL GUEST AND TUB ROOMS ON THE THIRD FLOOR. NOTE, SWITCH MAY BE LOCATED ON EITHER SIDE OF THE VANITY, CONTRACTOR TO FIELD ADAPT FOR EACH LOCATION.
- 115CD CEILING MOUNTED HORN-STROBE TO BE DEMOLISHED.
- DEMOLISH RECEPTACLE. SALVAGE POWER CIRCUIT FOR REUSE WITH NEW GFCI RECEPTACLE.
- DEMOLISH PANELBOARD, FEEDER AND BRANCH CIRCUITS TO REMAIN FOR CONNECTION TO NEW PANEL. NOTE THAT THE TRIM ON THE EXISTING PANELBOARD MEASURES 60"Hx29"W. PANEL BOARD HAS INTEGRAL LIGHTING CONTACTOR FOR CORRIDOR/COMMONS CIRCUITS THAT ONLY CONTROLS ONE CIRCUIT. CIRCUIT TO BYPASS CONTACTOR IN NEW WORK.
- DEMOLISH UNDERCABINET LIGHT FIXTURE. SALVAGE POWER CIRCUIT FOR REUSE WITH NEW UNDERCABINET LIGHT.
- DEMOLISH STEPLIGHT. SALVAGE CIRCUIT FOR REUSE WITH NEW STEPLIGHT IN EXISTING LOCATION.
- DEMOLISH DOWNLIGHT. SALVAGE CIRCUIT FOR REUSE WITH NEW FIXTURE IN EXISTING LOCATION.
- DEMOLISH LIGHT FIXTURE, CONDUIT, AND CONDUCTORS TO NEAREST UPSTREAM JUNCTION BOX OR DEVICE TO REMAIN. MAINTAIN CIRCUIT CONTINUITY TO DOWNSTREAM LOADS TO REMAIN. COORDINATE WITH ARCHITECT TO PROVIDE NEW CEILING TILE TO MATCH EXISTING.
- REMOVE GFCI RECEPTACLE AND TIMER SWITCH, STORE FOR REINSTALLATION IN NEW WORK.



Steve Fishback Architect
3720 Belanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Revisions:	
Drawn By: CK	Checked By: SB, JAM
Date: March 20, 2023	
Phase: PERMIT DOCUMENTS	
Job No: M2103	
SHEET TITLE: ELECTRICAL DEMOLITION PLAN AREA 1	
SHEET NO: E1.1	



GENERAL NOTES:

A. SEE E1.1 FOR GENERAL NOTES.

SHEET NOTES:

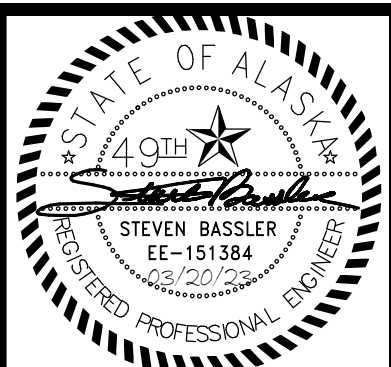
1. 115CD CEILING MOUNTED HORN/STROBE TO BE DEMOLISHED.
2. DEMOLISH RECEPTACLE. SALVAGE POWER CIRCUIT FOR REUSE WITH NEW GFCI RECEPTACLE.
3. DEMOLISH STEPLIGHT. SALVAGE CIRCUIT FOR REUSE WITH NEW STEPLIGHT IN EXISTING LOCATION.
4. DEMOLISH SURFACE MOUNTED LIGHT FIXTURE. SALVAGE CIRCUIT FOR REUSE WITH NEW FIXTURE IN EXISTING LOCATION.



KEY PLAN AREA 2

NO SCALE

1 THIRD FLOOR AREA 2 ELECTRICAL DEMOLITION PLAN
3/16" = 1'-0"



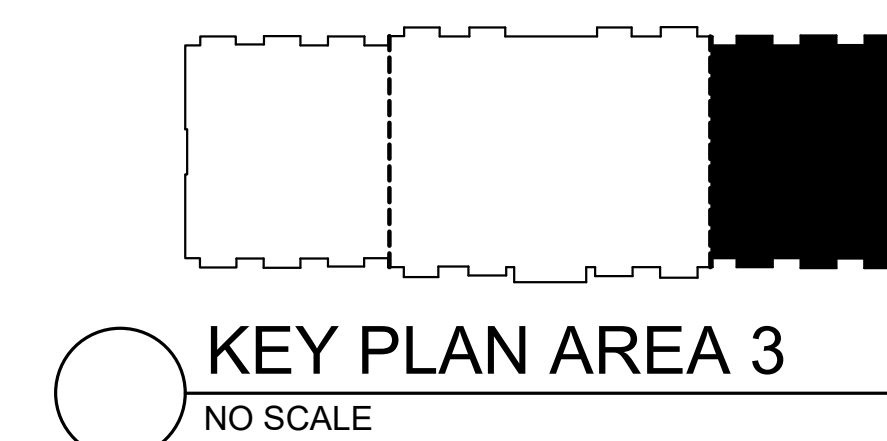
RSA
Mechanical and
Electrical Consulting
Engineers
874 West Emerald Lane, Suite 200
Anchorage, AK 99503
(907) 276-0521
Corporate No.: AEC0542

Steve Fishback Architect
3720 Belanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

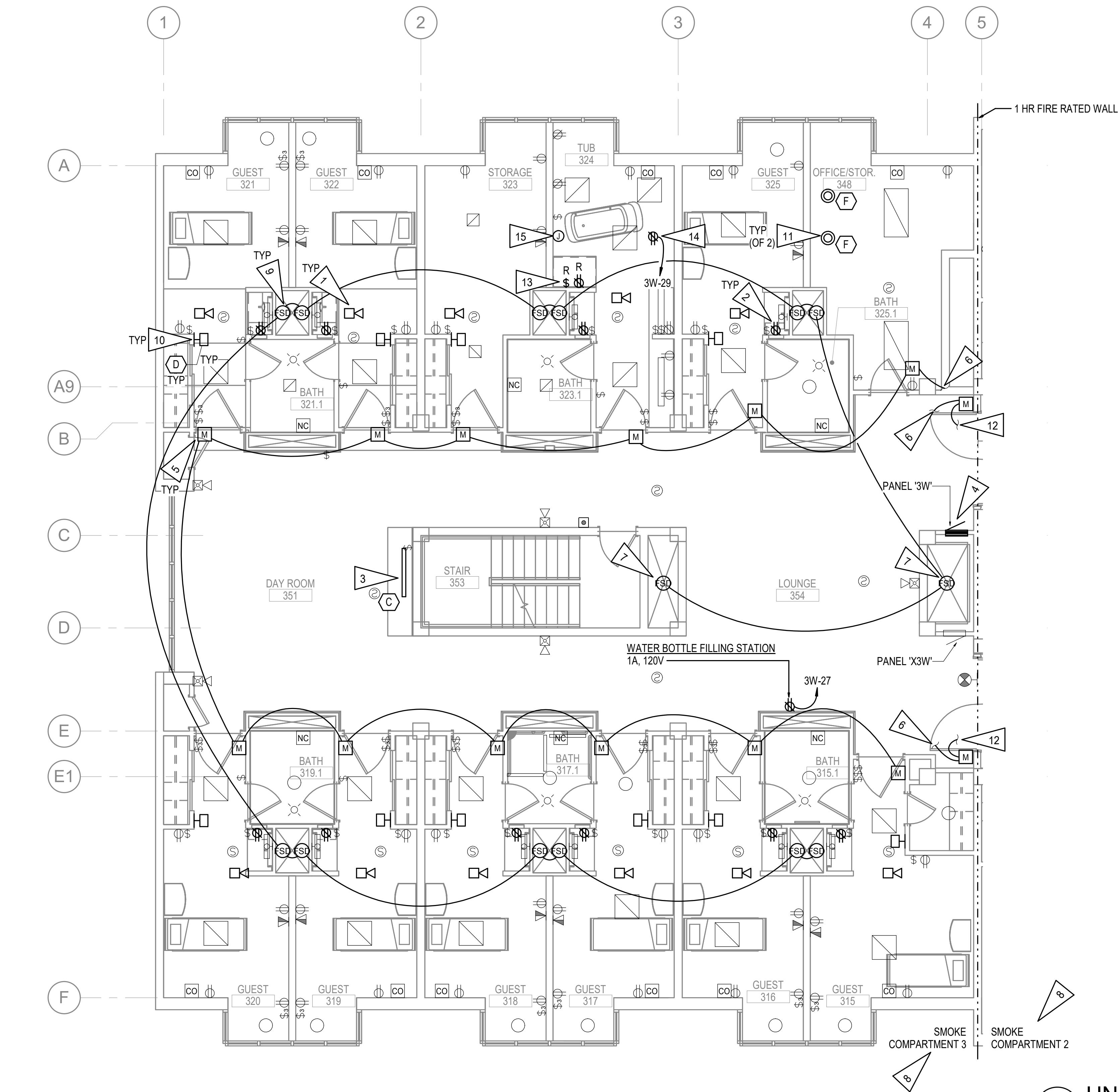
ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Revisions:	
Drawn By:	Checked By:
CK	SB, JAM
Date:	
March 20, 2023	
Project:	
PERMIT DOCUMENTS	
Job No:	
M2103	
Sheet Title:	
ELECTRICAL DEMOLITION PLAN AREA 2	
Sheet No:	

E1.2

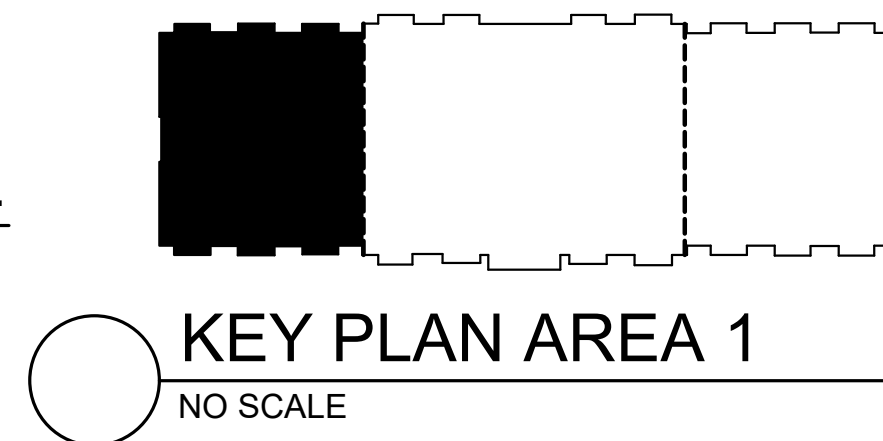


E1.3



1 THIRD FLOOR AREA 1 ELECTRICAL REMODEL PLAN
3/16" = 1'-0"

2 UNIT PRICE A1 - TYPICAL VANITY REMODEL
1/4" = 1'-0"

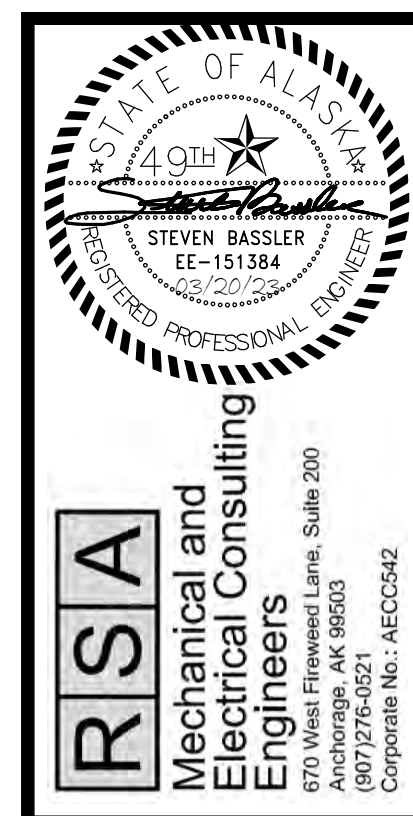


GENERAL NOTES:

- ALL FIRE ALARM WIRING THAT PASSES BETWEEN SMOKE COMPARTMENTS SHALL BE IN CONDUIT.
- ALL FIRE ALARM DEVICES SHALL BE LISTED FOR AND CONNECTED TO THE EXISTING NOTIFIER "NFS2-3030" FIRE ALARM CONTROL PANEL. CONTROL PANEL IS LOCATED IN THE BASEMENT OF THE BUILDING.
- PROVIDE NEW 120V CIRCUITS FOR MAGNETIC DOOR HOLDERS AND FIRE SMOKE DAMPERS FROM PANEL X3W OR X3E, WITH RELAYS INSTALLED FOR SEPARATE ZONES AS SHOWN. LOAD IS NEGLIGIBLE.
- COORDINATE WITH MECHANICAL FOR EXACT LOCATION AND QUANTITY OF FIRE/SMOKE DAMPERS. NOTE THAT THE PROJECT SCOPE IS TO PROVIDE CODE UPGRADES THROUGHOUT THE THIRD FLOOR. A NUMBER OF LOCATIONS WILL HAVE (2) IN CLOSE PROXIMITY.
- ALL FIRE/SMOKE DAMPERS WITHIN A COMPARTMENT SHALL BE CONTROLLED TOGETHER.
- RECENT PROJECT ON 4TH FLOOR DISCOVERED NEUTRAL WIRES WERE NOT COLOR DESIGNATED WITH PHASE TAPE ON GFCI CIRCUITS. PROVIDE PHASE TAPE TO ALL UNDESIGNATED NEUTRAL WIRES WHERE ENCOUNTERED PER MOA AGREEMENT.
- CONTRACTOR TO UPDATE FIRE ALARM ANNUNCIATOR PANEL ON FIRST FLOOR TO REFLECT SMOKE COMPARTMENT UPDATES.

SHEET NOTES:

- NEW HORN WITH 520Hz LOW FREQUENCY TONE FOR NOTIFICATION ON LOCAL AND GENERAL ALARM. PROVIDE CONNECTION TO EXISTING FIRE ALARM CIRCUIT. PROVIDE NEW BOOSTER POWER SUPPLY FOR NOTIFICATION CIRCUITS IF DEVICE DRAW EXCEEDS CIRCUIT CAPACITY.
- EXTEND AND CONNECT NEW GFCI RECEPTACLE TO EXISTING SAVED CIRCUIT. PROVIDE CONDUIT, CONDUCTORS, JUNCTION BOXES ETC. AS REQUIRED.
- CONNECT NEW UNDERCABINET LIGHT FIXTURE TO EXISTING CIRCUIT. PROVIDE CONDUIT, CONDUCTORS, JUNCTION BOXES, ETC AS REQUIRED.
- NEW PANEL AT EXISTING LOCATION. RECONNECT EXISTING FEEDER, EXTEND AS REQUIRED. RECONNECT EXISTING BRANCH CIRCUITS. ALL RECEPTACLE CIRCUITS IN BEDROOMS SHALL BE CONNECTED TO AFCI CIRCUIT BREAKERS. SEE SHEET E3.1.
- NEW MAGNETIC DOOR HOLD. PROVIDE CONNECTION TO FIRE ALARM SYSTEM. SYSTEM TO RELEASE MAGNETIC DOOR HOLDS UPON GENERAL ALARM. COORDINATE WITH ARCHITECT FOR EXACT PRODUCT TO BE PROVIDED.
- PROVIDE (5) TOTAL DOOR HOLDER ZONES IN ENTIRE PROJECT AS SHOWN. SMOKE COMPARTMENT SHALL BE CONTROLLED SEPARATELY FROM ADJACENT COMPARTMENTS SO THAT DOORS CAN BE RELEASED UPON ALARM IN EITHER COMPARTMENT.
- PROVIDE CONNECTION TO NEW FIRE/SMOKE DAMPER CIRCUIT NEARBY RESTROOMS. FIRE/SMOKE DAMPER IN VENTILATION SHAFTS ARE TYPICALLY INSTALLED ON GRILLES AND AREA DETECTION SHALL SERVE AS THE ACTING DETECTORS.
- ALL FIRE/SMOKE DAMPERS WITHIN A SMOKE COMPARTMENT SHALL BE CONTROLLED TOGETHER.
- PROVIDE CONNECTION TO FIRE/SMOKE DAMPER SPECIFIED UNDER MECHANICAL.
- CONNECT NEW STEPLIGHT TO EXISTING CIRCUIT IN EXISTING LOCATION. BYPASS ANY SWITCHES AHEAD OF LIGHT TO PROVIDE CONSTANT HOT TO PHOTOCELL CONTROLLED LIGHT.
- EXTEND AND CONNECT EXISTING SALVAGED CIRCUIT TO NEW LIGHT FIXTURE IN EXISTING LOCATION. PROVIDE CONDUIT, WIRE, JUNCTION BOXES, ETC. AS REQUIRED.
- SEE E2.2 FOR CONTINUATION OF DOOR MAG ZONE.
- REINSTALL SALVAGED GFCI RECEPTACLE AND TIMER SWITCH IN EXISTING LOCATION.
- NEW CEILING MOUNTED PATIENT LIFT CHARGING RECEPTACLE.
- JUNCTION BOX FOR NURSE CALL PULL CORD. PROVIDE CONDUIT TO ABOVE ACCESSIBLE CEILING AND COORDINATE WITH FACILITY FOR CONNECTION REQUIREMENTS. ASSUME PULL CORD AND CABLING WILL BE PROVIDED BY FACILITY.
- UNIT PRICE A1: CONNECT NEW TYPE 'B' POWER LED LIT MIRROR FROM GFCI PROTECTED TERMINALS OF RECEPTACLE NEXT TO SINK. LIGHT TO BE CONTROLLED WITH NEW SWITCH BESIDE SINK; INTEGRAL RECEPTACLE TO BE UNSWITCHED. SEE INSTALLATION INSTRUCTIONS. TYPICAL OF ALL GUEST AND TUB ROOMS ON THIRD FLOOR.



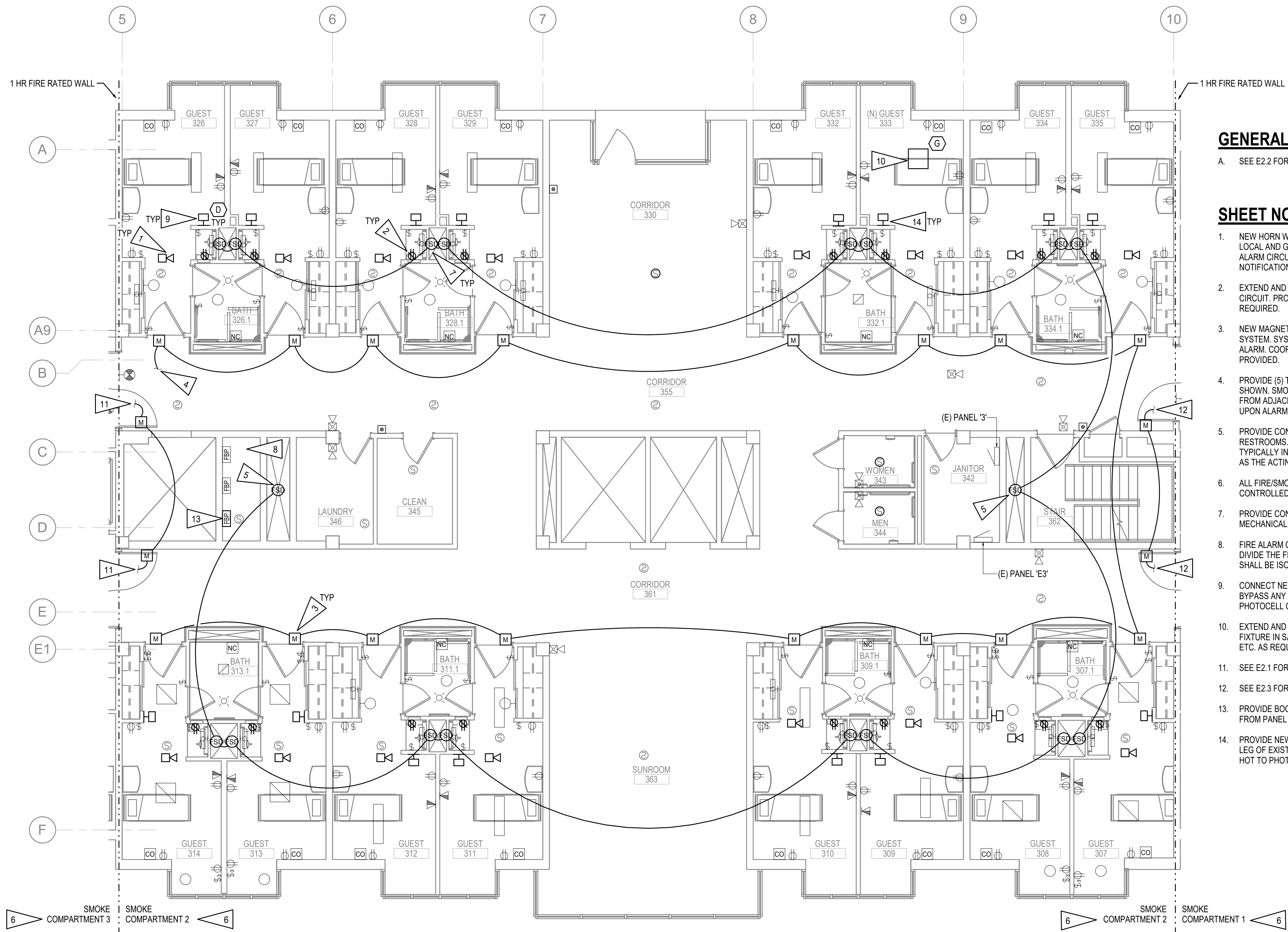
Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Revisions:	
Drawn By:	CK
Checked By:	SB, JAM
Date:	March 20, 2023
Project:	PERMIT DOCUMENTS
Job No:	M2103
Sheet Title:	ELECTRICAL REMODEL PLAN - AREA 1

SHEET NO:

E2.1



GENERAL NOTES:

A. SEE E2.2 FOR GENERAL NOTES.

SHEET NOTES:

1. NEW HORN WITH 520HZ LOW FREQUENCY TONE FOR NOTIFICATION ON LOCAL AND GENERAL ALARM. PROVIDE CONNECTION TO EXISTING FIRE ALARM CIRCUIT. PROVIDE NEW BOOSTER POWER SUPPLY FOR NOTIFICATION CIRCUITS IF DEVICE DRAW EXCEEDS CIRCUIT CAPACITY.
2. EXTEND AND CONNECT NEW GFCI RECEPTACLE TO EXISTING SAVED CIRCUIT. PROVIDE CONDUIT, CONDUCTORS, JUNCTION BOXES ETC. AS REQUIRED.
3. NEW MAGNETIC DOOR HOLD. PROVIDE CONNECTION TO FIRE ALARM SYSTEM. SYSTEM TO RELEASE MAGNETIC DOOR HOLDS UPON GENERAL ALARM. COORDINATE WITH ARCHITECT FOR EXACT PRODUCT TO BE PROVIDED.
4. PROVIDE (5) TOTAL DOOR HOLDER ZONES IN ENTIRE PROJECT AS SHOWN. SMOKE COMPARTMENT SHALL BE CONTROLLED SEPARATELY FROM ADJACENT COMPARTMENTS SO THAT DOORS CAN BE RELEASED UPON ALARM IN EITHER COMPARTMENT.
5. PROVIDE CONNECTION TO NEW FIRE/SMOKE DAMPER CIRCUIT NEAR BY RESTROOMS. FIRE/SMOKE DAMPER IN VENTILATION SHAFTS ARE TYPICALLY INSTALLED ON GRILLES AND AREA DETECTION SHALL SERVE AS THE ACTING DETECTORS.
6. ALL FIRE/SMOKE DAMPERS WITHIN A SMOKE COMPARTMENT SHALL BE CONTROLLED TOGETHER.
7. PROVIDE CONNECTION TO FIRE/SMOKE DAMPER SPECIFIED UNDER MECHANICAL.
8. FIRE ALARM CIRCUITS ENTER THIS ROOM. PROVIDE SLC MODULES AND DIVIDE THE FLOOR BY SMOKE COMPARTMENTS. NOTIFICATION CIRCUITS SHALL BE ISOLATED BY SMOKE COMPARTMENT AS WELL.
9. CONNECT NEW STEPLIGHT TO EXISTING CIRCUIT IN EXISTING LOCATION. BYPASS ANY SWITCHES AHEAD OF LIGHT TO PROVIDE CONSTANT HOT TO PHOTOCELL CONTROLLED LIGHT.
10. EXTEND AND CONNECT EXISTING SALVAGED CIRCUIT TO NEW LIGHT FIXTURE IN SAME LOCATION. PROVIDE CONDUIT, WIRE, JUNCTION BOXES, ETC. AS REQUIRED.
11. SEE E2.1 FOR CONTINUATION OF DOOR MAG ZONE.
12. SEE E2.3 FOR CONTINUATION OF DOOR MAG ZONE.
13. PROVIDE BOOSTER PANELS AS REQUIRED FOR REMODEL WORK. POWER FROM PANEL 'X3W'. LOAD IS NEGLIGIBLE.
14. PROVIDE NEW STEPLIGHT IN NEW LOCATION. CONNECT TO UNSWITCHED LEG OF EXISTING LOCAL LIGHTING CIRCUIT SO AS TO PROVIDE CONSTANT HOT TO PHOTOCELL CONTROLLED LIGHT.



KEY PLAN AREA 2
NO SCALE

1 THIRD FLOOR AREA 2 ELECTRICAL REMODEL PLAN
3/16" = 1'-0"

RS&A
Mechanical and
Electrical Consulting
Engineers

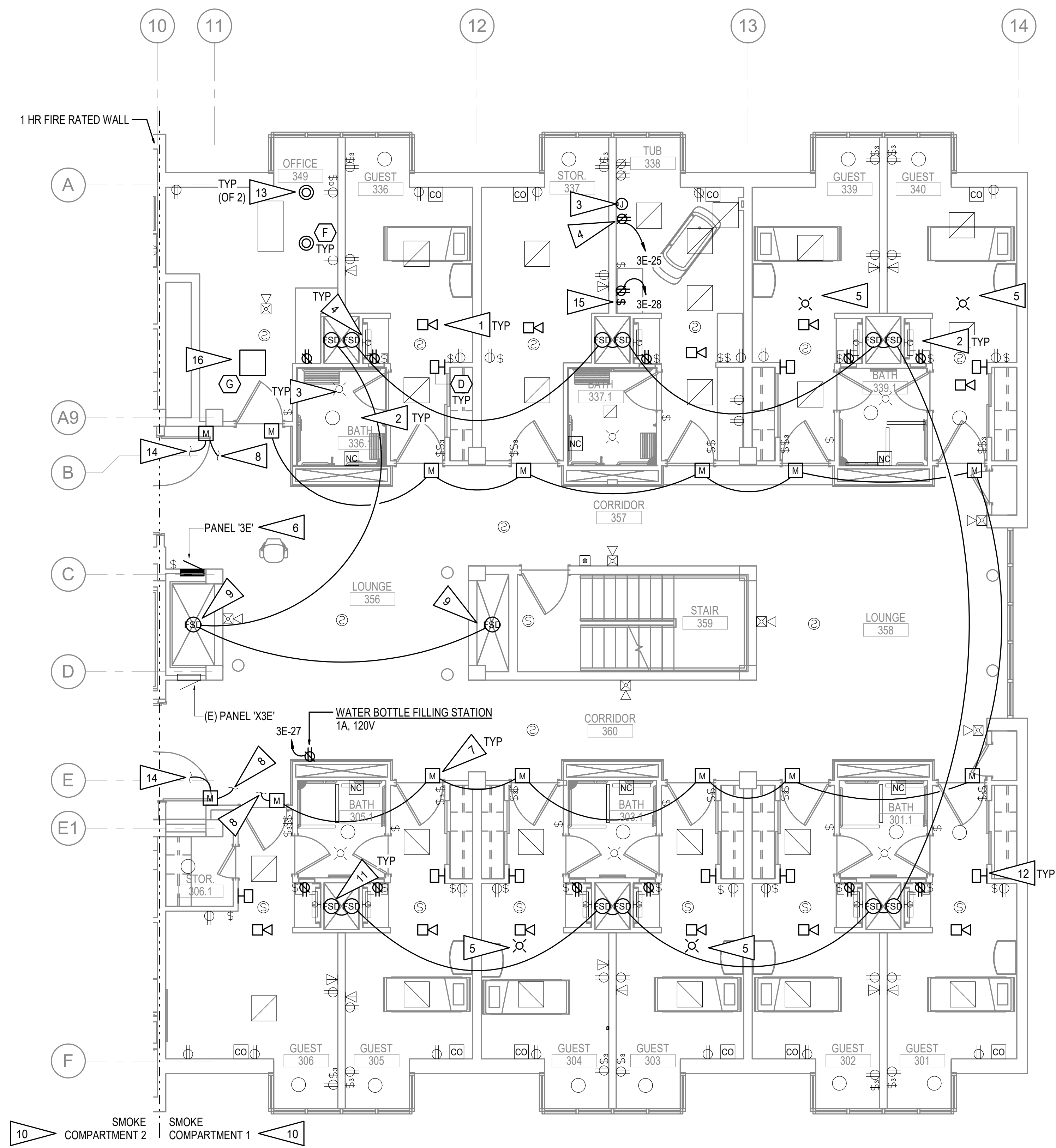
675 Westgate, Suite 200
Anchorage, AK 99503
(907) 276-0521
Corporate No.: AECC242

Steve Fishback Architect
3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Drawn By: CK		Checked By: SB, JAM
Date: March 20, 2023		
Title: PERMIT DOCUMENTS		
Project No.: M2103		
Sheet Title: ELECTRICAL REMODEL PLAN - AREA 2		
Sheet No.: 		

E2.2



1 THIRD FLOOR AREA 3 ELECTRICAL REMODEL PLAN
3/16" = 1'-0"

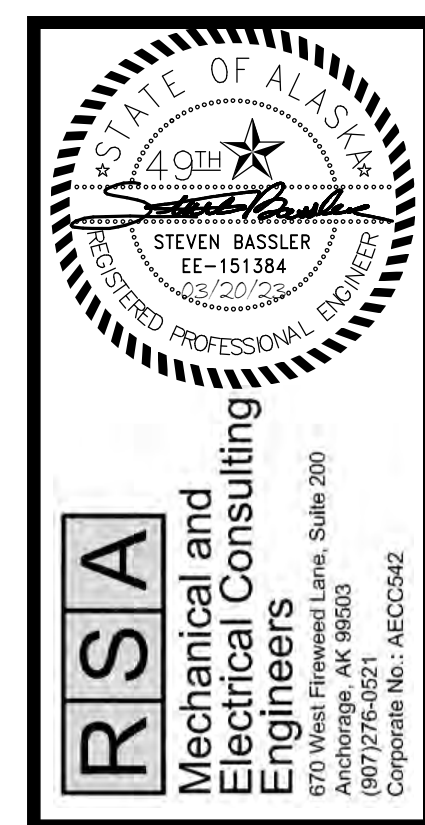
KEY PLAN AREA 3
NO SCALE

GENERAL NOTES:

- A. SEE E2.2 FOR GENERAL NOTES.

SHEET NOTES:

1. NEW HORN WITH 520Hz LOW FREQUENCY TONE FOR NOTIFICATION ON LOCAL AND GENERAL ALARM. PROVIDE CONNECTION TO EXISTING FIRE ALARM CIRCUIT. PROVIDE NEW BOOSTER POWER SUPPLY FOR NOTIFICATION CIRCUITS IF DEVICE DRAW EXCEEDS CIRCUIT CAPACITY.
2. EXTEND AND CONNECT NEW GFCI RECEPTACLE TO EXISTING SAVED CIRCUIT. PROVIDE CONDUIT, CONDUCTORS, JUNCTION BOXES ETC. AS REQUIRED.
3. JUNCTION BOX FOR NURSE CALL PULL CORD. PROVIDE CONDUIT TO ABOVE ACCESSIBLE CEILING AND COORDINATE WITH FACILITY FOR CONNECTION REQUIREMENTS. ASSUME PULL CORD AND CABLING WILL BE PROVIDED BY FACILITY.
4. PROVIDE RECEPTACLE FOR RECLINING TUB BATTERY CHARGING.
5. PROVIDE 177cd CEILING MOUNTED STROBE IN SLEEPING ROOM. CONNECT TO LOCAL AREA NAC CIRCUIT.
6. NEW PANEL AT EXISTING LOCATION. RECONNECT EXISTING FEEDER, EXTEND AS REQUIRED. RECONNECT EXISTING BRANCH CIRCUITS. ALL RECEPTACLE CIRCUITS IN BEDROOMS SHALL BE CONNECTED TO AFCI CIRCUIT BREAKERS. SEE SHEET E3.1.
7. NEW MAGNETIC DOOR HOLD. PROVIDE CONNECTION TO FIRE ALARM SYSTEM. SYSTEM TO RELEASE MAGNETIC DOOR HOLDS UPON GENERAL ALARM. COORDINATE WITH ARCHITECT FOR EXACT PRODUCT TO BE PROVIDED.
8. PROVIDE (5) TOTAL DOOR HOLDER ZONES IN ENTIRE PROJECT AS SHOWN. SMOKE COMPARTMENT SHALL BE CONTROLLED SEPARATELY FROM ADJACENT COMPARTMENTS SO THAT DOORS CAN BE RELEASED UPON ALARM IN EITHER COMPARTMENT.
9. PROVIDE CONNECTION TO NEW FIRE/SMOKE DAMPER CIRCUIT NEAR BY RESTROOMS. FIRE/SMOKE DAMPER IN VENTILATION SHAFTS ARE TYPICALLY INSTALLED ON GRILLES AND AREA DETECTION SHALL SERVE AS THE ACTING DETECTORS.
10. ALL FIRE/SMOKE DAMPERS WITHIN A SMOKE COMPARTMENT SHALL BE CONTROLLED TOGETHER.
11. PROVIDE CONNECTION TO FIRE/SMOKE DAMPER SPECIFIED UNDER MECHANICAL.
12. CONNECT NEW STEPLIGHT TO EXISTING CIRCUIT IN EXISTING LOCATION. BYPASS ANY SWITCHES AHEAD OF LIGHT TO PROVIDE CONSTANT HOT TO PHOTOCELL CONTROLLED LIGHT.
13. EXTEND AND CONNECT EXISTING SALVAGED CIRCUIT TO NEW LIGHT FIXTURE IN SAME LOCATION. PROVIDE CONDUIT, WIRE, JUNCTION BOXES, ETC. AS REQUIRED.
14. SEE E2.2 FOR CONTINUATION OF DOOR MAG ZONE.
15. TIMER SWITCH TO CONTROL TOWEL WARMER RECEPTACLE.
16. CONNECT NEW LIGHT FIXTURE TO EXISTING LOCAL LIGHTING POWER AND CONTROL CIRCUIT. PROVIDE CONDUIT, CONDUCTORS, JUNCTION BOXES, ETC. AS REQUIRED.



Steve Fishback Architect
3720 Belanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

ANCHORAGE PIONEER HOME
ANC 21-06C RESIDENT RENOVATIONS
923 W 11TH AVE, ANCHORAGE AK 99501

Revisions:	
Drawn By:	CK
Checked By:	SB, JAM
Date:	March 20, 2023
Phase:	PERMIT DOCUMENTS
Job No:	M2103
SHEET TITLE:	
ELECTRICAL REMODEL PLAN - AREA 3	
SHEET NO:	

E2.3



3720 Bellanca Way, Unit B, Anchorage, AK 99502
P: (907) 375-5584 E: Steve@fishbackak.com

923 W 11TH AVE. ANCHORAGE AK 99501

Revisions:	
Drawn By: CK	Checked By: SB, JAM
Date: March 20, 2023	
PERMIT DOCUMENTS	
Job No: M2103	
SHEET TITLE: ELECTRICAL PANEL SCHEDULES	
SHEET NO.:	

E3.1

NEW PANEL '3E'																		
MFR/MODEL: SQUARE D 'NQ'						VOLTS: 120/208V,3PH,4W						ENCLOSURE: NEMA 1						400 A
						VOLT-AMPS						MTG: SURFACE						
NOTE	CIRC	POLE	AMPS	SERVICE	TYPE	A		B		C		TYPE	SERVICE		AMPS	POLE	CIRC	NOTE
a.b	1	1	20	LTG - 301, 302, RECP-338 NORTH	MISC	743	623					LTG	LTG - 303 & 304	20	1	2	b	
a.b	3	1	20	RECP-BR, 301, EAST WALL 302	RECP			1642	1181			RECP	RECP-BR, 303, EAST WALL 304	20	1	4	a,b	
a.b	5	1	20	RECP-302 & WEST WALL 301	RECP					1001	1001	RECP	RECP-304 & WEST WALL 303	20	1	6	a,b	
a.b	7	1	20	LTG - 305 & 306	LTG	489	399					LTG	LTG - 307 & 308	20	1	8	b	
a.b	9	1	20	RECP-BR, 305, EAST WALL 306	RECP			1001	1001			RECP	RECP-BR, 307, EAST WALL 308	20	1	10	a,b	
a.b	11	1	20	RECP-306 & WEST WALL 305	RECP					641	1001	RECP	RECP-308 & WEST WALL 307	20	1	12	a,b	
b	13	1	20	LTG - 339 & 340	LTG	303	396					LTG	LTG - 337 & 338	20	1	14	b	
a.b	15	1	20	RECP-340 & EAST WALL 339	RECP			1001	360			RECP	RECP-BR, 338, EAST WALL 337	20	1	16	a,b	
a.b	17	1	20	RECP-BR, 339 AND WEST WALL 340	RECP					821	821	RECP	RECP-337 & WEST WALL 338	20	1	18	a,b	
a.b	19	1	20	LTG - LOUNGE & 336	LTG	141	240					LTG	LTG - SPOT LOUNGE	20	1	20	b	
a.b	21	1	20	RECP-BR, 336, EAST WALL LOUNGE	RECP			1001	420			LTG	LTG-HANDRAIL, RECP-CORRIDOR	20	1	22	a,b	
a.b	23	1	20	RECP-LOUNGE & WEST WALL 336	RECP					900	210	LTG	LTG-LOUNGE & COR.(CONTACTOR)	20	1	24	b	
a	25	1	20	RECLING TUB ROOM 338	RECP	1000	240					LTG	LTG - SPOT LOUNGE (1)	20	1	26	b	
c	27	1	20	BOTTLE FILLING STATION 356	MISC			120	1000			MISC	TOWEL WARMER 338	20	1	28	a	
	29	1	-	SPACE								RECP	RECP - TUB 338	20	1	30	a	
	31	1	-	SPACE		1200						RECP	RECP - 338	20	1	32	a	
	33	1	-	SPACE									SPACE	-	1	34		
	35	1	-	SPACE									SPACE	-	1	36		
	37	1	-	SPACE									SPACE	-	1	38		
	39	1	-	SPACE									SPACE	-	1	40		
	41	1	-	SPACE									SPACE	-	1	42		
TOTAL V-A						5777		8727		7836		22,340 VA						
TOTAL AMPS						48		73		65		62 A						
A.I.C. RATING: 22,000																		
CONNECTED LOAD IN KVA (THIS PANEL):					LTG	RECP	MOTR	LG.MT	MISC	KIT	HEAT	SPEC	TOTAL			AMPS		
CONNECTED LOAD IN KVA (BRANCH PANELS):					3.46	17.01	0.00	0.00	1.86	0.00	0.00	0.00	22.3 KVA			62 A		
TOTAL CONNECTED LOAD IN KVA:					3.46	17.01	0.00	0.00	1.86	0.00	0.00	0.00	0.0 KVA			0 A		
DEMAND LOAD IN KVA:					4.33	13.51	0.00	0.00	1.86	0.00	0.00	0.00	22.3 KVA			62 A		
												0.00	19.7 KVA			55 A		
PANEL NOTES:												PANEL OPTIONS:						
a PROVIDE AFCI TYPE CIRCUIT BREAKER.												MAIN LUGS ONLY						
b EXISTING LOAD(S) TO RECONNECT.																		
c PROVIDE 5mA GFCI TYPE CIRCUIT BREAKER																		

NEW PANEL '3W'																					
MFR/MODEL: SQUARE 'D' TYPE NQ						VOLTS: 120/208V,3PH,4W						ENCLOSURE: NEMA 1						400 A			
						VOLT-AMPS						MTG: SURFACE									
NOTE	CIRC	POLE	AMPS	SERVICE	TYPE	A		B		C		TYPE	SERVICE	AMPS	POLE	CIRC	NOTE				
b	1	1	20	LTG ROOMS 319,320	LTG	284	284						LTG	LTG ROOMS 317,318	20	1	2	b			
a,b	3	1	20	RECP ROOM 320, WEST WALL 319	RECP			1001	1001				RECP	RECP ROOM 318, WEST WALL 317	20	1	4	b			
a,b	5	1	20	RECP BATHRM, RM 319, EAST WALL 320	RECP					1001	1001		RECP	RECP BATHRM, RM 317, EAST WALL 328	20	1	6	a,b			
b	7	1	20	LTG RM 315,316	LTG	284	314						LTG	LTG RM 313 & 314	20	1	8	b			
a,b	9	1	20	RECP RM 316 AND WEST WALL RM 315	RECP			1001	1001				RECP	RECP RM 314, WEST WALL RM 315	20	1	10	a,b			
a,b	11	1	20	RECP BATHRM, RM 315 & EAST WALL RM 316	RECP					1001				SPARE	20	1	12	b			
b	13	1	20	LTG RM 321,322	LTG	426	203						LTG	LTG RM 323 & 324	20	1	14	b			
a,b	15	1	20	RECP BATHRM , RM 321 & WEST WALL RM 322	RECP			1001	1001				RECP	RECP BATHRM, & RM 323, AND WEST WALL RM 322	20	1	16	a,b			
a,b	17	1	20	RECP RM 322 & EAST WALL RM 321	RECP					1001				SPARE	20	1	18	b			
b	19	1	20	LTG LOUNGE & RM 325	LTG	548	626						LTG	SPOT LTG LOUNGE	20	1	20	b			
a,b	21	1	20	RECP BATH & RM 325 & WEST WALL LOUNGE	RECP			900	900				LTG	LTG HAND RAIL & CORR RECP	20	1	22	b			
a,b	23	1	20	RECP LOUNGE & EAST WALL RM 325	RECP					900	626		LTG	LTG LOUNGES & CORR (CONTACTOR)	20	1	24	b			
a,b	25	1	20	RM 324 TOWEL WARMER	RECP	1000	626						LTG	SPOT LTG LOUNGE	20	1	26	b			
c	27	1		BOTTLE FILLING STATION 354	MISC			1001					RECP	RECP BATHRM, RM 313 & EAST WALL RM 314	20	1	28	a,b			
a	29	1	20	PT LIFT CHARGER	MISC					1500	1080		RECP	RM 323 - 324	20	1	30	a,b			
	31	1	20	SPARE		750							RECP	RECP LOUNGE COUNTER	20	1	32	b			
	33	1	20	SPARE				1440					RECP	RECP BATH TUB	15	1	34	b			
	35	1	20	SPARE						1000			RECP	RECP LOUNGE COUNTER	20	1	36	b			
	37	1	20	SPARE		1000							MISC	COFFEE MAKER	15	1	38	b			
	39	1	20	SPARE				900					RECP	RECP RM 220 SOUTH OF SNK LOUNGE	20	1	40	b			
	41	1	20	SPARE						900			RECP	RECP RM 220 SOUTH OF SNK LOUNGE	20	1	42	b			
TOTAL V-A						6345		11147		10010		27,502 VA									
TOTAL AMPS						53		93		83		76 A									
A.I.C. RATING: 22,000																					
CONNECTED LOAD IN KVA (THIS PANEL):					LTG	RECP	MOTR	L.G.MT	MISC	KIT	HEAT	SPEC	TOTAL		AMPS						
CONNECTED LOAD IN KVA (BRANCH PANELS):					5.12	19.88	0.00	0.00	2.50	0.00	0.00	0.00	27.5 KVA		76 A						
TOTAL CONNECTED LOAD IN KVA:					5.12	19.88	0.00	0.00	2.50	0.00	0.00	0.00	0.0 KVA		0 A						
DEMAND LOAD IN KVA:					6.40	14.94	0.00	0.00	2.50	0.00	0.00	0.00	27.5 KVA		76 A						
												0.00	23.8 KVA		66 A						
PANEL NOTES:												PANEL OPTIONS:									
a PROVIDE AFCI TYPE CIRCUIT BREAKER.												MAIN LUGS ONLY									
b EXISTING LOAD(S) TO RECONNECT.																					
c PROVIDE 5mA GFCI TYPE CIRCUIT BREAKER.																					

ANCHORAGE PIONEER HOME
3rd Floor Resident Renovations

923 West 11th Avenue
Anchorage, Alaska 99501

Project No. ANC 23-26C

SPECIFICATIONS

March 20, 2023

ANCHORAGE PIONEER HOME BUILDING
3rd Floor Resident Renovations

Project No. ANC 23-26C

March 20, 2023

SPECIFICATIONS INDEX

01 11 00	Summary of Work
01 35 45	Airborne Contaminant Control
02 26 00	Hazardous Materials Assessment
02 41 19	Selective Demolition
02 82 33	Removal and Disposal of Asbestos Containing Materials
02 83 33	Removal and Disposal of Materials Containing Lead
02 84 18	Removal and Disposal of Chemical Hazards
05 50 00	Metal Fabrications
07 21 00	Insulation
07 84 00	Firestopping
07 92 00	Joint Sealants
08 31 16	Access Panels and Frames
08 71 00	Door Hardware
09 21 16	Gypsum Board Assemblies
09 30 13	Ceramic Tile
09 51 00	Acoustical Ceiling
09 65 00	Resilient Flooring
09 91 00	Painting
10 26 13	Corner Guards
10 28 00	Toilet and Bath Accessories
10 44 16	Fire Extinguishers
11 73 00	Ceiling Mounted Patient Lift System
12 30 00	Manufactured Casework

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Basic Bid and Unit Pricing
- B. Work by Others
- C. Hazardous Materials
- D. Work Inside Facility
- E. Work Plans and Access to Facility, Individual Work Areas
- F. Shut Offs/Disruptions to Service
- G. Use of Premises
- H. Using Agency Occupancy
- I. Coordination
- J. Parking/Staging

1.2 WORK COVERED BY CONTRACT DOCUMENTS

- A. Work covered by the contract documents is located on the third floor of the Anchorage Pioneer Home.
- B. The DEPARTMENT is acting for the State of Alaska.
- C. The work in this project includes renovations of the 3rd floor of the Anchorage Pioneer Home. These renovations are required to house residents who are in need of a higher level of care than can be offered in the current R2 occupancy. To accomplish this change, the 3rd floor occupancy will change from R2 to an I1, Condition 2 occupancy. The work required to accomplish the change includes development of smoke compartments, the addition of fire dampers and fire/smoke detectors. Some of these activities will require work to occur on the occupied 2nd floor.
- D. The project includes a significant tenant improvement throughout the third floor. The tenant improvement will include two new tub rooms, storage rooms, and staff offices, finish replacement throughout the floor, renovated toilet rooms, replacement of some lighting and electrical receptacles and new bedroom annunciation at the fire alarms. Other improvements include door closure style door holders that are connected to the fire/smoke detectors, purchase and installation of the project FF&E and purchase and installation of one resident lift.
- E. The project will be occurring in an occupied senior housing structure. Noise, dust, tool control and normal movement of material and waste will need to be carefully managed to minimize the disruption to the people who live in the building and the staff that support them. Access to the 2nd floor resident bathrooms to install mechanical equipment will need to be coordinated and scheduled to fit within the residents' daily routine. Work that creates structure bound noise such as core drilling for waste piping will be limited to 6 hours a day. Please review the demolition section of the specification (02 41 19) for further discussion on disruption control.

1.3 CONTRACT METHOD

- A. Construct the Work under a single lump sum contract.

1.4 BASIC BID

- A. That portion of the Work described within these documents (taken as a whole) as the Basic Bid scope, as well as unit priced items added by change order. Basic Bid work includes all work shown on the plans and specifications.
- B. Project will be constructed under a general construction contract.

1.5 WORKS BY OTHERS

- A. Cooperate with other Contractors and the DEPARTMENT to minimize conflict with construction operation.

1.6 HAZARDOUS MATERIALS

- A. All light fixtures to be removed shall be treated as positive for containing PCBs unless proven otherwise.
- B. CONTRACTOR to be aware that other hazardous materials may be within the facility.

1.7 WORK INSIDE FACILITY

- A. Work within the third floor shall remain contained with all openings between the CONTRACTOR'S work area and the operating Pioneer Home secured. Once a second floor guest room has been released for CONTRACTOR activity, every effort is encouraged to expedite completion.
- B. CONTRACTOR shall not under any circumstances leave tools or equipment unattended while working on the second floor unless secured in a guest room or a locked tool storage box. CONTRACTOR will be liable for any damages to persons and/or property resulting from unattended tools or equipment.
- C. No firearms or ammunition allowed on the grounds, to include locked vehicles.
- D. The use of powder-actuated tools must be approved by the project manager. Request for such tools must be submitted to the Maintenance Supervisor in writing three (3) working days in advance.

1.8 SHUTOFFS / DISRUPTIONS TO SERVICE

- A. Work with the Maintenance Supervisor to schedule disruption for a time, which minimizes impact on facility operations. Provide the Home written notification of any disruption to service at least 24 hours in advance of scheduled disruption or shutoff.
- B. Plan work to minimize down time. Work with DEPARTMENT to schedule disruption for a time that minimizes impact on USING AGENCY's operations.
- C. Provide written work plan and schedule for disruptions to service that exceed one hour.
- D. Contractor must provide protection as stated in Municipal Fire Codes and Safety Codes while working on the fire protection system.

1.9 CONTRACTOR'S USE OF PREMISES

- A. Coordinate use of the premises under direction of DEPARTMENT.
- B. Assume full responsibility for protection and safekeeping of products under this Contract.
- C. Assume full responsibility for the protection of the existing facility and contents, from damage due to construction operations.

1.10 USING AGENCY OCCUPANCY

- A. The User Agency will continue operations during entire construction period. Cooperate with DEPARTMENT in scheduling operations to minimize conflict and to facilitate the User Agency's operations.
- B. CONTRACTOR shall provide Material Safety Data Sheets for all products that may produce unpleasant odors.

1.11 COORDINATION

- A. Coordinate Work of the various elements of the plans to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items installed later.
- B. Verify if characteristics of elements of interrelated operating equipment are compatible; coordinate Work of various trades having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.

- C. Coordinate space requirements and installation of mechanical and electrical work, which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduits, as closely as practicable; make runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs. Coordinate work with existing elements in the building. Do not locate piping, conduit or other products where they will block access to equipment or junction boxes.
- D. In finished areas except as otherwise shown, conceal pipes, ducts, and wiring in the construction.
- E. Execute cutting and patching to integrate elements of Work, provide openings for penetrations of existing surfaces. Seal penetrations through floors, walls, partitions, and ceilings.

1.12 PARKING / STAGING

- A. CONTRACTOR to coordinate staging area with Facility Maintenance Supervisor.
- B. CONTRACTOR may use established facility parking.
- C. CONTRACTOR will be responsible for all additional required storage/staging and parking off site at no charge to the Department.

PART 2 - PRODUCTS NOT USED

PART 3 - EXECUTION NOT USED

END OF SECTION

PART 1 - GENERAL

1.1 SUMMARY:

- A. Related sections:
 - 1. Section 02 26 00 Hazardous Materials Assessment
 - 2. Section 02 41 19 Selective Demolition
 - 3. Section 02 82 33 Removal and Disposal of Asbestos Containing Materials
 - 4. Section 02 83 33 Removal and Disposal of Materials Containing Lead
 - 5. Section 02 84 18 Removal and Disposal of Chemical Hazards
- B. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead, are also present in settled and concealed dust in and on architectural, structural, mechanical and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with EPA and OSHA requirements.

1.2 DEFINITIONS:

- A. "Airborne Contaminants" are those contaminants listed in 29 CFR 1926.55 and 8 AAC 61.1100 that have the potential to become airborne due to various work activities being performed by the Contractor. Additionally, airborne contaminants include those fumes and odors that may be objectionable to personnel in Occupied Areas of the facility even though they are not listed in the reference regulations. Airborne contaminants may be broadly categorized as Pre-Existing or Activity Generated. Contaminant producing activities include, but are not limited to:
 - 1. Demolition, removal, installation and disposal of walls, floors, ceilings, steel, and other architectural or structural materials.
 - 2. Disturbance or removal of existing settled and concealed dusts.
 - 3. Demolition, relocation, installation and disposal of plumbing, mechanical and electrical systems and equipment.
 - 4. Finish operations such as sanding, preparation, painting, and application of special surface coatings.
 - 5. Any construction activity, which can generate aerosols, dust, smoke, or fumes.
 - 6. Temporary heat sources.
 - 7. Other on-site work operations not described above.
- B. "Pre-Existing Contaminants" are those contaminants that are present in the facility prior to the start of any work. These contaminants, including asbestos and lead, assumed to be present in settled and concealed dust throughout the building in areas not subject to routine cleaning, including the roof and inside and on top of architectural, mechanical, electrical and structural elements. The dust generally contains several common components including, but not limited to asbestos, cellulose, cotton, fiberglass, lead, silica and other Particulates Not Otherwise Regulated. Representative dusts throughout the facility have been examined by an EPA Certified Building Inspector and determined not to be "asbestos debris" from adjacent "Asbestos-Containing Building Materials" (ACBM). Based on similar sampling from similar buildings, the inspector also determined that the dusts are unlikely to contain more than one percent (1%) asbestos by weight, and therefore are not an asbestos-containing material (ACM). Reference 40 CFR 763.83 for asbestos, and 29 CFR 1926.1153 for silica. Refer to Section 02 26 00, Hazardous Materials Assessment. Dust and debris related to adjacent damaged asbestos containing materials are addressed in Section 02 82 33, Removal and Disposal of Asbestos Containing Materials.

- C. "Activity Generated Contaminants" are those contaminants generated by the various demolition or construction related activities of the Contractor. Examples of typical Activity Generated Contaminants include wood dust (cellulose), cement dust (silica), gypsum dust (particulates not otherwise regulated), paint fumes, and welding fumes. A complete list of regulated air contaminants is available in 29 CFR 1926.55 and 8 AAC 61.1100.
- D. "Work Areas": Areas of demolition, renovation, construction, adjacent staging and storage areas, and passage areas for workers, supplies, and waste. This may include but is not limited to attic spaces, spaces above ceilings, crawl spaces, mechanical and electrical spaces, confined spaces and other spaces not normally accessed or occupied.
- E. "Occupied Areas": Areas as determined by Owner's Representative and as shown on contract drawings. Typically these include areas adjacent to Work Areas or containment areas, either occupied or used for passage, as well as areas connected to construction area by mechanical system air intake, exhaust, and ductwork. Contaminant control procedures may be relaxed during periods when the building is not occupied as allowed by the Contractor's approved work plan.
- F. "Critical Clean Areas": Areas inside or outside the Work Area with equipment or occupants that cannot tolerate airborne contamination, and are to be maintained under positive pressure by High-Efficiency, Particulate, Air (HEPA) filtered equipment relative to the surrounding air. These areas will be described or shown in contract documents or drawings.
- G. "Contractor" is defined to include all trades and all subcontractors performing work on the work site.
- H. "Negative Initial Determination" is a determination made either through air monitoring or other objective data that indicates worker exposure to regulated airborne contaminants are below or expected to be below the regulated limits.

1.3 AIRBORNE CONTAMINANT CONTROL

- A. There is no requirement to remove Pre-Existing Contaminants from the facility. The Contractor may remove Pre-Existing Contaminants from their work areas if they determine that to be a more cost effective means of completing the work.
- B. The Contractors shall establish and maintain control over the generation and containment of all potential airborne contaminants so that workers, facilities, staff, programs, equipment, and operations are not adversely affected, including adverse affects on air monitoring. Construction activities that disturb existing materials or create airborne contaminants must be conducted in Work Areas specifically constructed, ventilated, and/or equipped to prevent the movement of contaminants into Occupied or Critical Clean Areas.
- C. The Contractor shall establish and maintain control over Activity Generated Contaminants within the Work Area to prevent abnormally high levels of airborne contaminants from settling on architectural, mechanical, electrical or structural components within the work areas, or interference with monitoring conducted for other work. The Contractor shall be required to clean all surfaces within a work area where abnormally high levels of Activity Generated Contaminants are deposited.
- D. The Contractor shall ensure that all workers are aware of the Occupied and Critical Clean Areas, the potential air contaminants present and the means and methods established in the work plan to control those contaminants.
- E. The Contractor shall ensure workers have the proper protective equipment needed for the job being performed.

1.4 TRAINING

- A. The Contractor shall ensure that all workers/trades performing work on the project site are trained in accordance with OSHA standards for hazard communication (29 CFR 1910.1200) and proper protective equipment (29 CFR 1926), as well as engineering controls and work methods required to prevent exposure to regulated air contaminants that might be generated or encountered as a results of their work, including 29 CFR 1926.1153.

1.5 RESPONSIBILITY:

- A. Owner's Responsibilities
 - 1. The Owner shall identify in contract documents Occupied Areas and Critical Clean Areas prior to allowing the Contractor to begin work. The Contractor shall be notified of all changes to these areas as work progresses.
- B. Contractor's Responsibilities:
 - 1. Preparing proposed work plans and procedures for control of airborne contaminants during demolition and construction.
 - 2. Identifying and implementing specific means and methods of achieving and maintaining control of airborne contaminants.
 - 3. Controlling the generation and spread of airborne contaminants from the Contractor's Work Areas.
 - 4. Cleaning and decontaminating all areas contaminated as the result of their operation. The Owner has the right to review and approve of any and all clean-up and decontamination procedures, chemicals, and processes.
 - 5. Notifying Owner's Representative a minimum of 48 hours prior to starting construction activities that might be expected to produce excess levels of airborne contaminants in Work Area so that precautions may be taken.

1.6 SUBMITTALS:

- A. Submittals Required: Submit the following documentation to the Owner for approval. The submittal shall be coordinated with all the Contractor's subcontractors and trades and be submitted as one submittal for all work covered by this section. WORK SHALL NOT PROCEED UNTIL THE SUBMITTAL PACKAGE IS APPROVED, AND THE PRE-CONSTRUCTION MEETING HAS BEEN HELD.
 - 1. Shop Drawings: Make all shop drawings accurately and to a scale sufficiently large to show all pertinent features of the work. Shop Drawings shall show:
 - a. Boundaries of each Work Area, Occupied Areas and Critical Clean Areas.
 - b. Location of barriers, negative pressure areas, positive pressure areas, and exhaust fan units (if required).
 - c. Locations of windows, louvers, ducts and other penetrations into Occupied Areas and/or Critical Clean Areas that need to be protected from airborne contamination.
 - d. Disposal Routes.
 - e. Locations of contaminant producing operations like painting or sanding which could be moved away from Occupied Areas.
 - 2. Work Plan: The Work Plan shall be prepared for this specific job in the form of checklists and shall include:
 - a. Work area set-up and protection procedures during occupied times.
 - b. Work area set-up and protection procedures during periods of limited occupancy (vacation and holidays).
 - c. Work procedures to minimize generation of airborne contaminants, including a written exposure control plan.
 - d. Worker protection procedures.
 - e. Daily cleanup procedures and activities.

- f. Procedures to follow if air contaminants enter Occupied or Critical Clean Areas.
 - g. Exposure assessment procedures if a "negative initial determination" has not been completed (note that negative initial determinations are not allowed related to silica exposure). A record of "negative initial determinations" shall be maintained by the Contractor and be available on the job site for review by the Owner or regulatory agencies.
 - 3. Safety Data Sheets (SDSs): The Contractor shall maintain on the job site, at a location approved by the owner, SDSs for each encapsulant, surfactant, solvent, detergent, and other material proposed to be used.
- B. Monitoring Results: The Contractor shall submit copies of all air monitoring and testing results to the Owner within 24 hours of receipt of results.

1.7 WORKER PROTECTION:

- A. The Contractor shall review the SDS's for the substances that will be used, data provided by these specifications, proposed means and methods, manufacturers data and other available data to determine the potential for worker exposure.
- B. Conduct air monitoring of worker exposures as necessary to show that workers are not being exposed above the permissible exposure limits established by 29 CFR 1926 and 8 AAC 61.1100 (negative initial determination). Not all contaminants or substances will require exposure monitoring. All sampling by the Contractor shall be at their own cost.
- C. In lieu of worker exposure monitoring, the Contractor may rely on objective data from recognized trade groups, manufacturer or previous exposure monitoring data that establish that worker exposure above the permissible exposure limits is not probable under conditions "closely resembling" the processes, types of materials, control methods, work practices and environmental conditions in the current job.

PART 2 - PRODUCTS Not Used

PART 3 - EXECUTION

3.1 WORK PRACTICES:

- A. General: All construction/demolition work shall be isolated, either by enclosures, and/or work practices and equipment to prevent worker exposures above the permissible exposure limit(s), and prevent the migration of contaminants (dust, fumes, smoke, etc.) into Occupied Areas and Critical Clean Areas of the facility. Exposures to occupants shall be maintained at least 10 times lower than the permissible exposure limit(s) for airborne contaminants. Conduct disturbance of concrete, brick, stone, mortar, etc. in accordance with 29 CFR 1926.1153 related to crystalline silica. If the Contractor's work practices are not effective in controlling airborne contaminants, as evidenced by dust, fumes, smoke, odors, etc. in Occupied or Critical Clean Areas, the Contractor shall provide a sealed barrier at the perimeter of the work area and exhaust the work area to maintain a negative pressure and/or provide a filtered positive pressure to Critical Clean and Occupied areas to keep airborne contaminants out. Maintain a positive pressure of 0.05 inches of water column relative to the air outside the Critical Clean Areas, with a minimum 100 feet per minute velocity through cracks, openings, etc.
- B. Direct exhaust from fume or smoke producing equipment away from building air intakes, windows and other penetrations into Occupied and Critical Clean Areas.

- C. The Contractor shall provide "walk-off" mats, at all connections between Work Areas and Occupied Areas, vacuumed or changed daily when there is traffic between the Work Area and the Occupied Areas.
- D. Enclosures, where used, shall be dust tight and withstand air pressure.
- E. Prohibited Materials: The use or application of the following materials is prohibited:
 - 1. All cleaners and aerosol products not submitted and approved by the Owner.
 - 2. All flammable or chlorinated hydrocarbon solvents, unless approved by the Owner.
- F. Any dust or debris tracked outside of Work Areas into Occupied Areas shall be cleaned up immediately. Contractor shall have the necessary manpower and equipment (dust and wet mops, HEPA vacuums, buckets and clean wiping rags) to keep adjacent Occupied Areas clean at all times.
- G. Dry Sweeping is prohibited. All vacuums used for cleaning shall be equipped with HEPA filters.
- H. Traffic between Work Areas and Occupied Areas shall be kept to a minimum. Keep doors between such areas closed at all times. Transport refuse through Occupied Areas in covered containers.
- I. Notify the Owner's Representative immediately of any release of airborne contaminants into Occupied Areas.

3.2 ENFORCEMENT:

- A. The Contractor shall periodically inspect Occupied Areas at the perimeter of the work area and Critical Clean Areas to verify that airborne contaminants have not spread into those areas.
- B. Failure to properly maintain airborne contaminant control in Work Areas, Occupied or Critical Clean Areas will result in issuance of a written warning. If the problem is not corrected immediately, the Owner will have cause to stop work.
- C. Failure of the Contractor to correct deficiencies in controlling airborne contaminants will result in corrective action taken by the Owner and deduction of all costs from the Contract.

3.3 WORK STOPPAGE:

- A. The Contractor shall stop work and notify the Owner whenever their work has caused visible dust, smoke, fumes or objectionable odors in Occupied or Critical Clean Areas.
- B. When such work stoppage occurs, the area shall be restored to its original condition by the Contractor at no expense to the Owner. The Contractor is responsible for removing dust, fumes and debris that were generated as a result of their work.

3.4 WORK COMPLETION:

- A. Provide thorough cleaning of finished surfaces that become exposed to dust or other airborne contaminants. Cleaning of Pre-Existing contaminants is not required.
- B. Removal of construction barriers and airborne contaminant control equipment shall be performed in a manner to minimize disturbance of airborne contaminants into occupied spaces. HEPA vacuum and clean all finished surfaces free of dust after the removal of barriers and equipment.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. The Hazardous Materials Assessment for the proposed construction is included with these Contract Documents.

1.2 USE OF INFORMATION

- A. The Hazardous Materials Assessment is provided for the Contractor's information and use in the planning and performance of work in areas containing hazardous or potentially hazardous materials as outlined in Paragraph 1.03.
 - 1. The information provided in the Hazardous Materials Assessment is based on samples collected in various locations of the building. Thus, the Owner and/or its Representative cannot guarantee or warrant that actual conditions encountered might not vary from the information presented in these reports.
 - 2. The data reported in the Hazardous Materials Assessment is accurate to the best of the Owner's and its Representative's knowledge. The requirements contained in these specifications and in the relevant state and federal regulations pertaining to the performance of work in areas containing hazardous or potentially hazardous materials provide guidance for the contractor for performance of work in these areas. The Owner and its Representative disclaim all responsibility for the Contractor's erroneous conclusions regarding the information presented in these reports; the requirements contained in these specifications; and the requirements of applicable state and federal regulations pertaining to performance of work in these areas.
 - 3. The Contractor shall be responsible for obtaining additional information if Contractor deems it necessary to carry out the work.
- B. It is highly recommended that the contractor visit the site to acquaint themselves with existing conditions.
- C. Attached Hazardous Materials Assessment

1.3 HAZARDOUS MATERIALS NOTIFICATION:

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead, are also present in settled and concealed dust in and on architectural, structural, mechanical and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with EPA and OSHA requirements.

PART 2 - PRODUCTS

Not Used

PART 3 - EXECUTION

Not Used

HAZARDOUS MATERIALS ASSESSMENT

**ANCHORAGE PIONEER HOME
3RD FLOOR RESIDENT RENOVATIONS**

ANCHORAGE, ALASKA

**Surveyed
August 28 & 31, 2020
September 30, 2020**

**Report Date
January 25, 2023**

EHS, ALASKA, INC.
ENGINEERING, HEALTH & SAFETY CONSULTANTS
11901 BUSINESS BLVD., SUITE 208
EAGLE RIVER, ALASKA 99577-7701

HAZARDOUS MATERIALS ASSESSMENT
ANCHORAGE PIONEER HOME – 3RD FLOOR RESIDENTS RENOVATIONS

ANCHORAGE, ALASKA

TABLE OF CONTENTS

	PAGE NO.
OVERVIEW	4
A. GENERALIZED REQUIREMENTS FOR HAZARDOUS MATERIALS	4
B. BUILDING DESCRIPTION	5
C. SAMPLING AND ANALYSIS	6
1. Asbestos-Containing Materials	6
2. Lead-Containing Materials	6
D. SURVEY RESULTS	7
1. Asbestos-Containing Materials	7
2. Asbestos in Dusts	16
3. Lead-Containing Materials	17
4. PCB-Containing Materials	17
5. Mercury-Containing Materials	18
6. Other Hazardous Materials	18
E. REGULATORY CONSTRAINTS	19
1. Asbestos-Containing Materials	19
2. Dusts with Asbestos	19
3. Lead-Containing Materials	20
4. PCB-Containing Materials	20
5. Mercury-Containing Materials	21
6. Other Hazardous Materials	21
F. RECOMMENDATIONS	21
1. Asbestos-Containing Materials	21
2. Dusts with Asbestos	22
3. Lead-Containing Materials	22
4. PCB-Containing Materials	22
5. Mercury-Containing Materials	22
6. Other Hazardous Materials	22
G. LIMITATIONS	23
1. Accuracy of Information	23
2. Site Conditions	23
3. Changing Regulatory Constraints	23

APPENDICES

Appendix A	Asbestos Bulk Field Survey Data Sheets and Lab Reports
Appendix B	Lead Analyzer Test Results
Appendix C	Drawings of Sample Locations

HAZARDOUS MATERIALS ASSESSMENT

ANCHORAGE PIONEER HOME – 3RD FLOOR RESIDENTS RENOVATIONS

ANCHORAGE, ALASKA

OVERVIEW

The 3rd Floor of the Anchorage Pioneer Home, located in Anchorage, Alaska, was surveyed for the presence of asbestos-containing materials (ACM), and other potentially hazardous materials as a part of the design services for the Anchorage Pioneer Home – 3rd Floor Residents Renovations Project at the facility for the Anchorage Pioneer Home. The survey also provided a “good faith” inspection for hazardous materials that may be disturbed during the construction. The proposed work includes the disturbance, demolition, removal and disposal of lead-containing paints and/or lead-containing materials that is incidental to the renovation and remodeling project. Due to the similar construction, this report also includes sample data from the 4th floor renovation project from 2020. Mr. Robert French, P.E. of EHS-Alaska, Inc. (EHS-Alaska) conducted the inspection in January 2023. Mr. Brandon W. Hill, and Mr. Robert A. French, P.E. conducted the inspections in August 2020 and September 2020.

A. GENERALIZED REQUIREMENTS FOR HAZARDOUS MATERIALS

Potentially hazardous materials have been identified in the 3rd Floor work areas that will be affected by the proposed renovations. Those materials include asbestos, lead, polychlorinated bi-phenyls (PCBs), mercury, and radioactive materials. Not all materials were tested for potentially hazardous components, other potentially hazardous materials, including those exterior to the building, such as contamination from underground fuel tanks may be present, but are not part of this report.

Buildings or portions of buildings that were constructed prior to 1978 which are residences, or contain day care facilities, kindergarten classes or other activities frequently visited by children under 6 years of age are classified as *child occupied facilities*. All work classified as “renovations” or disturbing more than 6 square feet of lead-based painted surfaces per room for interior activities or more than 20 square feet for exterior activities in child occupied facilities must comply with the requirements of 40 CFR 745. This building is not classified as a *child occupied facility* and therefore the requirements of 40 CFR 745 are not applicable.

Only the materials that will be directly affected by this project are required to be removed. The quantities and types of materials are incorporated into the design documents for this renovation. The removal and disposal of potentially hazardous materials are highly regulated, and it is anticipated that removal and disposal of asbestos, lead and chemical hazards will be conducted by a subcontractor to the general contractor who is qualified for such removal. It is anticipated that the general contractor and other trades will be able to conduct their work using engineering controls and work practices to control worker exposure and to keep airborne contaminants out of occupied areas of the building. Refer to Section 01 35 45, Airborne Contaminant Control.

Settled and concealed dusts in areas not subject to routine cleaning are present throughout the building, including the roof, and inside and on top of architectural, mechanical, electrical, and structural elements, and those dusts are assumed to contain regulated air contaminants. This should not be read to imply that there is an existing hazard to building occupants (normal occupants of the building as opposed to construction workers working in the affected areas). However, depending on the specific work items involved and on the means and methods employed when working in the affected areas, construction workers could be exposed to regulated air contaminants from those dusts in excess of the OSHA Permissible Exposure Limits (PELs).

The settled and concealed dusts were examined by an EPA Certified Building Inspector but were not sampled. The inspector determined that the dusts are not “asbestos debris” from an asbestos-containing building material (ACBM). Based on similar sampling from similar buildings, the inspector also determined that the dusts are unlikely to contain more than one percent (1%) asbestos by weight, and therefore are not an asbestos-containing material (ACM). Reference 40 CFR 763.83.

NOTE: Asbestos-containing debris was noted from damaged gypsum wall board systems in the rooms, wall chases and above the suspended ceiling system, and it is likely that those dusts and debris may contain more than one percent (1%) asbestos by weight, and therefore would be classified as an asbestos-containing material (ACM). Reference 40 CFR 763.83.

"Awareness training" (typically 2 hours) and possibly respiratory protection will be required for all Contractor Personnel who will be disturbing the dusts. The extent of the training and protective measures will depend upon the airborne concentrations measured during air monitoring of the contractors work force, which depends on the means and methods employed to control the dusts. The air monitoring may be discontinued following a "negative exposure assessment" showing that worker exposures are below the OSHA permissible exposure limits for the type of work and means and methods employed. Previous air monitoring from similar jobs with similar conditions may be used as historical data to establish a "negative exposure assessment".

B. BUILDING DESCRIPTION

Anchorage Pioneer Home was built in 2 phases, starting in 1974, with drawings for Phase II issued in 1975. There were subtle differences in materials and typical guest room layouts between the two phases, but both were designed by the same Architect. The Pioneer Home had a 3 story addition to the North in the mid 1980's (not investigated by this survey) and various upgrades and repairs through the years. This survey only covered in detail the portion of the 3rd floor which is scheduled for the major part of the planned renovation. Other portions on the lower floors which have minor work scheduled for piping installation were assumed to have similar materials likely to be affected by this project.

The interior partitions were a mixture of gypsum wall board and brick. The guest rooms were built in pairs that share a common bathroom. The walls between the pairs, and the corridor walls were typically of brick, with other walls being of gypsum wall board. The gypsum wallboard was covered with "Marlite", a pre-finished pressed hardboard at the "wet side" of the bathrooms, which was typically covered with a Fiber Reinforced Plastic (FRP) paneling around the tub and toilet areas at an unknown later date.

Much of the structure was of poured in place concrete columns and beams with pre-cast, post tensioned concrete floor/ceiling panels. The roofs were typically of pre-cast, post tensioned concrete angled roof panels. The exterior was typically of brick, with "window curtain wall systems" that included cement asbestos board insulated panels below and between the windows.

Corridor and guest room ceilings in the original construction were typically the exposed pre-cast concrete floor/ceiling panels. Corridor & guest room ceilings in the Phase II addition were typically of 2' x 2' lay-in acoustic ceiling tiles in the guest rooms and 2' x 4' acoustic ceiling tiles in the corridors. Bathrooms and storerooms, etc., had gypsum wallboard ceilings with asbestos-containing joint compound.

Thirteen of the guest bathrooms had previously been renovated, two bathrooms at an unknown date related to the installation of bathing tubs, and eleven bathrooms during a 2015 project. Those renovations were conducted without regard to the asbestos in the joint compound of the gypsum wall board or in the sheet vinyl flooring, and those materials are assumed to be still partially present in those previously renovated guest bathrooms, based on limited photographs of the 2015 work. Floor finishes were mainly of carpet in the guest rooms and corridors. The flooring in the seven bathrooms which were not previously renovated were typically of an asbestos-containing sheet vinyl, which was also present in the Men's and Women's Restrooms, Janitor Room, Laundry Room and Clean Room subject to renovation by this project.

The building was heated by a hydronic heating system combined with fin-tube heaters and various fan coil units supplying ventilation and heating. The heating and domestic water piping was typically insulated with fiberglass, with "hard and chalky" insulation on valves and fittings which was found to not contain asbestos. Similarly, the roof drain piping had "hard and chalky" insulation at the elbows and joints which was found to not contain asbestos.

C. SAMPLING AND ANALYSIS

1. Asbestos-Containing Materials

The survey included sampling of suspect ACM materials that had not been sampled in prior asbestos surveys, or samples of materials where previous sampling had been inconsistent. Previous sampling of some materials was conducted, but without complete information on the material descriptions or locations. Refer to data from the Anchorage Pioneer Home offices for information on previous sampling which is not included in this report. Additional testing of materials pertinent to the project was conducted and is included in this report.

The samples were analyzed for the presence of asbestos by polarized light microscopy (PLM), the method of analysis recommended by the U.S. Environmental Protection Agency (EPA) to determine the composition of suspected asbestos-containing materials (EPA method 600/M4-82-020). Only materials containing more than 1% total asbestos were classified as “asbestos-containing” based on EPA and the Occupational Safety and Health Administration (OSHA) criteria. Samples that were analyzed to have less than 10% asbestos were “point-counted” by the laboratory for more accuracy. Samples that are listed as having a “Trace by Point Count” had asbestos fibers found in the material, but the fibers were not present at the counting grids. Table 1 in Part D below contains a summary list of the asbestos bulk samples and the applicable results.

The Bulk Asbestos samples were analyzed for asbestos content by International Asbestos Testing Laboratories (IATL), Mt. Laurel, New Jersey, a National Voluntary Laboratory Accreditation Program (NVLAP) accredited laboratory.

EPA regulations under 40 CFR 763 requires the use of Polarized Light Microscopy (PLM) to determine whether or not a material contains asbestos. While PLM analysis does a good job for most materials, it does have some limitations, both in the size of the fibers that are visible under a standard optical microscope, and because the organic matrix that the fibers are bound within can obscure the fibers. At the discretion of the building inspector and the client, some types of samples may be analyzed or re-analyzed by what is called TEM NOB, or Transmission Electron Microscopy for Non-Friable Organically Bound materials. TEM NOB is the definitive method for determining if asbestos is present, but TEM NOB use is not required by the EPA. TEM NOB analysis was not done for this project.

Field survey data sheets and laboratory reports of the bulk samples are included in Appendix A. Drawings showing sample locations are included as Appendix C.

2. Lead-Containing Materials

Nearly all surfaces in the building were coated with paint and most surfaces had been repainted. EHS-Alaska tested representative paints throughout the affected areas of the building using a Heuresis Pb200i X-Ray Fluorescence (XRF) lead paint analyzer (Serial # 1770 with software version 4.0-21). The lead testing conducted was not a Lead-Based Paint Inspection or Screening as defined by HUD or EPA regulations, but was done to test surfaces that may be representative of those likely to be affected by this project. If surfaces and materials other than those tested are identified, the Contractor shall test and treat appropriately. Refer to the Lead Analyzer Test Results Table in Appendix B that identifies the surfaces tested, and the results. The Lead Test Locations are shown in Appendix C.

EPA and the Department of Housing and Urban Development (HUD) have defined lead-based paint as any paint or other surface coating that contains lead equal to or in excess of 1.0 milligram per square centimeter (mg/cm²) or 0.5 percent by weight. XRF results are classified as positive (lead is present at 1.0 mg/cm² or greater), negative (less than 1.0 mg/cm² of lead was present) or inconclusive (the XRF could not make a conclusive positive or negative determination). Tests that were invalid due to operator error are shown as void tests.

A Performance Characteristic Sheet (PCS) for the Heuresis Pb200i is available upon request. This PCS data provides supplemental information to be used in conjunction with Chapter 7 of the “HUD Guidelines”. Performance parameters provided in the PCS are applicable when operating the instrument using the

manufacturer's instructions and the procedures described in Chapter 7 of the "HUD Guidelines". The instrument was operated in accordance with manufacturer's instructions and Chapter 7 of the HUD Guidelines. No substrate correction is required for this instrument. There is no inconclusive classification for this instrument when using the 1.0 mg/cm² threshold.

D. SURVEY RESULTS

1. Asbestos-Containing Materials

The following Table 1A lists the samples taken in January 2023, and the results of the laboratory analysis. Asbestos field survey data sheets and laboratory reports are included as Appendix A. Refer to Appendix C for sample locations.

TABLE 1A

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
PH123-A01	Gypsum wall board, joint compound, and white sealant	3rd Floor, Room 310, at outlet on common wall. Photo 23 to 25	None Detected, three layers
PH123-A02	LCT-1, 2' x 2' drop edge ceiling tile with 1.5" directional fissures, & 1/16" random holes.	3rd Floor, Room 308, at soffit by wall. Photo 49 & 50.	None Detected
PH123-A03	Gray-green ceiling grid "L" channel Mastic.	3rd Floor, Room 308, at soffit by wall. Photo 50 & 51	1.2% chrysotile
PH123-A04	4" tan cove base with cream cove base mastic.	3rd Floor, Room 308, on Brick wall. Photo 53	None Detected both layers
PH123-A05	Yellow carpet mastic	3rd Floor, Room 308, in closet. Photo 54	None Detected
PH123-A06	Gypsum wall board, joint compound,	3rd Floor, Room 307 at outlet. Photo 62	None Detected both layers
PH123-A07	4" green cove base with tan and brown cove base mastic. Some gypsum board	3rd Floor, Room 306, at removed cove by entry. Photo 73 & 78	None Detected four layers
PH123-A08	Joint compound and tape.	3rd Floor, Room 306, at removed tape by corner near windows. Photo 87	None Detected
PH123-A09	LCT-2. 2' x 2' drop edge ceiling tile with fewer 1" minus directional fissures with random 1/32" holes.	3rd Floor, Room 305, in bedroom area. Photo 97	None Detected
PH123-A10	LCT-3. 2' x 2' drop edge ceiling tile with no fissures, 1/32" to 1/4" random rough edge holes.	3rd Floor, Room 304, at added soffit. Photo 104 & 106	None Detected
PH123-A11	LCT-2. 2' x 2' drop edge ceiling tile with fewer 1" minus directional fissures with random 1/32" holes.	3rd Floor, Room 302, in bedroom area. Photo 115	None Detected
PH123-A12	Cream, self coving, fused seam vinyl flooring, no backing, sticky clear mastic, brown remnant mastic & joint compound.	3rd Floor, Room 338 bathing suite. Behind doorway. Photo 149	None Detected four layers

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
PH123-A13	LCT-4. 2' x 2' drop edge ceiling tile with sandy texture. No holes or fissures	3rd Floor, Room 338 bathing suite. In Bath area. Photo 150	None Detected
PH123-A14	Joint compound from bathroom remodel (lab called it grout)	3rd Floor, Room 337.1 Bath. At J box in Ceramic tile wainscot. Photo 151	None Detected
PH123-A15	Brown epoxy grit floor	3rd Floor, Room 337.1 Bath. Behind door. Photo 152	None Detected
PH123-A16	Heavy thick Texture and paint from bathroom remodel (lab indicated that the layers were not separable)	3rd Floor, Room 337.1 Bath. At wall above exhaust grille. Photo 153	None Detected
PH123-A17	Hard Fitting insulation	3rd Floor, Room 338 bathing suite. Through hole in wall under sink to chase. Photo 154	None Detected
PH123-A18	Lighter texture and gypsum wall board	3rd Floor, Room 338 bathing suite. At hole in wall under sink to chase. Photo 154	None Detected both layers
PH123-A19	Lighter texture and gypsum wall board	3rd Floor, Room 338 bathing suite. At J box in main bath area. Photo 158	None Detected both layers
PH123-A20	4" black cove base with cream and brown mastic. GWB Paper	3rd Floor, Room 337, behind door where cove base removed. Photo 166	None Detected four layers
PH123-A21	LCT-1, 2' x 2' drop edge ceiling tile with 1.5" directional fissures, & 1/16" random holes.	3rd Floor, Room 337, at main room. Photo 165	None Detected
PH123-A22	Cream 1/4" chip sheet vinyl with tan mastic, stuck to black rubber transition strip.	3rd Floor, Room 336.1 Bath, at threshold. Photo 176	20% chrysotile in SV, None in black rubber, 1.1% chrysotile in mastic
PH123-A23	Black paint or black mastic	3rd Floor, Room 336, under carpet at threshold. Photo 176	None Detected
PH123-A24	Greenish sacking on concrete	3rd Floor, Room 336 at column in closet. Photo 177	None Detected
PH123-A25	Marlite and tan mastic.	3rd Floor, Room 336.1 at J box near toilet. Photo 178	1.3% chrysotile in mastic, None in Marlite
PH123-A26	Black sink undercoating	3rd Floor, Room 349. At stainless steel sink. Photo 185	1.4% chrysotile
PH123-A27	Silver coated heat shield at light	3rd Floor, Room 332.1 At light in bathroom. Photo 204	30% chrysotile
PH123-A28	Joint compound	3rd Floor, Room 332.1 At J Box for light switch. Photo 205	1.2% chrysotile

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
PH123-A29	Marlite and tan mastic. Lab also analyzed gypsum wall board	3rd Floor, Room 332.1 at J box near toilet. Photo 178	None Detected, three layers
PH123-A30	White paint and patch or sacking on concrete (lab indicated that the layers were not separable)	3rd Floor, Room 327 at column in closet. Photo 216	None Detected
PH123-A31	Yellow carpet mastic	3rd Floor, Room 348 at center of main floor. Carpet removed. Photo 227	None Detected
PH123-A32	LCT-5. 2' x 2' flat ceiling tile with random 3/8" and smaller fissures in circular "Galaxy" pattern	3rd Floor, Room 348 in entry hall. Photo 228	None Detected
PH123-A33	LCT-2. 2' x 2' drop edge ceiling tile with fewer 1" minus directional fissures with random 1/32" holes.	3rd Floor, Room 348 in entry hall. Photo 228	None Detected
PH123-A34	Brown epoxy grit floor	3rd Floor, Room 323.1 Bath, behind door. Photo 247	None Detected
PH123-A35	Lighter texture and gypsum wall board	3rd Floor, Room 324 bathing suite, at Light switch in hallway. Photo 248	None Detected both layers
PH123-A36	Lighter texture and gypsum wall board	3rd Floor, Room 324 bathing suite. At J box in main room. Photo 250	None Detected both layers
PH123-A37	LCT-4. 2' x 2' drop edge ceiling tile with sandy texture. No holes or fissures	3rd Floor, Room 324 bathing suite. In Hall area. Photo 251	None Detected
PH123-A38	Cream, self coving, fused seam vinyl flooring, no backing, sticky clear mastic, brown remnant mastic	3rd Floor, Room 324 bathing suite. Behind door. Photo 249	None Detected, three layers
PH123-A39	LCT-2. 2' x 2' drop edge ceiling tile with fewer 1" minus directional fissures with random 1/32" holes.	3rd Floor, Room 349 in entry hall. Photo 314	None Detected
The testing method used (polarized light microscopy [PLM]) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation should be made by quantitative transmission electron microscopy (TEM).			

The following Table 1B lists the samples taken in August 2020, and the results of the laboratory analysis. Asbestos field survey data sheets and laboratory reports are included as Appendix A. Refer to Appendix C for sample locations.

TABLE 1B

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
PH820-A01	Cement Board sandwich panel	Orig. Rm 410, under window, behind the fin tube enclosure. Photos 167-169	2.6% chrysotile, 1.4% crocidolite

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
PH820-A02	Joint compound	Orig. Rm 410, At edge of hallway to room. Previous damage. Photo 170	None Detected
PH820-A03	Joint compound, white and brown cove base mastics	Orig. Rm 410, at corner of wall between bathroom and sink area. Photo 171 & 172	None Detected both layers
PH820-A04	Hard Fitting Insulation	Orig. Rm 409.1, inside Sink Chase. Photo 174	None Detected
PH820-A05	Glob smeared on wall stud. Likely Joint compound, possibly HF insul.	Orig. Rm 409.1, inside Sink Chase. Photo 174	None Detected
PH820-A06	Yellow and green carpet mastic	Orig. Rm 410, near closet & dividing wall, Photo 175	None Detected
PH820-A07	Hard Fitting Insulation	Orig. Rm 409.1, in Tub Chase. Photo 189 & 190	None Detected
PH820-A08	Light yellow Marlite Mastic & white faced Marlite	Orig. Rm 409.1, at Tub Wall. Photo 191	None Detected both layers
PH820-A09	Gypsum wall board	Orig. Rm 409.1, at Tub Wall. Photo 192	None Detected
PH820-A10	SV-1 Sheet Vinyl. 3/8" Cream, gray & tan chip SV, with tan mastic & gb paper	Orig. Rm 409.1, at Tub Wall. Photo 191 & 192	60% chrysotile, None Detected in mastic or brown paper
PH820-A11	Paint with possible sacking, on concrete ceiling above drop ceiling.	Orig. Rm 410, Just inside entrance to bedroom. Photo 193	None Detected
PH820-A12	Tan ceiling grid mastic	Orig. Rm 410, West wall by closet. Photo 194 & 195	1.2% chrysotile
PH820-A13	Asbestos Heat shield in original incandescent light fixture	Orig. Rm 409, in Bedroom Portion. Wires assumed to have ACM insul. Photo 203	80% chrysotile
PH820-A14	LCT-1, 2x2 Galaxy Pattern lay in ceiling tile	Orig. Rm 410, in Bedroom. Photo 207	None Detected
PH820-A15	LCT-2, 2x2 drop beveled edge Galaxy pattern lay-in ceiling tile	Orig. Rm 409.1, at ceiling of bathroom. Photo 208	None Detected
PH820-A16	LCT-3, 2x2 drop beveled edge medium directional fissures with 1/16" holes. Appears to be oldest ceiling tile.	Orig. Rm 409.1, at ceiling of bathroom. Photo 208 & 209	None Detected
PH820-A17	LCT-3, 2x2 drop beveled edge medium directional fissures with 1/16" holes. Appears to be oldest ceiling tile.	Orig. Rm 409, at ceiling of Bedroom. Photo 210	None Detected
PH820-A18	Dark Gray-Green ceiling grid mastic	Ph. 2. Rm 407, West wall. Photo 232	1.4% chrysotile
PH820-A19	Brown Mirror Mastic and gb paper	Ph. 2. Rm 407, at sink area. Photo 233	1.8% chrysotile

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
PH820-A20	Tan “liquid nails” type adhesive at Metal Trim at ceiling on concrete	Ph. 2. Rm 407, near window in Alcove. Photo 235	1.2% chrysotile
PH820-A21	Cream colored, soft sealant at top of gyp bd joint to concrete ceiling	Ph. 2. Rm 407, west wall of Bedroom. Photo 236	None Detected
PH820-A22	Light brown mastic between Marlite and Green board GWB	Ph. 2. Rm 407.1. At Tub/toilet wall. Photo 237	1.8% chrysotile
PH820-A23	Joint compound and green board GWB	Ph. 2. Rm 407.1. At Tub/toilet wall. Photo 238	None Detected both layers
PH820-A24	Hard fitting insulation	Ph. 2. Rm 407.1. In Sink Chase. Photo 240	None Detected
PH820-A25	Likely hard fitting insulation glob on floor of chase.	Ph. 2. Rm 407.1. In Tub/toilet wall. Photo 243	None Detected
PH820-A26	Gray-greenish sacking on concrete column	Ph. 2. Rm 407, Column in Closet. Photo 247	None Detected
PH820-A27	Gray-greenish sacking on concrete column	Ph. 2. Rm 436, Column in Closet. Photo 264	None Detected
PH820-A28	Hard fitting insulation	Ph. 2. Rm 436.1, In Tub chase. Loose on floor of chase. Photo 168	None Detected
PH820-A29	Light brown mastic between Marlite and Green board GWB	Ph. 2. Rm 436.1, At Tub/toilet wall. Photo 270	1.8% chrysotile
PH820-A30	Green Board GWB	Ph. 2. Rm 436.1, At Tub/toilet wall. Photo 269	None Detected
PH820-A31	Black Sink Undercoating	Ph. 2. Rm 449. At stainless steel sink in Office. Photo 293	1.6% chrysotile
PH820-A32	LCT-3, 2x2 drop beveled edge medium directional fissures with 1/16” holes. Appears to be oldest ceiling tile.	Ph. 2. Rm 449. At window alcove in Office. Photo 299	None Detected
PH820-A33	Hard fitting insulation	Ph. 2. Rm 449. On piping above window alcove in Office. Photo 290	None Detected
PH820-A34	Dark Gray ceiling grid mastic	Ph. 2. Rm 449. On east wall in window alcove in Office. Photo 297	1.6% chrysotile
PH820-A35	Probably newer joint compound	Ph. 2. Rm 449. On what appears to be an added gwb on ext wall in window alcove in Office. Photo 298	None Detected
PH820-A36	Probably older joint compound	Ph. 2. Rm 449. below added gwb on ext wall near window alcove in Office. Photo 300 & 302	None Detected, 1st analysis, 1.4% chrysotile in re-analysis

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
PH820-A37	Asbestos wire insulation	Ph. 2. Rm 449. At recessed ceiling spotlight. Photo 303 & 304	80% chrysotile
PH820-A38	LCT-4 2x2 drop bevel, fewer directional fissures, less 1/16" holes	Ph. 2. Rm 449. At room ceiling. Photo 305	None Detected
PH820-A39	Newer GWB & JC inside added closet	Ph. 2. Hallway outside Rm 449. In corner of wall. Photo 307	None Detected both layers
PH820-A40	LCT-5 2x4 Galaxy pattern, typical new ceiling throughout corridor	Orig area. Corridor 461. Near double doors to Lounge 456. Photo 309	None Detected
PH820-A41	Ceramic fiber heat shield	Ph. 2. Rm 406. At newer surface mtd light. Photo 319, 320, 321	None Detected both layers
PH820-A42	Gypsum wall board and Joint Compound	Ph. 2. Rm 406. Inside corner of Closet. Photo 322	None Detected both layers
PH820-A43	Tan carpet mastic	Ph. 2. Rm 404. Inside Closet. Photo 343	None Detected
PH820-A44	Light tan and dark brown cove base mastics	Ph. 2. Rm 404. Inside Closet. Photo 344	None Detected both layers
PH820-A45	Light brown mastic between Marlite and Green board GWB	Ph. 2. Rm 403.1, At Tub/toilet wall. Photo BH01	2.2% chrysotile in mastic, None Detected in GWB
PH820-A46	Dark Gray ceiling grid mastic	Ph. 2. Rm 401. At exterior wall by windows. Photo BH02	1.4% chrysotile
PH820-A47	Probably newer joint compound	Ph. 2. Rm 401. On what appears to be an added gwb on ext wall in window alcove in Office. Photo BH04	None Detected
PH820-A48	Probably old joint compound	Ph 2, Corridor 457, at fire hose cabinet hole. Photo 396	None Detected
PH820-A49	SV-2 Identical to SV-1, but in Ph 2. area. Sheet Vinyl. 3/8" Cream, gray & tan chip SV, with dark tan mastic	Ph. 2, Rm 437.1 on floor by tub location. Photo BH05	60% chrysotile in vinyl, 1.2% chrysotile in yellow mastic
PH820-A50	Brown cove base mastic	Orig. Rm 435. At GWB wing-wall by sink. Photo 424	None Detected
PH820-A51	SV-1 Sheet Vinyl. 3/8" Cream, gray & tan chip SV, with tan mastic	Orig. Rm 434.1. At wall by toilet location. Photo BH006	60% chrysotile in vinyl, 1.2% chrysotile in yellow mastic
PH820-A52	Joint compound	Orig. Rm 431. At wing wall of closet. Photo BH07	None Detected, 1st analysis, 1.4% chrysotile in re-analysis
PH820-A53	Gypsum wall board	Orig. Rm 428. At wing wall of closet. Photo BH08	None Detected
PH820-A54	Black Sink Undercoating	Ph. 2. Rm 448. At Office Sink. Photo BH09	2.2% chrysotile

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
PH820-A55	Hard Fitting Insulation	Ph. 2, Rm 403. At holes cast into concrete beam for pipe passage. Photo 376	None Detected
The testing method used (polarized light microscopy [PLM]) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation should be made by quantitative transmission electron microscopy (TEM).			

Table 1C includes samples taken in June 2020, by Absolute Environmental, and the results of the laboratory analysis. Asbestos field survey data sheets and laboratory reports are included in Appendix A, note there were discrepancies in room numbers, these numbers match the numbers used in other sets of samples. There were no detailed descriptions or sample locations provided for these samples.

TABLE 1C

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
2020010-01	Joint Compound	Room 408	3% chrysotile in 1 layer, ND in other
2020010-02	Vinyl Sheeting	Bathroom, Room 408	20% chrysotile, ND in mastic
2020010-03	Drop in ceiling tile	Ceiling Room 408	None Detected
2020010-04	Joint Compound	Room 407	None Detected
2020010-05	Drop in ceiling tile	Ceiling Room 407	None Detected
2020010-06	Carpet Mastic	Room 407	None Detected
2020010-07	Cove base mastic and joint compound	Room 407	None Detected both layers
2020010-08	Cove base mastic	Room 407	None Detected
2020010-09	Carpet Mastic	Room 402	None Detected
2020010-10	Vinyl Sheeting	Room 402	20% chrysotile, ND in mastic
The following samples were also taken by the contractor, and were verbally described, but no field data sheets, lab reports or locations were provided.			
Not known	"wall covering mastic"	Bathroom to 407 & 408	4% (assumed to be chrysotile)
Not known	"joint compound"	Bathroom to 407 & 408	"negative"
The testing method used (polarized light microscopy [PLM]) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation should be made by quantitative transmission electron microscopy (TEM).			

Table 1D includes the results of the laboratory analysis of additional samples taken because of the discrepancies between the samples taken by EHS-Alaska, and by Absolute Environmental and highly suspect materials, like joint compound and "hard fitting" insulation. Asbestos field survey data sheets and laboratory reports are included in Appendix A. Refer to Appendix C for sample locations.

TABLE 1D

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
APH920-A01	Gypsum wall board & joint compound	Phase I, Restroom 409.1 at corner by door. Photo 2	None Detected in GWB, 1.7% chrysotile in JC

SAMPLE NUMBER	MATERIAL	LOCATION	ASBESTOS CONTENT
APH920-A02	Gypsum wall board & joint compound	Phase I, Guest Rm. 409 at corner in closet. Photo 3	None Detected in GWB, 2.3% chrysotile in JC
APH920-A03	Gypsum wall board & joint compound	Phase II, Guest Rm. 408, directly adjacent to Absolute's sample 1 at corner by sinks. Photo 4 & 5	None Detected in GWB, 1.8% chrysotile in JC
APH920-A04	Joint compound	Phase II, Guest Rm. 407, corner of outside wall. Photo 7 & 8	None Detected
APH920-A05	Gypsum wall board & joint compound	Phase II, Guest Rm. 406, at corner by sinks. Photo 9	None Detected in GWB, 1.4% chrysotile in JC
APH920-A06	"Green board" Gypsum wall board & joint compound	Phase II, Restroom 405.1 at corner by door. Photo 10 & 11	None Detected both layers
APH920-A07	"Green board" Gypsum wall board & joint compound	Phase II, Restroom 402.1 at corner by door. Photo 12	None Detected both layers
APH920-A08	Joint compound	Phase II, Guest Rm. 4039, outside corner by sink. Photo 13 & 14	1.6% chrysotile in JC
APH920-A09	"Green board" Gypsum wall board & joint compound	Phase II, Restroom 437.1 at corner by door. Photo 15	None Detected both layers
APH920-A10	Gypsum wall board & joint compound	Phase I, Guest Rm. 434 at corner in closet. Photo 16	None Detected in GWB, 2.2% chrysotile in one layer of JC, 2.4 % in 2nd
APH920-A11	Hard fitting insulation on domestic water	Phase I, Guest Room 435, through access panel. Photo 18	None Detected
APH920-A12	Hard fitting insulation on domestic water	Phase II, in Chase of Restroom 437.1, through fire extinguisher panel. Photo 19	None Detected
APH920-A13	Hard fitting. Probably domestic water	Phase II, Guest Room 439. Above ceiling. Photo 20	None Detected
APH920-A14	Hard fitting. Probably domestic water	Phase II, Lounge 458. Above ceiling. Photo 21 & 22	None Detected
APH920-A15	Hard fitting. Probably domestic water	Phase II, Guest Room 404. Above ceiling near Restroom. Photo 23	None Detected
APH920-A16	Hard fitting on Roof Drain	Phase II, Guest Room 404. Above ceiling near Window. Photo 24	None Detected
APH920-A17	Hard fitting. Probably hot water	Phase II, Guest Room 406. Above ceiling near Restroom. Photo 24	None Detected
APH920-A18	Hard fitting. Probably domestic water	Phase II, Lounge 456. Above ceiling near Center. Photo 25	None Detected
APH920-A19	Hard fitting. Probably domestic water	Phase II, Lounge 454. Above ceiling near Center. Photo 26	None Detected
APH920-A20	Hard fitting. Probably domestic water	Phase II, Corridor 452. Above ceiling near Door to 424. Photo 27	None Detected
The testing method used (polarized light microscopy [PLM]) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound materials. Before this material can be considered or treated as non-asbestos containing, confirmation should be made by quantitative transmission electron microscopy (TEM).			

The following materials have been found to contain asbestos in this or previous surveys, or were assumed to contain asbestos.

1. Cement asbestos board (CAB) "Glasweld" insulated infill panels at exterior windows of Phase I (confirmed asbestos), and Phase II (assumed asbestos).
2. Joint compound in gypsum wallboard systems on the ceilings and walls of Phase I and Phase II (confirmed ACM).
3. Sheet vinyl flooring and mastics in Guest Bathrooms (confirmed asbestos) and in other "wet" areas, including Public Bathrooms, laundry, and janitor closets, etc. (assumed asbestos).
4. Tan ceiling grid mastic holding perimeter "L" channels to walls of Phase I (confirmed asbestos).
5. Gray-green ceiling grid mastic holding perimeter "L" channels to walls of Phase II (confirmed asbestos).
6. Light brown mastic holding "Marlite" to gypsum wall board in Phase II (confirmed asbestos).
7. Light tan "Liquid Nails" type mastic found at sheet metal trim at ceiling in Phase II (confirmed asbestos).
8. Brown mastic holding mirrors to wall in Phase II area (confirmed asbestos).
9. Incandescent light fixture heat shields at original lights (confirmed asbestos).
10. High temperature wiring insulation at original incandescent lights (confirmed ACM).
11. Black sprayed-on undercoating on stainless steel sinks, in Phase II (confirmed asbestos).

The survey was limited to the direct areas likely to be affected by the residents upgrades project, and the following materials may be present in other areas of the building, and should be assumed to contain asbestos, or be sampled prior to any disturbance. These materials are not further discussed below since it is not known if they are actually present or not.

1. Flange gaskets and valve packings on piping (suspect, assumed asbestos).
2. Insulation to fire doors (suspect, assumed asbestos).
3. Exterior tarry damp-proofing (suspect, assumed asbestos).
4. Door, window and penetration sealants and window glazing compounds (suspect, assumed asbestos).
5. Interior tarry damp-proofing at inside face of exterior concrete or brick walls (suspect, assumed asbestos).
6. Various roofing materials, and patching tars (suspect, assumed asbestos).
7. Sound dampening tars at older Roof mounted Exhaust fans (suspect, assumed asbestos).
8. Various other colors of undercoatings on stainless steel sinks (black undercoating confirmed ACM, other colors suspect, assumed asbestos).
9. Other flooring materials (vinyl floor tiles, rubber flooring, rubber stair treads and stringers, etc.) and their associated mastics (suspect, assumed asbestos).
10. Other miscellaneous construction mastics for trim, paneling, etc. (suspect, assumed asbestos).

The following materials have been found to be asbestos-free in this or previous surveys, but is not to be considered a complete list of asbestos-free materials.

- All 2' x 2' Ceiling tiles.
- All 2' x 4' Ceiling tiles.
- Hard and chalky insulation at pipe valves and fittings of Phase I and Phase II.

The effects of the above asbestos-containing materials on the proposed renovation are discussed below.

Cement Asbestos Window Wall Panels

Cement asbestos panel are present at the window walls in the building. These panels are made of two cement asbestos panel with insulation sandwiched in between panels. Panels are present above and below windows in both the Phase I and Phase II portion of the building. The Phase I portion had the inner cement asbestos panel exposed within the guest room, but it was covered with gypsum wall board in the Phase II portion of the building. The cement asbestos panels are in good condition and are not friable in their present condition and are unlikely to be disturbed by this project.

Joint Compound

Joint compound on gypsum board walls, soffits and ceilings throughout the Phase I and Phase II areas were found to contain asbestos. No asbestos has been detected in the gypsum board. Joint compound

was in good condition and is not considered friable unless damaged. The gypsum wall board with asbestos-containing joint compound will be partially removed by this project.

Sheet Vinyl Flooring

The sheet vinyl flooring in the guest bathrooms in both the Phase I and Phase II portions of the building appeared to be the same, and both were found to contain asbestos. Similar, but different color sheet vinyl flooring in other "wet areas" in the building are assumed to be asbestos containing, including the Men's and Women's Restrooms, Janitor Room, Laundry Room and Clean Room subject to renovation by this project. The sheet vinyls were in several colors, and are not presently friable, but will be removed in the bathrooms by this project, and may be removed in the other areas.

Tan and Gray-green Ceiling grid Mastics

Two colors of mastics used to secure the "L" channels to walls contained asbestos. Typically most ceiling grids were secured to walls primarily with nails or screws; however, two colors were found to be asbestos-containing. Mastics were in good condition and were not friable and will be partially removed by this project.

Light brown "Marlite" Mastics

A light brown troweled-on mastic in the Phase II portion holding "Marlite" to the walls of the guest bathrooms contained asbestos. Similar "Marlite" is likely to be present in other "wet areas". The mastics were in good condition and were not friable and will be removed by this project in the guest bathrooms.

Brown Mirror Mastics

A brown troweled-on mastic in the Phase II portion holding the mirrors to the walls of the guest bathrooms contained asbestos. The mirrors in the Phase I portion had a different fastening structure which allows the mirrors to be tilted, and did not contain asbestos. The mastics were in good condition and were not friable and will be removed by this project.

Light Tan "Liquid-Nails" Mastics

A light tan mastics was used to secure the sheet metal trim at the edges of the concrete ceiling in the Phase II area. The mastics were in good condition and were not friable and may require minor disturbance by this project to re-establish the smoke barriers between floors.

Light Fixture Heat Shields

Several incandescent light fixtures were identified that were shielded with an asbestos-containing heat shield. Although not tested, it is assumed that "pigtail" wiring associated with these fixtures was insulated with asbestos-containing insulation. This shield material was in good condition and is considered friable. Wiring insulation is not friable. The light fixtures with asbestos heat shields and wiring will be removed by this project.

High Temperature Wiring Insulation

High Temperature Wiring Insulation was found to have asbestos-containing insulation at the "pigtailed" for incandescent spot-lights. Wiring insulation is typically not friable, and will be removed by this project.

Sink Undercoating

One Stainless steel sinks in the "Office" rooms in Phase II was found that is coated on the underside with a black spray-applied material containing asbestos. This material was in good condition and is not considered friable. The sink will be removed by this project.

2. Asbestos in Dusts

The settled and concealed dusts were examined by an EPA Certified Building Inspector but no samples for asbestos in dusts were authorized for this project. Based on their visual inspection and experience from similar buildings, the inspector determined that the typical settled and concealed dusts are not "asbestos debris" from an asbestos-containing building material (ACBM). Based on similar sampling from similar buildings, the inspector also determined that the dusts are unlikely to contain more than one percent (1%) asbestos by weight, and therefore are not an asbestos-containing material (ACM).

3. Lead-Containing Materials

Lead-Testing

EHS-Alaska tested paint and other materials throughout the affected areas of the building using a Heuresis XRF lead paint analyzer. Lead in paints tested varied from a trace amount to 0.18 mg/cm². Lead in other materials tested varied from a trace amount to 27.32 mg/cm². Refer to the Lead Analyzer Test Results Table in Appendix D that identifies the surfaces tested, and the results. The Lead Test Locations are shown in the Drawings in Appendix C.

Paints

There were varying lead contents found in the paints, based on what surfaces they are on, with most surfaces containing little lead (but are still classified as lead-containing materials by OSHA). The highest levels of lead were found on walls and other painted surfaces, and lowest levels on pre-finished materials.

Lead based paints (paint containing more than 1.0 mg/cm² of lead) were not identified in the project on however, it is anticipated that other components which are hidden, concealed, or otherwise not tested may be painted with lead-based paint. Lead was detected at very low levels in most of the painted wall and ceiling surfaces. XRF testing is not able to “prove” that “no” lead exists in the paint. Low levels of lead found by XRF testing does not mean that the paints are free of lead, the paints may contain lead. However, these paints may not present a hazard to occupants or workers performing renovation or demolition if lead-safe work practices are followed.

Ceramic Wall Tile and Glazing

Relatively high concentrations of lead were found in the glazing of ceramic plumbing fixtures. The concentrations of lead in ceramic glazing compounds should not be compared to lead-based paint criteria, as the glazing is inherently less likely to cause lead to be present in dusts or on surfaces, where it can be ingested. Lead in ceramic tile glazing may not pose a hazard to occupants, or workers performing renovation or demolition if lead-safe work practices are followed. All ceramic tiles and fixtures in the facility should be assumed to contain lead.

Plastic Components

Relatively high concentrations of lead were found in plastic components, such as “Formica” plastic laminate panels. The concentrations of lead in plastic compounds should not be compared to lead-based paint criteria. Lead in plastic compounds may have surface deterioration and if not cleaned regularly, lead may be present in dusts or on surfaces, where it can be ingested. Lead in plastic compounds may not pose a hazard to occupants, or workers performing renovation or demolition if good work practices are followed.

Metallic Lead in Batteries, Pipe Solder and Flashing

Metallic lead items identified in the building included lead solder at copper piping, and poured lead sealants at bell and spigot joints of waste and vent piping and lead acid batteries in emergency lights and other battery backup equipment. If removed during renovation or demolition they should be recycled or disposed of as hazardous waste.

Lead Dusts

The settled and concealed dusts were examined but no samples for lead in dusts were authorized for this project. Based on their visual inspection and similar sampling from similar buildings, the inspector also determined that the dusts are likely to have measurable concentrations of lead in the dusts.

4. PCB-Containing Materials

Light Ballasts

Older fluorescent lights typically have PCB-containing ballasts. PCB-containing ballasts in fluorescent lights were banned in 1978, but manufacturers were allowed to use up existing stocks, and lights may have been reused from other facilities. The survey included examination of what were considered to be representative light fixtures, but not all fixtures were able to be accessed. All lights shall be inspected during removal or relocation. Unless ballasts were marked “No PCBs,” they must be assumed to contain PCBs and must be disposed of as a hazardous waste when removed for disposal. Fluorescent light fixtures with PCB-containing ballasts were found in the work area. The fluorescent light fixtures will be replaced as shown on the drawings.

Older HID lights may have PCB-containing ballasts. Due to height restrictions and sealed ballast enclosures, the HID fixtures were not able to be accessed. All HID lights shall be inspected during removal or relocation. If ballasts are not marked "No PCBs," we suggest contacting the manufacturer of the lights to determine if the ballasts contain PCB's, or assume that they contain PCB's and be disposed of as a hazardous waste. The HID light fixtures are unlikely to be disturbed by this project.

Bulk Products

Some older paints, sealants and other building materials may contain measurable amounts of PCB's. PCB use in paints and sealants was supposed to have been discontinued in 1979. The EPA does not require the sampling of bulk products, and no sampling of "Bulk Products" were authorized for this project.

5. Mercury-Containing Materials

Fluorescent Lamps

Fluorescent lamps use mercury to excite the phosphor crystals that coat the inside of the lamp. These lamps contain from 15 to 48 milligrams of mercury depending on their age and manufacturer. Fluorescent light fixtures will be replaced as shown on the drawings.

Thermostats

Older thermostats or other electrical switches that may contain mercury were noted in the building.

High Intensity Discharge Lamps

High Intensity Discharge (HID) lamps use mercury and sodium vapors in the lamp, and also typically have lead-containing solders at the bases. These lamps contain varying amounts of mercury depending on their age and manufacturer. The HID light fixtures are unlikely to be disturbed by this project.

6. Other Hazardous Materials

Smoke Detectors

Several radioactive smoke detectors were found in the renovation area. No radioactive exit signs were found in the renovation area, but may be present in other areas of the building. If any radioactive items are removed by this project, they are required be disposed of as hazardous waste or recycled.

Household Chemicals

Common household chemicals, including quantities cleaners, disinfectants, floor or furniture wax, were present in the building. These loose containers were present in utility spaces, and will be relocated by the owner.

Soil Contamination

The scope of work for EHS-Alaska, Inc. did not include investigation of soils for petroleum or other contaminations.

Refrigerants

Refrigerators, ice machines, and water coolers were identified in the building that may contain ozone depleting refrigerants. Air conditioning units are also present. The equipment with refrigerants are not scheduled for disturbance by this project. Ozone depleting substances (ODS) are regulated by the EPA and must be removed by certified technicians prior to equipment disposal.

Heat Transfer Fluids

The existing heating and cooling system is assumed to contain heat transfer fluids, including glycol or other boiler treatment chemicals. Any heat transfer fluids removed from the heating system shall be recovered and properly disposed of or recycled. The heating system is unlikely to be disturbed by this project.

E. REGULATORY CONSTRAINTS

1. Asbestos-Containing Materials

The Federal Occupational Safety and Health Administration (29 CFR 1926.1101) and the State of Alaska Department of Labor (8 AAC 61) have promulgated regulations requiring testing for airborne asbestos fibers; setting allowable exposure limits for workers potentially exposed to airborne asbestos fibers; establishing contamination controls, work practices, and medical surveillance; and setting worker certification and protection requirements. These regulations apply to all workplace activities involving asbestos-containing materials.

The EPA regulations, issued as Title 40 of the Code of Federal Regulations, Part 61 (40 CFR 61) Subpart M under the National Emission Standards for Hazardous Air Pollutants (NESHAP) established procedures for handling ACM during asbestos removal and waste disposal. It is recommended that clearance sampling which complies with the EPA's Asbestos Hazard Emergency Response Act (AHERA) protocol be required following removal of asbestos-containing materials to document that the asbestos has been properly removed.

The EPA regulations require an owner (or the owner's contractor) to notify the EPA of asbestos removal operations and to establish responsibility for the removal, transportation, and disposal of asbestos-containing materials.

The disposal of asbestos waste is regulated by the EPA, the Alaska Department of Environmental Conservation, and the disposal site operator. Wastes being transported to the disposal site must be sealed in leak tight containers prior to disposal and must be accompanied by disposal permits and waste manifests.

2. Dusts with Asbestos

Settled and concealed dusts above ceilings, and at other areas that are not routinely cleaned (such as inside ducts and at roofs, etc.) are assumed to have measurable concentrations of asbestos. Based on sampling of similar settled and concealed dusts at similar buildings, those dusts are assumed to contain less than 1 percent asbestos. Normal settled and concealed dusts are distinct and treated differently from debris resulting from damaged asbestos-containing materials.

Background levels of asbestos in dusts for a particular location will depend on many factors, including whether or not asbestos occurs naturally in soils in the area.

Likely sources of asbestos in dusts include natural occurrences of asbestos

The types of asbestos found in settled and concealed dusts often contain actinolite, anthophyllite and tremolite forms of asbestos which are not commonly found in bulk samples taken of materials from buildings. Those forms of asbestos may come from natural occurrences of asbestos in an outside source, such as rock or ore deposits, which appear to be common in the Anchorage area.

Because the type of disturbance, concentration of asbestos in the dusts, cohesiveness of the dusts and room sizes will change, the airborne asbestos levels expected during the project will depend on the contractor's means and methods of conducting the work. The mere presence of asbestos in the dusts does not necessarily imply that a "hazard" exists which would require the use of specially trained workers to "abate" the "hazard". All dusts will likely be required to be removed from the areas where asbestos-containing materials are being removed (abatement areas) in order to achieve clearances. The dusts in the other areas are to be controlled so as to limit worker exposures and prevent contamination of occupied areas of the building.

There is no established correlation between settled or adhered dusts with measurable concentrations of asbestos and airborne concentrations. The definition in the OSHA regulations of asbestos-containing materials as those materials that contain 1 percent or more asbestos by weight, apply to cohesive materials and not to dusts. The OSHA regulations are essentially "performance based", if workers are exposed above the permissible exposure limits, then all of the requirements in the regulations become effective.

3. Lead-Containing Materials

The EPA Standard 40 CFR 745, Lead-Based Paint Poisoning Prevention in Certain Residential Structures, defines lead-based paint hazards and regulates lead based paint activities in target housing and child-occupied facilities. The requirements of this regulation include training certification, pre-work notifications, work practice standards and record keeping. Areas typically classified as child occupied facilities may include but are not limited to: day care facilities, preschools, kindergarten classrooms, restrooms, multipurpose rooms, cafeterias, gyms, libraries and other areas routinely used by children under 6 years of age. Training requirements for Firms (Contractors) and Renovators (Workers) became effective on April 22, 2010. The building is not classified as a child occupied facility, therefore the requirements of 40 CFR 745 do not apply.

Federal OSHA (29 CFR 1926.62) and the State of Alaska (8 AAC Chapter 61) have promulgated regulations that apply to all construction work where employees may be exposed to lead. The disturbance of any surfaces painted with lead-containing paint requires lead-trained personnel, personnel protective procedures, and air monitoring until exposure levels can be determined. If initial monitoring verifies that the work practices being used are not exposing workers, monitoring and protection procedures may be relaxed. Experience has shown that some paints in most buildings will contain low concentrations of lead and disturbance of those paints are still regulated under the OSHA lead standard, 29 CFR 1926.62. Low levels of lead found by XRF testing does not mean that the paints are free of lead, the paints may contain lead, and OSHA regulations apply anytime measurable amounts of lead are present in paints.

Settled and concealed dust above ceilings, and at other areas that are not routinely cleaned are assumed to have measurable concentrations of lead. Background levels of lead in dusts for a particular location will depend on many factors, including whether or not engines utilizing leaded gasoline were run in or near a building, and upon the age of the building, and thus the age of the dusts. Because the type of disturbance, quantity of lead dusts, cohesiveness of the dusts and room sizes will change, the airborne lead levels expected during the project will depend on the contractor's means and methods of conducting the work. The mere presence of lead in the dusts does not necessarily imply that a "hazard" exists which would require the use of specially trained workers to "abate" the "hazard".

There is no established correlation between settled or adhered lead dust concentrations and airborne concentrations. The OSHA regulations are essentially "performance based", if workers are exposed above the permissible exposure limits, then all of the requirements in the regulations become effective.

The EPA requires that actual construction or demolition debris that contains lead or lead-containing paint or other heavy metals be tested using the TCLP test to determine if the waste must be treated as hazardous waste. All federal, state and local standards regulating lead and lead-containing wastes are required to be followed during the renovation or demolition of portions of this building.

If the TCLP tests done on the waste stream(s) that are produced by the contractor are found to be classified as hazardous wastes, then those waste stream(s) will have to be packaged for shipping and disposal in accordance with hazardous waste and transportation regulations. Because there are no hazardous waste landfills in Alaska, this report assumes that disposal will take place in Seattle or elsewhere in the Pacific Northwest.

4. PCB-Containing Materials

The EPA has promulgated regulations (40 CFR Part 761) that cover the proper handling and disposal of PCB-containing materials. PCB-containing equipment was found by this survey, and any removed PCB-containing equipment is required to be disposed of at fully permitted hazardous waste facilities. The EPA regulates liquid PCBs differently from non-liquid materials. Workers who remove or handle PCB-containing or PCB-contaminated materials or who transport or dispose of PCB wastes must be trained and certified in hazardous waste operations and emergency response (HAZWOPER) as required by 29 CFR 1910.120 and the State of Alaska Department of Labor (8 AAC 61). The Department of Transportation under 49 CFR Parts 100-199 regulates the marking, packaging, handling and transportation of hazardous materials. All federal, state and local standards regulating PCBs and PCB waste must be followed during this project.

5. Mercury-Containing Materials

Thermostats and mercury-containing lamps are classified by the EPA as Universal Wastes. The EPA encourages that all Universal Wastes be recycled in accordance with 40 CFR 273. Mercury and mercury-containing products are considered hazardous waste if TCLP testing of the waste for mercury confirms the mercury content to be greater than the EPA criteria of 0.2 mg/l.

6. Other Hazardous Materials

Refrigerants

Refrigerators were stored on the floor, which are presumed to be scheduled to remain. Air conditioning systems were present in some guest windows that are scheduled to remain. Typically, refrigeration and air conditioning systems with ODS shall be maintained in order to prevent discharge of ODS. Systems that are to be removed, or dismantled shall have refrigerants containing ODS recovered and disposed of or recycled in accordance with 40 CFR 82.

Chemical Hazards

The EPA has promulgated regulations (40 CFR Parts 260 to 299 amongst others) that cover the proper handling and disposal of waste chemicals, including listed wastes, which are ignitable, corrosive, reactive, toxic, or an acute hazardous waste or wastes that exhibit the characteristics of toxicity. All construction workers who are required to remove or handle chemical hazards or to transport or dispose of chemical wastes shall be trained and certified as required by the U.S. Department of Labor (29 CFR 1910.120) and the State of Alaska Department of Labor (8 AAC 61). Transportation of chemical hazards are regulated by Department of Transportation regulations under 49 CFR Parts 171 to 178 amongst others.

Waste heat transfer fluids (such as used heating/cooling system glycol or other circulating heating/cooling fluids) are a potentially hazardous waste and are required to be TCLP tested prior to disposal to determine if the fluids are classified as hazardous or non-hazardous waste per the EPA's RCRA regulations governing hazardous wastes. According to a study performed by the University of Northern Iowa, standard TCLP analysis using ICP SW 6010 testing procedures commonly report levels of Arsenic and Selenium over regulatory thresholds due to interferences in the matrix. That report concluded that additional analysis should be performed to refute the presence of Arsenic or Selenium over the regulatory levels by either mass spectrometry using method SW 6020, or by graphite furnace using method SW 7060. Some heat transfer fluids may also contain potentially hazardous additives that modify the properties of the fluids for use in a particular system. It is recommended that the contractor consult with the persons responsible for maintaining the system to determine if any additives that may be potentially hazardous were used in the system to further determine disposal requirements.

Radioactive Materials

Self-luminous products that contain Tritium, Krypton-85, or Promethium-147 are considered radioactive. There are special disposal requirements for products that contain Tritium, Krypton-85, or Promethium-147 that are generally licensed. Data from the Nuclear Regulatory Commission (NRC) indicates that most all Tritium powered exit signs are generally licensed and therefore must be disposed of at a licensed disposal facility or returned to the manufacturer/distributor for disposal. Licensed radioactive products are regulated by Nuclear Regulatory Commission standard 10 CFR 20 and 10 CFR 32. Smoke detectors were present in the project area that may contain a radioactive material. If the detectors are of the ionization type they typically contain a small amount of Americium. When removed during renovation, the detectors should be returned to the owner for reuse or returned to the manufacturer for disposal or recycling. There are no licensed disposal facilities for radioactive wastes in Alaska.

F. RECOMMENDATIONS

1. Asbestos-Containing Materials

The asbestos-containing materials identified in the building are typically in intact condition and are classified as both friable and non-friable ACM. All asbestos-containing materials that will be disturbed by the planned

renovation work are required to be removed by trained asbestos workers. Refer to Section 02 82 33 Removal and Disposal of Asbestos Containing Materials.

2. Dusts with Asbestos

Dusts with measurable concentrations of asbestos are assumed to be present, but are not classified as asbestos-containing materials, or as debris from asbestos-containing materials. Workers disturbing dusts are required to have hazard communication training in accordance with OSHA regulations, but are not required to receive 40 hours of training, which is required for asbestos workers. The contractor will need to choose means and methods to control worker exposures to airborne contaminants. At least an initial exposure assessment or data from previous air monitoring is needed to show that worker exposures are maintained below the OSHA permissible exposure limits (PELs). Refer to Section 01 35 45 Airborne Contaminant Control.

3. Lead-Containing Materials

Federal OSHA (29 CFR 1926.62) and the State of Alaska (8 AAC Chapter 61) have promulgated regulations that apply to all construction work where employees may be exposed to lead, including disturbance of paints with low concentrations of lead.

Worker exposure to lead may be able to be controlled below the OSHA permissible exposure limit if proper engineering controls and procedures are used during renovation. Lead is a potentially hazardous waste and the EPA requires that all wastes that contains lead be tested to determine if they must be treated as hazardous waste. A TCLP test of the waste stream(s) produced by the Contractor's means and methods are required to be performed to determine if those wastes will be classified as hazardous or non-hazardous. Refer to Section 01 35 45 Airborne Contaminant Control and Section 02 83 33 Removal and Disposal of Materials Containing Lead.

4. PCB-Containing Materials

PCB-containing ballasts scheduled for removal or replacement will need to be removed, handled, packaged and disposed of in accordance with all regulations. Refer to Section 02 84 18 Removal and Disposal of Chemical Hazards.

5. Mercury-Containing Materials

Mercury-containing materials scheduled for removal or replacement will need to be removed, handled, packaged and disposed of in accordance with all regulations. If mercury-containing lamps and thermostats are handled and disposed of in accordance with the Universal Waste Regulations, no TCLP test is required. If the Contractor chooses to perform a TCLP test of fluorescent lamps, the test shall be conducted in accordance with the requirements of ANSI/NEMA Standard Procedure for Fluorescent Lamp Sample Preparation and Toxicity Characteristic Leaching Procedure, C78.LL 1256-2003 or latest version. Refer to Section 02 84 18 Removal and Disposal of Chemical Hazards.

6. Other Hazardous Materials

Radioactive materials scheduled for removal or replacement will need to be removed, handled, packaged and disposed of in accordance with all regulations. Refer to Section 02 84 18 Removal and Disposal of Chemical Hazards.

If any ODS are removed or replaced, they will need to be removed, handled, packaged and disposed of in accordance with all regulations. Refer to Section 02 84 18 Removal and Disposal of Chemical Hazards.

If any heat transfer fluids are removed or replaced, they will need to be removed, handled, packaged and disposed of in accordance with all regulations. Refer to Section 02 84 18 Removal and Disposal of Chemical Hazards.

G. LIMITATIONS

The conclusions and recommendations contained in this report are based upon professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted environmental consulting and engineering standards and practices and are subject to the following inherent limitations:

1. Accuracy of Information

The laboratory reports utilized in this assessment were provided by the accredited laboratories cited in this report. Although the conclusions, opinions, and recommendations are based in part, on such information, our services did not include the verification of accuracy or authenticity of such reports. Should such information provided be found to be inaccurate or unreliable, EHS-Alaska, Inc. reserves the right to amend or revise its conclusions, opinions, and/or recommendations.

2. Site Conditions

This limited survey did not include investigation of the entire site and may not be valid outside the survey area. The intent of this survey was to identify common hazardous materials that may be disturbed during the Guest Room renovations. This survey is not intended to be utilized as the sole design document for abatement. This survey was conducted while the site was occupied. All inspections were performed with furniture, equipment and/or stored items in place. The scope of work for this survey did not include identification of all potentially hazardous materials that may be present at this site, and was limited to the scope of work agreed upon with our client. Although a concerted effort was made to identify those common hazardous materials likely to be affected by this project, some hazardous materials may have been hidden by furniture, equipment or stored items and may not have been identified. The survey investigated representative materials and items, such as lights and mechanical components. Variations may occur between materials and items that appear to be the same, but are actually of different construction or materials. Other asbestos-containing or potentially hazardous materials may be present in the facilities that were concealed by structural members, walls, ceilings or floor coverings, or in materials where testing was not conducted.

3. Changing Regulatory Constraints

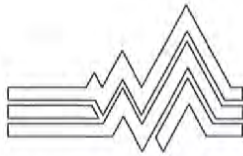
The regulations concerning hazardous materials are constantly changing, including the interpretations of the regulations by the local and national regulating agencies. Should the regulations or their interpretation be changed from our current understanding, EHS-Alaska, Inc. reserves the right to amend or revise its conclusions, opinions, and/or recommendations.

APPENDIX A

Asbestos Bulk Sample Field Survey Data Sheets and Laboratory Reports

RECEIVED

JAN 23 2023



EHS-ALASKA, INC.

EHS ALASKA
INCORPORATED

EHS-Alaska, Inc.

11901 Business Blvd., Suite 208, Eagle River, AK 99577

(907) 694-1383 • (907) 694-1382 fax

e-mail • ehsak@ehs-alaska.com

PROJECT NO: 7953-01	PROJECT NAME: Anch Pioneer Home 3rd Floor Reno	FACILITY: Anchorage Pioneer Home	COLLECTION DATE: 01-04-2023

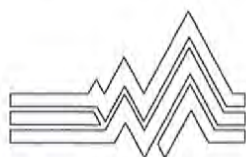
CHAIN OF CUSTODY RECORD

ANALYSIS REQUESTED:	☒ PLM BULK ☐ LEAD DUST ☐ TEM MICROVAC DUST (ASTM 5756)	☐ PLM DUST ☐ LEAD TCLP ☐ LEAD PPM	☐ TEM BULK ☐ LEAD PPM	TYPE:	TURNAROUND:	DISPOSAL:	QUANTITY:
				☒ ASBESTOS ☐ LEAD	2 DAYS	NORMAL	39

COLLECTED BY (signature) Robert A. French PRINTED NAME 1564 88IMP-0028 CERT# / AHERA# 7709 5335 8832 SHIPPING METHOD Fed Ex COURIER (signature) Jan 05, 2023, 11:00 DATE/TIME	IATL SELECTED LABORATORY SAMPLES ACCEPTED BY DATE/TIME ANALYST'S SIGNATURE DATE	SPECIAL INSTRUCTIONS / COMMENTS: LAB: RETURN A SIGNED COPY OF THIS FORM WITH THE FINAL REPORT TO EHS-ALASKA, INC. See sample location drawing for more detailed explanation of exact locations. <i>B. 1.9.23</i> <i>70 asbestos</i>

FIELD SURVEY DATA

EHS SAMPLE NO. LAB ID NO	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/XREF)	RESULTS FOR EHS-ALASKA USE ONLY
PH123-A01 7549544	Gypsum wall board, joint compound, and white sealant	3rd Floor, Room 310, at outlet on common wall. Photo 23 to 25	<i>None Detected</i> <i>Three layers</i>
PH123-A02 7549545	LCT-1, 2' x 2' drop edge ceiling tile with 1.5" directional fissures, & 1/16" random holes.	3rd Floor, Room 308, at soffit by wall. Photo 49 & 50.	<i>None Detected</i>
PH123-A03 7549546	Gray-green ceiling grid "L" channel Mastic.	3rd Floor, Room 308, at soffit by wall. Photo 50 & 51	<i>102% chrysotile</i>
PH123-A04 7549547	4" tan cove base with cream cove base mastic.	3rd Floor, Room 308, on Brick wall. Photo 53	<i>None Detected</i> <i>both layers</i>
PH123-A05 7549548	Yellow carpet mastic	3rd Floor, Room 308, in closet. Photo 54	<i>None Detected</i>
PH123-A06 7549549	Gypsum wall board, joint compound,	3rd Floor, Room 307 at outlet. Photo 62	<i>None Detected</i> <i>both layers</i>
PH123-A07 7549550	4" green cove base with tan and brown cove base mastic. Some gypsum board	3rd Floor, Room 306, at removed cove by entry. Photo 73 & 78	<i>None Detected</i> <i>Four layers</i>
PH123-A08 7549551	Joint compound and tape.	3rd Floor, Room 306, at removed tape by corner near windows. Photo 87	<i>None Detected</i>
PH123-A09 7549552	LCT-2. 2' x 2' drop edge ceiling tile with fewer 1" minus directional fissures with random 1/32" holes.	3rd Floor, Room 305, in bedroom area. Photo 97	<i>None Detected</i>



EHS ALASKA
INCORPORATED

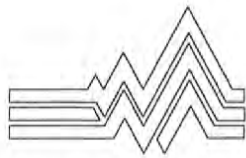
EHS Alaska, Inc.

11901 Business Blvd., Suite 208, Eagle River, AK 99577

(907) 694-1383 • (907) 694-1382 fax

e-mail • ehsak@ehs-alaska.com

PROJECT NO:	PROJECT NAME:	FACILITY:	COLLECTION DATE:
7953-01	Anch Pioneer Home 3rd Floor Reno	Anchorage Pioneer Home	01-04-2023
FIELD SURVEY DATA			
EHS SAMPLE NO. LAB ID NO	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/XREF)	RESULTS FOR EHS-ALASKA USE ONLY
PH123-A10 7549553	LCT-3. 2' x 2' drop edge ceiling tile with no fissures, 1/32" to 1/4" random rough edge holes.	3rd Floor, Room 304, at added soffit. Photo 104 & 106	None Detected
PH123-A11 7549554	LCT-2. 2' x 2' drop edge ceiling tile with fewer 1" minus directional fissures with random 1/32" holes.	3rd Floor, Room 302, in bedroom area. Photo 115	None Detected
PH123-A12 7549555	Cream, self coving, fused seam vinyl flooring, no backing, sticky clear mastic, brown remnant mastic & joint compound.	3rd Floor, Room 338 bathing suite. Behind doorway. Photo 149	None Detected Four layers
PH123-A13 7549556	LCT-4. 2' x 2' drop edge ceiling tile with sandy texture. No holes or fissures	3rd Floor, Room 338 bathing suite. In Bath area. Photo 150	None Detected
PH123-A14 7549557	Joint compound from bathroom remodel <i>lab id'd material as grout</i>	3rd Floor, Room 337.1 Bath. At J box in Ceramic tile wainscoat. Photo 151	None Detected
PH123-A15 7549558	Brown epoxy grit floor	3rd Floor, Room 337.1 Bath. Behind door. Photo 152	None Detected
PH123-A16 7549559	Heavy thick Texture and paint from bathroom remodel <i>lab said materials were not separable</i>	3rd Floor, Room 337.1 Bath. At wall above exhaust grille. Photo 153	None Detected
PH123-A17 7549560	Hard Fitting insulation	3rd Floor, Room 338 bathing suite. Through hole in wall under sink to chase. Photo 154	None Detected
PH123-A18 7549561	Lighter texture and gypsum wall board	3rd Floor, Room 338 bathing suite. At hole in wall under sink to chase. Photo 154	None Detected both layers
PH123-A19 7549562	Lighter texture and gypsum wall board	3rd Floor, Room 338 bathing suite. At J box in main bath area. Photo 158	None Detected both layers
PH123-A20 7549563	4" black cove base with cream and brown mastic. GWB Paper	3rd Floor, Room 337, behind door where cove base removed. Photo 166	None Detected Four layers
PH123-A21 7549564	LCT-1, 2' x 2' drop edge ceiling tile with 1.5" directional fissures, & 1/16" random holes.	3rd Floor, Room 337, at main room. Photo 165	None Detected
PH123-A22 7549565	Cream 1/4" chip sheet vinyl with tan mastic, stuck to black rubber transition strip.	3rd Floor, Room 336.1 Bath, at threshold. Photo 176	20% charcoal in SV. ND in BK rubber, 1.19% C
PH123-A23 7549566	Black paint or black mastic	3rd Floor, Room 336, under carpet at threshold. Photo 176	None Detected



EHS ALASKA
INCORPORATED

EHS/Alaska, Inc.

11901 Business Blvd., Suite 208, Eagle River, AK 99577

(907) 694-1383 • (907) 694-1382 fax

e-mail • ehsak@ehs-alaska.com

PROJECT NO:	PROJECT NAME:	FACILITY:	COLLECTION DATE:
7953-01	Anch Pioneer Home 3rd Floor Reno	Anchorage Pioneer Home	01-04-2023
FIELD SURVEY DATA			
EHS SAMPLE NO. LAB ID NO	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/XREF)	RESULTS FOR EHS-ALASKA USE ONLY
PH123-A24 7549567	Greenish sacking on concrete	3rd Floor, Room 336 at column in closet. Photo 177	None Detected
PH123-A25 7549568	Marlite and tan mastic.	3rd Floor, Room 336.1 at J box near toilet. Photo 178	1.3% Chrys. in Mastic ND - Marlite
PH123-A26 7549569	Black sink undercoating	3rd Floor, Room 349. At stainless steel sink. Photo 185	1.4% chrysotile
PH123-A27 7549570	Silver coated heat shield at light	3rd Floor, Room 332.1 At light in bathroom. Photo 204	30% chrysotile
PH123-A28 7549571	Joint compound	3rd Floor, Room 332.1 At J Box for light switch. Photo 205	1.2% Chrysotile
PH123-A29 7549572	Marlite and tan mastic. <i>Lab also analyzed gypsum wall board</i>	3rd Floor, Room 332.1 at J box near toilet. Photo 178	None Detected Three layers
PH123-A30 7549573	White paint and patch or sacking on concrete <i>Lab indicated that the layers were not separable</i>	3rd Floor, Room 327 at column in closet. Photo 216	None Detected
PH123-A31 7549574	Yellow carpet mastic	3rd Floor, Room 348 at center of main floor. Carpet removed. Photo 227	None Detected
PH123-A32 7549575	LCT-5. 2' x 2' flat ceiling tile with random 3/8" and smaller fissures in circular "Galaxy" pattern	3rd Floor, Room 348 in entry hall. Photo 228	None Detected
PH123-A33 7549576	LCT-2. 2' x 2' drop edge ceiling tile with fewer 1" minus directional fissures with random 1/32" holes.	3rd Floor, Room 348 in entry hall. Photo 228	None Detected
PH123-A34 7549577	Brown epoxy grit floor	3rd Floor, Room 323.1 Bath, behind door. Photo 247	None Detected
PH123-A35 7549578	Lighter texture and gypsum wall board	3rd Floor, Room 324 bathing suite, at Light switch in hallway. Photo 248	None Detected Both layers
PH123-A36 7549579	Lighter texture and gypsum wall board	3rd Floor, Room 324 bathing suite. At J box in main room. Photo 250	None Detected both layers
PH123-A37 7549580	LCT-4. 2' x 2' drop edge ceiling tile with sandy texture. No holes or fissures	3rd Floor, Room 324 bathing suite. In Hall area. Photo 251	None Detected

PROJECT NO:	PROJECT NAME:	FACILITY:	COLLECTION DATE:
7953-01	Anch Pioneer Home 3rd Floor Reno	Anchorage Pioneer Home	01-04-2023

FIELD SURVEY DATA

[illegible]

CERTIFICATE OF ANALYSIS

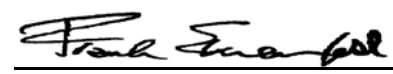
Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 1/9/2023 Report No.: 675882 - PLM Project: Anch Pioneer Home 3rd Floor Reno; Anchorage Pioneer Home Project No.: 7953-01
Client: EHS511	

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7549544 Client No.: PH123-A01	Analyst Observation: White Drywall Client Description: Gypsum Wall Board, Joint Compound and White Sealant	Location: 3rd Floor, Room 310, at Outlet on Common Wall - Photo 23 to 25 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	<u>Percent Non-Fibrous Material:</u> 95
Lab No.: 7549544(L2) Client No.: PH123-A01	Analyst Observation: Tan Joint Compound Client Description: Gypsum Wall Board, Joint Compound and White Sealant	Location: 3rd Floor, Room 310, at Outlet on Common Wall - Photo 23 to 25 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549544(L3) Client No.: PH123-A01	Analyst Observation: Tan Sealant Client Description: Gypsum Wall Board, Joint Compound and White Sealant	Location: 3rd Floor, Room 310, at Outlet on Common Wall - Photo 23 to 25 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549545 Client No.: PH123-A02	Analyst Observation: White Ceiling Tile Client Description: LCT-1, 2'x2' Drop Edge Ceiling Tile With 1.5" Directional Fissures and 1/16" Random Holes	Location: 3rd Floor, Room 308, at Soffit by Wall - Photo 49 and 50 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 60 Cellulose 20 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 20
Lab No.: 7549546 Client No.: PH123-A03	Analyst Observation: Grey Mastic Client Description: Grey-Green Ceiling Grid	Location: 3rd Floor, Room 308, at Soffit by Wall - Photo 50 and 51 Facility:
<u>Percent Asbestos:</u> <i>PC 1.2 Chrysotile</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 98.8
Lab No.: 7549547 Client No.: PH123-A04	Analyst Observation: Tan Cove Base Client Description: 4" Tan Cove Base With Cream Cove Base Mastic	Location: 3rd Floor, Room 308, on Brick Wall - Photo 53 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/6/2023
Date Analyzed: 01/09/2023
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Report Date: 1/9/2023
Report No.: 675882 - PLM
Project: Anch Pioneer Home 3rd Floor Reno;
Anchorage Pioneer Home
Project No.: 7953-01

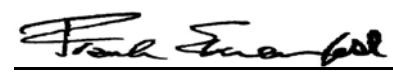
Client: EHS511

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7549547(L2) Client No.: PH123-A04	Analyst Observation: Cream Mastic Client Description: 4" Tan Cove Base With Cream Cove Base Mastic	Location: 3rd Floor, Room 308, on Brick Wall - Photo 53 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549548 Client No.: PH123-A05	Analyst Observation: Yellow Mastic Client Description: Yellow Carpet Mastic	Location: 3rd Floor, Room 308, in Closet - Photo 54 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549549 Client No.: PH123-A06	Analyst Observation: White Drywall Client Description: Gypsum Wall Board, Joint Compound	Location: 3rd Floor, Room 307 at Outlet - Photo 62 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	<u>Percent Non-Fibrous Material:</u> 95
Lab No.: 7549549(L2) Client No.: PH123-A06	Analyst Observation: White Joint Compound Client Description: Gypsum Wall Board, Joint Compound	Location: 3rd Floor, Room 307 at Outlet - Photo 62 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549550 Client No.: PH123-A07	Analyst Observation: Green Cove Base Client Description: 4" Green Cove Base With Tan and Brown Cove Base Mastic. Some Gypsum Board	Location: 3rd Floor, Room 306 at Removed Cove by Entry - Photo 73 and 78 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549550(L2) Client No.: PH123-A07	Analyst Observation: Tan Mastic Client Description: 4" Green Cove Base With Tan and Brown Cove Base Mastic. Some Gypsum Board	Location: 3rd Floor, Room 306 at Removed Cove by Entry - Photo 73 and 78 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/6/2023
Date Analyzed: 01/09/2023
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Report Date: 1/9/2023
Report No.: 675882 - PLM
Project: Anch Pioneer Home 3rd Floor Reno;
Anchorage Pioneer Home
Project No.: 7953-01

Client: EHS511

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7549550(L3)
Client No.: PH123-A07

Analyst Observation: Brown Mastic
Client Description: 4" Green Cove Base With Tan and Brown
Cove Base Mastic. Some Gypsum Board
Percent Non-Asbestos Fibrous Material:
2 Wollastonite

Location: 3rd Floor, Room 306 at Removed
Cove by Entry - Photo 73 and 78
Facility:
Percent Non-Fibrous Material:
98

Percent Asbestos:
None Detected

Lab No.: 7549550(L4)
Client No.: PH123-A07

Analyst Observation: White Drywall
Client Description: 4" Green Cove Base With Tan and Brown
Cove Base Mastic. Some Gypsum Board
Percent Non-Asbestos Fibrous Material:
5 Cellulose

Location: 3rd Floor, Room 306 at Removed
Cove by Entry - Photo 73 and 78
Facility:
Percent Non-Fibrous Material:
95

Percent Asbestos:
None Detected

Note: No joint compound present

Lab No.: 7549551
Client No.: PH123-A08

Analyst Observation: White Joint Compound
Client Description: Joint Compound and Tape

Location: 3rd Floor, Room 306 at Removed
Tape by Corner Near Windows - Photo 87
Facility:
Percent Non-Fibrous Material:
100

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Lab No.: 7549552
Client No.: PH123-A09

Analyst Observation: White Ceiling Tile
Client Description: LCT-2. 2'x2' Drop Edge Ceiling Tile With
Fewer 1" Minus Directional Fissures With Random 1/32"
Holes
Percent Non-Asbestos Fibrous Material:
60 Cellulose
20 Fibrous Glass

Location: 3rd Floor, Room 305, in
Bedroom Area - Photo 97
Facility:
Percent Non-Fibrous Material:
20

Percent Asbestos:
None Detected

Lab No.: 7549553
Client No.: PH123-A10

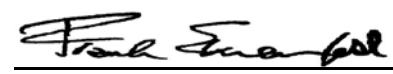
Analyst Observation: White Ceiling Tile
Client Description: LCT-3: 2'x2' Drop Edge Ceiling Tile With
No Fissures, 1/32" to 1/4" Random Rough Edge Holes
Percent Non-Asbestos Fibrous Material:
60 Cellulose
20 Fibrous Glass

Location: 3rd Floor, Room 304, at Added
Soffit - Photo 104 and 106
Facility:
Percent Non-Fibrous Material:
20

Percent Asbestos:
None Detected

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/6/2023
Date Analyzed: 01/09/2023
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

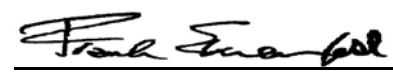
Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 1/9/2023 Report No.: 675882 - PLM Project: Anch Pioneer Home 3rd Floor Reno; Anchorage Pioneer Home Project No.: 7953-01
Client: EHS511	

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7549554 Client No.: PH123-A11	Analyst Observation: White Ceiling Tile Client Description: LCT-2: 2'x2' Drop Edge Ceiling Tile With Fewer 1" Minus Directional Fissures With Random 1/32" Holes	Location: 3rd Floor, Room 302, in Bedroom Area - Photo 115 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 60 Cellulose 20 Fibrous Glass	<u>Percent Non-Fibrous Material:</u> 20
Lab No.: 7549555 Client No.: PH123-A12	Analyst Observation: Grey Vinyl Sheet Flooring Client Description: Cream, Self Coving, Fused Seam Vinyl Flooring, No Backing, Sticky Clear Mastic, Brown Remnant Mastic	Location: 3rd Floor, Room 338 Bathing Suite. Behind Doorway - Photo 149 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549555(L2) Client No.: PH123-A12	Analyst Observation: Clear/Yellow Mastic Client Description: Cream, Self Coving, Fused Seam Vinyl Flooring, No Backing, Sticky Clear Mastic, Brown Remnant Mastic	Location: 3rd Floor, Room 338 Bathing Suite. Behind Doorway - Photo 149 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549555(L3) Client No.: PH123-A12	Analyst Observation: Brown Mastic Client Description: Cream, Self Coving, Fused Seam Vinyl Flooring, No Backing, Sticky Clear Mastic, Brown Remnant Mastic	Location: 3rd Floor, Room 338 Bathing Suite. Behind Doorway - Photo 149 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549555(L4) Client No.: PH123-A12	Analyst Observation: White Joint Compound Client Description: Cream, Self Coving, Fused Seam Vinyl Flooring, No Backing, Sticky Clear Mastic, Brown Remnant Mastic	Location: 3rd Floor, Room 338 Bathing Suite. Behind Doorway - Photo 149 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/6/2023
Date Analyzed: 01/09/2023
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Report Date: 1/9/2023
Report No.: 675882 - PLM
Project: Anch Pioneer Home 3rd Floor Reno;
Anchorage Pioneer Home
Project No.: 7953-01

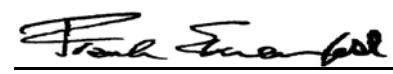
Client: EHS511

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7549556 Client No.: PH123-A13 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Ceiling Tile Client Description: LCT-4: 2'x2' Drop Edge Ceiling Tile With Sandy Texture, No Holes or Fissures <u>Percent Non-Asbestos Fibrous Material:</u> 20 Cellulose 40 Fibrous Glass	Location: 3rd Floor, Room 338 Bathing Suite. In Bath Area - Photo 150 Facility: <u>Percent Non-Fibrous Material:</u> 40
Lab No.: 7549557 Client No.: PH123-A14 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Grout Client Description: Joint Compound From Bathroom Remodel <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 3rd Floor, Room 337. 1 Bath. At J Box in Ceramic Tile Wainscoat - Photo 151 Facility: <u>Percent Non-Fibrous Material:</u> 100
<u>Different Material analyzed than listed on the sample log.</u>		
Lab No.: 7549558 Client No.: PH123-A15 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Brown Floor Coating Client Description: Brown Epoxy Grit Floor <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 3rd Floor, Room 337. 1 Bath. Behind Door - Photo 152 Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549559 Client No.: PH123-A16 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Tan Paint/Texture Client Description: Heavy Thick Texture and Paint From Bathroom Remodel <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 3rd Floor, Room 337. 1 Bath. At Wall Above Exhaust Grille - Photo 153 Facility: <u>Percent Non-Fibrous Material:</u> 100
<u>Layers not separable.</u>		
Lab No.: 7549560 Client No.: PH123-A17 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Off-White Insulation Client Description: Hard Fitting Insulation <u>Percent Non-Asbestos Fibrous Material:</u> 15 Cellulose	Location: 3rd Floor, Room 338 Bathing Suite. Through Hole in Wall Under Sink to Chase - Photo 154 Facility: <u>Percent Non-Fibrous Material:</u> 85

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/6/2023
Date Analyzed: 01/09/2023
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

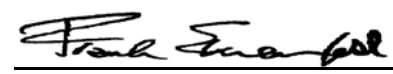
Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 1/9/2023 Report No.: 675882 - PLM Project: Anch Pioneer Home 3rd Floor Reno; Anchorage Pioneer Home Project No.: 7953-01
Client: EHS511	

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7549561 Client No.: PH123-A18	Analyst Observation: White Drywall Client Description: Lighter Texture and Gypsum Wall Board	Location: 3rd Floor, Room 338 Bathing Suite. At Hole in Wall Under Sink to Chase - Photo 154 Facility: <u>Percent Non-Fibrous Material:</u> 95
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	
Note: No joint compound present		
Lab No.: 7549561(L2) Client No.: PH123-A18	Analyst Observation: White Texture Client Description: Lighter Texture and Gypsum Wall Board	Location: 3rd Floor, Room 338 Bathing Suite. At Hole in Wall Under Sink to Chase - Photo 154 Facility: <u>Percent Non-Fibrous Material:</u> 100
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	
Lab No.: 7549562 Client No.: PH123-A19	Analyst Observation: White Drywall Client Description: Lighter Texture and Gypsum Wall Board	Location: 3rd Floor, Room 338 Bathing Suite. At J Box in Main Bath Area - Photo 158 Facility: <u>Percent Non-Fibrous Material:</u> 95
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	
Note: No joint compound present		
Lab No.: 7549562(L2) Client No.: PH123-A19	Analyst Observation: White Texture Client Description: Lighter Texture and Gypsum Wall Board	Location: 3rd Floor, Room 338 Bathing Suite. At J Box in Main Bath Area - Photo 158 Facility: <u>Percent Non-Fibrous Material:</u> 98
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 2 Cellulose	
Lab No.: 7549563 Client No.: PH123-A20	Analyst Observation: Black Cove Base Client Description: 4" Black Cove Base With Cream and Brown Mastic. GWB Paper	Location: 3rd Floor, Room 337. Behind Door Where Cove Base Removed - Photo 166 Facility: <u>Percent Non-Fibrous Material:</u> 100
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/6/2023
Date Analyzed: 01/09/2023
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Report Date: 1/9/2023
Report No.: 675882 - PLM
Project: Anch Pioneer Home 3rd Floor Reno;
Anchorage Pioneer Home
Project No.: 7953-01

Client: EHS511

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7549563(L2)
Client No.: PH123-A20

Analyst Observation: Cream Mastic
Client Description: 4" Black Cove Base With Cream and Brown Mastic. GWB Paper

Location: 3rd Floor, Room 337. Behind Door Where Cove Base Removed - Photo 166

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7549563(L3)
Client No.: PH123-A20

Analyst Observation: Brown Mastic
Client Description: 4" Black Cove Base With Cream and Brown Mastic. GWB Paper

Location: 3rd Floor, Room 337. Behind Door Where Cove Base Removed - Photo 166

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7549563(L4)
Client No.: PH123-A20

Analyst Observation: Brown Paper
Client Description: 4" Black Cove Base With Cream and Brown Mastic. GWB Paper

Location: 3rd Floor, Room 337. Behind Door Where Cove Base Removed - Photo 166

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
100 Cellulose

Facility:
Percent Non-Fibrous Material:
None Detected

Lab No.: 7549564
Client No.: PH123-A21

Analyst Observation: White Ceiling Tile
Client Description: LCT-1: 2'x2' Drop Edge Ceiling Tile With 1.5" Directional Fissures and 1/16" Random Holes
Percent Non-Asbestos Fibrous Material:
60 Cellulose
20 Fibrous Glass

Location: 3rd Floor, Room 337, at Main Room - Photo 165

Percent Asbestos:
None Detected

Facility:
Percent Non-Fibrous Material:
20

Lab No.: 7549565
Client No.: PH123-A22

Analyst Observation: Off-White Vinyl Sheet Flooring
Client Description: Cream 1/4" Chip Sheet Vinyl With Tan Mastic, Stuck to Black Rubber Transition Strip
Percent Non-Asbestos Fibrous Material:
None Detected

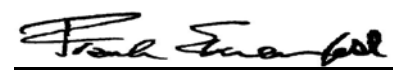
Location: 3rd Floor, Room 336. 1 Bath, at Threshold - Photo 176

Percent Asbestos:
20 Chrysotile

Facility:
Percent Non-Fibrous Material:
80

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/6/2023
Date Analyzed: 01/09/2023
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

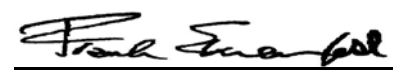
Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577 Client: EHS511	Report Date: 1/9/2023 Report No.: 675882 - PLM Project: Anch Pioneer Home 3rd Floor Reno; Anchorage Pioneer Home Project No.: 7953-01

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7549565(L2) Client No.: PH123-A22 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Black Rubber Client Description: Cream 1/4" Chip Sheet Vinyl With Tan Mastic, Stuck to Black Rubber Transition Strip <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 3rd Floor, Room 336. 1 Bath, at Threshold - Photo 176 Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549565(L3) Client No.: PH123-A22 <u>Percent Asbestos:</u> <i>PC 1.1 Chrysotile</i>	Analyst Observation: Tan Mastic Client Description: Cream 1/4" Chip Sheet Vinyl With Tan Mastic, Stuck to Black Rubber Transition Strip <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 3rd Floor, Room 336. 1 Bath, at Threshold - Photo 176 Facility: <u>Percent Non-Fibrous Material:</u> 98.9
Lab No.: 7549566 Client No.: PH123-A23 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Black Mastic Client Description: Black Paint or Black Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 3rd Floor, Room 336, Under Carpet at Threshold - Photo 176 Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549567 Client No.: PH123-A24 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Grey Cementitious Client Description: Greenish Sacking on Concrete <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 3rd Floor, Room 336 at Column in Closet - Photo 177 Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549568 Client No.: PH123-A25 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Brown Panel Client Description: Marlite and Tan Mastic <u>Percent Non-Asbestos Fibrous Material:</u> 100 Cellulose	Location: 3rd Floor, Room 336 . 1 at J Box Near Toilet - Photo 178 Facility: <u>Percent Non-Fibrous Material:</u> None Detected
Lab No.: 7549568(L2) Client No.: PH123-A25 <u>Percent Asbestos:</u> <i>PC 1.3 Chrysotile</i>	Analyst Observation: Tan Mastic Client Description: Marlite and Tan Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 3rd Floor, Room 336 . 1 at J Box Near Toilet - Photo 178 Facility: <u>Percent Non-Fibrous Material:</u> 98.7

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/6/2023
 Date Analyzed: 01/09/2023
 Signature: 
 Analyst: Aidan Becker

Approved By: 
 Frank E. Ehrenfeld, III
 Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Report Date: 1/9/2023
Report No.: 675882 - PLM
Project: Anch Pioneer Home 3rd Floor Reno;
Anchorage Pioneer Home
Project No.: 7953-01

Client: EHS511

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7549569
Client No.: PH123-A26

Analyst Observation: Black Undercoating
Client Description: Black Sink Undercoating

Location: 3rd Floor, Room 349. At
Stainless Steel Sink - Photo 185
Facility:

Percent Asbestos:
PC 1.4 Chrysotile

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
98.6

Lab No.: 7549570
Client No.: PH123-A27

Analyst Observation: Off-White Insulation
Client Description: Silver Coated Heat Shield at Light

Location: 3rd Floor, Room 332. 1 At Light
in Bathroom - Photo 204
Facility:

Percent Asbestos:
30 Chrysotile

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
70

Lab No.: 7549571
Client No.: PH123-A28

Analyst Observation: Tan Joint Compound
Client Description: Joint Compound

Location: 3rd Floor, Room 332. 1 At J Box
for Light Switch - Photo 205
Facility:

Percent Asbestos:
PC 1.2 Chrysotile

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
98.8

Lab No.: 7549572
Client No.: PH123-A29

Analyst Observation: Brown Panel
Client Description: Marlite and Tan Mastic

Location: 3rd Floor, Room 332. 1 At J Box
Near Toilet - Photo 178
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
100 Cellulose

Percent Non-Fibrous Material:
None Detected

Lab No.: 7549572(L2)
Client No.: PH123-A29

Analyst Observation: Tan Mastic
Client Description: Marlite and Tan Mastic

Location: 3rd Floor, Room 332. 1 At J Box
Near Toilet - Photo 178
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7549572(L3)
Client No.: PH123-A29

Analyst Observation: White Drywall
Client Description: Marlite and Tan Mastic

Location: 3rd Floor, Room 332. 1 At J Box
Near Toilet - Photo 178
Facility:

Percent Asbestos:
None Detected

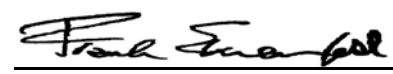
Percent Non-Asbestos Fibrous Material:
5 Cellulose

Percent Non-Fibrous Material:
95

Note: No joint compound present

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/6/2023
Date Analyzed: 01/09/2023
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Report Date: 1/9/2023
Report No.: 675882 - PLM
Project: Anch Pioneer Home 3rd Floor Reno;
Anchorage Pioneer Home
Project No.: 7953-01

Client: EHS511

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7549573
Client No.: PH123-A30

Analyst Observation: White/Grey Paint/Cementitious
Client Description: White Paint and Patch or Sacking on
Concrete
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected

Location: 3rd Floor, Room 327 at Column
in Closet - Photo 216
Facility:
Percent Non-Fibrous Material:
100

Layers not separable.

Lab No.: 7549574
Client No.: PH123-A31

Analyst Observation: Yellow Mastic
Client Description: Yellow Carpet Mastic
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected

Location: 3rd Floor, Room 348 at Center of
Main Floor. Carpet Removed - Photo 227
Facility:
Percent Non-Fibrous Material:
100

Lab No.: 7549575
Client No.: PH123-A32

Analyst Observation: White Ceiling Tile
Client Description: LCT-5: 2'x2' Flat Ceiling Tile With
Random 3/8" and Smaller Fissures in Circular "Galaxy"
Pattern
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
60 Cellulose
20 Fibrous Glass

Location: 3rd Floor, Room 348 in Entry
Hall - Photo 228
Facility:
Percent Non-Fibrous Material:
20

Lab No.: 7549576
Client No.: PH123-A33

Analyst Observation: White Ceiling Tile
Client Description: LCT-2: 2'x2' Drop Edge Ceiling Tile With
Fewer 1" Minus Directional Fissures With Random 1/32 Holes
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
60 Cellulose
20 Fibrous Glass

Location: 3rd Floor, Room 348 in Entry
Hall - Photo 228
Facility:
Percent Non-Fibrous Material:
20

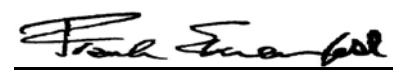
Lab No.: 7549577
Client No.: PH123-A34

Analyst Observation: Brown Floor Coating
Client Description: Brown Epoxy Grit Floor
Percent Asbestos:
None Detected
Percent Non-Asbestos Fibrous Material:
None Detected

Location: 3rd Floor, Room 323. 1 Bath,
Behind Door - Photo 247
Facility:
Percent Non-Fibrous Material:
100

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/6/2023
Date Analyzed: 01/09/2023
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

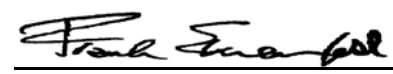
Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577 Client: EHS511	Report Date: 1/9/2023 Report No.: 675882 - PLM Project: Anch Pioneer Home 3rd Floor Reno; Anchorage Pioneer Home Project No.: 7953-01

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7549578 Client No.: PH123-A35 <u>Percent Asbestos:</u> <i>None Detected</i> Note: No drywall present.	Analyst Observation: White Joint Compound Client Description: Lighter Texture and Gypsum Wall Board <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 3rd Floor, Room 324 Bathing Suite at Light Switch in Hallway - Photo 248 Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549578(L2) Client No.: PH123-A35 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Texture Client Description: Lighter Texture and Gypsum Wall Board <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 3rd Floor, Room 324 Bathing Suite at Light Switch in Hallway - Photo 248 Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549579 Client No.: PH123-A36 <u>Percent Asbestos:</u> <i>None Detected</i> Note: No joint compound present	Analyst Observation: White Drywall Client Description: Lighter Texture and Gypsum Wall Board <u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	Location: 3rd Floor, Room 324 Bathing Suite. At J Box in Main Room - Photo 250 Facility: <u>Percent Non-Fibrous Material:</u> 95
Lab No.: 7549579(L2) Client No.: PH123-A36 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Texture Client Description: Lighter Texture and Gypsum Wall Board <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: 3rd Floor, Room 324 Bathing Suite. At J Box in Main Room - Photo 250 Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7549580 Client No.: PH123-A37 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Ceiling Tile Client Description: LCT-4: Drop Edge Ceiling Tile with Sandy Texture. No Holes or Fissures <u>Percent Non-Asbestos Fibrous Material:</u> 60 Cellulose 20 Fibrous Glass	Location: 3rd Floor, Room 324 Bathing Suite. In Hall Area - Photo 251 Facility: <u>Percent Non-Fibrous Material:</u> 20

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/6/2023
 Date Analyzed: 01/09/2023
 Signature: 
 Analyst: Aidan Becker

Approved By: 
 Frank E. Ehrenfeld, III
 Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Report Date: 1/9/2023
Report No.: 675882 - PLM
Project: Anch Pioneer Home 3rd Floor Reno;
Anchorage Pioneer Home
Project No.: 7953-01

Client: EHS511

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7549581
Client No.: PH123-A38

Analyst Observation: Grey Vinyl Sheet Flooring
Client Description: Cream, Self Coving, Fused Seam Vinyl Flooring, No Backing, Sticky Clear Mastic, Brown Remnant Mastic

Location: 3rd Floor, Room 324 Bathing Suite. Behind Door - Photo 249
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7549581(L2)
Client No.: PH123-A38

Analyst Observation: Clear/Yellow Mastic
Client Description: Cream, Self Coving, Fused Seam Vinyl Flooring, No Backing, Sticky Clear Mastic, Brown Remnant Mastic

Location: 3rd Floor, Room 324 Bathing Suite. Behind Door - Photo 249
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
None Detected

Percent Non-Fibrous Material:
100

Lab No.: 7549581(L3)
Client No.: PH123-A38

Analyst Observation: Brown Mastic
Client Description: Cream, Self Coving, Fused Seam Vinyl Flooring, No Backing, Sticky Clear Mastic, Brown Remnant Mastic

Location: 3rd Floor, Room 324 Bathing Suite. Behind Door - Photo 249
Facility:

Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
2 Wollastonite

Percent Non-Fibrous Material:
98

Lab No.: 7549582
Client No.: PH123-A39

Analyst Observation: White Ceiling Tile
Client Description: LCT-2: 2'x2' Drop Edge Ceiling Tile With Fewer 1" Minus Directional Fissures With Random 1/32" Holes

Location: 3rd Floor, Room 349 in Entry Hall. Photo 314
Facility:

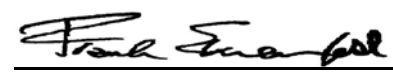
Percent Asbestos:
None Detected

Percent Non-Asbestos Fibrous Material:
60 Cellulose
20 Fibrous Glass

Percent Non-Fibrous Material:
20

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 1/6/2023
Date Analyzed: 01/09/2023
Signature: 
Analyst: Aidan Becker

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Report Date: 1/9/2023
Report No.: 675882 - PLM
Project: Anch Pioneer Home 3rd Floor Reno;
Anchorage Pioneer Home
Project No.: 7953-01

Client: EHS511

Appendix to Analytical Report

Customer Contact: Cali Swatowski

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, USEPA 600, R93-116 and NYSDOH ELAP 198.1 as needed.

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Semih Kocahasan

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Bulk Building Materials

Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

Information Pertinent to this Report:

Analysis by US EPA 600 93-116: Determination of Asbestos in Bulk Building Materials by Polarized Light Microscopy (PLM).

Certifications:

- NIST-NVLAP No. 101165-0
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. PC Trace represents a <0.25% amount. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analytical Methodology Alternatives: Your initial request for analysis may not have accounted for recent advances in regulatory requirements or advances in technology that are routinely used in similar situations for other qualified projects. You may have the option to explore additional analysis for further information. Below are a few options, listed as the matrix followed by the appropriate methodology. Also included are links to more information on our website.

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB) See additional information at the end of this appendix.

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Report Date: 1/9/2023
Report No.: 675882 - PLM
Project: Anch Pioneer Home 3rd Floor Reno;
Anchorage Pioneer Home
Project No.: 7953-01

Client: EHS511

Loose Fill Vermiculite Insulation, Attic Insulation, Zonolite (copyright), etc.: US EPA 600 R-4/004 (multi-tiered analytical process)
Sprayed On Insulation/Fireproofing with Vermiculite (SOF-V): ELAP 198.8 (PLM-SOF-V)

Soil, sludge, sediment, aggregate, and like materials analyzed for asbestos or other elongated mineral particles (ex. erionite, etc.): ASTM D7521, CARB 435, and other options available

Asbestos in Surface Dust according to one of ASTM's Methods (very dependent on sampling collection technique – by TEM): ASTM D 5755, D5756, or D6480

Various other asbestos matrices (air, water, etc.) and analytical methods are available.

Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a list with highlighted disclaimers that may be pertinent to this project. For a full explanation of these and other disclaimers, please inquire at customerservice@iatl.com.

- 1) Note: No mastic provided for analysis.
- 2) Note: Insufficient mastic provided for analysis.
- 3) Note: Insufficient material provided for analysis.
- 4) Note: Insufficient sample provided for QC reanalysis.
- 5) Note: Different material than indicated on Sample Log / Description.
- 6) Note: Sample not submitted.
- 7) Note: Attached to asbestos containing material.
- 8) Note: Received wet.
- 9) Note: Possible surface contamination.
- 10) Note: Not building material. 1% threshold may not apply.
- 11) Note: Recommend TEM-NOB analysis as per EPA recommendations.
- 12) Note: Asbestos detected but not quantifiable.
- 13) Note: Multiple identical samples submitted, only one analyzed.
- 14) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.080%.
- 15) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.125%.
- 16) Note: This sample contains >10% vermiculite mineral. See Appendix for Recommendations for Vermiculite Analysis.

Recommendations for Vermiculite Analysis:

Several analytical protocols exist for the analysis of asbestos in vermiculite. These analytical approaches vary depending upon the nature of the vermiculite mineral being tested (e.g. un-processed gänge, homogeneous exfoliated books of mica, or mixed mineral composites). Please contact your client representative for pricing and turnaround time options available.

iATL recommends initial testing using the EPA 600/R-93/116 method. This method is specifically designed for the analysis of asbestos in bulk building materials. It provides an acceptable starting point for primary screening of vermiculite for possible asbestos.

Results from this testing may be inconclusive. EPA suggests proceeding to a multi-tiered analysis involving wet separation techniques in conjunction with PLM and TEM gravimetric analysis (EPA 600/R-04/004).

For New York State customers, NYSDOH requires disclaimers and qualifiers for various vermiculite containing samples that direct analysis via ELAP198.6 and ELAP198.8 for samples that contain >10% vermiculite mineral where ELAP198.6 may be used to evaluate the asbestos content of the material. However, any test result using ELAP198.6 will be reported with the following disclaimer: "ELAP198.6 method does not remove vermiculite and may underestimate the level of asbestos present in a sample containing >10% vermiculite."

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

The following is a summary of the analytical process outlines in the EPA 600/R-04/004 Method:

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577 Client: EHS511	Report Date: 1/9/2023 Report No.: 675882 - PLM Project: Anch Pioneer Home 3rd Floor Reno; Anchorage Pioneer Home Project No.: 7953-01

2)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

3)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Floats" only.

4)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

5)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Suspension" only.
*With advance notice and confirmation by the laboratory.

**Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).

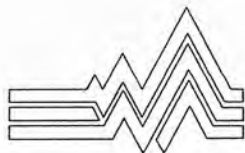
New York State Department of Health requires that samples originating from NYS that they categorize as Non-friable Organically Bound materials can only be confirmed as None Detected for asbestos by method 198.4. See the table below for a list of those materials. (ENVIRONMENTAL LABORATORY APPROVAL PROGRAM CERTIFICATION MANUAL - ITEM No. 198.1, Revision Date 5/6/16)

*Asphalt Shingles, Caulking, Ceiling Tiles with Cellulose, Duct Wrap, Glazing, Mastic, Paint Chips, Resilient Floor Tiles, Rubberized Asbestos Gaskets, Siding Shingles, Vinyl Asbestos Tile, NOB materials (other than SM-V) with <10% vermiculite, Any material (Friable or NOB other than SM-V) with >10% vermiculite.

Statistically derived uncertainty with any measure should be taken into consideration when reviewing and interpreting all reported data and results. A more comprehensive listing of accuracy, precision, and uncertainty as it impacts this method is available upon request.

RECEIVED

SEP 18 2020



EHS-ALASKA, INC.

EHS ALASKA
INCORPORATED

EHS-Alaska, Inc.

11901 Business Blvd., Suite 208, Eagle River, AK 99577

(907) 694-1383 • (907) 694-1382 fax

e-mail • ehsak@ehs-alaska.com

PROJECT NO: 7787-02	PROJECT NAME: Anch Pioneer Home 4th Floor Reno	FACILITY: Anchorage Pioneer Home	COLLECTION DATE: 08-31-2020

CHAIN OF CUSTODY RECORD

ANALYSIS REQUESTED:	☒ PLM BULK ☐ LEAD DUST ☐ TEM MICROVAC DUST (ASTM 5756)	☐ PLM DUST ☐ LEAD TCLP ☐ TEM BULK ☐ LEAD PPM	TYPE: ☒ ASBESTOS ☐ LEAD	TURNAROUND: 3 DAYS	DISPOSAL: NORMAL	QUANTITY: 55

COLLECTED BY (signature) Robert A. French PRINTED NAME 1564 88IMP-0028 CERT# / AHERA# 7714 4343 2984 SHIPPING METHOD Fed Ex COURIER (signature) Sept 3, 2020, 13:40 DATE/TIME	IATL SELECTED LABORATORY SAMPLES ACCEPTED BY DATE/TIME ANALYST'S SIGNATURE DATE 9/4/20	SPECIAL INSTRUCTIONS / COMMENTS: LAB: RETURN A SIGNED COPY OF THIS FORM WITH THE FINAL REPORT TO EHS-ALASKA, INC. See sample location drawing for more detailed explanation of exact locations. <i>70 Asbestos</i>

FIELD SURVEY DATA

EHS SAMPLE NO. LAB ID NO	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/XREF)	RESULTS FOR EHS-ALASKA USE ONLY
PH820-A01	Cement Board sandwich panel	Orig. Rm 410, under window, behind the fin tube enclosure. Photos 167-169 <i>2.6% Chrys, 1.4% Crocid.</i>	7058697
PH820-A02	Joint compound	Orig. Rm 410, At edge of hallway to room. Previous damage. Photo 170 <i>None Detected</i>	7058698
PH820-A03	Joint compound, white and brown cove base mastics	Orig. Rm 410, at corner of wall between bathroom and sink area. Photo 171 & 172 <i>None Detected Both layers</i>	7058699
PH820-A04	Hard Fitting Insulation	Orig. Rm 409.1, inside Sink Chase. Photo 174 <i>None Detected</i>	7058691
PH820-A05	Glob smeared on wall stud. Likely Joint compound, possibly HF insul.	Orig. Rm 409.1, inside Sink Chase. Photo 174 <i>None Detected</i>	7058692
PH820-A06	Yellow and green carpet mastic	Orig. Rm 410, near closet & dividing wall, Photo 175 <i>None Detected</i>	7058693
PH820-A07	Hard Fitting Insulation	Orig. Rm 409.1, in Tub Chase. Photo 189 & 190 <i>None Detected</i>	7058694
PH820-A08	Light yellow Marlite Mastic & white faced Marlite	Orig. Rm 409.1, at Tub Wall. Photo 191 <i>None Detected Both layers</i>	7058695
PH820-A09	Gypsum wall board	Orig. Rm 409.1, at Tub Wall. Photo 192 <i>None Detected</i>	7058696



EHS ALASKA
INCORPORATED

EHS Alaska, Inc.

11901 Business Blvd., Suite 208, Eagle River, AK 99577

(907) 694-1383 • (907) 694-1382 fax

e-mail • ehsak@ehs-alaska.com

PROJECT NO: 7787-02	PROJECT NAME: Anch Pioneer Home 4th Floor Reno	FACILITY: Anchorage Pioneer Home	COLLECTION DATE: 08-31-2020

FIELD SURVEY DATA

EHS SAMPLE NO. LAB ID NO	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/XREF)	RESULTS FOR EHS-ALASKA USE ONLY
PH820-A10	SV-1 Sheet Vinyl. 3/8" Cream, gray & tan chip SV, with tan mastic & gb paper	Orig. Rm 409.1, at Tub Wall. Photo 191 & 192 <i>in SV - None Detected 2 layers</i>	<i>60% Chry</i> 7058697
PH820-A11	Paint with possible sacking, on concrete ceiling above drop ceiling.	Orig. Rm 410, Just inside entrance to bedroom. Photo 193 <i>None Detected</i>	7058698
PH820-A12	Tan ceiling grid mastic	Orig. Rm 410, West wall by closet. Photo 194 & 195 <i>1.2% Chrysotile</i>	7058699
PH820-A13	Asbestos Heat shield in original incandescent light fixture	Orig. Rm 409, in Bedroom Portion. Wires assumed to have ACM insul. Photo 203 <i>80% Chrysotile</i>	7058700
PH820-A14	LCT-1, 2x2 Galaxy Pattern lay in ceiling tile	Orig. Rm 410, in Bedroom. Photo 207 <i>None Detected</i>	7058701
PH820-A15	LCT-2, 2x2 drop beveled edge Galaxy pattern lay-in ceiling tile	Orig. Rm 409.1, at ceiling of bathroom. Photo 208 <i>None Detected</i>	7058702
PH820-A16	LCT-3, 2x2 drop beveled edge medium directional fissures with 1/16" holes. Appears to be oldest ceiling tile.	Orig. Rm 409.1, at ceiling of bathroom. Photo 208 & 209 <i>None Detected</i>	7058703
PH820-A17	LCT-3, 2x2 drop beveled edge medium directional fissures with 1/16" holes. Appears to be oldest ceiling tile.	Orig. Rm 409, at ceiling of Bedroom. Photo 210 <i>None Detected</i>	7058704
PH820-A18	Dark Gray-Green ceiling grid mastic	Ph. 2. Rm 407, West wall. Photo 232 <i>1.4% Chrysotile</i>	7058705
PH820-A19	Brown Mirror Mastic and gb paper	Ph. 2. Rm 407, at sink area. Photo 233 <i>1.8% Chrysotile Mastic - ND in paper</i>	7058706
PH820-A20	Tan "liquid nails" type adhesive at Metal Trim at ceiling on concrete	Ph. 2. Rm 407, near window in Alcove. Photo 235 <i>1.2% Chrysotile</i>	7058707
PH820-A21	Cream colored, soft sealant at top of gyp bd joint to concrete ceiling	Ph. 2. Rm 407, west wall of Bedroom. Photo 236 <i>None Detected</i>	7058708
PH820-A22	Light brown mastic between Marlite and Green board GWB	Ph. 2. Rm 407.1. At Tub/toilet wall. Photo 237 <i>1.8% Chrysotile</i>	7058709
PH820-A23	Joint compound and green board GWB	Ph. 2. Rm 407.1. At Tub/toilet wall. Photo 238 <i>None Detected both layers</i>	7058710



EHS ALASKA
INCORPORATED

EHS Alaska, Inc.

11901 Business Blvd., Suite 208, Eagle River, AK 99577

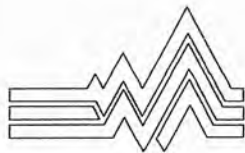
(907) 694-1383 • (907) 694-1382 fax

e-mail • ehsak@ehs-alaska.com

PROJECT NO: 7787-02	PROJECT NAME: Anch Pioneer Home 4th Floor Reno	FACILITY: Anchorage Pioneer Home	COLLECTION DATE: 08-31-2020

FIELD SURVEY DATA

EHS SAMPLE NO. LAB ID NO	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/XREF)	RESULTS FOR EHS-ALASKA USE ONLY
PH820-A24	Hard fitting insulation	Ph. 2. Rm 407.1. In Sink Chase. Photo 240 <i>None Detected</i>	7058711
PH820-A25	Likely hard fitting insulation glob on floor of chase.	Ph. 2. Rm 407.1. In Tub/toilet wall. Photo 243 <i>None Detected</i>	7058712
PH820-A26	Gray-greenish sacking on concrete column	Ph. 2. Rm 407, Column in Closet. Photo 247 <i>None Detected</i>	7058713
PH820-A27	Gray-greenish sacking on concrete column	Ph. 2. Rm 436, Column in Closet. Photo 264 <i>None Detected</i>	7058714
PH820-A28	Hard fitting insulation	Ph. 2. Rm 436.1, In Tub chase. Loose on floor of chase. Photo 168 <i>None Detected</i>	7058715
PH820-A29	Light brown mastic between Marlite and Green board GWB	Ph. 2. Rm 436.1, At Tub/toilet wall. Photo 270 <i>1.8% chrysotile</i>	7058716
PH820-A30	Green Board GWB	Ph. 2. Rm 436.1, At Tub/toilet wall. Photo 269 <i>None Detected</i>	7058717
PH820-A31	Black Sink Undercoating	Ph. 2. Rm 449. At stainless steel sink in Office. Photo 293 <i>1.6% chrysotile</i>	7058718
PH820-A32	LCT-3, 2x2 drop beveled edge medium directional fissures with 1/16" holes. Appears to be oldest ceiling tile.	Ph. 2. Rm 449. At window alcove in Office. Photo 299 <i>None Detected</i>	7058719
PH820-A33	Hard fitting insulation	Ph. 2. Rm 449. On piping above window alcove in Office. Photo 290 <i>None Detected</i>	7058720
PH820-A34	Dark Gray ceiling grid mastic	Ph. 2. Rm 449. On east wall in window alcove in Office. Photo 297 <i>1.6% chrysotile</i>	7058721
PH820-A35	Probably newer joint compound	Ph. 2. Rm 449. On what appears to be an added gwb on ext wall in window alcove in Office. Photo 298 <i>None Detected</i>	7058722
PH820-A36	Probably older joint compound	Ph. 2. Rm 449. below added gwb on ext wall near window alcove in Office. Photo 300 & 302 <i>1.4% Chrysotile</i>	7058723
PH820-A37	Asbestos wire insulation	Ph. 2. Rm 449. At recessed ceiling spotlight. Photo 303 & 304 <i>80% chrysotile</i>	7058724



EHS ALASKA
INCORPORATED

EHS, Alaska, Inc.

11901 Business Blvd., Suite 208, Eagle River, AK 99577

(907) 694-1383 • (907) 694-1382 fax

e-mail • ehsak@ehs-alaska.com

PROJECT NO: 7787-02	PROJECT NAME: Anch Pioneer Home 4th Floor Reno	FACILITY: Anchorage Pioneer Home	COLLECTION DATE: 08-31-2020

FIELD SURVEY DATA

EHS SAMPLE NO. LAB ID NO	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/XREF)	RESULTS FOR EHS-ALASKA USE ONLY
PH820-A38	LCT-4 2x2 drop bevel, fewer directional fissures, less 1/16" holes	Ph. 2. Rm 449. At room ceiling. Photo 305 <i>None Detected</i>	7058725
PH820-A39	Newer GWB & JC inside added closet	Ph. 2. Hallway outside Rm 449. In corner of wall. Photo 307 <i>None Detected Both layers</i>	7058726
PH820-A40	LCT-5 2x4 Galaxy pattern, typical new ceiling throughout corridor	Orig area. Corridor 461. Near double doors to Lounge 456. Photo 309 <i>None Detected</i>	7058727
PH820-A41	Ceramic fiber heat shield	Ph. 2. Rm 406. At newer surface mtd light. Photo 319, 320, 321 <i>None Detected Both layers</i>	7058728
PH820-A42	Gypsum wall board and Joint Compound	Ph. 2. Rm 406. Inside corner of Closet. Photo 322 <i>None Detected Both layers</i>	7058729
PH820-A43	Tan carpet mastic	Ph. 2. Rm 404. Inside Closet. Photo 343 <i>None Detected</i>	7058730
PH820-A44	Light tan and dark brown cove base mastics	Ph. 2. Rm 404. Inside Closet. Photo 344 <i>None Detected Both layers</i>	7058731
PH820-A45	Light brown mastic between Marlite and Green board GWB	Ph. 2. Rm 403.1, At Tub/toilet wall. Photo BH01 <i>2.2% Chrysotile, ND in GWB</i>	7058732
PH820-A46	Dark Gray ceiling grid mastic	Ph. 2. Rm 401. At exterior wall by windows. Photo BH02 <i>1.4% Chrysotile</i>	7058733
PH820-A47	Probably newer joint compound	Ph. 2. Rm 401. On what appears to be an added gwb on ext wall in window alcove in Office. Photo BH04 <i>None Detected</i>	7058734
PH820-A48	Probably old joint compound	Ph 2, Corridor 457, at fire hose cabinet hole. Photo 396 <i>None Detected</i>	7058735
PH820-A49	SV-2 Identical to SV-1, but in Ph 2. area. Sheet Vinyl. 3/8" Cream, gray & tan chip SV, with dark tan mastic	Ph. 2, Rm 437.1 on floor by tub location. Photo BH05 <i>1.2% chrys in mastic 60% Chrysotile</i>	7058736
PH820-A50	Brown cove base mastic	Orig. Rm 435. At GWB wing-wall by sink. Photo 424 <i>None Detected</i>	7058737
PH820-A51	SV-1 Sheet Vinyl. 3/8" Cream, gray & tan chip SV, with tan mastic	Orig. Rm 434.1. At wall by toilet location. Photo BH006 <i>SV-60% Chrysotile, Mastic 1.0% Chrysotile</i>	7058738



e-mail • ehsak@ehs-alaska.com

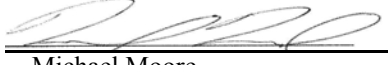
CERTIFICATE OF ANALYSIS

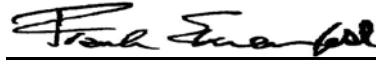
Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/4/2020 Report No.: 619125 - PLM Project: Anchorage Pioneer Home Project No.: 7787-02	Rev #2, 10/16/2020
Client: EHS511		

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7058688 Client No.: PH820-A01	Analyst Observation: White/Brown Cement Block Client Description: Cement Board Sandwich Panel	Location: Orig. Rm 410, Under Window, Behind The Fin Tube Enclosure Facility: Percent Non-Fibrous Material: 96
Percent Asbestos: <i>PC 2.6 Chrysotile</i> <i>PC 1.4 Crocidolite</i>	Percent Non-Asbestos Fibrous Material: None Detected	
Lab No.: 7058689 Client No.: PH820-A02	Analyst Observation: White Joint Compound Client Description: Joint Compound	Location: Orig. Rm 410, At Edge Of Hallway To Rm Previous Damage Facility: Percent Non-Fibrous Material: 100
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: None Detected	
Lab No.: 7058690 Client No.: PH820-A03	Analyst Observation: White Joint Compound Client Description: Joint Compound, White And Brown Cove Base Mastics	Location: Orig. Rm 410, At Corner Of Wall Between Bathroom And Sink Area Facility: Percent Non-Fibrous Material: 100
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: None Detected	
Lab No.: 7058690(L2) Client No.: PH820-A03	Analyst Observation: Brown/Yellow Mastic Client Description: Joint Compound, White And Brown Cove Base Mastics	Location: Orig. Rm 410, At Corner Of Wall Between Bathroom And Sink Area Facility: Percent Non-Fibrous Material: 100
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: None Detected	
Lab No.: 7058691 Client No.: PH820-A04	Analyst Observation: White Insulation Client Description: Hard Fitting Insulation	Location: Orig. Rm 409.1, Inside Sink Chase Facility: Percent Non-Fibrous Material: 40
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 60 Mineral Wool	

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/4/2020
Date Analyzed: 09/04/2020
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

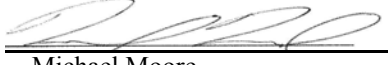
CERTIFICATE OF ANALYSIS

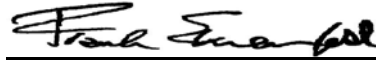
Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/4/2020 Report No.: 619125 - PLM Project: Anchorage Pioneer Home Project No.: 7787-02	Rev #2, 10/16/2020
Client: EHS511		

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7058692 Client No.: PH820-A05	Analyst Observation: White Joint Compound Client Description: Glob Smear On Wall Stud. Likely Joint Compound, Possibly HF Insul.	Location: Orig. Rm 409.1, Inside Sink Chase Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7058693 Client No.: PH820-A06	Analyst Observation: Yellow Mastic Client Description: Yellow And Green Carpet Mastic	Location: Orig. Rm 410, Near Closet And Dividing Wall Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 2 Cellulose	<u>Percent Non-Fibrous Material:</u> 98
Lab No.: 7058694 Client No.: PH820-A07	Analyst Observation: White Insulation Client Description: Hard Fitting Insulation	Location: Orig. Rm 409.1, In Tub Chase Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 40 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 60
Lab No.: 7058695 Client No.: PH820-A08	Analyst Observation: Yellow Mastic Client Description: Light Yellow Marlite Mastic And White Faced Marlite	Location: Orig. Rm 409.1, At Tub Wall Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7058695(L2) Client No.: PH820-A08	Analyst Observation: White/Brown Fiberboard Client Description: Light Yellow Marlite Mastic And White Faced Marlite	Location: Orig. Rm 409.1, At Tub Wall Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 40 Cellulose	<u>Percent Non-Fibrous Material:</u> 60
Lab No.: 7058696 Client No.: PH820-A09	Analyst Observation: White Drywall Client Description: Gypsum Wallboard	Location: Orig. Rm 409.1, At Tub Wall Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Fibrous Glass 2 Cellulose	<u>Percent Non-Fibrous Material:</u> 93

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/4/2020
Date Analyzed: 09/04/2020
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

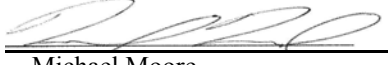
CERTIFICATE OF ANALYSIS

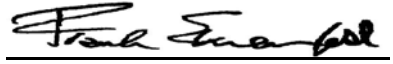
Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/4/2020 Report No.: 619125 - PLM Project: Anchorage Pioneer Home Project No.: 7787-02	Rev #2, 10/16/2020
Client: EHS511		

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7058697 Client No.: PH820-A10	Analyst Observation: White/Grey Vinyl Sheet Flooring Client Description: SV-1 Sheet Vinyl, 3/8" Cream, Gray And Tan Chips SV, With Tan Mastic And Gb Paper	Location: Orig. Rm 409.1, At Tub Wall Facility:
<u>Percent Asbestos:</u> 60 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose	<u>Percent Non-Fibrous Material:</u> 35
Lab No.: 7058697(L2) Client No.: PH820-A10	Analyst Observation: Yellow Mastic Client Description: SV-1 Sheet Vinyl, 3/8" Cream, Gray And Tan Chips SV, With Tan Mastic And Gb Paper	Location: Orig. Rm 409.1, At Tub Wall Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7058697(L3) Client No.: PH820-A10	Analyst Observation: Brown Underlayment Client Description: SV-1 Sheet Vinyl, 3/8" Cream, Gray And Tan Chips SV, With Tan Mastic And Gb Paper	Location: Orig. Rm 409.1, At Tub Wall Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 80 Cellulose	<u>Percent Non-Fibrous Material:</u> 20
Lab No.: 7058698 Client No.: PH820-A11	Analyst Observation: White Paint Client Description: Paint With Possible Sacking, On Concrete Ceiling Above Drop Ceiling	Location: Orig. Rm 410, Just Inside Entrance To Bedroom Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7058699 Client No.: PH820-A12	Analyst Observation: Yellow Mastic Client Description: Tan Ceiling Grid Mastic	Location: Orig. Rm 410, West Wall By Closet Facility:
<u>Percent Asbestos:</u> PC 1.2 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 98.8

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/4/2020
Date Analyzed: 09/04/2020
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

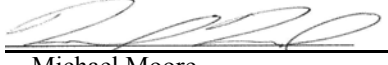
CERTIFICATE OF ANALYSIS

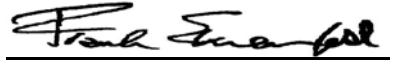
Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/4/2020 Report No.: 619125 - PLM Project: Anchorage Pioneer Home Project No.: 7787-02	Rev #2, 10/16/2020
Client: EHS511		

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7058700 Client No.: PH820-A13	Analyst Observation: White/Silver Wrap Client Description: Asbestos Heat Shield In Original Incandescent Light Fixture	Location: Orig. Rm 409, In Bedroom Portion. Wires Assumed To Have ACM Insul. Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>80 Chrysotile</i>	Percent Non-Asbestos Fibrous Material: None Detected	20
Lab No.: 7058701 Client No.: PH820-A14	Analyst Observation: White Ceiling Tile Client Description: LCT-1, 2x2 Galaxy Pattern Lay In Ceiling Tile	Location: Orig. Rm 410, In Bedroom Facility:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 50 Cellulose 10 Mineral Wool	Percent Non-Fibrous Material: 40
Lab No.: 7058702 Client No.: PH820-A15	Analyst Observation: White Ceiling Tile Client Description: LCT-2, 2x2 Drop Beveled Edge Galaxy Pattern Lay-In Ceiling Tile	Location: Orig. Rm 409.1, At Ceiling Of Bathroom Facility:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 50 Cellulose 30 Mineral Wool	Percent Non-Fibrous Material: 20
Lab No.: 7058703 Client No.: PH820-A16	Analyst Observation: White Ceiling Tile Client Description: LCT-3, 2x2 Drop Beveled Edge Medium Directional Fissures With 1/16" Holes. Appears To Be Oldest Ceil	Location: Orig. Rm 409.1, At Ceiling Of Bathroom Facility:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 50 Cellulose 30 Mineral Wool	Percent Non-Fibrous Material: 20
Lab No.: 7058704 Client No.: PH820-A17	Analyst Observation: White Ceiling Tile Client Description: LCT-3, 2x2 Drop Beveled Edge Medium Directional Fissures With 1/16" Holes. Appears To Be Oldest Ceil	Location: Ori. Rm 409, At Ceiling Of Bedroom Facility:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 50 Cellulose 30 Mineral Wool	Percent Non-Fibrous Material: 20

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/4/2020
Date Analyzed: 09/04/2020
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

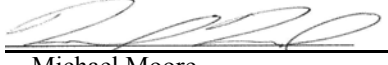
CERTIFICATE OF ANALYSIS

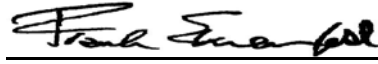
Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/4/2020 Report No.: 619125 - PLM Project: Anchorage Pioneer Home Project No.: 7787-02	Rev #2, 10/16/2020
Client: EHS511		

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7058705 Client No.: PH820-A18 <u>Percent Asbestos:</u> PC 1.4 Chrysotile	Analyst Observation: Dk Grey Mastic Client Description: Dark Gray-Green Ceiling Grid Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Ph 2. Rm 407, West Wall Facility: <u>Percent Non-Fibrous Material:</u> 98.6
Lab No.: 7058706 Client No.: PH820-A19 <u>Percent Asbestos:</u> PC 1.8 Chrysotile	Analyst Observation: Brown Mastic Client Description: Brown Mirror Mastic And Gb Paper <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Ph 2., Rm 407, At Sink Area Facility: <u>Percent Non-Fibrous Material:</u> 98.2
Lab No.: 7058706(L2) Client No.: PH820-A19 <u>Percent Asbestos:</u> None Detected	Analyst Observation: White/Tan Paper Client Description: Brown Mirror Mastic And Gb Paper <u>Percent Non-Asbestos Fibrous Material:</u> 60 Cellulose	Location: Ph 2., Rm 407, At Sink Area Facility: <u>Percent Non-Fibrous Material:</u> 40
Lab No.: 7058707 Client No.: PH820-A20 <u>Percent Asbestos:</u> PC 1.2 Chrysotile	Analyst Observation: Tan Adhesive Client Description: Tan Liquid Nails Type Adhesive At Metal Alcove Trim At Ceiling On Concrete <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Ph 2., Rm 407, Near Window In Alcove Facility: <u>Percent Non-Fibrous Material:</u> 98.8
Lab No.: 7058708 Client No.: PH820-A21 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Cream Sealant Client Description: Cream Colored, Soft Sealant At Top Of Gyp Bd Joint To Concrete Ceiling <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Ph 2., Rm 407, West Wall Of Bedroom Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7058709 Client No.: PH820-A22 <u>Percent Asbestos:</u> PC 1.8 Chrysotile	Analyst Observation: Lt Brown Mastic Client Description: Light Brown Mastic Between Marlite And Green Board GWB <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Ph 2., Rm 407.1, At Tub/Toilet Wall Facility: <u>Percent Non-Fibrous Material:</u> 98.2

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/4/2020
Date Analyzed: 09/04/2020
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/4/2020 Report No.: 619125 - PLM Project: Anchorage Pioneer Home Project No.: 7787-02	Rev #2, 10/16/2020
Client: EHS511		

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7058710 Client No.: PH820-A23	Analyst Observation: Brown Drywall Client Description: Joint Compound And Green Board GWB	Location: Ph 2., Rm 407.1, At Tub/Toilet Wall Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 3 Cellulose	<u>Percent Non-Fibrous Material:</u> 97

Lab No.: 7058710(L2) Client No.: PH820-A23	Analyst Observation: White Joint Compound Client Description: Joint Compound And Green Board GWB	Location: Ph 2., Rm 407.1, At Tub/Toilet Wall Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

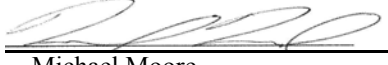
Lab No.: 7058711 Client No.: PH820-A24	Analyst Observation: White Insulation Client Description: Hard Fitting Insulation	Location: Ph. 2, Rm 407.1, In Sink Chase Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose 30 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 60

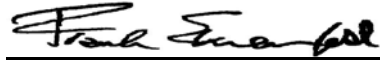
Lab No.: 7058712 Client No.: PH820-A25	Analyst Observation: White Insulation Client Description: Likely Hard Fitting Insulation Glob On Floor Of Chase	Location: Ph. 2, Rm 407.1, In Tub/Toilet Wall Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose 30 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 60

Lab No.: 7058713 Client No.: PH820-A26	Analyst Observation: Grey Debris Client Description: Gray-Greenish Sacking On Concrete Column	Location: Ph. 2, Rm 407, Column In Closet Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7058714 Client No.: PH820-A27	Analyst Observation: Grey Debris Client Description: Gray-Greenish Sacking On Concrete Column	Location: Ph. 2, Rm 436, Column In Closet Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/4/2020
Date Analyzed: 09/04/2020
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

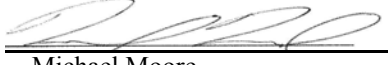
CERTIFICATE OF ANALYSIS

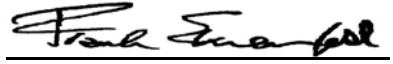
Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577 Client: EHS511	Report Date: 9/4/2020 Report No.: 619125 - PLM Project: Anchorage Pioneer Home Project No.: 7787-02 Rev #2, 10/16/2020

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7058715 Client No.: PH820-A28 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Insulation Client Description: Hard Fitting Insulation <u>Percent Non-Asbestos Fibrous Material:</u> 5 Cellulose 30 Mineral Wool	Location: Ph. 2, Rm 436.1, In Tub Chase Facility: <u>Percent Non-Fibrous Material:</u> 65
Lab No.: 7058716 Client No.: PH820-A29 <u>Percent Asbestos:</u> PC 1.8 Chrysotile	Analyst Observation: Lt Brown Mastic Client Description: Light Brown Mastic Between Marlite And Green Board GWB <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Ph. 2, Rm 436.1, At Tub/Toilet Wall Facility: <u>Percent Non-Fibrous Material:</u> 98.2
Lab No.: 7058717 Client No.: PH820-A30 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: Brown Drywall Client Description: Green Board GWB <u>Percent Non-Asbestos Fibrous Material:</u> 2 Cellulose	Location: Ph. 2, Rm 436.1, At Tub/Toilet Wall Facility: <u>Percent Non-Fibrous Material:</u> 98
Lab No.: 7058718 Client No.: PH820-A31 <u>Percent Asbestos:</u> PC 1.6 Chrysotile	Analyst Observation: Black Undercoating Client Description: Black Sink Undercoating <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Ph. 2, Rm 449, At Stainless Steel Sink In Office Facility: <u>Percent Non-Fibrous Material:</u> 98.4
Lab No.: 7058719 Client No.: PH820-A32 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Ceiling Tile Client Description: LCT-3, 2x2 Drop Beveled Edge Medium Directional Fissures With 1/16" Holes Appears To Be Oldest Ceili <u>Percent Non-Asbestos Fibrous Material:</u> 50 Cellulose 30 Mineral Wool	Location: Ph. 2, Rm 449, At Window Alcove In Office Facility: <u>Percent Non-Fibrous Material:</u> 20

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/4/2020
 Date Analyzed: 09/04/2020
 Signature: 
 Analyst: Michael Moore

Approved By: 
 Frank E. Ehrenfeld, III
 Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577 Client: EHS511	Report Date: 9/4/2020 Report No.: 619125 - PLM Project: Anchorage Pioneer Home Project No.: 7787-02 Rev #2, 10/16/2020

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7058720 Client No.: PH820-A33 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Insulation Client Description: Hard Fitting Insulation <u>Percent Non-Asbestos Fibrous Material:</u> 10 Cellulose 30 Mineral Wool	Location: Ph. 2, Rm 449, On Piping Above Window Alcove In Office Facility: <u>Percent Non-Fibrous Material:</u> 60

Lab No.: 7058721 Client No.: PH820-A34 <u>Percent Asbestos:</u> <i>PC 1.6 Chrysotile</i>	Analyst Observation: Dk Grey Mastic Client Description: Dark Gray Ceiling Grid Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Ph. 2, Rm 449, On East Wall In Window Alcove In Office Facility: <u>Percent Non-Fibrous Material:</u> 98.4

Lab No.: 7058722 Client No.: PH820-A35 <u>Percent Asbestos:</u> <i>None Detected</i>	Analyst Observation: White Joint Compound Client Description: Probably Newer Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Ph. 2, Rm 449, On What Appears To Be An Added Gwb On Ext Wall In Window Alcove In Office Facility: <u>Percent Non-Fibrous Material:</u> 100

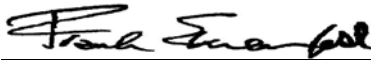
Lab No.: 7058723 Client No.: PH820-A36 <u>Percent Asbestos:</u> <i>PC 1.4 Chrysotile</i>	Analyst Observation: White/Tan Joint Compound Client Description: Probably Older Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Ph. 2, Rm 449, Below Added Gwb On Ext Wall Near Window Alcove In Office Facility: <u>Percent Non-Fibrous Material:</u> 98.6

Note: Sample analyzed by Becky Hargrove
 Note: Layers not separable; thin layer of tan joint compound between white joint compound and paint

Lab No.: 7058724 Client No.: PH820-A37 <u>Percent Asbestos:</u> <i>80 Chrysotile</i>	Analyst Observation: Yellow/Off-White Insulation Client Description: Asbestos Wire Insulation <u>Percent Non-Asbestos Fibrous Material:</u> 5 Talc	Location: Ph. 2, Rm 449, At Recessed Ceiling Spotlight Facility: <u>Percent Non-Fibrous Material:</u> 15

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/4/2020
 Date Analyzed: 09/04/2020
 Signature: 
 Analyst: Michael Moore

Approved By: 
 Frank E. Ehrenfeld, III
 Laboratory Director

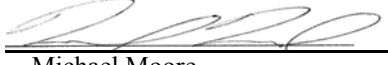
CERTIFICATE OF ANALYSIS

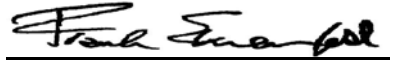
Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/4/2020 Report No.: 619125 - PLM Project: Anchorage Pioneer Home Project No.: 7787-02	Rev #2, 10/16/2020
Client: EHS511		

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7058725 Client No.: PH820-A38	Analyst Observation: White Ceiling Tile Client Description: LCT-4, 2x2 Drop Level, Fewer Directional Fissures, Less 1/16" Holes	Location: Ph. 2, Rm 449, At Rm Ceiling Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 50 Cellulose 30 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 20
Lab No.: 7058726 Client No.: PH820-A39	Analyst Observation: White Drywall Client Description: Newer GWB And JC Inside Added Closet	Location: Ph. 2, Hallway Outside Rm 449, In Corner Of Wall Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 3 Cellulose	<u>Percent Non-Fibrous Material:</u> 97
Lab No.: 7058726(L2) Client No.: PH820-A39	Analyst Observation: White Joint Compound Client Description: Newer GWB And JC Inside Added Closet	Location: Ph. 2, Hallway Outside Rm 449, In Corner Of Wall Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7058727 Client No.: PH820-A40	Analyst Observation: White Ceiling Tile Client Description: LCT-5, 2x4 Galaxy Pattern, Typical New Ceiling Throughout Corridor	Location: Orig. Area, Corridor 461, Near Double Doors To Lounge 456 Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 50 Cellulose 30 Mineral Wool	<u>Percent Non-Fibrous Material:</u> 20
Lab No.: 7058728 Client No.: PH820-A41	Analyst Observation: Silver Wrap Client Description: Ceramic Fiber Heat Shield	Location: Ph. 2, Rm 406, At Newer Surface Mtd Light Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/4/2020
Date Analyzed: 09/04/2020
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/4/2020 Report No.: 619125 - PLM Project: Anchorage Pioneer Home Project No.: 7787-02	Rev #2, 10/16/2020
Client: EHS511		

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7058728(L2) Client No.: PH820-A41	Analyst Observation: Yellow Mastic Client Description: Ceramic Fiber Heat Shield	Location: Ph. 2, Rm 406, At Newer Surface Mtd Light Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 2 Fibrous Glass	98

Lab No.: 7058729 Client No.: PH820-A42	Analyst Observation: White Drywall Client Description: Gypsum Wallboard And Joint Compound	Location: Ph. 2, Rm 406, Inside Corner Of Closet Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 3 Cellulose 2 Fibrous Glass	95

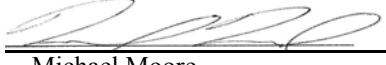
Lab No.: 7058729(L2) Client No.: PH820-A42	Analyst Observation: White Joint Compound Client Description: Gypsum Wallboard And Joint Compound	Location: Ph. 2, Rm 406, Inside Corner Of Closet Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: None Detected	100

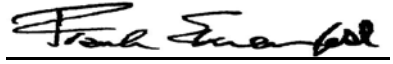
Lab No.: 7058730 Client No.: PH820-A43	Analyst Observation: Yellow Mastic Client Description: Tan Carpet Mastic	Location: Ph. 2, Rm 404, Inside Closet Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 2 Synthetic	98

Lab No.: 7058731 Client No.: PH820-A44	Analyst Observation: Brown Mastic Client Description: Light Tan And Dark Brown Cove Base Mastic	Location: Ph. 2, Rm 404, Inside Closet Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 5 Talc	95

Lab No.: 7058731(L2) Client No.: PH820-A44	Analyst Observation: Yellow Mastic Client Description: Light Tan And Dark Brown Cove Base Mastic	Location: Ph. 2, Rm 404, Inside Closet Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 1 Fibrous Glass	99

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/4/2020
Date Analyzed: 09/04/2020
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

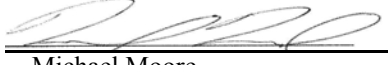
CERTIFICATE OF ANALYSIS

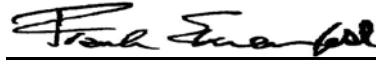
Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577 Client: EHS511	Report Date: 9/4/2020 Report No.: 619125 - PLM Project: Anchorage Pioneer Home Project No.: 7787-02 Rev #2, 10/16/2020

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7058732 Client No.: PH820-A45 <u>Percent Asbestos:</u> PC 2.2 Chrysotile	Analyst Observation: Lt Brown Mastic Client Description: Light Brown Mastic Between Marlite And Green Board GWB <u>Percent Non-Asbestos Fibrous Material:</u> 3 Talc	Location: Ph. 2, Rm 403.1, At Tub/Toilet Wall Facility: <u>Percent Non-Fibrous Material:</u> 94.8
Lab No.: 7058732(L2) Client No.: PH820-A45 <u>Percent Asbestos:</u> None Detected	Analyst Observation: Green Backing Material Client Description: Light Brown Mastic Between Marlite And Green Board GWB <u>Percent Non-Asbestos Fibrous Material:</u> 80 Cellulose	Location: Ph. 2, Rm 403.1, At Tub/Toilet Wall Facility: <u>Percent Non-Fibrous Material:</u> 20
Lab No.: 7058733 Client No.: PH820-A46 <u>Percent Asbestos:</u> PC 1.4 Chrysotile	Analyst Observation: Dk Grey Mastic Client Description: Dark Gray Ceiling Grid Mastic <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Ph. 2, Rm 401, At Exterior Wall By Windows Facility: <u>Percent Non-Fibrous Material:</u> 98.6
Lab No.: 7058734 Client No.: PH820-A47 <u>Percent Asbestos:</u> None Detected	Analyst Observation: White Joint Compound Client Description: Probably Newer Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Ph. 2, Rm 401, On What Appears To Be An Added Gwb On Ext Wall In Window Alcove In Office Facility: <u>Percent Non-Fibrous Material:</u> 100
Lab No.: 7058735 Client No.: PH820-A48 <u>Percent Asbestos:</u> None Detected	Analyst Observation: White Joint Compound Client Description: Probably Old Joint Compound <u>Percent Non-Asbestos Fibrous Material:</u> None Detected	Location: Ph. 2, Corridor 457, At Fire Hose Cabinet Hole Facility: <u>Percent Non-Fibrous Material:</u> 100

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/4/2020
 Date Analyzed: 09/04/2020
 Signature: 
 Analyst: Michael Moore

Approved By: 
 Frank E. Ehrenfeld, III
 Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/4/2020 Report No.: 619125 - PLM Project: Anchorage Pioneer Home Project No.: 7787-02	Rev #2, 10/16/2020
Client: EHS511		

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7058736 Client No.: PH820-A49	Analyst Observation: White/Grey Vinyl Sheet Flooring Client Description: SV-2 Identical To SV-1, But In Ph. 2 Area, Sheet Vinyl 3/8" Cream, Gray And Tan Chip SV, With Dark M	Location: Ph. 2, Rm 437.1, On Floor By Tub Location Facility:
<u>Percent Asbestos:</u> 60 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 40

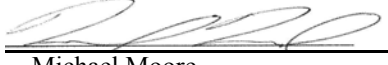
Lab No.: 7058736(L2) Client No.: PH820-A49	Analyst Observation: Yellow Mastic Client Description: SV-2 Identical To SV-1, But In Ph. 2 Area, Sheet Vinyl 3/8" Cream, Gray And Tan Chip SV, With Dark M	Location: Ph. 2, Rm 437.1, On Floor By Tub Location Facility:
<u>Percent Asbestos:</u> PC 1.2 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 98.8

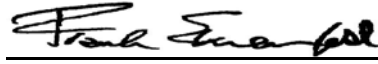
Lab No.: 7058737 Client No.: PH820-A50	Analyst Observation: Brown/Yellow Mastic Client Description: Brown Cove Base Mastic	Location: Orig. Rm 435, At GWB Wing-Wall By Sink Facility:
<u>Percent Asbestos:</u> None Detected	<u>Percent Non-Asbestos Fibrous Material:</u> 10 Talc	<u>Percent Non-Fibrous Material:</u> 90

Lab No.: 7058738 Client No.: PH820-A51	Analyst Observation: White/Grey Vinyl Sheet Flooring Client Description: SV-1 Sheet Vinyl, 3/8" Cream, Gray And Tan Chip SV, With Tan Mastic	Location: Orig. Rm 434.1, At Wall By Toilet Location Facility:
<u>Percent Asbestos:</u> 60 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 40

Lab No.: 7058738(L2) Client No.: PH820-A51	Analyst Observation: Yellow Mastic Client Description: SV-1 Sheet Vinyl, 3/8" Cream, Gray And Tan Chip SV, With Tan Mastic	Location: Orig. Rm 434.1, At Wall By Toilet Location Facility:
<u>Percent Asbestos:</u> PC 1.0 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 99

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/4/2020
Date Analyzed: 09/04/2020
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 9/4/2020 Report No.: 619125 - PLM Project: Anchorage Pioneer Home Project No.: 7787-02	Rev #2, 10/16/2020
Client: EHS511		

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7058739 Client No.: PH820-A52	Analyst Observation: Tan Joint Compound Client Description: Joint Compound	Location: Orig. Rm 431, At Wing Wall Of Closet Facility: Percent Non-Fibrous Material:
Percent Asbestos: PC 1.9 Chrysotile	Percent Non-Asbestos Fibrous Material: None Detected	98.1

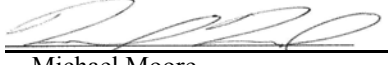
Note: Sample analyzed by Becky Hargrove

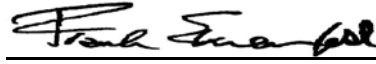
Lab No.: 7058740 Client No.: PH820-A53	Analyst Observation: White Drywall Client Description: Gypsum Wallboard	Location: Orig. Rm 428, At Wing Wall Of Closet Facility: Percent Non-Fibrous Material:
Percent Asbestos: None Detected	Percent Non-Asbestos Fibrous Material: 3 Cellulose 2 Fibrous Glass	95

Lab No.: 7058741 Client No.: PH820-A54	Analyst Observation: Black Undercoating Client Description: Black, Sink Undercoating	Location: Ph. 2, Rm 448, At Office Sink Facility: Percent Non-Fibrous Material:
Percent Asbestos: PC 2.2 Chrysotile	Percent Non-Asbestos Fibrous Material: None Detected	97.8

Lab No.: 7058742 Client No.: PH820-A55	Analyst Observation: White Insulation Client Description: Hard Fitting Insulation	Location: Ph. 2, Rm 403 Facility: Percent Non-Fibrous Material:
Percent Asbestos: None Detected	Percent Non-Asbestos Fibrous Material: 5 Cellulose 30 Mineral Wool	65

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 9/4/2020
Date Analyzed: 09/04/2020
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Client: EHS511

Report Date: 9/4/2020
Report No.: 619125 - PLM
Project: Anchorage Pioneer Home
Project No.: 7787-02

Appendix to Analytical Report

Customer Contact: Cali Swatowski

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, and USEPA 600, R93-116 as needed.

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Semih Kocahasan

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Bulk Building Materials

Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

Information Pertinent to this Report:

Analysis by US EPA 600 93-116: Determination of Asbestos in Bulk Building Materials by Polarized Light Microscopy (PLM).

Certifications:

- NIST-NVLAP No. 101165-0
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. PC Trace represents a <0.25% amount. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analytical Methodology Alternatives: Your initial request for analysis may not have accounted for recent advances in regulatory requirements or advances in technology that are routinely used in similar situations for other qualified projects. You may have the option to explore additional analysis for further information. Below are a few options, listed as the matrix followed by the appropriate methodology. Also included are links to more information on our website.

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB)

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Client: EHS511

Report Date: 9/4/2020
Report No.: 619125 - PLM
Project: Anchorage Pioneer Home
Project No.: 7787-02

Loose Fill Vermiculite Insulation, Attic Insulation, Zonolite (copyright), etc.: US EPA 600 R-4/004 (multi-tiered analytical process)
Sprayed On Insulation/Fireproofing with Vermiculite (SOF-V): ELAP 198.8 (PLM-SOF-V)

Soil, sludge, sediment, aggregate, and like materials analyzed for asbestos or other elongated mineral particles (ex. erionite, etc.): ASTM D7521, CARB 435, and other options available

Asbestos in Surface Dust according to one of ASTM's Methods (very dependent on sampling collection technique – by TEM): ASTM D 5755, D5756, or D6480

Various other asbestos matrices (air, water, etc.) and analytical methods are available.

Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a list with highlighted disclaimers that may be pertinent to this project. For a full explanation of these and other disclaimers, please inquire at customerservice@iatl.com.

- 1) Note: No mastic provided for analysis.
- 2) Note: Insufficient mastic provided for analysis.
- 3) Note: Insufficient material provided for analysis.
- 4) Note: Insufficient sample provided for QC reanalysis.
- 5) Note: Different material than indicated on Sample Log / Description.
- 6) Note: Sample not submitted.
- 7) Note: Attached to asbestos containing material.
- 8) Note: Received wet.
- 9) Note: Possible surface contamination.
- 10) Note: Not building material. 1% threshold may not apply.
- 11) Note: Recommend TEM-NOB analysis as per EPA recommendations.
- 12) Note: Asbestos detected but not quantifiable.
- 13) Note: Multiple identical samples submitted, only one analyzed.
- 14) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.080%.
- 15) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.125%.
- 16) Note: This sample contains >10% vermiculite mineral. See Appendix for Recommendations for Vermiculite Analysis.

Recommendations for Vermiculite Analysis:

Several analytical protocols exist for the analysis of asbestos in vermiculite. These analytical approaches vary depending upon the nature of the vermiculite mineral being tested (e.g. un-processed gänge, homogeneous exfoliated books of mica, or mixed mineral composites). Please contact your client representative for pricing and turnaround time options available.

iATL recommends initial testing using the EPA 600/R-93/116 method. This method is specifically designed for the analysis of asbestos in bulk building materials. It provides an acceptable starting point for primary screening of vermiculite for possible asbestos.

Results from this testing may be inconclusive. EPA suggests proceeding to a multi-tiered analysis involving wet separation techniques in conjunction with PLM and TEM gravimetric analysis (EPA 600/R-04/004).

For New York State customers, NYSDOH requires disclaimers and qualifiers for various vermiculite containing samples that direct analysis via ELAP198.6 and ELAP198.8 for samples that contain >10% vermiculite mineral where ELAP198.6 may be used to evaluate the asbestos content of the material. However, any test result using ELAP198.6 will be reported with the following disclaimer: "ELAP198.6 method does not remove vermiculite and may underestimate the level of asbestos present in a sample containing >10% vermiculite."

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

The following is a summary of the analytical process outlines in the EPA 600/R-04/004 Method:

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Client: EHS511

Report Date: 9/4/2020
Report No.: 619125 - PLM
Project: Anchorage Pioneer Home
Project No.: 7787-02

2)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

3)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Floats" only.

4)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

5)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004
Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Suspension" only.
*With advance notice and confirmation by the laboratory.

**Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).



383 Industrial Way Suite 300
Anchorage, AK 99501 (907) 258-8661



Lab Code: 200124-0

Bulk Sample Analysis for Asbestos

ATC Project #: LL11034

Client Project #: 2020-010

Report #: 667728

Report By: J. Hicklin

Report Date: 07/06/2020

Client: Absolute Services, Inc.
P.O. Box 110350
Anchorage, AK 99511

Collected By: Client
Collection Date: 06/29/2020
Analysis By: J. Hicklin
Analysis Date: 07/06/2020
Received By: J. Hicklin
Received Date: 07/01/2020

TAT: 48 Hour

Sample Count: 10 Layer Count:
14

Project Name/Location: Pioneer Home 4th Floor Reno

Client ID #	ATC ID#	Location:	Homogeneous	Material	Color	Layer
2020010-01	AB20-4078A	Room 408	No	Joint Compound	Off-White	1 of 2
		Asbestos Type	Asbestos %		% Asbestos: 3%	
		Chrysotile	3%			
		Other Fibrous Material	Fibrous %		Other Fibrous Materials: TRACE	
		Cellulose	Trace		Non-Fibrous Materials: 97%	

Sample Comments: Could be skim or texture application

Client ID #	ATC ID#	Location:	Homogeneous	Material	Color	Layer
2020010-01	AB20-4078B	Room 408	No	Joint Compound	Off-White	2 of 2
		Asbestos: None Detected				
		Other Fibrous Material	Fibrous %		Other Fibrous Materials: TRACE	
		Cellulose	Trace		Non-Fibrous Materials: 100%	

Client ID #	ATC ID#	Location:	Homogeneous	Material	Color	Layer
2020010-02	AB20-4079A	Bathroom Room 408	No	Sheet Vinyl	Tan	1 of 2
		Asbestos Type	Asbestos %		% Asbestos: 20%	
		Chrysotile	20%			
		Other Fibrous Material	Fibrous %		Other Fibrous Materials: 10%	
		Cellulose	10%		Non-Fibrous Materials: 70%	



383 Industrial Way Suite 300
Anchorage, AK 99501 (907) 258-8661



Lab Code: 200124-0

Bulk Sample Analysis for Asbestos

ATC Project #: LL11034

Client Project #: 2020-010

Report #: 667728

Report By: J. Hicklin

Report Date: 07/06/2020

Client ID #	ATC ID#	Location:		
2020010-02	AB20-4079B	Bathroom Room 408		
Homogeneous	Material	Color	Layer	
No	Mastic	Tan	2 of 2	
Asbestos: None Detected				
Other Fibrous Material		Fibrous %	Other Fibrous Materials: TRACE	
Cellulose		Trace	Non-Fibrous Materials: 100%	

Client ID #	ATC ID#	Location:		
2020010-03	AB20-4080	Ceiling Room 408		
Homogeneous	Material	Color	Layer	
No	Ceiling Tile	Tan	1 of 1	
Asbestos: None Detected				
Other Fibrous Material		Fibrous %	Other Fibrous Materials: 80%	
Cellulose		60%	Non-Fibrous Materials: 20%	
Mineral Wool		20%		

Client ID #	ATC ID#	Location:		
2020010-04	AB20-4081	Room 407		
Homogeneous	Material	Color	Layer	
No	Joint Compound	White	1 of 1	
Asbestos: None Detected				
Other Fibrous Material		Fibrous %	Other Fibrous Materials: TRACE	
Cellulose		Trace	Non-Fibrous Materials: 100%	

Client ID #	ATC ID#	Location:		
2020010-05	AB20-4082	Room 407		
Homogeneous	Material	Color	Layer	
No	Ceiling Tile	Tan	1 of 1	
Asbestos: None Detected				
Other Fibrous Material		Fibrous %	Other Fibrous Materials: 80%	
Cellulose		60%	Non-Fibrous Materials: 20%	
Mineral Wool		20%		



383 Industrial Way Suite 300
Anchorage, AK 99501 (907) 258-8661



Lab Code: 200124-0

Bulk Sample Analysis for Asbestos

ATC Project #: LL11034

Client Project #: 2020-010

Report #: 667728

Report By: J. Hicklin

Report Date: 07/06/2020

Client ID #	ATC ID#	Location:		
2020010-06	AB20-4083	Room 407		
Homogeneous	Material	Color	Layer	
No	Carpet Mastic	Yellow	1 of 1	
Asbestos: None Detected				
Other Fibrous Material		Fibrous %	Other Fibrous Materials: 2%	
Cellulose		2%	Non-Fibrous Materials: 98%	

Client ID #	ATC ID#	Location:		
2020010-07	AB20-4084A	Room 407		
Homogeneous	Material	Color	Layer	
No	Cove Base Mastic	Brown	1 of 2	
Asbestos: None Detected				
Other Fibrous Material		Fibrous %	Other Fibrous Materials: 4%	
Cellulose		Trace	Non-Fibrous Materials: 96%	
Talc		2%		
Wollastonite		2%		

Client ID #	ATC ID#	Location:		
2020010-07	AB20-4084B	Room 407		
Homogeneous	Material	Color	Layer	
No	Joint Compound	Off-White	2 of 2	
Asbestos: None Detected				
Other Fibrous Material		Fibrous %	Other Fibrous Materials: TRACE	
Cellulose		Trace	Non-Fibrous Materials: 100%	

Client ID #	ATC ID#	Location:		
2020010-08	AB20-4085	Room 407		
Homogeneous	Material	Color	Layer	
No	Cove Base Mastic	Brown	1 of 1	
Asbestos: None Detected				
Other Fibrous Material		Fibrous %	Other Fibrous Materials: TRACE	
Cellulose		Trace	Non-Fibrous Materials: 100%	



383 Industrial Way Suite 300
Anchorage, AK 99501 (907) 258-8661



Lab Code: 200124-0

Bulk Sample Analysis for Asbestos

ATC Project #: LL11034

Client Project #: 2020-010

Report #: 667728

Report By: J. Hicklin

Report Date: 07/06/2020

Client ID #	ATC ID#	Location:		
2020010-09	AB20-4086	Room 402		
Homogeneous	Material	Color	Layer	
No	Carpet Mastic	Yellow	1 of 1	
Asbestos: None Detected				
Other Fibrous Material		Fibrous %	Other Fibrous Materials: TRACE	
Cellulose		Trace	Non-Fibrous Materials: 100%	

Client ID #	ATC ID#	Location:		
2020010-10	AB20-4087A	Room 402		
Homogeneous	Material	Color	Layer	
No	Sheet Vinyl	Tan	1 of 2	
Asbestos Type		Asbestos %	% Asbestos: 20%	
Chrysotile		20%	Other Fibrous Materials: 10%	
Other Fibrous Material		Fibrous %	Non-Fibrous Materials: 70%	
Cellulose		10%		

Client ID #	ATC ID#	Location:		
2020010-10	AB20-4087B	Room 402		
Homogeneous	Material	Color	Layer	
No	Mastic	Tan	2 of 2	
Asbestos: None Detected				
Other Fibrous Material		Fibrous %	Other Fibrous Materials: TRACE	
Cellulose		Trace	Non-Fibrous Materials: 100%	

Joel Hicklin, Laboratory Technical Manager

07/06/2020

Date

07/06/2020

Date

Analysis performed by: EPA Method 600/M4-82-020 or EPA Method 600/R-93/116, at the discretion of the client or ATC. All quantities reported are based on visual estimation by PLM, unless point-counting method is requested and noted for the sample. Test report relates only to items tested and must not be used by client to claim product endorsement by NVLAP or any agency of the U.S. Government. Test reports must not be reproduced without the approval of ATC, and are subject to ATC General Terms and Conditions (available upon request).

ATC

383 Industrial Way Suite
300 Anchorage, AK 99501
(907)258-8661

LL 11034

CHAIN OF CUSTODY

Date: 7/1/2020

P.O.# _____

Client Name: Absolute Services Inc _____ Project Name: Pioneer Home 4th Floor reno Project #: 2020-010 _____

Billing Address: P.O. Box 110350 _____ City: Anchorage _____ State: AK Zip Code: 99511-0350 _____

Phone: 907-346-4490 _____ Cell: Wade 907-748-3000 _____

Send report via (choose one): Email: **wade@absoluteenv.com** _____ or Fax: _____

Only for SAME DAY T.A.T Verbal (circle one) Y / N If yes, please provide name/contact #: _____

****By signing for these samples you are responsible for payment. We will not bill someone else on your behalf.****

Samples Relinquished By (please print): Jason Gray Date: 7-1-20 Time: 8:40 am/pm

Samples Received By (please print): J. Hicklin Date: 7-1-20 Time: 9:15 am/pm

Samples Analysis Type: **PLM**

Other (specify) _____

PAYMENT ATTACHED: **N**

Composite: _____

Turn-around Time: **2-DAY**

Method of Payment: **CASH CHECK CREDIT CARD**

ACCOUNT WALK-IN WALK-IN-RUSH

Sample #	Collection Date	T.A.T.	Analysis Type	Location/Worker: Task	Volume (L)	Sample Condition
2020010-01	6/29/2020	2Day	PLM			
2020010-02	6/29/2020	2Day	PLM			
2020010-03	6/29/2020	2Day	PLM			
2020010-04	6/29/2020	2Day	PLM			
2020010-05	6/29/2020	2Day	PLM			
2020010-06	6/29/2020	2Day	PLM			
2020010-07	6/29/2020	2Day	PLM			
2020010-08	6/29/2020	2Day	PLM			
2020010-09	6/29/2020	2Day	PLM			
2020010-10	6/29/2020	2Day	PLM			

It is the responsibility of the Customer to ensure that samples are correctly taken and packaged. ATC reserves the right to refuse samples for analysis which are obviously unsuitable due to damage, incorrect or insufficient labeling, or incorrect sample loading. ATC will contact the Customer as soon as such a problem is identified and will discuss with the Customer the course of action to be taken.

Project Name Pioneer Hme 4th Floor Reno
 Location _____ Project # 2020-10
 Client Absolute Servoces Date _____
 Client Project # _____ Sheet No _____ of _____

CHAIN OF CUSTODY RECORD - ANALYTICAL REQUEST

ANALYSIS REQUESTED (CIRCLE) PLM	TURNAROUND REQUESTED	NO. OF SAMPLES	COLLECTION DATE
RELINQUISHED BY	DATE/TIME	SAMPLES RECEIVED BY	DATE/TIME
SHIPPING METHOD	COURIER (SIGNATURE)	SAMPLES RECEIVED BY	DATE/TIME

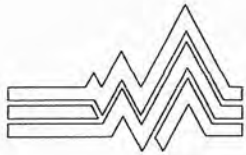
COMMENTS

Rooms per drawings

SAMPLE ID#	MATERIAL	LOCATION	COMMENTS
2020010-01	Joint Compound	Room 408	Dining/Kitchen 441
2020010-02	Vinyl Sheeting	Bathroom Room 408	Toilet 441A
2020010-03	Drop in Ceiling Tile	Ceiling Room 408	Dining/Kitchen 441
2020010-04	Joint Compound	Room 407	Dining/Kitchen 441
2020010-05	Drop in Ceiling Tile	Room 407	Dining/Kitchen 441
2020010-06	Carpet Mastic	Room 407	Dining/Kitchen 441
2020010-07	Cove Base Mastic and Joint Compound	Room 407	Dining/Kitchen 441
2020010-08	Cove Base Mastic	Room 407	Dining/Kitchen 441
2020010-09	Carpet Mastic	Room 402	Guest 451
2020010-10	Vinyl Sheeting	Room 402	Toilet 451A

RECEIVED

OCT 20 2020



EHS-ALASKA, INC.
EHS ALASKA
INCORPORATED

EHS-Alaska, Inc.

11901 Business Blvd., Suite 208, Eagle River, AK 99577

(907) 694-1383 • (907) 694-1382 fax

e-mail • ehsak@ehs-alaska.com

PROJECT NO: 7787-02	PROJECT NAME: Anch Pioneer Home 4th Floor Reno	FACILITY: Anchorage Pioneer Home	COLLECTION DATE: 09-30-2020

CHAIN OF CUSTODY RECORD

ANALYSIS REQUESTED:	☒ PLM BULK ☐ LEAD DUST ☐ TEM MICROVAC DUST (ASTM 5756)	☐ PLM DUST ☐ LEAD TCLP	☐ TEM BULK ☐ LEAD PPM	TYPE: ☒ ASBESTOS ☐ LEAD	TURNAROUND: 3 DAYS	DISPOSAL: NORMAL	QUANTITY: 20
COLLECTED BY (signature) <i>Robert A. French</i>		IATL SELECTED LABORATORY <i>h</i>		SPECIAL INSTRUCTIONS / COMMENTS:			
PRINTED NAME Robert A. French		SAMPLES ACCEPTED BY <i>[Signature]</i>		LAB: RETURN A SIGNED COPY OF THIS FORM WITH THE FINAL REPORT TO EHS-ALASKA, INC.			
CERT# / AHERA# 1564 88IMP-0028		DATE/TIME <i>10/5/20</i>		See sample location drawing for more detailed explanation of exact locations.			
SHIPPING METHOD Fed Ex		ANALYST'S SIGNATURE <i>[Signature]</i>		<i>0% Asbestos</i>			
COURIER (signature) 7716 9397 3267		DATE 10/5/20					
DATE/TIME Oct 2, 2020, 14:00							

FIELD SURVEY DATA

EHS SAMPLE NO. LAB ID NO	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/XREF)	RESULTS FOR EHS-ALASKA USE ONLY
APH920-A01 7072758	Gypsum wall board & joint compound	Phase 1, Restroom 409.1 at corner by door. Photo 2	<i>None Detected 94% 1.7% ch in joint Comp</i>
APH920-A02 7072759	Gypsum wall board & joint compound	Phase 1, Guest Rm. 409 at corner in closet. Photo 3	<i>None Detected in 94% 2.3% ch in Joint Comp</i>
APH920-A03 7072760	Gypsum wall board & joint compound	Phase 2, Guest Rm. 408, directly adjacent to Absolute's sample 1 at corner by sinks. Photo 4 & 5	<i>None Detected in Gyp 1.8% chrys. in Joint</i>
APH920-A04 7072761	Joint compound	Phase 2, Guest Rm. 407, corner of outside wall. Photo 7 & 8	<i>None Detected</i>
APH920-A05 7072762	Gypsum wall board & joint compound	Phase 2, Guest Rm. 406, at corner by sinks. Photo 9	<i>None Detected in Gyp 1.4% chrys in Joint</i>
APH920-A06 7072763	"Green board" Gypsum wall board & joint compound	Phase 2, Restroom 405.1 at corner by door. Photo 10 & 11	<i>None Detected both layers</i>
APH920-A07 7072764	"Green board" Gypsum wall board & joint compound	Phase 2, Restroom 402.1 at corner by door. Photo 12	<i>None Detected both layers</i>
APH920-A08 7072765	Joint compound	Phase 2, Guest Rm. 4039, outside corner by sink. Photo 13 & 14	<i>1.6% chrysotile</i>
APH920-A09 7072766	"Green board" Gypsum wall board & joint compound	Phase 2, Restroom 437.1 at corner by door. Photo 15	<i>None Detected both layers</i>



EHS ALASKA
INCORPORATED

EHS/Alaska, Inc.

11901 Business Blvd., Suite 208, Eagle River, AK 99577

(907) 694-1383 • (907) 694-1382 fax

e-mail • ehsak@ehs-alaska.com

PROJECT NO: 7787-02	PROJECT NAME: Anch Pioneer Home 4th Floor Reno	FACILITY: Anchorage Pioneer Home	COLLECTION DATE: 09-30-2020

FIELD SURVEY DATA

EHS SAMPLE NO. LAB ID NO	SAMPLE DESCRIPTION, (COLOR, MATERIAL TYPE, LAYERS, FRIABILITY)	LOCATION/COMMENTS (INCLUDING PHOTO/XREF)	RESULTS FOR EHS-ALASKA USE ONLY
APH920-A10 7072767	Gypsum wall board & joint compound	Phase 1, Guest Rm. 434 at corner in closet. Photo 16	2.2 in wh JC 2.4 in th JC
APH920-A11 7072768	Hard fitting insulation on domestic water	Phase 1, Guest Room 435, through access panel. Photo 18	None Detected
APH920-A12 7072769	Hard fitting insulation on domestic water	Phase 2, in Chase of Restroom 437.1, through fire extinguisher panel. Photo 19	None Detected
APH920-A13 7072770	Hard fitting. Probably domestic water	Phase 2, Guest Room 439. Above ceiling. Photo 20	None Detected
APH920-A14 7072771	Hard fitting. Probably domestic water	Phase 2, Lounge 458. Above ceiling. Photo 21 & 22	None Detected
APH920-A15 7072772	Hard fitting. Probably domestic water	Phase 2, Guest Room 404. Above ceiling near Restroom. Photo 23	None Detected
APH920-A16 7072773	Hard fitting on Roof Drain	Phase 2, Guest Room 404. Above ceiling near Window. Photo 24	None Detected
APH920-A17 7072774	Hard fitting. Probably hot water	Phase 2, Guest Room 406. Above ceiling near Restroom. Photo 24	None Detected
APH920-A18 7072775	Hard fitting. Probably domestic water	Phase 2, Lounge 456. Above ceiling near Center. Photo 25	None Detected
APH920-A19 7072776	Hard fitting. Probably domestic water	Phase 2, Lounge 454. Above ceiling near Center. Photo 26	None Detected
APH920-A20 7072777	Hard fitting. Probably domestic water	Phase 2, Corridor 452. Above ceiling near Door to 424. Photo 27	None Detected
	END		

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577 Client: EHS511	Report Date: 10/5/2020 Report No.: 620588 - PLM Project: Anch Pioneer Home 4th Floor Reno Project No.: 7787-02

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7072758 Client No.: APH920-A01	Analyst Observation: White Drywall Client Description: Gypsum Wallboard And Joint Compound	Location: Phase 1, Restroom 409.1 At Corner By Door Facility: <u>Percent Non-Fibrous Material:</u> 95
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 3 Cellulose 2 Fibrous Glass	

Lab No.: 7072758(L2) Client No.: APH920-A01	Analyst Observation: Tan Joint Compound Client Description: Gypsum Wallboard And Joint Compound	Location: Phase 1, Restroom 409.1 At Corner By Door Facility: <u>Percent Non-Fibrous Material:</u> 98.3
<u>Percent Asbestos:</u> <i>PC 1.7 Chrysotile</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	

Note: Sample/Layers analyzed by Rebecca Hargrove, 10/07/20.

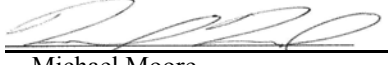
Lab No.: 7072759 Client No.: APH920-A02	Analyst Observation: White Drywall Client Description: Gypsum Wallboard And Joint Compound	Location: Phase 1, Guest Rm 409 At Corner In Closet Facility: <u>Percent Non-Fibrous Material:</u> 95
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 3 Cellulose 2 Fibrous Glass	

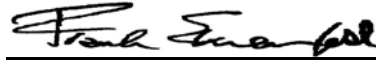
Lab No.: 7072759(L2) Client No.: APH920-A02	Analyst Observation: Tan Joint Compound Client Description: Gypsum Wallboard And Joint Compound	Location: Phase 1, Guest Rm 409 At Corner In Closet Facility: <u>Percent Non-Fibrous Material:</u> 97.7
<u>Percent Asbestos:</u> <i>PC 2.3 Chrysotile</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	

Note: Sample/Layers analyzed by Rebecca Hargrove, 10/07/20.

Lab No.: 7072760 Client No.: APH920-A03	Analyst Observation: White Drywall Client Description: Gypsum Wallboard And Joint Compound	Location: Phase 2, Guest Rm 408, Directly Adj To Absolute's Sample 1 At Corner By Sinks Facility: <u>Percent Non-Fibrous Material:</u> 95
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 3 Cellulose 2 Fibrous Glass	

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 10/5/2020
 Date Analyzed: 10/05/2020
 Signature: 
 Analyst: Michael Moore

Approved By: 
 Frank E. Ehrenfeld, III
 Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 10/5/2020 Report No.: 620588 - PLM Project: Anch Pioneer Home 4th Floor Reno Project No.: 7787-02
Client: EHS511	

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7072760(L2) Client No.: APH920-A03	Analyst Observation: White Joint Compound Client Description: Gypsum Wallboard And Joint Compound	Location: Phase 2, Guest Rm 408, Directly Adj To Absolute's Sample 1 At Corner By Sinks Facility: Percent Non-Fibrous Material: 98.2
Percent Asbestos: <i>PC 1.8 Chrysotile</i>	Percent Non-Asbestos Fibrous Material: None Detected	

Note: Sample/Layers analyzed by Rebecca Hargrove, 10/07/20.

Lab No.: 7072761 Client No.: APH920-A04	Analyst Observation: White Joint Compound Client Description: Joint Compound	Location: Phase 2, Guest Rm 407, Corner Of Outside Wall Facility: Percent Non-Fibrous Material: 100
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: None Detected	

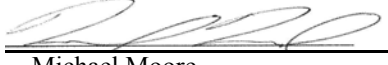
Lab No.: 7072762 Client No.: APH920-A05	Analyst Observation: White Drywall Client Description: Gypsum Wallboard And Joint Compound	Location: Phase 2, Guest Rm 406, At Corner By Sink Facility: Percent Non-Fibrous Material: 95
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 3 Cellulose 2 Fibrous Glass	

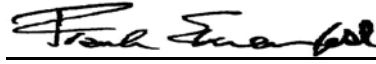
Lab No.: 7072762(L2) Client No.: APH920-A05	Analyst Observation: White Joint Compound Client Description: Gypsum Wallboard And Joint Compound	Location: Phase 2, Guest Rm 406, At Corner By Sink Facility: Percent Non-Fibrous Material: 98.6
Percent Asbestos: <i>PC 1.4 Chrysotile</i>	Percent Non-Asbestos Fibrous Material: None Detected	

Note: Sample/Layers analyzed by Rebecca Hargrove, 10/07/20.

Lab No.: 7072763 Client No.: APH920-A06	Analyst Observation: Brown Drywall Client Description: Green Board Gypsum Wallboard And Joint Compound	Location: Phase 2, Restroom 405.1 At Corner By Door Facility: Percent Non-Fibrous Material: 97
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 3 Cellulose	

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 10/5/2020
Date Analyzed: 10/05/2020
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 10/5/2020 Report No.: 620588 - PLM Project: Anch Pioneer Home 4th Floor Reno Project No.: 7787-02
Client: EHS511	

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7072763(L2) Client No.: APH920-A06	Analyst Observation: White Joint Compound Client Description: Green Board Gypsum Wallboard And Joint Compound	Location: Phase 2, Restroom 405.1 At Corner By Door Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Lab No.: 7072764 Client No.: APH920-A07	Analyst Observation: Brown Drywall Client Description: Green Board Gypsum Wallboard And Joint Compound	Location: Phase 2, Restroom 402.1 At Corner By Door Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 3 Cellulose	<u>Percent Non-Fibrous Material:</u> 97

Lab No.: 7072764(L2) Client No.: APH920-A07	Analyst Observation: White Joint Compound Client Description: Green Board Gypsum Wallboard And Joint Compound	Location: Phase 2, Restroom 402.1 At Corner By Door Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

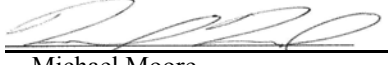
Lab No.: 7072765 Client No.: APH920-A08	Analyst Observation: White/Tan Joint Compound Client Description: Joint Compound	Location: Phase 2, Guest Rm 4039, Outside Corner By Sink Facility:
<u>Percent Asbestos:</u> PC 1.6 Chrysotile	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 98.4

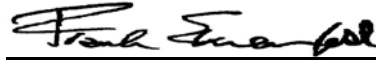
Note: Sample/Layers analyzed by Rebecca Hargrove, 10/07/20.

Lab No.: 7072766 Client No.: APH920-A09	Analyst Observation: Brown Drywall Client Description: Green Board Gypsum Wallboard And Joint Compound	Location: Phase 2, Restroom 437.1 At Corner By Door Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> 3 Cellulose	<u>Percent Non-Fibrous Material:</u> 97

Lab No.: 7072766(L2) Client No.: APH920-A09	Analyst Observation: White Joint Compound Client Description: Green Board Gypsum Wallboard And Joint Compound	Location: Phase 2, Restroom 437.1 At Corner By Door Facility:
<u>Percent Asbestos:</u> <i>None Detected</i>	<u>Percent Non-Asbestos Fibrous Material:</u> None Detected	<u>Percent Non-Fibrous Material:</u> 100

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 10/5/2020
Date Analyzed: 10/05/2020
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 10/5/2020 Report No.: 620588 - PLM Project: Anch Pioneer Home 4th Floor Reno Project No.: 7787-02
Client: EHS511	

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7072767 Client No.: APH920-A10	Analyst Observation: White Joint Compound Client Description: Gypsum Wallboard And Joint Compound	Location: Phase 1, Guest Rm 434 At Corner In Clsoet Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>PC 2.2 Chrysotile</i>	Percent Non-Asbestos Fibrous Material: None Detected	97.8

Note: Sample/Layers analyzed by Rebecca Hargrove, 10/07/20.

Lab No.: 7072767(L2) Client No.: APH920-A10	Analyst Observation: Tan Joint Compound Client Description: Gypsum Wallboard And Joint Compound	Location: Phase 1, Guest Rm 434 At Corner In Clsoet Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>PC 2.4 Chrysotile</i>	Percent Non-Asbestos Fibrous Material: None Detected	97.6

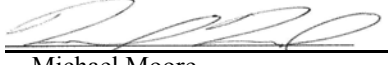
Note: Sample/Layers analyzed by Rebecca Hargrove, 10/07/20.

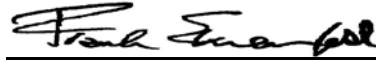
Lab No.: 7072768 Client No.: APH920-A11	Analyst Observation: White Insulation Client Description: Hard Fitting Insulation On Domestic Water	Location: Phase 1, Guest Rm 435, Through Access Panel Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 10 Fibrous Glass	90

Lab No.: 7072769 Client No.: APH920-A12	Analyst Observation: White Insulation Client Description: Hard Fitting Insulation On Domestic Water	Location: Phase 2, In Chase Of Restroom 437.1, Through Fire Extinguisher Panel Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 10 Fibrous Glass	90

Lab No.: 7072770 Client No.: APH920-A13	Analyst Observation: White Insulation Client Description: Hard Fitting Probably Domestic Water	Location: Phase 2, Guest Rm 439, Above Ceiling Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 10 Fibrous Glass	90

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 10/5/2020
Date Analyzed: 10/05/2020
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

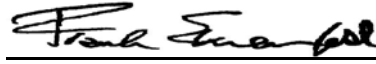
Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577	Report Date: 10/5/2020 Report No.: 620588 - PLM Project: Anch Pioneer Home 4th Floor Reno Project No.: 7787-02
Client: EHS511	

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7072771 Client No.: APH920-A14	Analyst Observation: Off-White Insulation Client Description: Hard Fitting Probably Domestic Water	Location: Phase 2, Lounge 458, Above Ceiling Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 10 Fibrous Glass	90
Lab No.: 7072772 Client No.: APH920-A15	Analyst Observation: Off-White Insulation Client Description: Hard Fitting Probably Domestic Water	Location: Phase 2, Guest Rm 404, Above Ceiling Near Restroom Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 10 Fibrous Glass	90
Lab No.: 7072773 Client No.: APH920-A16	Analyst Observation: Off-White Insulation Client Description: Hard Fitting On Roof Drain	Location: Phase 2, Guest Rm 404, Above Ceiling Near Restroom Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 10 Fibrous Glass	90
Lab No.: 7072774 Client No.: APH920-A17	Analyst Observation: Off-White Insulation Client Description: Hard Fitting Probably Hot Water	Location: Phase 2, Guest Rm 406, Above Ceiling Near Restroom Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 10 Fibrous Glass	90
Lab No.: 7072775 Client No.: APH920-A18	Analyst Observation: Off-White Insulation Client Description: Hard Fitting Probably Domestic Water	Location: Phase 2, Lounge 456, Above Ceiling Near Center Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 5 Fibrous Glass 2 Cellulose	93
Lab No.: 7072776 Client No.: APH920-A19	Analyst Observation: Off-White Insulation Client Description: Hard Fitting Probably Domestic Water	Location: Phase 2, Lounge 454, Above Ceiling Near Center Facility: Percent Non-Fibrous Material:
Percent Asbestos: <i>None Detected</i>	Percent Non-Asbestos Fibrous Material: 10 Fibrous Glass	90

Please refer to the Appendix of this report for further information regarding your analysis.

Date Received: 10/5/2020
Date Analyzed: 10/05/2020
Signature: 
Analyst: Michael Moore

Approved By: 
Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Client: EHS511

Report Date: 10/5/2020
Report No.: 620588 - PLM
Project: Anch Pioneer Home 4th Floor Reno
Project No.: 7787-02

PLM BULK SAMPLE ANALYSIS SUMMARY

Lab No.: 7072777

Client No.: APH920-A20

Analyst Observation: Off-White Insulation

Client Description: Hard Fitting Probably Domestic Water

Location: Phase 2, Corridor 452, Above
Ceiling Near Door To 424

Facility:

Percent Asbestos:

None Detected

Percent Non-Asbestos Fibrous Material:

10 Fibrous Glass

Percent Non-Fibrous Material:

90

Please refer to the Appendix of this report for further information regarding your analysis.

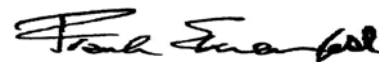
Date Received: 10/5/2020

Date Analyzed: 10/05/2020

Signature:

Analyst: Michael Moore

Approved By:



Frank E. Ehrenfeld, III
Laboratory Director

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Client: EHS511

Report Date: 10/5/2020
Report No.: 620588 - PLM
Project: Anch Pioneer Home 4th Floor Reno
Project No.: 7787-02

Appendix to Analytical Report

Customer Contact: Cali Swatowski

Method: 40 CFR Appendix E to Subpart E of Part 763, interim method for the Determination of Asbestos in Bulk Insulation Samples, and USEPA 600, R93-116 as needed.

This appendix seeks to promote greater understanding of any observations, exceptions, special instructions, or circumstances that the laboratory needs to communicate to the client concerning the above samples. The information below is used to help promote your ability to make the most informed decisions for you and your customers. Please note the following points of contact for any questions you may have.

iATL Customer Service: customerservice@iatl.com

iATL Office Manager: wchampion@iatl.com

iATL Account Representative: Semih Kocahasan

Sample Login Notes: See Batch Sheet Attached

Sample Matrix: Bulk Building Materials

Exceptions Noted: See Following Pages

General Terms, Warrants, Limits, Qualifiers:

General information about iATL capabilities and client/laboratory relationships and responsibilities are spelled out in iATL policies that are listed at www.iATL.com and in our Quality Assurance Manual per ISO 17025 standard requirements. The information therein is a representation of iATL definitions and policies for turnaround times, sample submittal, collection media, blank definitions, quantification issues and limit of detection, analytical methods and procedures, sub-contracting policies, results reporting options, fees, terms, and discounts, confidentiality, sample archival and disposal, and data interpretation.

iATL warrants the test results to be of a precision normal for the type and methodology employed for each sample submitted. iATL disclaims any other warrants, expressed or implied, including warranty of fitness for a particular purpose and warranty of merchantability. iATL accepts no legal responsibility for the purpose for which the client uses test results. Any analytical work performed must be governed by our Standard Terms and Conditions. Prices, methods and detection limits may be changed without notification. Please contact your Customer Service Representative for the most current information.

This confidential report relates only to those item(s) tested and does not represent an endorsement by NIST-NVLAP, AIHA LAP LLC, or any agency of local, state or province governments nor of any agency of the U.S. government.

This report shall not be reproduced except in full, without written approval of the laboratory.

Information Pertinent to this Report:

Analysis by US EPA 600 93-116: Determination of Asbestos in Bulk Building Materials by Polarized Light Microscopy (PLM).

Certifications:

- NIST-NVLAP No. 101165-0
- NYSDOH-ELAP No. 11021
- AIHA-LAP, LLC No. 100188

Quantification at <0.25% by volume is possible with this method. (PC) Indicates Stratified Point Count Method performed. (PC-Trace) means that asbestos was detected but is not quantifiable under the Point Counting regimen. PC Trace represents a <0.25% amount. Analysis includes all distinct separable layers in accordance with EPA 600 Method. If not reported or otherwise noted, layer is either not present or the client has specifically requested that it not be analyzed (ex. analyze until positive instructions). Small asbestos fibers may be missed by PLM due to resolution limitations of the optical microscope. Therefore, PLM is not consistently reliable in detecting asbestos in non-friable organically bound (NOB) materials. Quantitative transmission electron microscopy (TEM) is currently the only method that can pronounce materials as non-asbestos containing.

Analytical Methodology Alternatives: Your initial request for analysis may not have accounted for recent advances in regulatory requirements or advances in technology that are routinely used in similar situations for other qualified projects. You may have the option to explore additional analysis for further information. Below are a few options, listed as the matrix followed by the appropriate methodology. Also included are links to more information on our website.

Bulk Building Materials that are Non-Friable Organically Bound (NOB) by Gravimetric Reduction techniques employing PLM and TEM: ELAP 198.6 (PLM-NOB), ELAP 198.4 (TEM-NOB)

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated 11901 Business Blvd., Ste 208 Eagle River AK 99577 Client: EHS511	Report Date: 10/5/2020 Report No.: 620588 - PLM Project: Anch Pioneer Home 4th Floor Reno Project No.: 7787-02

Loose Fill Vermiculite Insulation, Attic Insulation, Zonolite (copyright), etc.: US EPA 600 R-4/004 (multi-tiered analytical process)
Sprayed On Insulation/Fireproofing with Vermiculite (SOF-V): ELAP 198.8 (PLM-SOF-V)

Soil, sludge, sediment, aggregate, and like materials analyzed for asbestos or other elongated mineral particles (ex. erionite, etc.): ASTM D7521, CARB 435, and other options available

Asbestos in Surface Dust according to one of ASTM's Methods (very dependent on sampling collection technique – by TEM): ASTM D 5755, D5756, or D6480

Various other asbestos matrices (air, water, etc.) and analytical methods are available.

Disclaimers / Qualifiers:

There may be some samples in this project that have a "NOTE:" associated with a sample result. We use added disclaimers or qualifiers to inform the client about something that requires further explanation. Here is a list with highlighted disclaimers that may be pertinent to this project. For a full explanation of these and other disclaimers, please inquire at **customerservice@iatl.com**.

- 1) Note: No mastic provided for analysis.
- 2) Note: Insufficient mastic provided for analysis.
- 3) Note: Insufficient material provided for analysis.
- 4) Note: Insufficient sample provided for QC reanalysis.
- 5) Note: Different material than indicated on Sample Log / Description.
- 6) Note: Sample not submitted.
- 7) Note: Attached to asbestos containing material.
- 8) Note: Received wet.
- 9) Note: Possible surface contamination.
- 10) Note: Not building material. 1% threshold may not apply.
- 11) Note: Recommend TEM-NOB analysis as per EPA recommendations.
- 12) Note: Asbestos detected but not quantifiable.
- 13) Note: Multiple identical samples submitted, only one analyzed.
- 14) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.080%.
- 15) Note: Analyzed by EPA 600/R-93/116. Point Counting detection limit at 0.125%.
- 16) Note: This sample contains >10% vermiculite mineral. See Appendix for Recommendations for Vermiculite Analysis.

Recommendations for Vermiculite Analysis:

Several analytical protocols exist for the analysis of asbestos in vermiculite. These analytical approaches vary depending upon the nature of the vermiculite mineral being tested (e.g. un-processed gange, homogeneous exfoliated books of mica, or mixed mineral composites). Please contact your client representative for pricing and turnaround time options available.

iATL recommends initial testing using the EPA 600/R-93/116 method. This method is specifically designed for the analysis of asbestos in bulk building materials. It provides an acceptable starting point for primary screening of vermiculite for possible asbestos.

Results from this testing may be inconclusive. EPA suggests proceeding to a multi-tiered analysis involving wet separation techniques in conjunction with PLM and TEM gravimetric analysis (EPA 600/R-04/004).

For New York State customers, NYSDOH requires disclaimers and qualifiers for various vermiculite containing samples that direct analysis via ELAP198.6 and ELAP198.8 for samples that contain >10% vermiculite mineral where ELAP198.6 may be used to evaluate the asbestos content of the material. However, any test result using ELAP198.6 will be reported with the following disclaimer: "ELAP198.6 method does not remove vermiculite and may underestimate the level of asbestos present in a sample containing >10% vermiculite."

Further information on this method and other vermiculite and asbestos issues can be found at the following: Agency for Toxic Substances and Disease Registry (ATSDR) www.atsdr.cdc.gov, United States Geological Survey (USGS) www.minerals.usgs.gov/minerals/, US EPA www.epa.gov/asbestos. The USEPA also has an informative brochure "Current Best Practices for Vermiculite Attic Insulation" EPA 747F03001 May 2003, that may assist the health and remediation professional. NYS customers please follow current NYSDOH ELAP requirements per policy on subject of surfacing and vermiculite, May 6, 2016, Testing Requirements for Surfacing Material Containing Vermiculite (https://www.wadsworth.org/sites/default/files/WebDoc/1198_8_02_2.pdf)

The following is a summary of the analytical process outlines in the EPA 600/R-04/004 Method:

- 1) **Analytical Step/Method:** Initial Screening by PLM, EPA 600R-93/116
Requirements/Comments: Minimum of 0.1 g of sample. ~0.25% for most samples.

CERTIFICATE OF ANALYSIS

Client: EHS Alaska Incorporated
11901 Business Blvd., Ste 208
Eagle River AK 99577

Client: EHS511

Report Date: 10/5/2020
Report No.: 620588 - PLM
Project: Anch Pioneer Home 4th Floor Reno
Project No.: 7787-02

2)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

3)**Analytical Step/Method:** Wet Separation by PLM Gravimetric Technique, EPA R-04/004

Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Floats" only.

4)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Sinks" only.

5)**Analytical Step/Method:** Wet Separation by TEM Gravimetric Technique, EPA R-04/004

Requirements/Comments: Minimum 50g** of dry sample. Analysis of "Suspension" only.

*With advance notice and confirmation by the laboratory.

**Approximately 1 Liter of sample in double-bagged container (~9x6 inch bag of sample).

APPENDIX B

Lead Analyzer Test Results

LEAD ANALYZER TEST RESULTS

SciAps X550Pb (Rh 4W), Serial Number 01052

NO.	SITE	INSPECTOR	FLOOR	ROOM	COMPONENT	SUBSTRATE	CONDITION	COLOR	TIME	RESULTS		
										LBP	mg/cm ²	+/- ERROR
1	PIONEER HM, 3RD FLOOR	FRENCH	3		CALIBRATION	WOOD		Red	1/4/2023 16:33	POSITIVE	1.03	0.03
2	PIONEER HM, 3RD FLOOR	FRENCH	3		CALIBRATION	WOOD		Red	1/4/2023 16:34	POSITIVE	1.09	0.03
3	PIONEER HM, 3RD FLOOR	FRENCH	3		CALIBRATION	WOOD		Red	1/4/2023 16:34	POSITIVE	1.01	0.03
4	PIONEER HM, 3RD FLOOR	FRENCH	3		CALIBRATION	WOOD		Red	1/4/2023 16:34	POSITIVE	1.04	0.02
5	PIONEER HM, 3RD FLOOR	FRENCH	3	361 CORR	WALL	DRYWALL	INTACT	OFF-WHITE	1/4/2023 16:37	NEGATIVE	0.01	< 0.01
6	PIONEER HM, 3RD FLOOR	FRENCH	3	310	WALL	DRYWALL	INTACT	OFF-WHITE	1/4/2023 16:39	NEGATIVE	0.01	< 0.47
7	PIONEER HM, 3RD FLOOR	FRENCH	3	310	WALL	BRICK	INTACT	OFF-WHITE	1/4/2023 16:42	NEGATIVE	0.01	< 0.01
8	PIONEER HM, 3RD FLOOR	FRENCH	3	360.1 CORR	DOOR FRAME	METAL	INTACT	Grey	1/4/2023 16:44	NEGATIVE	0.01	< 0.01
9	PIONEER HM, 3RD FLOOR	FRENCH	3	307	SINK	CERAMIC	INTACT	White	1/4/2023 16:45	NEGATIVE	0.01	< 0.01
10	PIONEER HM, 3RD FLOOR	FRENCH	3	307.1	TRIM	WOOD	INTACT	Grey	1/4/2023 16:47	NEGATIVE	0.01	< 0.01
11	PIONEER HM, 3RD FLOOR	FRENCH	3	304	COUNTER	FORMICA	INTACT	Yellow	1/4/2023 16:50	NEGATIVE	0.01	< 0.01
12	PIONEER HM, 3RD FLOOR	FRENCH	3	336.1	WALL	MARLITE	INTACT	White	1/4/2023 16:52	NEGATIVE	0.01	< 0.01
13	PIONEER HM, 3RD FLOOR	FRENCH	3	336.1	TUB	CERAMIC	INTACT	White	1/4/2023 16:55	POSITIVE	7.63	0.27
14	PIONEER HM, 3RD FLOOR	FRENCH	3	332.1	TUB	CERAMIC	INTACT	White	1/4/2023 16:58	POSITIVE	6.76	0.25
15	PIONEER HM, 3RD FLOOR	FRENCH	3	332.1	DOOR	WOOD	INTACT	Blue	1/4/2023 17:00	NEGATIVE	0.01	< 0.01
16	PIONEER HM, 3RD FLOOR	FRENCH	3	332.1	DOOR FRAME	METAL	INTACT	Black	1/4/2023 17:00	NEGATIVE	0.01	0.01
17	PIONEER HM, 3RD FLOOR	FRENCH	3	326	WALL	DRYWALL	INTACT	OFF-WHITE	1/4/2023 17:02	NEGATIVE	0.02	0.01
18	PIONEER HM, 3RD FLOOR	FRENCH	3	323.1	FLOOR	EPOXY	INTACT	Brown	1/4/2023 17:04	NEGATIVE	0.01	< 0.01
19	PIONEER HM, 3RD FLOOR	FRENCH	3	316	SINK	CERAMIC	INTACT	White	1/4/2023 17:06	NEGATIVE	0.01	< 0.01
20	PIONEER HM, 3RD FLOOR	FRENCH	3	316.1	TUB	CERAMIC	INTACT	White	1/4/2023 17:07	POSITIVE	7.6	0.27
21	PIONEER HM, 3RD FLOOR	FRENCH	3	315	DOOR	WOOD	INTACT	Blue	1/4/2023 17:08	NEGATIVE	0.03	0.01
22	PIONEER HM, 3RD FLOOR	FRENCH	3	314	DOOR FRAME	METAL	INTACT	Black	1/4/2023 17:10	NEGATIVE	0.01	0.01
23	PIONEER HM, 3RD FLOOR	FRENCH	3	314	DOOR	WOOD	INTACT	Red	1/4/2023 17:11	NEGATIVE	0.03	0.01
24	PIONEER HM, 3RD FLOOR	FRENCH	3		CALIBRATION	WOOD		Red	1/4/2023 17:12	NEGATIVE	0.01	< 0.01
25	PIONEER HM, 3RD FLOOR	FRENCH	3		CALIBRATION	WOOD		Red	1/4/2023 17:13	POSITIVE	1.04	0.03
26	PIONEER HM, 3RD FLOOR	FRENCH	3		CALIBRATION	WOOD		Red	1/4/2023 17:13	POSITIVE	1.05	0.03
27	PIONEER HM, 3RD FLOOR	FRENCH	3		CALIBRATION	WOOD		Red	1/4/2023 17:13	NEGATIVE	0.7	0.01
28	PIONEER HM, 3RD FLOOR	FRENCH	3		CALIBRATION	WOOD		Red	1/4/2023 17:13	NEGATIVE	0.99	0.02
29	PIONEER HM, 3RD FLOOR	FRENCH	3		CALIBRATION	WOOD		Red	1/4/2023 17:14	POSITIVE	1.03	0.03
30	PIONEER HM, 3RD FLOOR	FRENCH	3		CALIBRATION	WOOD		Red	1/4/2023 17:15	POSITIVE	1.04	0.03
31	PIONEER HM, 3RD FLOOR	FRENCH	3		CALIBRATION	WOOD		Red	1/4/2023 17:15	NEGATIVE	0.97	0.03
32	PIONEER HM, 3RD FLOOR	FRENCH	3		CALIBRATION	WOOD		Red	1/4/2023 17:15	POSITIVE	1.01	0.02

Table Heading Descriptions:

Duration: This is the nominal time in "source" seconds that each sample was analyzed.

LBP: Results are shown as positive (POS $\geq$ 1.0 mg/cm²) or negative (NEG < 1.0 mg/cm²). Positive results are shown in bold print.

mg/cm²: This is the testing results produced by the SciAps instrument in milligrams of lead per square centimeter (mg/cm²). The EPA defines lead based paint as paint containing lead at 1.0 mg/cm² or greater. A negative number is a result of an internal computation made by the instrument and should be interpreted as zero. Even though paint may be termed negative (less than 1.0 mg/cm²) by EPA definition, disturbance of the paint may still be regulated by OSHA under 29 CFR 1926.62. Where lead is present at any level, appropriate engineering controls, work practices and personal protective equipment should be used until a negative exposure assessment can be determined. <LOD indicates that the lead present was less than the limits of detection of the instrument (very little or no lead present).

LEAD ANALYZER TEST RESULTS

VOID: This indicates that the test was intentionally terminated by the operator due to operator error (e.g. - operator moved analyzer while testing).

Substrate: Where ceramic is shown as a substrate, lead content is typically from the glazing on the tile or fixture unless the tile is painted.

LEAD ANALYZER TEST RESULTS

NO.	SITE	INSPECTOR	FLOOR	ROOM	COMPONENT	SUBSTRATE	CONDITION	COLOR	DURATION	TIME	RESULTS		
											LBP	mg/cm ²	+/- ERROR
1	ANCHORAGE PIONEER HOME	HILL	-	-	CALIBRATION	-	-	GREEN	5	8/31/20 14:48:38	POSITIVE	1	0.1
2	ANCHORAGE PIONEER HOME	HILL	-	-	CALIBRATION	-	-	GREEN	5	8/31/20 14:48:51	POSITIVE	1	0.1
3	ANCHORAGE PIONEER HOME	HILL	-	-	CALIBRATION	-	-	GREEN	5	8/31/20 14:49:03	POSITIVE	1	0.1
4	ANCHORAGE PIONEER HOME	HILL	FOURTH	410	DOOR	WOOD	INTACT	OFF-WHITE	2	8/31/20 14:56:02	NEGATIVE	0.5	0.3
5	ANCHORAGE PIONEER HOME	HILL	FOURTH	410	DOOR FRAME	METAL	INTACT	TAN	5.96	8/31/20 14:57:14	NEGATIVE	0.11	0.12
6	ANCHORAGE PIONEER HOME	HILL	FOURTH	410	WALL	BRICK	INTACT	OFF-WHITE	5.6	8/31/20 15:00:54	NEGATIVE	0.03	0.13
7	ANCHORAGE PIONEER HOME	HILL	FOURTH	409.1	WALL	FORMICA	INTACT	OFF-WHITE	5.47	8/31/20 15:03:13	NEGATIVE	0.25	0.13
8	ANCHORAGE PIONEER HOME	HILL	FOURTH	409	DOOR FRAME	METAL	INTACT	BLACK	5.61	8/31/20 15:04:16	NEGATIVE	0.12	0.13
9	ANCHORAGE PIONEER HOME	HILL	FOURTH	407	DOOR	WOOD	INTACT	BLUE	5.68	8/31/20 15:07:30	NEGATIVE	0.17	0.13
10	ANCHORAGE PIONEER HOME	HILL	FOURTH	407	WALL	DRYWALL	INTACT	OFF-WHITE	5.63	8/31/20 15:10:02	NEGATIVE	0.14	0.13
11	ANCHORAGE PIONEER HOME	HILL	FOURTH	460	DOOR	WOOD	INTACT	TAN	5.26	8/31/20 15:11:14	NEGATIVE	0.11	0.13
12	ANCHORAGE PIONEER HOME	HILL	FOURTH	406	CABINET	FORMICA	INTACT	YELLOW	4.81	8/31/20 15:23:01	NEGATIVE	0.16	0.14
13	ANCHORAGE PIONEER HOME	HILL	FOURTH	406	WINDOW TRIM	METAL	INTACT	BLACK	5.6	8/31/20 15:24:22	NEGATIVE	0.51	0.13
14	ANCHORAGE PIONEER HOME	HILL	FOURTH	405.1	DOOR	WOOD	INTACT	RED	5.58	8/31/20 15:25:47	NEGATIVE	0.11	0.13
15	ANCHORAGE PIONEER HOME	HILL	FOURTH	405	CABINET	FORMICA	INTACT	ORANGE	5.95	8/31/20 15:27:19	NEGATIVE	0.92	0.12
16	ANCHORAGE PIONEER HOME	HILL	FOURTH	403	CABINET	FORMICA	INTACT	OFF-WHITE	5.77	8/31/20 15:29:03	NEGATIVE	0.12	0.12
17	ANCHORAGE PIONEER HOME	HILL	FOURTH	403	SINK	CERAMIC	INTACT	WHITE	5.68	8/31/20 15:30:32	POSITIVE	12.58	0.13
18	ANCHORAGE PIONEER HOME	HILL	FOURTH	402	DOOR FRAME	METAL	INTACT	BLACK	5.76	8/31/20 15:32:20	NEGATIVE	0.08	0.12
19	ANCHORAGE PIONEER HOME	HILL	FOURTH	401	RADIATOR	METAL	INTACT	BLACK	5.52	8/31/20 15:33:35	NEGATIVE	0.1	0.13
20	ANCHORAGE PIONEER HOME	HILL	FOURTH	401	DOOR	METAL	INTACT	OFF-WHITE	5.7	8/31/20 15:34:53	NEGATIVE	0.12	0.13
21	ANCHORAGE PIONEER HOME	HILL	FOURTH	439.1	WALL	FRP	INTACT	WHITE	6.13	8/31/20 15:36:30	NEGATIVE	0.24	0.12
22	ANCHORAGE PIONEER HOME	HILL	FOURTH	439	WALL	FRP	INTACT	WHITE	5.47	8/31/20 15:37:39	NEGATIVE	0.18	0.13
23	ANCHORAGE PIONEER HOME	HILL	FOURTH	438	CABINET	FORMICA	INTACT	ORANGE	6.93	8/31/20 15:40:04	NEGATIVE	1	0.11
24	ANCHORAGE PIONEER HOME	HILL	FOURTH	438	SINK	CERAMIC	INTACT	WHITE	5.79	8/31/20 15:41:31	POSITIVE	11.28	0.12
25	ANCHORAGE PIONEER HOME	HILL	FOURTH	457	DOOR	METAL	INTACT	OFF-WHITE	5.72	8/31/20 15:43:43	NEGATIVE	0.12	0.13
26	ANCHORAGE PIONEER HOME	HILL	FOURTH	457	WALL	DRYWALL	INTACT	OFF-WHITE	6.17	8/31/20 15:44:38	NEGATIVE	0.18	0.12
27	ANCHORAGE PIONEER HOME	HILL	FOURTH	449	CABINET	WOOD	FAIR	LT BROWN	5.57	8/31/20 15:46:45	NEGATIVE	0.2	0.13
28	ANCHORAGE PIONEER HOME	HILL	FOURTH	449	COUNTERTOP	FORMICA	INTACT	OFF-WHITE	6.47	8/31/20 15:47:42	NEGATIVE	0.19	0.12
29	ANCHORAGE PIONEER HOME	HILL	FOURTH	455	DOOR FRAME	METAL	INTACT	TAN	5.59	8/31/20 15:50:01	NEGATIVE	0.11	0.13
30	ANCHORAGE PIONEER HOME	HILL	FOURTH	434.1	TUB	CERAMIC	INTACT	WHITE	5.36	8/31/20 15:51:56	POSITIVE	25.48	0.13
31	ANCHORAGE PIONEER HOME	HILL	FOURTH	434	DOOR	WOOD	INTACT	WHITE	5.56	8/31/20 15:53:17	NEGATIVE	0.06	0.13
32	ANCHORAGE PIONEER HOME	HILL	FOURTH	434	WALL	BRICK	INTACT	OFF-WHITE	5.19	8/31/20 15:54:50	NEGATIVE	0.12	0.13
33	ANCHORAGE PIONEER HOME	HILL	FOURTH	433	SHELF	FRP	INTACT	OFF-WHITE	6.53	8/31/20 15:57:35	NEGATIVE	0.17	0.12
34	ANCHORAGE PIONEER HOME	HILL	FOURTH	431	SINK	CERAMIC	INTACT	WHITE	6.55	8/31/20 16:01:16	NEGATIVE	0.29	0.12
35	ANCHORAGE PIONEER HOME	HILL	FOURTH	429	SINK	CERAMIC	INTACT	WHITE	5.53	8/31/20 16:03:15	NEGATIVE	0.55	0.13
36	ANCHORAGE PIONEER HOME	HILL	FOURTH	429	DOOR	WOOD	INTACT	RED	5.4	8/31/20 16:04:15	NEGATIVE	0.06	0.13
37	ANCHORAGE PIONEER HOME	HILL	FOURTH	427	DOOR	WOOD	INTACT	BLUE	5.5	8/31/20 16:05:20	NEGATIVE	0.09	0.13
38	ANCHORAGE PIONEER HOME	HILL	FOURTH	427	DOOR FRAME	METAL	INTACT	BLACK	4.95	8/31/20 16:06:12	NEGATIVE	0.15	0.13
39	ANCHORAGE PIONEER HOME	HILL	FOURTH	426.1	WALL	MARLITE	INTACT	WHITE	5.65	8/31/20 16:07:16	NEGATIVE	0.18	0.13
40	ANCHORAGE PIONEER HOME	HILL	FOURTH	448	WALL	BRICK	INTACT	TAN	5.19	8/31/20 16:09:30	NEGATIVE	0.04	0.13
41	ANCHORAGE PIONEER HOME	HILL	FOURTH	448	COUNTERTOP	FORMICA	INTACT	OFF-WHITE	6.02	8/31/20 16:10:49	NEGATIVE	0.19	0.12
42	ANCHORAGE PIONEER HOME	HILL	FOURTH	448	CABINET	FORMICA	INTACT	ORANGE	10.21	8/31/20 16:11:31	POSITIVE	1.06	0.09
43	ANCHORAGE PIONEER HOME	HILL	FOURTH	425.1	TUB	CERAMIC	INTACT	WHITE	4.4	8/31/20 16:14:53	POSITIVE	27.32	0.14
44	ANCHORAGE PIONEER HOME	HILL	FOURTH	423	RADIATOR	METAL	INTACT	BLACK	5.49	8/31/20 16:18:00	NEGATIVE	0.07	0.13
45	ANCHORAGE PIONEER HOME	HILL	FOURTH	423	SINK	CERAMIC	INTACT	WHITE	5.39	8/31/20 16:19:06	POSITIVE	8.7	0.13
46	ANCHORAGE PIONEER HOME	HILL	FOURTH	419.1	TOILET	CERAMIC	INTACT	WHITE	5.56	8/31/20 16:22:02	NEGATIVE	7.8	0.13
47	ANCHORAGE PIONEER HOME	HILL	FOURTH	454	WATER FOUNTAIN	CERAMIC	INTACT	WHITE	5.6	8/31/20 16:28:06	POSITIVE	3.78	0.13
48	ANCHORAGE PIONEER HOME	HILL	FOURTH	461	TRIM	WOOD	INTACT	BLACK	5.77	8/31/20 16:30:52	NEGATIVE	0.02	0.12
49	ANCHORAGE PIONEER HOME	HILL	FOURTH	463	CEILING	WOOD	INTACT	WHITE	5.13	8/31/20 16:32:19	NEGATIVE	0.13	0.13
50	ANCHORAGE PIONEER HOME	HILL	-	-	CALIBRATION	-	-	GREEN	6.72	8/31/20 16:33:51	POSITIVE	1.04	0.12
51	ANCHORAGE PIONEER HOME	HILL	-	-	CALIBRATION	-	-	GREEN	5	8/31/20 16:34:24	POSITIVE	1	0.1

LEAD ANALYZER TEST RESULTS

NO.	SITE	INSPECTOR	FLOOR	ROOM	COMPONENT	SUBSTRATE	CONDITION	COLOR	DURATION	TIME	RESULTS		
											LBP	mg/cm ²	+/- ERROR
52	ANCHORAGE PIONEER HOME	HILL	-	-	CALIBRATION	-	-	GREEN	5	8/31/20 16:34:36	NEGATIVE	0.9	0.1

Table Heading Descriptions:

Duration: This is the nominal time in "source" seconds that each sample was analyzed.

LBP: Results are shown as positive (POS $\geq$ 1.0 mg/cm²) or negative (NEG < 1.0 mg/cm²). Positive results are shown in bold print.

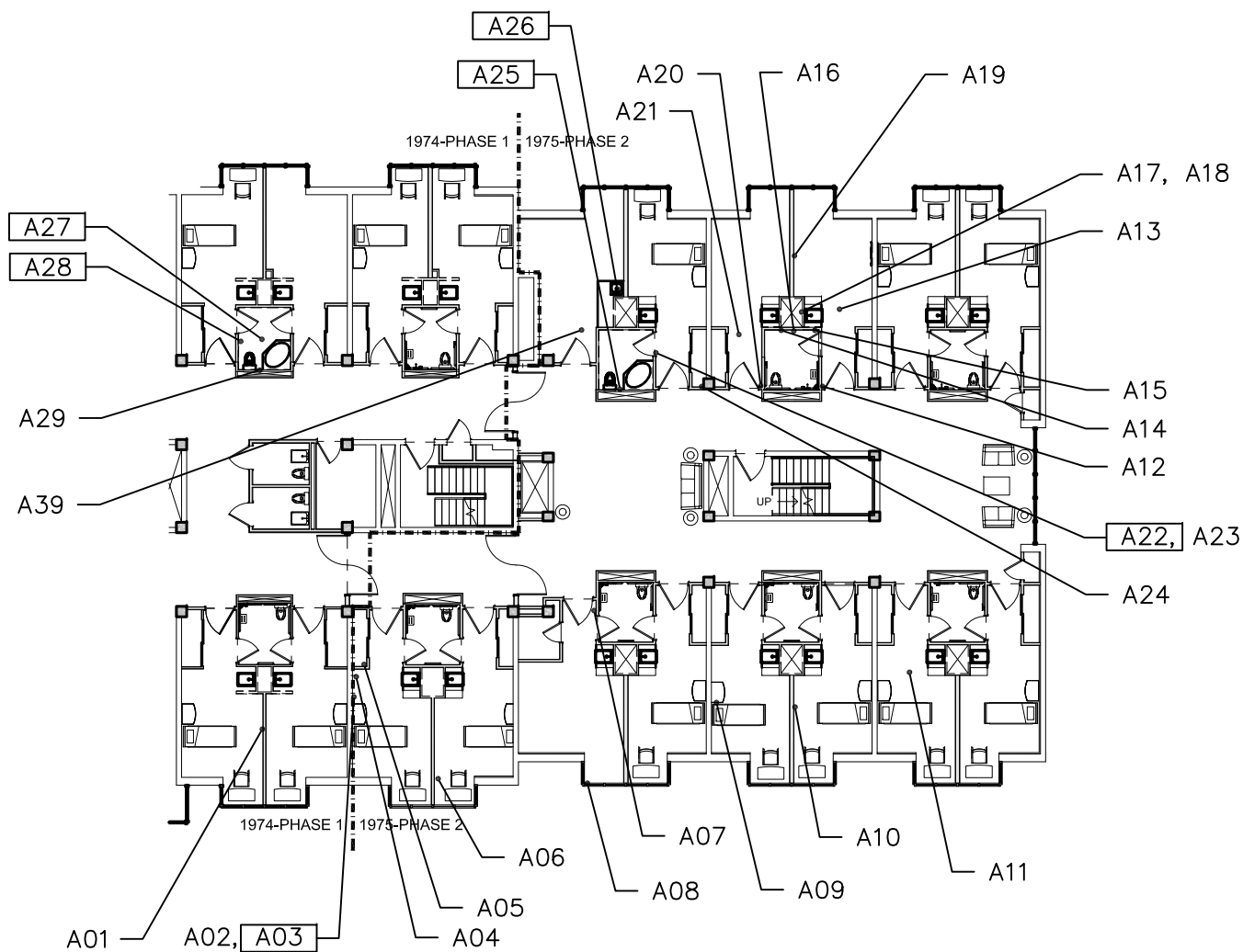
mg/cm²: This is the testing results produced by the Heuresis Pb200i instrument in milligrams of lead per square centimeter (mg/cm²). The EPA defines lead based paint as paint containing lead at 1.0 mg/cm² or greater. A negative number is a result of an internal computation made by the instrument and should be interpreted as zero. Even though paint may be termed negative (less than 1.0 mg/cm²) by EPA definition, disturbance of the paint may still be regulated by OSHA under 29 CFR 1926.62. Where lead is present at any level, appropriate engineering controls, work practices and personal protective equipment should be used until a negative exposure assessment can be determined. <LOD indicates that the lead present was less than the limits of detection of the instrument (very little or no lead present).

VOID: This indicates that the test was intentionally terminated by the operator due to operator error (e.g. - operator moved analyzer while testing).

Substrate: Where ceramic is shown as a substrate, lead content is typically from the glazing on the tile unless the tile is painted.

APPENDIX C

Drawings of Sample Locations



1
C-1

THIRD FLOOR, EAST
NTS



LEGEND

- AXX ASBESTOS TEST LOCATION
- AXX LAB TEST RESULTS POSITIVE FOR ASBESTOS

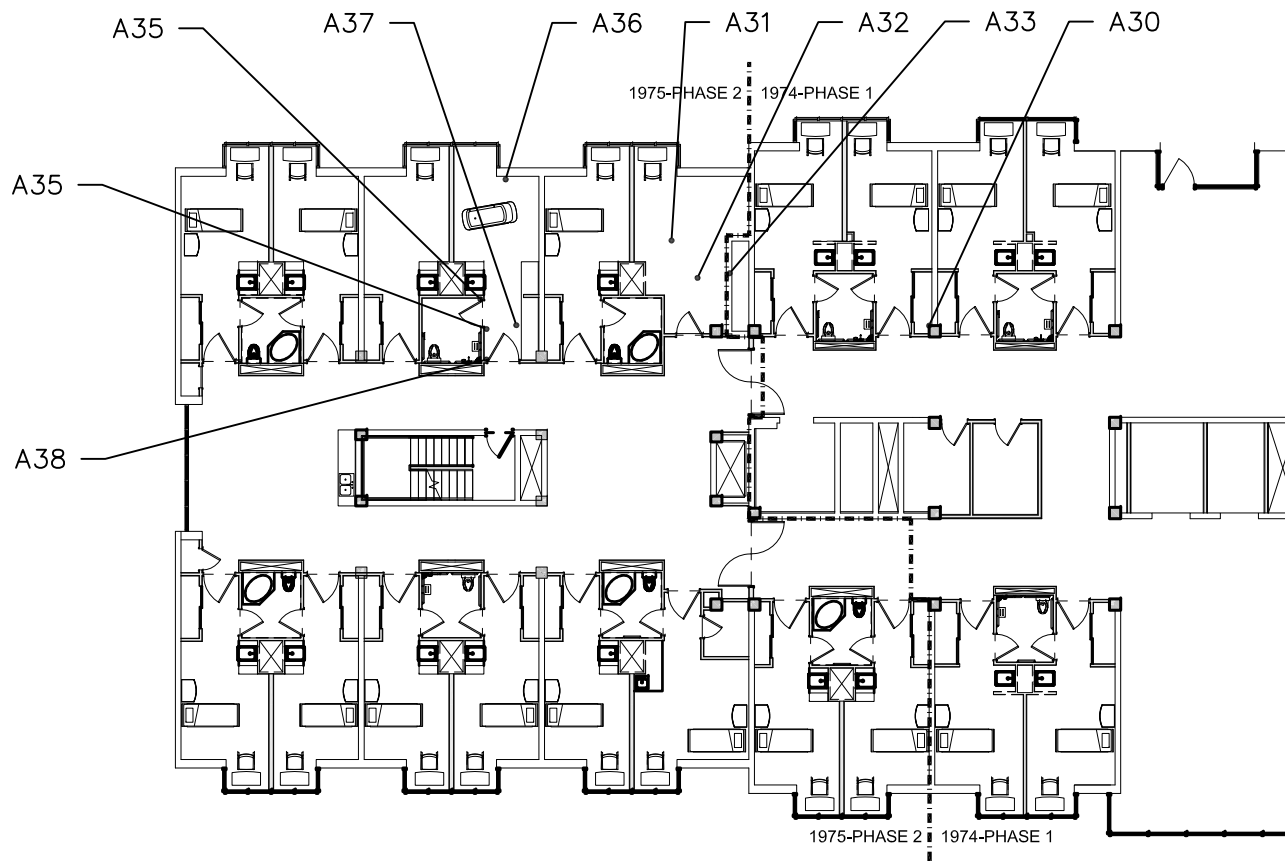
REFER TO TESTING SUMMARY IN REPORT FOR FULL DETAILS. ALL SAMPLES HAVE PH123 - PREFIX.

STATE OF ALASKA
DEPARTMENT OF HEALTH AND
SOCIAL SERVICES

ANCHORAGE PIONEER HOME
ANCHORAGE, ALASKA
ASBESTOS SAMPLE LOCATIONS



DRAWN: JHL	DATE: 01/04/2023
CHECK: RAF	
FILE #:	DWG.NO:
7953-SL	C-1



LEGEND

- AXX ASBESTOS TEST LOCATION
- AXX LAB TEST RESULTS POSITIVE FOR ASBESTOS

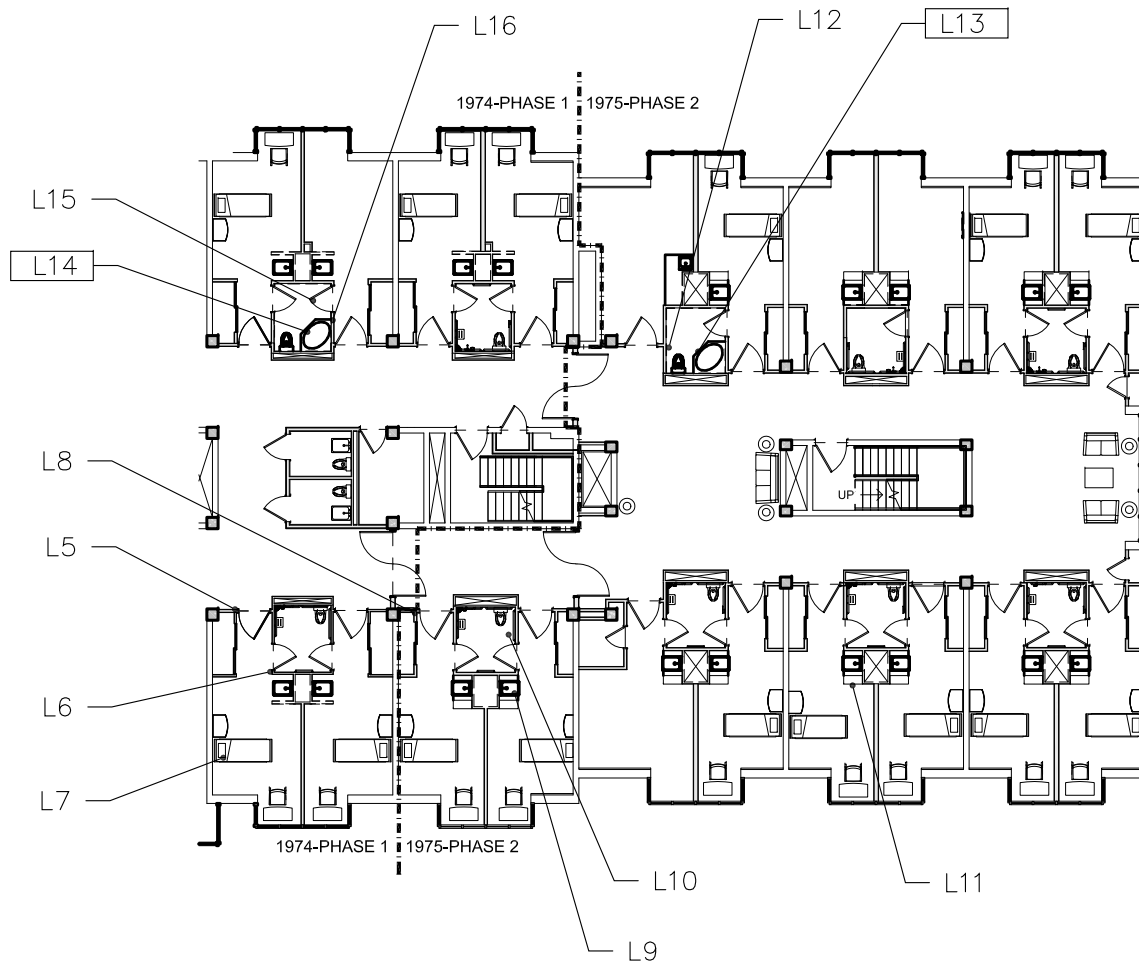
REFER TO TESTING SUMMARY IN REPORT FOR FULL DETAILS. ALL SAMPLES HAVE PH123 - PREFIX.

STATE OF ALASKA
DEPARTMENT OF HEALTH AND
SOCIAL SERVICES

ANCHORAGE PIONEER HOME
ANCHORAGE, ALASKA
ASBESTOS SAMPLE LOCATIONS



DRAWN: JHL	DATE: 01/04/2023
CHECK: RAF	
FILE #:	DWG.NO:
7953-SL	C-2



1
C-3

THIRD FLOOR, EAST
WING



LEGEND

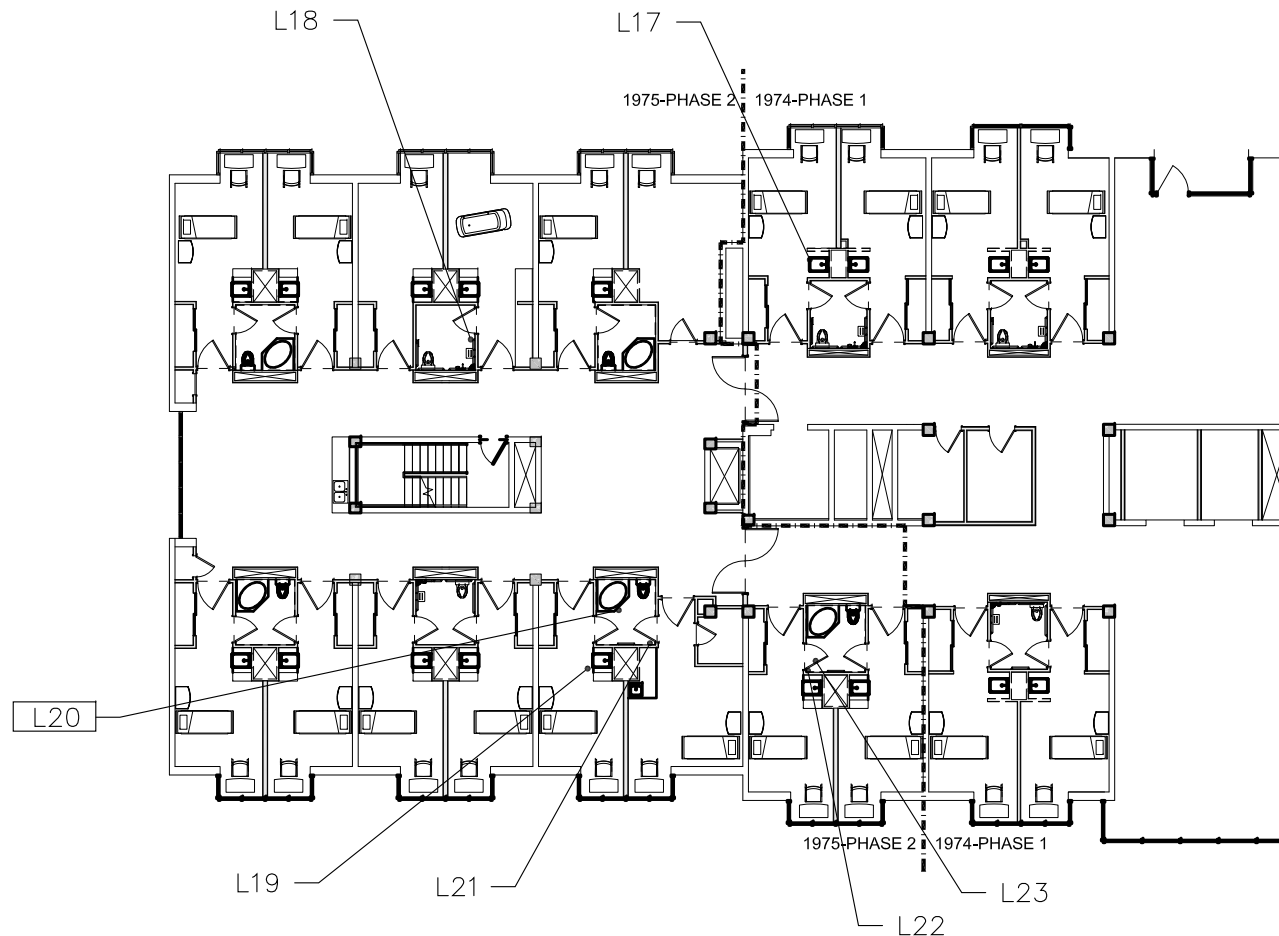
- LXX LEAD TEST LOCATION
 - LXX LEAD TEST CLASSIFIED AS LEAD BASED PAINT
- REFER TO TESTING SUMMARY IN REPORT FOR FULL DETAILS.

STATE OF ALASKA
DEPARTMENT OF HEALTH AND
SOCIAL SERVICES

ANCHORAGE PIONEER HOME
ANCHORAGE, ALASKA
LEAD SAMPLE LOCATIONS



DRAWN: JHL	DATE: 01/04/2023
CHECK: RAF	
FILE #:	DWG.NO:
7953-SL	C-3



LEGEND

— LXX LEAD TEST LOCATION

— LXX LEAD TEST CLASSIFIED AS LEAD BASED PAINT

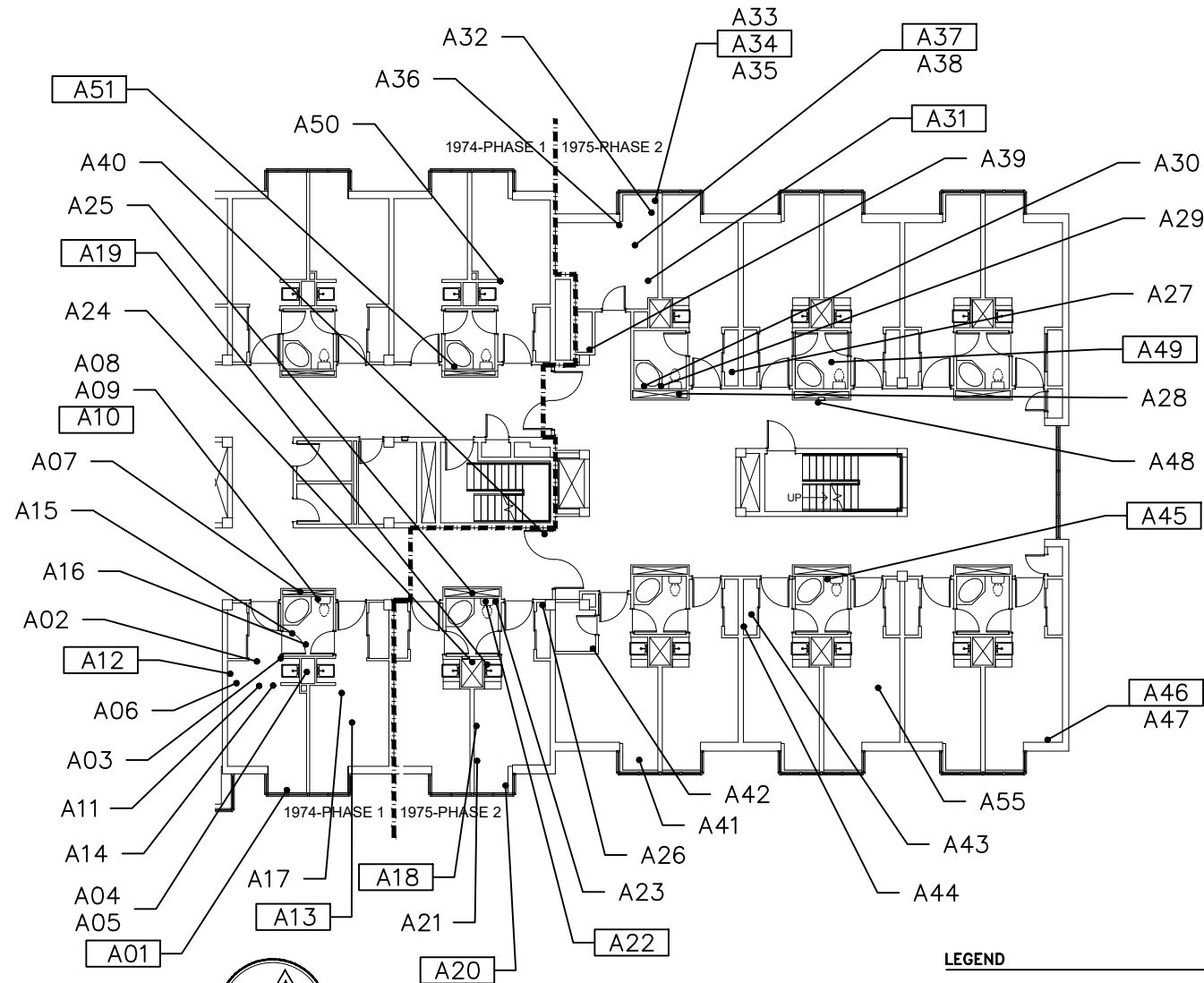
REFER TO TESTING SUMMARY IN REPORT FOR FULL DETAILS.

STATE OF ALASKA
DEPARTMENT OF HEALTH AND
SOCIAL SERVICES

ANCHORAGE PIONEER HOME
ANCHORAGE, ALASKA
LEAD SAMPLE LOCATIONS



DRAWN: JHL	DATE: 01/04/2023
CHECK: RAF	
FILE #:	DWG.NO:
7953-SL	C-4



1
C-1

FOURTH FLOOR, EAST
NTS

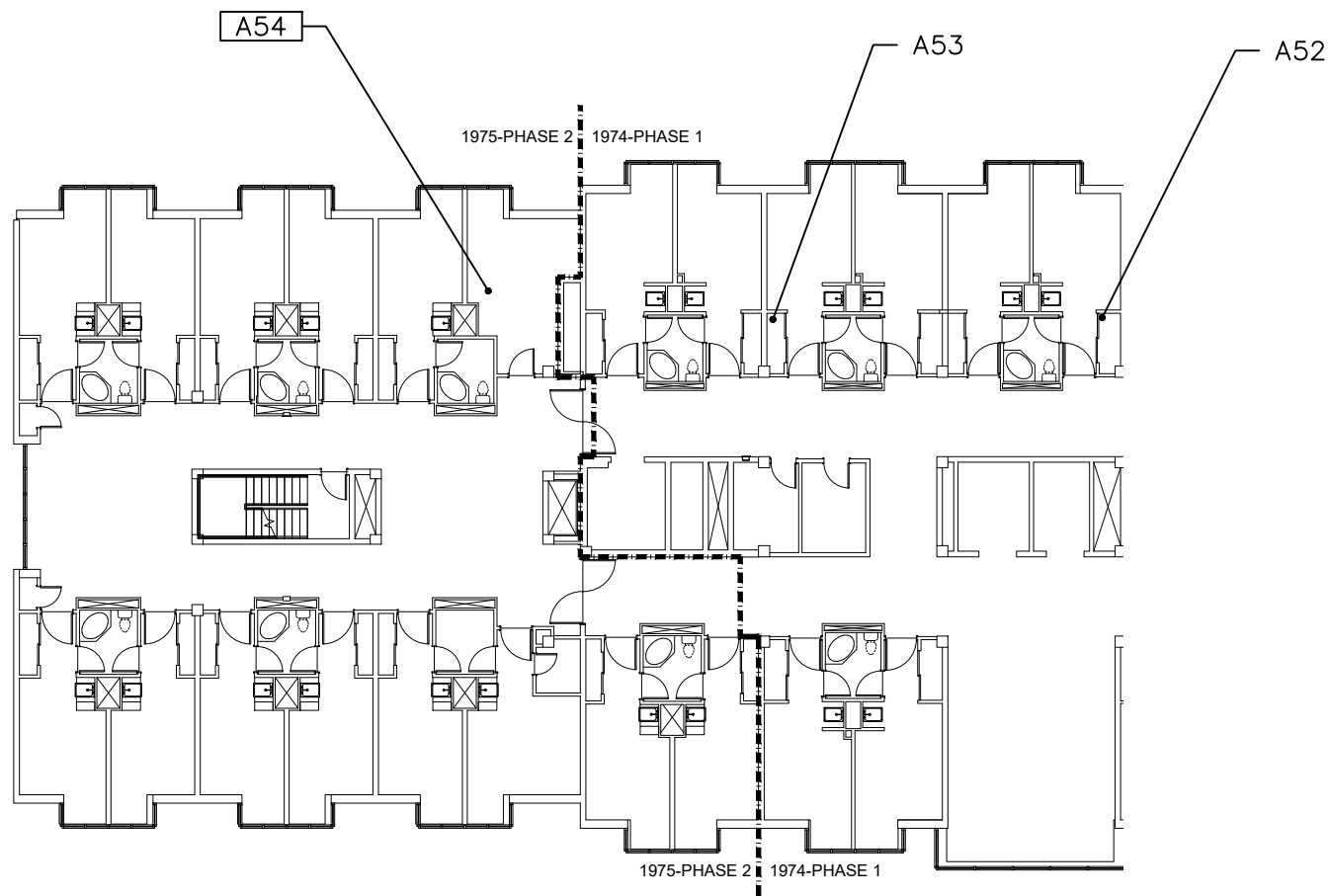


STATE OF ALASKA
DEPARTMENT OF HEALTH AND
SOCIAL SERVICES

ANCHORAGE PIONEER HOME
ANCHORAGE, ALASKA
ASBESTOS SAMPLE LOCATIONS



DRAWN: BWH	DATE: 08/31/2020
CHECK: RAF	
FILE #:	DWG.NO:
7787-SL	C-1



LEGEND

- AXX ASBESTOS TEST LOCATION
- AXX LAB TEST RESULTS POSITIVE FOR ASBESTOS

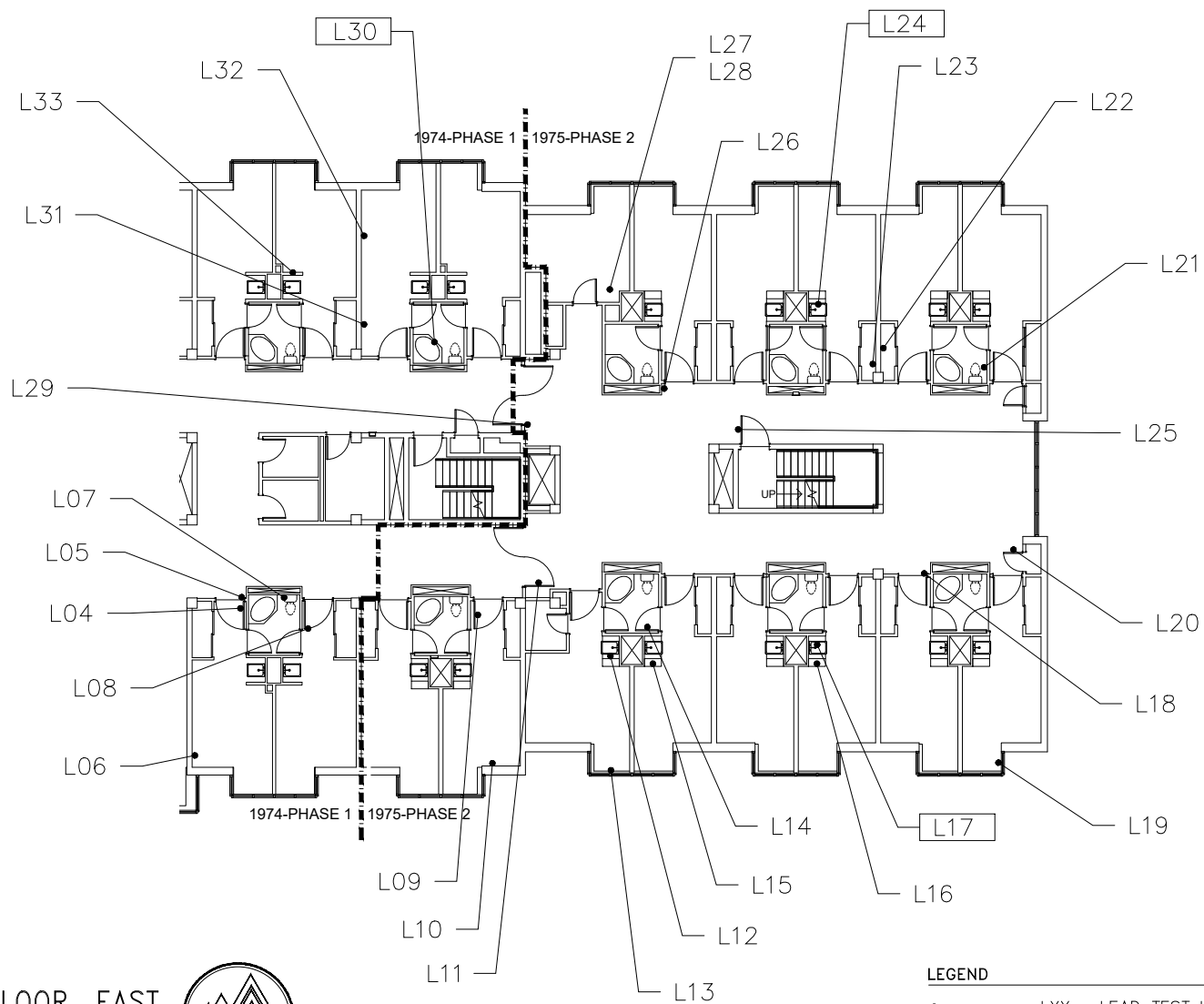
REFER TO TESTING SUMMARY IN REPORT FOR FULL DETAILS. ALL SAMPLES HAVE APH920- PREFIX.

STATE OF ALASKA
DEPARTMENT OF HEALTH AND
SOCIAL SERVICES

ANCHORAGE PIONEER HOME
ANCHORAGE, ALASKA
ASBESTOS SAMPLE LOCATIONS



DRAWN: BWH	DATE: 08/31/2020
CHECK: RAF	
FILE #:	DWG.NO:
7787-SL	C-2



1
C-3

FOURTH FLOOR, EAST
NTS



LEGEND

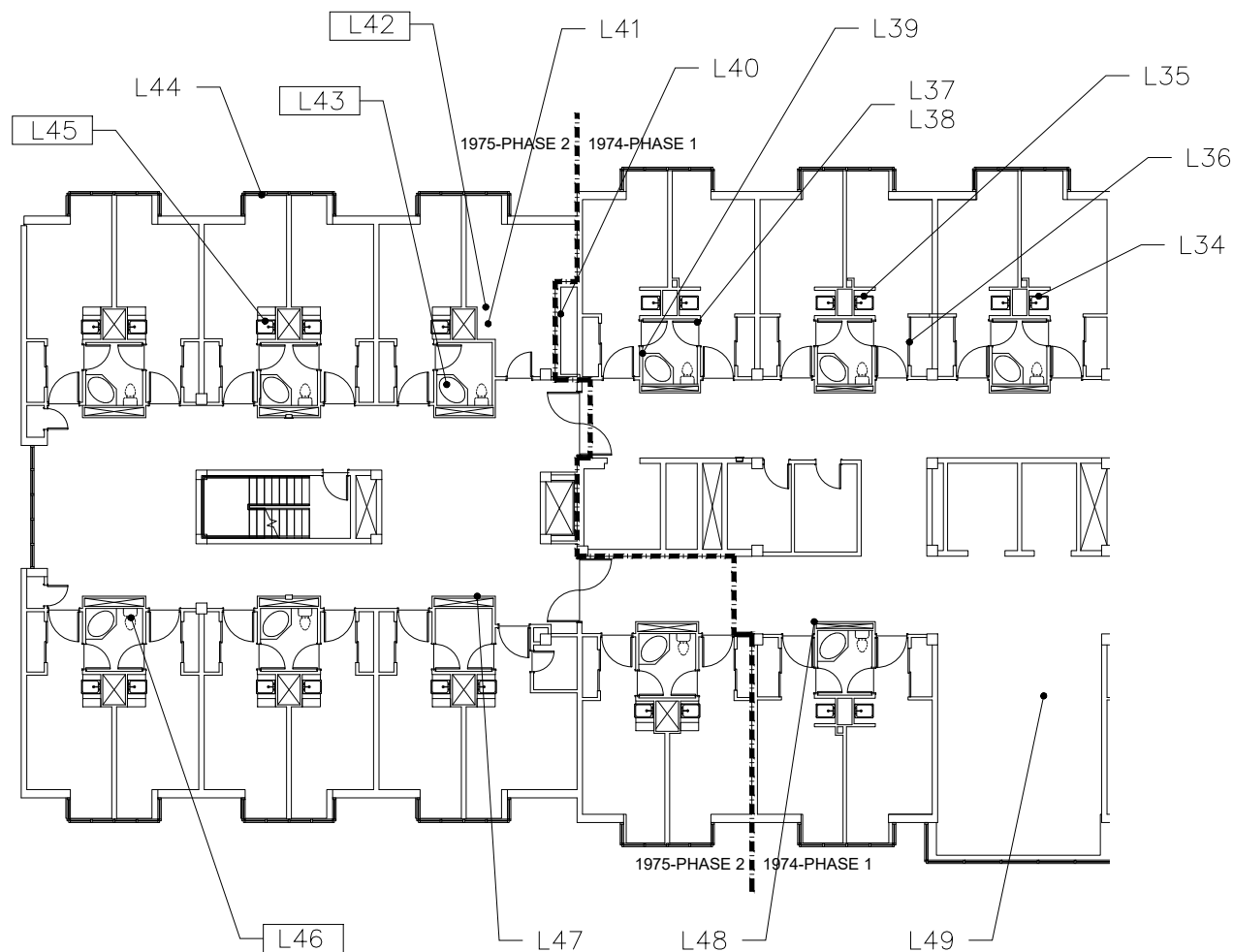
- LXX LEAD TEST LOCATION
 - LXX LEAD TEST CLASSIFIED AS LEAD BASED PAINT
- REFER TO TESTING SUMMARY IN REPORT FOR FULL DETAILS.

STATE OF ALASKA
DEPARTMENT OF HEALTH AND
SOCIAL SERVICES

ANCHORAGE PIONEER HOME
ANCHORAGE, ALASKA
LEAD SAMPLE LOCATIONS



DRAWN: BWH	DATE: 08/31/2020
CHECK: RAF	
FILE #:	DWG.NO:
7787-SL	C-3



FOURTH FLOOR, WEST
NTS

LEGEND

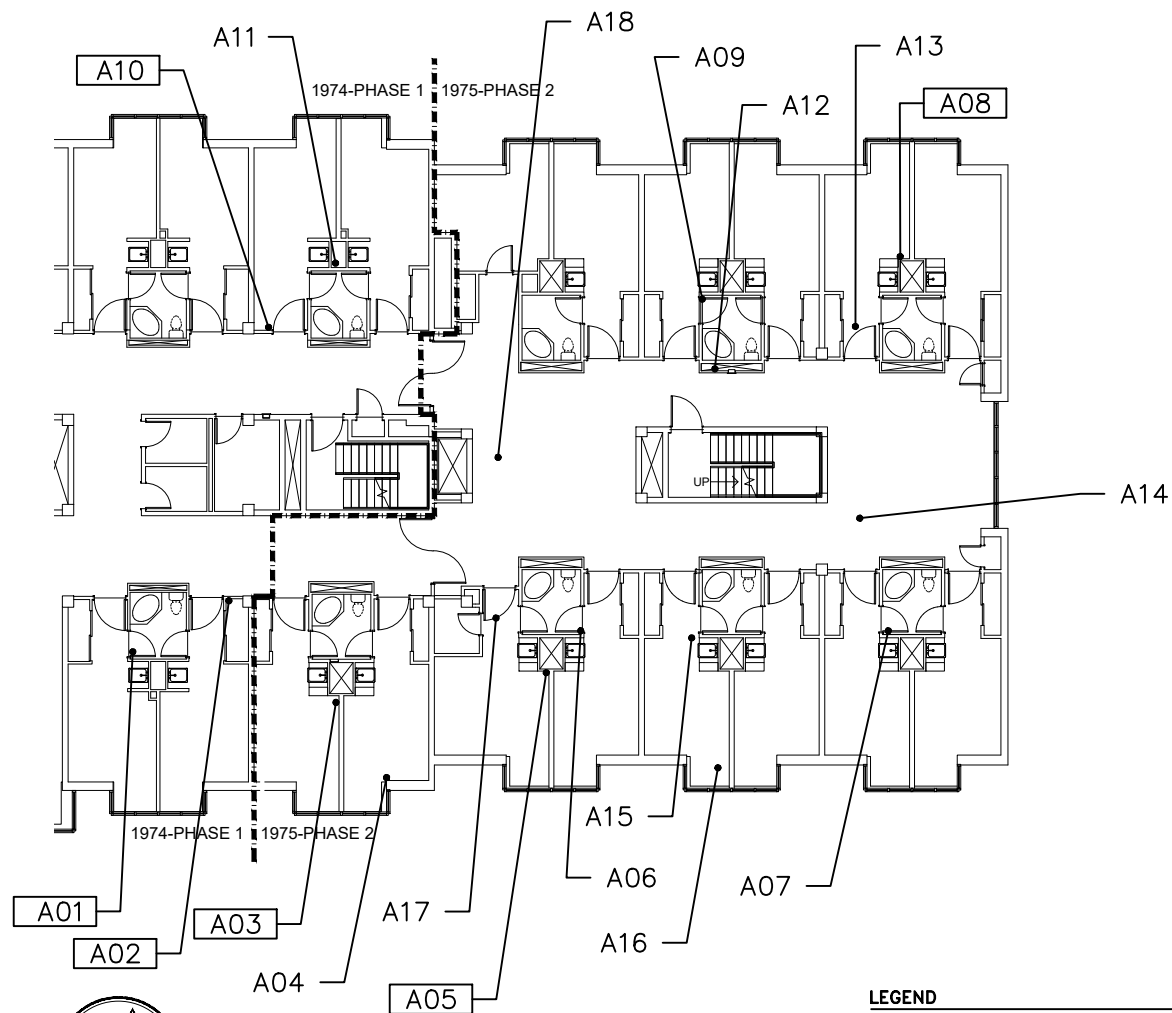
- LXX LEAD TEST LOCATION
 - LXX LEAD TEST CLASSIFIED AS LEAD BASED PAINT
- REFER TO TESTING SUMMARY IN REPORT FOR FULL DETAILS.

STATE OF ALASKA
DEPARTMENT OF HEALTH AND
SOCIAL SERVICES

ANCHORAGE PIONEER HOME
ANCHORAGE, ALASKA
LEAD SAMPLE LOCATIONS



DRAWN: BWH	DATE: 08/31/2020
CHECK: RAF	
FILE #:	DWG.NO:
7787-SL	C-4



1
C-5

FOURTH FLOOR, EAST
NTS



LEGEND

- AXX ASBESTOS TEST LOCATION
- AXX LAB TEST RESULTS POSITIVE FOR ASBESTOS

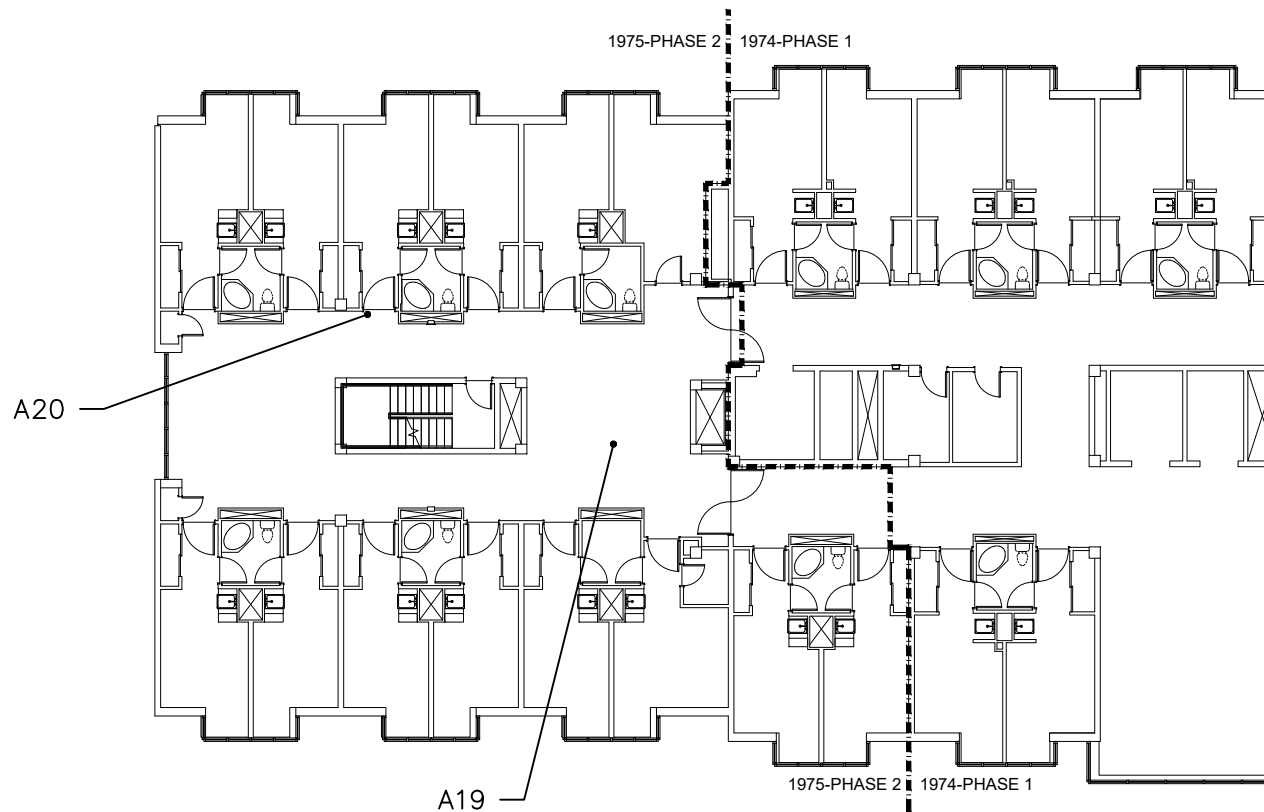
REFER TO TESTING SUMMARY IN REPORT FOR FULL DETAILS. ALL SAMPLES HAVE APH920- PREFIX.

STATE OF ALASKA
DEPARTMENT OF HEALTH AND
SOCIAL SERVICES

ANCHORAGE PIONEER HOME
ANCHORAGE, ALASKA
ASBESTOS SAMPLE LOCATIONS



DRAWN: BWH	DATE:
CHECK: RAF	08/31/2020
FILE #:	DWG.NO:
7787-SL	C-5



1
C-6

FOURTH FLOOR, WEST
NTS



LEGEND

- AXX ASBESTOS TEST LOCATION
- AXX LAB TEST RESULTS POSITIVE FOR ASBESTOS

REFER TO TESTING SUMMARY IN REPORT FOR FULL DETAILS. ALL SAMPLES HAVE APH920- PREFIX.

STATE OF ALASKA
DEPARTMENT OF HEALTH AND
SOCIAL SERVICES

ANCHORAGE PIONEER HOME
ANCHORAGE, ALASKA
ASBESTOS SAMPLE LOCATIONS



DRAWN: BWH	DATE:
CHECK: RAF	08/31/2020
FILE #:	DWG.NO:
7787-SL	C-6

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Removal of indicated existing equipment, finishes and furnishings in residents' bedrooms/bathroom suites and common areas on the third floor. There may be some limited areas of work required on the second floor to access mechanical devices. Caution must be taken when cutting through tensioned floor slabs. Determining strand locations before cutting is strongly recommended. Site access to the second floor is further discussed in 1.2, B. of this specification. There has been a hazardous material investigation and asbestos and lead are present. See specification sections:
 - 1. Section 01 35 45 Airborne Contaminant Control
 - 2. Section 02 26 00 Hazardous Materials Assessment
 - 3. Section 02 41 19 Selective Demolition
 - 4. Section 02 82 33 Removal and Disposal of Asbestos Containing Materials
 - 5. Section 02 83 33 Removal and Disposal of Materials Containing Lead
 - 6. Section 02 84 18 Removal and Disposal of Chemical Hazards
- B. Extent of selective demolition work is that effort required to facilitate the installation of new or modified products as indicated on Drawings and specified within this document. Additional cutting or patching may be required to provide for proper installation of finished surfaces and system components.
- C. Types of Selective Demolition Work: Demolition requires the selective removal and subsequent off-site disposal of materials and building components as required to accomplish the work items shown on the drawings and as necessary to construct the work included in this project. This work will include but is not limited to removal of mechanical equipment, electrical devices, carpet, sheet vinyl, gypsum board, floor and wall tile, doors and hardware and some furnishings.

1.2 JOB CONDITIONS

- A. Condition of Structures: Contractor shall verify actual condition of items to be removed or demolished. The contractor shall be responsible to notify Owner's Representative of discrepancies between actual conditions and information contained in the documents.
- B. Site Access: The Anchorage Pioneer Home is occupied by approximately 150 elderly Alaskans. It will be important for the Contractor to work closely with the Pioneer Home staff to assure resident disruption is held to a minimum and safe conditions are always present in resident occupied areas. The majority of the work will occur on the third floor which will be vacated during the construction process. Floors above and below the third floor will remain fully occupied and it is important for the Contractor to be courteous and avoid loud noises, particularly structural bound noises that travel throughout the building. Dust and trash must be collected and cleaned up throughout the construction process. Staging may occur on the third floor, but floor load limits must be considered when heavy items such as tile and gypsum board are stacked on the floor.
- C. Slab Cutting: Floor/ceiling slabs are post-tensioned planks with a thin topping. Care must be taken to avoid cutting/damaging reinforcing strands. Slab cutting, grinding chipping or other structure bound loud noises are to be restricted to 8:30 a.m. to 3:30 p.m. Monday through Saturday. No structure bound noises are to be created Sundays. Contractor access to the second floor to access services and install mechanical devices is to be restricted to allow demolition, system installation, access panel installation and gypsum board patching in one day. When the resident returns to their bedroom at the end of the day all work is to be complete, secure and cleaned up. Painting can occur at a separate, scheduled time as necessary.
- D. Partial Demolition and Removal: Following product removal, further demolition to access mechanical or electrical work will be required. Demolition to gain access is included in this scope of work.

- E. Salvage: Items indicated to be removed but of salvageable value to Contractor may be removed from the work area as work progresses. Transport salvaged items from work site as they are removed to areas designated by the Owner.
- F. Protection: Provide temporary barricades and other forms of protection as required to protect Owner's personnel, residents of the facility and general public from injury due to demolition work.
 - 1. The Anchorage Pioneer Home is an occupied residential senior center. All demolished or removed material must be removed from the site before the Contractor leaves the site each day. Control of the work area HVAC and fire alarm during demolition is a requirement of the project. All systems are to remain fully functional in all parts of the building other than the third floor.
 - 2. Protect from damage the existing finish work that is to remain in place and becomes exposed during demolition operations. Repair any such damage to the building at no additional cost to the Owner.
 - 3. Protect floors with suitable coverings.
 - 4. Construct temporary insulated solid dustproof partitions where required.
 - 5. Remove protection on completion of work.
 - 6. Restrict return airflow to eliminate dust and odor transmission to other areas of the building.
- G. Damages: Promptly repair damages caused to existing products not scheduled to be removed by demolition work at no cost to Owner.
- H. Utility Service: Maintain existing utilities to remain in service and protect against damage during demolition operations.
- I. Dust Control: Control dust resulting from demolition and removal work to avoid creation of a nuisance in the surrounding area. Do not use water to control dust.
- J. Hazardous Materials: Asbestos and lead paint are expected to be encountered in this work area. There may be areas that may have been overlooked during the project survey. The Contractor is to err on the side of caution and stop work in the area and notify the project representative immediately if surfaces or existing products are encountered that are suspected to contain hazardous materials.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.1 DEMOLITION

- A. Perform selective demolition work in a systematic manner. Use such methods as required to complete work indicated on Drawings in accordance with demolition schedule and governing regulations.
 - 1. Do not use power driven impact tools without prior approval.
 - 2. Provide means for effective air and dust pollution control as required to eliminate airborne construction dust from leaving the immediate work area. The building's air handlers will be required to remain in operation in those areas occupied by residents and staff. The Contractor is required to block all return air grills in work areas to prevent dust and odor migration into inhabited areas of the building.

3.2 SALVAGE MATERIALS

- A. Items noted in this specification as "Salvage - For Owner Use", carefully remove indicated items, clean, store and turn over to Owner and obtain receipt.

3.3 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove debris, rubbish and other materials resulting from demolition operations from building site. Transport and legally dispose of materials off site.
- B. If unexpected hazardous materials are encountered during demolition operations, comply with applicable regulations, laws and ordinances concerning removal, handling and protection against exposure or environmental pollution.

3.4 CLEAN-UP AND REPAIR

- A. Repair demolition performed in excess of that required. Repair surfaces, which are to remain but have become soiled or damaged by demolition work, to new condition.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. The work requires the disturbance, demolition, removal, and disposal of the following asbestos-containing materials (ACM) from the Anchorage Pioneer Home – 3rd Floor Resident Renovations Project as shown on the drawings and as specified herein. Bulk samples have been taken of suspect materials in this facility and the results are documented in Section 02 26 00, Hazardous Materials Assessment:
1. Sheet vinyl flooring and mastics in Guest Bathrooms (confirmed asbestos) and in other “wet” areas, including Public Bathrooms, laundry, and janitor closets, etc. (assumed asbestos).
 2. Joint compound in gypsum wallboard systems on the ceilings and walls of Phase I and Phase II (confirmed ACM).
 3. Tan ceiling grid mastic holding perimeter “L” channels to walls of Phase I (confirmed asbestos).
 4. Gray-green ceiling grid mastic holding perimeter “L” channels to walls of Phase II (confirmed asbestos).
 5. Light brown mastic holding “Marlite” to gypsum wall board in Phase II (confirmed asbestos).
 6. Light tan “Liquid Nails” type mastic found at sheet metal trim at ceiling in Phase II (confirmed asbestos).
 7. Brown mastic holding mirrors to wall in Phase II area (confirmed asbestos).
 8. Incandescent light fixture heat shields at original lights (confirmed asbestos).
 9. High temperature wiring insulation at original incandescent lights (confirmed ACM).
 10. Black sprayed-on undercoating on stainless steel sinks, in Phase II (confirmed asbestos).
- B. In addition to the above materials, the following materials are located in other areas of the building, and may require disturbance for auxiliary support, such as electrical and mechanical equipment and installation of equipment. Not all ACM is to be removed from these areas, only that required to complete the project work need be removed:
1. Cement asbestos board (CAB) “Glasweld” insulated infill panels at exterior windows of Phase I (confirmed asbestos), and Phase II (assumed asbestos).
 2. Flange gaskets and valve packings on piping (suspect, assumed asbestos).
 3. Insulation to fire doors (suspect, assumed asbestos).
 4. Exterior tarry damp-proofing (suspect, assumed asbestos).
 5. Door, window and penetration sealants and window glazing compounds (suspect, assumed asbestos).
 6. Interior tarry damp-proofing at inside face of exterior concrete or brick walls (suspect, assumed asbestos).
 7. Various roofing materials, and patching tars (suspect, assumed asbestos).
 8. Sound dampening tars at older Roof mounted Exhaust fans (suspect, assumed asbestos).
 9. Various other colors of undercoatings on stainless steel sinks (black undercoating confirmed ACM, other colors suspect, assumed asbestos).
 10. Other flooring materials (vinyl floor tiles, rubber flooring, rubber stair treads and stringers, etc.) and their associated mastics (suspect, assumed asbestos).
 11. Other miscellaneous construction mastics for trim, paneling, etc. (suspect, assumed asbestos).
- C. Quantities of ACM and hazardous materials shown on drawings are based on a comprehensive survey of the building and take-offs from scale drawings. The Hazardous Material Assessment and quantities provided are considered a baseline for bid purposes. It is the contractor's responsibility

to remove and dispose of all ACMs affected by the project from the site in accordance with applicable regulations. The contractor shall immediately notify the owner if other ACM or additional quantities are discovered. Quantities of materials removed shall be documented on a daily basis and shall include all materials removed and locations, in the units used on the drawings.

- D. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead, are also present in settled and concealed dust in and on architectural, structural, mechanical and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with EPA and OSHA requirements.
- E. Note: Debris from previous renovation projects, including debris from the joint compound from the gypsum wall board and other materials is present in the work areas. Asbestos-containing materials may have come loose and fallen onto or into, floors, ceilings, walls, chases, wall cavities or mechanical, electrical and structural system components. The Contractor shall immediately notify the Owner if and when they encounter worn, damaged, or deteriorated ACM as evidenced by dust or debris adjacent to ACM materials.
- F. Work will be required while guests and staff are occupying the building. Work during occupied periods involving disturbance of asbestos-containing materials inside the building shall be performed using critical barriers and negative air pressure enclosures. Access to work area from within the building shall be blocked to prevent unauthorized or inadvertent entry by guests and staff. Access to work area shall be secured by lock when work is not ongoing.
- G. All work shall comply with Environmental Protection Agency (EPA) AHERA standard, 40 CFR 763. Clearance sampling is required if the necessary disturbance of asbestos-containing material is not classified as "Small-Scale, Short-Duration" work as defined in 40 CFR 763, and is not required for work that only involves the disturbance of dusts with asbestos. Visual inspections are required for all work disturbing or removing asbestos. Clearance air samples shall include a minimum of five (5) Transmission Electron Microscopy (TEM) samples from each affected space, taken using aggressive methods as outlined in Appendix A to 40 CFR 763 and analyzed in accordance with 40 CFR 763.90.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 02 26 00 Hazardous Materials Assessment
- B. Section 01 35 45 Airborne Contaminant Control
- C. Section 02 83 33 Removal and Disposal of Materials Containing Lead
- D. Section 02 84 18 Removal and Disposal of Chemical Hazards

1.3 DEFINITIONS AND ABBREVIATIONS: Definitions and abbreviations are provided in the applicable publications listed in Paragraph 1.4 of this section.

1.4 APPLICABLE PUBLICATIONS: The publications listed below form a part of this specification to the extent referenced.

- A. General Requirements: All work shall be performed in compliance with the International Building, Fire, Fuel Gas, Mechanical, Residential, Energy Conservation and Administrative Code; Uniform

Plumbing Code; the National Electrical Code; and the publications listed in this section that are in effect at the time of the bidding of this contract.

- B. Title 29 Codes of Federal Regulations (CFR), Department of Labor (USDOL)
 - Part 1910 General Occupational Safety and Health Standards
 - Part 1926 Safety and Health Regulations for Construction
- C. Title 40 CFR, Environmental Protection Agency (EPA)
 - Part 61 National Emission Standards for Hazardous Air Pollutants
 - Part 311 Worker Protection
 - Part 763 Asbestos
- D. Title 49 CFR, Department of Transportation (DOT)
 - Part 171 General Information, Regulations and Definitions
 - Part 172 Hazardous Materials Communication and Regulations
 - Part 173 General Requirements for Shipments and Packaging
 - Part 177 Carriage by Public Highway
 - Part 178 Specifications for Packaging
 - Part 382 Requirements for Drug Testing
 - Part 383 Commercial Driver's License Standards
- E. State of Alaska Administrative Codes (AAC)
 - 8 AAC 61 Occupational Safety and Health Standards
 - 18 AAC 60 Solid Waste Management
- F. State of Alaska Statutes
 - AS 18.31 Health and Safety - Asbestos
 - AS 45.50.477 Titles Relating to Industrial Hygiene
- G. Public Law 101-637
 - Asbestos School Hazard Abatement Reauthorization Act
- H. Federal Standards
 - 313E Safety Data Sheets
- I. American National Standard Institute (ANSI)
 - Z9.2 Local Exhaust Systems
 - Z87.1 Eye and Face Protection
 - Z88.2 Practices for Respiratory Protection
- J. American Society for Testing and Materials (ASTM)
 - D-4397 Polyethylene Sheeting
- K. International Code Council
 - International Building (IBC), Fire, Fuel Gas, Mechanical, Residential, Energy Conservation and Administrative Codes Current Standards
- L. National Fire Protection Association (NFPA)
 - NFPA 701 Fire Tests for Flame Resistant Textiles and Films
- M. National Institute of Occupational Safety and Health (NIOSH)
 - Manual of Analytical Methods, Current Edition
- N. Underwriters Laboratories (UL)

UL 586

High-Efficiency, Particulate, Air (HEPA) Filter Units

1.5 QUALITY ASSURANCE

A. On-site Observation:

1. The safety and protection of the Contractor's employees, sub-contractor's employees, Owner's employees, the facility, and the public is the sole responsibility of the Contractor.
2. The Owner, the Owner's Representative or representatives of State or Federal agencies may make unannounced visits to the site during the work. The contractor shall make available two complete sets of clean, protective clothing for such visitor use. If the work requires the use of PAPR or Supplied Air Respirators, the contractor shall provide respirators to the visitor to ensure compatibility with fresh batteries or supplied air system. It is the visitor's responsibility to ensure medical qualification, training, and current "fit test" prior to using any respirator provided by the Contractor.
3. If the Owner or agency visitor determines that practices are in violation of applicable regulations, they will immediately notify the Contractor that operations must cease until corrective action is taken. Such notification will be followed by formal confirmation.
4. The Contractor shall stop work after receiving such notification. The work may not be restarted until the Contractor receives written authorization from the Owner.
5. All costs resulting from such a stop work order shall be borne by the Contractor and shall not be a basis for an increase in the contract amount or an extension of time.

B. Air Monitoring: Air monitoring during the work shall be performed as follows:

1. The Contractor shall hire Independent Testing Laboratories to collect and evaluate all air samples that are the responsibility of the Contractor. The Contractor shall direct its laboratories, in writing, to release air monitoring data, and all other pertinent data and records, to the Owner. A copy of this written direction shall be submitted to the Owner along with the information required by Paragraph 1.13 of this Specification.
2. The Contractor shall be responsible for monitoring its employees for potential exposure to airborne asbestos fibers as required by this specification and all applicable regulations.
3. The Contractor shall be responsible for work area monitoring and environmental monitoring outside the work area as required by this specification.
4. The Owner may perform air monitoring inside the building, inside the work areas, and on the Contractor's employees while asbestos work is underway and at any time during the work.
5. Final inspection and clearance air monitoring shall be conducted by the Contractor's Independent Testing Laboratory. The Independent Testing Laboratory may not be hired by the Abatement Subcontractor to perform final visual inspections and clearance air monitoring.
6. The Contractor shall have its Independent Testing Laboratories archive all air samples until the successful completion of the project.

C. Additional Sampling of Suspect Materials:

1. The Contractor and all Subcontractors shall be vigilant during demolition and construction in the event additional suspect asbestos or hazardous materials are encountered. If suspect asbestos or hazardous materials not previously identified are encountered, the contractor shall stop work that may be affected by this material and immediately notify the Owner. The Owner or the Owner's Representative will provide recommendations and additional testing if necessary. All sampling by the Contractor shall be at their own cost.
2. The Contractor and all Subcontractors shall notify the Owner prior to any bulk sampling of suspect asbestos-containing material or other hazardous materials to allow the Owner or Owner's Representative to be present during such sampling. All results of bulk sampling conducted by the Contractor or Subcontractors shall be submitted to the Owner.

- 1.6 PROTECTION OF EXISTING WORK TO REMAIN: Perform asbestos removal in the project work areas without contamination of adjacent work or the facility.
- 1.7 MEDICAL REQUIREMENTS
- A. Institute and maintain a medical surveillance program for employees in accordance with 29 CFR 1926.1101 and 29 CFR 1910.134.
- B. Institute and maintain a random drug testing program, as required by 49 CFR 382, for all drivers of vehicles transporting asbestos or hazardous materials.
- 1.8 TRAINING: Employ only workers who are trained and certified as required by 8 AAC 61.600, 29 CFR 1910, 29 CFR 1926, 40 CFR 763, and 49 CFR 383 to remove, encapsulate, barricade, transport, or dispose of asbestos.
- 1.9 PERMITS AND NOTIFICATIONS: Secure necessary permits for asbestos removal, hauling, and disposal and provide timely notification as required by federal, state, and local authorities.
- 1.10 SAFETY AND ENVIRONMENTAL COMPLIANCE: Comply with laws, ordinances, rules, and regulations of federal, state, and local authorities regarding handling, storing, transporting, and disposing of hazardous materials and all other construction activities.
- 1.11 RESPIRATOR PROGRAM: Establish a respirator program as required by ANSI Z88.2 and 29 CFR 1910.134.
- 1.12 HAZARD COMMUNICATION PROGRAM: Implement a hazard communication program in accordance with 29 CFR 1910.1200.
- 1.13 SUBMITTALS
- A. The Contractor shall submit the following documentation to the Owner for review, approval or rejection. Work shall not begin until submittals are approved.
1. Shop drawings.
 2. Work plan.
 3. Liability insurance policy and performance bond.
 4. Schedule.
 5. Testing laboratory and laboratory personnel.
 6. Disposal site designations and disposal authorizations.
 7. Waste transporter designation.
 8. Notifications and certifications.
 9. "Competent Person" designation and experience.
 10. Request for substitutions.
- B. Shop drawings shall show:
1. Boundaries of each regulated work area.
 2. Location and construction of decontamination areas.
 3. Location of temporary site storage facilities.
 4. Location of air monitoring stations, both in and outside of the work area.
 5. Emergency egress route(s).
 6. Location of negative pressure exhaust systems, if required.
- C. The work plan shall include procedures for:
1. Work area setup and protection.
 2. Worker protection and decontamination.

3. Initial exposure assessment procedures.
 4. Asbestos removal procedures.
 5. Waste load-out, transport, and disposal procedures.
 6. Air monitoring procedures.
 - a. Air monitoring procedures shall include the number of daily samples and the target volumes of each type of sample.
 - b. Clearance air monitoring procedures and protocols for each work area.
 7. Determination by the Certified Project Designer of the estimated quantities of ACM and PACM to be removed, and determination of clearance requirements for each different type or phase of work.
 8. Emergency procedures.
 9. The Work Plan shall be prepared, signed and dated by an Environmental Protection Agency (EPA) Certified Project Designer.
- D. Insurance Policy and Bond: Submit copies of the Contractor's or Subcontractor's insurance policy and performance bond. Submittal requirement is only to ensure that the insurance certificate(s) show specific coverage for the potentially hazardous materials being handled by this project. The insurance and bond amounts and certificate holder requirements are addressed in other portions of the contract documents and are not covered as part of this submittal requirement.
- E. Schedule: Submit construction schedule by work area.
- F. Independent Testing Laboratories and Laboratory Personnel: Submit the name, location, and phone number of proposed independent testing laboratories, and the names and certifications of the industrial hygiene technicians. Include the laboratory's accreditation. Not all laboratories will require all accreditations.
1. The Independent Testing Laboratories shall be acceptable to Owner.
 2. The laboratories shall be proficient in the National Institute of Occupational Safety and Health (NIOSH) Proficiency in Analytical Testing (PAT) program and shall be accredited by the National Institute of Science and Technology (NIST) under their National Voluntary Laboratory Accreditation Program (NVLAP) for bulk asbestos analysis and airborne asbestos fibers as appropriate. NVLAP accreditation for bulk asbestos analysis may be waived if the microscopists are listed in the American Industrial Hygiene Association (AIHA) Asbestos Analyst Registry (AAR).
 3. Provide a current list of their microscopists who have participated in the latest PAT and NVLAP programs and provide the names of microscopists and evidence that they have completed the NIOSH 582 course or equivalent. Provide latest AAR report of performance for microscopists.
 4. Provide name(s) and resume(s) of proposed on-site industrial hygiene technician(s) showing academic degrees and Alaska Abatement Certificate(s).
- G. Disposal Site: Submit the name and location of the proposed Alaska Department of Environmental Conservation/ U.S. Environmental Protection Agency (DEC/EPA) permitted disposal site. Submit authorization to dispose of asbestos waste by the proposed disposal site operator.
- H. Waste Transporter: Submit the name and address of the proposed waste transporter.
- I. Representations: Submit a signed statement by the Contractor that records of employees' work assignments, certifications, respirator fit tests, and medical records are accurate, up-to-date, and available for inspection.
- J. Notifications and Certificates:

1. Submit a copy of the written "Notification of Demolition and Renovation" to the Environmental Protection Agency. (If required by NESHAP).
 2. Submit a State of Alaska Department of Labor (ADOL) approved copy of the written ADOL notification of proposed workers.
 3. Submit a copy of Project Designer's current certification.
- K. Competent Person: Submit the name and certifications of the Contractor's proposed Competent Person and a list of their previous projects. Certify by signed statement that the Competent Person has the knowledge and training to supervise the work in compliance with the publications listed in Paragraph 1.4 above.
- L. Substitutions: Submit requests for substitutions of materials, equipment and methods.
- M. Updated Project Information: Submit changes to the submitted project information at least 24 hours prior to the effective time of change for the following:
1. Updated schedules.
 2. Change in Competent Person.
 3. ADOL approval for additional workers.
 4. Changes to work plan.
 5. Revisions to the EPA notification.
- 1.14 TEST REPORTS: Contractor shall submit periodic test reports, daily logs, monitoring results as specified herein. Submit two (2) copies of the following information within twenty-four (24) hours after the end of a shift:
- A. Initial Exposure Assessment(s): Submit the results of the Contractor's initial exposure assessment(s).
- B. Daily Air Monitoring: Submit daily, all results of Contractor's air monitoring (submit no later than 24 hours after the end of the shift). Submittal shall consist of negative air pressure recordings, daily monitoring report, field data sheets, the analytical laboratory's results, and sketch of sample locations. Submit all results of any sampling of bulk materials to Owner within 24 hours of receipt of results. Bulk sample submittal shall consist of daily monitoring report, field data sheets, and the analytical laboratory's results, and sketch of sample locations, as well as the current certification of the asbestos Building Inspector who conducted the sampling.
- C. Project Daily Logs: Submit the previous day's Daily Logs. Logs shall include regulated area sign-in sheets and list of asbestos-containing materials removed including quantities and locations of those materials, in the units used on the drawings. Claims for additional quantities will not be addressed unless daily quantities are submitted.
- D. Clearance Air Monitoring: Submit draft results of Contractor's clearance air monitoring for each work area for Owner's review and approval prior to releasing the work area to unprotected workers. FAX or electronic submittals are acceptable. Submittal shall include the following:
1. A signed and dated copy of the final visual inspection report (completed prior to clearance air monitoring) certifying that all dust and debris have been removed from the work area and that all ACM to be removed as required by the contract, were removed. Visual inspection reports are required for all removal, even if clearance air monitoring is not required.
 2. Documentation that clearance air sample collection complied with 40 CFR 763, contract specifications and the approved work plan.
 3. Drawings of the work area with sampling locations clearly marked. Work area drawings shall be clearly identified as to their location within the facility.

4. Field data sheets for sampling including: sample locations, calibration device serial number, initial and final pump calibration readings, pump time on and off, initial and final sampling flow rate, pump type and serial number, and sample cassette identification.
 5. Laboratory results, signed and dated by the analyst.
 6. Data sheets and visual inspection sheets shall be signed and dated by the Industrial Hygiene Technician performing the work.
- 1.15 PROJECT COMPLIANCE DOCUMENTS: Prepare and submit the following records of compliance with hazardous materials regulations following each work area clearance. Submittals may contain segregated submittals for more than one (1) work area. Submittal shall be received by Owner within four (4) weeks following work area clearance. Compliance documents shall be signed and dated and shall include as a minimum:
 - A. Waste transport records (40 CFR 61, Figure 4).
 - B. Disposal site receipts.
 - C. Contractor's "Start" and Finish" dates for the work area(s).
 - D. Daily logs, including regulated area sign in sheets, materials summary, etc (if not previously submitted).
 - E. Final work area inspection report(s) and inspector certifications (if not previously submitted).
 - F. Final, signed, clean copies of all bulk and air sampling field data sheets, location drawings, negative air tapes and air monitoring log, including all clearance data.
 - G. Final, signed, clear, legible copies of all analytical laboratory bulk and air monitoring test results, including all clearance data, and current laboratory certifications (if changed from previously submitted).
 - H. Copies of Asbestos Worker Training certificates for workers performing work on this project and all approved Alaska DOL notifications for those workers, and any revisions to the EPA notification(s).
- 1.16 SANITARY FACILITIES: Provide adequate toilet and hygiene facilities.
- 1.17 MATERIAL STORAGE: Store all materials subject to damage off the ground and secure from damage, weather, or vandalism.
- 1.18 ON-SITE DOCUMENTATION: The Contractor shall maintain on the job site, at a location approved by the owner, copies of the following data for safety procedures, equipment, and supplies used for the work
 - A. Equipment: Show the model, style, capacity and the operation and maintenance procedures for the following, as applicable:
 1. High-Efficiency, Particulate, Air (HEPA) Filtration units.
 2. HEPA Vacuum cleaners.
 3. Pressure differential recording equipment.
 4. Heat stress monitoring equipment.
 - B. Safety Data Sheets (SDS): Maintain SDSs for each encapsulant, surfactant, solvent, detergent, and other material proposed to be used.
 - C. Respiratory Protection Plan: The Contractor's and/or Subcontractor's written respirator program.

PART 2 - PRODUCTS

- 2.1 PERSONAL PROTECTIVE EQUIPMENT: Provide personal protective clothing as approved and selected by the IH.
- A. Respirators: Provide personally issued and marked respirators approved by the National Institute of Occupational Safety and Health (NIOSH). Provide sufficient replacements for respirators with disposable canisters. Use respirators equipped with dual cartridges whenever both asbestos hazards and other respiratory hazards exist in the work area.
 - B. Provide filter cartridges approved for each airborne contaminant which may be present. NIOSH approved filter cartridges shall be used. At no time shall the permissible exposure limit (PEL) for the contaminant exceed the PEL listed in 8 AAC 61.1100.
 - C. Whole Body Protection: Provide approved disposable fire retardant, full body coveralls and hoods fabricated from nonwoven fabric, gloves, eye protection, and hard-hats, and other protective clothing as required to meet applicable safety regulations to personnel potentially exposed to asbestos above the permissible exposure limits (PELs). Wear this protection properly. Full facepiece respirators shall meet the requirements of ANSI Z87.1.
 - D. Provide protective personal equipment and clothing at no cost to the workers.
- 2.2 DECONTAMINATION UNIT
- A. Provide a temporary three-stage decontamination unit, attached in a leak-tight manner to each negative pressure work area. Decontamination units shall consist of a clean room equipped with separate lockers for each worker, a shower room, and an equipment locker room equipped with separate lockers for each worker.
 - B. Shower specifications: Locate flow and temperature controls within the shower where adjustable by the user. Hot water service may be secured from the building hot water system if available, but only with back-flow protection installed by the Contractor at the point of connection, and with prior notification and approval by the Owner. Should sufficient hot water be unavailable, the Contractor shall provide a minimum 40-gallon electric hot water heater with a minimum recovery rate of 20 gallons per minute. Water from the shower room shall not be allowed to wet the floor in the clean room.
- 2.3 WASTE WATER FILTERS: Provide Water Filtration Units with filters of adequate capacity to treat decontamination water and shower flows. Water filtration unit effluent shall contain less than 7,000,000 asbestos fibers per liter prior to discharge to sanitary sewer or storm drains.
- 2.4 DANGER SIGNS AND TAPE: Post danger signs and tape signs to demarcate areas where asbestos waste is temporarily stored, and, in areas not accessible to the public, where asbestos-containing materials are left in place. Signs and labels shall be in accordance with applicable regulations and codes. The signs posted at work area entrances, exits, decontamination areas, emergency egress, and waste disposal areas shall comply with 29 CFR 1926.1101 and the International Fire Code.
- 2.5 WARNING LABELS: Affix warning labels to all components or containers containing asbestos wastes. Conform labeling to 29 CFR 1926.1101 and 49 CFR 172.
- 2.6 HEPA FILTRATION UNITS: (if required) shall conform to ANSI Z9.2, and HEPA filters shall be UL-586 labeled.

2.7 PRESSURE DIFFERENTIAL MONITORING EQUIPMENT: Provide continuous monitoring of the pressure differential with an automatic recording instrument for each negative pressure enclosure. Locate the instrument in a clean area where personnel have access to it without respiratory protection. The instrument shall be fitted with an alarm should the negative pressure drop below -0.02 inches of water column relative to the air outside containment.

2.8 CHEMICALS

- A. Adhesives: Adhesives shall be capable of sealing joints of adjacent sheets of polyethylene to finished or unfinished surfaces and of adhering under both dry and wet conditions.
- B. Mastic Removal Solvents: Mastic removal solvents shall not contain halogenated compounds or compounds with flashpoints less than 60° C (140° F). Solvents shall be compatible with replacement materials.
- C. Sealants and Encapsulants: Penetrating and bridging encapsulants for asbestos applications. Tint "Lock-Down" encapsulants used in non-finished areas for identification in a color that will not obscure residual asbestos. Encapsulants shall be compatible with replacement materials.
- D. Surfactant: Use a surfactant specifically designed to effectively wet asbestos. Mix and apply the surfactant as recommended by the manufacturer.

2.9 SAFETY DATA SHEETS (SDSs): Provide SDSs for all chemical materials brought onto the work-site.

2.10 MATERIALS

- A. Disposal Containers: Use disposal containers to receive, retain, and dispose of asbestos-containing or contaminated materials. Label leak tight containers in accordance with the applicable regulations. Non-leak tight containers are not acceptable. Plastic bags shall be a minimum 6-mil polyethylene, pre-printed with approved warning labels. Plastic wrap shall be 6-mil polyethylene sheets, securely wrapped and taped. Disposal containers shall be labeled with "ASBESTOS NA 2212," Contractor's name and location, and a Class 9 label.
- B. Glove Bags: The glove bags shall be a minimum of 6-mil polyethylene or polyvinylchloride plastic, and specially designed for removal of asbestos-containing materials, with two inward projecting long sleeves and rubber gloves, one inward projecting water wand sleeve, an internal tool pouch, and an attached, labeled receptacle for asbestos waste.
- C. Plastic Sheet: A minimum 6-mil thick flame resistant polyethylene (in accordance with NFPA 701) shall be used unless otherwise specified.
- D. Tape: Tape shall be capable of sealing joints of adjacent sheets of polyethylene, for attachment of polyethylene sheets to finished or unfinished surfaces and of adhering under both dry and wet conditions.

2.11 OTHER MATERIALS: The Contractor shall provide standard commercial quality of all other materials as required to prepare and complete the work.

2.12 TOOLS AND EQUIPMENT

- A. The Contractor shall provide tools and equipment as required to prepare and complete the work. Tools and equipment shall meet all applicable safety regulations.

- B. Transportation equipment shall be suitable for loading, temporary storage, transit, and unloading of contaminated waste without exposure to persons or property. All trucks or vans used to transport asbestos shall be enclosed and all containers sealed leaktight. Truck drivers shall have a commercial driver's license with hazardous material endorsement.

PART 3 - EXECUTION

3.1 WORK AREAS

- A. Regulated Work Areas: Establish regulated work areas in compliance with 29 CFR 1926.1101.
- B. Decontamination Area: Install decontamination areas in compliance with 29 CFR 1926.1101. Decontamination area shall meet fire-exiting requirements of the International Fire Code. Showers shall be provided with hot water and water filtration units.
- C. Negative Pressure Enclosure System: Construct Negative Pressure Enclosure Systems as required by 29 CFR 1926.1101, these specifications, and approved work plan. Signage shall conform to the International Fire Code and 29 CFR 1926.1101. Exhausts from HEPA Filtration Units shall terminate outside of the building.
- D. Notify applicable Fire Marshal as required by the International Fire Code.

3.2 PERSONNEL PROTECTION PROCEDURES

- A. Contractor's Competent Person shall strictly enforce personal protection procedures as required by the approved work plan and all applicable regulations.
- B. Post the decontamination, safety, and work procedures to be followed by workers.
- C. Provide continuous on-site supervision by the approved Competent Person.
- D. Maintain a daily log of all workers and visitors entering regulated work areas. Log shall contain the name of each individual, his or her organization, accurate time of entering and leaving, and purpose of visit.

- 3.3 ASBESTOS REMOVAL PROCEDURES: Remove asbestos in accordance with the Contractor's Approved Work Plan, applicable regulations and this specification. The Owner shall be notified 24-hours in advance of any asbestos disturbance taking place outside of a Negative Pressure Enclosure System.

3.4 AIR MONITORING

- A. Perform personal, work area, and environmental monitoring for airborne asbestos fibers by industrial hygiene technicians who are employees of (one of) the Contractor's Independent Testing Laboratories.
- B. Conduct air monitoring in accordance with 29 CFR 1926.1101, current EPA guidance, and as specified herein. Calibrate all sampling pumps on-site with a calibrated transfer standard before and after each sample. Built-in rotameters on pumps are not acceptable for calibration. Additional samples beyond the minimum numbers shown below may be necessary if samples are overloaded or require shorter sampling periods to achieve readable samples, due to size of the work force, or due to more than one 8-hour work shifts.
- C. Conduct daily work area and environmental air monitoring per shift as follows:
 - 1. Three (3) air samples within the work area.

2. One (1) air sample located outside the entrance to the work area.
 3. One (1) air sample located at the exhaust(s) of the HEPA filtration unit(s) (if more than one unit is used, the sampling may be rotated between units, however, each unit must be sampled at least once every three days).
 4. Three (3) air samples located in adjacent occupied areas.
 5. Two (2) waste load-out samples for the full duration of the operation, one taken inside the wash-down station and one taken on the clean side of the wash-down station, in addition to the daily work area and environmental samples, (no samples are necessary if no load-out operation is performed).
- D. Clearance air monitoring shall be conducted by the Contractor's Independent Testing Laboratory subcontractor. The Independent Testing Laboratory may not be hired by the Abatement Subcontractor to perform visual inspections and clearance air monitoring. Owner approval is required before a work area is released to unprotected workers. The Contractor is responsible for all costs associated with clearance and scheduling of visual inspection and clearance air monitoring. The maximum acceptable level of airborne asbestos fibers for work area clearance is as published in 40 CFR 763 for TEM analysis. A minimum of five aggressive clearance samples are required for each work area, regardless of the type of analysis. TEM analysis shall be used unless PCM analysis is approved. PCM analysis (NIOSH Method 7400) may be performed if allowed by 40 CFR 763 and with prior approval by the Owner or Owner's representative. The Contractor has the option, at its expense and at no cost to the Owner, of re-cleaning the work area and repeating the clearance air monitoring procedures or of having failed phase contrast microscopy (PCM) sample media sent to an approved NVLAP accredited laboratory for TEM analysis by NIOSH Method 7402.
- E. For small-scale, short-duration work, such as minor penetrations of gypsum wall board with asbestos-containing joint compound, gasket removal, or similar work, that work may be requested to be "cleared" on the basis of a minimum of 5 air samples taken inside the work area during the work, immediately adjacent to where removal is taking place, and where each of those air samples have fiber counts of less than 0.01 f/cc. If the samples taken during the work exceed 0.01 f/cc, the Contractor has the option, at its expense and at no cost to the Owner, of having failed PCM samples sent to an approved NVLAP accredited laboratory for TEM analysis by NIOSH Method 7402, or of re-cleaning the work area and conducting aggressive clearance PCM air monitoring procedures. These alternative "clearance" sampling protocols will only be allowed if fully outlined in the contractor's work plan, with specific pre-approval by the Owner. Visual inspections are required for all removal work, including small-scale, short-duration work.
- F. Conduct personal air monitoring in accordance with 29 CFR 1926.1101 and as specified herein.
1. Take personnel samples (excluding excursion samples) at least twice per eight-hour work shift at the rate of one sample for every six people performing that task in the same work area. Persons performing separate tasks or in separate work areas shall be sampled separately.
 2. Collect and analyze excursion samples as required by 29 CFR 1926.1101.
 3. Continuously monitor all workers disturbing asbestos outside of a Negative-Pressure Enclosure System if that work is conducted indoors.
- G. Daily personnel monitoring may be discontinued only after the Contractor's Independent Testing Laboratory certifies in writing that a Negative Exposure Assessment has been obtained and the Owner has reviewed and approved the negative exposure assessment data.
- H. Submit air monitoring results to the Owner as specified in Paragraphs 1.14 and 1.15.

3.5 DISPOSAL

- A. Dispose of asbestos wastes in an EPA/DEC permitted asbestos landfill.
- B. Comply with current waste disposal, handling, labeling, storage, and transportation requirements of the waste disposal facility, U.S. Department of Transportation, and EPA regulations.
- C. Workers handling waste shall wear protective clothing and canister type respirators.
- D. Drivers of the waste transport vehicles need not wear respirators while enroute.
- E. Workers shall wear respirators when handling asbestos material at the disposal site.

3.6 CLEANING OF WORK AREA

- A. Remove all asbestos material and debris upon completion of asbestos repair or removal within a work area. Wet clean or HEPA vacuum all surfaces within the work area.
- B. Notify the Owner and the Independent Testing Laboratory that asbestos work has been completed and the work area is ready for visual inspection. Visual inspections are required even if clearance air monitoring is not required. Include in the visual inspection report a statement that all asbestos in the work area has been removed, repaired and/or encapsulated as required by the contract, and that all debris has been removed.
- C. All required demolition (ACM and non-ACM) shall be completed in each work area prior to clearance air monitoring. Exceptions may be made with prior approval of the Owner.
- D. A lockdown encapsulant shall be applied to all surfaces within the abatement areas prior to performing clearance air monitoring.

3.7 CLEARANCE AIR MONITORING

- A. The Contractor and its Independent Testing Laboratory shall conduct and document a visual inspection to verify that all asbestos in the work area has been removed, repaired and/or encapsulated as required by the contract, and that all debris has been removed.
- B. Final clearance air monitoring tests shall not be performed until all areas and materials within the work area are fully clean and dry.
- C. Final clearance air monitoring shall be conducted by the Contractor's Independent Testing Laboratory in accordance with all applicable regulations and the Contractor's approved work plan after passing the visual inspection. The clearance criteria shall include a minimum of five clearance samples using "aggressive methods" collected and analyzed in accordance with 40 CFR 763. TEM analysis is required, unless PCM analysis is specifically pre-approved by the Owner as part of the work plan submittal.
- D. If the final clearance air monitoring results show that the work area has failed to meet the clearance criteria, the Independent Testing Laboratory shall notify the Owner and the Contractor. The Contractor shall reclean the work area and request the Independent Testing Laboratory to conduct a follow-up inspection to be followed by another set of clearance air monitoring samples. All work specified in this paragraph shall be done at no additional expense to the Owner.
- E. If the clearance air monitoring results meet the clearance criteria of 40 CFR 763 and the specifications for the work and the Owner has reviewed and accepted the clearance results as

required by 1.14 D, then the HEPA filtration units may be deactivated (if applicable) and all seals, barriers, barricades, and decontamination areas shall be dismantled and removed and the work area released to unprotected workers.

- F. Submit the final work area inspection report, clearance air monitoring field data sheets and the laboratory air monitoring report to the Owner as specified in Paragraph 1.15.

3.8 SUBSTANTIAL COMPLETION

- A. After the work area barriers and temporary construction and equipment have been removed, the Contractor shall inspect the work area to verify that no asbestos debris, contaminated water, or other residue remains. Any remaining residue shall be cleaned up using HEPA vacuum cleaners and wet wiping methods.
- B. The Contractor shall certify that the work area has been cleaned of all asbestos in compliance with the contract, and that there is no unrepaired damage to walls, ceilings, doors, surfaces, equipment or finishes other than that called for by the scope of work.
- C. Costs of restoration of damaged finishes shall be borne by the Contractor.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. The work may require the disturbance (including cleanup of existing loose paint), demolition, or removal, and disposal of lead painted and/or lead-containing materials related to the Anchorage Pioneer Home – 3rd Floor Resident Renovations Project as shown on the drawings and as specified herein. Items to be disturbed may include, but are not limited to:
 - 1. Painted interior and exterior surfaces, including, but not limited to painted windows, doors and frames, painted mechanical and electrical equipment, painted structural and miscellaneous steel, etc.
 - 2. Metallic lead caulking in bell and spigot pipe joints.
 - 3. Metallic lead in pipe solder at copper pipe fittings.
 - 4. Lead-containing dust in and on architectural, structural, mechanical, and electrical components.
- B. In addition to the above materials, the following materials are located in other areas of the building, and may require disturbance for auxiliary support, such as electrical and mechanical equipment and installation of equipment. Not all lead-containing materials are to be removed from these areas, only that required to complete the project work need be removed:
 - 1. Metallic lead flashings at VTR's, roof drain bowl clamping rings, and other roof penetrations, etc.
 - 2. Lead-acid batteries for exit and emergency lights, and other equipment.
- C. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead, are also present in settled and concealed dust in and on architectural, structural, mechanical and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with EPA and OSHA requirements.
- D. This building was constructed prior to 1978, but is not regulated by 40 CFR 745.
- E. The work includes all air monitoring, dust sampling, waste testing and disposal as specified herein. Materials listed are not necessarily hazardous waste or hazardous to handle. Lead-containing paints or materials identified for demolition and disposal shall be tested by the Toxicity Characteristics Leaching Procedure (TCLP) to determine if they are hazardous waste prior to disposal. Metal waste shall be recycled where practical.
- F. All work disturbing lead-containing materials shall comply with 29 CFR 1926.62, 40 CFR 745 and other applicable regulations. OSHA regulations apply equally to lead-containing materials, lead-containing paints, and lead-based paints, and are referred herein as lead-containing materials.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 02 26 00 Hazardous Materials Assessment
- B. Section 01 35 45 Airborne Contaminant Control
- C. Section 02 82 33 Removal and Disposal of Asbestos Containing Materials

D. Section 02 84 18 Removal and Disposal of Chemical Hazards

1.3 DEFINITIONS AND ABBREVIATIONS: Definitions and abbreviations are provided in the applicable publications listed in Paragraph 1.4 of this section.

1.4 APPLICABLE PUBLICATIONS: The publications listed below form a part of this specification to the extent referenced.

A. General Requirements: All work shall be performed in compliance with the International Building Code (IBC), Fire, Fuel Gas, Mechanical, Residential, Energy Conservation and Administrative Code; Uniform Plumbing Code; the National Electrical Code; and the publications listed in this section that are in effect at the time of the bidding of this contract.

B. Title 29 Code of Federal Regulations (CFR), Department of Labor (USDOL)
Part 1910 General Occupational Safety and Health Standards
Part 1926 Safety and Health Regulations for Construction

C. Title 40 CFR, Environmental Protection Agency (EPA)
Part 260 Hazardous Waste Management System: General
Part 261 Identification and Listing of Hazardous Wastes
Part 262 Standards Applicable to Generators of Hazardous Waste
Part 263 Standards Applicable to Transporters of Hazardous Waste
Part 270 Hazardous Waste Permit Program
Part 273 Standards for Universal Waste Management
Part 311 Worker Protection
Part 745 Lead Based Paint Poisoning Prevention in Certain Residential Structures

D. Title 49 CFR, Department of Transportation (DOT)
Part 171 General Information, Regulations and Definitions
Part 172 Hazardous Materials Communication and Regulations
Part 173 General Requirements for Shipments and Packaging
Part 176 Carriage by Vessel
Part 177 Carriage by Public Highway
Part 178 Specifications for Packaging
Part 382 Requirements for Drug Testing
Part 383 Commercial Driver's License Standards

E. Alaska Administrative Codes (AAC)
8 AAC 61 Occupational Safety and Health Standards
18 AAC 60 Solid Waste Management
18 AAC 62 Hazardous Waste Management
18 AAC 70 Water Quality Standards
18 AAC 75 Oil and Hazardous Substances Pollution Control

F. Alaska Statutes (AS)
AS 45.50.477 Titles Relating to Industrial Hygiene

G. Municipality of Anchorage
AMC 26.50.060 Specific Discharge Limitations

H. Federal Standards
313E Safety Data Sheets

- I. American National Standards Institute (ANSI)
 - Z9.2 Local Exhaust Systems
 - Z87.1 Eye and Face Protection
 - Z88.2 Practices for Respiratory Protection
- J. American Society For Testing and Materials (ASTM)
 - D 4397 Polyethylene Sheeting
 - E 1728 Standard Practice for Collection of Settled Dust Samples Using Wipe Sampling Methods for Subsequent Lead Determination
 - E 1792 Specification for Wipe Sampling Materials for Lead in Surface Dust
- K. International Code Council
International Building (IBC), Fire, Fuel Gas, Mechanical, Residential, Energy Conservation and Administrative Code Current Standards
- L. National Fire Protection Association (NFPA)
NFPA 701 Fire Tests for Flame Resistant Textiles and Films
- M. National Institute of Occupational Safety and Health (NIOSH)
Manual of Analytical Methods, Current Edition
- N. Underwriters Laboratories (UL)
UL 586 High-Efficiency, Particulate, Air (HEPA) Filter Units

1.5 QUALITY ASSURANCE

- A. On-site Observation:
 - 1. The safety and protection of the Contractor's employees, Subcontractor's employees, Owner's employees, the facility, and the public is the sole responsibility of the Contractor.
 - 2. The Owner, the Owner's Representative, or representatives of State or Federal agencies may make unannounced visits to the site during the work. The Contractor shall make available two complete sets of clean, protective clothing for such visitor use. If the work requires the use of PAPR or Supplied Air Respirators, the contractor shall provide respirators to the visitor to ensure compatibility with fresh batteries or supplied air system. It is the visitor's responsibility to ensure medical qualification, training, and current "fit test" prior to using any respirator provided by the Contractor.
 - 3. If the Owner or agency visitor determines that practices are in violation of applicable regulations, they will immediately notify the Contractor that operations must cease until corrective action is taken. Such notification will be followed by formal confirmation.
 - 4. The Contractor shall stop work after receiving such notification. The work may not be restarted until the Contractor receives written authorization from the Owner.
 - 5. All costs resulting from such a stop work order shall be borne by the Contractor and shall not be a basis for an increase in the contract amount or an extension of time.
- B. Monitoring and Testing: Monitoring and testing during the work shall be performed as follows:
 - 1. The Contractor shall hire Independent Testing Laboratories to collect and evaluate all air, dust, bulk, and toxicity characteristic leaching procedure (TCLP) samples that are the responsibility of the Contractor. The Contractor shall direct its laboratories, in writing, to release monitoring and testing data, and all other pertinent data and records, to the Owner.
 - 2. The Contractor shall be responsible for monitoring its employees for potential exposure to airborne contaminants as required by this specification and all applicable regulations.
 - 3. The Contractor shall be responsible for work area monitoring and environmental monitoring outside the work area as required by this specification.

4. The Owner may perform monitoring and testing inside the building, inside the work areas, and on the Contractor's employees while work is underway and at any time during the work.
 5. Final inspection and clearance testing shall be conducted by the Contractor.
 6. The Contractor shall have its Independent Testing Laboratories archive all samples until the successful completion of the project.
 - C. Additional Sampling of Suspect Materials:
 1. The Contractor and all Subcontractors shall be vigilant during demolition and construction in the event additional suspect lead or hazardous materials are encountered. If suspect lead or hazardous materials not previously identified are encountered, the contractor shall stop work that may be affected by this material and immediately notify the Owner. The Owner or the Owner's Representative will provide recommendations and additional testing if necessary. All sampling by the Contractor shall be at their own cost.
 2. The Contractor and all Subcontractors shall notify the Owner prior to any bulk sampling of suspect lead-containing material or other hazardous materials to allow the Owner or Owner's Representative to be present during such sampling.
- 1.6 PROTECTION OF EXISTING WORK TO REMAIN: Perform lead removal in the project work areas without damage or contamination of adjacent work or the facility.
- 1.7 MEDICAL REQUIREMENTS
 - A. Institute and maintain a surveillance program in accordance with 29 CFR 1926.62 and 29 CFR 1910.134.
 - B. Institute and maintain a random drug testing program, as required by 49 CFR 382, for all drivers of vehicles transporting hazardous materials.
- 1.8 TRAINING: Employ only workers who are trained and certified as required by 29 CFR 1910, 29 CFR 1926, 40 CFR 311, 40 CFR 745 and 49 CFR 383 to remove, encapsulate, barricade, transport, or dispose of lead-containing materials.
- 1.9 PERMITS, IDENTIFICATION NUMBERS AND NOTIFICATIONS: Secure necessary permits for hazardous material removal, storage, transport and disposal and provide timely notification as required by federal, state, and local authorities.
- 1.10 SAFETY AND ENVIRONMENTAL COMPLIANCE: Comply with laws, ordinances, rules, and regulations of federal, state, and local authorities regarding handling, storing, transporting, and disposing of hazardous materials and all other construction activities.
- 1.11 RESPIRATOR PROGRAM: Establish a respirator program as required by ANSI Z88.2 and 29 CFR 1910.134.
- 1.12 HAZARD COMMUNICATION PROGRAM: Implement a hazard communication program in accordance with 29 CFR 1910.1200.
- 1.13 SUBMITTALS
 - A. Submit the following documentation to the Owner for review, approval or rejection. Work shall not begin until submittals are approved.
 1. Shop drawings.
 2. Work plan.
 3. Liability insurance policy and performance bond.

4. Schedule.
 5. Independent testing laboratory and laboratory personnel.
 6. Disposal site designations.
 7. Waste transporter designations.
 8. Representations.
 9. "Competent Person" designation and experience.
 10. Request for substitutions.
- B. Shop drawings shall show:
1. Boundaries of each lead work area, if required.
 2. Location and construction of decontamination stations, if required.
 3. Location of temporary site storage facilities.
 4. Location of air monitoring stations, both in and outside of the work area.
 5. Emergency egress route(s).
 6. Location of negative pressure exhaust systems, if required.
- C. The work plan shall include procedures for:
1. Work area set-up and protection.
 2. Worker protection and decontamination.
 3. Initial exposure determination(s).
 4. Lead removal procedures.
 5. Waste testing, transport, and disposal procedures.
 6. Monitoring and testing procedures (Sampling and Analysis Plan).
 7. Spill clean-up emergency procedures.
- D. Insurance Policy and Bond: Submit copies of the Contractor's or Subcontractor's insurance policy and performance bond. Submittal requirement is only to ensure that the insurance certificate(s) show specific coverage for the potentially hazardous materials being handled by this project. The insurance and bond amounts and certificate holder requirements are addressed in other portions of the contract documents and are not covered as part of this submittal requirement.
- E. Schedule: Submit construction schedule by work area.
- F. Independent Testing Laboratories and Laboratory Personnel: Submit the name, location, and phone number of proposed independent testing laboratories, and the names and certifications of the industrial hygiene technicians. Include the laboratory's accreditation. Not all laboratories will require all accreditations.
1. The Independent Testing Laboratories shall be acceptable to Owner.
 2. Submit evidence that the laboratory is currently judged proficient in lead analysis, as determined by the Environmental Lead Proficiency Analytical Testing (ELPAT) Program, of the American Industrial Hygiene Association (AIHA) Environmental Lead Laboratory Accreditation Program (ELLAP) for lead in paint chip, soil, and dust wipe samples.
 3. Submit evidence that the laboratory is currently certified by OSHA to perform blood lead analysis.
 4. Submit evidence that the laboratory has demonstrated proficiency as determined by ELPAT or ELLAP performance for NIOSH Method 7082 and/or NIOSH Method 7105 analytical method for the determination of lead in air.
 5. Submit evidence that the laboratory has demonstrated proficiency in performing analyses according to Method 1311 TCLP, corresponding to the current version of Test Methods for Evaluating Solid Wastes (Chemical Physical Methods), SW-846. Evidence may include successful participation in a recognized inter-laboratory quality control program such as a laboratory certified by the California Health and Welfare Agency, Department of Health Services, or a more informal inter-laboratory quality control program.

6. Submit evidence that the laboratory is currently accredited by the American Industrial Hygiene Association (AIHA).
 7. Submit the name, address, telephone number, and résumé of the Contractor's Industrial Hygienist (IH) who prepared the Sampling and Analysis Plan and will oversee the on-site monitoring, visual inspections and clearance testing. Submit the names, addresses, and résumés of industrial hygiene technicians who may assist the IH for on-site tasks. Submit documentation that the IH has all the qualifications for the assigned duties as required by the Contractor's liability insurance policy.
 8. Submit copies of the Contractor's letter to each of the independent testing laboratories, directing each to release all the results for this project to the Owner, as these results become available and as specified herein.
- G. Disposal Site: Submit the name and location of the proposed Environmental Protection Agency (EPA) permitted disposal site.
- H. Waste Transporter: Submit the name and address of the proposed waste transporter.
- I. Representations: Submit statement by the Contractor that records of employees' work assignments, certifications, respirator fit tests, and medical records are accurate, up-to-date, and available for inspection.
- J. Competent Person: Submit the name and certifications of the Contractor's proposed Competent Person and a list of their previous projects. Certify that the Competent Person has the knowledge and training to supervise the work in compliance with the publications listed in Paragraph 1.4 above.
- K. Substitutions: Submit requests for substitutions of materials, equipment and methods.
- L. Updated Project Information: Submit changes to the submitted project information at least 24 hours prior to the effective time of change for the following:
1. Updated schedules for lead removal.
 2. Change in Competent Person.
 3. Changes to work plan.
- 1.14 TEST REPORTS: Submit the following documentation produced during the work as soon as received:
- A. Project Daily Logs: Submit the previous day's Daily Logs. Logs shall include regulated area sign-in sheets and list of lead-containing materials removed, including quantities and locations of those materials, in the units used on the drawings. Claims for additional quantities will not be addressed unless daily quantities are submitted.
- B. Daily Monitoring: Submit daily, all results of Contractor's air, and dust monitoring (submit no later than 24 hours after the end of the shift). Submittal shall consist of daily monitoring report, field data sheets, the analytical laboratory's results, and sketch of sample locations. Submit all results of any TCLP sampling or testing of bulk materials to Owner within 24 hours of receipt of results. Bulk or TCLP sample submittal shall consist of daily monitoring report, field data sheets, the analytical laboratory's results, and sketch of sample locations (sketch not required for TCLP samples, but descriptions of materials included is required).
- 1.15 PROJECT COMPLIANCE DOCUMENTS: Submit the following documents to the Owner with application for final payment:
- A. Contractor's actual project "Start and Finish" dates.

- B. Waste testing results per Paragraph 3.5 (A).
 - C. Waste Shipment Records (Manifest EPA form 8700-22) if required.
 - D. Clearance sampling and soil sampling data sheets (if required) and laboratory reports.
 - E. Disposal site receipts, or certification of acceptance for recycling.
 - F. Final clearance submittals as outlined in 3.7 (if required).
 - G. Evidence that each employee who was engaged in lead disturbance/removal work or who was exposed to lead completed training on lead covering the requirements of 29 CFR 1926.62.
- 1.16 SANITARY FACILITIES: Provide adequate toilet and hygiene facilities.
- 1.17 MATERIAL STORAGE: Store all materials subject to damage off the ground and secure from damage, weather, or vandalism.
- 1.18 ON-SITE DOCUMENTATION: The Contractor shall maintain on the job site, at a location approved by the owner, copies of the following data for safety procedures, equipment, and supplies used for the work.
- A. Equipment: Show the model, style, capacity and the operation and maintenance procedures for the following, as applicable:
 - 1. High-Efficiency, Particulate, Air (HEPA) Filtration units.
 - 2. HEPA Vacuum cleaners.
 - 3. Pressure differential recording equipment.
 - 4. Heat stress monitoring equipment.
 - B. Safety Data Sheets (SDSs): Maintain SDSs for each encapsulant, surfactant, solvent, detergent, and other material proposed to be used.
 - C. Respiratory Protection Plan: The Contractor's written respirator program.

PART 2 - PRODUCTS

- 2.1 PERSONAL PROTECTIVE EQUIPMENT: Provide personal protective clothing as approved and selected by the IH.
- A. Respirators: Provide personally issued and marked respirators approved by the National Institute of Occupational Safety and Health (NIOSH). Provide sufficient replacements for respirators with disposable canisters. Use respirators equipped with dual cartridges whenever both lead hazards and other respiratory hazards exist in the work area.
 - B. Provide filter cartridges approved for each airborne contaminant which may be present. NIOSH approved filter cartridges shall be used. At no time shall the permissible exposure limit (PEL) for the contaminant exceed the PEL listed in 8 AAC 61.1100.
 - C. Whole Body Protection: Provide approved aprons, gloves, eye protection, and hard-hats, and other protective clothing as required to meet applicable safety regulations to personnel potentially exposed to lead dust or fumes above the permissible exposure limit (PEL). Wear this protection properly. Full facepiece respirators shall meet the requirements of ANSI Z87.1.
 - D. Provide protective personal equipment and clothing at no cost to the workers.

2.2 DECONTAMINATION UNIT

- A. Provide a temporary three-stage decontamination unit, attached in a leak-tight manner to each Contained Work Area. Decontamination units shall consist of a clean room equipped with separate lockers for each worker, a shower room, and an equipment locker room equipped with separate lockers for each worker.
- B. Shower specifications: Locate flow and temperature controls within the shower and be adjustable by the user. Hot water service may be secured from the building hot water system if available, but only with back-flow protection installed by the Contractor at the point of connection, and with prior notification and approval by the Owner. Should sufficient hot water be unavailable, the Contractor shall provide a minimum 40 gallon electric hot water heater with a minimum recovery rate of 20 gallons per hour. Water from the shower room shall not be allowed to wet the floor in the clean room.

- 2.3 WASTE WATER FILTERS: Install the waste water filters in a series of stages with the final filtration stage sufficient to meet discharge standard of 18 AAC 70 and/or any local sewage system discharge limit for lead. Size the waste water pump for 1.25 times the shower head flow-rate. Dispose all filters as lead contaminated waste.
- 2.4 WARNING SIGNS AND TAPE: Post warning signs and tape at the boundaries and entrances to lead disturbance and removal work areas. Signs required by other statutes, regulations, or ordinances may be posted in addition to, or in combination with, this warning sign. Conform warning signs and tape to the requirements of 29 CFR 1926.62.
- 2.5 WARNING LABELS: Affix warning labels to all hazardous waste disposal containers as described in the Contractor's approved Solid Waste Disposal Plan. Conform labeling to 29 CFR 1926.62 and 49 CFR 100-199.
- 2.6 NEGATIVE PRESSURE EXHAUST SYSTEM: Use the negative pressure exhaust systems to exhaust each contained work area where the PEL will or is expected to be exceeded. Operate the negative pressure exhaust system continuously (24 hours a day) during lead work. Select the negative pressure exhaust system equipment to provide a minimum of 4 air changes per hour under load within the work area. The negative pressure exhaust system shall have a minimum of two stages of pre-filtration ahead of the HEPA filter: The HEPA filter shall bear the UL-586 label. In no case shall the building ventilation system be used as the local exhaust for the contained work area. Terminate the exhaust outside of the building. The exhaust ventilation system equipment shall be equipped with lock-out protection to prevent operation without a HEPA filter properly installed. The exhaust system equipment shall be equipped with the following instrumentation: a static pressure gauge with low flow alarm, an elapsed time indicator, automatic shutdown capability in the event of a major rupture in the HEPA filter or blocked air discharge and an automatic re-start when power is restored after a power failure.
- 2.7 PRESSURE DIFFERENTIAL MONITORING EQUIPMENT: Provide continuous monitoring of the pressure differential with an automatic recording instrument for each contained work area. Locate the instrument in a clean area where personnel have access to it without respiratory protection. The instrument shall be fitted with an alarm should the negative pressure drop below -0.02 inches of water column relative to the air outside containment.
- 2.8 TOOLS: Vacuum cleaners shall be equipped with HEPA filters. Use only approved power tools to remove lead-containing material. Do not use open-flame and electric element heat-gun type tools with temperatures in excess of 700° F to remove lead-containing material. Remove all residual lead contamination from reusable tools being removed from lead disturbance or removal work areas. Electrical tools and equipment shall be UL listed.

- 2.9 AIR MONITORING EQUIPMENT: The Contractor's IH shall select the air monitoring equipment to be used for the evaluation of airborne lead.
- 2.10 EXPENDABLE SUPPLIES: Provide flame resistant 6-mil thick polyethylene sheet plastic in widths necessary to minimize seams.
- 2.11 SAFETY DATA SHEETS (SDSs): Provide SDSs for all chemical materials brought onto the work-site.
- 2.12 OTHER ITEMS: Provide other items, such as consumable materials, disposable and/or reusable cleaning equipment and hand tools, or miscellaneous construction equipment and materials, in sufficient quantity as necessary to fulfill and complete the requirements of the contract. Electrical equipment and supplies shall be UL listed.
- 2.13 ENCAPSULANTS: Encapsulants shall contain no toxic or hazardous substances. Encapsulants shall be compatible with the products to which they are applied and be compatible with replacement products.

PART 3 - EXECUTION

3.1 WORK AREAS

- A. Lead Control Areas: A control area, structure or containment where lead-containing or contaminated materials are being disturbed. Critical barriers and/or physical boundaries shall be employed to isolate the lead control area and to prevent migration of lead contamination and unauthorized entry of personnel.
- B. Contained Lead Work Area Requirements: Construct contained lead work areas as described in the Contractor's approved work plan. A contained lead work area is required whenever airborne lead levels cannot be maintained below the OSHA action level at the boundary of a lead work area.
- C. Building Ventilation System: Shut down and isolate by air-tight seals all building ventilation systems supplying air into or returning air from a lead control area or contained lead work area.
- D. Building Electrical Systems: Verify that the electrical service is deactivated, disconnected and locked out where necessary for wet washing and/or removal. Provide temporary electrical service, equipped with ground fault protection, where needed.

3.2 PERSONNEL PROTECTION PROCEDURES

- A. Initial Determination: An initial determination is required in the absence of acceptable prior exposure data in accordance with 29 CFR 1926.62. Establish an initial lead work area for each material to be disturbed and each disturbance procedure if required. Isolate these lead work areas from the rest of the building. Personnel working in these areas shall wear respiratory protection and personal protective equipment as directed by the IH. Perform personal and work area air monitoring as directed by the IH. Operational decontamination facilities shall be available. Work performed shall be representative of the work to be done during the remainder of the project.
- B. Respirator Evaluation: Upgrading, downgrading, or not requiring respirators shall be recommended by the Contractor's IH based on the measured airborne lead-containing dust or fume concentrations. Immediately implement recommendations to upgrade the respiratory protection, followed by notification to the Owner. NOTE: Submit recommendations in writing to downgrade respirator type or not require respirators to the Owner for review and written approval prior to implementation.

- C. Decontamination Procedures: Worker and material decontamination procedures shall be as described in the Contractor's approved work plan. Worker decontamination shall be as directed by the Contractor's competent person.
- D. Work Stoppage: Stop work if the IH, the Owner, or a representative of a regulatory agency determines that the work is not in compliance with the Contractor's approved work plan, these specifications, or applicable laws and regulations. The Contractor shall stop work and notify the Owner whenever the measured concentrations of lead outside the lead control area equal or exceed 30 $\mu\text{g}/\text{m}^3$ for airborne lead or 200 $\mu\text{g}/\text{ft}^2$ for lead dust on surfaces that would normally be accessible by building occupants. When such work stoppage occurs, the cause of the contamination shall be corrected and the damaged or contaminated area shall be restored to its original decontaminated condition by the Contractor at no expense to the Owner. The Contractor is responsible for removing dusts and debris that were generated as a result of his work.
- E. The Contractor shall adhere to all applicable regulations regarding entry into confined spaces.

3.3 LEAD DISTURBANCE AND REMOVAL PROCEDURES:

- A. General: Perform lead disturbance or removal work in accordance with the Contractor's approved work plan, applicable regulations and this specification.
- B. Pre-Cleaning: Removal of existing loose paint chips is included in the scope of work. Pre-clean surfaces by HEPA vacuum and wet washing/wiping prior to the establishment of a work area.
- C. Perform waste battery storage and disposal in accordance with 40 CFR 261, 40 CFR 264, 40 CFR 265, 40 CFR 273 and 8 AAC.

3.4 MONITORING AND TESTING: Conduct daily sampling in accordance with the Contractor's accepted Sampling and Analysis Plan and this specification. The Owner may conduct air monitoring in the Contractor's work areas and on the Contractor's employees.

- A. Perform environmental air monitoring outside the lead work area for each lead work area without a negative initial determination. Take a minimum of two lead-in-air samples inside the work area, and two lead-in-air samples in adjacent areas.
- B. Perform dust wipe sampling for each lead work area without a negative initial determination. Include at least one sample immediately outside the entrance to the work area daily.
- C. Take personnel samples in accordance with 29 CFR 1926.62. Personal samples for an employee will include a minimum of two samples per 8 hour shift. Employees will be monitored at the rate of at least one employee for every eight people performing each task in each work area. Persons performing separate tasks or in separate lead work areas shall be sampled separately.
- D. Reduction of monitoring: For each operation for which the Negative Initial Determination established workers' exposure will be below the action level, the Contractor's IH may petition the Owner's Representative to recommend that the monitoring as required above be reduced for the specific task or operation.

3.5 DISPOSAL

- A. Sampling of Waste Materials: The Contractor shall test waste materials according to 40 CFR 261 and the disposal site's permit to determine if they are hazardous waste and to dispose of them accordingly. Collect, package and transport to an EPA approved Hazardous Waste Disposal Site all bulk debris, loose paint chips, fines, dust from HEPA filters and vacuum bags, unfiltered waste water, water filter cartridges, disposable personal protective equipment (including respirator filters, poly, and tape) which do not have TCLP test results that classify the material as non-hazardous for lead. Lead-acid batteries and other batteries are classified by the EPA as Universal Wastes. The EPA encourages that all Universal Wastes be recycled in accordance with 40 CFR 273, or in the case of lead-acid batteries, in accordance with 40 CFR 266, subpart G.
- B. Hazardous Waste Disposal: Dispose of hazardous project wastes as required by 40 CFR 260 and the Contractor's approved work plan.
- C. Construction (Non-Hazardous) Waste Disposal: Dispose of solid (non-hazardous) waste in a permitted waste facility, in accordance with applicable federal, state, and local laws and regulations. Burning of waste is prohibited.
- D. Salvageable Materials: The Contractor may salvage metallic lead, lead-acid batteries and other materials to keep such materials from entering the project waste stream. Sell or transfer salvage with a document of exempt status as provided by 40 CFR 261.
- E. Waste Storage: Temporarily store solid wastes as described in the approved work plan.

3.6 FINAL CLEANING AND VISUAL INSPECTION: Perform a final cleaning and visual inspection of each lead control area prior to release to unprotected workers in accordance with the Contractor's approved work plan. Clean the lead control area by vacuuming with a HEPA filtered vacuum cleaner, wet mopping or wet wiping. Do not dry sweep or use pressurized air to clean up the area. A final visual inspection report shall be provided verifying that all lead disturbance required by the contract has been completed and that all visible dust and debris subject to disturbance by the planned work under this contract have been removed and the area HEPA vacuumed, wet mopped or wet wiped.

3.7 WORK AREA CLEARANCE TESTING: Work area clearance testing by the Contractor is required for each lead control area where the lead action level has been exceeded. Clearance testing shall be performed only after a visual inspection report by the Contractor's IH Technician has documented that the work area is clean and that all lead disturbance required by the contract has been completed. Clearance testing shall include the following:

- A. A visual inspection report by the Contractor's IH Technician verifying that all lead disturbance required by the contract has been completed and that all visible dust and debris subject to disturbance by the planned work under this contract have been removed and the area HEPA vacuumed, wet mopped or wet wiped.
- B. Three (3) lead wipe and/or lead soil sample results from within the lead control area per the Contractor's approved work plan and in accordance with NIOSH method 9100. Clearance levels shall be 200 µg/ft² for wipes or 500 ppm in soil.
- C. The Owner may conduct concurrent clearance testing.
- D. Work area barriers or containments shall not be removed until clearance testing results are reviewed and approved by the Owner.

3.8 SUBSTANTIAL COMPLETION

- A. After the work area barriers and temporary construction and equipment have been removed, the Contractor shall inspect the work area to verify that no lead debris, contaminated water, or other residue remains. Any remaining residue shall be cleaned up using HEPA vacuum cleaners and wet wiping methods.
- B. The Contractor shall certify that the work area has been cleaned of all lead in compliance with the contract, and that there is no unrepaired damage to walls, ceilings, doors or surfaces or finishes other than that called for by the scope of work.
- C. Costs of restoration of damaged finishes shall be borne by the Contractor.

END OF SECTION

PART 1 - GENERAL

- 1.1 DESCRIPTION OF WORK: The work includes proper removal and disposal of electrical equipment and chemical hazards related to the Anchorage Pioneer Home – 3rd Floor Resident Renovations Project as shown on the drawings and as specified herein. Items to be removed or disturbed may include, but are not limited to:
- A. Mercury and mercury compounds in electrical equipment and light fixtures, switches, etc.
 - B. PCB containing ballasts and light fixture components contaminated with PCB-containing oil.
 - C. Electrical equipment and building components containing or contaminated with PCB-containing oil. Note: Where the ballasts have previously been replaced, fixtures and all components may be contaminated with PCB-Containing Oils, and shall either be decontaminated or disposed of as PCB contaminated equipment.
 - D. Heat transfer fluids.
 - E. Radioactive components in smoke detectors.
 - F. Universal Waste batteries for exit and emergency lights, and other equipment.
 - G. In addition to the above materials, the following chemical hazards are located in other areas of the facility, and are not presently planned for disturbance or removal. Not all Chemical Hazards are to be removed from these areas, only that required to complete the project work need be removed:
 - 1. Radioactive components in smoke detectors and self-illuminating exit signs.
 - 2. Ozone Depleting Substances (ODS) in refrigeration equipment.
 - 3. Mercury-containing electrical components, such as mercury switches or float valves.
 - H. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead, are also present in settled and concealed dust in and on architectural, structural, mechanical and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with EPA and OSHA requirements.
- 1.2 RELATED WORK SPECIFIED ELSEWHERE
- A. Section 02 26 00 Hazardous Materials Assessment
 - B. Section 01 35 45 Airborne Contaminant Control
 - C. Section 02 82 33 Removal and Disposal of Asbestos Containing Materials
 - D. Section 02 83 33 Removal and Disposal of Materials Containing Lead
- 1.3 DEFINITIONS AND ABBREVIATIONS: Definitions and abbreviations are provided in the applicable publications listed in Paragraph 1.4 of this Section.
- 1.4 APPLICABLE PUBLICATIONS: The publications listed below form a part of this specification to the extent referenced.

- A. General Requirements: All work shall be performed in compliance with the International Building (IBC), Fire, Fuel Gas, Mechanical, Residential, Energy Conservation and Administrative Code; Uniform Plumbing Code; the National Electrical Code; and the publications listed in this section that are in effect at the time of the bidding of this contract.
- B. Title 10 Code of Federal Regulations (CFR), Nuclear Regulatory Commission
Part 20 Standard for Protection Against Radiation
- C. Title 29 CFR, Department of Labor (USDOL)
Part 1910 General Occupational Safety and Health Standards
Part 1926 Safety and Health Regulations for Construction
- D. Title 40 CFR, Environmental Protection Agency (EPA)
Part 61 National Emission Standards for Hazardous Air Pollutants
Part 260 Hazardous Waste Management System: General
Part 261 Identification and Listing of Hazardous Waste
Part 262 Standards Applicable to Generators of Hazardous Waste
Part 263 Standards Applicable to Transporters of Hazardous Waste
Part 270 The Hazardous Waste Permit Program
Part 273 Standards for Universal Waste Management
Part 311 Worker Protection
Part 761 Polychlorinated Biphenyls (PCBs)
- E. Title 49 CFR, Department of Transportation (DOT)
Part 171 General Information, Regulations and Definitions
Part 172 Hazardous Materials Communication and Regulations
Part 173 General Requirements for Shipments and Packaging
Part 177 Carriage by Public Highway
Part 178 Specifications for Packagings
Part 382 Requirements for Drug Testing
Part 383 Commercial Driver's License Standards
- F. State of Alaska Administrative Codes (AAC)
8 AAC 61 Occupational Safety and Health Standards
18 AAC 60 Solid Waste Management
18 AAC 62 Hazardous Wastes
18 AAC 75 Oil and Hazardous Substances Pollution Control
- G. State of Alaska Statutes (AS)
AS 45.50.477 Titles Relating to Industrial Hygiene
- H. Federal Standards
313E Safety Data Sheets
- I. American National Standard Institute (ANSI)
Z9.2 Local Exhaust Systems
Z87.1 Eye and Face Protection
Z88.2 Practices for Respiratory Protection
C78.LL 1256 Procedures for Fluorescent Lamp Sample Preparation and Toxicity
Characteristic Leaching Procedure.
- J. American Society for Testing and Materials (ASTM)
D-4397 Polyethylene Sheeting

- K. International Code Council
International Building (IBC), Fire, Fuel Gas, Mechanical, Residential, Energy Conservation and
Administrative Code Current IC Standards
- L. National Fire Protection Association (NFPA)
NFPA 701 Fire Tests for Flame Resistant Textiles and Films
- M. National Institute of Occupational Safety and Health (NIOSH)
Manual of Analytical Methods, Current Edition

1.5 QUALITY ASSURANCE

- A. On-site Observation:
 - 1. The safety and protection of the Contractor's employees, sub-contractor's employees, Owner's employees, the facility, and the public is the sole responsibility of the Contractor.
 - 2. The Owner, the Owner's Representative, or representatives of State or Federal agencies may make unannounced visits to the site during the work. The contractor shall make available two complete sets of clean protective clothing for such visitor use. If the work requires the use of PAPR or Supplied Air Respirators, the contractor shall provide respirators to the visitor to ensure compatibility with fresh batteries or supplied air system. It is the visitor's responsibility to ensure medical qualification, training, and current "fit test" prior to using any respirator provided by the Contractor.
 - 3. If the Owner or agency visitor determines that practices are in violation of applicable regulations, they will immediately notify the Contractor that operations must cease until corrective action is taken. Such notification will be followed by formal confirmation.
 - 4. The Contractor shall stop work after receiving such notification. The work may not be restarted until the Contractor receives written authorization from the Owner.
 - 5. All costs resulting from such a stop work order shall be borne by the Contractor and shall not be a basis for an increase in the contract amount or an extension of time.
- B. Monitoring and Testing: Monitoring and testing during the work shall be performed as follows:
 - 1. The Contractor shall hire Independent Testing Laboratories to collect and evaluate all air, bulk, and toxicity characteristic leaching procedure (TCLP) samples, which are the responsibility of the Contractor. The Contractor shall direct its laboratories, in writing, to release monitoring and testing data, and all other pertinent data and records, to the Owner.
 - 2. The Contractor shall be responsible for monitoring its employees for potential exposure to airborne contaminants as required by specification 01 35 45 and all applicable regulations.
 - 3. The Contractor shall be responsible for work area monitoring and environmental monitoring outside the work area as required by this specification. All sampling by the Contractor shall be at their own cost.
 - 4. The Owner may perform monitoring and testing inside the building, inside the work areas, and on the Contractor's employees while work is underway and at any time during the work.
 - 5. The Contractor shall have its Independent Testing Laboratories archive all samples until the successful completion of the project.
 - 6. Final inspection and clearance testing shall be conducted by the Contractor.

1.6 PROTECTION OF EXISTING WORK TO REMAIN: Perform hazardous material removal work without damage or contamination of adjacent work or the site.

1.7 MEDICAL REQUIREMENTS

- A. Institute and maintain a medical surveillance program in accordance with 29 CFR 1910.134.
 - B. Institute and maintain a random drug testing program, as required by 49 CFR 382, for all drivers of vehicles transporting hazardous materials.
- 1.8 TRAINING: Employ only workers who are trained and certified as required by 29 CFR 1910, 29 CFR 1926, 40 CFR 311, and 49 CFR 383 to remove, encapsulate, barricade, transport, or dispose of hazardous materials.
- 1.9 PERMITS AND NOTIFICATIONS: Secure necessary permits for hazardous material removal, storage, transport and disposal and provide timely notification as required by federal, state, and local authorities.
- 1.10 SAFETY AND ENVIRONMENTAL COMPLIANCE: Comply with laws, ordinances, rules, and regulations of federal, state, and local authorities regarding handling, storing, transporting, and disposing of hazardous materials and all other construction activities.
- 1.11 RESPIRATOR PROGRAM: Establish a respirator program as required by ANSI Z88.2 and 29 CFR 1910.134.
- 1.12 HAZARD COMMUNICATION PROGRAM: Implement a hazard communication program in accordance with 29 CFR 1910.1200.
- 1.13 SUBMITTALS
- A. Approval: Submit the following documentation to the Owner for review, approval, or rejection. Work shall not begin until submittals are approved.
 - 1. Shop drawings.
 - 2. Hazardous material removal work plan.
 - 3. Liability insurance policy and performance bond.
 - 4. Schedule.
 - 5. Independent testing laboratories.
 - 6. Disposal site designations.
 - 7. Waste Transporter Designations.
 - 8. Notifications and certifications.
 - 9. Competent Person Designation Notifications and Certifications.
 - 10. Request for Substitutions.
 - B. Shop drawings shall show:
 - 1. Boundaries of all hazardous material removal areas.
 - 2. Location and construction of decontamination stations, if required.
 - 3. Location of temporary site storage facilities.
 - 4. Location of air monitoring stations, if required.
 - 5. Emergency egress route(s).
 - C. The work plan shall include procedures for:
 - 1. Work area set-up and protection.
 - 2. Worker protection and decontamination.
 - 3. PCB removal procedures.
 - 4. Mercury-containing lamp removal and packaging procedures.
 - 5. Mercury-containing material removal procedures.
 - 6. Monitoring and testing procedures (Sampling and Analysis Plan).
 - 7. Radioactive materials removal and tracking procedures.
 - 8. Waste handling, packaging, labeling, manifesting and disposal procedures.

- D. Insurance Policy and Performance Bond: Submit copies of the Contractor's or Subcontractor's insurance policy and performance bond. Submittal requirement is only to ensure that the insurance certificate(s) show specific coverage for the potentially hazardous materials being handled by this project. The insurance and bond amounts and certificate holder requirements are addressed in other portions of the contract documents and are not covered as part of this submittal requirement.
- E. Schedule: Submit construction schedule by work area.
- F. Independent Testing Laboratories and Laboratory Personnel: Submit the name, location, and phone number of proposed independent testing laboratories, and the names and certifications of industrial hygiene technicians. Include the laboratory's accreditation. Not all laboratories will require all accreditations.
 - 1. The Independent Testing Laboratories shall be acceptable to the Owner.
 - 2. Evidence that a laboratory has demonstrated proficiency in performing analyses according to Method 1311 TCLP, corresponding to the current version of Test Methods for Evaluating Solid Wastes (Chemical Physical Methods), SW-846. Evidence may include successful participation in a recognized inter-laboratory quality control program such as a laboratory certified by the California Health and Welfare Agency, Department of Health Services, or a more informal inter-laboratory quality control program.
 - 3. Submit the name, address, telephone number, and résumé of the Industrial Hygienist (IH) who prepared the Sampling and Analysis Plan and will oversee the on-site monitoring. Submit the names, addresses, and résumés of industrial hygiene technicians who may assist the IH for on-site tasks. The Contractor shall submit documentation that the IH has all the qualifications for the assigned duties as required by the Contractor's liability insurance policy.
 - 4. Submit copies of the Contractor's letters to the independent testing laboratories, directing each to release all the results for this project to the Owner, as these results become available and as specified herein.
- G. Disposal Site: Submit the name and location of the proposed Alaska Department of Environmental Conservation (DEC) or U.S. Environmental Protection Agency (EPA) permitted disposal sites.
- H. Waste Transporter: Submit the name, address and EPA Hazardous Waste Transporter identification number for the proposed waste transporters.
- I. Certifications, Permits, and Notifications: Obtain and submit copies of EPA Hazardous Waste Generator identification number for the purpose of accumulating hazardous waste in accordance with 40 CFR 262. Submit copies of refrigerant recovery technician's EPA certification and company name when refrigeration systems are being demolished or deactivated. If the site does not have an EPA ID number for hazardous wastes, the contractor will need to assist the Owner in obtaining the EPA ID number, but the Owner will be available to sign the application documents and shipment records prepared by the contractor.
- J. Representations: Submit statement by the Contractor that records of employees' work assignments, certifications, respirator fit tests, and medical records are accurate, up-to-date, and available for inspection.
- K. Competent Person: Submit the name and certifications of the Contractor's proposed Competent Person and a list of their previous projects. Certify that the Competent Person has the knowledge and training to supervise the work in compliance with the publications listed in Paragraph 1.4 above.
- L. Substitutions: Submit requests for substitutions of materials, equipment and methods.

- M. Updated Project Information: Submit changes to the submitted project information at least 24 hours prior to the effective time of change for the following:
 - 1. Updated schedules for hazardous material removal.
 - 2. Change in competent person.
 - 3. Changes to work plan.
- 1.14 TEST REPORTS: Submit the following documentation produced during the work as received:
 - A. Project Daily Logs: Submit the previous day's Daily Logs. Logs shall include regulated area sign-in sheets and list of chemical hazards removed including quantities and locations of those materials, in the units used on the drawings. Claims for additional quantities will not be addressed unless daily quantities are submitted.
 - B. Monitoring and testing data sheets and laboratory reports.
- 1.15 PROJECT COMPLIANCE DOCUMENTS: Submit the following documents with the application for final payment.
 - A. Daily sign-in sheets.
 - B. Contractor's actual "start and finish" project dates.
 - C. All hazardous waste shipping manifests.
 - D. Disposal site receipts, including manufacturer name and serial numbers from each radioactive exit sign (if removed).
 - E. All final laboratory results.
 - F. Submit legible copies of the each Worker's Hazardous Waste Operations and Emergency Response (HAZWOPR) cards and/or a copy of the refresher training certificate to show that all workers have received their initial training or an eight-hour refresher course within the past year.
- 1.16 SANITARY FACILITIES: Provide adequate toilet and hygiene facilities.
- 1.17 MATERIAL STORAGE: Store all materials subject to damage off the ground and secure from damage, weather, or vandalism.
- 1.18 ON-SITE DOCUMENTATION: The Contractor shall maintain on the job site, at a location approved by the owner, copies of the following data for safety procedures, equipment, and supplies used for the work.
 - A. Equipment: Show the model, style, operations, and maintenance for the following, as applicable:
 - 1. Respirators, PAPR and canister types.
 - 2. Decontamination facilities.
 - 3. Specialized hazards handling equipment.
 - B. Expendable supplies: Maintain the manufacturer's safety data, and use the data for the following supplies:
 - 1. Coveralls and headgear.
 - 2. Boots, aprons, and gloves.
 - 3. Disposal containers.
 - 4. Solvents and degreasers.

- C. Safety Data Sheets (SDS): Maintain SDSs for each encapsulant, surfactant, solvent, detergent, and other material proposed to be used.
- D. Respirator Program: The Contractor's written respirator program.

PART 2 - PRODUCTS

- 2.1 PERSONAL PROTECTIVE EQUIPMENT: Provide personal protective clothing as approved and selected by the IH.
 - A. Respirators: Provide personally issued and marked respirators approved by the National Institute of Occupational Safety and Health (NIOSH). Provide sufficient replacements for respirators with disposable canisters.
 - B. Provide filter cartridges approved for each airborne contaminant which may be present. NIOSH approved filter cartridges shall be used. At no time shall the permissible exposure limit (PEL) for the contaminant exceed the PEL listed in 8 AAC 61.1100.
 - C. Whole Body Protection: Provide approved aprons, gloves, goggles, face shields, and hard-hats, and other protective clothing as required to meet applicable safety regulations to all workers engaged in hazardous materials removal. Full facepiece respirators shall meet the requirements of ANSI Z87.1.
 - D. Provide protective personal equipment and clothing at no cost to the workers.
- 2.2 DECONTAMINATION UNIT: Provide a decontamination station in accordance with the Contractor's accepted work plan and applicable regulations.
- 2.3 WARNING SIGNS AND TAPE: Post warning signs and tape at the boundaries and entrances to chemical hazards removal areas. Signs required by other statutes, regulations, or ordinances may be posted in addition to, or in combination with, this warning sign.
- 2.4 WARNING LABELS: Affix warning labels to all hazardous waste disposal containers as described in the Contractor's approved Solid Waste Disposal Plan. Conform labeling to 49 CFR 100-199.
- 2.5 SPECIALIZED EQUIPMENT: Lamp crushers and other specialized equipment to consolidate, reduce or treat hazardous materials are classified as RCRA treatment and the EPA specifically prohibits the use of Drum Top Crushers for management of fluorescent lamps as universal waste unless an equivalency determination is made by the state.
- 2.6 EXPENDABLE SUPPLIES: Provide flame resistant 6-mil thick polyethylene sheet plastic in widths necessary to minimize seams.
- 2.7 SAFETY DATA SHEETS (SDSs): Provide SDSs for all chemical materials brought onto the work-site.
- 2.8 OTHER ITEMS: Provide other items, such as consumable materials, disposable and/or reusable cleaning equipment and hand tools, or miscellaneous construction equipment and materials, in sufficient quantity as necessary to fulfill and complete the requirements of the contract. Electrical equipment and supplies shall be UL listed.
- 2.9 ENCAPSULANTS: Encapsulants shall contain no toxic or hazardous substances. Encapsulants shall be compatible with the products to which they are applied and be compatible with any replacement products.

PART 3 - EXECUTION

3.1 WORK AREAS

- A. Electrical Power: Verify that the electrical power to the equipment being removed is deactivated, disconnected, and locked-out.
- B. Loaded Disposal Drums: The Contractor shall provide handling equipment to move disposal drums loaded with hazardous wastes.

3.2 PERSONNEL PROTECTION PROCEDURES

- A. All personnel entering the work area shall sign the daily log and put on clean protective clothing.
- B. Basic protective clothing shall consist of aprons, gloves, goggles, face shields, and hard hats--with the addition of approved full body coveralls, bib-type aprons, and respirators as conditions warrant.
- C. Make available a contaminated material disposal drum, 6-mil. plastic wrapping and tape, or appropriate bagging materials for leaking ballasts and/or oil-contaminated components.
- D. Decontamination Procedures: All personnel handling or removing hazardous materials will comply with the decontamination procedures as described in the approved work plan.

3.3 HAZARDOUS MATERIAL REMOVAL PROCEDURES: Conduct hazardous materials removal, handling, packaging, storage, transport and disposal in accordance with the Contractor's approved work plan, applicable regulations, and this specification.

- A. Perform PCB related work in accordance with 40 CFR 761, 8 AAC 61, 18 AAC 60 and 18 AAC 62.
- B. Perform mercury-containing lamps work in accordance with 40 CFR 261, 40 CFR 264, 40 CFR 265, 40 CFR 273 and 8 AAC.
- C. Perform waste battery work in accordance with 40 CFR 261, 40 CFR 264, 40 CFR 265, 40 CFR 273 and 8 AAC.
- D. Perform radioactive smoke detector work in accordance with 10 CFR 20, 8 AAC 61, 18 AAC 60 and 18 AAC 62.
- E. Perform heat transfer fluid work in accordance with 40 CFR 261, 40 CFR 264, 40 CFR 265, 40 CFR 273 and 8 AAC.

3.4 MONITORING AND TESTING: Conduct daily sampling in accordance with the Contractor's accepted Sampling and Analysis Plan and this Specification. The Owner may conduct air monitoring in the Contractor's work areas and on the Contractor's employees.

- A. Personal, work area, and environmental monitoring for airborne contaminants shall be performed by industrial hygiene technicians who are employees of (one of) the Contractor's Independent Testing Laboratories.
- B. Perform air monitoring in accordance with 29 CFR 1926, current EPA guidance, and as specified herein. Calibrate all sampling pumps on-site with a calibrated transfer standard before and after each sample. Built-in rotameters on pumps are not acceptable for calibration.

- C. Monitor for all airborne contaminants listed in 29 CFR 1926.55 and 8 AAC 61.1100, which are produced by the Contractor's operations.
- D. Contractor shall test waste materials as required by 40 CFR 261, the disposal site's permit, and it's approved work plan. If performed, TCLP testing of fluorescent lamps shall comply with ANSI/NEMA Standard Procedure for Fluorescent Lamp Sample Preparation and Toxicity Characteristic Leaching Procedure, C78.LL 1256-2003 or latest version.

3.5 DISPOSAL

- A. Dispose of hazardous wastes in an EPA permitted hazardous waste disposal site as required by 40 CFR 260 and 40 CFR 761, the Contractor's approved plan, and the disposal site operator.
- B. Comply with current waste disposal, handling, labeling, storage, and transportation requirements of the waste disposal facility, U.S. Department of Transportation, and EPA regulations.
- C. Dispose of PCB Containing ballasts and/or other PCB Equipment in accordance with 40 CFR 761.
- D. Fluorescent, mercury vapor, metal halide and high pressure sodium lamps are classified by the EPA as hazardous mercury waste under the Universal Waste Rule under 40 CFR 273. Mercury and mercury-containing products are considered hazardous waste unless TCLP testing of the waste for mercury confirms the mercury content to be less than the EPA criteria of 0.2 mg/l. If mercury-containing lamps and thermostats are handled and disposed of in accordance with the Universal Waste Regulations, no TCLP test is required. If the Contractor chooses to perform a TCLP test of fluorescent lamps, the test shall be conducted in accordance with the requirements of ANSI/NEMA Standard Procedure for Fluorescent Lamp Sample Preparation and Toxicity Characteristic Leaching Procedure, C78.LL 1256-2003 or latest version.
- E. Dispose or recycle universal waste batteries as required by 40 CFR 273, the Contractor's approved plan, and the disposal/recycling site operator.
- F. Dispose of radioactive materials and equipment in accordance with the manufacturer's recommendations, the disposal site's requirements and 10 CFR 20, Subpart K. Provide list of manufacturer name and serial numbers for all removed radioactive exit signs to owner.
- G. Waste heat transfer fluids (such as used heating/cooling system glycol or other circulating heating/cooling fluids) are a potentially hazardous waste and shall be drained and collected in appropriate waste containers for recycling or disposal. Fluids shall be TCLP tested prior to disposal to determine if the fluids are classified as hazardous or non-hazardous waste per the EPA's RCRA regulations governing hazardous wastes. Fluids that failed the TCLP test shall be packaged for disposal as hazardous waste.

3.6 CLEANING OF WORK AREA

- A. Remove all hazardous materials and debris within a work area. Wet clean all work area surfaces.
- B. Notify the Owner that hazardous materials removal has been completed and the work area is ready for visual inspection. Include a statement that all hazardous materials and debris in the work area have been removed as required by the contract.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Description of Work: The extent of work is shown on the Drawings and specified within this document and includes furnishing metal fabrications including bracing and support for ceiling mounted equipment including ceiling mounted lifts for residents.

1.2 QUALITY ASSURANCE

- A. Requirements of Regulatory Agencies: Requirements of the International Building Code and ADA, if more restrictive or demanding, govern those of this specification.
- B. Qualifications of Welders: Employ only certified welders who have been qualified in accordance with the procedures outlined in AWS Publication DI.1-80, Section 5, Parts A, B, C, D and E, as applicable, and with Alaska Board of Welding Examiners Regulation 12 AAC 72, Article 2.

1.3 PRODUCT DELIVERY, HANDLING AND STORAGE

- A. Shipping and Storage: Afford materials the degree of preservation, packaging and packing necessary to prevent deterioration and/or damage which might result from the hazards to which they will be subjected during shipment, handling and storage. Store materials off the ground with provisions for drainage of rain and/or snow. Repair or replace damaged materials as directed or as necessary.

1.4 SUBMITTALS

- A. Shop Drawings: Submit shop drawings showing complete details and schedules for the fabrication, shop assembly and installation of all metal fabrications.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. General: For the fabrication of metal work which will be exposed to view, use only materials which are smooth and free of surface blemishes including pitting, seam marks, rolled marks and roughness. Remove such blemishes by grinding, or by welding and grinding, prior to cleaning, treating and applying surface finishes including zinc coating.
- B. Miscellaneous Steel Fabrications: Fabricate from rolled steel shapes and plates conforming to requirements of ASTM Designation A36, and from hot-formed steel tubular shapes conforming to requirements of ASTM Designation A501. Hot-dip galvanize those units which will be exposed to the exterior or where built into exterior walls or slabs.
- C. Rough Hardware:
 - 1. General: Provide zinc coated fasteners for exterior use and where built into exterior walls.
 - 2. Bolts and Nuts: Hexagon head type, conforming to requirements of ASTM Designation A307, Grade A.
 - 3. Lag Bolts: Square head type, conforming to requirement of Federal Specification FF-B-561.
 - 4. Plain Washers: Round, general assembly grade carbon steel washers, conforming to requirements of Federal Specification FF-W-92.
 - 5. Lock Washers: Helical spring type, conforming to requirements of Federal Specification FF-W-84.
 - 6. Machine Screws: Cadmium plated steel screws conforming requirements of Federal Specification FF-S-92.

D. Ferrous Metals:

1. Metal Surfaces: For fabrication of miscellaneous metal work, which will be exposed to view, use only materials which are smooth and free of surface blemishes including pitting, aggregate, sharp protrusions, release agents, or other contaminants.
2. Steel Plates, Shapes, and Bars: ASTM A36.
3. Steel Tubing: Cold-formed, ASTM A500; or hot-rolled, ASTM A501.
4. Structural Steel Sheet: Hot-rolled, ASTM A570; or cold-rolled, ASTM A501.
5. Galvanized Structural Steel Sheet: ASTM A 46, of grade required for design loading. Coating designation as indicated, or if not indicated, G90.
6. Steel Pipe, Seamless: ASTM A53; Type and grade as selected by fabricator and as required for design loading; black finish standard weight (schedule 40), unless otherwise indicated.
7. Brackets, Flanges and Anchors: Cast or formed metal of the same type material and finish as supported rails, unless otherwise indicated.

E. Shop Prime Coating: Rust inhibitive metal primer.

2.2 FABRICATION

- A. General: Fabricate metal parts and assemblies in accordance the Reference Standards. Match configurations shown on the Drawings or as required. Form accurate shapes having smooth, flat surfaces and straight, sharp edges. Form bent metal corners to the smallest radius possible without causing grain separation. Cut, drill and tap for hardware and anchors shown on the Drawings or, if not shown, as required for a secure installation. Provide connections for the work of other trades.
- B. Welding: Perform all shop and field welding of steel fabrications in accordance with the "Structural Welding Code, AWS D1.1-80", of the American Welding Society, including applicable addenda and interpretative reading. Weld corners and seams continuously. Grind exposed welds smooth and flush to match and blend with adjoining surfaces.
- C. Hot-Dip Galvanizing: Prepare steel fabrications for galvanizing in accordance with ASTM Designation A385; sand blast all welds prior to the galvanizing process. Galvanize fabricated items in accordance with ASTM Designation A123. Galvanize bolts, nuts and other rough hardware in accordance with ASTM Designation A153. Safeguard against warpage and distortion and repair all such defects.
- D. Shop Painting: Clean surfaces of steel or iron fabrications accordance with requirements of Steel Structures Painting Council Specification SSPC-SP-1-63. Apply one coat of shop primer to all steel or iron fabrications, producing a uniform, dry film thickness of not less than 2.0 mils.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Inspect the substrate and observe conditions under which the work is to be performed. Do not proceed with the work, or allow it to proceed, until unsatisfactory condition have been corrected.

3.2 INSTALLATION

- A. General: Set metal work accurately in place as shown on the Drawings, in proper alignment and elevation, plumb, level, true, and free of rack. Anchor securely in place. Fit exposed connections accurately together to form tight hairline joints. Leave surfaces clean, smooth and free of defects.
- B. Field Welding: Field weld only those connections which cannot be shop welded because of shipping size limitations. Repair galvanized surfaces with cold applied galvanizing at welds. Comply with requirements for shop welding.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Description of Work: The extent of work is shown on the Drawings and specified within this document and includes furnishing and installing batt acoustical insulation.

1.2 QUALITY ASSURANCE

- A. Comply with fire-resistance, flammability and insurance ratings indicated, and comply with regulations as interpreted by governing authorities.

1.3 DELIVERY, HANDLING AND STORAGE

- A. Protect insulations from physical damage and from becoming wet, soiled or covered with ice or snow. Comply with manufacturer's recommendations for handling, storage and protection during installation.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Mineral/Glass Sound Attenuation Batt Insulation Fiber, Blanket/Batt Insulation: Inorganic (nonasbestos) fibers formed with binders into resilient flexible blankets or semi-rigid batts; ASTM C665 and C423, Type 1. Densities of not less than 0.5 lb. per cu. ft. for glass fiber units. Standard lengths and widths as required to coordinate with spaces to be insulated.
 - 1. Provide Type I unfaced units with wire retainers, or semi-rigid in vertical spaces and where self support is required.
 - 2. Flame-Spread Rating: Provide units with rating of 25, ASTM E84.
 - 3. Fire-Resistance Ratings: Where units are included in rated wall/ceiling/floor construction, provide mineral wood units which have been tested and rated as required for the indicated assembly.
 - 4. Manufacturer: Subject to compliance with requirements, products of one of the following:
 - a. Certain-Teed Products Corp.; Valley Forge, PA.
 - b. Manville Building Materials Corp.; Denver, CO.
 - c. Owens-Corning Fiberglass Corp.; Toledo, OH.
 - d. United States Gypsum Co.; Chicago, IL.
- B. Auxiliary Insulation Materials:
 - 1. Adhesive for Bonding Insulation: Type recommended by insulation manufacturer and complying with fire-resistance requirements.
 - 2. Mechanical Anchors: As recommended by insulation manufacturer for type of application and condition of substrate.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine substrate and conditions of insulation work to be performed. Do not proceed with insulation work until unsatisfactory conditions have been corrected.
- B. Clean substrates of substances harmful to insulations or vapor barriers, including removal of projections which might puncture vapor barriers.

3.2 INSTALLATION

- A. Comply with manufacturer's instruction for particular conditions, consult manufacturer's technical representative for specific recommendations before proceeding with work.
- B. Extend insulation full thickness as shown over entire area to be insulated. Cut and fit tightly around obstructions, and fill voids with insulation. Remove projections which interfere with placement.
- C. Apply batt insulation in single layer of required thickness. Fill cavity unless noted otherwise.

3.3 PROTECTION

- A. Protect installed insulation from physical abuses.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Description of Work: The work includes furnishing, fabricating and installing fire and smoke stopping in all new and existing openings in slabs and rated walls. It is expected slab and wall openings may be exposed during the demolition process that allow the passage of fire/smoke from one compartment to another. When discovered these openings are to be identified, documented and indicated to the project representative. Payment for filling the openings will be through unit pricing in units noted on the bid form.

1.2 QUALITY ASSURANCE

- A. Codes and Standards
1. American Society for Testing and Materials Standards (ASTM):
 - a. ASTM E84: Standard Test Method for Surface Burning Characteristics of Building Materials.
 - b. ASTM E814: Standard Test Method for Fire Tests of Through-Penetration Firestops.
 2. Underwriters Laboratories, Inc.
 - a. UL 723 Surface Burning Characteristics of Building Materials.
 - b. UL 1479 Fire Tests of Through-Penetration Firestops.
 3. UL Fire Resistance Directory:
 - a. Through Penetration Firestop devices (XHJI).
 - b. Fire Resistive Ratings (BXUV).
 - c. Through Penetration Firestop Systems (XHEZ).
 - d. Fill, Void, or Cavity Material (XHHW).

1.3 SUBMITTALS

- A. Submit manufacturer's product literature for each type of firestop material to be installed. Literature shall indicate product characteristics, typical uses, performance and limitation criteria, and test data.
- B. Firestopping schedule shall be submitted indicating size of opening, material penetrating opening (if any), proposed firestop material, and UL test data conforming to application. Schedule shall list each penetration and breach of fire rated assembly.
- C. UL Tested Systems: Submit drawings showing typical installation details for the methods of installation. Indicate which firestop materials will be used and thickness for different hourly ratings.
- D. Submit manufacturer's installation procedures for each type of product.
- E. Upon completion, installer shall provide written certification that materials were installed in accordance with the manufacturer's installation instructions and details.

1.4 PRODUCT DELIVERY, HANDLING AND STORAGE

- A. Deliver material in the manufacturer's original, unopened containers or packages with the manufacturer's name, product identification, lot number, UL label, and mixing and installation instructions as applicable.

- B. Store materials in the original, unopened containers or packages, and under conditions recommended by the manufacturer.
- C. All firestop materials shall be installed prior to expiration of shelf life.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Firestopping materials and systems shall meet the requirements specified within this document. Specific products listed below have been provided to establish a minimum standard of quality. Products which meet application requirements may be submitted for review.

2.2 MATERIALS

- A. Intumescent Firestop Sealants and Caulks:
 - 1. STI SpecSeal Series LCI and Series SSS Sealant.
 - 2. 3M Fire Barrier Caulk CP 25WB+.
 - 3. FlameSafe FS 1900 Series Sealant.
- B. Latex Firestop Sealant:
 - 1. STI SpecSeal LC150 Sealant.
 - 2. 3M Latex Intumescent Sealant.
 - 3. FlameSafe FS 900+ Sealant.
- C. Silicone Firestop Sealants and Caulks:
 - 1. STI SpecSeal Pensil 300.
 - 2. 3M Fire Barrier Silicone Sealants.
 - 3. Hilti CP 606 Silicone Firestop Sealant.
- D. Firestop Putty:
 - 1. STI SpecSeal SSP Firestop Putty Bars and Pads.
 - 2. 3M Fire Barrier Moldable Putty.
 - 3. FlameSafe FSP 1000 Putty and FSP 1077 Putty Pads.
- E. Firestop Collars:
 - 1. STI SpecSeal Firestop Collars, Series SSC and Series LCC
 - 2. 3M Fire Barrier PPD.
 - 3. FlameSafe Intumescent Wrap Strip Collar.
- F. Wrap Strips:
 - 1. STI SpecSeal Wrap Strip, SSWBLU Wrap Strip and SSWRED Wrap Strap.
 - 2. 3M Fire Barrier FS195 Wrap Strip.
 - 3. Metacaulk Wrap Strip.
- G. Firestop Mortar:
 - 1. STI SpecSeal Mortar.
 - 2. 3M Firestop Mortar.
 - 3. FlameSafe FS 200 Mortar Seal.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine the areas and conditions where firestops are to be installed and notify contracting officer of conditions detrimental to the proper and timely completion of the work. Do not proceed with work until unsatisfactory conditions have been corrected.
- B. Verify that environmental conditions are safe and suitable for installation of firestop products.
- C. Verify that all pipe, conduit, cable, and other items which penetrate fire-rated construction have been permanently installed prior to installation of firestops.

3.2 INSTALLATION

- A. General:
 - 1. Installation of firestops shall be performed in strict accordance with manufacturer's detailed installation procedures.
 - 2. Apply firestops in accordance with fire test reports, fire resistance requirements, acceptable sample installations, and manufacturer's recommendations.
 - 3. Unless specified and approved, all insulation used in conjunction with through-penetrants shall remain intact and undamaged and may not be removed.
 - 4. Seal holes and penetrations to ensure an effective smoke seal.
 - 5. In areas of high traffic, protect firestopping materials from damage.
 - 6. Insulation types specified in other sections shall not be installed in lieu of firestopping material specified in this section.
 - 7. All combustible penetrants (e.g. non-metallic pipes or insulated metallic pipes) shall be firestopped using products and systems tested in a configuration representative of the field condition.
- B. Dam Construction:
 - 1. When required to properly contain firestopping materials within openings, damming or packing materials may be utilized. Combustible damming material must be removed after appropriate curing. Noncombustible damming materials may be left as a permanent component of the firestop system.

3.3 CLEANING

- A. Remove spilled and excess materials adjacent to firestopping without damaging adjacent surfaces.
- B. Leave finished work in neat, clean condition with no evidence of spill overs or damage to adjacent surfaces.

3.4 APPROVAL

- A. All areas of work must be accessible until inspection by the applicable Code Authorities.
- B. Correct unacceptable firestops and provide additional inspection to verify compliance with this specification.

END OF SECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

- A. Flexible commercial and pick-resistant joint sealants to be used to fill open joints and to bed surface mounted equipment, furnishings, and fixtures. When complete, there are to be no gaps or open joints between walls, floors and ceilings, and surface applied devices.

1.2 PRODUCT DELIVERY, HANDLING AND STORAGE

- A. Deliver materials in original containers with manufacturer's labels thereon. Store in a warm dry place. Replace damaged materials as directed or as necessary.

1.3 SUBMITTALS

- A. Manufacturer's Data: Submit manufacturer's specifications and installation instructions for sealant and sealant backing. Include data substantiating compliance with specified requirements.
- B. Samples: Submit samples in the manufacturer's standard range of colors.
- C. Guarantee: Before commencement of work, furnish two copies of a written guarantee, signed by the Contractor and the installer, agreeing to repair or replace sealants that fail in joint adhesions, cohesion, abrasion resistance, weather resistance, extrusion resistance, migration resistance, stain resistance or general durability, or appear to deteriorate in any other manner not clearly specified as an inherent quality of the material in submitted manufacturer's data.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

- A. VOC Content of Interior Sealants: Provide sealants and sealant primers for use inside the waterproofing system that comply with the following limits for VOC content when calculated according to 40 CFR 59, Part 59, Subpart D (EPA Method 24):
 - 1. Architectural Sealants: 250 g/L.
 - 2. Sealant Primers for Nonporous Substrates: 250 g/L.
 - 3. Sealant Primers for Porous Substrates: 775 g/L.

2.2 URETHANE JOINT SEALANTS

- A. Pick-Resistant Urethane Joint Sealant: ASTM C920.
 - 1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. BASF Building Systems Master Seal CR95
 - b. Bostik Findley Seal N Flex FC
 - c. Pecora Corporation Dynaflex SC
 - 2. Hardness: 50 Shore A.
 - 3. Type: Single component (S).
 - 4. Grade: Nonsag (NS).
 - 5. Class: 25

2.3 JOINT SEALANT BACKING

- A. Cylindrical Sealant Backings: ASTM C1330, Type C (closed-cell material with a surface skin), Type O (open-cell material), Type B (bicellular material with a surface skin), or any of the preceding types, as approved in writing by joint-sealant manufacturer for joint application indicated, and of size and density to control sealant depth and otherwise contribute to production optimum sealant performance.
- B. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer.

2.4 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates.

PART 3 - EXECUTION

3.1 GENERAL

- A. Sealant shall be applied to all open construction joints and to bed all identified and required surface applied products to form moisture and ligature resistant tight joints.

3.2 INSTALLATION

- A. Installation of Backing Materials: Install bond breaker tape and sealant backer rod in accordance with manufacturer's instructions.
- B. Installation of Sealant: Apply sealant in accordance with manufacturer's printed instructions for the specific conditions including manufacture range of installation using a handgun with nozzle of proper size. Fill joints and voids solid. Tool joints with equipment designed especially for that purpose, leaving surfaces uniform, smooth, and free of sags, gaps, bulges, air pockets and other inconsistencies. Remove excess material immediately. Leave adjacent surfaces clean. Cure sealed joints for a period of not less than 48 hours.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Description of Work: The extent of work is shown on the Drawings and specified within this document and includes furnishing and installing metal access panels to gain maintenance access to concealed mechanical and electrical equipment. This section is to be used for the procurement of access panels to provide access to systems specified in mechanical and electrical documents.

1.2 QUALITY ASSURANCE

- A. Regulatory Requirements: Provide panel assemblies which have been tested by Underwriters Laboratories and labeled with an appropriate frame and access panel assembly rating. Modify this Specification as required to secure labels.

1.3 SUBMITTALS

- A. Manufacturer's Data: Submit manufacturer's specifications and installation instructions for metal access panels. Include data substantiating compliance with specified requirements.

1.4 PRODUCT DELIVERY, HANDLING AND STORAGE

- A. General: Afford materials the degree of preservation, packaging and packing necessary to prevent deterioration and/or damage which might result from the hazards to which they will be subjected during shipment, handling and storage. Store materials off the ground with provisions for drainage of rain and/or snow. Repair or replace damaged materials as directed or as necessary.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Provide access panels with fire/smoke ratings matching those of the wall/ceiling they are being installed in.
- B. Metal Components: Form panels and frames from commercial quality, level, cold-rolled steel conforming to ASTM Designation A366, free of scale, pitting and other surface defects.
- C. Fasteners: Provide all necessary bolts, nuts, washers, screws and other fastening devices in required quantities and varieties.
- D. Finish: Rust inhibitive metal primer which has been proved to be compatible with field painted finish coats to match adjacent surfaces.

2.2 ACCESS PANELS

- A. Wall Access Panels
 - 1. Panels: Flush surface type, formed from not less than 16 gauge steel.
 - 2. Frames: Welded unit type, formed from not less than 16 gauge steel.
 - 3. Hinges: Concealed, removable, pin type spring hinges set to open to 175 degrees.
 - 4. Locks: Provide one screwdriver cam style lock with each access panel.
 - 5. Opening Size: 12 inches x 12 inches minimum, provide larger openings as required.
- B. Ceiling Access Panels
- C. Panels: Flush surface type, formed from not less than 20 gauge steel.
- D. Frames: Welded unity type, formed from not less than 16 gauge steel.

- E. Hinges: Concealed, removable, pin type spring hinges set to open at 175 degrees.
- F. Locks: Provide one screw driver cam style lock with each access panel.
- G. Opening Size: 16 inches x 16 inches minimum, provide larger openings as required.

2.3 FABRICATION

- A. Provide access panel assemblies which have been manufactured as integral units, complete with all necessary parts and ready for installation.
- B. Shop fabricate by forming and welding. Miter corners. Grind exposed welds smooth. Produce accurate shapes having straight edges and sharp corners and angels. Leave surfaces smooth and free of warp, wave, buckle and other defects.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Carefully examine the substrate and observe conditions under which the work is to be performed. Do not proceed with the work, or allow it to proceed, until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Locate access panels as required for access to concealed mechanical and electrical equipment. Coordinate the location of required access panels with mechanical and electrical Contractors. Install in a rigid and secure manner in accordance with manufacturer's instructions, with flanges pulled tight against wall and ceiling surfaces. Adjust hardware for proper operation after installation. Clean surfaces. Remove and replace defective or damaged units as directed or as necessary.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Description of Work: Work under this section includes the complete finish hardware requirements for the commercial doors in this project. Quantities listed are for the Contractor's convenience only and are not guaranteed. Items not specifically mentioned but necessary to complete the work shall be furnished, matching the items specified in quality and finish.

1.2 QUALITY ASSURANCE

- A. Supplier: Finish hardware shall be supplied by a recognized builders' hardware supplier who has been furnishing hardware in the same region as the project for a period of not less than 5 years. The supplier's organization shall include a member of the American Society of Architectural Hardware Consultants who is available at all reasonable times during the course of the work to meet with the Owner, Architect or Contractor for project hardware consultation. The hardware supplier must be a factory authorized direct distributor of the locks, closers and exit devices.
- B. Installer: Finish hardware shall be installed only by experienced tradesmen, either at the door and frame fabrication plant or at the project site.
- C. Codes:
 - 1. All finish hardware shall comply with applicable local and/or state current building codes.
 - 2. Hardware for fire rated openings shall also be in compliance with all fire building codes applicable to the district in which the building is located. Provide only hardware which has been tested and listed by UL for the types and sizes of doors required and which complies with the requirements of the door and frame labels.

1.3 SUBMITTALS

- A. Manufacturer's Data: Submit one electronic copy of manufacturer's data for each item of finish hardware.
- B. Hardware Schedule:
 - 1. At the earliest possible date, submit the finish hardware schedule organized into "hardware sets" and indicating complete designation of every item required for each door or opening. Approval of the hardware schedule does not relieve the Contractor of the responsibility to fulfill the project requirements in accordance with the Contract Documents.
 - 2. Submit a keying schedule in accordance with the instructions from the Owner or Architect.
 - 3. After the schedule have been approved by the Architect, submit corrected schedule.
- C. Templates: Furnish hardware templates for each fabricator of doors, frames and other work to be factory prepared for the installation of hardware.

1.4 PRODUCT HANDLING AND STORAGE

- A. Packaging: Each item or package is to be separately tagged with identification related to the final hardware schedule. Basic installation instructions shall be included in the packages.

1.5 GUARANTEE

- A. Finish hardware shall be guaranteed against defects in workmanship and operation for a period of one year, backed by a factory guarantee of the hardware manufacturer, except the door closers shall be so guaranteed for 10 years. No liability shall be assumed by the hardware supplier where faulty operation is due to improper installation or lack of normal maintenance.

PART 2 - PRODUCTS

2.1 FINISH: BUILDING STANDARD HARDWARE FINISH IS 32D, BRUSHED STAINLESS STEEL.

2.2 SCHEDULED AND APPROVED DOOR HARDWARE

A.	Hinges	Ives, Pemko McKinney
B.	Locks and Latches	Schlage
C.	Closers, Surface	LCN, Dorma
D.	Kickplate	Ives, Rockwood
E.	Electric Strikes	HES, Von Duprin
F.	Door Stops	Ives, Rockwood
G.	Overhead Stops	Glynn Johnson, ABH
H.	Cylinders	Schlage
I.	Thresholds, Astragals, and Weatherstrip	Pemko, National
J.	Keys and Keying	

1. All cylinders shall be keyed as directed to the building's existing Master Key system.
2. Provide construction cores and construction keys for all doors with cylinders for use during the construction phase. Construction cores and keys shall remain the property of the hardware supplier and shall be returned by the contractor at the completion of the project. At the completion of the project and when notified by the Owner/Architect, the contractor shall install all permanent cores.
3. Individual keying shall be as directed by the Owner and shall follow the existing master key system. The hardware supplier shall conduct a keying conference with the Owner/Architect.
4. Furnish the following quantities of keys except as amended at the key conference
 - a. 2 Master keys per set
 - b. 2 Permanent Control keys
 - c. 2 Extra Cores keyed as directed for emergency replacements
 - d. 2 Extra Cut Keys for replacement cores
 - e. 2 Extra Control Keys for replacement cores
5. Key Control: Stamp "Do Not Duplicate" on each permanent key.
6. Permanent keys shall be delivered directly to the owner's representative.

2.3 HARDWARE GROUPS

FINISH LIST	
<u>Code</u>	<u>Description</u>
AL/689	Aluminum Painted
US10/612	Satin Chromium Plated
US10/612	Stainless Steel, Dull
US10B/613	Oil Rubbed Bronze

MANUFACTURER LIST	
<u>Code</u>	<u>Name</u>
AB	ABH Manufacturing Inc.
BE	Best Access Systems
NA	National Guard
SH	Stanley Commercial Hardware
ST	Stanley
TR	Trimco
DRM	Dorma

PART 3 - EXECUTION

3.1 PREPARATION

- A. Provide solid backing for all wall stops when installed in new or walls opened for construction.
- B. Fasteners: Check all conditions and use fastening devices as needed to securely anchor all hardware as per manufacturer's published templates. Self-tapping sheet metal screws are not acceptable. All closers and exit devices on wood doors shall be thru-bolted. Thresholds shall be secured with countersunk stainless steel screws.

3.2 INSTALLATION

- A. Mounting Heights: Mount units at heights listed in "Recommended Locations for Builders' Hardware" by DHI, unless indicated otherwise.
- B. Install each hardware item in compliance with the manufacturer's instructions.
 - 1. Wherever cutting and fitting are required to install hardware on surfaces which will be painted or finished at a later time, install each item completely and then remove and store until completion of the finishes. Re-install each item.
 - 2. Do not install surface-mounted items until finishes have been completed.
- C. Adjust and check each operating item of hardware to insure proper operation and function of every unit. Replace units that cannot be adjusted to operate freely and smoothly.

3.3 ADJUSTMENT

- A. Wherever hardware installation is made more than one month prior to acceptance or occupancy, make a final check and adjustment of all hardware items during the week prior to acceptance or occupancy but after final air balancing. Clean and lubricate operating items as necessary to restore proper function and finish of hardware and doors. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
- B. After mechanical systems have been balanced, adjust door closers to comply with the following ANSI requirements:
 - 1. With the door open 70 degrees, the door closer shall be adjusted so that the door will take at least 3 seconds to move to a point where the leading edge of the door is 3 inches from latching.
 - 2. The maximum force for pushing or pulling open a door shall be as follows:
 - a. Fire doors shall have the minimum opening force allowable by the appropriate administrative authority.
 - b. Other doors:
Interior hinged doors: 5 lbf.
 - c. These forces do not apply to the force required to retract latch bolts or disengage other devices that may hold the door in a closed position.
- C. Instruct Owner's personnel in proper adjustment and maintenance of hardware and hardware finishes.

HARDWARE SETS

Hardware Group No. 1

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	CLOSER SENTRONIC	1856 FS	✂		DRM
1	EA	GASKETING	488SBK PSA		BK	ZER

Hardware Group No. 2

Provide each SGL door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
1	EA	PRIVACY LOCK	ND40S ATH 43-005		612	SCH

Hardware Group No. 3

Provide each DE door(s) with the following:

QTY		DESCRIPTION	CATALOG NUMBER		FINISH	MFR
6	EA	HINGE	5BB1HW 5 X 4.5		612	IVE
2	EA	FIRE EXIT HARDWARE	QM-9827-EO-F-LBR-499F		612	VON
2	EA	SURFACE CLOSER	4040XP		691	LCN
2	EA	KICK PLATE	8400 10" X 1" LDW B-CS		612	IVE
2	EA	FIRE/LIFE WALL MAG	SEM7850 AS REQ (12/24/120V AC/DC TRI-VOLT)	 ✂	695	LCN
2	EA	MEETING STILE	328D-S		D	ZER
1	EA	GASKETING	488SBK PSA		BK	ZER

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Description of Work: The extent of work is shown on the Drawings and specified within this document and includes furnishing and installing gypsum board, gypsum board accessories and finishing materials.

1.2 QUALITY ASSURANCE

- A. Reference Standards: Comply with recommendations and specifications of the Gypsum Associated (GA), American Society for Testing and Materials (ASTM) and American National Standards Institute (ANSI) as modified and supplemented on the Drawings and herein. Refer to ASTM C1007-83 "Standard Specification for Installation of Load Bearing Steel Studs and Related Accessories", ASTM C754-88 "Standard of Steel Framing Members to Receive Screw Attached Gypsum", ANSI C840-88 "Standard Specifications for the Application and Finishing of Wallboard", GA-216-96 "Application and Finishing of Gypsum Board". Shaft Wall construction in conformance with UL Design U499, FM WP-755,2-27-85.
- B. Tolerances: Do not exceed 1/8 inch in 8 feet variation from plumb or level in any exposed line or surface except at joints between units; do not exceed 1/16 inch variation between planes of abutting edges or ends. Space between the edge of gypsum wallboard panels and floor surface shall not exceed 1/4 inch.

PART 2 – PRODUCTS

2.1 INTERIOR GYPSUM BOARD

- A. Metal Framing System For Interior Walls: Not less than 20 gauge galvanized steel studs, runners, and rigid furring channels conforming to requirements of ASTM Designation C645.
- B. Metal Framing for Shaft Wall: Not less than 20 gauge 2-1/2 inch CH stud, 2-1/2 inch J runners at floor and ceiling.
- C. Ceiling Suspension System:
1. Carrying Channels: 1-1/2 inch high, 16 gauge cold rolled steel channels.
 2. Furring Channels: 7/8 inch high galvanized steel furring channels designed for the attachment of 5/8 inch gypsum wallboard.
 3. Hanger Wire: Not less than 9 gauge galvanized, soft annealed, mild steel wire.
 4. Tie Wire: Not less than 18 gauge galvanized, soft annealed, mild steel wire. Galvanized steel clips may be used at the Contractor's option.
- D. General: Complying with ASTM C1629. ASTM D3273.
1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 - a. Georgia-Pacific Gypsum, LLC.
 - b. National Gypsum Company.
 - c. USG Corporation.
- E. Impact/Mold Resistant Gypsum Board: For use on all walls and ceilings in bathrooms.
1. Gypsum Wallboard: U.L. Labeled Type "X", 5/8 inch thick gypsum board with tapered edges. Gypsum board shall be fiberglass faced and constructed with properties similar to National Gypsum Gold Bond eXP Interior Extreme AR. Provide this product or an approved product with the same or better characteristics.

2. Where specifically identified on the drawing, install the following:
 - a. Gypsum Wallboard: U.L. Labeled Type "X", 1/2 inch thick gypsum board with tapered edges. Gypsum board shall be fiberglass faced and constructed with properties similar to National Gypsum Gold Bond eXP Interior Extreme AR. Provide this product or an approved product with the same or better characteristics
- F. Shaft Wall Core Gypsum Board: UL labeled type X gypsum board 1' thick.
- G. Gypsum Board: For use on ceilings in all areas other than toilet/bathrooms.
 1. Gypsum Wallboard: U.L. Labeled Type "X", 5/8 inch thick gypsum board with tapered edges conforming to requirements of ASTM Designation C36.
- H. Mold and Mildew Resistant Tile Backer: UL Labeled Type "X", 5/8 inch thick gypsum board with square edges. Gypsum board shall be fiberglass faced and constructed with properties similar to National Gypsum Gold Bond eXP Tile Backer.
- I. Gypsum Wallboard Accessories
 1. Edge Trim: U-shaped galvanized steel casing bead, U.S. Gypsum Company "No. 200-A" or approved. Reveal type edge trim will not be accepted.
 2. Control Joint: V-shaped galvanized steel control joint, U.S. Gypsum Company No. .093 or approved.
- J. Mechanical Fasteners: Provide screws, nails, and other fasteners in varieties recommended by the gypsum wallboard manufacturer and in quantities required.
- K. Finishing Materials:
 1. Joint Treatment Tapes: Plain or perforated tape conforming to requirements of ASTM Designation C475.
 2. Joint Treatment Compound: Commercially formulated compound conforming to requirements of ASTM Designation C475.

PART 3 – EXECUTION

3.1 INSPECTION

- A. Carefully examine the substrate and observe conditions under which the work is to be performed. Do not proceed with the work until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Temperature and Ventilation: During the installation of gypsum wallboard maintain a temperature in the building at not less than 50 degrees F. Provide ventilation as required to prevent moisture accumulation.

3.3 INSTALLATION

- A. Installation of Metal Wall Framing System: Carefully place and align metal runners in accordance with dimensions and other conditions shown on the Drawings. In locations where metal wall framing is indicated to be installed in a curved or non-linear manner, provide curved track. Secure bottom runners to floor with appropriate fasteners or anchors spaced not more than 24 inches on centers. Secure top runners to floor or roof structure above in a similar fashion. Walls to extend to the structure above the ceiling and shall be provided with top stud track. Brace as required. Space metal studs not more than 16 inches on centers and secure to metal runners with screws. Locate framing members as required for attachment of surface materials as shown on the Drawings. Provide seismic restraint as required. Provide sheetmetal backing for all wall mounted components including, but not limited to, cabinets, handrails, bathroom fixtures and hardware.

- B. Installation of Shaft Wall: Place 2-1/2 inch metal runners in alignment. Install CH studs at 24 inches on center while positioning 1 inch thick proprietary shaft wall boards in stud H cavity. On opposite side add 1 layer of specified type X GWB. perpendicular to shaft wall attach with 1 inch type S drywall screws at 12 inches on center in conformance with UL Design U499, FM WP-755,2-27-85.
- C. Installation of Ceiling Suspension System:
1. General: Locate members such that they will not conflict with the installation of patient lifts, lighting fixtures, ceiling diffusers, grilles or other ceiling mounted equipment. Provide seismic restraint as required.
 2. Installation of Wire Hangers: Attach hangers to structural framing members with metal clips or anchors designed for that purpose. Locate hangers plumb in relation to main runners, avoid contact with ducts, pipe and insulation. Alter the spacing of hangers or splay hangers to avoid such obstructions, do not exceed the maximum allowable spacing. Offset horizontal forces of splayed hangers by countersplaying bracing. Provide extra hangers within 6 inches of ends of carrying channels and as required to support lighting fixtures, ceilings diffusers and grilles, access panels and other similar items. At control or expansion joints, provide extra hangers as required to support discontinuous members.
 3. Installation of Carrying Channels: Support carrying channels from hangers by saddle tying. Locate carrying channels within 6 inches of parallel walls to support ends of furring channels.
 4. Installation of Furring Channels: Attach furring channels to carrying channels at each intersection with tie wire or with clips designed for that purpose. Locate furring channels perpendicular to carrying channels and extend to within 2 inches of perimeter walls; do not abut channels to perimeter construction.
- D. Installation of Gypsum Wallboard:
1. All gypsum wallboard is to be installed in accordance with requirements of ANSI C840-88 and GA-216-96, comply with manufacturer's printed instructions where more stringent. Apply gypsum wallboard horizontally to walls and partitions with vertical joints located over supports. Stagger vertical joints in alternate courses and offset vertical joints at least one stud space on opposite faces of partitions. Apply gypsum wallboard with the long dimension perpendicular to supports with end joints located over supports. Fasten gypsum wallboard to wall framing and to ceiling joists with screws. Gaps between gypsum wallboard panels and adjacent surfaces such as finish floors, perpendicular walls and ceilings shall not exceed 1/4 inch unless indicated otherwise.
 2. Trimming: Reinforce all external corners of gypsum wallboard work with corner bead. Trim all exposed edges, especially those edges where gypsum wallboard abuts dissimilar construction with metal edge trim. Use continuous trim components where possible. Miter corners. Secure trim in place with fasteners. Fully conceal fasteners and trim flanges with joint compound.
 3. Finishing:
 - a. Joint Reinforcement: Use joint tape to reinforce joints formed by tapered edges or butt ends of drywall units and at internal corners and angles. Set tape in joint compound then apply a skim coat over tape in one application. Allow joint compound to dry, then sand smooth. Where open spaces of more than 1/16 inch width occur between abutting gypsum wallboard units, prefill joints with joint compound and allow prefill to dry before application of joint tape.
 - b. Application of Joint Compound (where exposed): Finish Level 4, apply not less than three (3) separate coats of joint compound over joints, fastener heads and metal flanges. Allow drying time between applications of joint compound in accordance with manufacturer's printed instructions but in no case less than 24 hours. Sand surfaces smooth between

each coat. Leave surfaces smooth and flush without joints, fastener heads, metal flanges or surface defects visible following application of field applied finishes.

- c. Fire Taping (under applied finish): Finish Level 2, apply one (1) coat of joint compound over joints and fastener heads in locations where gypsum board surfaces are not visually accessible or otherwise concealed.
- d. Texture: Provide flat wall finish. Apply joint compound evenly to achieve smooth wall surface.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Description of Work: The extent of the work is shown on the Drawings and specified within this document and includes furnishing and installing wall and floor tile in the bathrooms and showers.

1.2 QUALITY ASSURANCE

- A. Reference Standards: Comply with recommendations and specifications of the American National Standards Institute and the Tile Council of America, ANSI A108, A118, A136.1 and ANSI A137.1.
- B. Source of Supply: Provide materials obtained from only one source for each type and color of tile.
- C. Manufacturer's Instructions: Comply with shipping, storing, installation and sealing instructions provided by tile manufacturer.

1.3 SUBMITTALS

- A. Manufacturer's Data: Submit manufacturer's specifications and installation instructions for ceramic tile, mortar, grout and cleaning materials. Include data substantiating compliance with specified requirements.
- B. Samples: Submit samples showing manufacturer's entire variety of standard colors and patterns. Allow ample time for review. Obtain selections from the Contracting Officer before ordering materials.
- C. Certificates of Compliance: Submit manufacturer's Master Grade Certificate bearing the TCA certification mark.
- D. Overages: Upon completion of the work, deliver nine (9) square feet of each tile to the Owner for use in maintenance repairs. Tile shall be delivered in the manufacturer's containers with a complete description of the tile, including stock number and color, affixed to each container.

1.4 PRODUCT DELIVERY, HANDLING AND STORAGE

- A. Afford materials the degree of preservation, packaging and packing necessary to prevent deterioration and/or damage which might result from the hazards to which they will be subjected during shipment, handling and storage. Store materials off the ground with provisions for drainage of rain and/or snow. Repair or replace damaged materials as directed or as necessary.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Porcelain Wall Tile: POR1 Large format porcelain tile, 6 x 12 inch in size. Basis of Design, Mosa Global Collection/Globalgrip, gray, Color code 16870, Item code 16870 015030.
- B. Porcelain Base: POR2 Porcelain tile 2.8 x 12 inch in size. Conforming to ANSI Specification 137.1. Basis of Design, Mosa Global Collection/Globalgrip, gray, Color code 16871, Item code 16870 015030.
- C. Porcelain Floor Tile: POR3 Porcelain factory mounted mosaic tile, 6 x 6 inch in size. Basis of Design: Mosa Global Collection/Globalgrip, large, speckled gray, Color code 75920, Item number 75920AS030030.
- D. Grounds and Trims: Wall stainless steel trim Basis of Design, Schluter E125 for tile only. Backing, tile and edge ground, Schluter, EBU200. Floor trim Basis of Design, Schluter Deco for tile to sheet vinyl transition.
- E. Adhesive (For wall tile installation): Dry set mortar.

- F. Mortar (for floor and base tile installation): Dry set mortar.
- G. Grout: Commercially formulated and/portland cement grout compound in a color selected by the Architect.
- H. Trowelable Leveling and Patching Compounds: Basis of Design, ARDEX, Sika or approved by manufacturer for applications indicated.
- I. For tile backing. See Section 09 21 16.
- J. Waterproof Membrane (entire floor area in toilet/shower rooms and the tub room).
 - 1. Chlorinated Polyethylene Sheet: Non-plasticized, chlorinated polyethylene faced on both sides with nonwoven polyester fabric.
 - 2. Products/Manufacturers: Noble Company, NobleSeal TS, Noble Deck.
- K. Temporary Protective Coating: Product indicated below that is formulated to protect exposed surfaces of tile against adherence of mortar and grout; compatible with tile, mortar, and grout products and easily removable after grouting is completed without damaging grout or tile.
 - 1. Grout release in form of manufacturer's standard proprietary liquid coating that is specially formulated and recommended for use as temporary protective coating for tile.
- L. Tile Cleaner: A neutral cleaner capable of removing soil and residue without harming tile and grout surfaces, specifically approved for materials and installations indicated by tile and grout manufacturers.

PART 3 - PART 3 - EXECUTION

3.1 INSPECTION

- A. Carefully examine the substrate and observe conditions under which the work is to be performed. Do not proceed with the work until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Remove coatings, including compounds and other substances that contain soap, wax, oil or silicone, that are incompatible with tile setting materials.
 - 1. Provide concrete substrates for tile floors installed with adhesives or thin-set mortar that comply with flatness tolerances specified in referenced ANSI A108 Series of tile installation standards.
 - 2. Fill cracks, holes and depressions with trowelable leveling and patching compound according to tile-setting material manufacturer's written instructions. Use product specifically recommended by tile-setting manufacturer.
 - 3. Remove protrusions, bumps and ridges by sanding or grinding.
- B. Blending: For tile exhibiting color variations within ranges selected during sample submittals, verify that tile has been factory blended and packaged so tile units taken from one package show same range of colors as those taken from other packages and match approved samples. If not factory blended, either return to manufacturer or blend tiles at project site before installing.
- C. Field-Applied Temporary Protective Coating: Where indicated under tile type or needed to prevent grout from staining or adhering to exposed tile surfaces, precoat them with continuous film of temporary protective coating, taking care not to coat unexposed tile surfaces.

3.3 INSTALLATION

- A. Tile: Follow manufacturer's recommended instructions for floor and wall tile and install using the Tile Council of America Method and in accordance with ANSI Specification A108. Provide expansion joints

in conformance with TCA Recommendation. Carefully lay out the work to avoid the use of narrow pieces at borders or elsewhere.

- B. Floor heights are to slope from public areas into the bedrooms with the intent of creating positive drainage into the bathroom shower drains. Follow manufacturer's recommendations on the thickness of each lift to create the slope shown on the drawings.
- C. Cementitious Backer Units: Screw cementitious backer units to framing, placing a fastener every 6 to 8 inches on center. Where 2 units abut, provide space of 1/8 to 3/16 inch between units. Panel edge fastening shall be provided by locating screws 6 inches on center in joint between the units. Washer shall secure both panel edges. Space shall be filled with mortar and reinforced with fiberglass mesh tape set in mortar.
- D. Extend waterproof membrane a minimum of 6 inches up all toilet/bathroom walls.

3.4 CLEANING

- A. Upon completion of installation, clean tile in accordance with recommendations of the Tile Council of America and Manufacturers proprietary materials. Tile may be cleaned with acid solutions only when permitted by the tile and grout manufacturer's printed instructions, and no sooner than 14 days after installation. Protect metal surfaces and cast iron and vitreous plumbing fixtures from effects of acid cleaning. After cleaning, flush with clean water. Leave finished installations clean and free of cracked, chipped, broken, unbonded or otherwise defective tile.
- B. When recommended by tile manufacturer, apply coat of neutral protective cleaner to completed tile walls and floors. Protect installed tile work with kraft paper or other heavy covering during construction period to prevent staining, damage and wear.
- C. Prohibit foot and wheel traffic from tiled floors for at least seven days after grouting is completed.
- D. Before final inspection, remove protective coverings and rinse neutral cleaner from tile surfaces.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Description of Work: The extent of the work is shown on the Drawings and specified within this document and includes furnishing and installing ceiling suspension systems and suspended acoustical ceiling board.

1.2 QUALITY ASSURANCE

- A. Requirements of Regulatory Agencies: Provide acoustical ceiling systems which have been tested and rated by Underwriters Laboratories, Inc.
- B. Reference Standards: Comply with recommendations and specifications of the American Society for Testing and Materials, as modified and supplemented on the Drawings and herein.
- C. Qualifications of Installer: Subcontract the installation of the suspended acoustical ceiling to an installer who is experienced with similar installations and who is acceptable to the manufacturer of the primary acoustical material.

1.3 SUBMITTALS

- A. Manufacturer's Data: Submit manufacturer's specifications and installation instructions for suspension systems and acoustical ceiling board. Include data substantiating compliance with specified requirements.

1.4 PRODUCT DELIVERY, HANDLING AND STORAGE

- A. Delivery and Storage: Afford materials the degree of preservation, packaging and packing necessary to prevent deterioration and/or damage which might result from the hazards to which they will be subjected during shipment, handling and storage. Store materials in a dry environment not less than 60°F in temperature.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Suspension Systems: Proprietary system by Armstrong for use with Optima. Commercially manufactured ASTM Designation C635 adjustable hanger bracket, 15/16" Prelude grid with containment cap and all other necessary components.
 - 1. Finish of Exposed Caps: Provide manufacturer's standard baked enamel finish, white (textured).
- B. Suspended Acoustical Ceiling Board:
 - 1. Act-1 Board Used in Exposed Grid Systems: Similar to Armstrong Optima, one inch thick wet-formed, mineral fiber fire resistive units with the following qualities and characteristics:
 - a. NRC Rating: 0.90
 - b. Light Reflectance: 0.90
 - c. Flame Spread: 0 - 25
 - d. Size: 2'-0" x 4'-0"
 - e. Pattern: Optima
 - f. Edge: Square
 - 1) Finish: Factory applied paint

2. ACT-2 Board Used in Exposed Grid Systems: Similar to Armstrong Optima Health Zone, one inch thick wet-formed, mineral fiber fire resistive units with the following qualities and characteristics:
 - a. NRC Rating: 0.95
 - b. Light Reflectance: 0.86
 - c. Flame Spread: 0 - 25
 - d. Size: 2'-0" x 4'-0"
 - e. Pattern: Optima
 - f. Edge: Square
 - 1) Finish: Factory applied paint

C. Attachment Devices: Size for 5 times design load indicated in ASTM C635, Table 1, Direct Hung.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Carefully examine the substrate and observe conditions under which the work is to be performed. Do not proceed with the work until unsatisfactory conditions have been corrected.
- B. Acceptance of Grid Installation: Prior to the installation of any acoustical ceiling board, the Contractor shall secure in writing from the Owner's Representative, that the ceiling grid installation and above ceiling work of other trades, has been inspected and is acceptable.

3.2 INSTALLATION

- A. Installation of Suspension Systems: Install suspension systems in accordance with provisions of ASTM Designation C636, "Installation of Metal Suspension Systems for Acoustical Tile and Lay-In Panels", the general recommended procedures of the system manufacturer, and details on the reflected ceiling plans. Deflection of any component shall not exceed 1/360 of the span. Brace suspension system for seismic loads, as defined in UBC Standards.
- B. Installation of Acoustical Ceiling Board: Following written acceptance of grid and above ceiling work, install acoustical materials in strict accordance with manufacturer's instructions. Remove and replace, at no additional cost to the Owner, materials that are damaged, chipped, broken or discolored.

3.3 CLEANING

- A. Clean surfaces prior to the time of final acceptance of the building.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Description of Work: The extent of the work includes furnishing and installing sheet flooring and wall base including Chilewich vinyl backed tile. Floors throughout the building will be required to be leveled to ensure base to floor interface results in a gap free seam.

1.2 QUALITY ASSURANCE

- A. Reference Standards: Comply with recommendations and standard specifications of the Resilient Floor Covering Institute, as modified and supplemented on the Drawings and herein.

1.3 SUBMITTALS

- A. Manufacturer's Data: Submit manufacturer's specifications and installation instructions for resilient flooring and wall base. Include data substantiating compliance with specified requirements.
- B. Samples: Submit samples of resilient flooring and wall base in the manufacturer's complete range of colors and pattern.
- C. Maintenance Instructions: Upon completion and prior to acceptance of the work, submit current copies of the flooring manufacturer's recommendations of maintenance methods for each type of flooring.

1.4 PRODUCT DELIVERY, HANDLING AND STORAGE

- A. Deliver materials in original and unbroken containers with manufacturer's labels thereon. Store in a dry place.

PART 2 - PRODUCTS

2.1 COLORS AND PATTERNS

- A. As selected.

2.2 RESILIENT SHEET FLOOR COVERING

- A. Basis of Design Product:
 - 1. Luxem Resilient Plank Tile: Shaw, In-Tandem
 - 2. Resilient Sheet: Shaw Innate
 - 3. Vinyl Backed Tile: Chilewich.
 - 4. Wall Base: Tarkett Millwork Mandalay Wall Base.

2.3 MATERIALS

- A. Basis of Design, Shaw "Innate + In Tandem" (0896V). Resilient Plank Tile, Conforming to ASTM F06. 10 inch x 59 inch x 0.098 inch thick.
- B. Basis of Design, Shaw "Innate + In Tandem" (0897V). Resilient Sheet, Conforming to ASTM F06. 6.59 feet x 65.62 feet x 0.098 inch thick.
- C. Basis of Design, Chilewich Vinyl Backed Tile, conforming to ASTM E662-03, ASTM C1028, 18 inch x 18 inch x 0.13 inch. Basket-Weave, Oyster.
- D. Wall Base: Basis of Design, Tarkett Millwork Wall Base "Mandalay MW-XX-H6". Constructed of thermoset vulcanized rubber (Type TS), Group I (Solid Homogenous), cove wall base 6 inches high, 3/8 inch (.375 inches) thick. Provide wall base in as long of pieces as available.

2.4 INSTALLATION MATERIALS

- A. Trowelable Leveling and Patching Compounds: Basis of Design, ARDEX or Sika or approved by manufacturer for applications indicated.
- B. Adhesives: Water-resistant type recommended by manufacturer to suit floor tile and substrate conditions indicated.

2.5 EXTRA STOCK

- A. Resilient Plank Tile: Additional tile, 2 full boxes.
- B. Vinyl Backed Tile: Additional tile, 4 full boxes.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Carefully examine the substrate and observe conditions under which the work is to be performed. Do not proceed with the work until unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Timing: Defer installation of resilient flooring and base until other finishing operations, including painting, have been completed.
- B. Environmental Conditions: In spaces where flooring is to be installed, maintain a temperature at floor level of 65°F to 85°F for not less than 48 hours prior to commencement of work. Provide adequate ventilation to remove moisture and fumes from work areas.
- C. Level floors at floor/wall interface to ensure flat surface to place wall base against. Gaps between wall base and finish floors are not acceptable.
- D. NOTE: Surface elevation change at guest room entries is to be built up with leveling compound. Ensure substraight is fully cured prior to flooring application.
- E. Preparation of Surfaces: Vacuum or broom clean surfaces to be covered and remove oil, paint, wax, dirt and other foreign substances.

3.3 INSTALLATION

- A. General: Install resilient flooring in strict accordance with manufacturer's printed instructions using skilled craftsmen to perform the work. Secure materials to the substrate with adhesive.
- B. Installer's Note: Floor surfaces in this building are not flat. Assume all floor to wall interfaces will require the floor be built-up to level to achieve accessible floor to base transition.
- C. Installation of Resilient Plank Flooring:
 - 1. Thoroughly clean substrate with vacuum removing all foreign and loose material. Any loose particles will transmit through the resilient floor product and require product removal and replacement.
 - 2. Installation of Resilient Plank Flooring: Center flooring in room and assure planks against walls in the long dimension of the plank are cut at not less than half the width of the plank. Stagger end joints a minimum of 8". Planks may be installed using liquid or spray adhesive recommended by manufacturer. If liquid is applied use 1/15" wide by 1/32" deep by 1/32" apart (U) notched trowel. Assure all joints and seams are tight and all adhesive is cleaned from the surface. Roll planks with a 3 section 100 pound roller. Re-roll the entire glued floor area with the 100 pound

roller within the working time of the adhesive. Continue to roll the floor periodically throughout the workday to assure full bond.

- D. Installation of Resilient Sheet Flooring: Fit sheet flooring to the space by straight scribing or patter scribing as required by job conditions. Cut seams by overlapping or underscribing as recommended by the manufacturer. After flooring is properly fitted, roll back ½ sheet at a time and spread adhesive on floor and wall surfaces. Embed flooring in the spread adhesive and roll the floor surface with roller weighing not less than 100 pounds, starting at the center of the sheet and rolling outward to expel any trapped air and thoroughly bond the flooring to the substrate. Weight seams with sandbags to ensure complete adhesion.

E. Wall Base:

1. Walls must be permanently dry, clean, smooth, and structurally sound and floor will need to be leveled. The surface must be free of all dust, loose particles, solvents, paint, grease, oil, wax, alkali, sealing/curing compounds, old adhesive, and any other foreign material, which could affect the installation and adhesive bond to the substrate. Permanent and non-permanent markers, pens, crayons, paint, or similar marking tools used to mark the substrate or the back of the wall base material will cause migration staining. All substrate contaminants must be mechanically removed prior to the installation of the flooring material. NOTE: Do not use liquid solvents or adhesive removers.

Fill all depressions, cracks, and other surface irregularities with good quality patching compound appropriate for this purpose.

2. Cut wall base to the required lengths using a standard or sliding compound miter saw equipped with a carbide tip blade with 80 teeth or greater.

Note: When butting wall base seams together, it may be necessary to square cut the factory edge if butt ends do not align. Apply wall base adhesive to the ribbed surface (back) of the wall base with an 1/8" square-notched trowel. The adhesive shall cover 80% of the back surface. Leave 1/4" (6.35 mm) uncovered space at the top of the wall base to prevent the compressed adhesive from becoming exposed when the base is installed.

Carefully position the wall base on the wall surface and roll with a small hand roller. Always roll back to starting point to prevent stretching the wall base.

Use a clean white cloth dampened with water to remove wet adhesive from wall base, substrate and floor covering.

Dried adhesive may require the use of denatured alcohol applied to a clean white cloth. (Follow manufacturer's precautions when using denatured alcohol.

F. Installation of Vinyl Backed Tile

1. Cracks 1/8" (0.30 cm) wide or greater, construction joints, control joints, depressions, grooves, or other irregularities should be filled and leveled with non-shrinking patching compound.
2. Installation of flooring materials is to be undertaken the same way one would install carpet tile relative to layout and starting points. See CRI 104 for standard industry specifications.
3. Use full spread of adhesive to ensure a trouble-free installation.
4. Tiles come packed 20 tiles to a box. All tiles will have arrows on the back so the installer can determine the direction of each tile.
5. Mix tile from different boxes to create a random pattern of tile. In addition, each tile will have a number on the back with the arrow note above. The installer shall randomly mix the 1-4 numbers within areas, and throughout the entire installation.

6. The installer shall mark two straight lines at right angles to each other on the floor, establish the field of tile is to be installed. Installation of the tiles shall start in the middle of the space and work towards the sides in quadrants.
7. Spread adhesive up to the lines with the appropriate trowel. Allow the adhesive time to tack up. Length of time depends on temperature and humidity but generally will be 10-20 minutes. The adhesive should be sticky to the touch but not transfer to the finger.
8. Lay the tile into the adhesive, making sure that the edge aligns with the drawn lines. Fit tiles together to eliminate gaps between tiles but not with too much pressure, which may cause tiles to buckle.
9. Tiles are not to be rolled. However, installer should check installation 24 hours after completion for any tiles that may be lifting. To correct, the installer may use a 75-pound (or less) roller to re-adhere tiles to the floor. Additional adhesive on these particular tiles may also be required.
10. Trim white strands at tile edges with scissors. These strands are normal to be every Chilewich vinyl-backed flooring tile installation. Once Trimmed they will not return.
11. Maintain normal temperatures for 48 – 72 hours after installation to allow time for adhesive to cure.
12. Wait 24 hours prior to a full move-in to allow for adhesive to cure.

3.4 CLEANING AND PROTECTION

- A. Initial Cleaning: Immediately upon completion of a space, remove any excess adhesive from resilient flooring and wall base using neutral type cleaner approved by the manufacturer. Protect flooring from damage by providing plywood covering to all surfaces receiving heavy traffic or by covering with heavy kraft paper to protect from foot traffic.
- B. Final Cleaning: Just prior to final acceptance, wash resilient flooring and base with a non-alkaline cleaning solution and rinse thoroughly with clear cold water. Carefully follow manufacturer's printed instructions for cleaning and finishing flooring. If the manufacturer's instructions vary from these listed above, follow manufacturer's instructions.
- C. Perform initial maintenance according to the floor manufacturer's instructions.
- D. Protect installed flooring as recommended by the flooring manufacturer against damage from rolling loads, other trades or the placement of fixtures and furnishings.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Description of Work: The extent of the work is shown on the Drawings and specified within this document and includes furnishing materials and preparing and painting interior surfaces of new walls and new gypsum board only. All painting of existing surfaces is to be accomplished by the Home. Omission of specific new surfaces from Finish or Color Schedules is not to be interpreted to mean that finish is not required. In such an instance, obtain clarification from the Architect. Surface preparation, prime coats and finish coats specified are in addition to surface treatments and prime coats specified in other Sections of the Specification. The number of coats specified is to be interpreted as the minimum number required. Apply additional coats if required to achieve complete coverage and concealment of surface receiving finish or to achieve uniformity of color, sheen and texture.
- B. Items Requiring No Finish:
1. Concealed Surfaces: Unless specifically indicated on the Drawings, painting is not required on concealed surfaces such as walls above ceilings or in pipe spaces.
 2. Finished Metal Surfaces: Do not paint anodized aluminum, stainless steel, chromium plate, brass, bronze, copper or other similar metals.
 3. Finished Plastic Surfaces: Do not paint acrylic fiberglass, polycarbonate, polyethylene, vinyl or other similar plastic surfaces.
 4. Pre-Finished Materials: Do not paint such items as (but not limited to) pre-finished architectural woodwork, pre-finished metal roofing and siding, acoustic materials, pre-finished mechanical and electrical items and equipment except where indicated on the Drawings.
 5. Mechanical Piping and Ductwork: Except for color coding and painting specified in other sections of this Specification, do not paint piping and ductwork.
 6. Operating Parts: Do not paint moving parts of operating units such as valve and damper operators, linkages, sensing devices and motor and fan shafts.
 7. Labels: Do not paint over code-required labels or equipment name, identification, performance or nomenclature plates.
 8. Existing Surfaces: Do not paint existing painted surfaces. The Pioneer Home staff will do this work independently.

1.2 SUBMITTALS

- A. Materials List: Submit a complete materials list showing the intended use of each item listed. Include certificates from suppliers of painting materials stating that each material is the best of its respective kind and suitable for the intended purpose.
- B. Manufacturer's Data: With the materials list, submit manufacturer's specifications and printed instructions for preparation of surfaces and for mixing and thinning and application of each material used. Include data substantiating with specified requirements.
- C. Samples: Prepare 12 x 12 inch samples of selected colors. Allow ample time for review. Obtain approval from the Architect before applying paint to finished surfaces.
- D. Overages: Upon completion of work, furnish one (1) gallon can of each type and color of paint for maintenance purposes. Label for positive identification; list tinting formulas. Store on the premises where directed.

1.3 PRODUCT DELIVERY, HANDLING AND STORAGE

- A. General: Deliver materials in original and unbroken containers with manufacturer's labels thereon. Store in a clean, dry, well-ventilated space.

PART 2 - PRODUCTS

2.1 COLORS AND FINISHES

- A. Prior to beginning work, the Architect will furnish color selections for surfaces to be painted. Selections will be derived from submitted color wheel.
- B. Color Pigments: Pure, non-fading, applicable types to suit the substrates and service intended.
 - 1. Lead content in the pigment, if any, is limited to contain not more than 0.06% lead, as lead metal based on the total non-volatile (dry-film) of the paint by weight. This limitation is extended to all interior and exterior surfaces.
- C. Paint Coordination: Provide finish coats which are compatible with prime paints used. Review other sections of these specifications in which prime paints are to be provided to ensure compatibility of total coatings system for various substrates. Upon request from other trades, furnish information on characteristics of finish materials proposed for use, to ensure compatible prime coats are used. Provide barrier coats over incompatible primers or remove and reprime as required

2.2 MATERIAL QUALITY

- A. Provide the best quality grade of the various types of coatings as regularly manufactured by acceptable paint material manufacturers. Materials not displaying the manufacturer's identification as a standard, best-grade product will not be acceptable. Design Standard is Sherwin Williams.
- B. Provide undercoat paint produced by the same manufacturer as the finish coats. Use only thinners approved by the paint manufacturer and use only within recommended limits.

2.3 INTERIOR PAINT SYSTEMS

- A. General: Unless trade name is listed below, the product numbers refer to materials as manufactured by Sherwin Williams, which shall establish a minimum standard of quality, limited to those manufacturers listed above, may be substituted.
 - 1. Interior Acrylic Latex: Gloss Level 4 for interior gypsum board walls, including wet areas such as toilet, kitchen and tub rooms. Two coats. Basis of Design: Sherwin Williams "Duration Home".

PART 3 - EXECUTION

3.1 INSPECTION

- A. Applicator must examine the areas and conditions under which painting work is to be applied. Do not proceed with the work until unsatisfactory conditions have been corrected.
- B. Starting of painting work will be construed as the applicator's acceptance of the surfaces and conditions within any particular area.
- C. Do not paint over dirt, rust, scale, grease, moisture, scuffed surfaces or conditions otherwise detrimental to the formation of a durable paint film.

3.2 SURFACE PREPARATION

- A. General: Perform preparation and cleaning procedures in strict accordance with the paint manufacturer's instructions as herein specified, for each particular substrate condition.

1. Remove all hardware, hardware accessories, machined surfaces, plates, lighting fixtures and similar items in place and not to be finish-painted or provide surface-applied protection prior to surface preparation and painting operations. Remove, if necessary, for the complete painting of the items and adjacent surfaces. Following completion of painting of each space or area, reinstall the removed items by workmen skilled in the trades involved.
2. Clean surfaces to be painted before applying paint or surface treatments. Remove oil and grease prior to mechanical cleaning. Program the cleaning and painting so that contaminants from the cleaning process will not fall onto wet, newly painted surfaces.

3.3 APPLICATION

A. General:

1. All materials shall be applied and cut in neatly so as to dry uniformly to the color and sheen specified, free from any runs, sags, crinkles, shiners, streaks, holidays and brush marks.
2. Basic application Procedures: It is the intent of this Specification to require procedures which are within the accepted standards of the industry and conform to the recommendations of the manufacturer. The following is intended as a general guide for application of painting materials and is to be followed unless it conflicts with the recommendations of the manufacturer:
 - a. Interior Finished Surfaces Finished Prior to Final Installation: Sprayed if practicable; brushed if spraying is not practicable; end result required is flat, smooth finish without stipple or brush marks.
 - b. Apply additional coats when undercoats, stains or other conditions show through the final coat of paint, until the paint film is of uniform finish, color and appearance. Give special attention to ensure that all surfaces including edges, corners, crevices, welds and exposed fasteners receive a dry-film thickness equivalent to that of flat surfaces.
 - c. Paint surfaces behind movable equipment and furniture the same as similar exposed surfaces. Paint surfaces behind permanently fixed equipment or furniture with prime coat only before final installation of equipment.
 - d. Sand lightly between each succeeding coat.

B. Scheduling Painting

1. Apply the first coat material to surfaces that have been cleaned, pretreated or otherwise prepared for painting as soon as practicable after preparation and before subsequent surface deterioration.
2. Allow sufficient time between successive coatings to permit proper drying. Do not recoat until paint has dried to where it feels firm, does not deform or feel sticky under moderate thumb pressure, and the application of another coat of paint does not cause lifting or loss of adhesion of the undercoat.

C. Minimum Coating Thickness: Apply each material at not less than the manufacturer's recommended spreading rate to establish a total dry-film thickness as recommended by coating manufacturer.

3.4 CLEAN UP AND PROTECTION

- A. Clean Up: During the progress of the work, remove from the site all discarded paint materials, rubbish, cans and rags at the end of each workday.
- B. Upon completion of painting work, clean paint-spattered surfaces. Remove spattered paint by proper methods of washing and scraping, using care not to scratch or otherwise damage finished surfaces.

- C. Protection: Protect work of other trades, whether to be painted or not, against damage by painting and finishing work. Correct any damage by cleaning, repairing or replacing, and repainting, as acceptable to Owner's Representative.
- D. Provide "Wet Paint" signs as required to protect newly painted finishes. Remove temporary protective wrappings provided by others for protection of their work, after completion of painting operations.
- E. At the completion of work of other trades, touch up and restore all damaged or defaced painted surfaces. Should touch up paint be visually noticeable, repaint entire surface.
- F. Repairs: The Contractor is responsible for defective work, whatever the cause. Replace coatings which do not comply with requirements of the Specification and repair damaged surfaces at no expense to the Owner. Leave surfaces clean, smooth and free of defects at the time of final acceptance.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Description of Work: The extent of the work is shown on the Drawings and specified within this document and includes furnishing and installing corner guards on out turned GWB corners in public areas.

1.2 SUBMITTALS

- A. Submit manufacturer's technical data and installation instructions for stainless steel corner guards.

1.3 PRODUCT DELIVERY, HANDLING AND STORAGE

- A. Deliver materials in original and unbroken containers with manufacturer's label thereon. Store in a dry place.

PART 2 - PRODUCTS

2.1 STAINLESS STEEL CORNER GUARDS

- A. Basis of Design; Wallguard, 2 inch x 2 inch x 48 inch high, or in height indicated on drawings, 16 gauge 304 stainless steel with drilled holes for fasteners.
- B. Fasteners: Install corner guards using manufacturer's recommended stainless steel screws.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Field Measurements: Take field measurements prior to preparation of shop drawings and fabrication where possible.

3.2 INSTALLATION

- A. Install corner guards on out turned GWB corners in public areas and tub rooms. Install in accordance with manufacturer's instruction. Provide all necessary fasteners and accessories for complete installation. Extend corner guards from top of wall base to 48 inches above wall base and as illustrated on drawings (full height corner guard is illustrated in tub rooms).

3.3 CLEANING

- A. Clean units in accordance with manufacturer's instruction.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Description of Work: The extent of work is shown on the Drawings and specified within this document and includes furnishing and installing toilet and bath accessories as well as medication cabinet. In some instances, backing only is to be installed at the time of construction, see schedule in this specification.

1.2 QUALITY OF ASSURANCE

- A. General: Unless other trade name is listed below, the product numbers refer to materials as manufactured by Bobrick Washroom Equipment, which shall establish a minimum standard of quality. Materials of equal quality may be substituted.

1.3 SUBMITTALS

- A. Submit manufacturer's technical data and installation instructions for each toilet accessory. Note required recess depth for all recessed equipment.

1.4 PRODUCT DELIVERY, HANDLING AND STORAGE

- A. General: Afford materials the degree of preservation, packaging and packing necessary to prevent deterioration and/or damage which might result from the hazards to which they will be subjected during shipment, handling and storage. Store in a safe, dry, clean and well ventilated space, protected from damage, soiling and moisture.

PART 2 - PRODUCTS

2.1 ACCESSORY ITEMS

- A. Grab Bars (GB)
Basis of Design: Bobrick Washroom Equipment, Inc., No. B-5806, in lengths and configurations as required or as shown on the Drawings. Fasten with No. 252-30 concealed anchors for stud wall construction.
- B. Swing Up Grab Bar (GBI)
In addition to ADA requirements, provide Bobrick B-4998 Swing-up grab bar on shower side of all toilets. In new bathrooms provide mounting plate with backing. In existing bathrooms fasten backing plate to existing wall.
- C. Toilet Tissue Dispenser (TTD)
Basis of Design: Bobrick Washroom Equipment, Inc., No. B-543.
- D. Shower Track and Curtain (STC)
Track: Basis of Design, Kirsch Drapery Hardware Architrac Series 9600, Style 6 Hand Drawn, ceiling mount, Carrier, slide with metal hook 9616.

Shower Curtain: Width as needed x full floor to ceiling height, 100% polyester, machine washable, water repellant, antimicrobial, fire retardant (Pass NFPA 701).

Tub (Privacy) Curtain: Width as needed x full floor to ceiling height. For use in room 324 & 338.
Basis of Design: Maharam Sail 511507, 53% Trevira CS Polyester, 47% FR Polyester; Custom Finish - Nanotex with Antimicrobial.

- E. Shower Seat (SS)
Basis of Design: Grab Bar Specialties, teak fold-down, 28 inches x 16 inches. Please note this may be a custom seat size as required to meet ADA standards for the existing shower stalls.
- F. Robe Hook (RH)
Basis of Design: Bobrick Washroom Equipment, Inc., No. B-542.
- G. Towel Bar (TB)
Basis of Design: Bobrick Washroom Equipment Inc. No. B-530 (24").
- H. OWNER PROVIDED AND INSTALLED - Medical Security Cabinet (MSC) NIC
Basis of Design: Global Industries, Double Lock Cabinet constructed of stainless steel. Cabinet dimensions, 8 inches wide x 2-5/8 inches deep x 12-1/8 inches high. Provide cabinet with full piano hinge and not less than two shelves. Provide with two locks for double lock capacity. Cabinet to be recessed, provide backing.
- I. UNIT PRICE - Lighted Medicine Cabinet (MC): 32 inch wide by 40 inch high, lighted medicine cabinet.
Basis of Design: Kohler Maxstow K-81149-SLE for installation above all bedroom vanities.
- J. UNIT PRICE - Surface Mounted Shower Soap Dish (SSD)
Basis of Design: Kohler Co. (K-1897)

PART 3 - EXECUTION

3.1 INSPECTION

- A. Carefully examine the substrate and observe conditions under which the work is to be performed. Do not proceed with the work until unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Locate toilet accessories as shown on the Drawings or, if not shown, as directed by the Architect. Install in a rigid and secure manner in accordance with manufacturer's printed instructions, using theft and vandal resistant anchorages and attachments. Adjust toilet and bath accessories for proper operation after installation. Clean surfaces. Remove and replace defective or damaged units as directed or as necessary.

SCHEDULE

Room No.	TTD	GB	STC	GBI	SS	TB	RH	SSD
301.1								
303.1								
305.1								
307.1								
309.1								
311.1								
313.1	1	4	1	1	3	2	2	1
315.1	1	4	1	1	3	2	2	1
317.1								
319.1	1	4	1	1	3	2	2	1
321.1	1	4	1	1	2	2	1	1
323.1	1	4	1	1	3	2	2	1
325.1	1	4	1	1	3	2	2	1
326.1								
328.1								
332.1	1	4	1	1	3	2	2	1
334.1								
336.1	1	4	1	1	2	2	1	1
337.1	1	4	1	1	2	2	2	1
339.1								

- Medical Security Cabinet (MSC) is to be installed in every bedroom by Owner. NIC
- Medication cabinets are to be provided and installed in every bedroom. Contractor to provide Unit Price.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Description of Work: The extent of the work is shown on the Drawings and specified within this document and includes furnishing and installing fire extinguishers and fire rated cabinets.

PART 2 - PRODUCTS

2.1 FIREFIGHTING DEVICES

- A. Fire Extinguishers: Ten pound dry powder ABC stored pressure type equipped with a pressure gauge and printed instruction for repair, maintenance and recharging, and bearing the Underwriters' Laboratory label with a 4-A; 60-B:C rating.
- B. Fire Extinguisher Cabinets: Two-piece surface or recessed type with white enamel finished steel tub, return trim stainless steel door, break-away full glazed clear acrylic panel and cylinder lock, and bearing the Underwriters' Laboratory label. Size cabinets for extinguishers furnished. Furnish four (4) keys per cylinder. Cabinets shall be fire rated in value appropriate for wall it is being mounted in.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install fire extinguishers included in this section in current cabinet locations and where shown on drawings where available. Where cabinets are not currently available but necessary to comply with applicable regulations of governing authorities, install new cabinets and extinguishers.
 - 1. Prepare recesses in walls for fire extinguisher cabinets as required by type and size of cabinet and to comply with manufacturer's instructions. Maintain fire separation integrity of fire rated walls. Existing cabinets do not maintain required fire barrier.

3.2 IDENTIFICATION

- A. Identify fire extinguisher in cabinet with lettering spelling "FIRE EXTINGUISHER" painted on door by silk-screen process.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The extent of work includes providing ceiling mounted patient lifts in areas shown on the drawings. All seismic and structural support and bracing is within the scope of this work. Attachment of the proprietary devices to the existing ceiling is to be provided by the product manufacturer and submitted to MOA as a deferred submittal.

1.2 QUALITY ASSURANCE

- A. Certification for Compliance: Compliance with ISO 10535 & UL 60601-1.
- B. The publications listed below form a part of this specification to the extent referenced. The publications are listed in the text by the basic designation only.
- C. International Organization for Standardization (ISO):
 - 1. 10535-06 - Hoist for the Transfer of Disabled Persons-Requirements and Test Methods
- D. Underwriters Laboratories (UL):
 - 1. 60601-1(2003) - Medical Electrical Equipment: General Requirements for Safety.
 - 2. 94-2013 - UL Standards for Safety Test for Flammability of Plastic Materials for Parts in Devices and Appliances-Fifth Edition.
- E. International Electromagnetic Commission (IEC):
 - 1. 60601-1-2(2015) - Medical electrical equipment – Part 1-2: General requirements for basic safety and essential performance – Collateral Standard: Electromagnetic disturbances – Requirements and tests.
- F. VA Patient Safety Alert AL14-07.

1.3 SUBMITTALS

- A. Submit in accordance with specification Section 01 33 00.
 - 1. Shop drawings shall show structural supports. Structural calculations for the support of the track and its attachment to ceiling structure. Shop drawings shall also provide general room layout with bed position and all obstructions to ceiling lift.
 - 2. Shop drawings and structural calculations shall be signed and stamped by a registered structural engineer, who is registered in the state of Alaska.
- B. Certificates of Compliance from Manufacturer
- C. Manufacturer's Literature and Data:
 - 1. Lifting Capacity
 - 2. Lifting Speed
 - 5. Vertical Axis Motor
 - 6. Emergency Brake
 - 7. Emergency Lowering Device
 - 8. Emergency Stopping Device
 - 9. Electronic Soft-Start and Soft-Stop Motor Control
 - 10. Current Limiter for Circuit Protection
 - 12. Strap Length

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers are encouraged to submit products that are equal to or better than the following basis of design: Arjo Huntleigh Getinge Group Maxi Sky 600.

2.2 CEILING TRACK SYSTEM

- A. The Ceiling Track shall be high strength extruded aluminum or approved.

2.3 LIFT UNIT

- A. The Lift Unit shall be constructed of a steel frame system driven by a gear reduced high torque motor.
- B. The Lift system shall have the following features.
 - 1. Lifting capacity: 600 lbs.
 - 2. Electronic soft-start and soft-stop motor control
 - 3. Emergency lowering device
 - 4. Emergency stopping device
 - 5. Current limiter for circuit protection in case of overload.
 - 6. Safety device that stops the motor to lift when batteries are low.
 - 7. Emergency brake
 - 8. Cab: VO plastic–fire retardant, UL 94

2.4 MOTORS

- A. Vertical Movement - DC Motor

2.5 BATTERIES

- A. The life cycle for batteries shall be in compliance with IEC 6100-1-2.
- B. Rechargeable batteries with up to 120 transfers with a load of 200 lbs (for repositioning) and a minimum of 40 transfers with its maximum load of 600 lbs.

2.6 STRAPS AND SLING

- A. The straps shall meet ISO 10535. The straps shall ensure the patient's safety by preventing the patient from falling out of the sling.
- B. The sling shall meet ISO 10535. The sling shall cradle the body of the patient.
- C. As a minimum, provide two (2) medium and two (2) large hygiene slings with each lift.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install ceiling mounted patient lift system as identified by manufacturer and as shown on shop drawings.

3.2 INSTRUCTION AND PERSONNEL TRAINING

- A. Training shall be provided for the required personnel to educate them on proper operation and maintenance for the lift system equipment.

3.3 TEST

- A. Conduct performance test, in the presence of the project representative to show that the patient lift system equipment and control devices operate properly and in accordance with design, specification, and code requirements.

3.4 INSPECTION

- A. Inspection of installed ceiling mounted patient lift systems shall be conducted in accordance with the manufacturer's installation checklist and the facilities installation checklist prior to use for patient movement.

END OF SECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Description of Work: The extent of the work is shown on the Drawings and specified within this document and includes furnishing and installing shop fabricated cabinets. Most of this work is part of the vanity as a unit price independent of the base bid. See Bid Schedule.

1.2 SUBMITTALS

- A. Prior to fabrication, submit for review by Owner's Representative one (1) full size mock-up unit which includes a full cabinet assembly. This unit shall be standard for all bedrooms including top, sink, and drawers with hardware. After approval, the cabinet will be available for installation.
- B. Submit shop drawings for manufactured cabinet work showing plans, elevations, ends and cross-sections. Show details and location of anchorages and fitting to floors, walls and base. Include layout of units with relation to surrounding walls, doors, windows and other building components.
- C. Certification of Installers: Provide training and manufacturer's endorsement of installer.

1.3 QUALITY ASSURANCE

- A. Comply with recommendations and specifications of the American Society for Testing and Materials, Architectural Woodwork Institute, National Electrical Manufacturer's Association, National Particle Board Association and appropriate Commercial Standards and Federal Specification, as modified and supplemented on the Drawings and herein.
- B. For installation of cabinetry, use only personnel who are thoroughly factory trained and familiar with the product and certified for the installation of the cabinetry by the cabinet manufacturer with one year of experience.

1.4 PRODUCT DELIVERY, HANDLING AND STORAGE

- A. Afford materials the degree of preservation, packaging and packing necessary to prevent deterioration and/or damage which might result from the hazards to which they will be subjected during shipment, handling and storage. Store in a safe, dry, clean and well-ventilated space, protected from damage, soiling and moisture.

1.5 PROJECT CONDITIONS

- A. Examine substrate and conditions under which work in this section is to be performed. Do not proceed with work until unsatisfactory conditions have been corrected.
- B. Deliver manufactured cabinets only after wet operations in building are completed.
- C. Comply with manufacturer's requirements for temperature and humidity for casework installation areas. Do not install casework until required temperature and relative humidity have been stabilized and will be maintained.
- D. Control temperature and humidity in installation area as required to maintain moisture content of installed casework within a 1.0% tolerance of optimum moisture content; provide from date of installation through remainder of construction period. Fabricator of casework shall determine optimum moisture content and required temperature and humidity condition.

PART 2 - PRODUCTS

2.1 PLASTIC LAMINATE FINISHED CASEWORK MATERIALS

- A. Plywood: A-A INT-APA Douglas Fir veneer core plywood, except A-B Grade may be used for top backing.

- B. Particle Board: High density furniture grade material conforming to Federal Specification LLL-B800a, commercial Standard CS 326-66 and National Particle Board Association Interim Standard TS 5594-B.
- C. Plastic Laminate: Conforming to NEMA Standard GP50 for cabinet components. Basis of Design, Wilsonart.
- D. Solid Surface: Provide solid surface material manufactured from homogenous composition of acrylic polymer, aluminum trihydrate filler and pigment. Sheet material shall be 1/2 inch thick in sheets as large as possible. Formica or approved equal. Provide in color selected from full range of manufacturer's colors.
- E. Solid Surface Integral Lavatory: Basis of Design, Formica Group Everform Vanity Bowl, 1513, 103 Arctic.

2.2 CABINET HARDWARE AND ACCESSORIES

- A. Butt Hinges: 2-3/4-inch, 5-knuckle steel hinges made from 0.095-inch-thick metal, and as follows:
 - 1. Semi concealed hinges for Flush Overlay Doors: BHMA A156.9, B01361 / B01521.
- B. Bath and Tub Room Pulls: Basis of Design, Doug Mockett, Urban Edge drawer pulls, DP213B, 7 inch.
- C. Wire Pulls: Back mounted, solid metal, 4 inches long, 1-1/2 inches deep, and 5/16 inch in diameter.
- D. Catches: Magnetic catches, BHMA A156. 9, B03141.
- E. Adjustable Standards and Supports
 - 1. Adjustable Shelf Standards and Supports: BHMA A156.9, equal to No. 82/182 wall mounted shelving system with heavy-duty double-track standards and brackets as manufactured by Knape & Vogt, 12 inch lengths unless otherwise indicated.
 - 2. Cabinet Shelf Pins: Provide metal pins for edge mounted cabinet shelves.
- F. Drawer Slides: BHMA A156.9, B05091.
 - 1. Heavy Duty (Grade 1HD-100 and Grade 1HD-200): Side mounted; full-extension type; zinc-plated steel ball-bearing slides. 100 pound minimum capacity each.
 - 2. Box Drawer Slides: Grade 1HD-100; for drawers not more than 6 inches high and 24 inches wide. 75 pound minimum capacity each. Bottom mount slides are acceptable but not required.

2.3 FABRICATION

- A. Construction
 - 1. Conform to dimensions shown on the Drawings or specified herein. Construct cabinet sides, backs, tops, bottoms, shelves, drawer, door fronts and other components of plywood or high density particle board of required thickness. Plywood substrate shall provide for cabinet tops, shelving and drawers.
 - 2. Face Construction: Reveal Overlay type.
 - 3. Exposed Shelving: Provide 3/4 inch thick plywood for shelves spanning up to 36 inches, 1-1/8 inch thick plywood spanning over 36 inches. Finish top and bottom of shelves with plastic laminate and edge (4 sides) with 3 mm thickness, to match shelf color.
 - 4. Concealed Shelving: Provide 3/4 inch thick plywood for interior concealed shelves. Finish top and bottom of shelves with plastic laminate, polyester, or melamine to match interior cabinet finish. All edges are to receive 3 mm PVC.

5. Exposed Edges: PVC, not less than 3 mm thick, in sizes to suit material thickness, machine applied with hot melt adhesive.
- B. Countertop for Casework
 1. Solid Surface Countertop Construction: Fabricate components in shop to the greatest degree practical. Panels and integral sinks shall be joined using panel manufacturer's standard joint adhesive. Resulting seam shall be inconspicuous and nearly invisible. Attach 2 inch wide reinforcing strip of solid polymer material centered under each joint. Follow manufacturers installation instructions for mounting sinks to countertops. Finish component edges to a smooth, uniform finish. Ease edges of all required cut outs. Finish with uniform matte finish (gloss rating 5-20). All countertops shall be constructed of solid surface. Provide 4 inch high by 1/2 inch thick solid surface back-splash and end-splash, eased edges.
 2. Exposed Edges: Plastic laminate matching surface. Ease exposed edges of overlap sheet.
 3. Cut openings for equipment to be installed at job site. Comply with equipment manufacturer's requirements, provide internal corners of 1/8 inch minimum radius. Smooth saw cut and ease edges.
 4. Seal cut edges of counter at openings for sinks and other "wet" equipment, using waterproofing compound recommended by manufacturer and compatible with laminating adhesive.
- C. Solid Surface Shelf Unit: Shop construct solid surface shelf unit for installation in each bedroom at the lavatory area as shown. Shelf unit it to fit between wall studs, field verify dimension between studs and adjust unit width accordingly. Ease all edges.
- D. Drawers
 1. Construct a full drawer box, then fasten an applied front. Tenon or wood dowel front and back members of the drawer box into side members and reinforce with inside corner supports. All drawer components shall be 1/2 inch thick plywood.
- E. Finish: Finish exposed exterior vertical surfaces with high pressure plastic laminate. Finish the interior side of doors and applied drawer fronts with high pressure plastic laminate balancing sheet. Finish the underside of wall hung cabinet units with polyester laminate. Finish unit bases, backs, bottoms of drawer boxes, and concealed vertical end panels with a factory bonded phenolic face. Finish base and upper cabinet interior surfaces with polyester or melamine laminate.

PART 3 - EXECUTION

3.1 CASEWORK INSTALLATION

- A. Measurements: Obtain accurate field measurements and calculate, dimensions from and between finished wall surfaces including the surfaces of walls shown on the Drawings but not yet in place. Provide scribe strips and closures as required for surface continuity, but size casework such that scribe strips will be limited to not more than 1 1/2 inches in width. Show all dimensions and the proposed locations of all scribe strips and closures on shop drawings. The Contractor is responsible for fitting casework to adjacent construction.
- B. Install plumb, level, true and straight with no distortions. Shim as required using concealed shims. Where casework abuts other finished work, scribe and apply filler strips for accurate fit with fasteners concealed where practicable.
- C. Set base cabinets straight, plumb, and level. Adjust sub-tops within 1/16 inch of a single plane. Fasten each individual cabinet to floor at toe space, with fasteners spaced 24 inches o.c. Bolt continuous cabinets together. Secure individual cabinets with not less than two fasteners into floor, where they do not adjoin other cabinets.

- D. Where required, assemble components into one integral unit with joints flush, tight and uniform. Align similar adjoining doors and drawer to a tolerance of 1/16 inch.
- E. Securely fasten wall cabinets to solid supporting material, not wallboard. Anchor, adjust, and align wall cabinets as specified for base cabinets.
 - 1. Reinforcement of stud walls and backing to support wall-mounted cabinets shall be constructed as a component of the wall framing system. Responsibility for accurate location and sizing of reinforcement shall be the responsibility of the cabinet installer.
 - 2. Adjust casework and hardware so that doors and drawers operate smoothly without warp or bind. Lubricate operating hardware as recommended by manufacturer.

3.2 INSTALLATION OF TOPS

- A. Where practicable, make field joints in same manner as factory jointing using dowels, splines, adhesives and fasteners recommended by manufacturer. Locate field joints as shown on accepted shop drawings, factory prepared so there is not job site processing of top and edge surfaces.
- B. Form field joints using manufacturer's recommended adhesive, with joints inconspicuous and nearly invisible in finished work. Provide backsplashes and end splashes as indicated on the drawings. Adhere to countertops using manufacturer's standard color-matched silicone sealant. Secure tops to cabinets using sealant in pattern recommended by top manufacturer, make accommodations for expansion and contraction.
- C. After installation, carefully dress joints smooth, remove any surface scratches, clean and polish entire surface.

3.3 CLEANING AND PROTECTION

- A. Repair or remove and replace defective work as directed upon completion of installation.
- B. Clean shop-finished surfaces, touch-up as required, and remove or refinish damaged or soiled areas, as acceptable to Owner's Representative.
- C. Protect materials and casework from damage by work of other trades.

END OF SECTION