Petersburg Borough

Meeting Agenda

Borough Assembly
Regular Meeting

12 South Nordic Drive
Petersburg, AK 99833

Monday, August 18, 2025 | **6:00 PM** | **Assembly Chambers**

You are invited to a Zoom webinar!
When: August 18, 2025 06:00 PM Alaska

Topic: 8.18.2025 Assembly Meeting

Join from PC, Mac, iPad, or Android:

https://petersburgak-gov.zoom.us/j/89386450592?pwd=Sbj9qh0C5qkLgmnCv0vEoGmUJKLsmd.1

Passcode:864736

Join via audio: (720) 707-2699 or (253) 215-8782
Webinar ID: 893 8645 0592
Passcode: 864736

1. **Call To Order/Roll Call**
2. **Voluntary Pledge of Allegiance**
3. **Approval of Minutes**
   - **A. Regular Assembly Meeting Minutes; August 4, 2025**
4. **Amendment and Approval of Meeting Agenda**
5. **Public Hearings**
6. **Bid Awards**
7. **Persons to be Heard Related to Agenda**
   Persons wishing to share their views on any item on today's agenda may do so at this time.
8. **Persons to be Heard Unrelated to Agenda**
   Persons with views on subjects not on today's agenda may share those views at this time.
9. **Boards, Commission and Committee Reports**
10. **Consent Agenda**

A. Liquor License Renewal - Inga's Galley

Eide Ventures, LLC, dba Inga's Galley, has applied to renew their restaurant liquor license. The Assembly may support or protest the application within 60 days of the date of notice of the application filing.

11. Report of Other Officers

12. Mayor's Report

A. Mayors Report August 18, 2025

13. Manager's Report

A. Manager's Report, August 18, 2025

14. Unfinished Business

15. New Business

A. Ordinance #2025-13: An Ordinance of the Petersburg Borough Adjusting the FY 2026 Budget for Known Changes

Harbor Shed Roof -This project was originally budgeted for in FY2025. The construction project was delayed due to contractor availability. Construction is now scheduled for this fall. This adjustment to the FY2026 budget allocates $180,000 to complete the project.

Blind Slough Hydro Dam Breach Study - This proposed expense of $59,942 is to fund a professional services contract for the completion of a Dam Break Study in FY2026. A proposal has been received from McMillen, the engineering firm that designed the Blind Slough hydro upgrades and also acts as our Chief Dam Safety Engineer. A copy of the proposal is attached to the Assembly packet.

GIS Project – This project helps support the Electric, Water and Wastewater departments. Additional funding ($15,000 to be split between the three utilities) is needed to continue a support contract with RDI, the GIS experts that assisted with the in-the-field data collection effort this summer. This additional professional support will help Borough staff to complete utility maps and provide guidance as the utilities begin to use the GIS system and expand on its functionality. The increased budget will also allow for additional training of our in-house GIS Technicians to ensure effective management of the GIS data.

B. Aquatic Center Sewer Line Repair Project

Parks and Recreation Director Payne has received biddable documents for the Aquatic Center Sewer Line Repair Project and is seeking Assembly approval to send the project out to bid. A copy of the documents is attached to this packet.

16. Communications

A. **Correspondence Received Since July 31, 2025**

17. **Assembly Discussion Items**

    A. **Assembly Member Comments**

    B. **Recognitions**

18. **Adjourn**

Petersburg Borough

12 South Nordic Drive
Petersburg, AK 99833

Meeting Minutes

Borough Assembly
Regular Meeting

Monday, August 04, 2025	12:00 PM	Assembly Chambers

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1. Call To Order/Roll Call

The meeting was called to order by Vice Mayor Marsh at 12:00 pm.

PRESENT
Vice Mayor Donna Marsh
Assembly Member Bob Lynn
Assembly Member Jeigh Stanton Gregor
Assembly Member James Valentine

EXCUSED
Mayor Mark Jensen
Assembly Member Scott Newman
Assembly Member Rob Schwartz

2. Voluntary Pledge of Allegiance

The Pledge was recited.

3. Approval of Minutes

A. Regular Assembly Meeting Minutes, July 21, 2025

The minutes of the July 21, 2025 meeting were unanimously approved as submitted.

Motion made by Assembly Member Lynn, Seconded by Assembly Member Valentine.
Voting Yea: Vice Mayor Marsh, Assembly Member Lynn, Assembly Member Stanton Gregor, Assembly Member Valentine

4. Amendment and Approval of Meeting Agenda

The agenda was approved as submitted.

5. Public Hearings

There were no public hearings.

6. Bid Awards

There were no bid awards.

7. Persons to be Heard Related to Agenda

Persons wishing to share their views on any item on today's agenda may do so at this time.

No views were shared.

8. Persons to be Heard Unrelated to Agenda

Persons with views on subjects not on today's agenda may share those views at this time.

Mary Clemens, speaking on behalf of herself, spoke against selling borough property on Haugen Drive for building duplexes because of the undue pressure it would cause the neighboring property owners.

9. Boards, Commission and Committee Reports

There were no reports.

10. Consent Agenda

A. Liquor License Renewal - Bottle Shop

By unanimous vote, the Assembly supported the liquor license renewal for the Bottle Shop.

Motion made by Assembly Member Lynn, Seconded by Assembly Member Valentine.
Voting Yea: Vice Mayor Marsh, Assembly Member Lynn, Assembly Member Stanton Gregor, Assembly Member Valentine

11. Report of Other Officers

A. Petersburg Medical Center

PMC CEO Hofstetter provided a written report to the Assembly on Medical Center activities.

B. US Forest Service

District Ranger Case provided an update on Forest Service activities.

C. Petersburg School District

Superintendent Taylor provided an update on School District activities.

12. Mayor's Report

A. August 4, 2025 Mayor's Report

Vice Mayor Marsh read the Mayor's Report into the record.

13. Manager's Report

A. August 4, 2025 Manager's Report

Manager Giesbrecht read his report into the record, a copy of which is attached and made a permanent part of these minutes

14. Unfinished Business

There was no unfinished business.

15. New Business

A. Resolution #2025-17: A Resolution Urging Immediate Action for Effective Sea Otter Management to Restore Southeast Alaska's Shellfish Commercial Fisheries and Subsistence Harvests

After discussion, Resolution #2025-17 was postponed to the second Assembly meeting in September.

Motion made by Assembly Member Stanton Gregor, Seconded by Assembly Member Valentine.
Voting Yea: Vice Mayor Marsh, Assembly Member Lynn, Assembly Member Stanton Gregor, Assembly Member Valentine

B. Resolution #2025-18: A Resolution Addressing the Management of Nuisance Black Bears in the Petersburg Borough

A motion to approve Resolution #2025-18 was made and seconded. The motion received three votes in favor and one opposed. As four affirmative votes are required for approval, the motion failed.

Motion made by Assembly Member Lynn, Seconded by Assembly Member Valentine.
Voting Yea: Vice Mayor Marsh, Assembly Member Lynn, Assembly Member Valentine
Voting Nay: Assembly Member Stanton Gregor

C. Resolution #2025-19: A Resolution Expressing Support for the Southeast Alaska Power Agency's Southeast Alaska Delivery Resiliency (SEADR) Project and Application to the Alaska Energy Authority Grid Resilience Formula Grant Program

Resolution #2025-19 was approved by unanimous roll call vote.

Motion made by Assembly Member Lynn, Seconded by Assembly Member Valentine.
Voting Yea: Vice Mayor Marsh, Assembly Member Lynn, Assembly Member Stanton Gregor, Assembly Member Valentine

16. Communications

A. Correspondence Received Since July 17, 2025

B. FEMA Shelter Training - August 15th and 16th

Director Hankins invited community members to participate in the FEMA Shelter training.

17. Assembly Discussion Items

A. Assembly Member Comments

Vice Mayor Marsh addressed Dave Ohmer's application to purchase borough property, noting that although she does not have a significant financial interest in the sale, her in-laws own adjacent property. She acknowledged that it would have been appropriate to disclose this connection during the meeting. Vice Mayor Marsh also stated that the application will be placed on the agenda for the second regular meeting in September, allowing for another opportunity to vote on the matter

B. Recognitions

It was noted that this meeting marks Chris Cotta's final Assembly meeting, as he will be relocating south to begin a new position. Mr. Cotta began his service with the City of Petersburg in July 2008 as Assistant Public Works Director and was promoted to Public Works Director for the Petersburg Borough in March 2018. Vice Mayor Marsh expressed appreciation for his 17 years of dedicated service to the City and Borough of Petersburg and extended best wishes for his future endeavors.

C. Marine Passenger Fee and Cruise Ship Rate Study from Ketchikan

Member Valentine proposed that the Assembly consider raising the marine passenger fee from $5 to $8 per person and that the additional $3 would be put directly into the Harbor Enterprise Fund to help pay for the building of a new cruise ship dock for American Cruise Lines.

18. Adjourn

The meeting was adjourned at 12:53 p.m.

THE STATE of ALASKA
GOVERNOR MIKE DUNLEAVY

Department of Commerce, Community, and Economic Development

ALCOHOL & MARIJUANA CONTROL OFFICE
550 West 7th Avenue, Suite 1600
Anchorage, AK 99501
Main: 907.269.0350

August 7, 2025

From: Alcohol.licensing@alaska.gov; amco.localgovernmentonly@alaska.gov;

Licensee: Eide Ventures, LLC
DBA: Inga's Galley
VIA email: akingasgalley@gmail.com
CC: petersburgtax@gmail.com
Local Government 1: Petersburg Borough
Local Government 2:
Via Email: dthompson@petersburgak.gov; bregula@petersburgak.gov

Re: Restaurant Eating Place License #5392 Combined Renewal Notice for 2025-2026 Renewal Cycle

License Number:	#5392
License Type:	Restaurant Eating Place
Licensee:	Eide Ventures, LLC
Doing Business As:	Inga's Galley
Physical Address:	104 N Nordic Dr Petersburg, AK 99833
Designated Licensee:	Passawee Eide
Phone Number:	(808) 430-8019; (480) 235-1374
Email Address:	akingasgalley@gmail.com

☒ **License Renewal Application** ☐ **Endorsement Renewal Application**

Dear Licensee:

Our staff has reviewed your application after receiving your application and the required fees. Your renewal documents appear to be in order, and I have determined that your application is complete for purposes of AS 04.11.510, and AS 04.11.520.

Your application is now considered complete and will be sent electronically to the local governing body(s), your community council if your proposed premises are in Anchorage or certain locations in the Matanuska-Susitna Borough, and to any non-profit agencies who have requested notification of applications. The local governing body(s) will have 60 days to protest the renewal of your license.

Your application will be scheduled for the **September 16th, 2025** board meeting for Alcoholic Beverage Control Board consideration. The address and call-in number for the meeting will be posted on our home

page. The board will not grant or deny your application at the meeting unless your local government waives its right to protest per AS 04.11.480(a).

Please feel free to contact us through the Alcohol.licensing@alaska.gov email address if you have any questions.

Dear Local Government:

We have received completed renewal applications for the above-listed licenses within your jurisdiction. This is the notice required under AS 04.11.480. A local governing body may protest the issuance, renewal, relocation, or transfer to another person of a license with one or more endorsements, or issuance of an endorsement by sending the director and the applicant a protest and the reasons for the protest in a clear and concise statement within 60 days of the date of the notice of filing of the application. A protest received after the 60-day period may not be accepted by the board, and no event may a protest cause the board to reconsider an approved renewal, relocation, or transfer.

To protest any application(s) referenced above, please submit your written protest for each within 60 days to AMCO and provide proof of service upon the applicant and proof that the applicant has had a reasonable opportunity to defend the application before the meeting of the local governing body.
If you have any questions, please email amco.localgovernmentonly@alaska.gov.

Dear Community Council (Municipality of Anchorage and Mat-Su Borough only)

We have received a completed renewal application for the above-listed license (see attached application documents) within your jurisdiction. This letter serves to provide written notice to the above-referenced entities regarding the above application, as required under AS 04.11.310(b) and AS 04.11.525.

Please contact the local governing body with jurisdiction over the proposed premises for information regarding the review of this application. Comments or objections you may have about the application should first be presented to the local governing body.
If you have any questions, please email Alcohol.licensing@alaska.gov

Sincerely,
Kyle Helie, Licensing Examiner II
For
Kevin Richard, Director

Mayor's Report
For
August 18, 2025 Assembly Meeting

Filing for Candidacy for the October 7, 2025 Municipal Election: The filing period to run for an Assembly, Board or Commission seat for the Petersburg Borough ends at 4:30 p.m. on August 26, 2025. Paperwork to file for candidacy is available on the Borough website or at the front desk of the Municipal Building.

Absentee and Early Voting Information: Applications to request absentee ballots are available on the Borough website or upstairs in the municipal building. Early Voting will begin on September 17th from 11:00 am to 3:00 pm downstairs in the municipal building.

For more information on the election, go to www.petersburgak.gov and click on the orange banner at the top of the screen.

PETERSBURG
ALASKA

Borough Manager's Report
Assembly Meeting 18 August 2025

- Thanks to Absolute Drains, both EH water tanks have new mixing valves and are working wonderfully.
- Southeast Windowcraft replaced the last six oversized windows in the stairwell of Elderly Housing. This has been a 10+ year project in upgrading all our original 1982 windows! They have done phenomenal job in their workmanship with minimal impact to our residents and operations!
- Volleyball Camp starting next week.
- Lifeguard course coming up Aug 22nd - 24th. Any interested people 15 years or older can contact Scott Burt for more info!
- School swim and dive team is already in the water!
- Staff will be attending a Water Safety webinar focusing on open-water risks and safety. Hosted by Safe Kids Worldwide, brought to us by the AK Office of Boating Safety.
- BDO will be in town with a group of auditors September 8 – 12th to perform the Borough's annual audit.
- The library will be closed Monday Sept 15 - Wednesday Sept 17 for the replacement of the windows.
- Painting fresh crosswalks around the school as weather permits.
- Installing a storm drain in the police parking lot to eliminate the buildup of winter ice
- Moved 400 yards of shot rock from the quarry to the PW yard to be used for future projects
- Replaced worn out rear differential on one of the Borough's two 5-yard dump trucks and removing the wing blade from the grader prior to shipping it to Juneau for repairs
- Garbage bears are still very active and we are continuing our public education campaign to encourage folks to keep garbage secured, as required by Borough code. We also have bear straps for garbage cans back in stock at Public Works. These are available to Sanitation customers free, upon request.
- Traffic at the baling facility is high, with lots of garbage being generated by the Harbors and fish processors.
- Replaced the floor joists for lower level of PVFD's burn tower and working on templates to replace broken outhouse windows with Lexan, a more cost-effective solution

- Replacing bird netting above the scale at Sanitation
- Rick Braun completed the monument survey at the Cabin Creek dam
- Nordic Diving completed the dive inspection and cleaning of intakes and bypasses on both dams.
- Work continues on the Pump Station 4 and Force Main Upgrade project. Excavation inside the cofferdam cell is progressing as they weld in walers to reinforce the structure. The wet well is scheduled to be set early next week. Some manholes and pipe have been installed along the corridor.
- Staff and PCS are working to identify and repair communication failures between lift stations and the plant.
- The line crew will be scheduling isolated and limited power outages soon to address maintenance items on the distribution system. Public Service Announcements will be sent out, with direct notifications to affected customers, prior to the outages.
- The cooperative effort between the Crystal Lake Hatchery operator, SSRAA, and PMPL to install a second tailrace vent pipe was a success. The flow restriction caused by entrained air at higher turbine outputs has been resolved and the Total Dissolved Gas (TDG) was reduced. SSRAA is consulting with the owner of the hatchery (State of AK) to determine if steps to add more venting, or make other changes to the tailrace, would be appropriate to decrease the TDG levels further.
- PCS recently helped PMPL with installations of wireless access points at the hydro and Crystal Lake dam. This will improve communications dramatically at these facilities and allow for technical support access and wifi based phone calls in support of operations and safety considerations at the remote sites.
- PCS cleaned up the networking equipment in our control room and installed a new firewall that improves cyber security of our SCADA system.
- The new Scow Bay Generator was picked up by a contracted trucking company on August 12th. The unit will be trucked from Houston Texas to AML dock in Seattle over the course of a week. The unit will then be loaded onto an AML barge and start the trip to Petersburg. PMPL is working with Rock N Road Construction to help move the 133,000 lb generator to Borough property once it arrives. A temporary shelter is being purchased to protect the generator over the course of the winter.
- PMPL has issued a Request for Proposals for a design/build project to advance current 30% Scow Bay Generator facility plans to construction ready documents and then negotiate a construction price to build a permanent home for the generator. It is anticipated that once a contract has been awarded, engineering can proceed this fall and construction can start in the spring. Several contractors have shown interest in the project so far.
- PMPL has heard from Southeast Conference that the rollout of Alaska Heat Smart's ACES (Accelerating Clean Energy Savings) program in Petersburg is getting close to reality. Within the next 1-2 months, the ACES heat pump grant program will be available to Petersburg residents. It is important to note that any Petersburg household that is thinking about buying a heat pump should wait until this program rolls out before making a purchase. No retroactive grants are allowed by the program funding source.
- I met with representatives of American Cruise Lines last week to discuss the ongoing project.

PETERSBURG BOROUGH
ORDINANCE #2025-13

AN ORDINANCE OF THE PETERSBURG BOROUGH ADJUSTING THE FY 2026 BUDGET FOR KNOWN CHANGES

Section 1. Classification: This ordinance is not of a permanent nature and shall not be codified in the Petersburg Municipal Code.

Section 2. Purpose: The purpose of this ordinance is to adjust the FY 2026 budget for known changes.

Section 3. Substantive Provisions: In accordance with Section 11.09(a) of the Charter of the Petersburg Borough, the budget for the fiscal period beginning July 1, 2025 and ending June 30, 2026 is adjusted as follows:

Explanation: Necessary revisions in the FY 2026 budget identified after adoption of the Budget.

Account Number	Account	Original Budget	Increase (Decrease)	Amended Budget
FISCAL YEAR 2026 REVENUE / EXPENSE BUDGET ADJUSTMENTS				
Harbor Shed Roof – Continuation from prior year.				
450.000.506555	Harbor Shed Roof adj. to Harbor Office	$0	**$180,000.**	$180,000.
This project was originally budgeted for in FY2025. The construction project wasn't started in FY2025 because the contractor couldn't get to it until this fall. This is to add the expense to the FY26 budget.				
Petersburg Municipal Power and Light				
410.000.501410	Professional Services for Blind Slough Hydro Dam Break Study	$56,000.	**$59,942.**	$115,942.
This new expense is to fund a professional services contract for the completion of a Dam Break Study in FY26. A proposal has been received from McMillen, the engineering firm that designed the Blind Slough hydro upgrades and also acts as our Chief Dam Safety Engineer. A copy of the proposal is attached to the Assembly packet.				
Petersburg Municipal Power and Light				
410.000.501960	Electric Department Transfer Out	-$20,000.	**-$5,000.**	-$25,000.
420.000.501960	Water Department Transfer Out	-$5,000.	**-$5,000.**	-$10,000.
430.000.501960	Wastewater Department Transfer Out	-$5,000.	**-$5,000.**	-$10,000.
757.000.40224X	GIS Capital Project – Transfer In	$30,000.	**$15,000.**	$45,000.

PETERSBURG BOROUGH
ORDINANCE #2025-13

Additional funding is needed to continue a support contract with RDI, the GIS experts that helped with the in-the-field data collection effort this summer. This additional professional support will help Borough staff to complete utility maps and provide guidance as the utilities start to use the GIS system and expand on its functionality. The increased budget will also allow for additional training of our in-house GIS Technicians who will be managing the GIS data.

Section 4. Severability: If any provision of this ordinance or any application to any person or circumstance is held invalid, the remainder of this ordinance and application to any person and circumstance shall not be affected.

Section 5. Effective Date: This ordinance shall become effective immediately after the date of its passage.

Passed and approved by the Petersburg Borough Assembly, Petersburg, Alaska this 15th day of September.

_____
Mark Jensen, Mayor

ATTEST:

_____
Rebecca Regula, Borough Clerk

Adopted:
Published:
Effective:

August 5, 2025

Karl Hagerman
Utility Director
Petersburg Municipal Power & Light
Petersburg Borough
PO Box 329, Petersburg, Alaska 99833

Subject: Crystal Lake Dam, Blind Slough Hydroelectric Project (P-201-AK)

Re: Proposal to Perform a Dam Breach Inundation Analysis and Hazard Potential Classification Review

Dear Mr. Hagerman,

McMillen, Inc. (McMillen) is pleased to submit the enclosed letter proposal to Petersburg Municipal Power & Light (PMPL) to perform a dam breach inundation analysis and hazard potential classification review for Crystal Lake Dam. We have developed the following scope of work (SOW), cost estimate, and schedule for PMPL review. The proposal is based on our project understanding, our initial review of the recently acquired LiDAR, and previous conversations between PMPL and McMillen.

PROJECT UNDERSTANDING

The most recent dam breach and inundation mapping study for Crystal Lake Dam was performed in 1985. Since then, methods and procedures for preparing dam breach studies have improved significantly. Updated dam breach inundation mapping would provide a better understanding of the potential downstream impacts, including time to flood wave arrival, and magnitude and extent of flooding. Of particular interest are the hatchery facilities and residences approximately 1.5 miles downstream of the dam. The analyses performed as a part of this study will also improve emergency response planning based on a better understanding of flood wave arrival times and magnitude.

The Crystal Lake Dam has a High hazard potential classification. Prior to 2011, the dam had a Significant classification, and PMPL voluntarily completed a Part 12D Inspection. During review of the 2009 Part 12D, FERC questioned the Significant classification and recommended that an updated dam breach study be performed to resolve this question[1]. At the time, PMPL elected to re-classify the dam as High hazard and forgo an inundation study.

[1] McMillen, Inc. (2024) Blind Slough Hydroelectric Project, FERC No. 0201-AK, 2024 Periodic Inspection Report. January.

Previous reviews of terrain data indicated that it was generally lacking sufficient detail in the powerhouse and hatchery area to adequately define the structures, storage ponds, and other features which would be of specific interest for the hydraulic analyses. In 2025, new LiDAR data became available; the LiDAR was determined to be of adequate quality to characterize the topography around the dam, Crystal Creek downstream reach, and the potential downstream inundation areas around the hatchery and powerhouse. After conversations with the FERC Project Engineer and the Chief Dam Safety Engineer (CDSE) during the 2025 annual inspection, it was determined that performing another study, using modern techniques and utilizing the new LiDAR, would result in a more accurate representation of a potential dam breach. This updated study could also be used to inform a review of the dam's hazard potential classification.

PROJECT GENERAL ASSUMPTIONS

Based on the information provided by PMPL and our Project Understanding, the following assumptions have been made in the development of this SOW. These assumptions impact the overall Project and budget. However, McMillen will gladly entertain any discussion on these assumptions to ensure they align with PMPL goals.

- All meetings will take place virtually using Microsoft Teams.
- No site visits will be performed as part of this SOW.
- McMillen assumes the project notice to proceed to be granted within two months of submitting this proposal. If the award process is prolonged, the project's budget and schedule may need to be reassessed for potential adjustments due to the delay.
- The total duration of the project is anticipated to be 4 months.
- All technical documents will be reviewed internally by qualified McMillen personnel before submission to PMPL.
- All materials will be prepared and submitted electronically.

PROJECT APPROACH

McMillen's Project approach is identified in the following tasks and activities. The tasks will be completed in the order described, excluding Project Management, which is included for the duration of the Project.

- Task 1.0 – Project Management
- Task 2.0 – Hydraulic Modeling and Inundation Mapping
- Task 3.0 – Hazard Potential Classification

- Task 4.0 – Report Preparation

The following narratives provide our Project approach and assumptions for each work task. The narratives are the basis of the development of our labor-hour estimate.

TASK 1.0: PROJECT MANAGEMENT

Steven Klawitter, PE, will serve as the McMillen PM responsible for the overall coordination and direction of the work. He has led and performed numerous dam breach and inundation analyses. The hydraulic analyses will be performed by Gibson De Jode, EIT, with oversight and direction provided by Mr. Klawitter. Project Quality Assurance/Quality Control (QA/QC) will be performed by Cyrus Niamir, PE, the CDSE and most recent Part 12D Independent Consultant for the Blind Slough Hydroelectric Project.

Task 1.0 includes administration, project setup, accounting, and invoicing. Project Management will also cover the coordination between team members who are performing reviews, analyses, mapping, and report writing. All project deliverables will be reviewed internally by a qualified McMillen team member (QA/QC). This task also includes provisions for two meetings, one to kick off the Project at the start of the work and one to discuss the results prior to issuing the final report.

DELIVERABLES

- Invoices (PDF format).
- Monthly progress reports with each invoice (PDF format).

ASSUMPTIONS

- The Project duration is anticipated to be four months.

TASK 2.0: HYDRAULIC MODELING AND INUNDATION MAPPING

Task 2.0 will consist of developing a two-dimensional hydraulic model using HEC-RAS version 6.4 or newer. The model terrain will be based on the newly available LiDAR data where available and supplemented by other publicly available terrain sources as necessary. The model domain will extend form the dam down Crystal Creek to Blind Slough and along Blind Slough to west to the Wrangell Narrows and east towards the Sumner Strait to capture the full extents of the failure flood waves. The total downstream reach is approximately 14 miles spilt between the Crystal Creek and both east and west portions of Blind Slough.

The dam breach parameters will be developed based on previous experience, previous studies at Crystal Lake Dam, and standard engineering practices including FERC Engineering Guidelines. The developed parameters will be entered into HEC-RAS to simulate the dam breach scenario. An

iterative approach will be taken to determine the appropriate model domain configurations, computational time steps, model refinement areas, boundary conditions, and baseflow conditions. Three model scenarios will be evaluated including:

1. Sunny day dam breach at full pool (EL. 1292.0, NAVD88)
2. Probable Maximum Flood (PMF) with dam breach
3. PMF with no dam breach

The third model scenario (PMF with no dam breach) will be used to inform the general understanding of the incremental impacts between the PMF without breach and PMF with breach. Discussion of this comparison will be provided in the report developed as part of Task 4.0. This simplified analysis will not be intended to serve as a full Incremental Hazard Evaluation as would be required under FERC Engineering Guidelines Chapter 2 to revise the Inflow Design Flood (IDF) to a storm less than the PMF. In addition to the three base case scenarios, McMillen will prepare a sensitivity analysis of the selected HEC-RAS modeling parameters. This analysis will be conducted for breach formation time, breach size, and terrain roughness based on the sensitivity analyses recommended in FERC Engineering Guidelines Chapter 2, Appendix II-A (2015). Three sensitivity analysis runs will be performed, and results will be compared to the base case parameters. Details of the model results, model development, and selected modeling parameters will be included in the report prepared in Task 4.0.

The detailed downstream routing results will be utilized to develop separate sets of inundation maps for the sunny-day breach and PMF breach scenarios. McMillen's GIS team will primarily perform this task. Our GIS team has extensive experience developing detailed inundation maps to provide critical information to end-users. Inundation maps will be developed at a variable scale to provide increased resolution in areas of interest such as the fish hatchery. Map features will include selected cross sections at critical locations that report the peak flow, peak water depth, peak water velocity, and time to flood wave arrival and peak flood flow. These maps will meet FERC requirements (Engineering Guidelines Chapter 6) and will be acceptable for inclusion in the Project's Emergency Action Plan (EAP). The inundation maps will be included as an appendix to the report prepared as part of Task 4.0. Revisions will be made to the maps based on comments received during PMPL's review.

DELIVERABLES

- Electronic copy of the HEC-RAS model.
- Analyses will be summarized as part of Task 4.0 reporting.
- Digital copies of inundation maps showing sunny-day and PMF failure conditions (PDF format), consistent with FERC Engineering Guidelines Chapter 6, will be appended to Task 4.0 reporting.

ASSUMPTIONS

- The existing PMF study will be provided by PMPL and is acceptable for use in this analysis.
- PMPL will provide the lake elevation-storage curve and the spillway rating curve.
- Downstream culverts and bridge crossings will be assumed to fail during the breach and will not be included in the hydraulic model.
- Sensitivity analysis will be conducted for time of breach, breach size, and roughness. Three sensitivity analysis runs will be performed.
- Two sets of inundation maps will be prepared, consistent with FERC requirements.

TASK 3.0: HAZARD POTENTIAL CLASSIFICATION

The FERC hazard potential classification system categorizes dams based on the probable loss of human life and the impacts on economic, environmental, and lifeline interests. The key difference between a Significant and a High classification determination is the expected loss of human life; Significant is characterized by no probable loss of human life, while High is conversely characterized by probable loss of human life. The dam breach hydraulic modeling and inundation mapping described in Task 2.0 will be used to inform loss of life estimates. The loss of life estimates will be performed using methods presented in the US Bureau of Reclamation Guidelines for Estimating Life Loss (RCEM, 2015) and will consider the FERC Engineering Guidelines (specifically Chapters 1, 2, and 18).

Loss of life calculations will be compared to the hazard potential classification definitions and discussions and McMillen will perform a formal of review the dam's High hazard potential classification. Topics such as impact of failure, mis-operation of the dam, property damage, and environmental concerns will be covered as part of this review.

DELIVERABLES

- Analysis and rationale will be included as part of Task 4.0 reporting.

ASSUMPTIONS

- Estimates of the number of personnel working and residing at the hatchery are available.
- Recent Sudden Failure Assessments and Evacuation Drills are available and can be relied upon for this analysis.

TASK 4.0: REPORT PREPARATION

The work performed in Task 2.0 and Task 3.0 will be summarized in a Dam Breach Inundation Mapping and Hazard Potential Classification Review Report for Crystal Lake Dam. The calculations

and inundation maps will be included as appendices to the report. McMillen will develop a draft report and associated appendices for review by PMPL. Based on this review, a revised final report and supporting documents will be developed, signed, and sealed for submittal to PMPL.

DELIVERABLES

- Draft report and attachments (PDF and Word format).
- Final report and attachments (PDF format).
- Final GIS files in accordance with FERC requirements for submittal to FERC with the final report and attachments.

ASSUMPTIONS

- A revised final report will be issued within two weeks of receiving comments from PMPL.
- This proposal covers efforts to prepare documents for delivery to FERC. Additional effort based on comments received from FERC is not included.

SCHEDULE

The work will begin upon Notice to Proceed (NTP) which is assumed to occur on October 1, 2025. Table 1 provides a schedule breakdown for each task. The Project is anticipated to occur between October 2025 and January 2026.

Table 1. Proposed Schedule

Milestone	Time (Business Days)	Start	End
Notice to Proceed		10/1/2025	
1.0 Project Management			
Progress Reports and Invoicing	78	10/1/2025	1/16/2026
Project Setup and Task Coordination	78	10/1/2025	1/16/2026
External Meetings	78	10/1/2025	1/16/2026
2.0 Hydraulic Modeling and Inundation Mapping			
Data Collection and Review	7	10/3/2025	10/17/2025
Breach Parameter Development	20	10/20/2025	11/14/2025
Hydraulic Model Development	25	10/20/2025	11/21/2025
Sensitivity Analysis	10	11/24/2025	12/5/2025
Inundation Mapping	20	11/17/2025	12/12/2025
3.0 Hazard Potential Classification			
Life Loss Calculations	10	12/1/2025	12/12/2025
Hazard Classification Review	10	12/1/2025	12/12/2025
4.0 Report Preparation			
Draft Report	25	11/17/2025	12/19/2025
Final Report	10	1/5/2026	1/16/2026

BUDGET

Table 2 provides a budget summary for each task discussed above. Attachment A provides a detailed breakdown of tasks, hours, and billing rates used to support the proposed budget. The not-to-exceed amount for the Crystal Lake Dam Breach Inundation Mapping and Hazard Potential Classification Review is $59,942. The Project will be invoiced monthly on a time and materials basis.

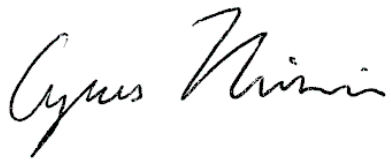
Table 2. Proposed Project Budget

Task No.	Description	Budget
1.0	Project Management	$5,148
2.0	Hydraulic Modeling and Inundation Mapping	$30,154
3.0	Hazard Potential Classification	$7,360
4.0	Report Preparation	$17,280
	Total	**$59,942**

CONCLUSION

We appreciate the opportunity to provide you with a detailed SOW, cost estimate, and schedule for execution of the dam breach inundation analysis and hazard potential classification review for Crystal Lake Dam. If you have any questions or need additional information, please contact Cyrus Niamir at niamir@mcmillen.com or 720-481-9165. We look forward to serving PMPL on this Project.

Sincerely,



Cyrus Niamir, PE
Dam Safety / Geotechnical Discipline Lead

Encl. Attachment A: Detailed Budget Breakdown

ATTACHMENT A: DETAILED BUDGET BREAKDOWN

Staff	C. Niamir (QA/QC)	S. Klawitter (PM)	G. De Jode (H&H)	Z. Uhlmann (GIS)	Tech. Editor	Admin.			
Rates	$ 217	$ 185	$ 130	$ 110	$ 120	$ 105	Hours	Total Labor	TOTAL
1.0 Project Management	**4**	**16**	**2**	**2**	**-**	**8**	**32**	**$ 5,148**	**$ 5,148**
Progress Reports and Invoicing		4				4	8	$ 1,160	$ 1,160
Project Setup and Task Coordination	2	10	2	2		4	20	$ 3,184	$ 3,184
External Meetings	2	2					4	$ 804	$ 804
								$ -	$ -
2.0 Hydraulic Modeling and Inundation Mapping	**2**	**32**	**112**	**84**	**-**	**-**	**230**	**$ 30,154**	**$ 30,154**
Data Collection and Review	2	4	12	4			22	$ 3,174	$ 3,174
Breach Parameter Development		2	20				22	$ 2,970	$ 2,970
Hydraulic Model Development		8	48				56	$ 7,720	$ 7,720
Sensitivity Analysis		2	16				18	$ 2,450	$ 2,450
Inundation Mapping		16	16	80			112	$ 13,840	$ 13,840
3.0 Hazard Potential Classification	**10**	**14**	**20**	**-**	**-**	**-**	**44**	**$ 7,360**	**$ 7,360**
Life Loss Calculations	4	8	16				28	$ 4,428	$ 4,428
Hazard Classification Review	6	6	4				16	$ 2,932	$ 2,932
								$ -	$ -
4.0 Report Preparation	**10**	**36**	**56**	**-**	**8**	**2**	**112**	**$ 17,280**	**$ 17,280**
Draft Report	8	24	40		8		80	$ 12,336	$ 12,336
Final Report	2	12	16			2	32	$ 4,944	$ 4,944
Total Hours	**26**	**98**	**190**	**86**	**8**	**10**	**418**		
Total Budget	**5,642**	**18,130**	**24,700**	**9,460**	**960**	**1,050**		**$ 59,942.00**	**$ 59,942.00**

DRAIN LINE REPAIRS

BID DOCUMENTS

FOR:

PETERSBURG AQUATIC CENTER
PETERSBURG, ALASKA 99833

PREPARED BY:

RESPEC

Juneau, AK
9109 Mendenhall Mall Rd, Ste 4
Juneau, AK 99801
Phone: 907.780.6060
www.respec.com
AECC163270

SHEET INDEX

EXHIBIT DRAWINGS

REVISIONS

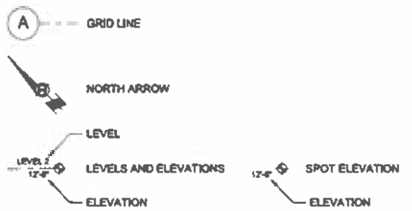
PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS — PETERSBURG, ALASKA 99833

SHEET TITLE: PROJECT COVER SHEET — BID DOCUMENTS

PROJECT NO. 10313.24002

SHEET NUMBER G-001

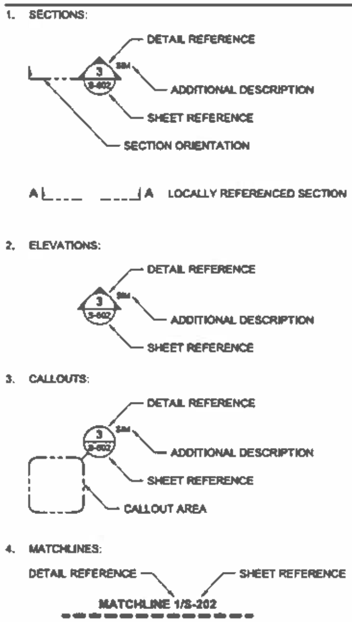
DATUM



LINEWORK

1. EXISTING TO REMAIN:
1. NEW:
2. DEMOLITION:
2. BY OTHERS:

REFERENCES



CODE ANALYSIS

1. PROJECT:
   - A. PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS PETERSBURG PARKS AND RECREATION, PETERSBURG, AK 99833
2. CLIENT:
   - A. PETERSBURG PARKS AND RECREATIONS
3. CONTRACTOR:
   - A. TBD
4. SCOPE OF WORK:
   - A. REPLACING/REPAIRING BROKEN SANITARY PIPING BELOW EXISTING SLAB FOUNDATION.
5. ORIGINAL CODES:
   - A. 2003 INTERNATIONAL FAMILY OF CODES
6. CURRENT CODES:
   - A. 2021 INTERNATIONAL FAMILY OF CODES WHERE APPLICABLE, INCLUDING:
     - a. 2021 EXISTING BUILDING CODE, LEVEL 1 ALTERATION (SECTION 302)
7. CONSTRUCTION TYPE:
   - A. VB - FULLY AUTOMATIC SPRINKLERED OCCUPANCY TYPE A-3

GENERAL NOTES

1. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES IN ACCOMPLISHING NEW WORK.
2. REMOVE AND STORE ALL EXISTING FIXTURES, CABINETRY, CASEWORK INCLUDING LOCKERS, BENCHES, TOILETS, SINKS, TOILET/URINAL PARTITIONS, ACCESSORIES, UNLESS NOTED OTHERWISE. REFER TO EXHIBIT DRAWING EX1 FOR EXISTING LIST. REINSTALL TO COMPLETE WORK.
3. REFER TO STRUCTURAL DRAWINGS FOR EXTENT OF CONCRETE FLOOR AND CMU WALL SHORING OR DEMOLITION EXTENTS.
4. CONTRACTOR TO PROTECT ALL EXISTING FINISHES AND FURNISHINGS TO ACCOMPLISH THE WORK. DAMAGED FINISHES OR FURNISHINGS TO BE REPLACED AT CONTRACTOR'S EXPENSE.
5. ADDITIVE ALTERNATES:
   - A. ADD ALT 1 AND 2 ARE AREAS OF THE FIRST FLOOR SLAB WHICH MAY NEED TO BE REMOVED TO REPAIR THE EXISTING UTILITIES. SEE MECHANICAL AND STRUCTURAL FOR ADDITIONAL INFORMATION.

REVISIONS

CONSULTANT:

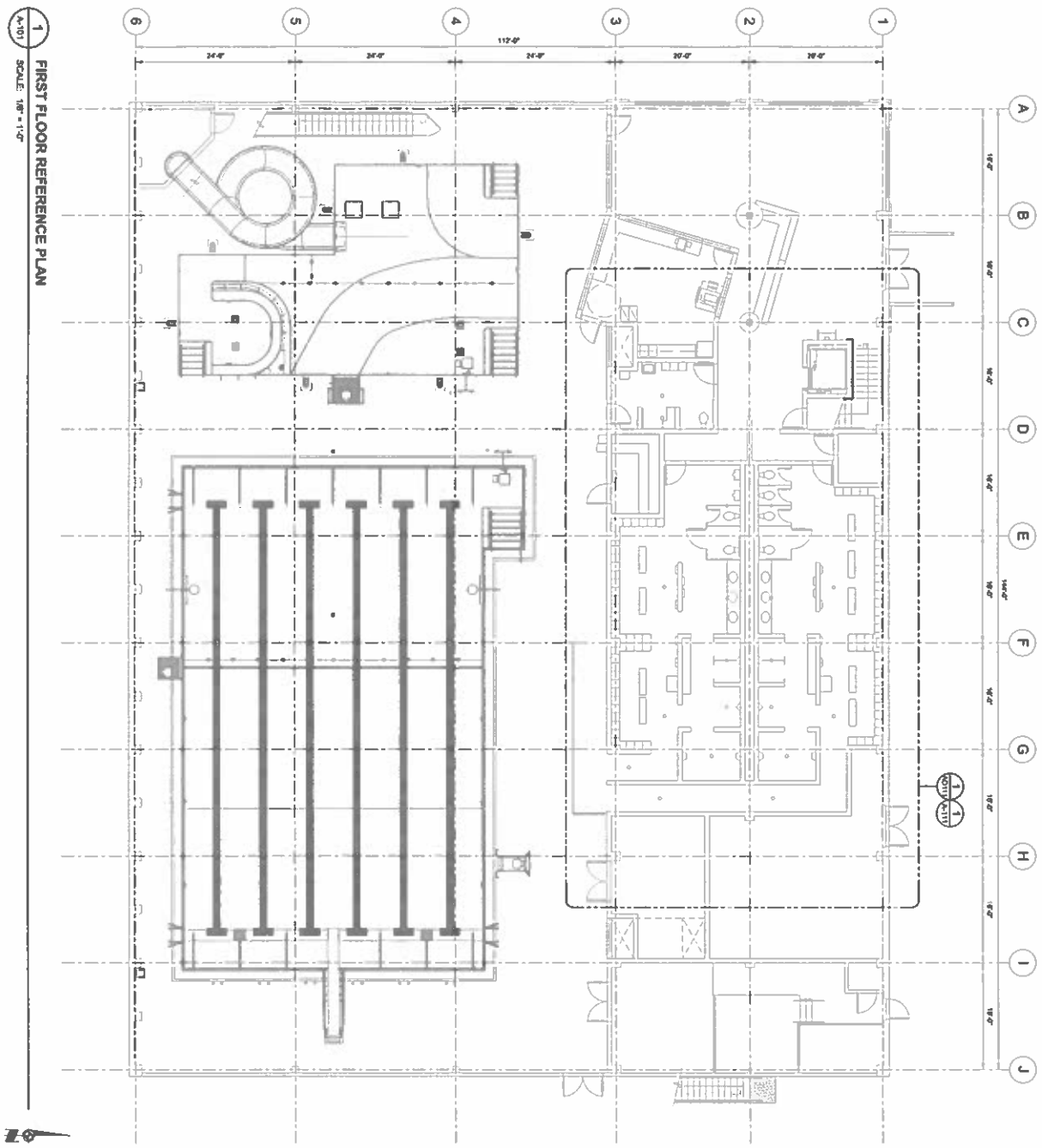
Juneau, AK
AECC 163270

PROJECT:
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE:
LEGEND AND ABBREVIATIONS
BID DOCUMENTS

PROJECT No. I0315.24002

SHEET NUMBER A-001



1 A-101 FIRST FLOOR REFERENCE PLAN
SCALE: 1/8" = 1'-0"

SHEET NOTES

1. FIELD VERIFY EXISTING CONDITIONS.

A-101	SHEET TITLE: REFERENCE PLAN BID DOCUMENTS	PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS PETERSBURG, ALASKA 99833	RESPEC Juneau, AK	CONSULTANT:

PROJECT No: 0315.24002
SHEET NUMBER: A-101

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION. AFFECTING ALL LABELED SCALES

EXISTING FINISHES LEGEND

1. EXISTING CARPET:
2. EXISTING TILE:
3. EXISTING FINISHES TO REMAIN:

SHORING AND DEMOLITION LEGEND

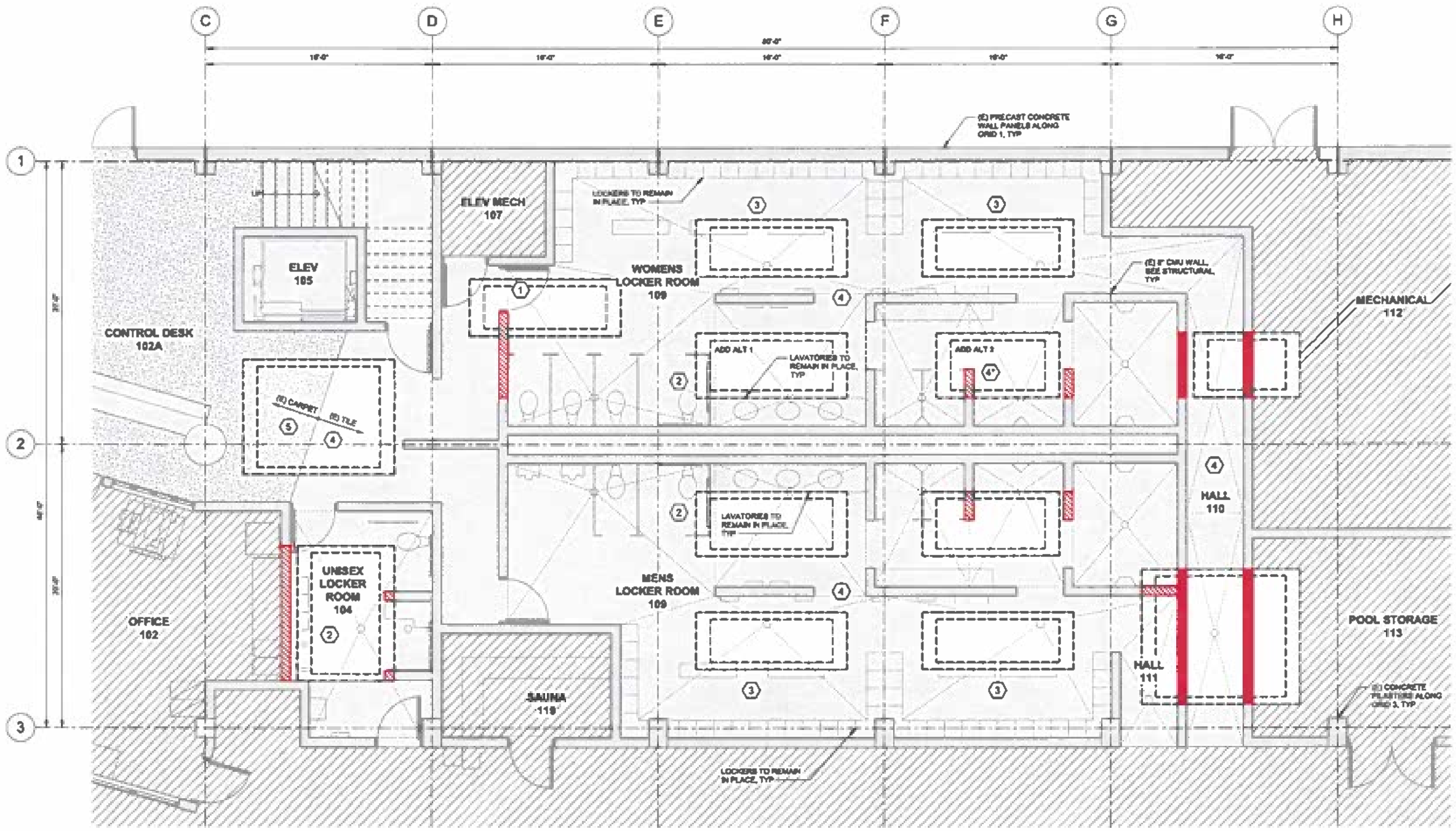
1. 8" CMU PARTITION WALL SHORING: (SEE STRUCTURAL)
2. 8" CMU SHEAR WALL SHORING: (SEE STRUCTURAL)
3. CONCRETE FLOOR SLAB DEMOLITION: (SEE STRUCTURAL)

DEMOLITION KEYNOTES (#)

1. REMOVE DOOR, FRAME, HARDWARE, AND STORE FOR REINSTALL.
2. REMOVE EXISTING CABINETRY, LAVATORIES, TOILETS, PARTITIONS, ACCESSORIES, AND LOCKERS AS NEEDED TO ACCOMPLISH WORK. PROTECT AND STORE FOR REINSTALL.
3. REMOVE EXISTING BENCHES AS NEEDED TO ACCOMPLISH WORK. PROTECT AND STORE FOR REINSTALL.
4. REMOVE ALL (E) TILE, TILE BASE, GROUT, AND MORTAR. PREPARE FOR NEW SEALED CONCRETE FINISH.
5. PEEL BACK (E) CARPET AND PROTECT TO ACCOMPLISH SLAB DEMO.

SHEET NOTES

1. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES IN ACCOMPLISHING NEW WORK.
2. REMOVE AND STORE ALL EXISTING FIXTURES, CABINETRY, CASEWORK INCLUDING LOCKERS, BENCHES, TOILETS, SINKS, TOILET/URINAL PARTITIONS, ACCESSORIES UNLESS NOTED OTHERWISE. REFER TO EXHIBIT DRAWING EX1 FOR EXISTING LIST.
3. REFER TO STRUCTURAL DRAWINGS FOR EXTENTS OF EXISTING CONCRETE FLOOR DEMOLITION AND CMU WALL SHORING. CONTRACTOR TO REPAIR/REPLACE EXISTING CMU WALL ASSEMBLIES AND REPAINT ENTIRE WALLS WHERE REQUIRED DUE TO DAMAGE TO EXISTING WALLS.
4. CONTRACTOR TO PROTECT ALL EXISTING FINISHES AND FURNISHINGS TO ACCOMPLISH THE WORK. DAMAGED FINISHES OR FURNISHINGS TO BE REPLACED AT CONTRACTOR'S EXPENSE.



1 AD111 PARTIAL FIRST FLOOR PLAN - DEMOLITION
SCALE: 1/4" = 1'-0"

REVISIONS

CONSULTANT:

Juneau, AK

RESPEC

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS

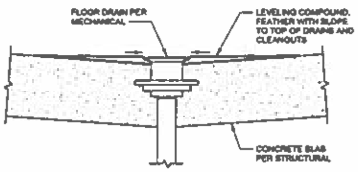
PETERSBURG, ALASKA 99833

SHEET TITLE: PARTIAL FIRST FLOOR PLAN - DEMOLITION

BID DOCUMENTS

PROJECT No. 03315.24002

SHEET NUMBER AD111



2 FLOOR DRAIN DETAIL
A-111
SCALE: 1 1/2" = 1'-0"

FINISHES LEGEND

1. EXISTING CARPET:
2. SEALED CONCRETE:
3. EXISTING FINISHES TO REMAIN:

NEW WORK KEYNOTES (#)

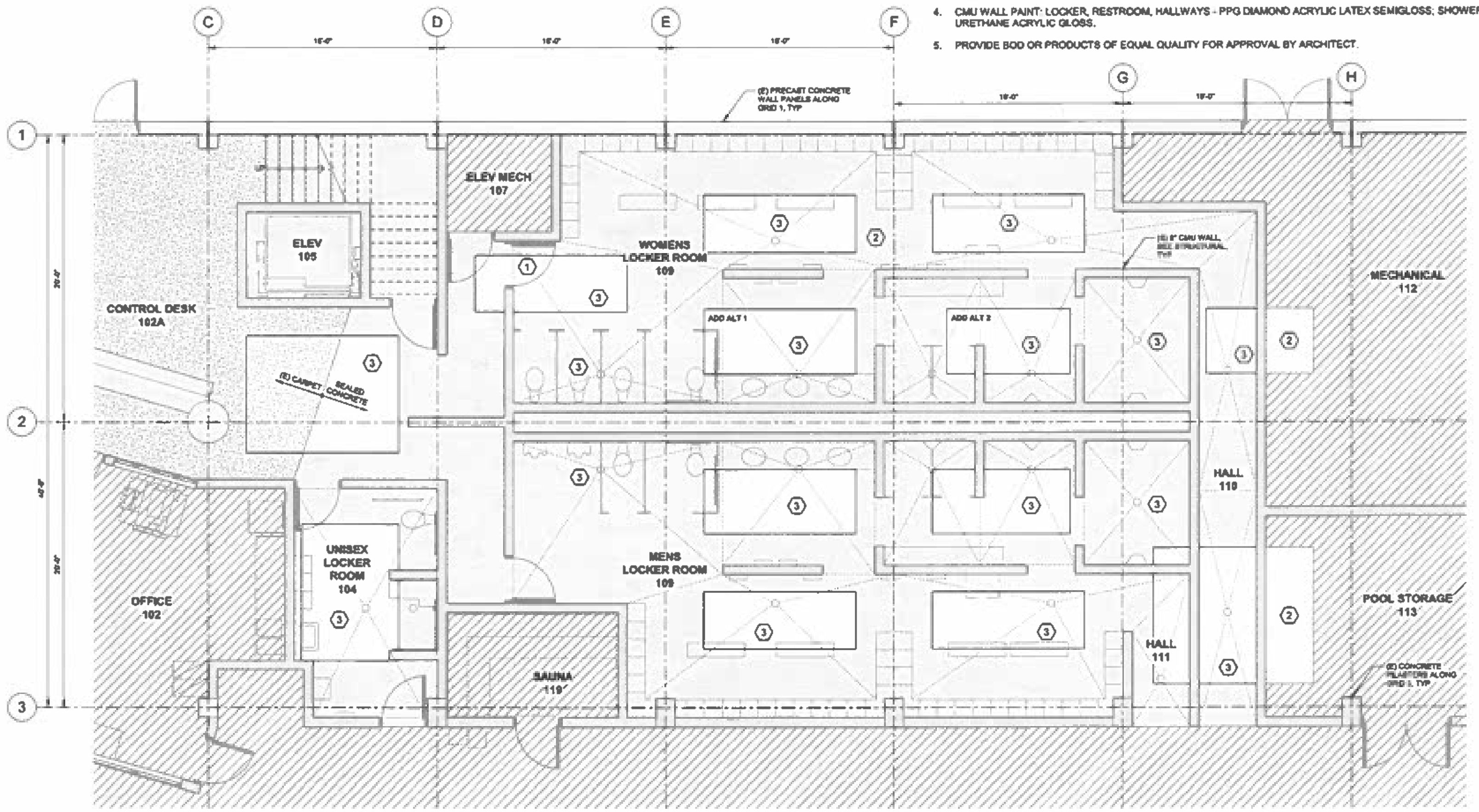
1. REINSTALL EXISTING DOOR FRAME, DOOR, AND HARDWARE.
2. NEW AND EXISTING CONCRETE FLOORS SHALL BE SEALED.
3. NEW CONCRETE FLOOR INFILL, SEE STRUCTURAL. MATCH SLOPE TO DRAINS (1/8" PER 1'-0" MINIMUM). INSTALL NEW FLOOR DRAINS WHERE REQUIRED, SEE MECHANICAL. PREPARE EXISTING CONCRETE FLOORS AS REQUIRED FOR ACCEPTANCE OF SEALER AND LEVELING COMPOUND WHERE REQUIRED TO FILL VOIDS AND AT EXISTING DRAINS PER PRODUCT MANUFACTURER'S INSTALLATION INSTRUCTIONS. INSTALL LEVELING COMPOUND WITH POSITIVE SLOPE WHERE NEW DRAIN PROVIDED AT EREAS WHERE EXISTING SLABS TO REMAIN

SHEET NOTES

1. CONTRACTOR TO VERIFY EXISTING CONDITIONS AND REPORT ANY DISCREPANCIES IN ACCOMPLISHING NEW WORK.
2. REINSTALL EXISTING FIXTURES, CABINETRY, CASEWORK INCLUDING LOCKERS, BENCHES, TOILETS, SINKS, TOILET/URINAL PARTITIONS, ACCESSORIES UNLESS NOTED OTHERWISE. REFER TO EXHIBIT DRAWING EX1 FOR EXISTING LIST.
3. INSTALL NEW 6" RUBBER BASE AT ALL LOCATIONS WHERE EXISTING TILE BASE HAS BEEN REMOVED AT CMU WALLS AND LOCKER BASES.
4. REFER TO STRUCTURAL DRAWINGS FOR EXTENTS OF NEW CONCRETE FLOOR AND CMU WALL DEMOLITION. WHERE CMU WALL DEMO OR DAMAGE HAS OCCURED, REPLACE AND/OR REPAIR CMU WALL AND PAINT ENTIRE WALL.

BASIS OF DESIGN (BOD) FINISHES

1. FLOOR LEVELING COMPOUND: ARDEX V 1000.
2. CONCRETE FLOOR SEALER/COATING: SIKA SIKAGUARD-62 EPOXY COATING WITH CUSTOM COLOR KIT (AS SELECTED BY OWNER), PRIMER: SIKA SIKADUR-32 HI-MOD, ANTI-SLIP ADDITIVE - BROADCAST SILICA SAND (20-40 MESH).
3. RUBBER WALL BASE: ROPPE SERIES 700 6" NO TOE RUBBER WALL BASE.
4. CMU WALL PAINT: LOCKER, RESTROOM, HALLWAYS - PPG DIAMOND ACRYLIC LATEX SEMIGLOSS; SHOWERS - PPG BREAK-THROUGH URETHANE ACRYLIC GLOSS.
5. PROVIDE BOD OR PRODUCTS OF EQUAL QUALITY FOR APPROVAL BY ARCHITECT.



1 PARTIAL FIRST FLOOR PLAN
A-111
SCALE: 1/4" = 1'-0"

REVISIONS

CONSULTANT:

Juneau, AK

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE: PARTIAL FIRST FLOOR PLAN

BID DOCUMENTS

PROJECT No. I0315.24002

SHEET NUMBER A-111

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION, AFFECTING ALL LABELED SCALES

DATUM

- A — GRID LINE
- NORTH ARROW
- LEVEL 2 / 12'-6" — LEVEL; LEVELS AND ELEVATIONS; ELEVATION
- 12'-6" — SPOT ELEVATION; ELEVATION

LINEWORK

1. EXISTING TO REMAIN:
2. DEMOLITION:
1. NEW:
2. BY OTHERS:

REFERENCES

1. SECTIONS:
   - DETAIL REFERENCE
   - ADDITIONAL DESCRIPTION
   - SHEET REFERENCE
   - SECTION ORIENTATION
   - A — A LOCALLY REFERENCED SECTION
2. ELEVATIONS:
   - DETAIL REFERENCE
   - ADDITIONAL DESCRIPTION
   - SHEET REFERENCE
3. CALLOUTS:
   - DETAIL REFERENCE
   - ADDITIONAL DESCRIPTION
   - SHEET REFERENCE
   - CALLOUT AREA
4. MATCHLINES:
   - DETAIL REFERENCE
   - SHEET REFERENCE
   - MATCHLINE 1/S-202

TAGS AND SYMBOLS

1. FOUNDATIONS:
   - PILASTER OR PEDESTAL TYPE, SEE SCHEDULE
   - BOTTOM OF FOOTING ELEVATION, AS NOTED
   - FOOTING TYPE, SEE SCHEDULE
   - PILASTER OR PEDESTAL TYPE, SEE SCHEDULE
2. COLUMNS AND HANGERS:
   - DENOTES EXISTING
   - COLUMN OR HANGER SHAPE AND SIZE
   - COLUMN OR HANGER SYMBOLIC REPRESENTATION
   - COLUMN BASE PLATE TYPE
3. FLOORS AND ROOFS:
   - FLOOR OR ROOF TYPE, SEE SCHEDULE
   - SPAN DIRECTION, AS NOTED
4. WALLS
   - W1 — SHEAR WALL TYPE, SEE SCHEDULE
5. CHANGES IN ELEVATION:
   - STEP DOWN / UP
   - RAMP DOWN
   - RAMP UP
6. VERTICAL BRACING:
   - ABOVE OR TO THE LEFT INDICATES VERTICAL BRACE ABOVE DISPLAYED PLAN
   - COLUMN OR HANGER SYMBOLIC REPRESENTATION
   - BELOW OR TO THE RIGHT INDICATES VERTICAL BRACE BELOW DISPLAYED PLAN
7. BEAMS:
   - RELATIVE ELEVATION
   - REQUIRED CAMBER
   - TOTAL NUMBER OF STUDS
   - BEAM SHAPE AND SIZE
   - DENOTES EXISTING
   - COLUMN OR HANGER
   - DRAG CONNECTION, SEE TYPICAL DETAIL
   - DIMENSION FROM REFERENCE ELEVATION
   - (E) W14X22 (12) [1"] <BELOW> <X'-X">
   - BEAM
   - MOMENT CONNECTION, SEE TYPICAL DETAIL
   - CANTILEVERED MOMENT CONNECTION
   - CANTILEVERED BEAM
   - COLUMN OR HANGER

A. NOTES:

a. SEE TYPICAL FRAMING DETAILS FOR CONNECTIONS.

b. SPACE STUDS PER TYPICAL SHEAR STUD PLACEMENT DETAIL.

STRUCTURAL ABBREVIATIONS

NOTE: NOT ALL ABBREVIATIONS USED.

@	AT
AB	ANCHOR BOLT
AFF	ABOVE FINISH FLOOR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
ALT	ALTERNATE
APPROX	APPROXIMATELY
ARCH	ARCHITECTURAL
ASD	ALLOWABLE STRENGTH DESIGN
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS
ATR	ALL THREAD ROD
AWS	AMERICAN WELDING SOCIETY
AWW	ALL WEATHER WOOD
BET / BTWN	BETWEEN
BLKG	BLOCKING
BM	BEAM
BN	BOUNDARY NAILING
BOF	BOTTOM OF FOOTING
BOS	BOTTOM OF STEEL
BOT	BOTTOM
BP	BUTTON PUNCH
BPL	BOTTOM PLATE
BRKT	BRACKET
BS	BOTH SIDES
CANT	CANTILEVER
CBJ	CITY AND BOROUGH OF JUNEAU
CJ	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CL	CENTERLINE
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONN	CONNECTION
CONT	CONTINUOUS
CONTR'S	CONTRACTORS
CP	COMPLETE PENETRATION
DBL	DOUBLE
DIA / DIAM / ø	DIAMETER
DIAG	DIAGONAL
DICA	DRILLED IN CONCRETE ANCHOR
DIM	DIMENSION
DL	DEAD LOAD
DP	DEEP
DWG	DRAWING
(E)	EXISTING
EA	EACH
EJ	EXPANSION JOINT
ELEV	ELEVATION
ELF	EQUIVALENT LATERAL FORCE PROCEDURE
EMBED	EMBEDDED
EN	END NAILING
EOR	ENGINEER OF RECORD
EQ	EQUAL
EQUIV	EQUIVALENT
ES	EQUALLY SPACED
EW	EACH WAY
FB	FLAT BAR
FDN	FOUNDATION
FF	FINISH FLOOR
FNSB	FAIRBANKS NORTH STAR BOROUGH
FRMG	FRAMING
FS	FAR SIDE
FT	FOOT/FEET
FTG	FOOTING
GA	GAGE
GALV	GALVANIZED
GLB	GLULAM BEAM
GR	GRADE
GWB	GYPSUM WALL BOARD
HD	HOLDOWN
H / HORIZ	HORIZONTAL
HSS	HOLLOW STRUCTURAL SECTION
IBC	INTERNATIONAL BUILDING CODE
ICF	INSULATED CONCRETE FORM
IN	INCH(ES)
INSUL	INSULATION
INT	INTERIOR
JT	JOINT
K	KIP (1000 LB)
KSI	KIPS PER SQUARE INCH
LL	LIVE LOAD
LLV	LONG LEG VERTICAL
LOC	LOCATION
LONG	LONGITUDINAL

STRUCTURAL ABBREVIATIONS (CONTINUED)

NOTE: NOT ALL ABBREVIATIONS USED.

MANUF	MANUFACTURER
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MID	MIDDLE
MIN	MINIMUM
MOA	MUNICIPALITY OF ANCHORAGE
MPH	MILES PER HOUR
MSB	MATANUSKA-SUSITNA BOROUGH
MTL	METAL
(N)	NEW
NIC	NOT IN CONTRACT
NS	NEAR SIDE
NTS	NOT TO SCALE
OC	ON CENTER
OPP	OPPOSITE HAND
OSB	ORIENTED STRAND BOARD
OWSJ	OPEN WEB STEEL JOIST
PDF	POWDER DRIVEN FASTENER
PC	PRECAST
PEN	PENETRATION
PJP	PARTIAL JOINT PENETRATION
PL	PLATE
PLB	PARALLAM BEAM
PLF	POUNDS PER LINEAL FOOT
PLY	PLYWOOD
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	PRESSURE TREATED
PWJ	PLYWOOD WEB JOIST
REF	REFERENCE
REINF	REINFORCEMENT
REQ'D	REQUIRED
RO	ROUGH OPENING
SCH / SCHED	SCHEDULE
SIM	SIMILAR
SIP	STRUCTURAL INSULATED PANELS
SFRS	SEISMIC FORCE RESISTING SYSTEM
SMS	SHEET METAL SCREWS
SOG	SLAB-ON-GRADE
SQ	SQUARE
STAGG	STAGGERED
STD	STANDARD
STL	STEEL
STR / STRUCT	STRUCTURAL
T&B	TOP & BOTTOM
T&G	TONGUE & GROOVE
TEMP	TEMPERATURE
THRD	THREADED
TO	TOP OF
TOC	TOP OF CONCRETE
TOS	TOP OF STEEL
TS	TUBE STEEL
TYP	TYPICAL
UFC	UNIFIED FACILITIES CRITERIA
UNO	UNLESS NOTED OTHERWISE
V / VERT	VERTICAL
W/	WITH
WD	WIDE
WF	WIDE FLANGE
WP	WORKING POINT
WWF	WELDED WIRE FABRIC

REVISIONS

CONSULTANT:

Juneau, AK

RESPEC

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

SHEET TITLE: LEGEND AND ABBREVIATIONS

BID DOCUMENTS

PROJECT No. I0315.24002

SHEET NUMBER S-001

STRUCTURAL DESIGN DATA

1. RISK CATEGORY (PER RECORD DRAWINGS) — III
2. LIVE LOADS:
   - A. FIRST FLOOR — 100 PSF
   - B. ROOF — 20 PSF
   - C. STAIRS & CORRIDORS — 100 PSF
   - D. MECHANICAL MEZZANINE — 125 PSF
   - E. MECHANICAL MEZZANINE — 170 PSF
3. SNOW LOADS:
   - A. GROUND SNOW LOAD — P_g = 65 PSF (ORIGINAL) 150 PSF (CURRENT)
   - B. EXPOSURE FACTOR — $C_e = 1.0$
   - C. THERMAL FACTOR — $C_t = 1.0$
   - D. IMPORTANCE FACTOR — $I_s = 1.1$
   - E. ROOF SNOW LOAD — P_s = 50 PSF (ORIGINAL) 116 PSF (CURRENT)
4. WIND LOADS:
   - A. WIND SPEED — V_{ULT} = 147 MPH
   - B. WIND EXPOSURE CATEGORY — C
   - C. IMPORTANCE FACTOR — $I_w = 1.00$
5. SEISMIC LOADS:
   - A. SEISMIC FORCE RESISTING SYSTEM
     - a. STEEL BRACED FRAMES
     - b. CMU SHEAR WALLS
     - c. CONCRETE SHEAR WALLS
   - B. SEISMIC IMPORTANCE FACTOR — $I_e = 1.25$
   - C. SITE CLASS — D (RECORD DOC'S)
   - D. MAPPED ACCELERATIONS
     - a. SHORT-PERIOD — $S_S = 0.29$ g
     - b. 1-SECOND — $S_1 = 0.28$ g
   - E. DESIGN ACCELERATIONS
     - a. SHORT-PERIOD — $S_{DS} = 0.30$ g
     - b. 1-SECOND — $S_{D1} = 0.37$ g
   - F. SEISMIC DESIGN CATEGORY — D
6. FOUNDATION DESIGN CRITERIA
   - A. THE BUILDING IS FOUNDED ON STEEL PILES. REFER TO THE EXISTING BUILDING DRAWINGS FOR MORE INFORMATION.

STRUCTURAL GENERAL NOTES

1. THE SCOPE OF WORK IS TO REPAIR THE EXISTING SEWER PIPING. THE EXISTING UTILITIES ARE LOCATED BELOW THE FIRST FLOOR SLAB. THE FIRST FLOOR IS COMPOSED OF AN ELEVATED CONCRETE SLAB SUPPORTED BY CONCRETE BEAMS AND GIRDERS, WHICH ARE FOUNDED ON STEEL PILES.
   - A. THE EXISTING STRUCTURAL FLOOR SLAB MUST BE DEMOLISHED AND REPLACED AS INDICATED TO PROVIDE ACCESS TO THE UNDERFLOOR UTILITIES.
   - B. MULTIPLE INTERIOR CMU PARTITION WALLS MUST BE SHORED IN PLACE OR REMOVED AND RE-INSTALLED. MULTIPLE INTERIOR CMU SHEAR WALLS MUST BE SHORED IN PLACE. ALL SHORING OF EXISTING WALLS IS PART OF THE DELEGATED DESIGN, FOR MORE INFORMATION, SEE THE STRUCTURAL DELEGATED DESIGN NOTES.
2. PERFORM ALL WORK IN COMPLIANCE WITH THE MINIMUM STANDARDS OF THE FOLLOWING CODES:
   - A. THE INTERNATIONAL BUILDING CODE (IBC) 2021 AND ITS REFERENCED STANDARDS, HEREIN REFERRED TO AS "THE CODE", AND OTHER REGULATORY CRITERIA WHICH HAVE AUTHORITY OVER ANY PORTION OF THE WORK.
3. THIS WORK INVOLVES EXISTING STRUCTURES, PERFORM THE FOLLOWING TASKS PRIOR TO STARTING CONSTRUCTION:
   - A. SURVEY AND FIELD VERIFY ALL EXISTING CONDITIONS ASSOCIATED WITH THE WORK.
   - B. INVESTIGATE THE SITE DURING CLEARING AND EARTHWORK OPERATIONS FOR FILLED EXCAVATIONS OR BURIED STRUCTURES, SUCH AS FOUNDATIONS, ETC.
   - C. ALL OMISSIONS OR CONFLICTS BETWEEN ELEMENTS OF THE CONTRACT DOCUMENTS MUST BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER OF RECORD, PRIOR TO PROCEEDING WITH THE RELATED WORK.
4. THE STRUCTURAL DRAWINGS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. CONSTRUCTION LOADS MUST NOT EXCEED THE DESIGN LIVE LOADS.
5. IF THE STRUCTURAL ENGINEER OF RECORD IS NOT RETAINED BY THE OWNER TO OVERSEE CONSTRUCTION ACTIVITIES, THE STRUCTURAL ENGINEER OF RECORD IS NOT IN RESPONSIBLE CHARGE OF THE CONSTRUCTION PER SECTION 107.3.4 OF THE CODE. CONSTRUCTION ACTIVITIES INCLUDE, BUT ARE NOT LIMITED TO, REVIEW OF SPECIAL INSPECTION AND STRUCTURAL OBSERVATION REPORTS, REVIEW OF SUBMITTAL DOCUMENTS, AND REVIEW OF DELEGATED DESIGN SUBMITTALS.
6. THE FOLLOWING ITEMS ARE PART OF THE LATERAL FORCE RESISTING SYSTEM (LFRS):
   - A. PRECAST CONCRETE SHEAR WALLS, CMU SHEAR WALLS, STEEL BRACED FRAMES, DRAG BEAMS, CONCRETE FLOORS (AT MEZZANINE AND GROUND FLOORS), ROOF DECK, AND ALL ASSOCIATED CONNECTIONS.

STRUCTURAL DELEGATED DESIGN NOTES

1. THE DESIGN OF THE FOLLOWING ELEMENTS ARE THE RESPONSIBILITY OF THE CONTRACTOR:
   - A. ALL SHORING OF EXISTING BUILDING ELEMENTS REQUIRED TO COMPLETE THE WORK, INCLUDING BUT NOT LIMITED TO:
     - a. INTERIOR CMU PARTITION WALLS
     - b. INTERIOR CMU SHEAR WALLS
   - B. THE SHORING DESIGN MUST INCLUDE ALL ASPECTS NECESSARY TO SUPPORT THE EXISTING BUILDING ELEMENTS WITHOUT DAMAGE OR OVERLOAD.
   - C. THE DESIGN OF ALL FORMWORK AND SHORING REQUIRED FOR THE NEW FLOOR SLAB.
   - D. ALL ARCHITECTURAL, MECHANICAL AND ELECTRICAL EQUIPMENT BRACING AND ANCHORAGE TO THE STRUCTURE
2. PROVIDE SUBMITTALS TO THE ARCHITECT AND STRUCTURAL ENGINEER OF RECORD FOR REVIEW.
3. SUBMITTALS MUST INCLUDE DRAWINGS AND CALCULATIONS SEALED BY A CIVIL OR STRUCTURAL ENGINEER LICENSED IN THE STATE OF ALASKA.

STRUCTURAL CONCRETE NOTES

1. PERFORM ALL CONCRETE WORK IN ACCORDANCE WITH CHAPTER 19 OF THE IBC, AND ALL REFERENCED STANDARDS.
2. USE NORMAL WEIGHT (150 PCF) CAST-IN-PLACE CONCRETE WITH 28 DAY COMPRESSIVE STRENGTHS (F'_c) AS FOLLOWS:

CONDITION	MINIMUM STRENGTH (PSI)	EXPOSURE CATEGORY	MAX W/C RATIO	AIR ENTRAINMENT
FLOOR SLAB	5,000	F0, S0, W2, C2	0.50	0%

3. CONCRETE MATERIAL REQUIREMENTS:
   - A. USE PORTLAND CEMENT CONFORMING TO ASTM STANDARD C-150 AND TYPE I, IL, OR III, UNLESS NOTED OTHERWISE.
   - B. USE NORMAL WEIGHT AGGREGATE OF NATURAL SAND AND ROCK CONFORMING TO THE REQUIREMENTS AND TESTS OF ASTM C-33.
4. REINFORCING MATERIAL REQUIREMENTS:
   - A. USE DEFORMED REINFORCING BARS CONFORMING TO THE STANDARDS OF ASTM A615, GRADE 60. WHERE WELDING OF REINFORCING BARS OCCURS, USE ASTM A706 GRADE 60.
5. PROVIDE DOWELS, WHERE REQUIRED, THAT MATCH THE SIZE AND NUMBER OF MAIN REINFORCING.
6. SPLICE REINFORCING BARS WHERE INDICATED ON THE DRAWINGS. LAP HORIZONTAL REINFORCING AT CORNERS AND INTERSECTIONS. STAGGER ALL SPLICES UNLESS NOTED OTHERWISE. IF SPLICE LOCATIONS ARE NOT SPECIFICALLY INDICATED, VERIFY PLANNED LOCATION WITH THE EOR.
7. DETAIL, FABRICATE, LABEL, SUPPORT, AND SPACE ALL CONCRETE REINFORCEMENT CONFORMING TO THE PROCEDURES AND REQUIREMENTS OF THE LATEST EDITION OF CHAPTER 19 OF THE CODE, ACI 318, AND THE "ACI DETAILING MANUAL: DETAILS AND DETAILING CONCRETE REINFORCEMENT", ACI 315.
8. PROVIDE A MINIMUM CONCRETE COVER OVER REINFORCING OF:
   - A. 3" FOR CONCRETE CAST AGAINST THE EARTH.
   - B. 1 1/2" FOR BARS EXPOSED TO WEATHER AND BEAMS AND COLUMNS.
   - C. 1 1/2" FOR INTERIOR SLABS.
9. THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF SHORING. THE DESIGN, REMOVAL, AND RESHORING OF FORMWORK MUST CONFORM TO ACI 318, THE CODE, AND IS THE RESPONSIBILITY OF THE CONTRACTOR.
10. PROVIDE CONCRETE WITH A MAXIMUM SLUMP OF 8 INCHES ± 1 INCH WITH VERIFIED SLUMP OF 3 INCHES ± 1 INCH BEFORE ADDING HIGH-RANGE WATER REDUCING OR PLASTICIZING ADMIXTURES AT THE PROJECT SITE.
11. SUBMIT THE FOLLOWING TO THE ENGINEER OF RECORD FOR REVIEW AND APPROVAL:
    - A. CONCRETE MIX DESIGN DATA FOR EACH TYPE AND COMPRESSIVE STRENGTH OF CONCRETE REQUIRED. BASE MIX DESIGNS ON FIELD EXPERIENCE, TRIAL MIXTURES, OR BOTH, IN CONFORMANCE WITH ACI 318. MIX DESIGNS MUST BE SIGNED BY A REGISTERED CIVIL OR STRUCTURAL ENGINEER.
    - B. REINFORCING BAR SHOP DRAWINGS, CONTAINING ALL REINFORCING DETAILS, SPACING, PLACEMENT, COUPLERS, AND PLANNED CONSTRUCTION JOINTS. PREPARE SHOP DRAWINGS IN CONFORMANCE WITH ACI 315.
12. MAINTAIN CONCRETE ABOVE 50 DEGREES FAHRENHEIT AND IN A MOIST CONDITION FOR A MINIMUM OF SEVEN DAYS AFTER PLACEMENT.

STRUCTURAL MASONRY NOTES

1. PERFORM ALL MASONRY WORK IN ACCORDANCE WITH CHAPTER 21 OF THE IBC, AND ALL REFERENCED STANDARDS.
2. USE MASONRY COMPONENT AND DESIGN COMPRESSIVE STRENGTHS AS SHOWN BELOW:

COMPONENT	REQUIRED STRENGTH	MATERIAL NOTES
CMU BLOCKS	F'_{cmu} = 3,250 PSI (MIN)	ASTM C-90, NORMAL WEIGHT
MORTAR	F'_m = 1,800 PSI (MIN)	ASTM C-270, TYPE S OR M
GROUT	F'_g = 2,500 PSI (MIN)	ASTM C-476
MASONRY ASSEMBLY	F'_m = 2,500 PSI	NET AREA COMPRESSIVE STRENGTH

   - A. USE CLEAN, ANGULAR, WELL-GRADED SAND AGGREGATES FREE FROM DETRIMENTAL AMOUNTS OF DUSTS, LUMPS, SHALE AND ALKALI OR ORGANIC MATERIAL. REFER TO ASTM C144 FOR MORTARS AND ASTM C404 FOR GROUTS.
   - B. VERIFY THE SPECIFIED COMPRESSIVE STRENGTH OF MASONRY WITH THE UNIT STRENGTH METHOD OR THE PRISM TESTING METHOD IN ACCORDANCE WITH TMS 602.
3. USE REINFORCING STEEL CONFORMING TO ASTM A615 OR A706, GR 60. DETAIL REINFORCING IN ACCORDANCE WITH THE LATEST EDITION OF THE ACI STANDARD OF PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES.
4. SPLICE REINFORCING STEEL WHERE INDICATED. LAP REINFORCING STEEL AT SPLICES A MINIMUM OF (48) BAR DIAMETERS, UNLESS NOTED OTHERWISE. WHERE CLEAR DISTANCE BETWEEN BARS AT ADJACENT SPLICES IS 3 INCHES OR LESS, INCREASE LAP LENGTH BY 30 PERCENT UNLESS SPLICES ARE STAGGERED AT LEAST (24) BAR DIAMETERS.
5. ENSURE A MINIMUM OF 1" OF GROUT COVER AROUND REINFORCING STEEL, ANCHOR BOLTS, AND INSERTS PENETRATING THE MASONRY SHELL.
6. PROVIDE NOT LESS THAN 1/2" OF GROUT BETWEEN MASONRY UNITS AND REINFORCING STEEL, AND BETWEEN PARALLEL REINFORCING NOT LESS THAN 1 INCH OR ONE BAR DIAMETER, WHICHEVER IS LARGER.
7. GROUT ALL CELLS SOLID, UNLESS NOTED OTHERWISE.
8. CLEANOUTS ARE REQUIRED AT ALL CELLS TO RECEIVE GROUT TO THOROUGHLY INSPECT FOR AND CLEAR DEBRIS.
9. CONSOLIDATE ALL GROUT POURS WITH MECHANICAL VIBRATION.
10. LIMIT ALL GROUT LIFTS TO 5' - 4" IN 4 HOUR INCREMENTS, UNLESS THE CONDITIONS OF TMS 602-16 SECTION 3.5D HAVE BEEN MET.
11. PROVIDE ADEQUATE TEMPORARY BRACING, AS REQUIRED, DURING CONSTRUCTION TO WITHSTAND LATERAL LOADS AND THE HYDROSTATIC PRESSURES OF FLUID GROUT.
12. PROVIDE CONTROL JOINTS IN CMU WALLS, MATCH EXISTING LOCATIONS.
13. PLACE ALL MASONRY IN A ½ UNIT RUNNING BOND PATTERN, UNLESS NOTED OTHERWISE. PLACE CELLS IN VERTICAL ALIGNMENT. USE CLOSED-END UNITS AT CORNERS, OPENINGS AND END-WALLS.

STRUCTURAL CONCRETE ANCHOR NOTES

1. USE THE FOLLOWING POST INSTALLED ANCHORS OR APPROVED EQUALS:
   - A. ADHESIVE ANCHORS: HILTI HIT-RE 500 V3 EPOXY
   - B. REBAR EMBED: HILTI HIT-RE 500 V3 EPOXY, OR HILTI HIT-HY-200
   - C. EXPANSION ANCHORS: HILTI KWIK BOLT-TZ SS304 OR 316
   - D. THE SIZE, ORIENTATION, SPACING, AND ADDITIONAL REQUIREMENTS AS INDICATED ON THE DRAWINGS.
2. MEET THE MINIMUM EMBEDMENT, EDGE DISTANCE AND SPACING REQUIREMENTS OF THE APPLICABLE ICC-ES REPORT FOR POST INSTALLED CONCRETE ANCHORS AND INSERTS.
3. DO NOT CUT OR DAMAGE EXISTING REINFORCING STEEL WHEN PLACING POST INSTALLED ANCHORS INTO EXISTING CONCRETE.
4. DO NOT SUBSTITUTE CAST-IN-PLACE BOLTS AND RODS WITH POST-INSTALLED ANCHORS WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD.
5. USE HOT-DIPPED GALVANIZED OR STAINLESS ANCHORS WHEN EXPOSED TO EXTERIOR OR DAMP CONDITIONS, IN ACCORDANCE WITH MANUFACTURER RECOMMENDATIONS.
6. INSTALL AND TEST POST INSTALLED ANCHORS IN ACCORDANCE WITH CHAPTER 17 OF THE CURRENT IBC CODE AND THE APPLICABLE ICC-ES REPORT.
7. PERFORM ALL TESTING IN THE PRESENCE OF THE PROJECT INSPECTOR OF RECORD.

REVISIONS

CONSULTANT:

RESPEC — Juneau, AK

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

SHEET TITLE: GENERAL NOTES

BID DOCUMENTS

PROJECT No. I0315.24002

SHEET NUMBER S-002

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION, AFFECTING ALL LABELED SCALES

SPECIAL INSPECTION NOTES

1. ALL SPECIAL INSPECTIONS AND REPORTING REQUIREMENTS PER SECTION 1704 OF THE IBC AND REFERENCED STANDARDS, INCLUDING THE TASKS OUTLINED IN THE TABLES ON THIS SHEET, SHALL BE PROVIDED.
2. THE OWNER OR OWNER'S AGENT, OTHER THAN THE CONTRACTOR, SHALL EMPLOY QUALIFIED AGENCIES TO PROVIDE SPECIAL INSPECTION AND TESTS FOR THE WORK SPECIFIED IN SECTION 1705 OF THE IBC. SPECIAL INSPECTION AGENCIES SHALL BE QUALIFIED PER 1704.2.1 OF THE IBC.
3. THE SPECIAL INSPECTORS SHALL, AT A MINIMUM, PROVIDE SPECIAL INSPECTION REPORTS TO THE BUILDING OFFICIAL, OWNER OR OWNER'S AUTHORIZED AGENT, ARCHITECT, AND THE ENGINEER OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE NOTICE OF THE CONTRACTOR, OWNER OR OWNER'S AUTHORIZED AGENT, ARCHITECT, AND THE ENGINEER OF RECORD.
4. THE SPECIAL INSPECTORS SHALL SUBMIT A FINAL SIGNED REPORT DOCUMENTING ALL SPECIAL INSPECTIONS AND TESTS, AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS OR TESTS.
5. QUALITY ASSURANCE AS REQUIRED BY TABLES ON THIS SHEET SHALL BE THE RESPONSIBILITY OF THE OWNER'S REPRESENTATIVE. QUALITY CONTROL AS REQUIRED BY THE SPECIAL INSPECTION SCHEDULES SHALL BE PROVIDED BY THE FABRICATOR AND/OR ERECTOR.
6. THE CONTRACTOR SHALL PROVIDE A MINIMUM OF 24 HOURS OF ADVANCE NOTICE PRIOR TO A REQUIRED SPECIAL INSPECTION AND PROVIDE ACCESS TO THE SITE AS REQUIRED FOR THE SPECIAL INSPECTOR TO COMPLETE THEIR WORK.
7. THE COST OF ANY REINSPECTION REQUIRED DUE TO CONSTRUCTION ERROR IS THE RESPONSIBILITY OF THE CONTRACTOR.
8. DEFINITIONS:
   A. QC - QUALITY CONTROL, TO BE PROVIDED BY THE FABRICATOR AND ERECTOR, PER AISC 360 CHAPTER N.1.
   B. QA - QUALITY ASSURANCE, TO BE PROVIDED BY OTHERS WHEN REQUIRED BY THE AUTHORITY HAVING JURISDICTION, BUILDING CODE, PURCHASER, OWNER, OR ENGINEER OF RECORD, PER AISC 360 CHAPTER N.1
   C. O - OBSERVE THESE ITEMS ON A RANDOM BASIS, OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS.
   D. P - PERFORM THESE TASKS FOR EACH JOINT OR MEMBER
   E. D - DOCUMENT INSPECTION ACTIVITIES.
   F. FREQUENCY
      a. P - PERIODIC
      b. C - CONTINUOUS

STRUCTURAL OBSERVATION NOTES

1. THE OWNER OR OWNER'S AUTHORIZED AGENT SHALL EMPLOY A STRUCTURAL ENGINEER, REGISTERED IN THE STATE OF ALASKA, TO PERFORM STRUCTURAL OBSERVATIONS IN ACCORDANCE WITH SECTION 1704.6 OF THE IBC.
2. PRIOR TO THE COMMENCEMENT OF OBSERVATIONS THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT IDENTIFYING THE FREQUENCY AND EXTENT OF STRUCTURAL OBSERVATIONS.
3. AT THE CONCLUSION OF THE WORK INCLUDED IN THE PERMIT, THE STRUCTURAL OBSERVER SHALL SUBMIT TO THE BUILDING OFFICIAL A WRITTEN STATEMENT THAT THE SITE VISITS HAVE BEEN MADE AND IDENTIFY ANY REPORTED DEFICIENCIES THAT, TO THE BEST OF THE STRUCTURAL OBSERVER'S KNOWLEDGE, HAVE NOT BEEN RESOLVED.

TABLE 1 - REQUIRED SPECIAL INSPECTIONS AND TESTS OF CONCRETE CONSTRUCTION

REFERENCE IBC TABLE 1705.3 AND ASSOCIATED SECTIONS FROM ACI318-19

	REQUIRED VERIFICATION AND INSPECTION	FREQUENCY
1.	INSPECT REINFORCEMENT AND VERIFY PLACEMENT.	P
2.	REINFORCING BAR WELDING:	
	A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706;	P
	B. INSPECT SINGLE-PASS FILLET WELDS, MAXIMUM 5/16"; AND	P
	C. INSPECT ALL OTHER WELDS.	C
3.	INSPECT ANCHORS CAST IN CONCRETE.	P
4.	INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS.	
	A. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS.	C
	B. MECHANICAL ANCHORS AND ADHESIVE ANCHORS NOT DEFINED IN 4.A.	P
5.	VERIFY USE OF REQUIRED DESIGN MIX.	P
6.	PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	C
7.	INSPECT CONCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	C
8.	VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	P
9.	INSPECT FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	P

TABLE 2 - REQUIRED SPECIAL INSPECTIONS FOR MASONRY CONSTRUCTION

REFERENCE IBC SECTION 1705.4 AND TMS 602 SECTION 1.6

	REQUIRED VERIFICATION AND INSPECTION	FREQUENCY
1.	AS MASONRY CONSTRUCTION BEGINS, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE	
	A. PROPORTIONS OF SITE-PREPARED MORTAR	P
	B. GRADE, TYPE, AND SIZE OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS.	P
2.	PRIOR TO GROUTING, VERIFY THAT THE FOLLOWING ARE IN COMPLIANCE	
	A. GROUT SPACE	C
	B. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS	C
3.	VERIFY COMPLIANCE OF THE FOLLOWING DURING CONSTRUCTION	
	A. MATERIALS AND PROCEDURES WITH THE APPROVED SUBMITTALS	C
	B. PLACEMENT OF REINFORCEMENT, CONNECTORS, AND ANCHOR BOLTS	P
	C. SIZE AND LOCATION OF STRUCTURAL MEMBERS	P
	D. TYPE, SIZE, AND LOCATION OF ANCHORS, INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION	C
	E. WELDING OF REINFORCEMENT	C
	F. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD WEATHER (TEMPERATURE BELOW 40°F) OR HOT WEATHER (TEMPERATURE OVER 90°F)	P
4.	OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND PRISMS	C

No.	Date	Item

REVISIONS

CONSULTANT :

Juneau, AK
RESPEC
AECC163270

PROJECT :
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE :
SPECIAL INSPECTIONS
BID DOCUMENTS

PROJECT No. I0315.24002
SHEET NUMBER
S-003

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION, AFFECTING ALL LABELED SCALES 1"

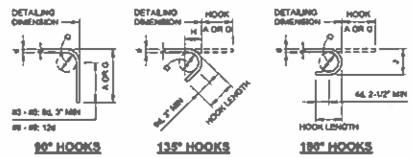
LAP SPLICE LENGTH SCHEDULE: CLASS B										
F'C (PSI)	BAR SIZE (GR 60)	#3	#4	#5	#6	#7	#8	#9	#10	#11
	BAR DIAMETER (IN)	0.375	0.500	0.625	0.750	0.875	1.000	1.128	1.270	1.410
5,000	TOP BAR	22	29	36	43	63	72	81	92	102
	OTHER	17	23	28	34	49	56	63	70	78
CLASS A LAP LENGTH SCHEDULE: DIVIDE SCHEDULE VALUES BY 1.3										

NOTES

1. SCHEDULE VALUES ARE VALID FOR NORMAL WEIGHT CONCRETE WITH REBAR LAYOUTS MEETING THE REQUIREMENTS OF EITHER A, B, OR C:
   A. CLEAR SPACING AND CLEAR COVER OF BARS BEING DEVELOPED OR LAP SPLICED IS NOT LESS THAN (1) BAR DIAMETER AND WITHIN STIRRUPS OR TIES THROUGHOUT.
   B. CLEAR SPACING OF BARS BEING DEVELOPED OR LAP SPLICED IS AT LEAST (2) BAR DIAMETERS AND CLEAR COVER IS AT LEAST (1) BAR DIAMETER.
   C. LAP SPLICE LENGTHS ARE INCREASED BY 1.5.
2. IF EPOXY COATED REINFORCING IS USED, INCREASE LAP SPLICE LENGTH BY 1.5.
3. TOP BAR REFERS TO HORIZONTAL REINFORCEMENT WITH MORE THAN 1'-0" OF FRESH CONCRETE PLACED BELOW THE BAR.
4. OTHER REFERS TO ALL OTHER CONDITIONS NOT DEFINED AS TOP BARS.

1 / S-101 TYPICAL LAP SPLICE SCHEDULE

SCALE: NO SCALE



BEND DIMENSION SCHEDULE										
	90° HOOKS		135° HOOKS				180° HOOKS			
BAR SIZE	D	A OR G	D	A OR G	H	HOOK LENGTH	D	A OR G	J	HOOK LENGTH
#3	2"	4-1/2"	2"	4-1/2"	2-3/4"	4-1/4"	2"	5"	2-3/4"	3-3/4"
#4	2-1/2"	4-3/4"	2-1/2"	5"	3"	4-3/4"	2-1/2"	6-1/2"	3-1/2"	4-1/4"
#5	3-1/4"	6"	3-1/4"	6"	3-3/4"	6"	3-1/4"	9-1/2"	4-1/2"	4-3/4"
#6	4-1/2"	1'-0"	4-1/2"	8"	4-1/2"	7-3/4"	4-1/2"	8-1/4"	6"	6"
#7	5-1/4"	1'-2"	5-1/4"	9"	5-1/4"	8-3/4"	5-1/4"	9-3/4"	7"	7"
#8	6"	1'-4"	6"	10-1/2"	6"	10"	6"	11"	8"	8"

D = FINISHED INSIDE BEND DIAMETER (INCLUDES SPRING BACK), d = BAR DIAMETER, ACI 318 MINIMUM BEND DIAMETER: #3 - #8: 4d (5d USED IN TABLE), #9 - #8: 6d

2 / S-101 TYPICAL STANDARD HOOK DIMENSIONS

SCALE: NO SCALE

No.	Date	Revision

REVISIONS

CONSULTANT:

Juneau, AK

RESPEC

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

SHEET TITLE: TYPICAL DETAILS

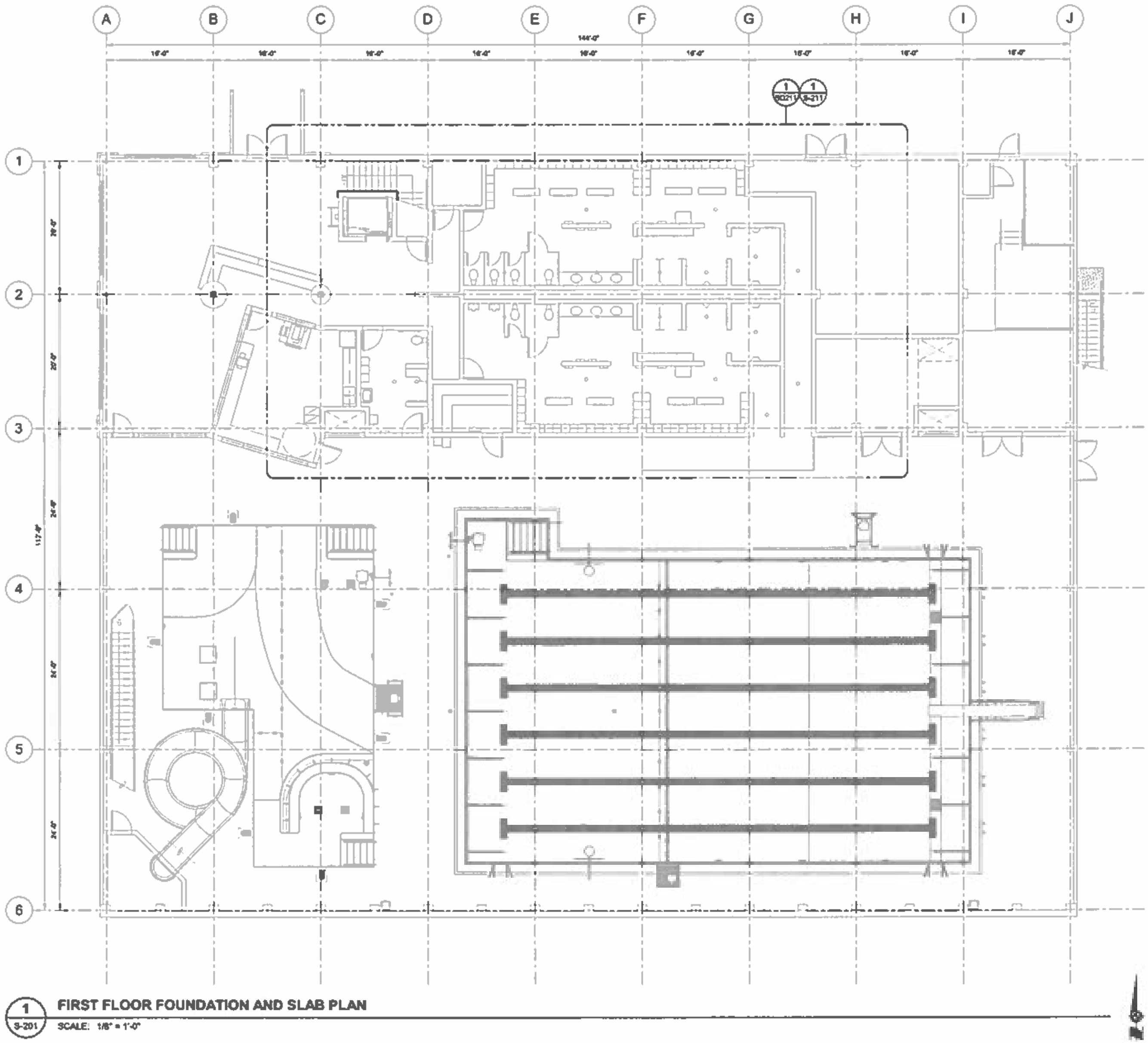
BID DOCUMENTS

DESIGN JCL
DRAWN DAV
CHECKED CDW
DATE

PROJECT No. 10315.24002

SHEET NUMBER S-101

Item 15B.



1 S-201 FIRST FLOOR FOUNDATION AND SLAB PLAN

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

SHEET NOTES

1. FIELD VERIFY EXISTING CONDITIONS.
2. MATERIAL EXCAVATED FROM BELOW THE FIRST FLOOR SLAB MAY NOT BE STORED ON THE FLOOR SLAB. AN APPROXIMATE LOCATION FOR STORAGE OF MATERIAL OUTSIDE OF THE BUILDING IS INDICATED. COORDINATE THE FINAL LOCATION WITH OWNER.

APPROXIMATE LOCATION OF STORAGE FOR EXCAVATED MATERIAL. SEE SHEET NOTE 2

REVISIONS

SHEET TITLE: REFERENCE PLAN

BID DOCUMENTS

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

RESPEC — Juneau, AK

CONSULTANT:

PROJECT No. 0315.24002

SHEET NUMBER S-201

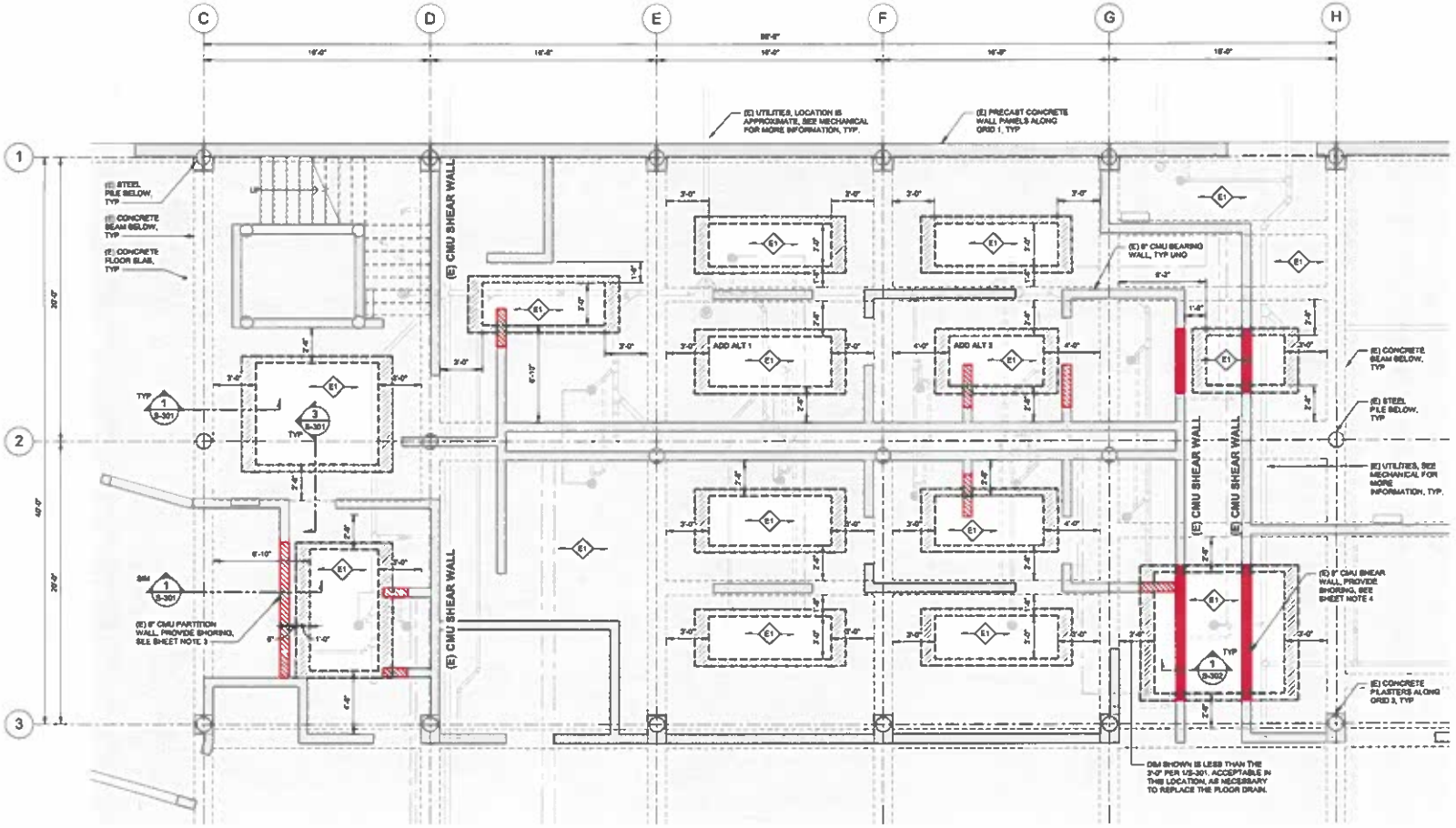
EXISTING FLOOR SCHEDULE	
TYPE	FLOOR DESCRIPTION
E1	EXISTING 8" ELEVATED CONCRETE SLAB REINFORCED WITH #5 BARS AT 6" OC, TOP AND BOTTOM, IN SPAN DIRECTION AND #4 BARS AT 1'-6" OC IN PERPENDICULAR DIRECTION, TOP AND BOTTOM.

SHORING AND DEMOLITION LEGEND

1. 6" CMU PARTITION WALL SHORING: (SEE SHEET NOTE 3)
2. 8" CMU SHEAR WALL SHORING: (SEE SHEET NOTE 4)
3. SAW CUT EXTENTS.
4. CHIP OUT EXTENTS (SEE SHEET NOTE 2)

SHEET NOTES

1. FIELD VERIFY EXISTING CONDITIONS.
2. CHIP OUT EXTENTS ARE THE MAXIMUM EXTENT OF DAMAGE TO THE EXISTING FLOOR SLAB ALLOWED IN ORDER TO EXPOSE THE EXISTING SLAB REBAR FOR CONNECTION TO NEW SLAB REBAR.
3. PROVIDE SHORING FOR ALL INDICATED EXISTING CMU WALLS AS NECESSARY TO PROTECT FROM DAMAGE.
   A. THE CMU WALLS MAY BE REMOVED AND REPLACED TO MATCH EXISTING AT THE CONTRACTOR'S OPTION. SEE REMOVAL AND REPAIR DETAILS ON SHEET S-302.
4. PROVIDE SHORING FOR ALL INDICATED EXISTING CMU SHEAR WALLS.
5. ADDITIVE ALTERNATES:
   A. ADD-ALT 1 AND 2 ARE AREAS OF THE FIRST FLOOR SLAB WHICH MAY NEED TO BE REMOVED TO REPAIR THE EXISTING UTILITIES, SEE MECHANICAL FOR MORE DETAILS.
6. DO NOT STORE EXCAVATED MATERIAL ON THE FIRST FLOOR BUILDING SLAB.



1 SD211 **FIRST FLOOR FOUNDATION AND SLAB PLAN - DEMOLITION**

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

REVISIONS

CONSULTANT:

Juneau, AK

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

SHEET TITLE: PARTIAL FOUNDATION AND SLAB PLAN - DEMOLITION

BID DOCUMENTS

DESIGN JCL
DRAWN CLM
CHECKED ZDM
DATE 07/09/2025

PROJECT No. 10313.24002

SHEET NUMBER SD211

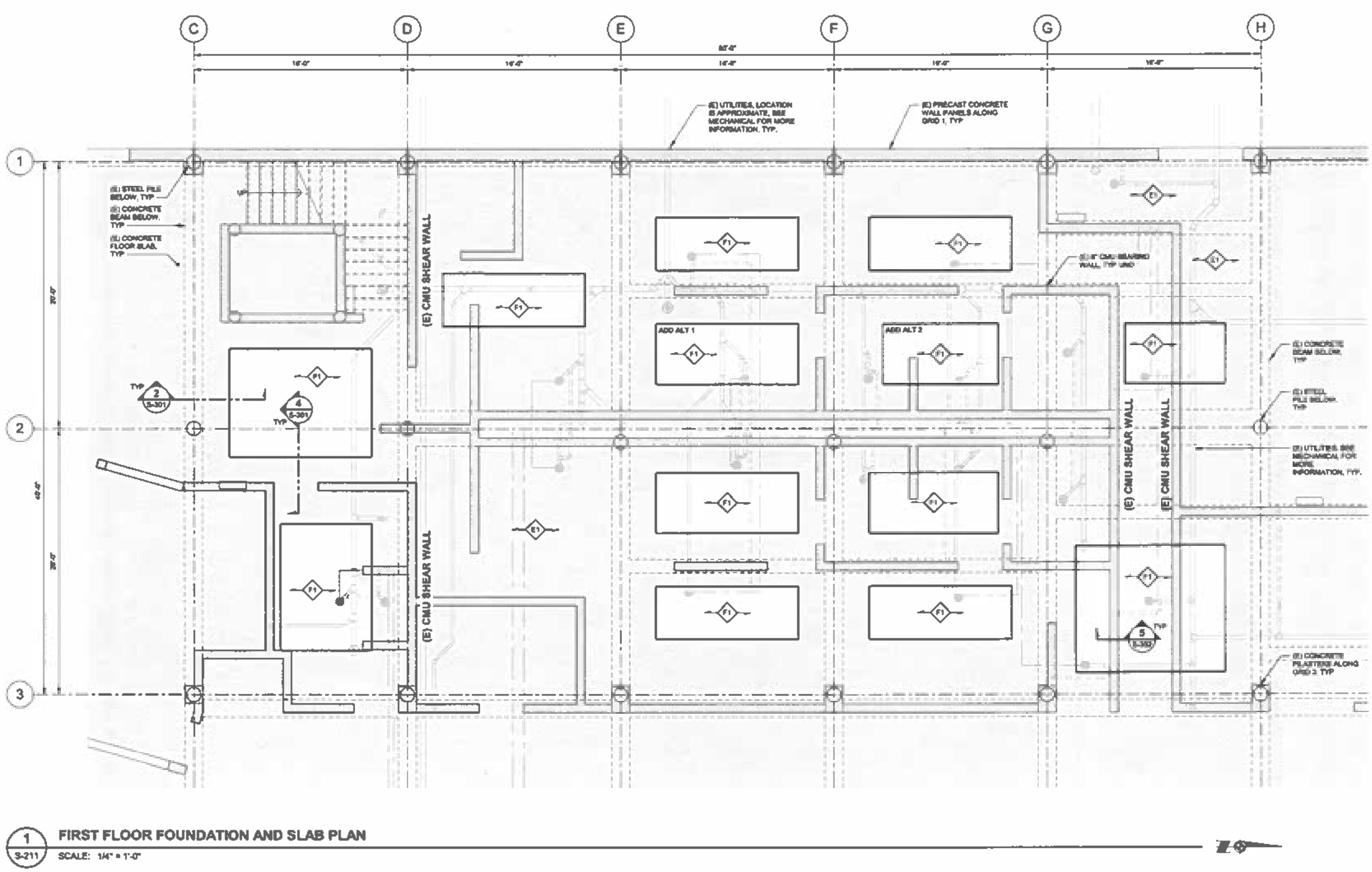
IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION, AFFECTING ALL LABELED SCALES

FLOOR SCHEDULE

TYPE	FLOOR DESCRIPTION
E1	EXISTING 8" ELEVATED CONCRETE SLAB REINFORCED WITH #5 BARS AT 6" OC, TOP AND BOTTOM, IN SPAN DIRECTION AND #4 BARS AT 1'-6" OC IN PERPENDICULAR DIRECTION, TOP AND BOTTOM.
F1	8" ELEVATED CONCRETE SLAB REINFORCED WITH #5 BARS AT 6" OC, TOP AND BOTTOM, IN SPAN DIRECTION AND #4 BARS AT 1'-6" OC IN PERPENDICULAR DIRECTION, TOP AND BOTTOM.

SHEET NOTES

1. FIELD VERIFY EXISTING CONDITIONS.
2. DO NOT STORE EXCAVATED MATERIAL ON THE FIRST FLOOR BUILDING SLAB.
3. ADDITIVE ALTERNATES:
   A. ADD-ALT 1 AND 2 ARE AREAS WHICH MAY NEED TO BE REMOVED TO PROVIDE SUPPORT FOR THE EXISTING PIPING, SEE MECHANICAL FOR MORE DETAILS.



1 / S-211 **FIRST FLOOR FOUNDATION AND SLAB PLAN**
SCALE: 1/4" = 1'-0"

SHEET TITLE: PARTIAL FOUNDATION AND SLAB PLAN

BID DOCUMENTS

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

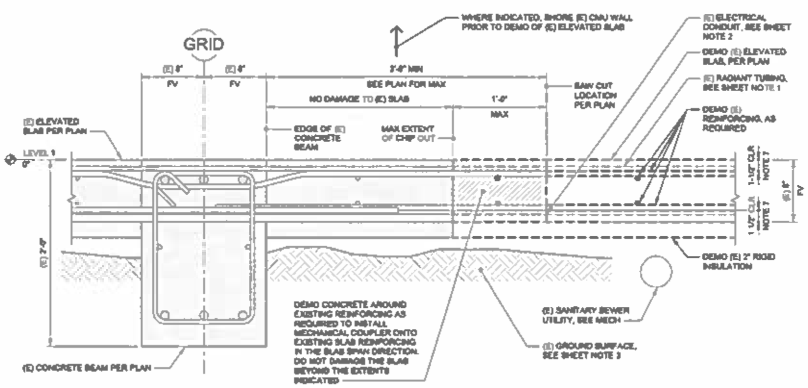
RESPEC — Juneau, AK

CONSULTANT:

REVISIONS

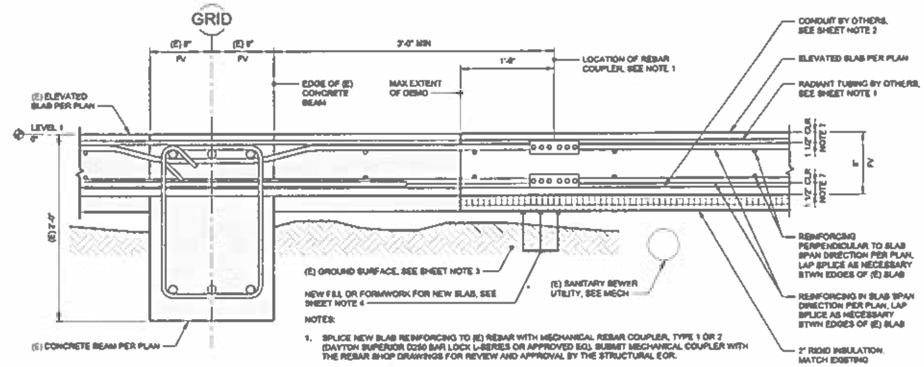
PROJECT No. 10315.24002

SHEET NUMBER S-211



1 S-301 DEMOLITION SECTION - PARALLEL TO SLAB SPAN

SCALE: 1 1/2" = 1'-0"

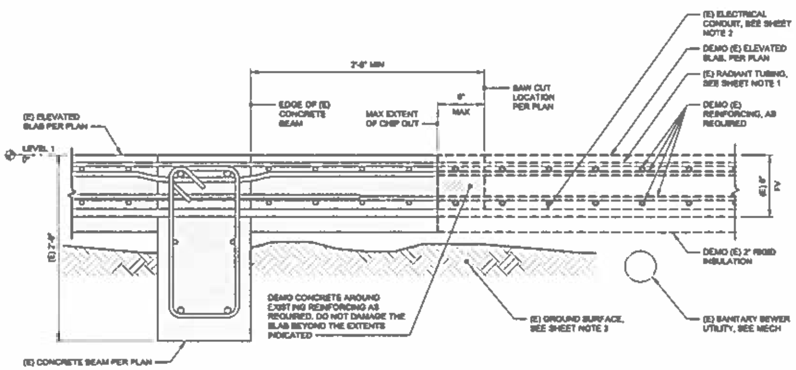


NOTES:

1. SPLICE NEW SLAB REINFORCING TO (E) REBAR WITH MECHANICAL REBAR COUPLER, TYPE 1 OR 2 (DAYTON SUPERIOR D250 BAR LOCK L-SERIES OR APPROVED EQ). SUBMIT MECHANICAL COUPLER WITH THE REBAR SHOP DRAWINGS FOR REVIEW AND APPROVAL BY THE STRUCTURAL EOR.

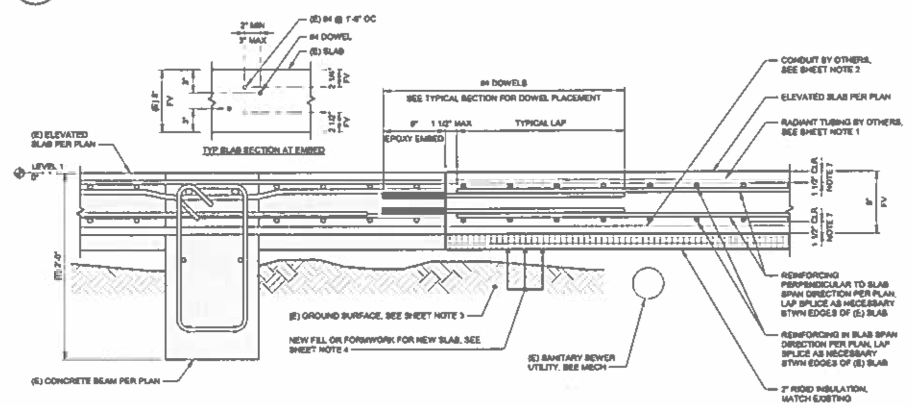
2 S-301 REPAIR SECTION - PARALLEL TO SLAB SPAN

SCALE: 1 1/2" = 1'-0"



3 S-301 DEMOLITION SECTION - PERPENDICULAR TO SLAB SPAN

SCALE: 1 1/2" = 1'-0"



4 S-301 REPAIR SECTION - PERPENDICULAR TO SLAB SPAN

SCALE: 1 1/2" = 1'-0"

SHEET NOTES

1. RADIANT HEAT TUBING IS PRESENT WITHIN THE EXISTING FLOOR SLAB, SEE MECHANICAL FOR DEMO AND REPAIR DETAILS.
2. UTILITIES, INCLUDING BUT NOT LIMITED TO ELECTRICAL CONDUIT, ARE LOCATED IN THE EXISTING FLOOR SLAB. THE CONTRACTOR MUST TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES DURING DEMO AND REPAIR OPERATIONS. SEE ELECTRICAL AND MECHANICAL FOR DEMO AND REPAIR DETAILS IF UTILITES ARE ENCOUNTERED.
3. THE EXISTING GROUND SUFRACE MAY VARY. THE GRADE BELOW THE FLOOR SLAB MAY HAVE SETTLED SINCE IT'S ORIGINAL CONSTRUCTION. THE CONTRACTOR MUST TAKE ALL MEASURES NECESSARY TO ACCOUNT FOR THE VARIABLE SURFACE OF THE EXISTING SUBGRADE.
4. CONTRACTOR IS RESPONSIBLE FOR THE DESIGN OF FORMWORK TO SUPPORT THE NEW FLOOR SLAB.
5. AT EXISTING TO NEW SURFACES:
   A. ROUGHEN JOINT AND CLEAN ALL DEBRIS
   B. APPLY A BONDING AGENT BETWEEN ALL NEW AND EXISTING CONCRETE SURFACES, SIKA SIKADUR 32-HI-MOD OR APPROVED EQUAL.
6. EXISTING CMU WALLS NOT SHOWN IN TYPICAL DETAILS FOR CLARITY, SHEET S-301 ONLY.
7. MATCH EXISTING CLEAR DIMENSIONS. IF THE DIMENSION VARIES BY MORE THAN 1/2" FROM WHAT IS SHOWN, NOTIFY THE ENGINEER OF RECORD IN A TIMELY MANNER.
8. DO NOT STORE EXCAVATED MATERIAL ON THE FIRST FLOOR SLAB.

REVISIONS

CONSULTANT:

RESPEC
Juneau, AK

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

SHEET TITLE: FOUNDATION DETAILS

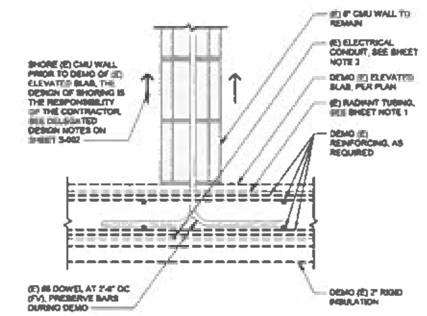
BID DOCUMENTS

PROJECT No. 0315.24002

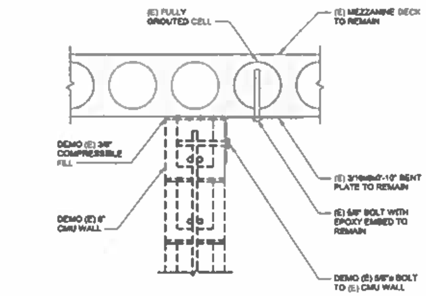
SHEET NUMBER S-301

Item 15B.

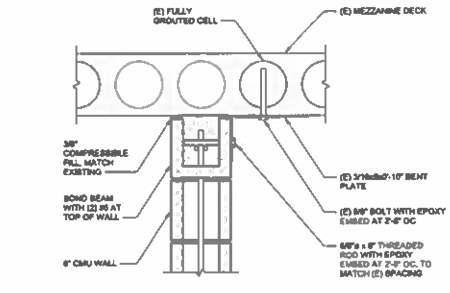
IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION, AFFECTING ALL LABELED SCALES



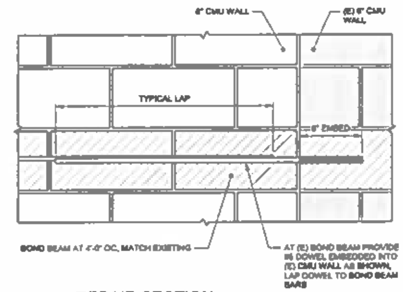
1 S-302 **DEMOLITION SECTION - CMU WALL SHORING**
SCALE: 1 1/2" = 1'-0"



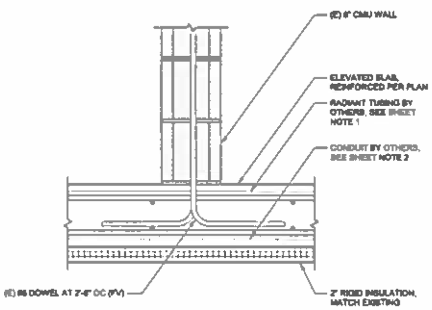
2 S-302 **DEMOLITION SECTION - CMU WALL TOP**
SCALE: 1 1/2" = 1'-0"



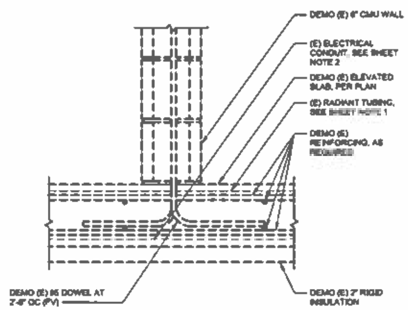
3 S-302 **REPAIR SECTION - CMU WALL TOP**
SCALE: 1 1/2" = 1'-0"



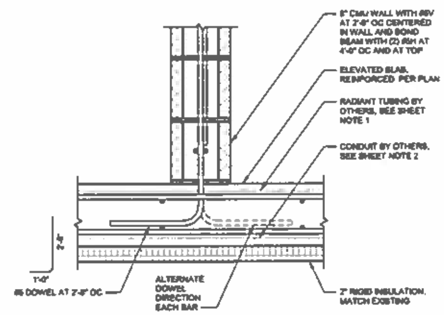
4 S-302 **REPAIR SECTION NEW TO EXISTING CMU WALL JOINT**
SCALE: 1 1/2" = 1'-0"



5 S-302 **REPAIR SECTION - CMU WALL SHORING**
SCALE: 1 1/2" = 1'-0"



6 S-302 **DEMOLITION SECTION - CMU WALL BASE**
SCALE: 1 1/2" = 1'-0"



7 S-302 **REPAIR SECTION - CMU WALL BASE**
SCALE: 1 1/2" = 1'-0"

SHEET NOTES

1. RADIANT HEAT TUBING IS PRESENT WITHIN THE EXISTING FLOOR SLAB, SEE MECHANICAL FOR DEMO AND REPAIR DETAILS.
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7. MATCH EXISTING CLEAR DIMENSIONS, IF THE DIMENSION VARIES BY MORE THAN 1/2" FROM WHAT IS SHOWN, NOTIFY THE ENGINEER OF RECORD IN A TIMELY MANNER.
8. DO NOT STORE EXCAVATED MATERIAL ON THE FIRST FLOOR SLAB.

REVISIONS

CONSULTANT:

RESPEC
Juneau, AK
www.respec.com
AECC163270

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE: FOUNDATION DETAILS
BID DOCUMENTS

PROJECT No. I0315.24002
SHEET NUMBER S-302

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION, AFFECTING ALL LABELED SCALES

GENERAL

DETAIL SYMBOL	1 / M-101	DETAIL IDENTIFICATION; DRAWING ON WHICH DETAIL IS SHOWN
SECTION SYMBOL	A / M-101	SECTION IDENTIFICATION; DRAWING ON WHICH SECTION IS SHOWN
MATCHLINE VIEW REFERENCE	1/M-102A	DETAIL IDENTIFICATION; DRAWING ON WHICH CONTINUATION OF VIEW IS SHOWN
ROOM NAME AND NUMBER DESIGNATION	ROOM NAME 101	
SHEET KEYNOTE	1	
GENERAL SHEET NOTE	3.	
POINT OF CONNECTION		
NORTH ARROW	N	

CONSTRUCTION PHASE LINESTYLE

- TO BE DEMOLISHED OR RELOCATED
- EXISTING TO REMAIN
- NEW

MECHANICAL TAGS

EQUIPMENT DESIGNATION, SEE EQUIPMENT SCHEDULE	EF-1	EQUIPMENT DESIGNATION
PLUMBING FIXTURE DESIGNATION, SEE FIXTURE CONNECTION SCHEDULE	P-01	FIXTURE DESIGNATION

CODE NOTES

1. ALL WORK SHALL BE INSTALLED IN CONFORMANCE WITH APPLICABLE BUILDING CODES INCLUDING THE 2021 INTERNATIONAL BUILDING CODES, 2021 INTERNATIONAL MECHANICAL CODE, 2018 UNIFORM PLUMBING CODE, NATIONAL ELECTRICAL CODE, STATE OF ALASKA, AND CITY OF PETERSBURG.
2. INSTALLATION OF PLUMBING SYSTEMS SHALL BE IN ACCORDANCE WITH CROSS CONNECTIONS REQUIREMENTS OF CHAPTER 6 OF THE UNIFORM PLUMBING CODE AND LOCAL REQUIREMENTS.

GENERAL CONSTRUCTION NOTES

1. ALL PLUMBING CONSTRUCTION SHALL CONFORM TO PLUMBING & DRAINAGE INSTITUTE UNIVERSAL PLUMBING CODE STANDARDS.
2. PROVIDE TESTING AND BALANCING OF RADIANT HEATING SYSTEM AS INDICATED. MATCH EXISTING FLOW RATES. PROVIDE FIELD REPORT OF MANIFOLD ZONE FLOWS.
3. "EXHIBIT" SHEETS (EX-SERIES SHEETS) CONTAINING RECORD INFORMATION ARE PROVIDED FOR REFERENCE. FIELD VERIFY AS REQUIRED.

PIPE FITTINGS & VALVES

- ELBOW, TURNED DOWN
- ELBOW, TURNED UP
- TEE, OUTLET DOWN
- TEE, OUTLET UP
- FLOW DIRECTION
- CONCENTRIC REDUCER
- ISOLATION VALVE
- BALL VALVE
- PRESSURE REDUCING VALVE
- CHECK VALVE
- STRAINER
- STRAINER W/ BLOWDOWN
- PRESSURE TEMPERATURE TAP ("PETE'S PLUG")
- AUTOMATIC FLOW CONTROL VALVE
- BALANCE VALVE
- RELIEF OR SAFETY VALVE
- DRAIN ISOLATION VALVE AND HOSE ADAPTOR
- DRAIN ISOLATION VALVE AND CAP
- UNION
- FLANGE CONNECTION
- PIPE ANCHOR
- PIPE GUIDE
- METER
- THERMOMETER
- PRESSURE GAUGE W/ ISOLATION VALVE
- PUMP - CIRC
- PUMP - INLINE

ABBREVIATIONS

ACFM	ACTUAL CUBIC FEET PER MINUTE	MAX	MAXIMUM
AFF	ABOVE FINISHED FLOOR	MBH	THOUSAND BTU's PER HOUR
AHAP	AS HIGH AS POSSIBLE	MIN	MINIMUM
APPROX	APPROXIMATE	MISC	MISCELLANEOUS
BTU	BRITISH THERMAL UNIT	NC	NORMALLY CLOSED
CFM	CUBIC FEET PER MINUTE	NO	NORMALLY OPEN
CIRC	CIRCULATION	NO.	NUMBER
CLNG	CEILING	OC	ON CENTER
CONT	CONTINUATION, CONTINUED	P	PUMP
CP	CIRCULATING PUMP	PD	PRESSURE DROP
CU	COPPER	PDI	PLUMBING & DRAINAGE INSTITUTE
CW	COLD WATER	POC	POINT OF CONNECTION
(D)	DEMOLISH	PSI	POUNDS PER SQUARE INCH
DIA	DIAMETER	RL	RAINLEADER
DN	DOWN	RZ	RADIANT ZONE
(E)	EXISTING	SA	SUPPLY AIR
ENT	ENTERING	SCH	SCHEDULE
ESP	EXTERNAL STATIC PRESSURE	SQFT	SQUARE FEET
FCO	FLOOR CLEANOUT	SS	STAINLESS STEEL
FD	FLOOR DRAIN	TEMP	TEMPERATURE
FT	FEET	TP	TRAP PRIMER
GAL	GALLONS	TYP	TYPICAL
GALV	GALVANIZED	UL	UNDERWRITER'S LABORATORY
GPM	GALLONS PER MINUTE	UON	UNLESS OTHERWISE NOTED
HW	HOT WATER	VTR	VENT THROUGH ROOF
HWC	HOT WATER CIRCULATION	VR	VENT RISER
HWR	HEATING WATER RETURN	W	WASTE
HWS	HEATING WATER SUPPLY	W/	WITH
HZ	HERTZ	W.C.	WATER COLUMN
ID	INSIDE DIAMETER	WCO	WALL CLEANOUT
IN	INCHES		
LAV	LAVATORY		
LF	LINEAL FEET		
LVG	LEAVING		

REVISIONS

No.	Date	Item

CONSULTANT :

STATE OF ALASKA

RESPEC
Juneau, AK

PROJECT :
PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE :
MECHANICAL SYMBOL LEGEND & ABBREVIATIONS
BID DOCUMENTS

PROJECT No. I0315.24002
SHEET NUMBER
M-001

PART 1 - GENERAL

1. DESCRIPTION:
   A. PROVIDE LABOR, MATERIALS, EQUIPMENT, SUPERVISION OF LABOR, AND PERFORMANCE OF OPERATIONS REQUIRED TO INSTALL MECHANICAL AND PLUMBING SYSTEMS AS DEFINED HEREIN ON THE DRAWINGS AND GENERAL SPECIFICATIONS.

2. CODE:
   A. COMPLETE WORK IN ACCORDANCE WITH THE 2021 EDITIONS OF THE INTERNATIONAL BUILDING CODE (IBC), INTERNATIONAL MECHANICAL CODE (IMC), INTERNATIONAL FUEL-GAS CODE, AND NATIONAL ELECTRICAL CODE (NEC) AND 2018 EDITIONS OF THE UNIFORM PLUMBING CODE (UPC), AS AMENDED BY THE STATE OF ALASKA, THEY CITY OF PETERSBURG, AND STANDARD APPROVED INDUSTRY PRACTICES.

3. DRAWINGS:
   A. DRAWINGS ARE DIAGRAMMATIC AND DO NOT SHOW OFFSETS OR EXACT LOCATIONS OF PIPING UNLESS DIMENSIONED.
   B. REVIEW DRAWINGS AND SPECIFICATIONS FOR FEATURES AND EQUIPMENT FURNISHED BY OTHER CRAFTS BUT INSTALLED IN ACCORDANCE WITH THIS SECTION.
   C. BRING QUESTIONABLE OR CONFLICTING ITEMS TO THE IMMEDIATE ATTENTION OF THE OWNER'S REPRESENTATIVE.
   D. CODES, ORDINANCES, REGULATIONS, MANUFACTURER'S INSTRUCTIONS, OR STANDARDS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH THE DRAWINGS AND SPECIFICATIONS.

4. COORDINATION:
   A. COORDINATE WORK UNDER THIS DIVISION WITH WORK OF OTHER TRADES TO AVOID CONFLICTS, ERRORS, AND DELAYS. REVIEW THE DRAWINGS AND SPECIFICATIONS FOR EQUIPMENT FURNISHED BY OTHER CRAFTS BUT INSTALLED IN ACCORDANCE WITH THIS SECTION.

5. EQUIPMENT SUBSTITUTIONS:
   A. SCHEDULED BASIS OF DESIGN EQUIPMENT IS REPRESENTATIVE OF THE STANDARD OF QUALITY AND PERFORMANCE REQUIRED.
   B. SUBSTITUTIONS WILL BE CONSIDERED IF THE CONTRACTOR DEMONSTRATES, TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE, THAT THE SUBSTITUTES ARE OF EQUAL OR BETTER QUALITY.

6. PRODUCTS:
   A. PROVIDE PRODUCTS AND MATERIALS NEW AND UNUSED, UNLESS OTHERWISE NOTED.
   B. OBTAIN OWNER'S APPROVAL OF PRODUCTS AND MATERIALS PRIOR TO ORDERING OR INSTALLING PARTS OF SYSTEMS.

7. SUBMITTALS:
   A. PROVIDE PRODUCT SUBMITTALS FOR MATERIALS AND EQUIPMENT SHOWN ON THE DRAWINGS, DESCRIBED IN THE SPECIFICATIONS, AND REQUIRED FOR THE COMPLETION OF THE PROJECT.
   B. INCLUDE DIMENSIONS, WEIGHTS, CATALOG NUMBERS, WIRING DIAGRAMS, ROUGH-IN DIMENSIONS, AND PERFORMANCE DATA FOR MATERIAL AND EQUIPMENT.
   C. HIGHLIGHT DEVIATIONS FROM THESE SPECIFICATIONS OR BASIS OF DESIGN. INDEX AND IDENTIFY MATERIALS AND EQUIPMENT BY ITEM, NAME, OR DESIGNATION USED ON THE DRAWINGS.
   D. SUBMITTAL REVIEW IS FOR GENERAL DESIGN AND ARRANGEMENT AND DOES NOT RELIEVE THE CONTRACTOR FROM REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE SUBMITTAL REVIEW DOES NOT INCLUDE CHECKING FOR QUANTITY, DIMENSION, OR FOR PROPER OPERATION. PROVIDE SUBMITTALS ELECTRONICALLY IN PDF FORMAT WITH SECTIONS LABELED AND BOOKMARKED IN ALIGNMENT WITH SPECIFICATIONS.

8. RECORD DRAWINGS:
   A. MAINTAIN A SET OF RECORD DRAWINGS ON THE CONSTRUCTION SITE. RECORD CHANGES ON FLOOR PLANS AND DIAGRAMS AS WORK IS COMPLETED.

PART 2 - PRODUCTS

22 05 29 - HANGERS AND SUPPORTS FOR PLUMBING PIPING AND EQUIPMENT
1. MSS SP-58 COMPLIANT.
2. PIPE SUPPORT: 5/8" HILTI KWIK BOLT-TZ2 SS304 OR 316 WITH AN ATR COUPLER.
   A. PROVIDE STAINLESS STEEL SUPPORT FROM SLAB ABOVE.
   B. PROVIDE CONCRETE INSERTS IN NEW SLAB.
   C. PROVIDE IMPACT SCREW TYPE IN EXISTING SLAB.
3. PIPE HANGER TYPE: SPLIT RING.
   A. STAINLESS STEEL OR OTHER APPROVED CORROSION RESISTANT MATERIAL.

22 11 00 - FACILITY WATER DISTRIBUTION
1. TRAP PRIMER PIPING:
   A. CROSSLINKED POLYETHYLENE (PEX) PIPING (INDIVIDUAL FIXTURES ONLY):
      a. PROVIDE PIPING MANUFACTURED IN ACCORDANCE WITH ASTM F876 AND ASTM F877; BY PEX-A OR ENGEL METHOD; WITH FIBER LAYER (FASER) TO RESTRICT THERMAL EXPANSION, MATCH EXISTING.
      b. PROVIDE ASTMF1960 TYPE PEX-A COLD EXPANSION FITTINGS.
      c. PROVIDE ASSEMBLY CONSISTING OF PROPEX INSERT AND CORRESPONDING PROPEX RING.
      d. PROVIDE TYPE L COPPER BODY WITH UNS 3600 SERIES BRASS PROPEX OUTLET CONNECTIONS MANIFOLDS.

22 13 00 - FACILITY SANITARY SEWER
A. SANITARY WASTE AND VENT PIPING:
B. PVC PIPE: ASTM D2665 OR ASTM D303, SCHEDULE 40.
   a. FITTINGS: PVC.
   b. JOINTS: ASTM D2855, SOLVENT WELD WITH ASTM D2564 SOLVENT CEMENT.

22 13 19.13 - SANITARY DRAINS
1. FLOOR DRAIN, FD-1:
   A. PROVIDE OUTLET SAME AS CONNECTED PIPING. CAULKED OUTLET CONNECTION FOR UNDERGROUND OTHERWISE SCREWED OR CAULKED AS REQUIRED. SECURED BY COUNTER SUNK SCREWS. ANSI A1121.1; GALVANIZED CAST IRON TWO PIECE BODY WITH DOUBLE DRAINAGE FLANGE, WEEP HOLES, REVERSIBLE CLAMPING COLLAR, AND ROUND, ADJUSTABLE POLISHED-BRONZE 6"X6" INCH STRAINER WITH SQUARE HOLES. WITH PRIMING LINE CONNECTION. BASIS OF DESIGN IS ZURN ZN-Z415S-G-P. PROVIDE TRAP PRIMER TAILPIECE ADAPTER.
   B. FLOOR DRAIN STRAINER TOP: SEE ABOVE.
   C. FLOOR CLEANOUT COVER: POLISHED BRONZE.
   D. CONTRACTOR TO VERIFY COMPATABILITY ONSITE.

23 83 00 - RADIANT HEATING FLOOR SYSTEMS
1. RADIANT FLOOR HEATING SYSTEM:
   A. SUPPLY 1/2-INCH DIAMETER UPONOR (WIRSBO) OR PEX COMPOSITE POLYETHYLENE PIPE, EXISTING TUBING IS WIRSBO HEPEX 1/2-INCH DIAMETER:
      a. LAYERED HIGH DENSITY CROSS-LINKED POLYETHYLENE,125 PSIG OPERATING PRESSURE AT MAXIMUM 180 DEGREES F.
      b. JOINTS: ENGINEERED PLASTIC COUPLING FOR USE IN JOINING HEPEX TUBING. 210 DEGREES F MAX OPERATING TEMPERATURE.

PART 3 – EXECUTION

1. GENERAL:
   A. INSTALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND PER INDUSTRY STANDARDS.
   B. PROVIDE CLEARANCE IN HANGERS AND FROM STRUCTURE AND OTHER EQUIPMENT FOR INSTALLATION OF INSULATION AND ACCESS TO VALVES AND FITTINGS. EXAMINE AREAS TO RECEIVE EQUIPMENT FOR COMPLIANCE WITH REQUIREMENTS FOR INSTALLATION TOLERANCES AND OTHER CONDITIONS AFFECTING PERFORMANCE OF THE WORK.
   C. EXAMINE ROUGHING-IN FOR PIPING AND ELECTRICAL CONNECTIONS TO VERIFY ACTUAL LOCATIONS BEFORE EQUIPMENT INSTALLATION.
   D. PROCEED WITH INSTALLATION ONLY AFTER UNSATISFACTORY CONDITIONS HAVE BEEN CORRECTED.

2. PIPING, VALVES, AND SPECIALTIES:
   A. PREPARE AND MAKE FUSION JOINTS ACCORDING TO MANUFACTURER'S REQUIREMENTS USING APPLICABLE TOOLS.
   B. INSTALL SPECIALTIES IN ACCORDANCE WITH MANUFACTURER INSTRUCTIONS.

3. DRAINAGE PIPING:
   A. INSTALL SOIL, WASTE, AND FLOOR DRAINAGE PIPING RUN AS SHOWN AND WITH GRADES NOT LESS THAN 1/4 INCH PER 1 FOOT. PITCH VENT PIPING 1/4 INCH PER 10 FEET.
   B. SECURE HANGER TO CONCRETE SLAB ABOVE. COORDINATE LOCATION WITH REBAR AND RADIANT TUBING.

4. UNDERGROUND PIPING, VALVES, AND SPECIALTIES:
   A. INSTALL PER MANUFACTURER WRITTEN INSTRUCTION WHERE SPECIFIC INSTALLATION IS NOT INDICATED.
   B. INSTALL BEGINNING AT LOW POINT OF EACH SYSTEM.
   C. INSTALL TRUE TO GRADES AND ALIGNMENTS INDICATED WITH UNBROKEN CONTINUITY OF INVERT.
   D. INSTALL REQUIRED GASKETS ACCORDING TO MANUFACTURER WRITTEN INSTRUCTION FOR USE OF LUBRICANTS, CEMENTS, AND OTHER INSTALLING REQUIREMENTS.
   E. INSTALL AT MINIMUM SLOPES UNLESS OTHERWISE NOTED AND IN ACCORDANCE WITH ASTM D2321.

5. PIPING SYSTEM TEST AND START-UP:
   A. TEST AND CLEAN DOMESTIC WATER HEATING SYSTEMS IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE AND UNIFORM PLUMBING CODE.
   B. TEST PIPING SYSTEMS IN THE PRESENCE OF THE OWNER OR OWNER'S REPRESENTATIVE.
   C. PROTECT EQUIPMENT, GAGES, CONTROLS, AND THERMOMETER WELLS DURING TESTS.
   D. TEST DRAINAGE, WASTE, AND VENT PIPING HYDROSTATICALLY BY FILLING PIPING WITH WATER TO THE HIGHEST POINT FOR A MINIMUM OF ONE HOUR.
   E. SYSTEMS SHALL REMAIN TIGHT WITHOUT LEAKS, DISPLACEMENT, OR STRAINING UNDER TESTING CONDITIONS. CORRECT DEFICIENT WORK RESULTING IN LEAKS, DISPLACEMENT, OR STRAINING AND RETEST THE SYSTEM UNTIL NO DEFICIENCIES REMAIN.

6. PENETRATIONS:
   A. SEAL WALL PENETRATIONS THROUGH FIRE RATED WALLS, FLOORS, AND CEILINGS WITH FIRE RATED SEALANT. INSTALL COVER PLATE WHERE EXPOSED.
   B. INSTALL INSULATED PIPES, DUCTS, OR CONDUIT WITH INSULATION BUTTED TO SURFACE.
   C. SEAL UNINSULATED PIPES, DUCTS, OR CONDUIT WITH SILICONE OR CEMENT.
   D. FLASH AND SEAL PENETRATIONS THROUGH ROOF DECK WATERTIGHT.

7. RADIANT PIPING
   A. SEE SHEETS MD111 AND M111.
   B. ISOLATE AND DRAIN RESPECTIVE RADIANT MANIFOLD AND TUBING.
   C. AFTER SAW CUTTING OF SLAB COORDINATE WITH GENERAL CONTRACTOR TO CHIP AWAY CONCRETE TO EXPOSE ENOUGH EXISTING RADIANT TUBING FOR CONNECTION. CLEAN TUBING AND PREP FOR JOINING TO NEW RADIANT TUBING WITH APPROVED COUPLINGS.
   D. PROVIDE PRESSURE TESTING OF RADIANT TUBING. MAINTAIN 5 PSI DURING CONCRETE POURING.

REVISIONS

CONSULTANT:

RESPEC
Juneau, AK

PROJECT:
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

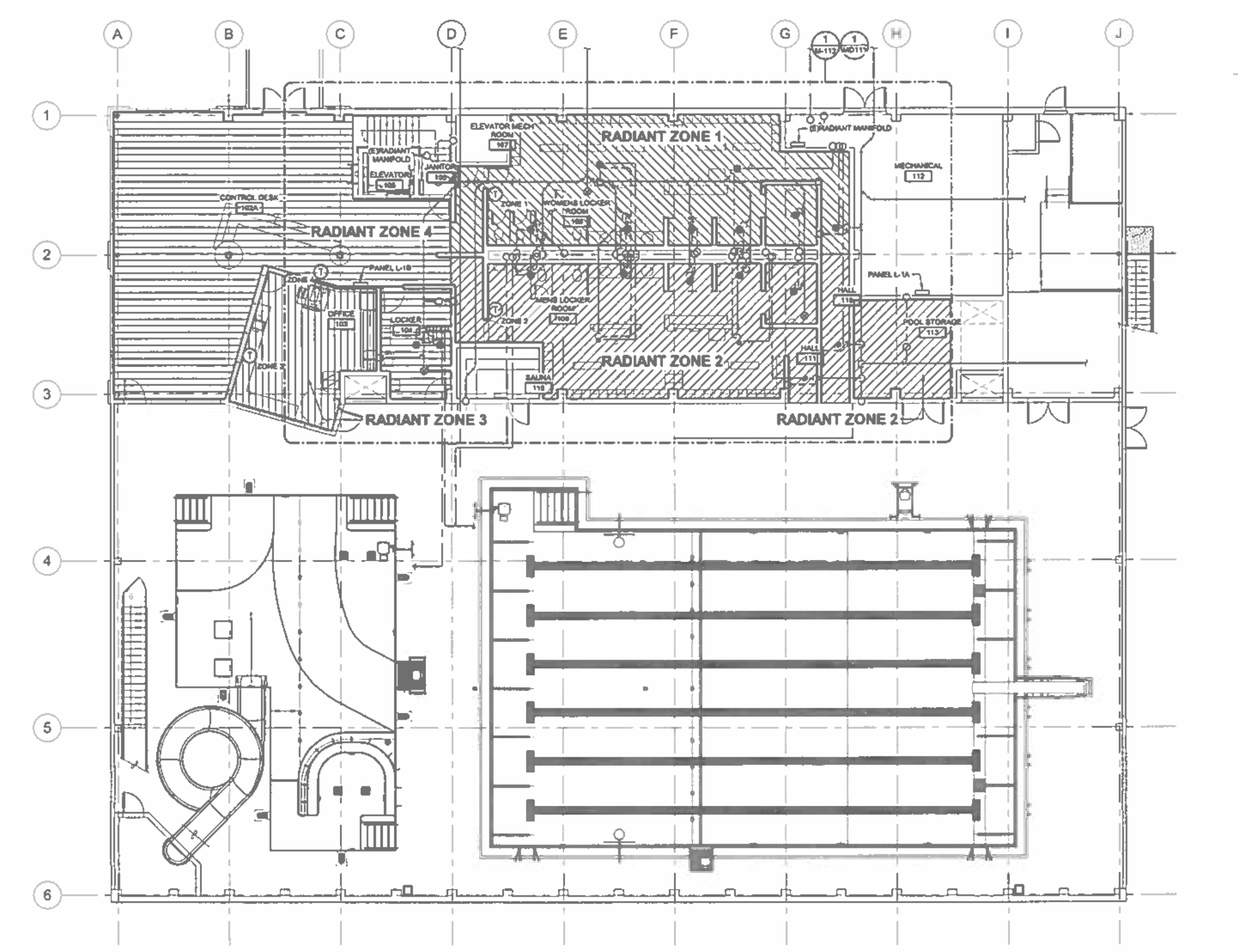
SHEET TITLE:
SPECIFICATIONS
BID DOCUMENTS

DESIGN
DRAWN
CHECKED DM
DATE

PROJECT No.
#0315.24002

SHEET NUMBER
M-002

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION, AFFECTING ALL LABELED SCALES



1 OVERALL PLAN - PLUMBING
M-111 SCALE: 1/8" = 1'-0"

SHEET NOTES

1. EXISTING RADIANT TUBING IS WIRSBO HEPEX 1/2" TUBING, INSTALLED 12" OC. SHOP DRAWINGS OF THE TUBING ARE NOT AVAILABLE.

RADIANT PIPING RECONNECTION INSTRUCTIONS

1. OPEN THE MANIFOLD DRAIN VALVES TO RELEASE WATER FROM THE ZONES AS REQUIRED. FLUSH/PURGE THE TUBING SYSTEM OF WATER WITH COMPRESSED AIR. CHECK FOR DRAINAGE: MAKE SURE NO WATER IS LEFT IN THE TUBING. YOU WANT TO AVOID ANY LEFTOVER WATER DURING REPAIRS.
2. REMOVAL OF RADIANT TUBING: COORDINATE WITH GENERAL CONTRACTOR DURING CONCRETE SLAB REMOVAL FOR TUBING REMOVAL. SAWCUT SLAB FOR INITIAL DEMOLITION, IN AREA SHOWN. REMOVE CONCRETE, REBAR, AND TUBING. CAREFULLY CHIP CONCRETE OUT AROUND TUBING FOR APPROXIMATELY 6-12" FURTHER FROM SAW CUT FOR RECONNECTION TO EXISTING TUBING. SEE DETAIL 2 ON SHEET M-511.
3. USING REPAIR FITTINGS: IF THE LEAK IS AT A JOINT, CUT THE PEX TUBING ON EITHER SIDE OF THE CONNECTION. USE AN APPROVED PEX COUPLING TO CONNECT THE TUBING SECTIONS.
4. REPLACE DAMAGED OR REMOVED SECTIONS: IF THE TUBING SHOWS SIGNIFICANT WEAR OR DAMAGE, CUT OUT THE AFFECTED SECTION AND REPLACE IT WITH A NEW PIECE OF PEX TUBING.
5. TEST THE SYSTEM: ONCE REPAIRS ARE COMPLETE, REFILL THE SYSTEM WITH WATER, CHECK FOR LEAKS, AND ALLOW THE SYSTEM TO RETURN TO OPERATING TEMPERATURE. MONITOR THE AREA FOR SIGNS OF ISSUES.
6. MAINTAIN 3-5 PSI PRESSURE AND CONTINUOUSLY MONITOR DURING CONCRETE SLAB POUR. REPAIR TUBING AS NEEDED. PROVIDE FIELD REPORT OF TEST PRESSURES.
7. VERIFY PROPER OPERATION OF RADIANT TUBING HEATING SYSTEM AFTER COMPLETION AND CONTROL FROM ROOM THERMOSTAT.

CONSULTANT :

Juneau, AK

PROJECT : PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

SHEET TITLE : OVERALL PLAN - RADIANT TUBING

BID DOCUMENTS

PROJECT No. 10315.24002

SHEET NUMBER M-111

REVISIONS

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION, AFFECTING ALL LABELED SCALES

RADIANT PIPING RECONNECTION INSTRUCTIONS

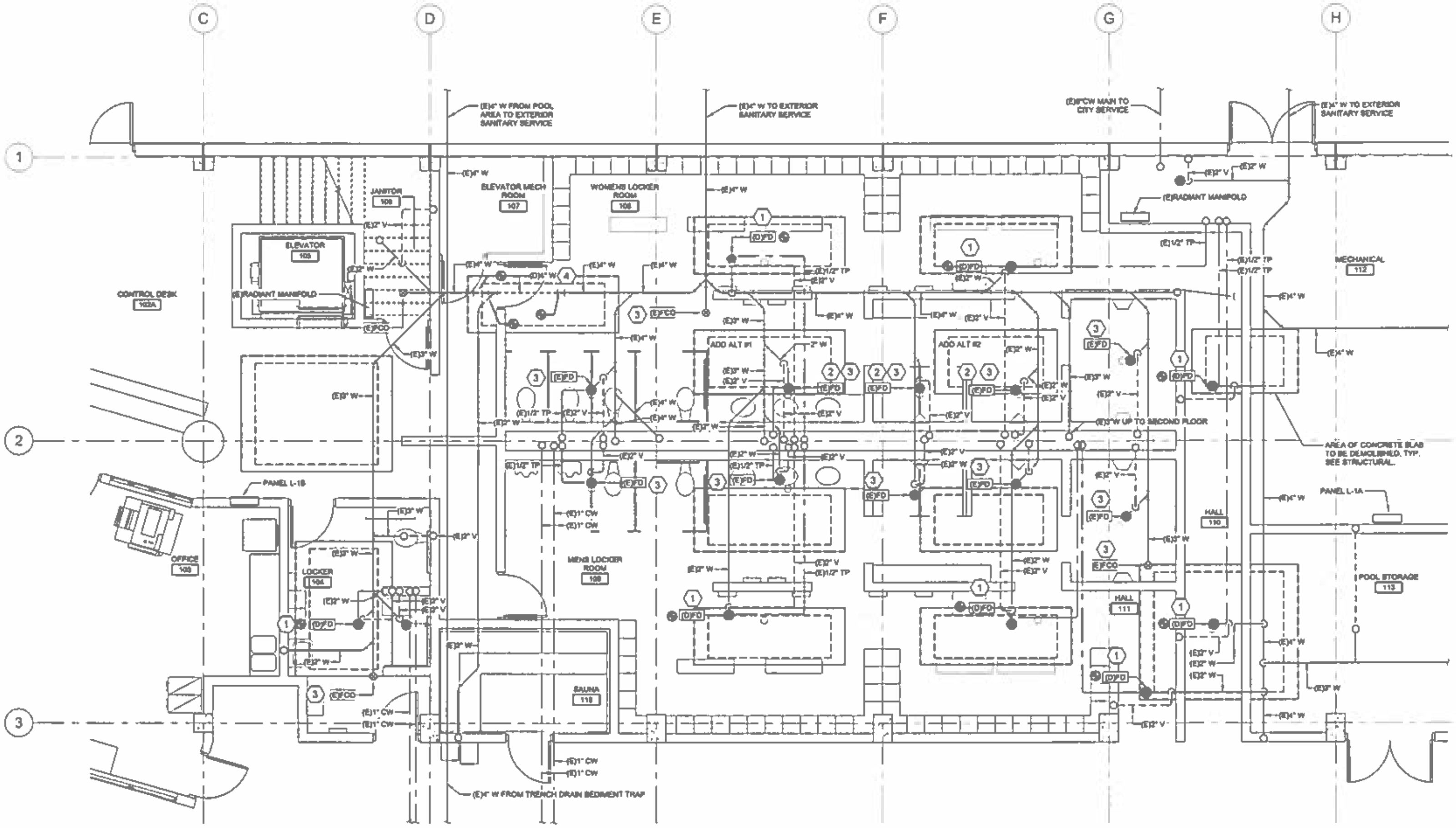
1. OPEN THE MANIFOLD DRAIN VALVES TO RELEASE WATER FROM THE ZONES AS REQUIRED. FLUSH/PURGE THE TUBING SYSTEM OF WATER WITH COMPRESSED AIR. CHECK FOR DRAINAGE: MAKE SURE NO WATER IS LEFT IN THE TUBING. YOU WANT TO AVOID ANY LEFTOVER WATER DURING REPAIRS.
2. REMOVAL OF RADIANT TUBING: COORDINATE WITH GENERAL CONTRACTOR DURING CONCRETE SLAB REMOVAL FOR TUBING REMOVAL. SAWCUT SLAB FOR INITIAL DEMOLITION, IN AREA SHOWN. REMOVE CONCRETE, REBAR, AND TUBING. CAREFULLY CHIP CONCRETEOUT AROUND TUBING FOR APPROXIMATELY 6-12" FURTHER FROM SAW CUT FOR RECONNECTION TO EXISTING TUBING. SEE DETAILS ON SHEET M-511.
3. USING REPAIR FITTINGS: IF THE LEAK IS AT A JOINT, CUT THE PEX TUBING ON EITHER SIDE OF THE CONNECTION. USE AN APPROVED PEX COUPLING TO CONNECT THE TUBING SECTIONS.
4. REPLACE DAMAGED OR REMOVED SECTIONS: IF THE TUBING SHOWS SIGNIFICANT WEAR OR DAMAGE, CUT OUT THE AFFECTED SECTION AND REPLACE IT WITH A NEW PIECE OF PEX TUBING.
5. TEST THE SYSTEM. ONCE REPAIRS ARE COMPLETE, REFILL THE SYSTEM WITH WATER, CHECK FOR LEAKS, AND ALLOW THE SYSTEM TO RETURN TO OPERATING TEMPERATURE. MONITOR THE AREA FOR SIGNS OF ISSUES.
6. MAINTAIN 3-5 PSI PRESSURE AND CONTINUOUSLY MONITOR DURING CONCRETE SLAB POUR. REPAIR TUBING AS NEEDED. PROVIDE FIELD REPORT OF TEST PRESSURES.
7. VERIFY PROPER OPERATION OF RADIANT TUBING HEATING SYSTEM AFTER COMPLETION AND CONTROL FROM ROOM THERMOSTAT.

SHEET NOTES

1. DEMO CONCRETE SLAB PER STRUCTURAL PLANS AS NECESSARY FOR WORK. EXCAVATE, BACKFILL, AND REPAIR CONCRETE SLAB PER STRUCTURAL DRAWINGS.
2. CONTRACTOR RESPONSIBLE FOR LOCATING EXISTING UNDERGROUND PIPING AND UNDERGROUND ELECTRIC. VERIFY INVERT ELEVATIONS OF PIPING AND CONNECTION POINTS PRIOR TO DEMOLITION.
3. UNDERGROUND PIPING IS EXISTING EXCEPT WHERE SHOWN AS DEMOLISHED OR NEW.
4. RADIANT TUBING SHOP DRAWINGS ARE NOT AVAILABLE. EXISTING RADIANT TUBING IS 1/2-INCH DIAMETER AND 12" ON CENTER.
5. ELECTRICAL CIRCUITING TO POWER OUTLETS IS LOCATED UNDERGROUND IN PLASTIC CONDUIT LIKELY AT BOTTOM OF SLAB. SEE ELECTRICAL REFERENCE DRAWINGS FOR CIRCUIT IDENTIFICATION. IDENTIFY AND DEENERGIZE RESPECTIVE CIRCUITS PRIOR TO DEMOLITION OF SLAB.
6. CONTRACTOR IS TO BE PREPARED TO REPAIR/REPLACE ANY DMAGED CONDUITS. THERE ARE NO AS-BUILT RECORDS OF ELECTRICAL ROUTES.

SHEET KEYNOTES (#)

1. DEMO FLOOR DRAIN IN SLAB.
2. ALTERNATE WORK: DEMOLISH IF NECESSARY TO COMPLETE BASE WORK.
3. WHERE DEMO OF CONCRETE NOT REQUIRED AND (E) DRAINS AND CLEANOUTS LEFT IN PLACE, PROVIDE SLOPED LEVELING COMPOUND PER DETAIL 2/A-111. REPLACE FLOOR DRAIN GRATE AND CLEAN OUT COVERS LEVEL WITH FLOOR.
4. DEMO SECTION OF WASTE PIPE AND CLEAR OUT GRAVEL BLOCKAGE.



1 / MD111 — FIRST FLOOR PLAN - PLUMBING - DEMOLITION
SCALE: 1/4" = 1'-0"

REVISIONS

CONSULTANT :

Juneau, AK
RESPEC

PROJECT : PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE : FIRST FLOOR PLAN - PLUMBING - DEMOLITION
BID DOCUMENTS

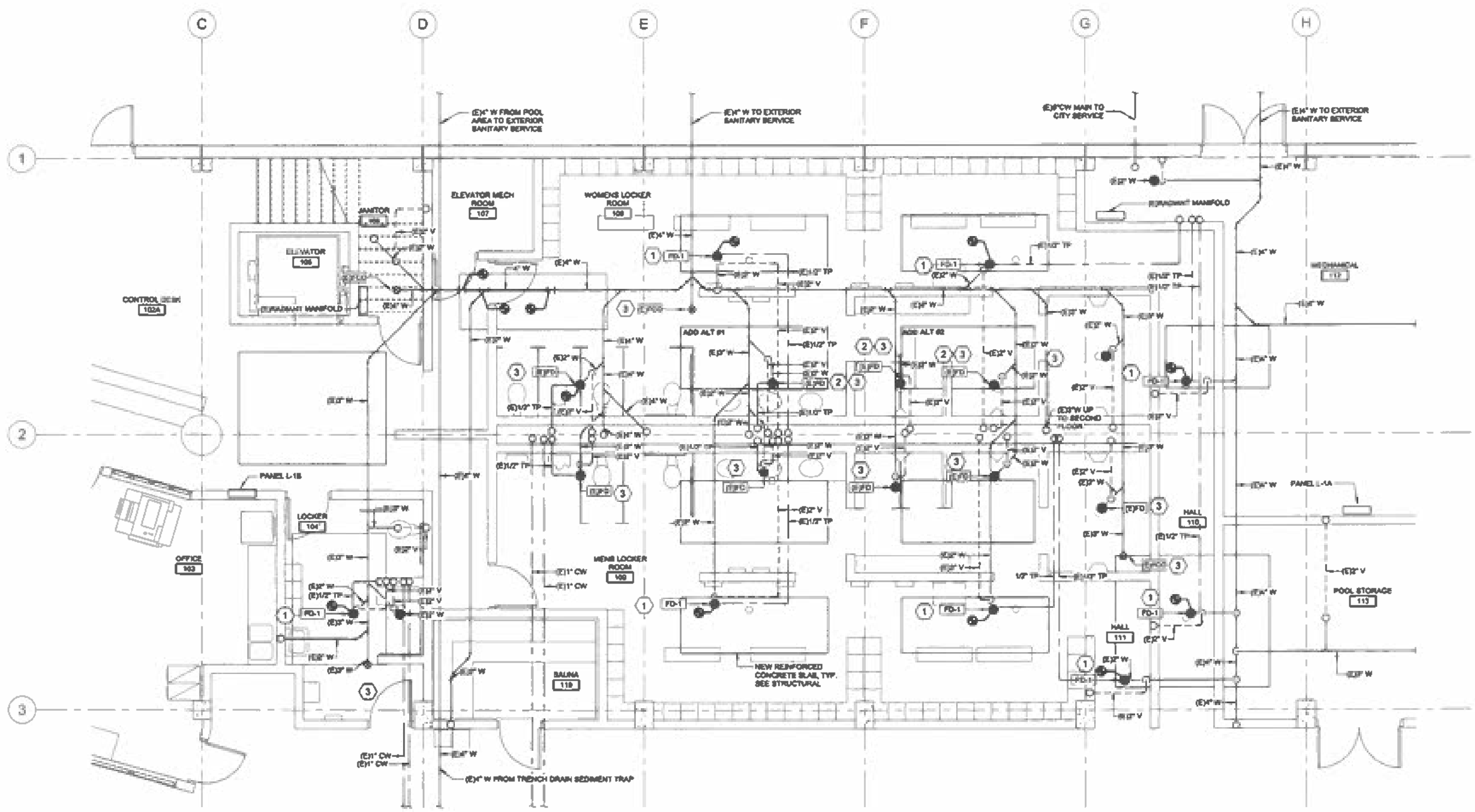
PROJECT No. I0315.24002
SHEET NUMBER MD111

SHEET NOTES

1. REPLACE UNDERGROUND WASTE, VENT, AND TRAP PRIMER PIPING AS NECESSARY IN ORDER TO CONNECT TO EXISTING FLOOR DRAINS. LOCATION OF UNDERGROUND PIPING SHOWN IS NOT AS-BUILT BUT IS TAKEN FROM ORIGINAL CONSTRUCTION DOCUMENTS AND SUBSEQUENT RECENT SITE PICTURES.
2. SEE SHEET M-111 FOR RELATED WORK REPLACING AND REPAIRING RADIANT TUBING IN CUT SLAB LOCATIONS.
3. PRESSURE TEST AND BALANCE MODIFIED RADIANT HEATING SYSTEM AS NEEDED FOR NEW WORK.

SHEET KEYNOTES

1. REPLACE FLOOR DRAIN CONNECT TO EXISTING WASTE PIPING. SECURE EXISTING FLOOR DRAIN WASTE PIPING TO SLAB. SEE DETAIL ON SHEET M-001.
2. ALTERNATE WORK. REPLACE IF NECESSARY TO COMPLETE BASE BID WORK.
3. WHERE DEMO OF CONCRETE NOT REQUIRED AND (E) DRAINS AND CLEANOUTS LEFT IN PLACE, PROVIDE SLOPED LEVELING COMPOUND PER DETAIL 2/A-111. REPLACE FLOOR DRAIN GRATE AND CLEAN OUT COVERS LEVEL WITH FLOOR.



1 M-112 FIRST FLOOR PLAN - PLUMBING
SCALE: 1/4" = 1'-0"

SHEET TITLE: FIRST FLOOR PLAN - UNDERGROUND PLUMBING

BID DOCUMENTS

PROJECT: PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS

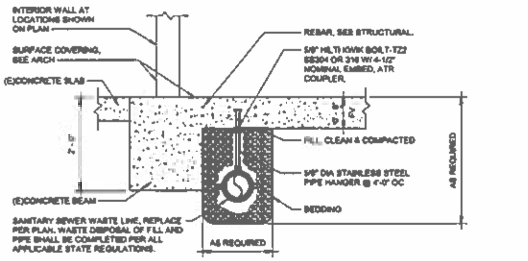
PETERSBURG, ALASKA 99833

RESPEC — Juneau, AK

PROJECT No. 10315.24002

SHEET NUMBER M-112

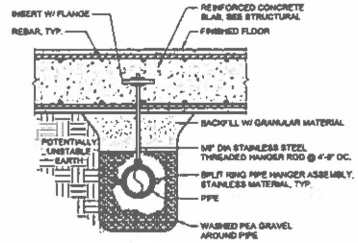
REVISIONS



NOTE: CONTRACTOR SHALL AVOID (E) STRUCTURAL REINFORCEMENT WITH POST INSTALLED ANCHOR INSTALLATION. COORDINATE LENGTH OF HANGER ROD TO MAINTAIN SLOPE OF PIPE AND CONTINUATION OF EXISTING CONNECTION POINTS.

1 / M-511 BELOW GRADE PIPE HANGER - EXISTING SLAB DETAIL

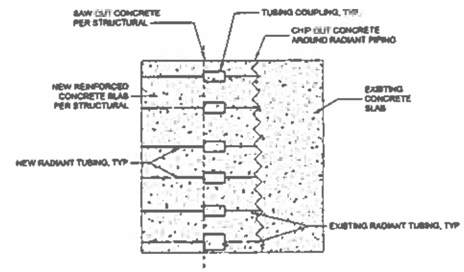
SCALE: NOT TO SCALE



NOTE: CONTRACTOR SHALL AVOID (E) STRUCTURAL REINFORCEMENT WITH POST INSTALLED ANCHOR INSTALLATION. COORDINATE LENGTH OF HANGER ROD TO MAINTAIN SLOPE OF PIPE AND CONTINUATION OF EXISTING CONNECTION POINTS.

2 / M-511 BELOW GRADE PIPE HANGER - NEW SLAB DETAIL

SCALE: NOT TO SCALE



3 / M-511 RADIANT PIPING CONNECTION DETAIL

SCALE: NOT TO SCALE

REVISIONS

CONSULTANT:

Juneau, AK

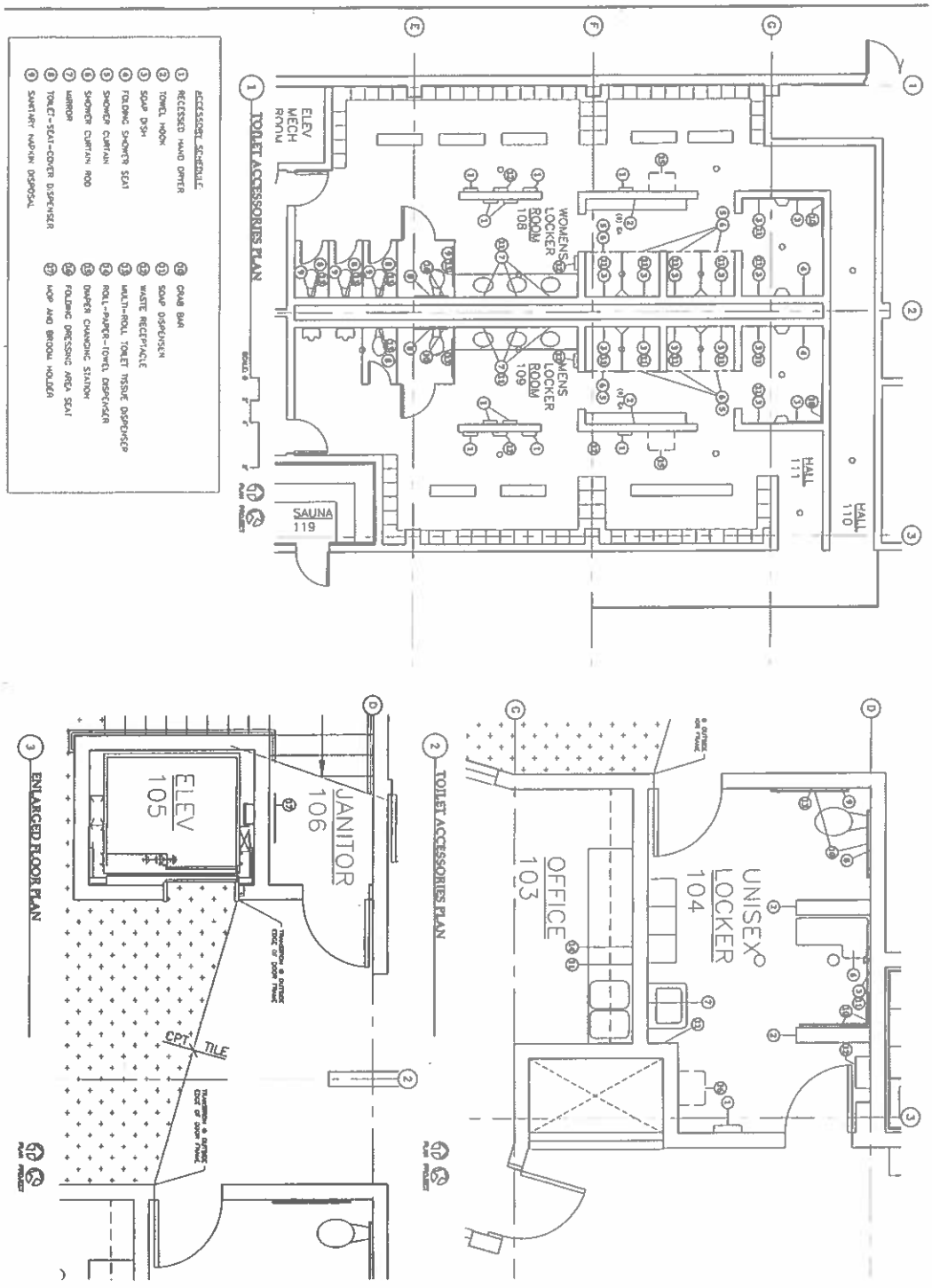
RESPEC

PROJECT:
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

SHEET TITLE:
PLUMBING DETAILS
BID DOCUMENTS

PROJECT No. I0315.24002

SHEET NUMBER M-511



A403

PETERSBURG AQUATIC CENTER
PETERSBURG, ALASKA

Jensen Yorba Lott Inc.

EX1

SHEET TITLE:
EXHIBIT DRAWING

BID DOCUMENTS

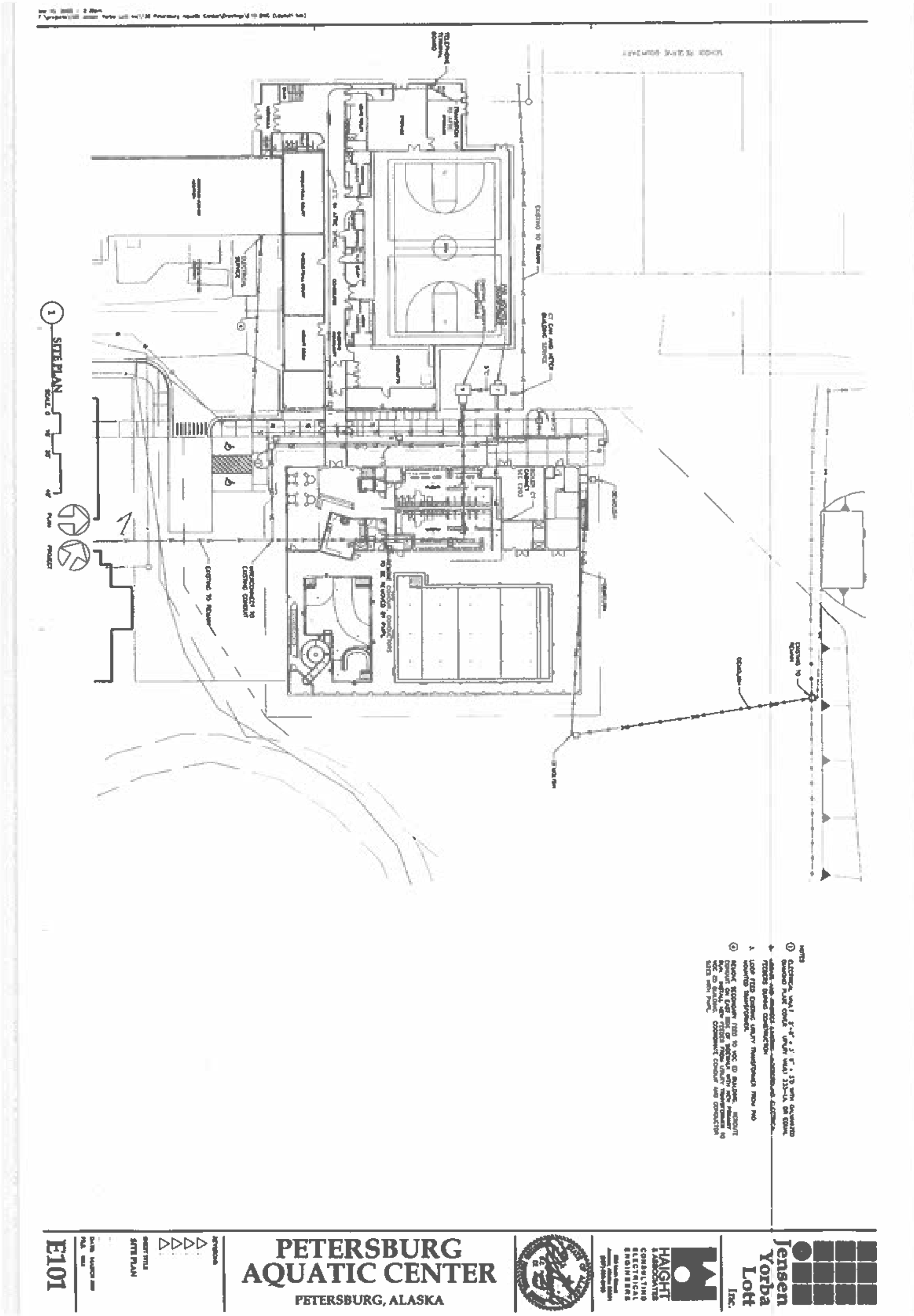
PROJECT:
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

RESPEC
JUNEAU, AK

CONSULTANT:

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION. AFFECTING ALL LABELED SCALES



REVISIONS

SHEET TITLE:
EXHIBIT DRAWING

BID DOCUMENTS

PROJECT:
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

RESPEC
Juneau, AK
www.respec.com

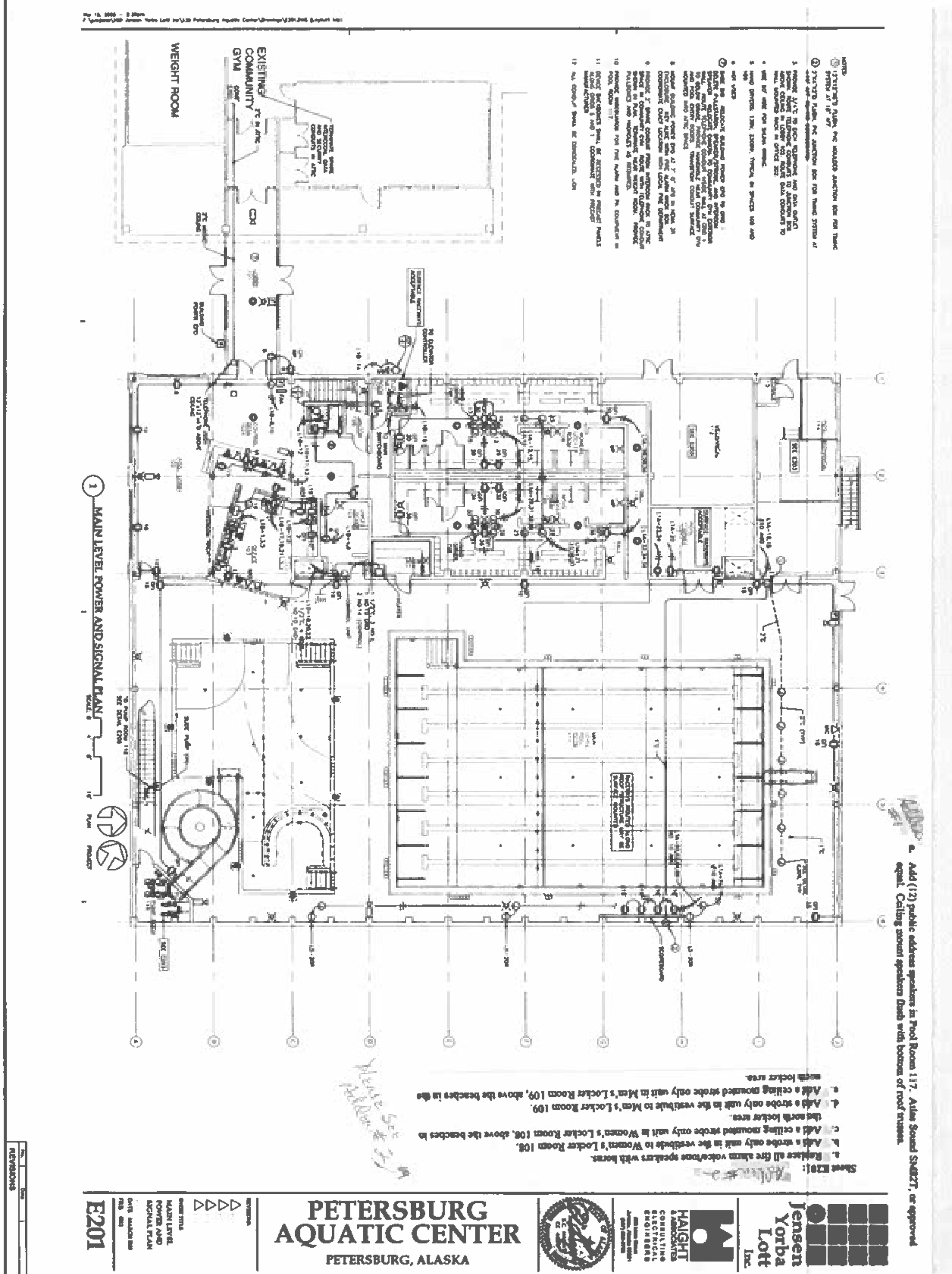
CONSULTANT:

DESIGN
DRAWN
CHECKED
DATE

PROJECT No.
00315.24002

EX2

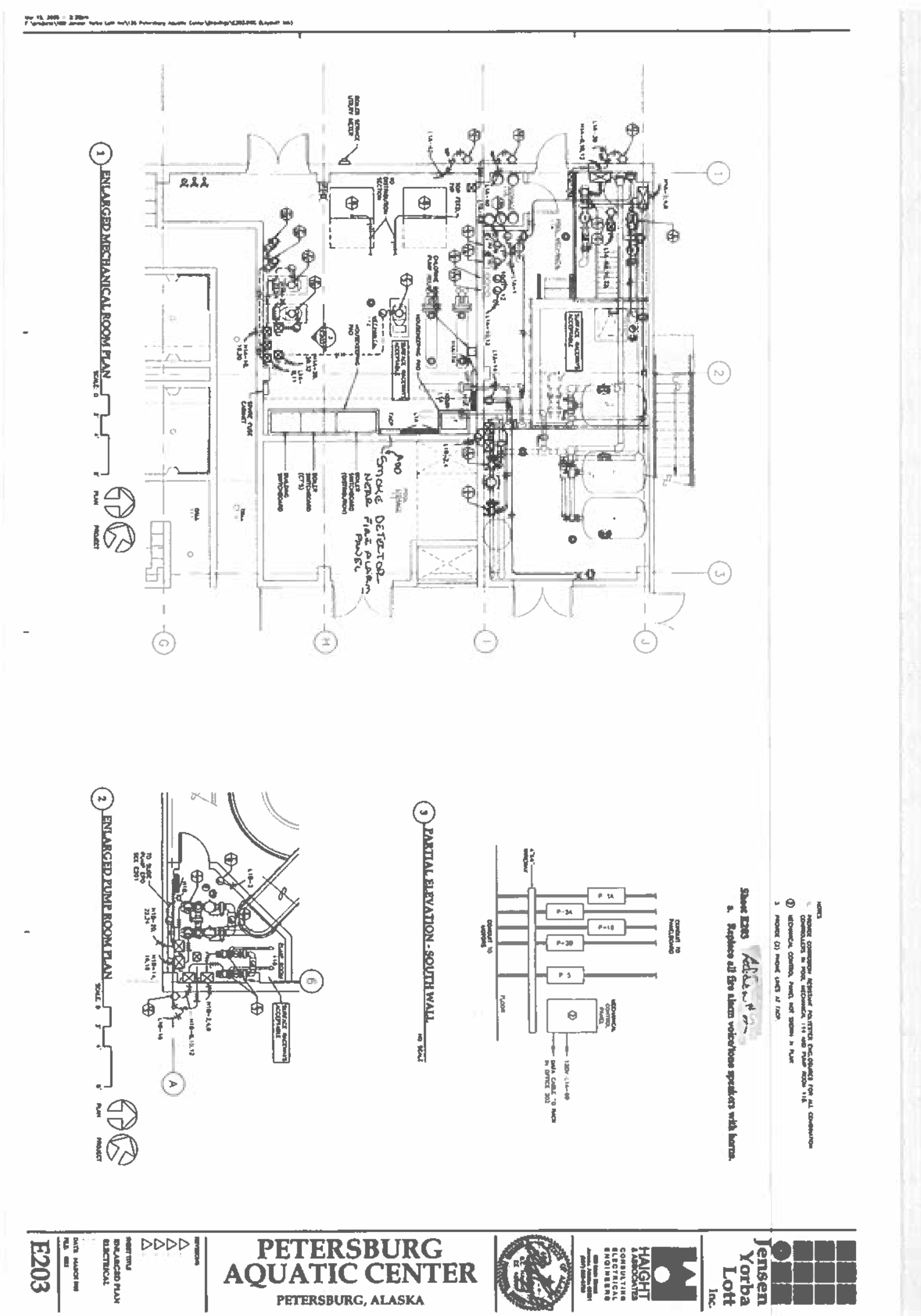
IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION. AFFECTING ALL LABELED SCALES.


EXISTING COMMUNITY GYM
WEIGHT ROOM
MAIN LEVEL POWER AND SIGNAL PLAN
a. Add (12) public address speakers in Pool Room 117. Atlas Sound SM82T, or approved equal. Ceiling mount speakers flush with bottom of roof trusses.
Sheet E201:
a. Replace all fire alarm voice/tone speakers with horns.
b. Add a strobe only unit in the vestibule to Women's Locker Room 108.
c. Add a ceiling mounted strobe only unit in Women's Locker Room 108, above the benches in the north locker area.
d. Add a strobe only unit in the vestibule to Men's Locker Room 109.
e. Add a ceiling mounted strobe only unit in Men's Locker Room 109, above the benches in the north locker area.
Jensen Yorba Lott Inc.
HAIGHT & ASSOCIATES
PETERSBURG AQUATIC CENTER
PETERSBURG, ALASKA
E201

EX3 PROJECT No. 0315.24002	SHEET TITLE : EXHIBIT DRAWING BID DOCUMENTS	PROJECT : PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS PETERSBURG, ALASKA 99833	RESPEC Juneau, AK Juneau, AK 99801 AECC	CONSULTANT :

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING IT'S PRODUCTION. AFFECTING ALL LABELED SCALES

Item 15B.

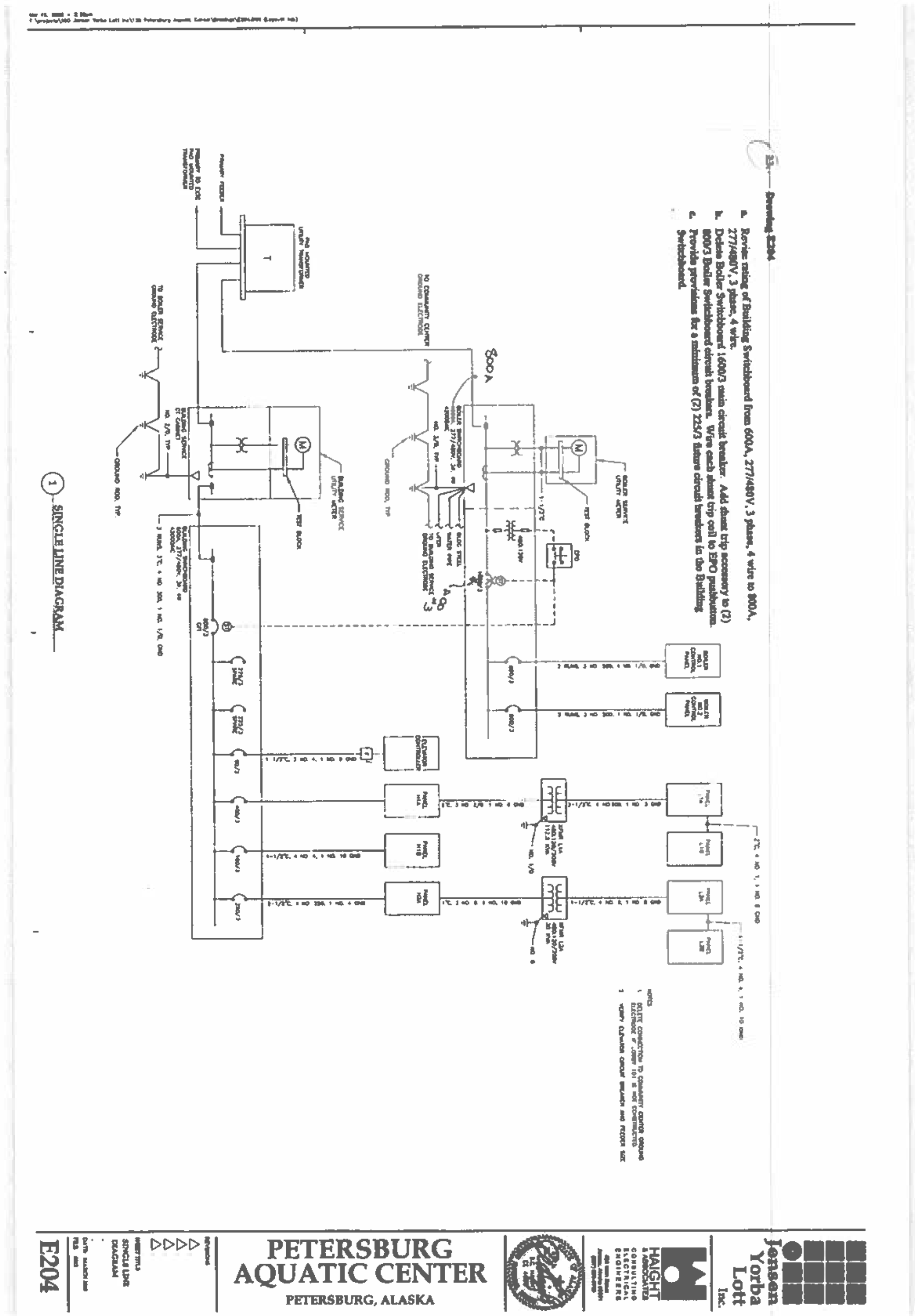


SHEET TITLE : EXHIBIT DRAWING BID DOCUMENTS	PROJECT : PETERSBURG AQUATIC CENTER DRAIN LINE REPAIRS PETERSBURG, ALASKA 99833	RESPEC Juneau, AK 9109 Mendenhall Mall Rd. Ste 4 Juneau, AK 99801 Phone: 907 780 6060 www.respec.com AECC 183270		CONSULTANT :

PROJECT No. B3152.24002

SHEET NUMBER EX4

IF THIS BAR DOES NOT MEASURE EXACTLY ONE INCH, THE SCALE OF THIS DRAWING HAS BEEN ALTERED DURING ITS PRODUCTION. AFFECTING ALL LABELED SCALES 1"



Drawing E204
a. Revise rating of Building Switchboard from 600A, 277/480V, 3 phase, 4 wire to 800A, 277/480V, 3 phase, 4 wire.
b. Delete Boiler Switchboard 1600/3 main circuit breaker. Add shunt trip accessory to (2) 800/3 Boiler Switchboard circuit breakers. Wire each shunt trip coil to EPO pushbutton.
c. Provide provisions for a minimum of (2) 225/3 future circuit breakers in the Building Switchboard.
800A
1 SINGLE LINE DIAGRAM
PETERSBURG AQUATIC CENTER
PETERSBURG, ALASKA
E204
Jensen Yorba Lott Inc.

REVISIONS

SHEET TITLE:
EXHIBIT DRAWING

BID DOCUMENTS

PROJECT:
PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS

PETERSBURG, ALASKA 99833

RESPEC
Juneau, AK
9109 Mendenhall Mall Rd. Ste 4
Juneau, AK 99801
Phone 907 780 6060
www.respec.com
AECC183270

CONSULTANT:

EX5

PANEL H1A

120/208V, 3 PH, 4W, 225 AMPS — MAIN LUGS ONLY — LOCATION: MECHANICAL 112 — MOUNT: SURFACE

CKT	DESCRIPTION	BREAKER	A	B	C	CKT	BREAKER	DESCRIPTION
1	POOL HEAT 114 HEAT PUMP 113	20/1	1.3	3.0		2	20/1	CHLORINE BOOSTER PUMP
3	LOUNGE 101-102, OFFICE 103, LOCKER 104,	20/1	3.6		0.0	4	20/1	CHLORINE BOOSTER PUMP
5	CONCESSION BUILDING, MAU/MUA	20/1	0.0	0.0		6	20/1	SPARE
7	SPARE	20/1	0.0		0.0	8	20/1	SPARE
9	SPARE	20/1	0.0	0.0		10	20/1	SPARE
11	SPARE	20/1	0.0		0.0	12	20/1	SPARE
13	SPARE	20/1	0.0	0.0		14	20/1	SPARE
15	SPARE	20/1	0.0		0.0	16	20/1	SPARE
17	SPARE	20/1	0.0	0.0		18	20/1	SPARE
19	SPARE	20/1	0.0		0.0	20	20/1	SPARE
21	SPARE	20/1	0.0	0.0		22	20/1	SPARE
23	SPARE	20/1	0.0		0.0	24	20/1	SPARE
25	HWD DRYER 106	30/2	2.1	1.7		26	20/1	RECEPTACLES 106
27	RECEPTACLES 107	20/1	0.9		0.6	28	20/1	RECEPTACLES 108
29	SPARE	20/1	0.0	0.0		30	20/1	SPARE
31	SPARE	20/1	0.0		0.0	32	20/1	SPARE
33	SPARE	20/1	0.0	0.0		34	20/1	SPARE
35	SPARE	20/1	0.0		0.0	36	20/1	SPARE
37	SPARE	20/1	0.0	0.0		38	20/1	SPARE
39	SPARE	20/1	0.0		0.0	40	20/1	SPARE
41	----	175/3	37.5	37.5		42	----	----
		375	43.3	43.1	39.3			

BALANCED CONNECTED LOAD = 125.5 KVA / 231 AMPS
MAXIMUM CONNECTED LOAD = 125.5 KVA / 231 AMPS
MAXIMUM DEMAND LOAD = 0.0 KVA / 0.0 AMPS

* GFI CIRCUIT BREAKER

PANEL H1B

120/208V, 3 PH, 4W, 225 AMPS — MAIN LUGS ONLY — LOCATION: PUMP ROOM 118 — MOUNT: SURFACE

CKT	DESCRIPTION	BREAKER	A	B	C	CKT	BREAKER	DESCRIPTION
1	SPARE	30/1	0.0	1.3		2	15/3	JET Pump
3	SPARE	30/1	0.0		1.3	4		
5	SPARE	30/1	0.0	1.3		6	15/3	JET Pump
7	SPARE	30/1	0.0		1.3	8		
9	SPARE	30/1	0.0	1.3		10	15/3	JET Pump
11	SPARE	30/1	0.0		1.3	12		
13	SPARE	30/1	0.0	3.9		14	25/3	SUB. PUMP
15	SPARE	30/1	0.0		3.9	16		
17	SPARE	30/1	0.0	3.9		18	25/3	SUB. PUMP
19	SPARE	30/1	0.0		3.9	20		
21	SPARE	30/1	0.0	3.9		22	25/3	SUB. PUMP
23	SPARE	30/1	0.0		3.9	24		
25	SPARE	30/1	0.0	0.0		26	20/1	SPARE
27	SPARE	30/1	0.0		0.0	28	20/1	SPARE
29	SPARE	30/1	0.0	0.0		30	20/1	SPARE
31	SPARE	30/1	0.0		0.0	32	20/1	SPARE
33	SPARE	30/1	0.0	0.0		34	20/1	SPARE
35	SPARE	30/1	0.0		0.0	36	20/1	SPARE
37	SPARE	30/1	0.0	0.0		38	20/1	SPARE
39	SPARE	30/1	0.0		0.0	40	20/1	SPARE
41	SPARE	30/1	0.0	0.0		42	20/1	SPARE
43	SPARE	30/1	0.0		0.0	44	20/1	SPARE
45	SPARE	30/1	0.0	0.0		46	20/1	SPARE
47	SPARE	30/1	0.0		0.0	48	20/1	SPARE
			0.0	13.0	13.0			

BALANCED CONNECTED LOAD = 26.0 KVA / 36 AMPS
MAXIMUM CONNECTED LOAD = 313 KVA / 36 AMPS
MAXIMUM DEMAND LOAD = 0.0 KVA / 0.0 AMPS

PANEL L1B

120/208V, 3 PH, 4W, 225 AMPS — MAIN LUGS ONLY — LOCATION: CONCESS. ROOM 109A — MOUNT: FLUSH

CKT	DESCRIPTION	BREAKER	A	B	C	CKT	BREAKER	DESCRIPTION
1	RECEPTACLE OFFICE 101	20/1	0.2	0.9		2	20/1	RECEPTACLE 110
3	RECEPTACLE OFFICE 102	20/1	0.1		0.9	4	20/1	RECEPTACLES 107,109
5	RECEPTACLE OFFICE 103	20/1	0.1	0.9		6	20/1	RECEPTACLES 108,104
7	RECEPTACLE OFFICE 104	20/1	0.1		0.9	8	20/1	RECEPTACLES 105,106
9	RECEPTACLE OFFICE 105	20/1	0.9	1.5		10	20/1	RECEPTACLES 110
11	RECEPTACLE 108A	20/1	0.9		1.5	12	20/1	RECEPTACLES 111
13	RECEPTACLE 108A	20/1	1.8	1.5		14	20/1	(E-1)
15	EXISTING LIGHTING	20/1	1.8		3.6	16	15/3	SAUNA HEATER/CONTROLS
17	COPY MACHINE	20/1	0.7	4.7		18		
19	WATER COOLER	20/1	0.7		4.7	20	15/3	SAUNA HEATER
21	SPARE	20/1	0.0	0.0		22	20/1	SPARE
23	SPARE	20/1	0.0		0.0	24	20/1	SPARE
25	SPARE	20/1	0.0	0.0		26	20/1	SPARE
27	SPARE	20/1	0.0		0.0	28	20/1	SPARE
29	SPARE	20/1	0.0	0.0		30	20/1	SPARE
31	SPARE	20/1	0.0		0.0	32	20/1	SPARE
33	SPARE	20/1	0.0	0.0		34	20/1	SPARE
35	SPARE	20/1	0.0		0.0	36	20/1	SPARE
37	SPARE	20/1	0.0	0.0		38	20/1	SPARE
39	SPARE	20/1	0.0		0.0	40	20/1	SPARE
41	SPARE	20/1	0.0	0.0		42	20/1	SPARE
43	SPARE	20/1	0.0		0.0	44	20/1	SPARE
45	SPARE	20/1	0.0	0.0		46	20/1	SPARE
47	SPARE	20/1	0.0		0.0	48	20/1	SPARE
			7.0	9.1	7.0			

BALANCED CONNECTED LOAD = 23.1 KVA / 70 AMPS
MAXIMUM CONNECTED LOAD = 23.1 KVA / 36 AMPS
MAXIMUM DEMAND LOAD = 0.0 KVA / 0.0 AMPS

PANEL L1A

120/208V, 3 PH, 4W, 400 AMPS — MAIN LUGS ONLY — LOCATION: MECHANICAL 112 — MOUNT: SURFACE

CKT	DESCRIPTION	BREAKER	A	B	C	CKT	BREAKER	DESCRIPTION
1	LIGHT HEATER	20/1	1.3	3.0		2	20/1	CHLORINE BOOSTER PUMP
3	SPARE	20/1	0.0		0.0	4	20/1	CHLORINE BOOSTER PUMP
5	SPARE	20/1	0.0	0.0		6	20/1	CHLORINE CONTROLLER
7	SPARE	20/1	0.0		0.0	8	20/1	CHLORINE CONTROLLER
9	P-3A	15/1	0.5	0.6		10	20/1	CHEM FEED SYSTEM
11	P-3B	15/1	0.5		0.6	12	20/1	CHEM FEED SYSTEM
13	HWD DRYER 105	30/2	2.3	0.8		14	20/1	RECEPTACLES 111
15	HWD DRYER 105	30/2	2.3		0.7	16	20/1	RECEPTACLES 112
17	HWD DRYER 104	30/2	2.3	1.4		18	20/1	RECEPTACLES 113
19	HWD DRYER 104	30/2	2.3		0.5	20	20/1	HANGING/RECEPTACLE 113
21	HWD DRYER 103	30/2	2.3	2.5		22	20/1	SPARE
23	HWD DRYER 103	30/2	2.3		2.5	24	20/1	RECEPTACLES 104
25	HWD DRYER 102	30/2	2.3	1.7		26	20/1	RECEPTACLES 105
27	HWD DRYER 102	30/2	2.3		1.7	28	20/1	RECEPTACLES 106
29	HWD DRYER 101	30/2	2.3	0.5		30	20/1	RECEPTACLES 107
31	HWD DRYER 101	30/2	2.3		0.5	32	20/1	RECEPTACLES 109
33	HWD DRYER 100	30/2	2.3	1.2		34	20/1	RECEPTACLES 110
35	HWD DRYER 100	30/2	2.3		1.2	36	20/1	RECEPTACLES 108
37	PANEL L1B	100/2	9.1	9.0		38	GF-1	RECEPTACLES 101
39	----	----			0.0	40	GF-2	RECEPTACLES 102
41	----	----	0.0			42	GF-3	RECEPTACLES 103
			37.1	37.0	33.1			

BALANCED CONNECTED LOAD = 77.5 KVA / 215 AMPS
MAXIMUM CONNECTED LOAD = 77.5 KVA / 220 AMPS
MAXIMUM DEMAND LOAD = 0.0 KVA / 0.0 AMPS

* GFI CIRCUIT BREAKER

PANEL L1A

120/208V, 3 PH, 4W, 400 AMPS — MAIN LUGS ONLY — LOCATION: MECHANICAL 112 — MOUNT: SURFACE

CKT	DESCRIPTION	BREAKER	A	B	C	CKT	BREAKER	DESCRIPTION
43	LAP POOL N. UNDERWATER	20/1	1.0	2.0		44	20/1	LEISURE POOL W.S.B. UNDERWATER
45	LAP POOL N. UNDERWATER	20/1	1.0		2.0	46	20/1	LEISURE POOL W.S.B. UNDERWATER
47	LAP POOL E. UNDERWATER	20/1	1.0	2.0		48	20/1	LEISURE POOL E. UNDERWATER
49	LAP POOL E. UNDERWATER	20/1	1.0		2.0	50	20/1	LEISURE POOL E. UNDERWATER
51	LAP POOL E. UNDERWATER	20/1	1.0	1.0		52	20/1	SPARE
53	LAP POOL E. UNDERWATER	20/1	1.0		1.0	54	20/1	SPARE
55	LAP POOL W. UNDERWATER	20/1	1.0	2.0		56	20/1	SPARE
57	LAP POOL W. UNDERWATER	20/1	1.0		2.0	58	20/1	SPARE
59	LAP POOL S. UNDERWATER	20/1	1.0	2.0		60	20/1	SPARE
61	LAP POOL S. UNDERWATER	20/1	1.0		2.0	62	20/1	SPARE
63	LAP POOL S. UNDERWATER	20/1	1.0	1.0		64	20/1	SPARE
65	CONTROL PANEL 112	20/1	1.0		1.0	66	20/1	SPARE
67	SPARE	20/1	0.0	0.5		68	20/1	REC. 117
69	SPARE	20/1	0.0		0.5	70	20/1	SPARE
71	SPARE	20/1	0.0	0.0		72	20/1	SPARE
73	SPARE	20/1	0.0		0.0	74	20/1	SPARE
75	SPARE	20/1	0.0	0.0		76	20/1	SPARE
77	SPARE	20/1	0.0		0.0	78	20/1	SPARE
79	SPARE	20/1	0.0	0.0		80	20/1	SPARE
81	SPARE	20/1	0.0		0.0	82	20/1	SPARE
83	SPARE	20/1	0.0	0.0		84	20/1	SPARE
			31.1	27.0	24.4			

BALANCED CONNECTED LOAD = 77.5 KVA / 215 AMPS
MAXIMUM CONNECTED LOAD = 77.5 KVA / 215 AMPS
MAXIMUM DEMAND LOAD = 0.0 KVA / 0.0 AMPS

* GFI CIRCUIT BREAKER

PANEL H2A

120/208V, 3 PH, 4W, 225 AMPS — MAIN LUGS ONLY — LOCATION: MECHANICAL 112 — MOUNT: SURFACE

CKT	DESCRIPTION	BREAKER	A	B	C	CKT	BREAKER	DESCRIPTION
1	LOUNGE 101,201,301,401 LIGHTING	20/1	3.6	15.3		2	20/1	HEAT/1
3	POOL ROOM LIGHTING	20/1	3.0		13.3	4	20/1	HEAT/2
5	POOL ROOM LIGHTING	20/1	3.0	13.3		6	20/1	HEAT/3
7	POOL ROOM LIGHTING	20/1	3.0		13.3	8	20/1	HEAT/4
9	POOL ROOM LIGHTING	20/1	3.0	7.0		10	20/1	SPARE
11	POOL ROOM LIGHTING	20/1	3.0		7.0	12	20/1	SPARE
13	POOL ROOM LIGHTING	20/1	3.0	2.0		14	20/1	SPARE
15	POOL ROOM LIGHTING	20/1	3.0		2.0	16	20/1	SPARE
17	POOL ROOM LIGHTING	20/1	3.0	2.0		18	20/1	SPARE
19	POOL ROOM LIGHTING	20/1	3.0		2.0	20	20/1	SPARE
21	POOL ROOM LIGHTING	20/1	3.0	2.0		22	20/1	SPARE
23	POOL ROOM LIGHTING	20/1	3.0		2.0	24	20/1	SPARE
25	POOL ROOM LIGHTING	20/1	3.0	2.0		26	20/1	SPARE
27	POOL ROOM LIGHTING	20/1	3.0		2.0	28	20/1	SPARE
29	POOL ROOM LIGHTING	20/1	3.0	2.0		30	20/1	SPARE
31	POOL ROOM LIGHTING	20/1	3.0		2.0	32	20/1	SPARE
33	POOL ROOM LIGHTING	20/1	3.0	2.0		34	20/1	SPARE
35	POOL ROOM LIGHTING	20/1	3.0		2.0	36	20/1	SPARE
37	POOL ROOM LIGHTING	20/1	3.0	2.0		38	20/1	SPARE
39	CONTROL BUILDING	20/1	1.0		0.0	40	20/1	SPARE
41	SPARE	20/1	0.0	0.0		42	20/1	SPARE
			48.2	45.9	48.4			

BALANCED CONNECTED LOAD = 138.5 KVA / 192 AMPS
MAXIMUM CONNECTED LOAD = 138.5 KVA / 214 AMPS
MAXIMUM DEMAND LOAD = 0.0 KVA / 0.0 AMPS

PANEL L1B

120/208V, 3 PH, 4W, 225 AMPS — MAIN LUGS ONLY — LOCATION: CONCESS. ROOM 109A — MOUNT: FLUSH

CKT	DESCRIPTION	BREAKER	A	B	C	CKT	BREAKER	DESCRIPTION
1	RECEPTACLE OFFICE 101	20/1	0.2	0.9		2	20/1	RECEPTACLE 110
3	RECEPTACLE OFFICE 102	20/1	0.1		0.9	4	20/1	RECEPTACLES 107,109
5	RECEPTACLE OFFICE 103	20/1	0.1	0.9		6	20/1	RECEPTACLES 108,104
7	RECEPTACLE OFFICE 104	20/1	0.1		0.9	8	20/1	RECEPTACLES 105,106
9	RECEPTACLE OFFICE 105	20/1	0.9	1.5		10	20/1	RECEPTACLES 110
11	RECEPTACLE 108A	20/1	0.9		1.5	12	20/1	RECEPTACLES 111
13	RECEPTACLE 108A	20/1	1.8	1.5		14	20/1	(E-1)
15	EXISTING LIGHTING	20/1	1.8		3.6	16	15/3	SAUNA HEATER/CONTROLS
17	COPY MACHINE	20/1	0.7	4.7		18		
19	WATER COOLER	20/1	0.7		4.7	20	15/3	SAUNA HEATER
21	SPARE	20/1	0.0	0.0		22	20/1	SPARE
23	SPARE	20/1	0.0		0.0	24	20/1	SPARE
25	SPARE	20/1	0.0	0.0		26	20/1	SPARE
27	SPARE	20/1	0.0		0.0	28	20/1	SPARE
29	SPARE	20/1	0.0	0.0		30	20/1	SPARE
31	SPARE	20/1	0.0		0.0	32	20/1	SPARE
33	SPARE	20/1	0.0	0.0		34	20/1	SPARE
35	SPARE	20/1	0.0		0.0	36	20/1	SPARE
37	SPARE	20/1	0.0	0.0		38	20/1	SPARE
39	SPARE	20/1	0.0		0.0	40	20/1	SPARE
41	SPARE	20/1	0.0	0.0		42	20/1	SPARE
43	SPARE	20/1	0.0		0.0	44	20/1	SPARE
45	SPARE	20/1	0.0	0.0		46	20/1	SPARE
47	SPARE	20/1	0.0		0.0	48	20/1	SPARE
			7.0	9.1	7.0			

BALANCED CONNECTED LOAD = 23.1 KVA / 70 AMPS
MAXIMUM CONNECTED LOAD = 23.1 KVA / 36 AMPS
MAXIMUM DEMAND LOAD = 0.0 KVA / 0.0 AMPS

Jensen Yorba Lott Inc.

HAIGHT ENGINEERS CONSULTING ELECTRICAL ENGINEERS

PETERSBURG AQUATIC CENTER
PETERSBURG, ALASKA

REVISIONS

No.	Date	By

E205

PROJECT No. 0315.24002
Project Manager EX6

SHEET TITLE: EXHIBIT DRAWING
BID DOCUMENTS

PROJECT: PETERSBURG AQUATIC CENTER
DRAIN LINE REPAIRS
PETERSBURG, ALASKA 99833

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CONSULTANT:

To the Editor and Borough Assembly Members:

Finding a place to call home in Petersburg has become a growing concern and even a struggle. We've seen how difficult it's become to find affordable, long-term housing, whether we're looking to rent or to buy. Many have found it a challenge that is insurmountable. It's a concern that affects everyone from families just starting out, to our fishermen, to the folks who serve our schools and clinics.

We need more homes. Our town's housing vacancy rates are incredibly low. This isn't just an inconvenience; it's a real barrier. It impacts our ability to bring in the new teachers, nurses, and skilled workers our community needs, and it makes it harder for our own children to see a future where they can afford to stay in the town they grew up in.

We've seen the rise of short-term rentals listed on sites like Airbnb and Vrbo. We understand that tourism is important to our economy. But currently there are very few local rules specifically for these short-term rentals. This lack of planning is contributing to an imbalance.

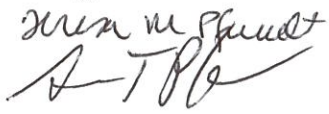
Other communities in Southeast Alaska have taken steps like requiring owners to live on-site or setting limits on how many homes can be used as short-term rentals. Here in Petersburg, our focus has largely been on collecting taxes from these rentals. While those taxes are important for our borough, they don't solve the core problem: when a home shifts from being a place where a family lives year-round to a vacation spot, it's one less home available for long-term housing.

It means one less option for the police officer trying to move his family here, the mechanic moving to town to work on boats or cars, or the local business owner needing to house an employee. This trend can push up rental prices and home values, making it harder for our own wages to keep pace, making it difficult for people to put down roots and build a life in Petersburg.

How can we ensure our tourism thrives while we protect the homes that make Petersburg a strong, affordable place to live? This isn't about shutting down all short-term rentals; it's about finding a sensible path forward that ensures the health of our community.

Addressing the lack of short-term housing regulations in Petersburg is a crucial step we must take to protect Petersburg's future for us all.

Warmly,



Alec and Teresa Pfundt

August 5, 2025

(907-518-1414)