



REQUEST FOR PROPOSALS

DESIGN SERVICES FOR SEISMIC UPGRADES

February 10, 2023



TABLE OF CONTENTS

Section 1

Announcement of Request for Proposals	page 3
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Section 2

2.1	Form of Consultants Response	page 4
2.2	Prohibition of Alterations	page 5
2.3	Equal Employment Compliance Requirement	page 5
2.4	Disclosure of Interest/Public Record	page 5
2.5	Reservations	page 5
2.6	Insurance Coverage	page 6
2.7	Selection Process Schedule	page 7
2.8	Design Firm Proposals	page 8
2.9	Selection Criteria	page 8
2.10	Scope of Services Agreement and Fee Negotiations	page 10
2.11	Inquiries	page 10
2.12	Collusion	page 10
2.13	Disclosure	page 10
2.14	Special Contract Requirements	page 10

Section 3

3.1	Introduction	page 11
3.2	Scope of Requested Services	page 11
3.3	District Provided Services	page 12
3.4	Required Proposal and Response Criteria Information	page 12
3.5	Protest Procedure	page 14
3.6	Negotiation	page 16
3.7	Attachments	page 16

Attachments

ATTACHMENT A	Description of Work
ATTACHMENT B	Certifications
ATTACHMENT C	Insurance Requirements
ATTACHMENT D	Consultant References
ATTACHMENT E	Form of Agreement
ATTACHMENT F	Talent Elementary School Seismic Evaluation Report
ATTACHMENT G	Talent Middle School Seismic Evaluation Report



SECTION 1

ANNOUNCEMENT OF REQUEST FOR PROPOSALS

Electronic Proposal response will be received by Phoenix Talent School District, District Office, located at **401 W 4th Street, Phoenix, OR 97535** until **2:00 PM, March 2, 2023**. Email or faxed responses will not be accepted. Late proposals will not be accepted.

The Phoenix Talent School District is seeking to select an Architect to provide the services described herein Design Services for the Phoenix Talent School District, Talent Elementary School and Talent Middle School Seismic Upgrades Project.

Project Description:

The Phoenix Talent School District is seeking a design firm to provide Design Services for Seismic upgrades at the following schools:

- **Talent Elementary School:**
Comprehensive seismic improvement of classrooms.
- **Talent Middle School:**
Comprehensive seismic improvement of gymnasium, cafeteria and classrooms.

The District reserves the right to reject any Proposal response not in compliance with all prescribed public procedures and requirements and to waive informalities in this Request for Proposals response process.

The Request for Proposals may be obtained from: <http://hmkco.org/bid-documents/>.

A MANDATORY Pre-Proposals Meeting and Project Orientation will be held at 1:00 PM on February 16, 2023 at Talent Elementary School, located at 307 Wagner Creek Road, Talent, OR 97540. We will then visit the project sites.

Dated this 10th Day of February, 2023

Jon McCalip
Director of Facilities
Phoenix Talent School District



SECTION 2

2.1 FORM OF CONSULTANTS RESPONSE

- A. **IMPORTANT NOTICE:** Oregon State Statutes under the Proposals Based Selection (RFP) process allow the Phoenix Talent School District to go through a prescribed process to solicit qualifications for architectural and engineering services and award professional services contracts. The District takes the RFP process seriously, and it is its intent to solicit professional consultant qualification submittals that are accurate, and that each consultant intends to honor. Consultants are expected to submit responses that are accurate, complete, and contain all terms and conditions that they feel are necessary. If after submitting a response, the consultant finds changes are necessary, the consultant may change or withdraw their response at any time up to the time of response opening. However, after the due date and time, the response may not be changed or altered in any way. If accepted, a response is considered complete and the consultant will be expected to honor their submittal.
- B. Proposals Based Selection (RFP) is allowed under Oregon Administrative Rules to solicit professional services. This Request for Proposals allows consultants the opportunity to submit to the District the qualifications response that they feel will best serve the interests of the District.
- C. Consultants shall submit one (1) electronic copy on a flash drive of their response and all attachments, containing all required signatures. All responses shall be addressed as follows:

Phoenix Talent School District
Attn: Jon McCalip, Director of Facilities
401 W 4th Street
Phoenix, OR 97535

- D. Responses including cover letter & resumes are limited to 30 pages of content, single-sided, 8 1/2" x 11", and minimum 11-point font. Any additional information deemed appropriate should be submitted as a separate document on a separate flash drive.
- E. In addition, the name and address of the consultant and the title of the proposal, **IDENTICAL IN WORDING** to that appearing on the cover of this RFP **MUST** appear on the outside of said response, i.e., Request for Proposals: Design Services for Seismic Upgrades.
- F. All responses must be received by the District no later than 2:00 PM, date as specified in this RFP. The District will not be responsible for responses that were not received due to technological error. It is the proposing firm's responsibility to ensure that the District has received their statement of qualifications.
- G. The original Certificate of Understanding of Request for Proposals (ATTACHMENT B) shall be signed with blue ink.
- H. Electronically transmitted responses via email or fax will not be accepted.



- I. Firms intending to submit an RFP Response must attend the MANDATORY Pre-Proposal Meeting and Project Orientation. Only those Firms recorded as attending this meeting will be considered by the District. The District will not accept responses where the attendees subrogate their attendance to a firm who was not in attendance. No other meeting will be held.

2.2 PROHIBITION OF ALTERATIONS

- A. Responses that are incomplete or conditioned, or that contain any alterations, addition of items not called for in the RFP, or that contain irregularities of any kind, or that are not in conformity with the law or requirements of this RFP may be rejected.
- B. No contact of any District personnel is permitted during this solicitation process. All questions are to be directed to HMK Company.

2.3 EQUAL EMPLOYMENT COMPLIANCE REQUIREMENT

- A. By submitting this response, the consultant certifies conformance to the applicable Federal Acts, Executive Orders and Oregon Statutes and Regulations concerning affirmative action toward equal employment opportunities. All information and reports that are required by the Federal or Oregon Governments having responsibilities for the enforcement of such laws shall be supplied to the District upon request, for purposes of investigations to ascertain compliance with such acts, orders, statutes, or regulations.

2.4 DISCLOSURE OF INTEREST/PUBLIC RECORD

- A. No employee or elected official of the District may own more than 5% of a business that is submitting a response to this RFP unless it is fully disclosed in the proposal documents.
- B. Responses will not be made a part of the public record until AFTER the evaluation process is completed. Said files, including the evaluation report, will then be available for public review. If a response contains any information that is considered a trade secret under ORS 192.345, respondents must mark each sheet of such information with the following legend: "This information constitutes a trade secret under ORS 192.345, and shall not be disclosed except in accordance with the Oregon Public Records Law, ORS Chapter 192." (See Section 3.5.G, 3.5.H, and 3.5.I)

2.5 RESERVATIONS

- A. The Phoenix Talent School District herein expressly reserves the following rights:
 1. To negotiate separately with any source whatsoever in any manner necessary to serve the best interest of the District. The District does not intend to award a contract solely on the basis of any response made to this Request for Proposals or in any way to pay for information solicited or obtained. The information obtained will be used in determining what seems to best serve the interest of the District. The District intends to award a single contract for the Project on the basis of quality of services offered,



qualifications, experience, accessibility, and communication skills.

2. To reject any or all responses as permitted by Oregon Statutes or Administrative Rule and to waive informalities in responses if it is in the public's best interest to do so.
3. To consider the competency and responsibility of consultants and of their proposed sub-consultants (if any) in making the award.
4. In the event any consultant or consultants to whom the contract is awarded shall default in executing said formal contract or in furnishing satisfactory Errors and Omissions insurance coverage within the time and in the manner hereinafter specified, to terminate the contract negotiations and to solicit a fee contract with another consultant or consultants.
5. In the event only one response is received; the Superintendent or School Board Members may, at their election, return the proposal unopened.
6. To make the recommendation to award based on its best judgment as to which qualifications response best meets the District's expectations of a program, balancing the highest standards of quality, innovativeness and services requested.
7. To make such changes or corrections in the RFP as it may deem necessary or desirable prior to the response opening. Consultants will be notified of such changes in writing by addenda electronically transmitted to the address on file with HMK Company.
8. Proposers responding to the RFP do so solely at their expense, and the District is not responsible for any Proposer expenses associated with the RFP. Without limitation, the District shall not be responsible for any costs of preparation of the responses.
9. The District will not discriminate against any person or firm based upon race, color, national origin, gender, age, religion, disability, political affiliation or marital status. The District extends equal opportunity to all persons and specifically encourages disadvantaged and businesses owned by women to access and participate in this and all District projects, programs, and services.
10. The District can request for any additional information it deems reasonably necessary to evaluate, rank and select the most qualified Proposer to perform the Services described in the RFP.

2.6 INSURANCE COVERAGE

- A. The District will require the successful consultant to obtain and furnish a Certificate of Insurance listing the Phoenix Talent School District as Certificate holder. The District will require the successful consultant to obtain and furnish a Blanket Errors and Omissions Coverage (\$2,000,000) and as further detailed in ATTACHMENT C.



2.7 SELECTION PROCESS SCHEDULE

- A. Request for Proposals Issued February 10, 2023
- B. Mandatory Pre-Proposals Meeting February 16, 2023
 - 1. A MANDATORY Pre-Proposal Meeting and Project Orientation will be held at 1:00 PM on February 16, 2023 at Talent Elementary School, located at 307 Wagner Creek Road, Talent, OR 97540. We will then visit the project sites. Statements made at the pre-proposal meeting will not be binding on the District unless confirmed by written addenda. Potential Consultants may obtain additional information about the project and overall District goals at this time.
- C. Deadline, Request for Clarifications February 23, 2023
 - 1. Inquiries for clarification or additional information as described in Section 2.11, if any, must be received by 2:00 PM on February 23, 2023.
- D. Solicitation Protest Period Ends February 23, 2023
 - 1. Protests to the RFP, the Contract or any aspect of the selection process as set out in Section 3.5 must be received by David McKay, Principal in Charge, HMK Company by 2:00 PM on February 23, 2023.
- E. Proposals Response Due Date March 2, 2023
 - 1. Responses must be received by the District no later than 2:00 PM, March 2, 2023. Responses submitted after this time will be subject to rejection at the District's discretion.
- F. Review Responses by District March 9, 2023
- G. Notify Firms Selected for Interviews 5:00 PM on March 10, 2023
- H. Interviews March 15, 2023
 - 1. Consultants shall be available for possible interviews (at the District's sole discretion) on March 15, 2023, no other dates will be held.
- I. Notification of Selected Consultant March 17, 2023
 - 1. A Consultant will be selected, if at all, and sent a selection notice. The unsuccessful consultants will be sent a copy of the selection notice.
- J. Consultant Fee Negotiations March 20, 2023
 - 1. Following the notice of selection, the District and Consultant will enter into negotiations regarding specific scope of services and fees. If a negotiated agreement cannot be reached between both parties, the District will terminate negotiations with the first chosen Consultant and begin the same



negotiations with the second selected Consultant until a contract can be executed between both parties.

K. Selection Protest Period Ends March 24, 2023

1. Any protests of the selection decision must be received 7 calendar days after consultant selection by District. Any hearing on a protest will be scheduled as soon as reasonably possible.

L. District Board Action to Award Contract April 6, 2023

Contracts Issued April 7, 2023

M. Contracts Executed No Later Than April 13, 2023

1. The District intends to enter into a single Contract for the Project with the selected Consultant within 7 days of award.
2. The schedule of events in Section 2.7 is intended to allow prospective Consultants sufficient time for requests for information, objections to the requirements of this RFP, and preparation of responses. Prospective Consultants who think that the schedule is unreasonable should notify the District immediately. If the District receives a substantial number of adverse comments, the District will consider extending the schedule of events by issuing an addendum.

N. **Proposed process schedule subject to change.**

2.8 DESIGN FIRM PROPOSALS

- A. Licensed Architect in the State of Oregon
- B. Firm and personnel experience in the design and construction of a new publicly owned building in Oregon. A minimum of 5 similar projects in the last 5 years.
- C. Firm must have extensive experience with the Oregon Public Contracting Code, ORS 279A, 279B, and 279C, as well as the applicable administrative rules interpreting the same.
- D. Specific personnel experience with publicly owned office design and construction.
- E. Relevant experience of proposed design team including sub-consultants working together on projects.
- F. Reliability of performance, related professional skills, design schedule and budget adherence.
- G. References, both clients, sub-consultants, and contractors.

2.9 SELECTION CRITERIA



- A.** The established criteria to be used to select the response that best meets the overall goals and public contracting needs of the District may include, but are not limited to:
1. Licensed Architect in the State of Oregon.
 2. Attended the MANDATORY Pre-Proposal Meeting.
 3. Quality & substance of response.
 4. Response compliance with format stipulated in this RFP.
 5. Firm and personnel experience in the design and construction to add, modernize and/or remodel publicly owned K-12 schools in Oregon. Firm must have extensive experience with Oregon Public Contracting Code, ORS 279A, 279B, and 279C, as well as the applicable administrative rules interpreting the same.
 6. Service, which could include adequate personnel and/or reputation of architect and their proposed engineering consultants.
 7. Specific personnel experience with public projects design and construction.
 8. Reliability of performance, related professional skills, design schedule and budget adherence.
 9. Team approach to working with project participants.
 10. Management ability, planning ability and philosophy.
 11. Communication skills, with the public and in committee work.
 12. Quality of design documents in relation to errors omissions and coordination.
 13. References, both clients and contractors.
 14. Interview.
- B.** The evaluation criteria and maximum number of points available for each criterion is further detailed in Section 3.4.
- C.** The Consultants response submittals will be evaluated and scored by a panel made up of a combination of District Administrative personnel, School Board Members, and District's represented consultants.
- D.** If the District chooses to interview firms, each firm is required to bring only the following people filling these position Principal in Charge, Project Architect, Structural Engineer. Maximum of 10 points will be awarded to each of the interviewees and 10 points for the overall firm. A maximum of 40 points will be awarded.
- E.** The District will seek negotiations and award of a professional services contract with



the firm it deems the most qualified provider who provides the best overall qualifications in the proposal and interview. The District is seeking to select the most qualified firm to act as the Architect of record for design and construction for the Project.

- F. The selected firms to do the work will be required to submit a total detailed fee proposal and identify their time by project and activity for each billing issued for the District's internal cost accounting use.

2.10 SCOPE OF SERVICES AGREEMENT AND FEE NEGOTIATIONS

- A. Following the "Notice of top Selected Consulting Firm", the District will meet with the top selected firm to determine the specific scope of services and negotiate the required fees for such services. Following an agreement in principle of the specified scope of services and fees, the District shall issue a formal written contract for these services. The formation of such a contract shall not be complete, and the District shall not be liable thereon, until the formal written contract is executed. In the event that an agreement cannot be made with the top selected firm, the District will terminate the negotiations and reserve the right to negotiate with the second top selected firm. This process will continue until negotiations are successful.

2.11 INQUIRIES

- A. All inquiries related to the RFP documents, response format and selection process, are to be directed to David McKay, Principal in Charge, HMK Company, email: david.mckay@hmkco.org, with a copy to Kristi Nelson, Project Administrator, HMK Company, email: kristi.nelson@hmkco.org. Firms responding to this RFP are prohibited from contacting Phoenix Talent School District employees.
- B. Clarification questions will be answered in the form of written addenda and sent to all RFP holders who attend the Mandatory Pre-Proposals meeting and Orientation.

2.12 COLLUSION

- A. A consultant submitting a proposal hereby certifies that no officer, agent or employee of the District has a pecuniary interest in this RFP; that the response is made in good faith without fraud, collusion or connection of any kind with any other consultant and that the consultant is competing solely in its own behalf without connection with, obligation to any undisclosed person or firm.

2.13 DISCLOSURE

- A. Responses will not be made part of the public record until after the evaluation process is completed.

2.14 SPECIAL CONTRACT REQUIREMENTS

- A. Pursuant to Oregon Revised Statute (ORS) Chapter 200, District encourages the participation of small businesses, certified by the Oregon Certification Office for Business Inclusion and Diversity ("COBID") in all contracting opportunities. This includes certified small businesses in the following categories: disadvantaged business enterprise, minority-owned business, woman-owned business, a business



that a service-disabled veteran owns or an emerging small business. District also encourages joint ventures or subcontracting with certified small business enterprises.

SECTION 3

3.1 INTRODUCTION

The District is seeking professional Design Services for Seismic Upgrades to assist District staff in planning, designing, and constructing the Project described in Attachment A, which is hereby incorporated by reference, to be funded by General Obligation Bond, Seismic Rehabilitation Grants, and Renew America's Schools Grant (April 2023 application). The District is seeking to select an Architect to provide Design Services for Seismic Upgrades in connection with the Project.

- A.** Estimated fees for architectural and engineering services are to be determined after further development of a specific scope of work and negotiations with the selected Consultant.

3.2 SCOPE OF SERVICES REQUESTED

- A.** Professional Services to include:
1. Pre-design services & Schematic Design.
 2. Design Development.
 3. Construction Documents.
 4. Assist in Bidding Process.
 5. Construction Administration, including but not limited to review and approval of submittals, shop drawings, and invoices.
 6. Final Inspections and Project Close Out.
 7. Coordination of other support services:
 - a. Independent 3rd Party Cost Estimates at Schematic Design, Design Development and Construction Document phases.
 - b. Site Design (if required).
 - c. Civil Engineering (if required).
 - d. Landscape Design (if required).
 - e. Structural Engineering.
 - f. Electrical Engineering (as required).
 - g. Mechanical Engineering (as required).
 - h. ~~Coordination of the land use planning application with the appropriate city or county agencies.~~
 8. Communication and support
 - a. Facilitate planning with District staff and committees.
 - b. ~~Attendance at District Board Meetings as needed.~~



c. Working with District and the District's Project Managers.

- B.** The Consultant's response shall include information about all subcontracted Engineering Firms who are proposed to be part of the project team. Identify the persons from each consultant proposed for this project and provide the proposed consultants relative experience (Attachment D Engineering References are not included in page count). The District reserves the right to approve final project team members.

3.3 DISTRICT PROVIDED SERVICES

- A.** Topographic and Boundary Survey of the sites "as is" (if required).
- B.** Soils and geotechnical analysis (as required).
- C.** Hazardous material consultant.

3.4 REQUIRED PROPOSAL AND RESPONSE CRITERIA INFORMATION

- A.** Cover Letter
- B.** Section One — Capability to perform the architectural services for the project being considered, including both sites described on Attachment A. (25 Points)
- 1.** Describe your firm, including your service area, available Architectural and Engineering services, and experience.
 - 2.** Discuss how your firm can assure the District of a complete set of documents, what quality control measures your office uses, your method of peer review, and consultant's coordination processes used.
 - 3.** Describe your firm's ability to work in a collaborative manner with District, District's Representatives, Community, and other Project Stakeholders.
 - 4.** Disclose names and services provided by subcontracted consultants including engineers and cost estimators.
 - 5.** Is your firm or consultants proposed on your team currently involved in Dispute Resolution defined as Mediation (binding or non-binding), Arbitration or Litigation related to a construction project? If so, please explain.
 - 6.** Has your firm or consultants proposed on your team been involved in Dispute Resolution defined as Mediation (binding or non-binding), Arbitration or Litigation in the past ten years related to a construction project? If so, please explain.
 - 7.** Has your firm or any of its owners, officers, or partners ever been found liable in a civil suit, or found guilty in a criminal action, for making any false claim or material misrepresentation to any public agency or entity? If so, please explain. (Answer this question for each of your consultants also).



8. Has your firm or any of its owners, officers, or partners ever been convicted of a crime involving any federal, state, or local law related to construction? If so, please explain. (Answer this question for each of your consultants also).
9. Has your firm or any of its owners, officers, or partners ever been convicted of a federal or state crime of fraud, theft, or any other act of dishonesty? If so, please explain. (Answer this question for each of your consultants also).

C. Section Two — Project approach, staffing level, and design philosophy. (30 Points)

1. Describe your philosophy of service.
2. Identify company personnel who will have the responsibility for the District's projects. Include names, titles, experience, and resumes. Provide resumes for key subcontracted consultants and engineers. Provide copies of key personnel's licenses.
3. Describe your identified personnel's experience both for the proposer and their sub-consultants ability to perform the project scope of services.
4. Describe for each personnel proposed for the projects their current and projected workload as well as the time committed to this project.
5. Indicate your capability to assure that key personnel will remain assigned to the District account for the duration of the projects or to cover the assigned personnel for extended absences or vacations.
6. Describe any innovative methods or procedures that will be of interest to or benefit the District in accomplishing the intended goals of the project.
7. Describe your current work load and the firm's capability to provide the requested services.
8. Discuss how your firm can assure the District of adequate administration during the construction phase.

D. Section Three — Performance history on past projects; Public Facilities. (20 Points)

1. Describe the relevant Architectural and Engineering Experience with design and construction to add, modernize and/or remodel K-12 schools in Oregon in the last five (5) years. Provide a case study of at least four (4) similar projects.
2. Provide a list of all substantial K-12 schools in Oregon projects you have designed in the last 10 years; provide a brief title, summary of work, date of construction, total cost of construction, and total project change orders.
3. Give examples of successful K-12 schools in Oregon projects for meeting project budgets and design and construction work schedules.
4. Give examples of your firms performance history in meeting deadlines for K-



12 schools in Oregon.

5. Give examples of your firm's performance history in designing K-12 schools in Oregon meeting the District's budget.
6. Describe your experience with Public Contracting statutes ORS 279C and corresponding OAR's.

E. Section Four — References of other clients served. (25 Points)

1. Provide a reference contact person, current phone number and email for completed K-12 school seismic projects in Oregon. (Comparable construction value over \$2 Million.)

3.5 PROTEST PROCEDURE

- A.** All responses will become part of the public record for this Project, without liability to the Phoenix Talent School District. The District reserves the right to reject any or all responses received as a result of this RFP and, if doing so would be in the public interest, cancel this solicitation. The District reserves the right to consider a response or responses in whole or in part, and to determine the responsiveness of a submittal by reference to the response taken as a whole. Consultants will be held to the terms submitted in their responses.
- B.** Requests for changes or clarifications of the Request for Proposals, as described in Section 2.11, shall be delivered in writing by 2:00 PM on February 23, 2023. Protests of the requirements, evaluation criteria, or contractual provisions in this Request for Proposals, shall be delivered in writing by 2:00 PM on February 23, 2023, as stated in the Schedule set forth in Section 2.7 above and to the person and at the address set forth in Section 3.5.D.5, below. Protests of, and requests for, changes to technical or contractual requirements, specifications or provisions shall include the reason for the protest and any proposed changes to the requirements. No such protests or requests shall be considered if received after the deadline. No oral, telegraphic, telephone, facsimile, or email protests or requests will be accepted. The District will consider all protests and requested changes and, if appropriate, amend the RFP. Only amendments issued in writing by the District will change the requirements, specifications, or provisions of this RFP.
- C.** Any firm responding to this RFP claiming to have been adversely affected or aggrieved by the selection of a competing response, shall have seven (7) calendar days after notification of selection to submit a written selection protest to the person designated in Section 3.5.D.5, below. Written notification must be received by 4:00 PM within the identified seven (7) calendar day period as stated in the Schedule set forth in Section 2.7 above. No oral telegraphic, telephone, facsimile, or email protests will be accepted. No protest against Consultant selection shall be considered if received after the established protest deadline.
- D.** In order to be considered, a protest shall be in writing and shall include:
 1. The name and address of the aggrieved person;



2. The contract title under which the protest is submitted;
 3. A detailed description of the specific grounds for protest and any supporting documentation; a Proposer submitting a protest must claim that the protesting Proposer is the highest ranked Proposer because the Proposals of all higher ranked Proposers failed to meet the requirements of the RFP or because the higher ranked Proposers otherwise are not qualified to perform the Services described in the RFP; and
 4. The specific ruling or relief requested. In addition, in the event the protesting party asserts another proposers lack of responsibility as a ground for protest, it must address in detail each of the matters in its written protest.
 5. The written protest shall be mailed or delivered to HMK Company, David McKay, Principal in Charge, 46 N Front Street, Suite 201, Medford, OR 97501.
 6. And shall be labeled: "Protest".
- E. Upon receipt of a written protest, the District shall promptly consider the protest. The District may give notice of the protest and its basis to other persons, including Consultants involved in or affected by the protest; such other persons may be given an opportunity to submit their views and relevant information. If the protest is not resolved by mutual agreement of the aggrieved person and the District, the District will promptly issue a decision in writing stating the reasons for the action taken. A copy of the decision shall be mailed by certified mail, return receipt requested, or otherwise promptly furnish to the aggrieved person and any other interested parties. The District's decision may be appealed to the Superintendent by written notice together with all supportive evidence, received at the address set forth in Section 2 not more than two (2) working days after receipt of the decision. The Superintendent's decision shall be final and conclusive.
- F. Strict compliance with the protest procedures set forth herein is essential in furtherance of the public interest. Any aggrieved party that fails to comply strictly with these protest procedures is deemed, by such failure, to have waived and relinquished forever any right or claim with respect to alleged irregularities in connection with the solicitation or award. No person or party may pursue any action in court challenging the solicitation or award of this contract without first exhausting the administrative procedures specified herein and receiving the District's final decision.
- G. The District shall retain this RFP and one copy of each original response received from all responding Consultants, together with copies of all documents pertaining to the selection of qualified Consultants, and award of a contract. These documents will be made a part of a file or record, which shall be open to public inspection, after Consultant selection and award, is announced. If a response contains any information that is considered a trade secret under ORS 192.345, respondents must mark each sheet of such information with the following legend: "This information constitutes a trade secret under ORS 192.345, and shall not be disclosed except in accordance with the Oregon Public Records Law, ORS Chapter 192."



- H. The Oregon Public Records Law exempts from disclosure only bona fide trade secrets and the exemption from disclosure apply only "unless the public interest requires disclosure in the particular instance". Therefore, non-disclosure of documents or any portion of a document submitted as part of a response may depend upon official or judicial determination made pursuant to the Public Records Law.
- I. In order to facilitate public inspection of the non-confidential portion of the response, material designated as confidential shall accompany the response, but shall be readily separable from it. Prices, makes, model or catalog numbers of items offered, scheduled delivery dates, and terms of payment shall be publicly available regardless of any designation to the contrary. Any response marked as a trade secret in its entirety may be considered non-responsive.

3.6 NEGOTIATION

- A. After selection of a successful Proposer, District may enter into Contract negotiations with the successful Proposer. By submitting a Proposal, Proposer agrees to comply with the requirements of the RFP, including the terms and conditions of the Sample Contract (ATTACHMENT E), with the exception of those terms listed below for negotiation.
- B. Proposer shall review the attached Sample Contract and note exceptions.
- C. Proposer must submit any exceptions to District in writing during the Questions / Requests for Clarification period set forth in Section 2.7 above. The exception document must give the exact text of the requested change to the terms and conditions, and the Proposer's reason for requesting the change. Unless District agrees to modify any of the terms and conditions, District intends to enter into a Contract with the successful Proposer in substantially the form set forth in Sample Contract (ATTACHMENT E).
- D. The District reserves the right to negotiate the final Contract; however, District is not required to make any changes and many provisions cannot be changed. Proposer is cautioned that the Phoenix Talent School District believes modifications to the standard provisions constitute increased risk and increased cost to the District. Therefore, District will consider the Scope of requested exceptions in the evaluation of Proposal.
- E. Any subsequent negotiated changes are subject to prior approval of District's Board of Directors.
- F. In the event that the parties have not reached mutually agreeable terms within (30) Thirty calendar days, District may terminate Negotiations and commence Negotiations with the next highest-ranking Proposer.

3.7 ATTACHMENTS

- A. Attachments to this RFP include:
 - 1. ATTACHMENT A, Description of Work
 - 2. ATTACHMENT B, Certifications (MUST BE SIGNED AND RETURNED WITH PROPOSAL)



3. ATTACHMENT C, Insurance Requirements
4. ATTACHMENT D, Engineering References (MUST BE RETURNED WITH PROPOSAL)
5. ATTACHMENT E, Sample Contract
6. ATTACHMENT F, Talent Elementary School Seismic Evaluation Report
7. ATTACHMENT G, Talent Middle School Seismic Evaluation Report

End of Request for Proposals



ATTACHMENT A DESCRIPTION OF WORK

The Phoenix Talent School District recently has completed a master planning exercise. That work is the basis for seeking to select an Architect to provide Design Services for Seismic Upgrades for:

Project Description:

The Phoenix Talent School District is seeking a design firm to provide Design Services for Seismic Upgrades at the following schools:

- **Talent Elementary School:**
Comprehensive seismic improvement of classrooms.
- **Talent Middle School:**
Comprehensive seismic improvement of gymnasium, cafeteria and classrooms.

The District anticipates selecting one firm to provide design services for the Project, including both of the sites/schools described herein. The total value of the construction budgets is anticipated to be approximately \$1.4 Million for Talent Elementary School and \$2.45 Million for Talent Middle School. Selected firms will be expected to start immediately after School Board Award and receipt of a notice to proceed (NTP).

The estimated time period during which the Project is anticipated to be completed, and the estimated time period in which the specific Architect Services sought will be performed, is as follows:

Talent Elementary School:

Design: May 2023 – September 2023
Permit/Bid: October 2023
Construction: June 2024 – August 2024

Talent Middle School:

Design: May 2023 – September 2023
Permit/Bid: October 2023
Construction: June 2024 – August 2024

The Request for Proposal process has been created to help establish clear and concise qualifications as the basis for the selection of a Design Firm to assist the District with the design and construction of the project.

A MANDATORY pre-proposal meeting has been established as an integral part of the RFP process. At this meeting project concepts, District's goals and priorities, and the selection process will be further discussed. All pertinent additional information presented at the pre-qualification meeting, together with questions and related answers shall be put in writing and sent to all in attendance.



**ATTACHMENT B
CERTIFICATIONS**

CERTIFICATION OF UNDERSTANDING OF REQUEST FOR PROPOSALS

The undersigned offers and agrees to furnish all material, supervision and personnel to the Phoenix Talent School District for Design Services for Seismic Upgrades in accordance with this Request for Proposals.

Acknowledgement of Addendum: _____

The undersigned further certifies that he/she has read, understands and agrees to abide by all terms and conditions of this Request for Proposals and if awarded the contract to furnish the Design Services for Seismic Upgrades to the District as delineated by this Request for Proposals.

The Consultant certifies that it does not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, handicap, financial ability, age or other non-job-related factors as per ORS 659a and 42 U.S.C. § 2000e et seq.

RESIDENCY STATEMENT

A resident is defined as a respondent that has paid employment taxes or income taxes in Oregon during the 12 calendar months immediately preceding submission of the RFP Response, has a business address in this state and has stated that they are a resident.

The undersigned hereby states their resident status is as follows:

RESIDENT: YES _____ NO _____

FIRM NAME: _____

BY: _____ TITLE: _____
Signature

BY: _____ DATED: _____
Print/type name



ATTACHMENT C INSURANCE REQUIREMENTS

1. **Insurance Coverages.** The Design Firm (Firm) shall procure and maintain at its expense during the performance of the Agreement and thereafter as required below the following insurance from one or more companies authorized to do business in the State of Oregon with a policyholder's rating of not less than A-IX in the most recent edition of Best's Rating Guide. Except as approved otherwise by the Owner in advance, such insurance shall protect against claims which arise out of or relate to all of the Firm's services under the Agreement, whether performed by the Firm or a consultant or a person or entity for which either of them may be responsible.

Workers' Compensation Insurance, if required by law, with statutory limits.

Employer's Liability Insurance, if employees are employed for other than secretarial or bookkeeping services, with a limit of not less than \$1,000,000 each accident, \$1,000,000 disease each employee, and \$1,000,000 disease policy limit.

Commercial General Liability Insurance, applicable to all premises and operations, including Bodily Injury, Property Damage, Personal Injury, Contractual Liability, Independent Contractors, Products and Completed Operations, Broad Form Property Damage (including Completed Operations), and coverage for explosion, collapse, and underground hazards, with limits of not less than \$2,000,000 per occurrence, \$4,000,000 aggregate applicable specifically to the Project.

Business Automobile Liability Insurance, applicable to owned, non-owned and hired automobiles, with a limit of not less than \$1,000,000 combined single limit each accident, \$2,000,000 aggregate.

Professional Liability Insurance, applicable to all acts and omissions of the Firm and its consultants at all tiers, with limits of not less than \$2,000,000 per occurrence and \$2,000,000 aggregate.

2. **Deductibles.** The Firm shall pay all deductibles on all policies required by Paragraph 1. Maximum allowable deductible is \$10,000 without Owner's express written approval.
3. **Waivers of Subrogation Re Liability Insurance.** The Workers' Compensation and Employer's Liability policies shall be subject to a waiver of subrogation in favor of Owner and its members, partners, officers, directors, agents, and employees, and the successors in interest of the foregoing.
4. **Cross-Liability Coverages.** The Commercial General Liability and Automobile Liability policies shall provide cross-liability coverages as would be achieved under the standard International Organization for Standardization ("ISO") separations of insureds clause.
5. **Additional Insureds.** The Commercial General Liability and Automobile Liability policies shall name the District and its members, partners, officers, directors, agents, and employees, and the successors in interest of the foregoing, as Certificate Holder, using ISO additional insureds endorsement CG 20 10 11 85 or a substitute providing equivalent coverages. Such coverages provided to the additional insureds shall (a) be primary and noncontributory with respect to any insurance or self-insurance retention of the additional insureds, including but not limited to



any Excess Liability coverage maintained by the additional insureds, (b) provide the same types and extents of coverages as the coverages provided to the primary insured, and shall not be limited to the “vicarious liability” of the additional insureds, (c) waive all rights of subrogation against the additional insureds, and (d) be maintained for the same durations as the coverages provided to the primary insured, including but not limited to the continuation of the Products and Completed Operations coverage until three (3) years after final payment to the Owner’s prime contractor on the Project, and shall not be limited to “ongoing operations”. Notwithstanding the foregoing, this Paragraph shall not be construed to require the Firm to provide insurance coverage of the additional insureds in a way or to an extent that results in a violation of ORS § 30.140.

6. **Duration of Coverages.** The insurance coverages required by Paragraphs 1 through 6 shall be written on an occurrence basis, except the Professional Liability Insurance. The Professional Liability policy shall provide for a retroactive date of placement prior to or coinciding with the commencement of the performance of the professional services under the Agreement. All other policies shall be in effect as of the date of commencement of the Services under the Agreement. All policies shall be maintained and remain in effect until one (1) year after final payment to the Owner’s prime contractor on the Project and thereafter when the Firm is assisting or advising the Owner regarding the correction of defective or nonconforming Work; provided that the Products and Completed Operations policy and the Professional Liability policy shall remain in effect until three (3) years after final payment to the Owner’s prime contractor on the Project. The Firm shall notify the Owner of any claims that may materially impair the coverage under Firm’s Professional Liability policy.
7. **Proof of Insurance.** The Firm shall file with Owner, upon execution of the Agreement, certificates of insurance acceptable to the Owner as well as copies of all insurance policies, with all riders and endorsements, all separate exclusions, conditions and waivers, and all other amendatory documents attached, evidencing the insurance required by this Attachment. The Firm will notify the Owner with at least thirty (30) days’ written notice, if the policy will be cancelled or allowed to expire. If any of the required coverages are to renew during the period when such coverages is to remain in effect, or are required to remain in effect in force after final payment to the Owner’s prime contractor on the Project, an additional certificate evidencing continuation of such coverage shall be submitted upon renewal or with the Firm’s final invoice.
8. **Effect of No or Insufficient Insurance.** The Firm’s failure to comply with the requirements of this Attachment shall constitute a material breach of the Agreement entitling the Owner to terminate the Agreement for cause. In the alternative, the Owner in its sole discretion may purchase the insurance required of, but not obtained or maintained, by the Firm pursuant to this Attachment C and charge such costs thereof to the Firm. The Owner’s rights under this Paragraph shall be in addition to, and without waiver of, its other rights and remedies under the Agreement or applicable law.
9. **Limitation to This Attachment.** Nothing in this Attachment shall negate, abridge, or reduce the Firm’s responsibilities or liabilities under the Agreement or applicable law, the meaning and effect of the provisions of this Attachment being limited to setting out the Firm’s express obligations with respect to insurance.



**ATTACHMENT D
CONSULTANT REFERENCES**

NOTE: COPY AND FILL OUT THIS SHEET FOR EACH MEMBER OF THE CONSULTANT TEAM. (COMPLETE ONE PER SUB CONSULTANT)

A. Firm: _____ Name: _____

B. Discipline: _____

C. Time with, or current relationship to this firm:

D. Past five to ten-year project history – list project name and contact information for each:

E. List projects from above that are public building projects:

F. List projects from "E" above that qualified for recognition under LEED or other similar State or Federal programs for energy efficiency and resource conservation:



**ATTACHMENT E
FORM OF AGREEMENT**

The form of agreement between Owner and Architect will be the modified AIA B101 – 2017 following this cover page.

DRAFT AIA® Document B101™ – 2017

Standard Form of Agreement Between Owner and Architect

AGREEMENT made as of the « » day of « » in the year «2023»
(In words, indicate day, month and year.)

BETWEEN the Architect's client identified as the Owner:
(Name, legal status, address and other information)

«Phoenix Talent School District»
«401 W 4th Street»
«Phoenix, OR 97535»
«Brent Barry, Superintendent»

and the Architect:
(Name, legal status, address and other information)

«To Be Determined»
« »
« »
« »

for the following Project:
(Name, location and detailed description)

«Phoenix Talent School District»
«Seismic Rehabilitation Projects»

«Talent Elementary School»
«307 Wagner Creek Road»
«Talent, OR 97540»

«Talent Middle School»
«102 Christian Avenue»
«Talent, OR 97540»

The Owner and Architect agree as follows.

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An *Additions and Deletions Report* that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

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TABLE OF ARTICLES

- 1 INITIAL INFORMATION
- 2 ARCHITECT'S RESPONSIBILITIES
- 3 SCOPE OF ARCHITECT'S BASIC SERVICES
- 4 SUPPLEMENTAL AND ADDITIONAL SERVICES
- 5 OWNER'S RESPONSIBILITIES
- 6 COST OF THE WORK
- 7 COPYRIGHTS AND LICENSES
- 8 CLAIMS AND DISPUTES
- 9 TERMINATION OR SUSPENSION
- 10 MISCELLANEOUS PROVISIONS
- 11 COMPENSATION
- 12 SPECIAL TERMS AND CONDITIONS
- 13 SCOPE OF THE AGREEMENT

ARTICLE 1 INITIAL INFORMATION

§ 1.1 This Agreement is based on the Initial Information set forth in this Section 1.1.

§ 1.1.1 The Owner's program for the Project:

(Insert the Owner's program, identify documentation that establishes the Owner's program, or state the manner in which the program will be developed.)

« »

§ 1.1.1.2

Any proposals attached to this Agreement are incorporated solely for: (i) any statement of fees and schedule that is consistent with the terms of Section 11 of this Agreement and the other exhibits and (ii) any statement of Architect's and its consultants' scope of services that is consistent with the remainder of this Agreement, or that provides basic services in addition to those stated in this Agreement. No other provisions of any proposal are part of this Agreement, including without limitation any purported limitation on liability. To the extent that a proposal term otherwise conflicts with the other terms of this Agreement, such proposed conflicting terms are void and are expressly and wholly subject to the terms of this Agreement. In the event of overlap or inconsistency between the provisions of such proposals and the other terms of this Agreement, the provision that provides a better quality or quantity of service to Owner shall control.

« »

§ 1.1.2 The Project's physical characteristics:

(Identify or describe pertinent information about the Project's physical characteristics, such as size; location; dimensions; geotechnical reports; site boundaries; topographic surveys; traffic and utility studies; availability of public and private utilities and services; legal description of the site, etc.)

«Talent Elementary School, 307 Wagner Creek Road, Talent, OR 97540»

1315623\v5

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User Notes:

(2037211951)

«Talent Middle School, 102 Christian Avenue, Talent, OR 97540»

§ 1.1.3 The Owner's total budget for the Cost of the Work for the Project, as defined in Section 6.1:
(Provide total and, if known, a line item breakdown.)

«Talent Elementary School MACC: \$1.4 M»
«Talent Middle School MACC: \$2.45 M»

§ 1.1.4 The Owner's anticipated design and construction milestone dates:

.1 Design phase milestone dates, if any:

Design Phase	«May 2023 – September 2023»
Schematic Design (SD)	« »
Design Development (DD)	« »
Construction Document (CD)	« »
Site Development Bid Package	« »
Building Completion Bid Package	« »
Final Completion	« »

.2 Anticipated Construction Commencement date:

Site Development Construction	« »
Construction	«June 2024»

.3 Substantial Completion date or dates:

Substantial Completion	«August 2024»
------------------------	---------------

.4 Other milestone dates:

Final Completion	«August 2024»
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§ 1.1.5 The Owner intends the following procurement and delivery method for the Project:
(Identify method such as competitive bid or negotiated contract, as well as any requirements for accelerated or fast-track design and construction, multiple bid packages, or phased construction.)

«Construction Manager | General Contractor»

§ 1.1.6 The Owner's anticipated Sustainable Objective for the Project:
(Identify and describe the Owner's Sustainable Objective for the Project, if any.)

«N/A»

§ 1.1.7 The Owner identifies the following representative in accordance with Section 5.3:
(List name, address, and other contact information.)

«Phoenix Talent School District»
«Jon McCalip, Director of Facilities»
«401 W 4th Street»
«Phoenix, OR 97535»

§ 1.1.8 The persons or entities, in addition to the Owner's representative, who are required to review the Architect's submittals to the Owner are as follows:
(List name, address, and other contact information.)

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§ 1.1.9 The Owner shall retain the following consultants and contractors:
(List name, legal status, address, and other contact information.)

.1 Geotechnical Engineer:

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.2 Surveyor:

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.3 Hazardous Materials:

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.4 Building Envelope:

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.5 Building Commissioning:

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§ 1.1.10 The Architect identifies the following representative in accordance with Section 2.3:
(List name, address, and other contact information.)

«To Be Determined»

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§ 1.1.11 The Architect shall retain the consultants identified in Sections 1.1.11.1 and 1.1.11.2:
(List name, legal status, address, and other contact information.)

§ 1.1.11.1 Consultants retained under Basic Services:

.1 Structural Engineer:

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.2 Mechanical Engineer:

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.3 Electrical Engineer (includes low voltage):

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.4 Plumbing:

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.5 Landscaping:

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.6 Civil:

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.7 ADA/Accessibility:

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.8 Cost Estimator:

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.9 Acoustic:

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§ 1.1.11.2 Consultants retained by Architect under Supplemental Services:

<< >>

§ 1.1.12 Other Initial Information on which the Agreement is based:

« »

§ 1.2 The Owner and Architect may reasonably rely on the Initial Information. Both parties, however, recognize that the Initial Information may be changed by Owner and, in that event, the Owner and the Architect shall appropriately adjust the Architect's services, schedule for the Architect's services, and the Architect's compensation. The Owner may adjust the Owner's budget for the Cost of the Work and the Owner's anticipated design and construction milestones, as necessary, to accommodate material changes in the Initial Information.

ARTICLE 2 ARCHITECT'S RESPONSIBILITIES

§ 2.1 The Architect shall provide the professional services as set forth in this Agreement. The Architect represents that it is properly licensed in the jurisdiction where the Project is located to provide the services required by this Agreement, or shall cause such services to be performed by appropriately licensed design professionals. The Architect shall be and operate as an independent contractor in the performance of the services and shall have control over and responsibility for all personnel performing the services. In no event shall the Architect be authorized on behalf of the Owner: to enter into any Contracts or undertakings; to waive any provisions of the Contract Documents; to receive contractual notice on behalf of the Owner; to execute any Certificate of Payment, Change Order or other document; to authorize any payments or accept or approve any documents, work, services, goods or materials which result in a change in the Contract Sum or Contract Time, without prior written approval of the Owner. This Agreement covers services provided by Architect and its consultants prior to the date hereof, if any.

§ 2.2 The Architect shall perform its services consistent with the professional skill and care ordinarily provided by architects practicing in the same or similar locality under the same or similar circumstances (the "standard of care"). All professional services performed by Architect under this Agreement are subject to the standard of care unless expressly stated otherwise. The standard of care is not a warranty or guarantee and Architect makes no warranties or guarantees in the Agreement regarding its professional services other than its obligation to perform them in accordance with the standard of care. The Architect shall perform its services as expeditiously as is consistent with such professional skill and care and the orderly progress of the Project. The Architect will perform this Agreement and render decisions in a timely manner to avoid delay in the progress of the Project and the Work of the Contractor. The Architect shall work cooperatively to obtain for the Owner the improvements covered by the Owner's program and scope of Work at the lowest cost consistent with quality workmanship, materials, and durability. The Architect shall, at no cost to the Owner, promptly and satisfactorily correct any services Owner reasonably finds to be defective or not in conformity with the requirements of this Agreement.

§ 2.3 The Architect's representative authorized to act on behalf of the Architect with respect to the Project is identified in Section 1.1.10. The Architect's representative will devote all of such representative's time as necessary to the Project as may be appropriate to and consistent with full and timely performance of this Agreement by Architect. The Architect may not remove or replace its designated representatives or its principal architects from any Project, so long as they are employed by the Architect, without thirty (30) calendar days' advance written notice to the Owner. The Architect will consult with the Owner and obtain the Owner's approval of any new designated representatives or new or replacement principal architects for the Project. New or replacement designated representatives or principal architects must be qualified and must have adequate experience with similar projects.

§ 2.4 Except with the Owner's knowledge and consent, the Architect shall not engage in any activity, or accept any employment, interest or contribution that would reasonably appear to compromise the Architect's professional judgment with respect to this Project.

§ 2.5 Insurance

§ 2.5.1 The Architect shall procure and maintain at its expense during the performance of the Agreement and thereafter as required below the following insurance from one or more companies authorized to do business in the State of Oregon with a policyholder's rating of not less than A-IX in the most recent edition of Best's Rating Guide. Except as approved otherwise by the Owner in advance, such insurance shall protect against claims which arise out of or relate to all of the Architect's services under the Agreement, whether performed by the Architect or a consultant or a person or entity for which either of them may be responsible.

(Identify types and limits of insurance coverage, and other insurance requirements applicable to the Agreement, if any.)

Workers' Compensation Insurance: The Architect, its subconsultants, if any, and all employers providing work, labor or materials under this Contract who are subject employers under the Oregon Workers' Compensation Law shall comply with ORS 656.017, which requires them to provide workers' compensation coverage that satisfies Oregon law for all their subject workers. Out-of-state employers must provide workers' compensation coverage for their workers that comply with ORS 656.126. Employers' Liability Insurance with coverage limits of not less than \$500,000 each accident shall be included.

Commercial General Liability Insurance, applicable to all premises and operations, including Bodily Injury, Property Damage, Personal Injury, Contractual Liability, Independent Contractors, Products and Completed Operations, Broad Form Property Damage (including Completed Operations), and coverage for explosion, collapse, and underground hazards, with limits of not less than \$2,000,000 per occurrence, \$4,000,000 aggregate applicable specifically to the Project.

Business Automobile Liability Insurance, applicable to owned, non-owned and hired automobiles, with a limit of not less than \$1,000,000 combined single limit each accident, \$2,000,000 aggregate.

Professional Liability Insurance, applicable to all acts and omissions of Architect and its consultants at all tiers, with limits of not less than \$4,000,000 per occurrence and \$2,000,000 aggregate.

§ 2.5.2 Deductibles. No insurance policy required of Architect or its consultants under this Section 2.5 shall have a deductible or self-insured retention in an amount exceeding \$10,000 without the Owner's prior written approval. The Architect shall pay all deductibles or self-insured retention on all policies required by this Section 2.5 or otherwise carried by Architect or its consultants, without reimbursement.

§ 2.5.3 Waivers of Subrogation Re Liability Insurance. The Workers' Compensation and Employer's Liability policies shall be subject to a waiver of subrogation in favor of Owner and its officers, directors, agents, and employees, and the successors in interest of the foregoing.

§ 2.5.4 Cross-Liability Coverages. The Commercial General Liability and Automobile Liability policies shall provide cross-liability coverages as would be achieved under the standard International Organization for Standardization ("ISO") separations of insureds clause.

§ 2.5.5 Additional Insureds. The Commercial General Liability and Automobile Liability policies shall name the Owner and its officers, directors, agents, employees, volunteers, and the successors in interest of the foregoing as Certificate Holder and them and HMK Company as additional insureds, using ISO additional insureds endorsement CG 20 10 11 85 or a substitute providing equivalent coverages. Such coverages provided to the additional insureds shall (a) be primary and noncontributory with respect to any insurance or self-insurance retention of the additional insureds, including but not limited to any Excess Liability coverage maintained by the additional insureds, (b) provide the same types and extents of coverages as the coverages provided to the primary insured, and shall not be limited to the "vicarious liability" of the additional insureds, (c) waive all rights of subrogation against the additional insureds, and (d) be maintained for the same durations as the coverages provided to the primary insured, including but not limited to the continuation of the Products and Completed Operations coverage until three (3) years after final payment to the Owner's prime contractor on the Project, and shall not be limited to "ongoing operations." Notwithstanding the foregoing, this Paragraph shall not be construed to require the Architect to provide insurance coverage of the additional insureds in a way or to an extent that results in a violation of ORS § 30.140, if applicable.

§ 2.5.6 Duration of Coverages. The insurance coverages required by this Section 2.5 shall be written on an occurrence basis, except the Professional Liability Insurance. The Professional Liability policy shall provide for a retroactive date of placement prior to or coinciding with the commencement of the performance of the professional services under the Agreement. All other policies shall be in effect as of the date of commencement of the Architect's services under the Agreement. All policies shall be maintained and remain in effect until at least one (1) year after final payment to the Owner's prime contractor on the Project and thereafter when the Architect is assisting or advising the Owner regarding the correction of defective or nonconforming Work; provided that the Products and

Completed Operations policy and the Professional Liability policy shall remain in effect until three (3) years after final payment to the Owner's prime contractor on the Project. The Architect shall notify the Owner of any claims that may materially impair the coverage under Architect's Professional Liability policy.

§ 2.5.7 Proof of Insurance. The Architect shall file with Owner, upon execution of the Agreement, certificates of insurance acceptable to the Owner as well as copies of all insurance policies, with all riders and endorsements, all separate exclusions, conditions and waivers, and all other amendatory documents attached, evidencing the insurance required by this Section 2.5. The Architect will notify the Owner with at least thirty (30) days' written notice if the policy will be cancelled or to expire for any reason. If any of the required coverages are to renew during the period when such coverages is to remain in effect, or are required to remain in effect in force after final payment to the Owner's prime contractor on the Project, an additional certificate evidencing continuation of such coverage shall be submitted upon renewal or with the Architect's final invoice.

§ 2.5.8 Consultants. The Architect shall cause all its consultants to carry and maintain workers' compensation coverage required by law and commercial general and professional liability insurance coverage in amounts and with limits mutually agreed upon by the Owner and the Architect. In the absence of any such agreement, the amounts and limits shall be the same as those required of the Architect.

§ 2.5.9 Effect of No or Insufficient Insurance. The Architect's failure to comply with the requirements of this Section 2.5 shall constitute a material breach of the Agreement entitling the Owner to terminate the Agreement for cause. In the alternative, the Owner in its sole discretion may purchase the insurance required of, but not obtained or maintained by, the Architect pursuant to this Section 2.5 and charge such costs thereof to the Architect. The Architect shall reimburse the Owner upon demand and shall furnish such information needed by the Owner to obtain such insurance. In addition, the Owner shall have the right, but not the obligation, to prohibit the Architect from entering the Project site until the required certificates and copies of policies in complete compliance with this Section 2.5 are received and approved by the Owner. The Architect's maintenance of its and its consultants' insurance coverage in full force and effect for the Project is a condition precedent to the Architect's right to payment and to exercise or enforce any right or remedy for money damages against the Owner. Failure by the Architect to procure and maintain the insurance policies required above in full force and effect during the performance of services under this Agreement, and during any extensions or additional services hereunder, shall constitute a material breach of this Agreement. The Owner's rights under this Paragraph shall be in addition to, and without waiver of, its other rights and remedies under the Agreement or applicable law.

§ 2.6 Indemnity. To the fullest extent allowed under applicable law, The Architect shall defend, indemnify, and hold harmless the Owner and the Owner's affiliates, agents and representatives and any affiliated or related entities, including without limitation, officers, board members, employees and volunteers, and the Owner's representative identified herein, and hold them harmless for, from, and against any and all loss, liability, damage, demands, claims, costs, and expenses, including reasonable attorney fees at any level including pre-claim and on any appeal, to the extent caused in whole or in part by the acts or omissions of the Architect or its agents, consultants, employees, or representatives, including without limitation for:

- .1 Breach of this Agreement by the Architect;
- .2 Death, personal injury (including bodily injury), property damage, or violation of law, regulation, or orders, to the extent caused in whole or in part by the performance of the Architect or those for whom the Architect is responsible;
- .3 Violation or infringement of third-party intellectual property rights by the Architect;
- .4 Any negligent or willful acts or omissions by the Architect, Architect's consultants, or other persons for whom the Architect is responsible;
- .5 Claims for compensation asserted by the Architect's employees (including wage and hour or benefit claims) or any violation of federal, state, or local wage and hour or labor laws and regulations by the Architect or other persons for whom the Architect is responsible; and

.6 Any impermissible disclosure of proprietary or confidential Owner information.

Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 2.6. In claims against any person or entity indemnified under this Section 2.6 by an employee of the Architect, the Architect itself, or anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under Section 2.6 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Architect under workers' compensation acts, disability benefit acts, or other employee benefit acts.

§ 2.7 The Architect shall be responsible to the Owner for acts and omissions of the Architect's employees, consultants, subcontractors and their respective agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Architect or any of its consultants or subcontractors.

§ 2.8 Pursuant to Oregon Revised Statute (ORS) Chapter 200, District encourages the participation of small businesses, certified by the Oregon Certification Office for Business Inclusion and Diversity ("COBID") in all contracting opportunities. This includes certified small businesses in the following categories: disadvantaged business enterprise, minority-owned business, woman-owned business, a business that a service-disabled veteran owns or an emerging small business. District also encourages joint ventures or subcontracting with certified small business enterprises.

§ 2.9 No Unsupervised Contact with Students. "Unsupervised contact with students" means contact with students that provide the person opportunity and probability for personal communication or touch when not under direct supervision of a representative of the Owner. The Architect will ensure that the Architect's employees, any subconsultant, and their officers, agents, and employees will have no direct unsupervised contact with students while on the Owner's property. The Architect will work with the Owner to ensure compliance with this requirement. If the Architect is unable to ensure through a security plan that none of its subconsultants, officers, agents, or employees will have direct, unsupervised contact with students in a particular circumstance or circumstances, Architect shall so notify the Owner prior to beginning any work that could result in such contact. The Architect authorizes the Owner to conduct a criminal background check, including fingerprinting, of any officer, agent, or employee of the Architect that will have unsupervised contact with students. The Architect also agrees to cause its subconsultants, if any, that will have unsupervised contact with students to authorize Owner to conduct such background checks. If fingerprinting is required by law, the Owner may require the Architect to arrange for such fingerprinting through local law enforcement agencies and for reporting and recordkeeping of the same as and to the extent required by law, including as required under Oregon SB155, OAR 581-021-0511 and applicable Owner rules, policies and procedures. If fingerprinting is required, the cost will be borne solely by the Architect without reimbursement. In addition, the Architect shall comply with all other Oregon Senate Bill 155 requirements, as applicable, including, but not limited to, providing Owner requested information for any of the Architect's or its subconsultants, employees, volunteers, or agents, who have the potential for unsupervised contact with students, and providing requested information for new employees, volunteers, or agents before they begin work. The Architect will discuss any questions or concerns about these requirements with the Owner's designated Point of Contact before beginning work. Compliance with this Section 2.9 shall not be grounds for any increase in compensation. Failure of compliance by the Architect or any subconsultant shall be grounds for immediate termination of this Contract by the Owner for cause.

ARTICLE 3 SCOPE OF ARCHITECT'S BASIC SERVICES

§ 3.1 The Architect's Basic Services consist of those described in this Article 3, the exhibits hereto, and otherwise described in this Agreement as Basic Services, and include usual and customary structural, mechanical, and electrical engineering services.

§ 3.1.1 The Architect shall manage the Architect's services, consult with the Owner, research applicable design criteria, attend Project meetings, communicate with members of the Project team, and report progress to the Owner. The Architect shall coordinate the designs and other services of its consultants and correlate the design documents to be consistent with each other. The Architect shall provide to the Owner the rates for all of its consultants.

§ 3.1.2 The Architect shall coordinate its services with those services provided by the Owner and the Owner's consultants. The Architect shall be entitled to reasonably rely on the accuracy and completeness of services and

information furnished by the Owner and the Owner's consultants. The Architect shall provide prompt written notice to the Owner if the Architect becomes aware of any error, omission, or inconsistency in such services or information.

§ 3.1.3 [The schedule for performance of Architect's services is attached as Exhibit ____.] [As soon as practicable after the date of this Agreement, or no later than 10 calendar days after requested by the Owner, the Architect shall submit for the Owner's approval a schedule for the performance of the Architect's services consistent with Section 1.1.4. The schedule initially shall include anticipated dates for the commencement of construction and for Substantial Completion of the Work as set forth in the Initial Information. The schedule shall include allowances for periods of time required for the Owner's review, for the performance of the Owner's consultants, and for approval of submissions by authorities having jurisdiction over the Project. The schedule shall, for each phase of the Architect's services, set forth the schedule or tabular form delineating the estimated timeline for each phase. Once approved by the Owner,] time limits established by the schedule shall not, except for reasonable cause, be exceeded by the Architect or Owner. With the Owner's approval, the Architect shall adjust the schedule, if necessary as the Project proceeds until the commencement of construction. Notwithstanding anything in the Agreement to the contrary, the Architect may request adjustment to the schedule if Architect believes, for reasonable cause beyond Architect's control, additional time is necessary to comply with the standard of care. Architect must request such adjustment in writing prior to performance of the service for which adjustment is sought. Anticipated shortage of available professional labor time is not reasonable cause.

§ 3.1.4 Time is of the essence of Architect's performance.

§ 3.1.5 The Architect shall, at appropriate times, contact governmental authorities and certification agencies required to approve the Construction Documents and entities providing utility services to the Project. The Architect shall respond to and comply with applicable design requirements imposed by those authorities, certification agencies and by such entities providing utility services.

§ 3.1.6 The Architect shall assist the Owner in connection with the Owner's responsibility for filing documents required for the approval of governmental authorities having jurisdiction over the Project.

§ 3.1.7 The Architect shall cooperate with and assist the Owner in any appeal or challenge to code or inspection requirements.

§ 3.1.8 Throughout the Project, the Architect shall:

- .1 Advise the Owner of any surveys; tests; inspections; geotechnical or hydrological services; air, water, and soil pollution testing; ground corrosion tests; resistivity tests; test borings or pits; percolation tests; Hazardous Materials testing; or other tests or reports required by law or that should otherwise be procured;
- .2 Recommend and assist the Owner in arranging for the services of engineers or consultants for those tests and services when they are reasonably necessary or required, but shall not itself contract with the engineers or consultants;
- .3 Assist the Owner in arranging for and coordinating those tests or services that are approved and contracted for by the Owner;
- .4 Review all inspections and reports, advise the Owner of their results and recommendations, provide the Owner with copies of those reports or results, if necessary, and report to the Owner and the provider of the inspections or reports any errors or inconsistencies discovered;
- .5 Obtain from the Owner's consultants or engineers the soil bearing, percolation, elevation, and other values necessary to prepare the Architect's designs and Construction Documents; and
- .6 Request verification of this information as necessary to perform its services.

§ 3.1.9 Subject to the standard of care, the Architect shall review and comply with all laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities applicable to the Architect's services. Architect shall, in accordance with applicable professional standards, inquire into, anticipate, and incorporate into its services, without additional charge, changes to such requirements that will be in effect at the time of applicable permitting, construction and inspections. If a conflict arises between any of these requirements, the Architect will so notify the Owner and will review and recommend proposals to resolve the conflict, and assist the Owner in obtaining approval for any such resolution, as necessary.

§ 3.1.10 Throughout the design process, The Architect shall as a Basic Service review, propose, and comment on value engineering proposals as requested by Owner. If the Owner procures value engineering services, directly or indirectly, the Architect and its consultants shall coordinate with the value engineering efforts by briefing the value engineering consultant, answering its questions, and meeting with the Owner's representatives and the value engineer to determine the advisability of changes in the Architect's design as recommended by the value engineer. The Architect shall make such changes as the Owner directs after such consultation.

§ 3.1.11 If the Contractor (CMGC or otherwise) provides cost estimates, itself or through a cost estimator, the Architect shall confer with and coordinate reconciliation of Architect's cost estimates with such Contractor cost estimates to the same extent the Architect is obligated to do so with respect to cost estimates provided by the Owner or its consultants under this Agreement.

§ 3.1.12 The Architect shall coordinate the preparation of plans, specifications, and drawings among those preparing the same to avoid inconsistencies, omissions, or failure of integration among the same.

§ 3.1.13 The Architect shall attend all Project meetings, unless Owner advises Architect that Architect's attendance is not necessary.

§ 3.1.14 The Architect shall provide the Owner with digital records in nonproprietary pdf format, and paper records, of compiled record drawings showing significant approved changes to the Working Drawings during the Construction Phase based on marked-up prints, drawings and other data furnished by the Contractor to the Architect.

§ 3.1.15 Subject to the standard of care, the Architect shall evaluate work fabricated off the site, including precast components to the same extent as Architect is required to evaluate on-site Work.

§ 3.1.16 The Architect shall assist the Owner and Contractor in any negotiations with authorities or others in achieving a certificate of occupancy or completion certification, as applicable.

§ 3.1.17 The Architect shall participate in a meeting just prior to the warranty expiration for the purpose of resolving warranty deficiencies and shall consult with and assist the Owner in the resolution of claims for defective work or materials during the warranty period.

§ 3.1.18 The Architect shall provide graphic design materials to assist the Owner in preparation of project signage.

§ 3.1.19 The Architect shall participate in at least one Design Charette to include stakeholders identified by the Owner.

§ 3.1.20 The Architect and subconsultants shall comply with the Owner's Design Standards as provided to the Architect by the Owner. If Architect believes compliance with the design guidelines would not conform to applicable laws or the applicable professional standard of care, Architect shall so advise the Owner prior to performance of the Services at issue. The Owner's review or approval of any design documents shall not relieve the Architect of its responsibility for the accuracy and completeness of such documents.

§ 3.1.21 To the extent applicable under ORS 279B.020(5), 279B.235(3), or 279C.540 (6), a laborer shall be paid at least time and a half for all work performed on the legal holidays specified in subsection (1) (b) (B) to (G) of ORS 279C.540 and for all overtime worked in excess of 40 hours in any one week, except for individuals under personal services contracts who are excluded under ORS 653.010 to 653.261 or under 29 U.S.C. 201 to 209 from receiving overtime. To the extent required under the statutes, Architect shall give notice in writing to its employees who

perform work on Project, either at the time of hire or before commencement of work on this contract, or by posting a notice in a location frequented by employees, of the number of hours per day and days per week that the employees may be required to work. Architect shall post a circular clearly printed in boldfaced 12-point type, and containing a copy of ORS 279C.545, in a prominent place alongside the door of its timekeeper's office or in a similar place that is readily available and freely visible to workers employed on the work, and shall cause the circular to be continuously posted from the inception to the completion of this Agreement.

§ 3.1.22 To the extent applicable pursuant to ORS 279C.530, employees working under this Contract are subject to employers that will comply with ORS 279C.656 (Workers' Compensation) or employers that are exempt under ORS 656.126, and the Architect shall promptly, as due, make payment to any person, co-partnership, association or corporation furnishing medical, surgical, and hospital care or other needed care and attention incident to sickness or injury to the Architect's employees, of all sums which the Architect agrees to pay for such services and all moneys and sums which the Architect collected or deducted from the wages of employees pursuant to any law or Contract for the purposes of providing or paying for such services.

§ 3.1.23 To the extent applicable pursuant to ORS 279C.530, all subject employers working under the contract are either employers that will comply with ORS 656.017 (Employer required to pay compensation and perform other duties) or employers that are exempt under ORS 656.126 (Coverage while temporarily in or out of state). The Architect shall promptly, as due, make payment to any person, co-partnership, association or corporation furnishing medical, surgical, and hospital care or other needed care and attention incident to sickness or injury to the Architect's employees, of all sums which the Architect agrees to pay for such services and all moneys and sums which the Architect collected or deducted from the wages of employees pursuant to any law or Contract for the purposes of providing or paying for such services.

§ 3.1.24 The Architect and its consultants shall comply with all virus protection, access control, back-up, password, and other security and other information technology policies of the Owner when using, having access to, or creating systems for any of the Owners' computers, data systems, personnel, or other information sources.

§ 3.1.25 The Architect agrees that each of its employees, consultants' employees and principals/owners involved in the Work, may, at the option of the Owner, be subject to a security background check, at any time. The Owner retains the option to require immediate removal of any sub-consultant, employee or agent. Notwithstanding the foregoing, the Architect and not the Owner, remains solely responsible for performing background checks on and screening for public safety, all consultants and employees and, to the extent allowed by law, shall provide such screening methodologies and information to Owner upon request.

§ 3.1.26 The Architect shall, and shall cause its employees and subconsultants to, familiarize themselves with and comply with (i) all Owner property access rules, policies and regulations, and (ii) all Owner rules, policies and regulations regarding Covid-19 and regarding political signage, if any.

§ 3.2 Schematic Design Phase Services

§ 3.2.1 The Architect shall review the program and other information furnished by the Owner, and shall review laws, codes, regulations, and any certification criteria applicable to the Architect's services.

§ 3.2.2 The Architect shall prepare a preliminary evaluation of the Owner's program, schedule, budget for the Cost of the Work, Project site, the proposed procurement and proposed delivery method, and other Initial Information, each in terms of the other, to ascertain the requirements of the Project. The Architect shall notify the Owner of (1) any inconsistencies discovered in the information, and (2) other information or consulting services that may be reasonably needed for the Project.

§ 3.2.3 The Architect shall present its preliminary evaluation to the Owner and shall discuss with the Owner alternative approaches to design and construction of the Project, including the feasibility of incorporating environmentally responsible design approaches. The Architect shall reach an understanding with the Owner regarding the requirements of the Project.

§ 3.2.4 Based on the Project requirements agreed upon with the Owner, the Architect shall prepare and present, for the Owner's approval, a preliminary design illustrating the scale and relationship of the Project components.

§ 3.2.5 Based on the Owner's approval of the preliminary design, the Architect shall prepare Schematic Design Documents for the Owner's approval. The Schematic Design Documents shall consist of drawings and other documents including a site plan, if appropriate, and preliminary building plans, sections and elevations; and may include some combination of study models, perspective sketches, or digital modeling or representations. Preliminary selections of major building systems and construction materials shall be noted on the drawings or described in writing.

§ 3.2.5.1 The Architect shall consider sustainable design alternatives, such as material choices and building orientation, together with other considerations based on program and aesthetics, in developing a design that is consistent with the Owner's program, schedule and budget for the Cost of the Work. The Owner may obtain more advanced sustainable design services as a Supplemental Service under Section 4.1.1.

§ 3.2.5.2 The Architect shall consider the value of alternative materials, building systems and equipment, together with other considerations based on program and aesthetics, in developing a design for the Project that is consistent with the Owner's program, schedule, and budget for the Cost of the Work.

§ 3.2.5.3 The Architect shall identify and describe the significant physical attributes of the Project, including but not limited to through the following:

- .1 Design narrative, plan, elevation, and section drawings (including floor-to-floor and wall-to-wall dimensions) and conceptual civil site plans, if applicable, which shall be sufficient to indicate site topography, plan arrangements (including all rooms and areas, entrances, exits, elevators, stairs, stairwells, corridors, toilet rooms, storage, and major mechanical and electrical areas) and the general scope and character of the Project.
- .2 Schematic plan, elevation, and section drawings, studies, and analyses including all design disciplines, including as follows:
 - .1 Architectural:
 - (1) Single-line plan and section drawings showing complete building layout, identifying the major areas, core areas, and their relationships, including security plan and ingress / egress plans;
 - (2) Preliminary exterior wall cross section and elevation indicating location and size of fenestration and cladding components, and indicating insulation type, location, and overall thermal transfer coefficients for all exterior wall fenestration and cladding assemblies;
 - (3) Identification of roof system, deck, steep- or low-slope primary weathering assembly, flashing and drainage technique, and indicating overall combined heat transfer coefficient for roof / ceiling composite and roof area;
 - (4) Identification of all proposed interior and exterior finishes, including doors and fenestration;
 - (5) Site plan, if applicable, with building located and overall grading plan with a minimum of 5'-0" contour lines, and all major site developments such as utilities, access road paving, walls, outside support buildings, structured parking facilities, paved parking lots, setbacks, impacts of wetlands or other protected areas, and other zoning, land-use, and / or survey information;
 - (6) Gross and net area calculations.
 - .2 Structural: Identification and description of structural systems from roof to grade (precast, structural steel with composite deck, structural steel with bar joists, etc.).
 - .3 Mechanical
 - (1) Preliminary square footage airflow (cfm) calculations;
 - (2) Schematic HVAC system layout that is compatible with one of the proposed systems to be studied with life-cycle costing;
 - (3) A written description of three HVAC systems that appear compatible with loading conditions for subsequent life-cycle costing.

- .4 Electrical
- (1) Lighting concepts described noting types of fixtures to be used;
 - (2) Major electrical equipment roughly described;
 - (3) Schematic description including approximate location of electrical distribution system, including service entry, switchboards, motor control centers, panels, transformers, and energy generator, if required.

§ 3.2.5.4 The Architect shall provide a written description of the Project's responsiveness to the programming specifications of the Owner.

§ 3.2.5.5 The Architect shall provide a written description of possible alternatives for the Project.

§ 3.2.6 The Architect shall submit to the Owner an estimate of the Cost of the Work prepared in accordance with Section 6.3. If the Architect's estimated Cost of the Work differs from any Owner's consultant's estimated Cost of the Work, the Architect shall attend such meetings and prepare such work product as necessary to reconcile its estimated cost with the Owner's consultant's estimate, and the Owner shall cause its consultant to cooperate in the same.

§ 3.2.6.1 The Architect shall submit the Schematic Design Documents to the Owner, prior to final presentation and submission, and attend at least one (1) meeting with the Owner and any of its designees, to discuss any opportunities to maximize the value of the Project components, after which the Architect shall incorporate any changes in the final Schematic Design Documents and submit to the Owner pursuant to § 3.2.7.

§ 3.2.7 The Architect shall submit the Schematic Design Documents to the Owner in person, and request the Owner's approval.

§ 3.2.8 Subject to the standard of care, the Schematic Design Phase shall include a thorough code and certification requirement search by Architect identifying in writing all applicable building codes and ordinances and certification requirements, including but not limited to fire, life safety, security, and accessibility requirements.

§ 3.2.9 Subject to the standard of care, Architect shall advise the Owner promptly and in writing of the necessity or advisability for the Owner to procure any tests, studies, analyses, reports, or consultant's services upon which proper development of design and construction documents is dependent.

§ 3.2.10 The Schematic Design Documents will identify any systems, materials or equipment for which contractors or others not engaged by Architect will provide design services or certifications ("Delegated Design Components"), which Delegated Design Components shall be consistent with this Agreement and subject to Owner's approval.

§ 3.2.11 The Schematic Design Phase shall include a thorough code search by Architect identifying in writing all applicable building codes and ordinances and certification requirements.

§ 3.2.12 Before the Architect proceeds with the Design Development Phase, the Architect shall make a presentation of its Schematic Design to the Owner including, but not limited to, explaining its conformance with and any approved exceptions to the Owner's design guidelines.

§ 3.2.13 Following the approval of the Owner, the Architect shall seek and secure review of Schematic Design Documents by all regulatory and certification agencies as may be necessary or appropriate, and obtain approval by those agencies. The Architect shall participate in public hearings or presentations, if required, in order to receive approval of the regulatory agencies.

§ 3.3 Design Development Phase Services

§ 3.3.1 Based on the Owner's approval of the Schematic Design Documents, and on the Owner's authorization of any adjustments in the Project requirements and the budget for the Cost of the Work, the Architect shall prepare Design Development Documents for the Owner's approval. The Design Development Documents shall illustrate and describe the development of the approved Schematic Design Documents and shall consist of drawings and other documents including plans, sections, elevations, typical construction details, and diagrammatic layouts of building

systems to fix and describe the size and character of the Project as to architectural, structural, mechanical and electrical systems, and other appropriate elements. The Design Development Documents shall also include outline specifications that identify major materials and systems and establish, in general, their quality levels. Required elements of the Schematic Design Documents include but are not limited to the following:

- .1 Architectural:
 - (1) Refinements and updates of all information included in the Schematic Design documents, and including the following:
 - (2) Updated project narrative, including a description of any changes to the Project's responsiveness to the programming specifications;
 - (3) Floor plans including updates of all information included in the Schematic Design documents, and including space assignments, sizes, and locations of installed fixed or moveable equipment that affects the design of the spaces, and interior finishes, and confirmation of total net and gross area of the building;
 - (4) Elevations, including exterior elevations showing design elements such as windows, materials, and mechanical and electrical features on walls and roofs, and interior elevations establishing the Owner's functional requirements, equipment, and systems locations;
 - (5) Reflected ceiling plans indicating ceiling materials, heights, and all architectural, mechanical, and electrical features, devices, and equipment;
 - (6) Building and wall sections, including floor-to-floor dimensions, materials, openings and major features; and
 - (7) Schedules, including but not limited to doors, windows, equipment, and other applicable information.
 - (8) An outline specification conforming to the formatting of the Construction Specification Institute, identifying major materials and systems and establishing in general their quality levels.
 - (9) Fire life safety plan, details, materials, and sprinklering.
 - (10) Incorporation of building commissioning requirements provided by the Owner, and coordination with the Owner's consultant therefor.
- .2 Structural:
 - (1) Refinements and updates of all information included in the Schematic Design documents, and including the following:
 - (2) Plan and section drawings to identify the extent and type of structural systems and members;
 - (3) Details and notes to show the structure's conformance to the provisions of the applicable codes and regulations;
- .3 Mechanical:
 - (1) Refinements and updates of all information included in the Schematic Design documents, and including the following:
 - (2) Plans showing single line layouts with approximate sizing of major duct and piping systems on architectural plan backgrounds, and space assignments, sizes, outlines of central heating, cooling, filtering and ventilation requirements;
 - (3) Plan and section drawings to show coordination or architectural, structural, mechanical, and electrical elements; and
 - (4) Schedules, including but not limited to plumbing fixtures, HVAC equipment, software systems, and other applicable information;
 - (5) Incorporation of building commissioning requirements provided by the Owner, and coordination with the Owner's consultant therefor;
- .4 Electrical:
 - (1) Refinements and updates of all information included in the Schematic Design documents, and including the following:
 - (2) Plans showing space assignments, sizes, and outline of fixed equipment such as transformers, switch gears, and generator sets;
 - (3) Typical lighting layout coordinated with the established ceiling system;

- (4) Layout for power, fire alarm, and security systems, intercoms / speakers / communication equipment, telephones, internet connections and data networks, any cable,
 - (5) Schedules, including but not limited to lighting, equipment connections, software operating systems, and any other applicable information;
- .5 Civil Drawings:
 - (1) Refinements and updates of all information included in the Schematic Design documents, and including the following:
 - (2) Drawings showing grading, cutting, cut and fill calculations, paving, storm drainage, utilities, demolition, and all other applicable information. If work is to be phased, separate drawings for each phase of construction shall be prepared;
- .6 Landscape:
 - (1) Drawings and schedules to include proposed materials, irrigation system layout, and other applicable information. If work is to be phased, separate drawings for each phase of construction shall be prepared.
- .7 Codes and Regulations:
 - (1) Updates to all code and regulation analyses, including fire, life, safety, security, occupant accessibility including ADA compliance and all local, state, and federal requirements and regulations; and
- .8 Right-of-Way Modifications or Improvements:
 - (1) Traffic, lighting, intersection, and/or crosswalk revisions if any required by the local authorities having jurisdiction.

§ 3.3.2 The Architect shall submit to the Owner an updated estimate of the Cost of the Work to include itemization by each specification section. If the Architect's estimated Cost of the Work at this point differs from the Owner's consultant's estimated Cost of the Work, the Architect shall attend such meetings and prepare such work product as necessary to reconcile its estimate with the Owner's consultant's estimate, and the Owner shall cause its consultant to cooperate in the same. The Architect shall submit for the Owner's approval the maximum allowable construction cost ("MACC") for each specification section.

§ 3.3.2.1 The Architect shall submit the Design Development documents to the Owner, prior to final presentation and submission, and attend one (1) meeting with the Owner and any of its designees, to discuss any opportunities to maximize the value of the Project components, after which the Architect shall incorporate any changes in the final Design Development documents and submit them to the Owner pursuant to § 3.3.3.

§ 3.3.3 The Architect shall update the estimate of the Cost of the Work prepared in accordance with Section 6.3.

§ 3.3.4 The Architect shall submit the Design Development Documents to the Owner in person, advise the Owner of any adjustments to the estimate of the Cost of the Work, and request the Owner's approval. Before the Architect proceeds with the Construction Document Phase, the Architect shall make a presentation of its Design Development Documents to the Owner including, but not limited to, explaining its conformance with and any approved exceptions to the Owner's design guidelines, and to discuss any opportunities to maximize the value of the Project components, after which the Architect shall incorporate any changes in the final Design Development documents and submit them to the Owner for approval pursuant to this Section 3.3.4.

§ 3.3.5 Following the approval of the Owner, the Architect shall seek and secure review of Design Development Documents by all regulatory and certification agencies as may be necessary or appropriate, and obtain ultimate approval by those agencies. The Architect shall participate in public hearings or presentations, if required, in order to receive approval of the regulatory agencies.

§ 3.3.6 Subject to the standard of care, the Architect shall advise the Owner promptly and in writing of the necessity or advisability for the Owner to procure any tests, studies, analyses, reports, or consultant's services on which proper development of design and construction documents is dependent.

§ 3.4 Construction Documents Phase Services

§ 3.4.1 Based on the Owner's approval of the Design Development Documents, and on the Owner's authorization of any adjustments in the Project requirements and the budget for the Cost of the Work, the Architect shall prepare Construction Documents for the Owner's approval. The Construction Documents shall illustrate and describe the further development of the approved Design Development Documents and shall consist of Drawings and Specifications setting forth in detail the quality levels and performance criteria of materials and systems and other requirements for the construction of the Work. The Owner and Architect acknowledge that, in order to perform the Work, the Contractor will provide additional information, including Shop Drawings, Product Data, Samples and other similar submittals, which the Architect shall review in accordance with Section 3.6.4.

§ 3.4.2 Subject to the standard of care, the Architect shall incorporate into the Construction Documents the design requirements of governmental authorities having jurisdiction over the Project, shall prepare the Construction Documents to meet all requirements of the most recent applicable codes, regulations, and industry standards adopted in the jurisdiction. The Architect will respond to all comments, requests, or changes requested by federal, state and local governments, or certification agencies with jurisdiction over the Project or its use, including, when required, filing and prosecuting routine appeals and modifying Construction Documents. If a conflict arises between any of these requirements, the Architect will so notify the Owner and will review and recommend proposals to resolve the conflict, and assist the Owner in obtaining approval for any such resolution, as necessary.

§ 3.4.3 During the development of the Construction Documents, to the extent requested by Owner, the Architect shall assist the Owner in the development and preparation of (1) bidding and procurement information that describes the time, place, and conditions of bidding, including bidding or proposal forms; (2) the form of agreement between the Owner and Contractor; and (3) the Conditions of the Contract for Construction (General, Supplementary and other Conditions). The Architect shall also compile a project manual that includes the Conditions of the Contract for Construction and Specifications, and may include bidding requirements and sample forms.

§ 3.4.4 The Architect shall coordinate with the Owner's consultant to estimate the cost of the Project based on the Construction Documents, and update the estimate for the Cost of the Work. If the cost estimate exceeds the Owner's budget established under Section 5.2, the Architect shall proceed according to Sections 6.5 through 6.7. If the Architect's estimated Cost of the Work at this point differs from the Owner's consultant's estimated Cost of the Work, the Architect shall attend such meetings and prepare such work product as necessary to reconcile its estimate with the Owner's consultant's estimate, and the Owner shall cause its consultant to cooperate in the same. The Architect shall submit for the Owner's approval the maximum allowable construction cost ("MACC") for each specification section.

§ 3.4.5 The Architect shall submit the Construction Documents to the Owner, advise the Owner of any adjustments to the estimate of the Cost of the Work, take any action required under Section 6.5, and request the Owner's approval on the following schedule:

- .1 50% complete set provided to the Owner at least 85 calendar days prior to first bid advertisement date.
- .2 95% complete set presented in person to the Owner at least 55 calendar days prior to first bid advertisement date. Upon submission of the 95% complete set, the Architect shall attend one (1) meeting with the Owner and any of its designees, to discuss (a) any opportunities to maximize the value of the Project components; (b) constructability review and recommendations; (c) commissioning review and recommendations, after which the Architect shall incorporate any changes required by the Owner and its consultants in the final Construction Documents and proceed to submit a 100% complete set pursuant to Section 3.4.5.3 below.
- .3 100% complete set provided to the Owner at least 21 calendar days prior to first bid advertisement date.

The Architect's and its consultants' Construction Documents submitted to the Owner and to permitting or certification agencies shall be effectively complete, coordinated, and internally consistent, and shall contain no undisclosed missing elements. With submission of the 100% complete set, the Architect certifies that the

Construction Documents are in compliance with all applicable codes. The Owner's review of the any Construction Document set does not relieve the Architect of its independent obligations for the accuracy and completeness of the documents.

§ 3.4.6 The Architect will provide for each Project three sets of Construction Documents to the Owner and Contractor (and such documents in electronic format, if requested) for use by the Owner-Contractor, its subcontractors, and others who must review or approve the Project, as may be reasonably requested. The Architect will furnish additional sets of the Construction Documents as required to authorized recipients at the recipients' expense, at Architects' cost of reproduction.

§ 3.4.7 Subject to the standard of care, the Architect shall advise the Owner promptly and in writing of the necessity or advisability for the Owner to procure any tests, studies, analyses, reports, or consultant's services on which proper development of design and construction documents is dependent.

§ 3.4.8 Following the approval of the Owner, which approval shall not relieve Architect of its obligations hereunder, the Architect shall seek and secure review of Construction Documents by all regulatory and certification agencies as may be necessary or appropriate, and obtain ultimate approval by those agencies, including all necessary permit filings. The Architect shall participate in public hearings or presentations, if required, in order to receive approval of the regulatory agencies.

§ 3.4.9 Statutory Requirements. In addition to all other applicable legal requirements and professional standards:

- .1 Pursuant to ORS 671.020, all Drawings and the title page of all specifications intended to be used as construction documents shall bear the stamp of a registered architect and shall be signed by the Architect.
- .2 Pursuant to ORS 671.025, the plans and specifications shall bear identification which shall include without limitation the Project name and location, the name, address and telephone number of the person responsible for the preparation of the documents, the name, address and telephone number of the Owner, and the date the document was issued.
- .3 All Drawings and plans as required in ORS 455.645 for the structure shall be certified by a qualified professional engineer or qualified architect. The design shall provide for resistance to lateral forces including wind and earthquakes, as well as gravity loads, in accordance with accepted engineering practice and governing building codes. The design shall be accompanied by supporting lateral load calculations.
- .4 Architect shall cause all Plans and Specifications to conform to the other applicable requirements of ORS 279C.

§ 3.5 Procurement Phase Services

§ 3.5.1 General

The Architect shall assist the Owner in establishing a list of prospective contractors. Following the Owner's approval of the Construction Documents, the Architect shall assist the Owner in (1) obtaining either competitive bids or negotiated proposals; (2) confirming responsiveness of bids or proposals; (3) determining the successful bid or proposal, if any; and, (4) recommendation of an award of contracts for construction.

§ 3.5.2 Competitive Bidding

§ 3.5.2.1 Bidding Documents shall consist of bidding requirements and proposed Contract Documents.

§ 3.5.2.2 The Architect shall assist the Owner in bidding the Project by:

- .1 procuring the reproduction of Bidding Documents for distribution to prospective bidders;
- .2 distributing the Bidding Documents to prospective bidders, requesting their return upon completion of the bidding process, and maintaining a log of distribution and retrieval and of the amounts of deposits, if any, received from and returned to prospective bidders;
- .3 organizing and conducting a pre-bid conference and walk-through for prospective bidders; and

- .4 preparing responses to questions from prospective bidders and providing clarifications and interpretations of the Bidding Documents to the prospective bidders in the form of addenda.

§ 3.5.2.3 The Architect shall consider requests for substitutions, if the Bidding Documents permit substitutions, and recommend approval or rejection to the Owner. The Architect shall prepare and distribute addenda identifying substitutions approved by the Owner. The Owner will distribute addenda to all prospective bidders.

§ 3.5.2.4 The Architect shall assist the Owner, as requested, in evaluating the Contractor's proposals for Work to be performed by the Contractor or an affiliated entity, including evaluation of proposals by subcontractors or other benchmark pricing submitted in connection with the Contractor's proposals for self-performed Work. In addition to all other review, the Architect will assist the Owner in investigating and vetting the "responsibility" and suitability of the apparent lowest bidder.

§ 3.5.2.5 The Architect, if requested, shall attend bid opening, tabulate the bids and generally assist in evaluating the bids.

§ 3.5.3 Negotiated Proposals

§ 3.5.3.1 Proposal Documents shall consist of proposal requirements and proposed Contract Documents.

§ 3.5.3.2 The Architect shall assist the Owner in obtaining proposals by:

- .1 facilitating the distribution of Proposal Documents for distribution to prospective contractors and requesting their return upon completion of the negotiation process;
- .2 organizing and participating in selection interviews and walk-throughs with prospective contractors;
- .3 preparing responses to questions from prospective contractors and providing clarifications and interpretations of the Proposal Documents to the prospective contractors in the form of addenda; and
- .4 participating in negotiations with prospective contractors, and subsequently preparing a summary report of the negotiation results, as directed by the Owner.

§ 3.5.3.3 The Architect shall consider requests for substitutions, if the Proposal Documents permit substitutions, and shall prepare addenda identifying substitutions approved by the Owner. The Owner will distribute the addenda to all prospective contractors.

§ 3.5.3.4 The Architect shall assist the Owner in evaluating the proposals for Work to be performed, including evaluation of proposals by subcontractors and benchmark pricing submitted in connection with the Contractor's proposal for self-performed Work.

§ 3.6 Construction Phase Services

§ 3.6.1 General

§ 3.6.1.1 The Architect shall provide administration of the Contract between the Owner and the Contractor as set forth below and in AIA Document A201™-2017, General Conditions of the Contract for Construction as modified by Owner.

§ 3.6.1.2 The Architect shall advise and consult with the Owner during the Construction Phase Services. The Architect shall have authority to act on behalf of the Owner only to the extent provided in this Agreement. The Architect shall report to the Owner all observed deviations from the Contract Documents and from the most recent construction schedule submitted by the Contractor. The Architect shall not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work unless the Plans and Specifications direct the same, nor shall the Architect be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents unless Architect observes but fails timely to report such failure to the Owner. The Architect shall be responsible for the Architect's and its consultants' negligent acts or omissions including, but not limited to, the failure to identify and notify the Owner of defective work or work that is not in compliance with the Construction Documents and to seek correction of such defective work, but shall not have control over or charge of, and shall not be responsible for, acts or omissions of the Contractor or of any other persons or entities performing portions of the Work.

§ 3.6.1.3 Subject to Section 4.2 and except as provided in Section 3.6.6.5, the Architect's responsibility to provide Construction Phase Services commences with the award of the Contract for Construction and terminates at the expiration of the period of correction of the Work described in the General Conditions for each Project. The Architect will furnish architectural services and consultations necessary to correct minor construction defects encountered during the correction period.

§ 3.6.2 Evaluations of the Work

§ 3.6.2.1 The Architect shall visit the site at least weekly and otherwise at intervals appropriate to the stage of construction, or as otherwise required in Section 4.2.3, to become generally familiar with the progress and quality of the portion of the Work completed, to guard the Owner against defects and deficiencies in the Work, and to determine, in general, if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents to become generally familiar with the progress and quality of the portion of the Work completed, and to observe and report defects and deficiencies in the Work. The Architect shall make on-site inspections to check the quality and quantity of the Work as set forth in this Agreement. On the basis of the site visits, the Architect shall keep the Owner reasonably informed about the progress and quality of the portion of the Work completed, and shall report in writing to the Owner, in writing, within twenty-four hours of the observation of the following in a form acceptable to the Owner: (1) known deviations from substitutions to the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. Architect shall work with Owner to ensure that such deviations and deficiencies are corrected as a part of its Basic Services.

§ 3.6.2.2 The Architect has the authority to and shall, with advance written notice to the Owner, reject Work and documentation and submittals that do not conform to the Contract Documents. Architect shall give Owner prior notice of any proposed rejection of Work and shall identify to Owner the nature of the deficiency Architect perceives in the Work proposed to be rejected, and shall inform the Owner contemporaneously of any rejection of Work or documents or submittals. Whenever the Architect considers it necessary or advisable, the Architect shall, after consultation with the Owner, have the authority to require inspection or testing of the Work in accordance with the provisions of the Contract Documents, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Architect nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Architect to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 3.6.2.3 The Architect shall interpret the Contract Documents on written request of the Owner, and shall decide matters concerning performance under, and requirements of, the Contract Documents on written request of the Owner. The Architect's response to such requests shall be made in writing within any time limits required in the Contract Documents, or otherwise agreed upon, or otherwise with reasonable promptness, but not in any event in excess of seven calendar days from request.

§ 3.6.2.4 Interpretations and decisions of the Architect shall be consistent with the intent of, and reasonably inferable from, the Contract Documents and shall be in writing or in the form of drawings. When making such interpretations and decisions, the Architect shall endeavor to secure faithful performance by both Owner and Contractor, shall not show partiality to either, and shall not be liable for results of interpretations or decisions rendered in good faith.

§ 3.6.2.5 Unless the Owner designates another person to serve as an Initial Decision Maker, as that term is defined in AIA Document A201-2017, or removes the requirement of Initial Decision Maker, the Architect, at Owner's request, shall render initial decisions on Claims between the Owner and Contractor as provided in the Contract Documents.

§ 3.6.2.6 The Architect will consistently attend construction progress and scheduling meetings at the Project site, ensure that such meetings are regularly scheduled, review and approve or reject the Contractor's Critical-path Method schedule for the Work, and address all matters within the scope of the Architect's services for the Project. The Architect shall review and correct minutes and other meeting documentation prepared by others, and ensure that appropriate minutes and Project documentation are maintained and preserved.

§ 3.6.2.7 The Architect will require its consultants and engineers to perform periodic visual observations necessary to determine whether materials and equipment provided by the Contractor to be installed or incorporated in the Work

conform to the requirements of the Contract Documents. However, the Architect and consultants shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work.

§ 3.6.2.8 The Architect shall submit to the Owner a written field report approximately every week or more frequently as appropriate to the work being performed on the job site. Architect promptly shall notify Owner of any failure by Contractor, subcontractors or any other person performing any of the work to carry out that work in accordance with the Contract Documents.

§ 3.6.3 Certificates for Payment to Contractor

§ 3.6.3.1 The Architect shall review, check the calculations of, and certify the amounts due the Contractor and shall issue Certificates for Payment in such amounts. Based on the Architect's observations and evaluations of the Contractor's Applications for Payment, the Architect shall review and certify the amounts due the Contractor within five (5) days after receipt of the Contractor's Application for Payment, and shall, from time to time upon the request of the Owner, issue to Owner and/or Owner's lender, a Certificate in a form acceptable to Owner together with any other documents, certificates, instruments and information reasonably requested by Owner and Owner's lender. Architect shall assemble and certify all certificates of payment and backup information which may be reasonably necessary or of assistance to Owner in filing required documentation for Owner's lender and governmental authorities. The Architect shall consult with Owner's Representative to reach agreement on the progress of the Work and on the amounts due the Contractor. The Architect's certification for payment shall constitute a representation to the Owner, based on the Architect's evaluation of the Work as provided in Section 3.6.2 and on the data comprising the Contractor's Application for Payment, that, to the best of the Architect's knowledge, information and belief, the Work has progressed to the point indicated and that the quality of the Work is in accordance with the Contract Documents, and that the Contractor is entitled to payment in the amount certified. The foregoing representations are subject to: (1) an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, (2) results of subsequent tests and inspections, (3) correction of minor deviations from the Contract Documents prior to completion, and (4) specific qualifications expressed by the Architect. The Architect shall submit all periodic and final Certificates of Payment and completion to Owner for Owner's review and concurrence before issuing the same.

§ 3.6.3.2 The issuance of a Certificate for Payment shall not be a representation that the Architect has (1) made exhaustive or continuous on-site inspections to check the quality or quantity of the Work, (2) reviewed construction means, methods, techniques, sequences or procedures, (3) reviewed copies of requisitions received from Subcontractors and suppliers and other data requested by the Owner to substantiate the Contractor's right to payment, or (4) ascertained how or for what purpose the Contractor has used money previously paid on account of the Contract Sum.

§ 3.6.3.3 The Architect shall maintain a record of the Applications and Certificates for Payment.

§ 3.6.3.4 The Architect shall complete its review of each Application for Payment from the Contractor and deliver the Certificate for Payment (or rejection of the Application for Payment) to the Owner within seven (7) calendar days from the date of the Architect's receipt of the Application for Payment. Architect shall submit all periodic and final Certificates of Payment and completion to Owner for Owner's review and concurrence before issuing the same.

§ 3.6.4 Submittals

§ 3.6.4.1 The Architect shall review the Contractor's submittal schedule and shall not unreasonably delay or withhold approval of the schedule. The Architect's action in reviewing submittals shall be taken in accordance with the approved submittal schedule or, in the absence of an approved submittal schedule, with reasonable promptness (not exceeding seven (7) calendar days) while allowing sufficient time, in the Architect's professional judgment, to permit adequate review within the Project schedule.

§ 3.6.4.2 In accordance with the Architect-approved submittal schedule, the Architect and its consultants shall review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data and Samples, for the primary purpose of checking for conformance with information given and the design and engineering concept expressed in the Contract Documents. The Architect shall track the status of all submittals and provide periodic written reports to the Owner, or upon the Owner's request. Review of such submittals is not for the purpose of determining the accuracy and completeness of other information such as dimensions, quantities, and

installation or performance of equipment or systems, which are the Contractor's responsibility. The Architect's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Architect, of any construction means, methods, techniques, sequences or procedures. The Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 3.6.4.3 If the Contract Documents specifically require the Contractor to provide professional design services or certifications by a design professional related to systems, materials, or equipment (i.e., Delegated Design Components), the Architect shall specify the appropriate performance and design criteria that such services must satisfy. The Architect shall review and take appropriate action on Shop Drawings and other submittals related to the Work designed or certified by the Contractor's design professional, provided the submittals bear such professional's seal and signature when submitted to the Architect. The Architect's review shall include checking for conformance with information given and the design concept expressed in the Contract Documents and determining that the systems, materials, or equipment are designed in conformance with the performance or design criteria and the design concept expressed in the Contract Documents. The Architect shall be entitled to reasonably rely upon the adequacy and accuracy of the services, certifications, and approvals performed or provided by such design professionals. Architect also shall be responsible for Coordination of such Delegated Design Component work. "Coordination" of Delegated Design Component work means (i) overseeing the timeliness of Delegated Design Component work and promptly notifying Owner and Contractor of any delay in the same; (ii) reviewing the designs and specifications of the design-builders for observable quality problems and to detect incompatibilities or inconsistencies with Owner's program and Architect's designs and specifications ("Design Conflicts"), (iii) preparing Architect's plans and specifications to reasonably avoid Design Conflicts; (iv) identifying Design Conflicts promptly to Owner and Contractor, and making proposals to Owner and Contractor for resolution of Design Conflicts, (v) implementing resolutions of Design Conflicts into Architect's drawings and specifications, (vi) submitting the Delegated Design Component drawings and specifications together with Architect's drawings and specifications for permitting and bid packages; and (vii) performance during the construction phase of Architect's duties with respect to review of the Delegated Design Component work. The cost of such services in connection with the Delegated Design Component work is included in Architect's Basic Services.

§ 3.6.4.4 Subject to Section 4.2, the Architect shall review and respond to requests for information about the Contract Documents within seven (7) calendar days of their submission. The Architect shall set forth, in the Contract Documents, the requirements for requests for information. Requests for information shall include, at a minimum, a detailed written statement that indicates the specific Drawings or Specifications in need of clarification and the nature of the clarification requested. The Architect's response to such requests shall be made in writing within any time limits agreed upon, or otherwise with reasonable promptness. If appropriate, the Architect shall prepare and issue supplemental Drawings and Specifications in response to the requests for information.

§ 3.6.4.5 The Architect shall maintain a record of submittals and copies of submittals supplied by the Contractor in accordance with the requirements of the Contract Documents.

§ 3.6.5 Changes in the Work

§ 3.6.5.1 The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve aesthetic changes or an adjustment in the Contract Sum or an extension of the Contract Time. The Architect must notify the Owner's Representative in advance of ordering any such changes, and shall not make the change if the Owner so designates. Subject to Section 4.2, the Architect shall prepare Change Orders and Construction Change Directives for the Owner's approval and execution in accordance with the Contract Documents.

§ 3.6.5.2 The Architect shall maintain records relative to changes in the Work.

§ 3.6.5.3 The Architect shall review requests by the Owner or Contractor for changes in the Work, including adjustments to the Contract Sum or Contract Time.

§ 3.6.5.4 If the Architect determines that implementation of the requested changes would result in a change to the Contract that may cause an adjustment in the Contract Time or Contract Sum, the Architect shall make a written recommendation to the Owner, who may authorize further investigation of such change. Upon such authorization, and based upon information furnished by the Contractor, if any, the Architect shall prepare a written estimate of the

additional cost and time that might result from such change, including any additional costs attributable to a change in services of the Architect. With the Owner's approval, the Architect shall incorporate those estimates into a Change Order or other appropriate documentation for the Owner's execution or negotiation with the Contractor.

§ 3.6.6 Project Completion

§ 3.6.6.1 The Architect shall:

- .1** conduct inspections to validate (or at the Owner's request determine) the date or dates of Substantial Completion and the date of final completion as provided in the General Conditions of the Construction Contract;
- .2** issue Certificates of Substantial Completion;
- .3** collect, receive, and forward to the Owner, for the Owner's review and records, written warranties and related documents required by the Contract Documents and received from the Contractor; and,
- .4** issue a final Certificate for Payment based upon a final inspection indicating that, to the best of the Architect's knowledge, information and belief, the Work complies with the requirements of the Contract Documents.

§ 3.6.6.2 The Architect's inspections shall be conducted with the Owner to check conformance of the Work with the requirements of the Contract Documents and to verify the accuracy and completeness of the list submitted by the Contractor of Work to be completed or corrected. Operations and maintenance materials prepared by the Contractor and its subcontractors shall be reviewed by the Architect in the same manner as submittals.

§ 3.6.6.3 When Substantial Completion has been achieved, the Architect shall inform the Owner about the balance of the Contract Sum remaining to be paid the Contractor, including the amount to be retained from the Contract Sum, if any, for final completion or correction of the Work, and shall issue Certificates of Substantial Completion using AIA Document G704 or a substantially similar form acceptable to Owner.

§ 3.6.6.4 The Architect shall forward to the Owner the following information received from the Contractor: (1) consent of surety or sureties, if any, to reduction in or partial release of retainage or the making of final payment; (2) affidavits, receipts, releases and waivers of liens and claims, or bonds indemnifying the Owner against liens and claims; and (3) any other documentation required of the Contractor under the Contract Documents. The Architect shall review and approve operations and maintenance materials prepared by the Contractor and its subcontractors, as well as As-Built Drawings, in the same manner as submittals.

§ 3.6.6.5 Upon request of the Owner, and prior to the expiration of one year from the date of Substantial Completion, the Architect shall, without additional compensation, conduct a meeting with the Owner to review the facility operations and performance and prepare a punch list of required corrective actions by the Contractor and any discrepancies observed, distribute the written documents to the Contractor, and make appropriate recommendations to the Owner.

§ 3.6.6.6 The Architect shall provide information and assistance to the Owner and its consultants and agents, including its commissioning agent, following Substantial Completion. The Contractor will be responsible for coordinating the commissioning of all designated systems.

§ 3.6.6.7 With Architect's prior review and approval of form, containing reasonable limits including the standard of care, actual knowledge and good faith, the Architect shall provide any documentation that may be required by the Owner's lender or other financing source on the Project ("Lender") verifying completion of the Project in compliance with the Contract Documents and other certifications reasonably required by the Lender.

ARTICLE 4 SUPPLEMENTAL AND ADDITIONAL SERVICES

§ 4.1 Supplemental Basic Services

§ 4.1.1 The services listed below will be required for the Project and, where the Architect is listed under the Responsibility column, are included in the scope of Architect's Basic Services and compensated by the fee set forth in Section 11.1.1.

Supplemental Services	Responsibility (Architect, Owner, or not provided)
§ 4.1.1.1 Programming	
§ 4.1.1.2 Multiple preliminary designs	
§ 4.1.1.3 Measured drawings	
§ 4.1.1.4 Existing facilities surveys	
§ 4.1.1.5 Site evaluation and planning	
§ 4.1.1.6 Building Information Model management responsibilities	
§ 4.1.1.7 Development of Building Information Models for post construction use	
§ 4.1.1.8 Civil engineering	
§ 4.1.1.9 Landscape design	
§ 4.1.1.10 Architectural interior design	
§ 4.1.1.11 Value analysis	
§ 4.1.1.12 Detailed cost estimating beyond that required in Sections 3 and 6	
§ 4.1.1.13 On-site project representation	
§ 4.1.1.14 Conformed documents for construction	
§ 4.1.1.15 As-designed record drawings	
§ 4.1.1.16 As-constructed record drawings	
§ 4.1.1.17 Post-occupancy evaluation	
§ 4.1.1.18 Facility support services	
§ 4.1.1.19 Tenant-related services	
§ 4.1.1.20 Architect's coordination of the Owner's consultants	
§ 4.1.1.21 Telecommunications/data design	
§ 4.1.1.22 Security evaluation and planning	
§ 4.1.1.23 Commissioning	
§ 4.1.1.24 Sustainable Project Services pursuant to Section 4.1.3	
§ 4.1.1.25 Fast-track design services	
§ 4.1.1.26 Multiple bid packages	
§ 4.1.1.27 Historic preservation	
§ 4.1.1.28 Furniture, furnishings, and equipment design	
§ 4.1.1.29 Other services provided by specialty Consultants	
§ 4.1.1.30 Other Supplemental Services	

§ 4.1.2 Description of Supplemental Services

§ 4.1.2.1 A description of each Supplemental Service identified in Section 4.1.1 as the Architect's responsibility is provided below.

(Describe in detail the Architect's Supplemental Services identified in Section 4.1.1 or, if set forth in an exhibit, identify the exhibit. The AIA publishes a number of Standard Form of Architect's Services documents that can be included as an exhibit to describe the Architect's Supplemental Services.)

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§ 4.1.2.2 A description of each Supplemental Service identified in Section 4.1.1 as the Owner's responsibility is provided below.

(Describe in detail the Owner's Supplemental Services identified in Section 4.1.1 or, if set forth in an exhibit, identify the exhibit.)

« »

§ 4.2 Architect's Additional Services. The Architect may provide Additional Services after execution of this Agreement without invalidating the Agreement. All services reasonably required to provide the services described in Section 3 are Basic Services. Except for services required due to the fault of the Architect, any Additional Services provided in accordance with this Section 4.2 shall entitle the Architect to compensation pursuant to Section 11.3 and an appropriate adjustment in the Architect's schedule. Architect shall provide Owner prior written approval of any Additional Service. If the approval request does not state that the service is an Additional Service, it shall be deemed a Basic Service, and Owner may, in its approval, reserve the right to assert that some or all of the services characterized by Architect as Additional Services are Basic Services. In no event shall a service be considered an Additional Service if the service, or the need for such service, arises out of the fault, neglect, or nonperformance of Architect or its consultants. Furthermore, a service will only be considered a potential Additional Service only to the extent Architect establishes that Architect's costs are increased as a result of the same.

§ 4.2.1 Upon recognizing the need to perform the following Additional Services, the Architect shall notify the Owner with reasonable promptness and explain the facts and circumstances giving rise to the need. The Architect shall not proceed to provide the following Additional Services until the Architect receives the Owner's written authorization:

- .1 Services necessitated by a material unanticipated change in the Initial Information, previous instructions or approvals given by the Owner, or a material change in the Project including, but not limited to, size, quality, complexity, the Owner's schedule or budget for Cost of the Work, or procurement or delivery method;
- .2 Services necessitated by the enactment or revision of codes, laws, or regulations, including changing or editing previously prepared Instruments of Service, after issuance of permits;
- .3 Changing or editing previously prepared Instruments of Service necessitated by official interpretations of applicable codes, laws or regulations after issuance of permits that are either (a) contrary to specific interpretations by the applicable authorities having jurisdiction made prior to the issuance of the building permit, or (b) contrary to requirements of the Instruments of Service when those Instruments of Service were prepared in accordance with the applicable standard of care;
- .4 Services necessitated by decisions of the Owner not rendered in a timely manner (given a reasonable period for response) or any other material failure of performance on the part of the Owner or the Owner's consultants or contractors for which the Architect can demonstrate an impact to the schedule that increases Architect's costs;
- .5 Preparation for, and attendance at, a dispute resolution proceeding or legal proceeding, except (i) where the Architect is party thereto, or (ii) when necessary for issuance of permits;
- .6 Consultation concerning replacement of Work resulting from fire or other cause during construction.

§ 4.2.2 To avoid delay in the Construction Phase, the Architect shall provide the following Additional Services, notify the Owner with reasonable promptness, and explain the facts and circumstances giving rise to the need. If the Owner subsequently determines that all or parts of those services are not Additional Services, the Owner shall give prompt written notice to the Architect, and unless otherwise agreed compensation for the services shall be established in accordance with Article 8. Furthermore, the following will be considered Additional Services only to the extent Architect establishes that Architect's costs are increased as a result of the same.

- .1 Reviewing a Contractor's submittal materially out of sequence from the submittal schedule approved by the Architect;
- .2 Responding to the Contractor's excessive requests for information that are not prepared in accordance with the Contract Documents if such information is otherwise available to the Contractor from typical study and comparison of the Contract Documents, field conditions, other Owner provided information, Contractor prepared coordination drawings, or prior Project correspondence or documentation.

§ 4.2.3 The Architect shall provide Construction Phase Services for each Project exceeding the limits set forth below as Additional Services. When the limits below are reached, the Architect shall notify the Owner:

- .1 «2» («two») reviews of each Shop Drawing, Product Data item, sample and similar submittals of the Contractor.
- .2 «1» («one») site visit per week by the Architect during construction.
- .3 «2» («two») inspections for any portion of the Work to determine whether such portion of the Work is substantially complete in accordance with the requirements of the Contract Documents.
- .4 «2» («two») inspections for any portion of the Work to determine final completion.

§ 4.2.4 To the extent the Architect's Basic Services are affected, and except for services required under Section 3.6.6.5 and those services that do not exceed the limits set forth in Section 4.2.3, Construction Phase Services provided more than 60 days after (1) the date of Substantial Completion of the Work or (2) the initial date of Substantial Completion identified in the agreement between the Owner and Contractor, whichever is later, shall be compensated as Additional Services to the extent the Architect incurs additional cost in providing those Construction Phase Services.

§ 4.2.5 If the services covered by this Agreement (other than warranty period inspection) have not been completed within the time identified in Section 4.2.4 through no fault of the Architect, extension of the Architect's services beyond that time shall be compensated as Additional Services.

ARTICLE 5 OWNER'S RESPONSIBILITIES

§ 5.1 Unless otherwise provided for under this Agreement, the Owner shall provide (unless already provided) information reasonably requested, if necessary, and relevant for Architect to perform in a timely manner regarding requirements for and limitations on the Project to the extent such information is identified herein.

§ 5.2 Unless otherwise stated herein or in the Request for Proposals, the Owner shall establish the Owner's budget for the Project, including (1) the budget for the Cost of the Work as defined in Section 6.1; (2) the Owner's other costs; and, (3) reasonable contingencies related to all of these costs. The Owner, at the Owner's election, may update the Owner's budget for the Project as necessary throughout the duration of the Project until final completion. If the Owner significantly increases or decreases the Owner's budget for the Cost of the Work, the Owner shall notify the Architect. The Architect shall thereafter advise the Owner concerning the resulting effects on the Project's scope and quality.

§ 5.3 The Owner shall identify a representative authorized to act on the Owner's behalf with respect to the Project. The Owner shall render decisions and approve the Architect's submittals in a timely manner in order to avoid unreasonable delay in the orderly and sequential progress of the Architect's services.

§ 5.4 The Owner shall furnish available surveys to describe physical characteristics, legal limitations and utility locations for the site of the Project, and a written legal description of the site. The surveys and legal information shall include, as applicable and available, grades and lines of streets, alleys, pavements and adjoining property and structures; designated wetlands; adjacent drainage; rights-of-way, restrictions, easements, encroachments, zoning, deed restrictions, boundaries and contours of the site; locations, dimensions, and other necessary data with respect to existing buildings, other improvements and trees; and information concerning available utility services and lines, both public and private, above and below grade, including inverts and depths.

§ 5.5 If the Owner determines applicable, the Owner shall furnish services of geotechnical engineers, which may include test borings, test pits, determinations of soil bearing values, percolation tests, evaluations of hazardous materials, seismic evaluation, ground corrosion tests and resistivity tests, including necessary operations for anticipating subsoil conditions, with written reports and appropriate recommendations.

§ 5.6 The Owner shall provide the Supplemental Services, if any, designated as the Owner's responsibility in Section 4.1.1.

§ 5.7 Each party shall coordinate the services of its own consultants with those services provided by the other. Upon each party's request, the other party shall furnish copies of the scope of services in the contracts between the other

party and its consultants. The Owner's engagement of a consultant does not limit or define the scope of services, tests or inspections to be provided by Architect or its consultants.

§ 5.8 The Owner shall furnish tests, inspections and reports required by law or the Contract Documents, such as structural, mechanical, and chemical tests, tests for air and water pollution, and tests for hazardous materials. This paragraph does not limit or define the scope of tests or inspections to be provided by Architect or its consultants.

§ 5.9 The Owner shall furnish all legal, insurance and accounting services, including auditing services, that Owner determines reasonably necessary at any time for the Project to meet the Owner's needs and interests. Owner retains the right to self-insure.

§ 5.10 The Owner shall, if Owner determines it appropriate, provide prompt written notice to the Architect if the Owner becomes aware of any fault or defect in the Project involving Architect, including errors, omissions or inconsistencies in the Architect's Instruments of Service.

§ 5.11 The Owner may communicate directly with the Contractor and Architect's consultants, but may elect to communicate with the Contractor and the Architect's consultants through the Architect about matters arising out of or relating to the Contract Documents.

§ 5.12 Before executing the Contract for Construction, the Owner shall endeavor to coordinate the Architect's duties and responsibilities set forth in the Contract for Construction with the Architect's services set forth in this Agreement. The Architect, at Owner's request, shall cooperate with such coordination. The Architect may request that the Owner provide the Architect a copy of the executed agreement between the Owner and Contractor, including the General Conditions of the Contract for Construction.

§ 5.13 The Owner shall provide the Architect reasonable access to the Project site prior to commencement of the Work and shall obligate the Contractor to provide the Architect access to the Work wherever it is in preparation or progress, subject to site safety and security rules.

§ 5.14 The Owner's approval, acceptance, use of or payment for all or any part of the Architect's services hereunder shall in no way alter the Architect's obligations or the Owner's rights hereunder, nor excuse Architect or its consultants from any failure to perform in accordance with the applicable standard of care.

§ 5.15 Architect acknowledges that the provisions of the Oregon Tort Claims Act (ORS 30.260-30.300) apply to the obligations of the Owner, and any such obligation shall be limited as provided in the applicable provisions of the Oregon Tort Claims Act and other applicable law notwithstanding any other provision of this Agreement seemingly to the contrary.

ARTICLE 6 COST OF THE WORK

§ 6.1 For purposes of this Agreement, the Cost of the Work shall be the total cost to the Owner to construct all elements of the Project designed or specified by the Architect and shall include contractors' general conditions costs, overhead and profit. The Cost of the Work also includes the reasonable value of labor, materials, and equipment, donated to, or otherwise furnished by, the Owner. The Cost of the Work does not include the compensation of the Architect; the costs of the land, rights-of-way, financing, or contingencies for changes in the Work; or other costs that are the responsibility of the Owner.

§ 6.2 The Owner's budget for the Cost of the Work is provided in Initial Information, and may be adjusted by Owner throughout the Project under Sections 5.2, 6.4 and 6.5. Evaluations of the Owner's budget for the Cost of the Work, and the preliminary estimate of the Cost of the Work and updated estimates of the Cost of the Work, prepared by the Architect, represent the Architect's judgment as a design professional. It is recognized, however, that neither the Architect nor the Owner has control over the cost of labor, materials, or equipment; the Contractor's methods of determining bid prices; or competitive bidding, market, or negotiating conditions. Accordingly, the Architect cannot and does not warrant or represent that bids or negotiated prices will not vary from the Owner's budget for the Cost of the Work, or from any estimate of the Cost of the Work, or evaluation, prepared or agreed to by the Architect.

§ 6.3 In preparing or verifying the estimates of the Cost of Work, the Architect shall be permitted, subject to the Owner's prior approval, to include contingencies for design, bidding, and price escalation; to determine what materials, equipment, component systems, and types of construction are to be included in the Contract Documents. The Architect shall recommend reasonable adjustments in the program and scope of the Project; and recommend and include design and bid alternates acceptable to Owner as may be necessary to adjust the estimated Cost of the Work to meet the Owner's budget for the Cost of the Work. The Architect's estimate or verification of the Cost of the Work shall be based on the best method reasonably available, which may include (without limitation) current area, volume or similar conceptual estimating techniques.

§ 6.4 If, through no fault of the Architect, the Procurement Phase has not commenced within 90 days after the Architect submits the Construction Documents to the Owner, the Owner may, at Owner's discretion, adjust Owner's budget for the Cost of the Work to reflect changes in the general level of prices in the applicable construction market.

§ 6.5 If at any time the estimate of the Cost of the Work exceeds the Owner's budget for the Cost of the Work, the Architect shall, as a Basic Service, make appropriate recommendations to the Owner to adjust the Project's size, quality, or budget for the Cost of the Work.

§ 6.6 If the Owner's budget for the Cost of the Work at the conclusion of the Construction Documents Phase Services is exceeded by the lowest bona fide bid or negotiated proposal, the Owner shall

- .1 give written approval of an increase in the budget for the Cost of the Work;
- .2 authorize rebidding or renegotiating of the Project within a reasonable time;
- .3 terminate in accordance with Section 9.5;
- .4 in consultation with the Architect or the Owner's consultant, revise the Project program, scope, or quality as required to reduce the Cost of the Work; or,
- .5 implement any other mutually acceptable alternative.

§ 6.7 If the Owner chooses to proceed under Section 6.6.4, the Architect shall modify the Construction Documents as necessary to comply with the Owner's budget for the Cost of the Work at the conclusion of the Construction Documents Phase Services, or the budget as adjusted under Section 6.6.1. If the Owner requires the Architect to modify the Construction Documents because the lowest bona fide bid or negotiated proposal exceeds the Owner's budget for the Cost of the Work the Architect's services for modifying the Construction Documents shall be without additional compensation. In any event, the Architect's modification of the Construction Documents shall be the limit of the Architect's responsibility under this Article 6, absent professional negligence.

ARTICLE 7 COPYRIGHTS AND LICENSES

§ 7.1 Drawings, specifications, and other documents, including those in electronic form, prepared by the Architect and the Architect's consultants are Instruments of Service for use with respect to the applicable Project. The Architect warrants, for itself and on behalf of its consultants, that in preparing or transmitting Instruments of Service, or any other works or information, the preparing or transmitting party (along with Owner) is the copyright owner of such works or information or has permission from the copyright owner to prepare and transmit such works and information for its intended use on the Project.

§ 7.2 The Architect and the Architect's consultants shall be deemed the authors of their respective Instruments of Service, including the Drawings and Specifications. The Owner is hereby assigned and shall retain all ownership, common law, statutory and other reserved rights, including copyrights. Submission or distribution of Instruments of Service to meet official regulatory requirements or for similar purposes in connection with the Project is not to be construed as publication in derogation of the reserved rights.

§ 7.3 It is intended that the Instruments of Service of Architect and its consultants ("Instruments of Service") are work made for hire by an independent contractor under provisions of the U.S. Copyright Act and that therefore the Owner shall be deemed the Instruments of Service's owner. If Architect's or its consultant's work does not meet the definition of work made for hire by an independent contractor, then Architect hereby irrevocably and unconditionally assigns and transfers to the Owner (and shall cause its consultants in their consultant agreements, or otherwise, to irrevocably and unconditionally assign and transfer to the Owner) all right, title and interest in all Instruments of Service, whether arising from copyright, patent, trademark, trade secret, or any other state or federal

intellectual property law or doctrines. Architect waives and releases (and shall cause its consultants to waive and release) all rights relating to the ownership of the Instruments of Service produced under this Contract, including any rights arising under 17 U.S.C. § 106A. As owner of the Instruments of Service, the Owner shall have the right to use or grant licenses for use of the Instruments of Service, including licenses for use to the Contractor, Subcontractors, Sub-subcontractors, and material or equipment suppliers, as well as the Owner's consultants and separate contractors, to reproduce applicable portions of the Instruments of Service for use in performing the services on the Project. Architect and its consultants retain the right to use standard architectural and engineering details included in the Instruments of Service for other projects.

§ 7.3.1 In the event the Owner uses the Instruments of Service, other than prototypes, on another project without retaining the authors of the Instruments of Service, the Owner releases the Architect and Architect's consultant(s) from all claims and causes of action arising from such uses that Architect establishes would have been avoided by Owner's retention of the author for such uses. The terms of this Section 7.3.1 shall not apply if the Owner rightfully terminates this Agreement for cause under Section 9.4, or (ii) negligent, deficient or nonconforming services of Architect or its consultants, or (iii) to Instruments of Service that are (or are agreed to be used as) prototypes. It is intended that the Owner may use and allow others to use prototype Instruments of Service without restriction or condition.

§ 7.4 Except for the ownership and licenses granted under this Article 7 or elsewhere in this Agreement, no other license or right shall be deemed granted or implied under this Agreement. To the extent provided in Section 7.3.1, any unauthorized use of the Instruments of Service shall be at the Owner's sole risk and without liability to the Architect and the Architect's consultants.

§ 7.5 The provisions of this Article 7 shall survive the termination of this Agreement.

§ 7.6 Notwithstanding any other provision of Section 7.3, Instruments of Service may be continuously used for construction of the Project during the pendency of any dispute between the Owner and the Architect, including without limitation any dispute for payment, and thereafter. Neither Architect nor any of its consultants shall have any right to stop or enjoin use of the Instruments of Service by Owner, and any claim of Architect or its consultants for unauthorized use shall be limited to appropriate monetary relief.

ARTICLE 8 CLAIMS AND DISPUTES

§ 8.1 General

§ 8.1.1 The Owner and Architect shall commence all claims and causes of action against the other and arising out of or related to this Agreement, whether in contract, tort, or otherwise, in accordance with the requirements of the binding dispute resolution method selected in this Agreement and within the period specified by applicable law.

§ 8.1.2 To the extent damages are covered by property insurance, the Owner and Architect waive all rights against each other and against the contractors, consultants, agents, and employees of the other for damages, except such rights as they may have to the proceeds of such insurance as set forth in AIA Document A201-2017, General Conditions of the Contract for Construction, as modified by Owner. The Owner or the Architect, as appropriate, shall require of the contractors, consultants, agents, and employees of any of them, similar waivers in favor of the other parties enumerated herein.

§ 8.2 Mediation

§ 8.2.1 At Owner's sole election, any claim, dispute or other matter in question arising out of or related to this Agreement shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 8.2.2 At the Owner's election, the Owner and Architect shall endeavor to resolve claims, disputes and other matters in question between them by mediation shall be administered by either the American Arbitration Association (AAA) in accordance with its Construction Industry Mediation Procedures in effect on the date of this Agreement, or the Arbitration Service of Portland (ASP) in accordance with its rules, in effect on the date of this Agreement, as selected by Owner ("Arbitration Service"). A request for mediation shall be made in writing, delivered to the Architect, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of a complaint or other appropriate demand for binding dispute resolution but, in such event, if the Owner elects to mediate, mediation shall proceed in advance of binding dispute resolution proceedings, which shall

be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration proceeding is stayed pursuant to this section, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 8.2.3 If the dispute is mediated, the parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 8.2.4 If the parties do not resolve a dispute through mediation pursuant to this Section 8.2, the method of binding dispute resolution shall be the following:

(Check the appropriate box.)

☒ Arbitration pursuant to Section 8.3 of this Agreement

☐ Litigation in a court of competent jurisdiction

☐ Other: *(Specify)*

If the Owner and Architect do not select a method of binding dispute resolution, or do not subsequently agree in writing to a binding dispute resolution method other than litigation, the dispute will be resolved in a court of competent jurisdiction. Venue for court action shall be in the county in which the Project is located.

§ 8.3 Arbitration

§ 8.3.1 If the parties have selected arbitration as the method for binding dispute resolution in this Agreement, any claim, dispute or other matter in question arising out of or related to this Agreement subject to, but not resolved by, mediation shall be subject to arbitration, which, unless the parties mutually agree otherwise, shall be administered by the Arbitration Service selected by Owner in accordance with its Construction Industry Arbitration Rules (if AAA) or its rules (if ASP) in effect on the date of this Agreement, except that there shall be a single arbitrator regardless of the amount in dispute. A demand for arbitration shall be made in writing, delivered to the other party to this Agreement, and filed with the person or entity administering the arbitration. Any arbitration of a claim or dispute under this Agreement shall be conducted in the county location of Owner, unless the parties mutually agree upon a different location.

§ 8.3.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the claim, dispute or other matter in question would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the claim, dispute or other matter in question.

§ 8.3.2 The foregoing agreement to arbitrate, and other agreements to arbitrate with an additional person or entity duly consented to by parties to this Agreement, shall be specifically enforceable in accordance with applicable law in any court having jurisdiction thereof.

§ 8.3.3 The award rendered by the arbitrator(s) shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 8.3.4 Consolidation or Joinder

§ 8.3.4.1 Either party, with the Owner's approval, may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation; (2) the arbitrations to be consolidated substantially involve common questions of law or fact; and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 8.3.4.2 Either party, with the Owner's approval, may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

§ 8.3.4.3 The Architect grants to any person or entity made a party to an arbitration conducted under this Section 8.3, whether by joinder or consolidation, the same rights of joinder and consolidation as the Owner and Architect under this Agreement.

§ 8.3.4.4 Notwithstanding any other provision of this Agreement, to avoid a multiplicity of proceedings, (i) if Owner's agreement with the Contractor provides for the resolution of disputes through litigation, Owner may elect to join Architect in any such litigation with Contractor that involves issues of common liability, law or facts with Architect, and any disputes with Architect for which Owner joins Architect in such litigation shall be resolved in such litigation proceeding instead of arbitration; and (ii) if Owner's agreement with the Contractor provides for the resolution of disputes through arbitration, Owner may elect to join Architect in any such arbitration with Contractor that involves issues of common liability, law or facts with Architect, and any disputes with Architect for which Owner joins Architect in such arbitration shall be resolved in such arbitration proceeding instead of litigation. Architect agrees to such joinder provisions.

§ 8.4 In the event a suit, action, arbitration, or other proceeding of any nature whatsoever, including without limitation any proceeding under the U.S. Bankruptcy Code, is instituted, or the services of an attorney are retained, to interpret or enforce any provision of this Agreement or with respect to any dispute relating to this Agreement, the prevailing party shall be entitled to recover from the losing party its reasonable attorneys', paralegals', accountants', and other experts' fees, and all deposition, reporting and transcription costs, and all other fees, costs, and expenses actually incurred and reasonably necessary in connection therewith. In the event of suit, action, arbitration, or other proceeding, the amount thereof shall be determined by the judge or arbitrator, shall include fees and expenses incurred on any appeal or review, and shall be in addition to all other amounts provided by law.

§ 8.5 The provisions of this Article 8 shall survive the termination of this Agreement.

ARTICLE 9 TERMINATION OR SUSPENSION

§ 9.1 If the Owner fails to make undisputed payments to the Architect in accordance with this Agreement for more than thirty (30) calendar days, such failure may be considered substantial nonperformance and cause for termination or, at the Architect's option, cause for suspension of performance of services under this Agreement. If the Architect elects to suspend services, the Architect shall give seven (7) calendar days' written notice to the Owner before suspending services. In the event of a suspension of services, the Architect shall have no liability to the Owner for delay or damage caused the Owner because of such suspension of services. Before resuming services, the Architect shall be paid all sums due prior to suspension and any expenses incurred in the interruption and resumption of the Architect's services. The Architect's fees for the remaining services and the time schedules shall be equitably adjusted. Architect shall not suspend services, withhold documents or terminate this Agreement for nonpayment in the event of a good faith dispute, so long as Owner continues to make undisputed payments.

§ 9.2 If the Owner suspends the Project, the Architect shall be compensated for services performed prior to notice of such suspension. When the Project is resumed, the Architect shall be compensated for reasonable expenses incurred in the interruption and resumption of the Architect's services. The Architect's fees for the remaining services and the time schedules shall be equitably adjusted.

§ 9.3 If the Owner suspends the Project for more than ninety (90) cumulative calendar days for reasons other than the fault of the Architect, the Architect may terminate this Agreement by giving not less than seven (7) calendar days' written notice.

§ 9.4 Except as otherwise provided, either party may terminate this Agreement upon not less than seven (7) calendar days' written notice should the other party fail substantially to perform in accordance with the terms of this Agreement through no fault of the party initiating the termination.

§ 9.5 The Owner may terminate this Agreement, in whole or in part, upon written notice to the Architect for the Owner's convenience and without cause. If Owner terminates for cause, Owner at any time may, by notice to Architect, convert the termination to a termination for convenience. In the event Owner terminates for cause and it is determined that Owner did not have sufficient cause for termination, such termination automatically shall be converted to a termination for convenience and shall be deemed at Owner's convenience under this Section. Termination for convenience shall not impair Owner's other rights, including without limitation its rights and remedies for negligence and breach of this Agreement, and including without limitation rights of self-help, deduction and offset. In no event shall Architect have a claim for damages, lost profits on services not performed, or otherwise on account of the termination of the Contract by Owner, with or without cause.

§ 9.6 If the Owner terminates this Agreement for its convenience pursuant to Section 9.5, or the Architect terminates this Agreement pursuant to Section 9.3, the Owner shall compensate the Architect for services performed prior to termination, together with Reimbursable Expenses incurred prior to termination, and costs attributable to termination, including the reasonable costs attributable to the Architect's termination of consultant agreements, but in no event more than the maximum compensation provided in this Agreement for performance of Services through the Phase of Services then complete or partially complete. In no event shall Architect be entitled to anticipated profit or overhead on the value of the services not performed by the Architect after any termination.

§ 9.7 Except as otherwise expressly provided herein, the obligation to provide Services under this Agreement shall terminate one year from the date of Substantial Completion.

§ 9.8 The Owner's rights to use the Architect's Instruments of Service in the event of a termination of this Agreement are set forth in Article 7.

§ 9.9 Upon any termination of this Agreement, the Owner shall be free to contract with any of Architect's consultants for performance of continued or further services on this project. Architect shall cooperate in such process and shall take no action to prevent or delay such contracting.

ARTICLE 10 MISCELLANEOUS PROVISIONS

§ 10.1 This Agreement shall be governed by the law of the place where the Project is located.

§ 10.2 Terms in this Agreement shall have the same meaning as those in AIA Document A201-2017, General Conditions of the Contract for Construction, as modified by Owner.

§ 10.3 The Owner and Architect, respectively, bind themselves, their agents, successors, assigns, and legal representatives to this Agreement. The Architect shall not assign this Agreement without the written consent of the Owner. The Owner may assign this Agreement or any rights under this Agreement.

§ 10.4 If the Owner requests the Architect to execute certificates, the proposed language of such certificates shall be submitted to the Architect for review at least (14) days prior to the requested dates of execution. If the Owner requests the Architect to execute consents reasonably required to facilitate assignment or financing, grants or revenue bonds, the Architect shall execute all such consents that are consistent with this Agreement, provided the proposed consent is submitted to the Architect for review at least 14 days prior to execution. The Architect shall not be required to execute certificates or consents that would require knowledge, services, or responsibilities beyond the scope of this Agreement.

§ 10.5 Nothing contained in this Agreement shall create a contractual relationship with, or a cause of action in favor of, a third party against either the Owner or Architect.

§ 10.6 Unless otherwise required in this Agreement, the Architect shall have no responsibility for the discovery, presence, handling, removal or disposal of, or exposure of persons to, hazardous materials or toxic substances in any form at the Project site, but shall immediately report to the Owner, in writing, any such items discovered.

§ 10.7 The Architect shall have the right to include photographic or artistic representations of the design of the Project among the Architect's promotional and professional materials but only with Owner's prior written approval. The Architect shall be given reasonable access to the completed Project to make such representations. However, the

Architect's materials shall not include the Owner's confidential or proprietary information. This Section 10.7 shall survive the termination of this Agreement unless the Owner terminates this Agreement for cause pursuant to Section 9.4.

§ 10.8 If the Architect or its consultants receives information specifically designated or reasonably inferable as "confidential" or "business proprietary," or which contains financial information, staff or student information, or operational plans of the Owner, the Architect shall keep such information strictly confidential and shall not disclose it to any other person except as set forth in Section 10.8.1. This Section 10.8 shall survive the termination of this Agreement.

§ 10.8.1 The Architect may disclose "confidential" or "business proprietary" information after 7 days' notice to the Owner, only when required by law, arbitrator's order, or court order, including a subpoena or other form of compulsory legal process issued by a court or governmental entity, or to the extent such information is reasonably necessary for the Architect to defend itself in any dispute. The Architect may also disclose such information to its employees, consultants, or contractors in order to perform services or work solely and exclusively for the Project, provided those employees, consultants and contractors are subject to the restrictions on the disclosure and use of such information as set forth in this Section 10.8.

§ 10.9 The invalidity of any provision of the Agreement shall not invalidate the Agreement or its remaining provisions. If it is determined that any provision of the Agreement violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Agreement shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Agreement.

§ 10.10 Notices under this Agreement will be deemed to have been delivered when given in person or sent successfully by email or facsimile transmission with confirmed delivery, one (1) business day after being sent by overnight courier (charges prepaid), or four (4) business days after being mailed, postage prepaid, in each case to the appropriate address as listed in this Agreement (or to such other address as either party may from time to time designate by written notice given to the other party). Notice to a party, including a notice that must be in writing, may be satisfied by its inclusion in written meeting minutes distributed to the parties.

§ 10.11 The Architect warrants and represents that the Architect and its consultants are properly licensed under all applicable laws to perform their services in the jurisdiction in which each Project is located. Each person who performs the services shall be experienced and qualified to perform the services they perform. If requested by the Owner, the Architect shall remove from the Project, without cost to the Owner or delay to the Project any person whose removal the Owner reasonably requests.

ARTICLE 11 COMPENSATION

§ 11.1 For the Architect's Basic Services described under Article 3, the Owner shall compensate the Architect as follows:

- .1** Stipulated Sum
 (Insert amount)
 « »
- .2** ~~Percentage Basis~~
 ~~*(Insert percentage value)*~~
 ~~« » (« ») % of the Owner's budget for the Cost of the Work, as calculated in accordance with Section 11.6.~~
- .3** ~~Other~~
 ~~*(Describe the method of compensation)*~~
 ~~« »~~

§ 11.2 For the Architect's Supplemental Services, if any, designated in Section 4.1.1 and for any Sustainability Services required pursuant to Section 4.1.3, the Owner shall compensate the Architect as follows:

(Insert amount of, or basis for, compensation. If necessary, list specific services to which particular methods of compensation apply.)

«None»

§ 11.3 For Additional Services that may arise during the course of the Project, including those under Section 4.2, the Owner shall compensate the Architect as follows:

(Insert amount of, or basis for, compensation.)

« »

§ 11.3.1 If Additional Services are required during the course of the Project under Section 4.2 and approved by Owner, and a stated lump-sum or not-to-exceed compensation for the Service is not stated herein, the Architect shall prepare a detailed statement of the total cost of those Additional Services and submit it to the Owner for approval before the services are rendered. Thereafter, costs for Additional Services may not be incurred in excess of the approved amount without prior written approval of the Owner. Compliance with this Section 11.3.1 is a condition precedent to payment for Additional Services.

§ 11.4 Compensation for Supplemental and Additional Services of the Architect's consultants when not included in Section 11.2 or 11.3, shall be the amount invoiced to the Architect plus «Zero» percent («0»%), or as follows:

(Insert amount of, or basis for computing, Architect's consultants' compensation for Supplemental or Additional Services.)

«None»

§ 11.5 When compensation for Basic Services is based on a stipulated sum or a percentage basis, the proportion of compensation for each phase of services shall be as follows:

Schematic Design Phase	« »	percent (	« »	%)
Design Development Phase	« »	percent (	« »	%)
Construction Documents Phase	« »	percent (	« »	%)
Procurement Phase	« »	percent (	« »	%)
Construction Phase	« »	percent (	« »	%)
Total Basic Compensation	one hundred	percent (	100	%)

§ 11.6 When compensation identified in Section 11.1 is on a percentage basis, progress payments for each phase of Basic Services shall be calculated by multiplying the percentages identified in this Article by the Owner's most recent budget for the Cost of the Work. Compensation paid in previous progress payments shall not be adjusted based on subsequent updates to the Owner's budget for the Cost of the Work.

§ 11.6.1 When compensation is on a percentage basis and any portions of the Project are deleted or otherwise not constructed, compensation for those portions of the Project shall be payable to the extent services are performed on those portions, in accordance with the schedule set forth in Section 11.5 based on (1) the lowest bona fide bid or negotiated proposal, or (2) if no such bid or proposal is received, the most recent estimate of the Cost of the Work for such portions of the Project. The Architect shall be entitled to compensation in accordance with this Agreement for all services performed whether or not the Construction Phase is commenced.

§ 11.7 The hourly billing rates for services of the Architect and the Architect's consultants are set forth below. The rates shall be adjusted in accordance with the Architect's and Architect's consultants' normal review practices.

(If applicable, attach an exhibit of hourly billing rates or insert them below.)

« »

Employee or Category

Rate (\$0.00)

§ 11.8 Compensation for Reimbursable Expenses

§ 11.8.1 Reimbursable Expenses are in addition to compensation for Basic, Supplemental, and Additional Services and include expenses incurred by the Architect and the Architect's consultants directly related to the Project, as follows:

- .1 Transportation and authorized out-of-town travel and subsistence, if approved in advance by Owner;
- .2 Long distance services, dedicated data and communication services, teleconferences, Project web sites, and extranets;
- .3 Permitting and other fees required by authorities having jurisdiction over the Project;
- .4 Printing, reproductions, plots and standard form documents;
- .5 Postage, handling and delivery;
- .6 Expense of overtime work requiring higher than regular rates, if authorized in advance by the Owner;
- .7 Renderings, models, mock-ups, professional photography, and presentation materials requested by the Owner;
- .8 If required by the Owner, and with the Owner's prior written approval, the Architect's consultants' expenses of professional liability insurance dedicated exclusively to this Project, or the expense of additional insurance coverage or limits in excess of that required by this Agreement or, if not so required, in excess of that normally maintained by the Architect's consultants;
- .9 Site office expenses if any, if approved by Owner; and
- .10 Other similar Project-related expenditures if approved in advance by the Owner.

§ 11.8.2 For Reimbursable Expenses the compensation shall be the expenses incurred by the Architect and the Architect's consultants plus «Ten» percent («» %) of the expenses incurred. Reimbursable Expenses shall not exceed \$XX,000 without prior written approval of the Owner, which may be given or withheld in Owner's discretion. No additional markup will be allowed.

§ 11.8.3 To the extent Architect's proposal or any provision or exhibit of this Agreement identifies an expense as included in the Architect's fee, it shall not be subject to reimbursement as a Reimbursable Expense.

§ 11.9 Use of Work Product. If the Owner or the Architect terminates the Agreement for any reason, the Architect shall deliver to the Owner all work product of the Architect and its subconsultants that is not already in the Owner's possession, and the Owner shall not be required to pay any fee as compensation for the Owner's continued use of the work product.

§ 11.10 Payments to the Architect

§ 11.10.1 Initial Payments

§ 11.10.1.1 An initial payment of «Zero Dollars» (\$«0.00») shall be made upon execution of this Agreement and is the minimum payment under this Agreement. It shall be credited to the Owner's account in the final invoice.

§ 11.10.2 Progress Payments

§ 11.10.2.1 Unless otherwise agreed, payments for services shall be made monthly in proportion to services performed. Payments are due and payable upon presentation of an approvable Architect's invoice, together with (i) evidence that Architect has paid its consultants current up to the prior pay period (if required by Owner) and (ii) all certificates, documents and designs included in the work covered by the statement; and (iii) a waiver of claims in form required by the Owner. Amounts unpaid «Thirty» («30») days after the approved invoice receipt date shall bear interest at the rate entered below, or in the absence thereof at the legal rate prevailing from time to time at the place of the Project. Submission of Architect's invoice constitutes a waiver of payment claims by the Architect and its consultants for work performed during the coverage date of the invoice, except the amount stated in the invoice.

(Insert rate of monthly or annual interest agreed upon.)

Interest will accrue at an annual rate of one percent over the prime lending rate published by U.S. Bank in Portland, Oregon, on the date on which interest begins to accrue.

§ 11.10.2.2 The Owner shall not withhold amounts from the Architect's compensation to impose a penalty or liquidated damages on the Architect, or to offset sums requested by or paid to contractors for the cost of changes in the Work, unless the Architect agrees or is liable for the amounts.

§ 11.10.2.3 Records of Reimbursable Expenses, expenses pertaining to Supplemental and Additional Services, and services performed on the basis of hourly rates shall be available to the Owner at the time of invoice and thereafter.

ARTICLE 12 SPECIAL TERMS AND CONDITIONS

Special terms and conditions that modify this Agreement are as follows:

<< >>

ARTICLE 13 SCOPE OF THE AGREEMENT

§ 13.1 This Agreement represents the entire and integrated agreement between the Owner and the Architect and supersedes all prior negotiations, representations or agreements, either written or oral. This Agreement may be amended only by written instrument signed by both the Owner and Architect.

§ 13.2 This Agreement is comprised of the following documents identified below:

- .1 AIA Document B101™–2017, Standard Form Agreement Between Owner and Architect
- .2 AIA Document A201™–2017, General Conditions of the Contract for Construction (copy will be provided upon request)

☒ Other Exhibits incorporated into this Agreement:

(Clearly identify any other exhibits incorporated into this Agreement, including any exhibits and scopes of services identified as exhibits in Section 4.1.2.)

.2 Other documents:

EXHIBIT A | Architect's Proposal

EXHIBIT B | Program Schedule

EXHIBIT C | Architect's Fee Proposal

This Agreement entered into as of the day and year first written above.

PHOENIX TALENT SCHOOL DISTRICT

TO BE DETERMINED

OWNER (Signature)

Brent Barry, Superintendent

(Printed name and title)

ARCHITECT (Signature)

(Printed name, title, and license number, if required)

ATTACHMENT F - TALENT ELEMENTARY SCHOOL SEISMIC EVALUATION REPORT



Seismic Evaluation Report For:

TALENT ELEMENTARY

307 Wagner Creek Rd, Talent, OR 97540
Phoenix-Talent School District



EXPIRES: 06-30-24

Prepared By:

ZCS Engineering & Architecture

Matthew R. Smith, PE, SE, Principal

524 Main Street, Suite 2, Oregon City, OR 97045

T: 503.659.2205 | E: MattS@zcsea.com



Project Summary Information						
Building Part	Building Part Name	Included in Retrofit	Year Built	Building Type***	Nonstructural Retrofits Included in Scope Y/N***	Previous Seismic Retrofit Y/N*** (Year if Yes)
A	Library	No	1974			
B	Gymnasium	Yes	1973			
C	Classrooms	No	1995			
D	Classrooms	No	1960			
E	Classrooms	Yes	1949	URM	Y	N
F	Classrooms	No	1995			
G	Gymnasium	No	2001			
*** Entries required ONLY for building parts included in proposed seismic retrofit. If building part was previously or is currently being retrofit, please list the building part's Risk Category and retrofit design Performance Objective, if known. Nonstructural deficiencies posing life safety risk MUST be included in the scope of work and budget. Seismic fragility inputs for existing buildings with previous seismic retrofits MUST be adjusted to reflect previous seismic retrofit measures completed for a building part.						
Total Retrofit Cost		\$2,494,281				
Retrofit Square Feet		10,900 S.F.				
Retrofit Cost per Square Foot		\$228.83				
Is the campus within a tsunami, FEMA flood zone, landslide/slope instability, liquefaction potential or other high hazard area? If so, provide documentation (e.g. the Oregon Statewide Hazards Viewer by DOGAMI). ** Projects within the code defined Tsunami Design Zone require consultation with DOGAMI prior to application submittal. Applicant shall include such documentation with the application.						Yes. See Geotechnical Report in Appendix D

Note: The hazard level of tsunami, flood zone, landslide/slope instability, and liquefaction must be explicitly answered either via DOGAMI website, DOGAMI consultation, and/or a geotechnical report. If the hazard level is unknown, it must be assumed to exist and be mitigated or otherwise resolved in the conceptual retrofit scope of work.

Engineering Report Checklist		
☒	Engineering Report Cover Page	
☒	Project Summary Page	Page 1
☒	Building Parts Identification	Page 5
☒	Statement of the Performance Objective	Page 7
	Summary of Deficiencies	
☒	Structural Seismic Deficiencies	Page 10
☒	Nonstructural Seismic Deficiencies	Page 11
	Summary of Mitigation/Retrofit	
☒	Structural Mitigation/Retrofit	Page 10
☒	Nonstructural Mitigation/Retrofit	Page 11
	Summary Construction Cost Estimate	
☒	Direct Cost	Page 14
☒	Indirect Soft Cost	Page 14
☒	Certification Statement by Engineer	Page 15
	ASCE 41-17 Tier 1 Checklist	
☒	Basic Configuration Checklist	Appendix B
☒	Building System Structural Checklist	Appendix B
☒	Nonstructural Checklist	Appendix B
☒	Retrofit Drawings & Sketches	Appendix C
☒	DOGAMI or Geotechnical Report	Appendix D
☒	Itemized Construction Cost Estimate	Appendix E
☒	Rapid Visual Screening	Appendix F

1.0 Project Introduction

Phoenix-Talent School District is located in Talent, Oregon in Jackson County. The District operates six schools located within the community including the property of interest, Talent Elementary School. The District has retained ZCS Engineering and Architecture (ZCS) to perform a seismic evaluation of Talent Elementary School that provides the District with an objective, comprehensive analysis of the condition of the building's seismic resisting systems. The purpose of the evaluation is to determine the seismic lateral resisting system deficiencies when compared to buildings designed using modern building codes. This evaluation was performed in accordance with the American Society of Civil Engineers "Seismic Rehabilitation of Existing Buildings ASCE/SEI 41-17".

SEISMIC EVALUATION SNAPSHOT	
Street Address	307 Wagner Creek Rd, Talent, Or
Evaluation Standard	ASCE 41-17 (Tier 1 Analysis)
Building's Risk Category	IV
Target Building Performance Level	Immediate Occupancy for BSE-1E and Life Safety for BSE-2E
Target Non-Structural Performance Level	Position Retention for BSE-1E and Hazards Reduced for BSE-2E
ASCE 41 Building Type	URM
FEMA P-154 Seismicity Region (Table 2-2)	Moderately High
ASCE 41-17 Level of Seismicity (Table 2-4)	High
Cost Estimate	\$2,494,281
Cost/Square Foot	\$228.83

2.0 Building Description

The buildings being considered in this report include the Gymnasium and the Classrooms. ZCS has reviewed the buildings and their construction to classify their lateral systems as identified in ASCE 41-17. These lateral systems will be used throughout this evaluation. The lateral systems present consist of Unreinforced Masonry Bearing Walls with Flexible Diaphragms (URM). These determinations were made after observing the subject facilities and reviewing the available existing drawings. Descriptions of these structure types are listed below and specifically identify the lateral load resisting systems. In addition to the lateral systems present, ZCS has summarized the gravity load carrying systems of the subject facilities including later in this section.

Unreinforced Masonry Bearing Walls URM - This building was initially reviewed as an RM1 construction type due to the presence of some reinforcing present in the wall construction. Through the RM1 Tier 1 evaluation it was determined that the walls are under reinforced. Accordingly, this building is classified as a URM. These buildings have a perimeter bearing walls that consist of unreinforced clay brick, stone, or concrete masonry. Interior bearing walls, where present, also consist of unreinforced clay brick, stone, or concrete masonry. In older construction, floor and roof framing consists of straight or diagonal lumber sheathing supported by wood joists, which, in turn, are supported on posts and timbers. In more recent construction, floors consist of structural panel or plywood sheathing rather than lumber sheathing. The diaphragms are flexible relative to the walls. Where they exist, ties between the walls and the diaphragms consist of anchors or bent steel plates embedded in the mortar joints and attached to framing. The foundation system may consist of a variety of elements.

Below is a figure identifying the building parts on campus and listing applicable information. See below for descriptions of building parts included in the evaluation and applicable building types as noted above.

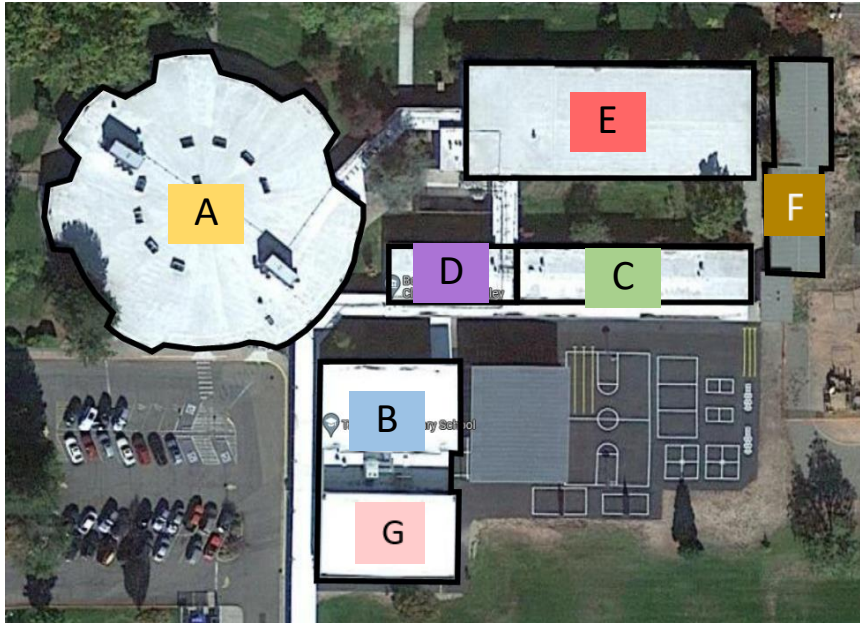


Figure 1- Talent Elementary School Key Plan

**Photographs of the building parts included in this report are located in Appendix A.

BUILDING PARTS	
A	Construction Year: 1974 Building Name: Library ASCE 41-17 Building Type: RM1 In Scope?: No
B	Construction Year: 1973 Building Name: Gymnasium ASCE 41-17 Building Type: In Scope?: No
C	Construction Year: 1995 Building Name: Classrooms ASCE 41-17 Building Type: In Scope?: No
D	Construction Year: 1960 Building Name: Classrooms ASCE 41-17 Building Type: In Scope?: No
E	Construction Year: 1949 Building Name: Classrooms ASCE 41-17 Building Type: URM In Scope?: Yes
F	Construction Year: 1995 Building Name: Classrooms ASCE 41-17 Building Type: In Scope?: No
G	Construction Year: 2001 Building Name: Gymnasium ASCE 41-17 Building Type: RM1 In Scope?: No

Building Part E Construction:

- ASCE 41-17 Building Type:
 - URM
- Roof Structure:
 - Straight-sheathed roof diaphragm supported by dimensional lumber rafters resting by masonry walls
- Walls:
 - Unreinforced masonry walls
 - Dimensional studs with gypsum wallboard sheathing partition walls
- Foundation:
 - Slab-on-grade with cast-in-place concrete footings
- Notable Structural Features/Concerns:
 - Window wall on the north and southern sides of structure
 - Unsupported clay brick wall at old entryway

3.0 Seismic Evaluation Methodology

The subject structure was evaluated using information gathered from site observations, available historic construction documents, and interviews with District staff. This information was then utilized to perform a structural evaluation as outlined in the American Society of Civil Engineer's "Seismic Evaluation and Retrofit of Existing Buildings – ASCE 41-17" (ASCE 41-17). ASCE 41-17 is referenced as the standard for seismic evaluations of existing buildings by the International Existing Building Code (IEBC) which is referenced by the Oregon Structural Specialty Code (OSSC). Further, ASCE 41-17 is the evaluation tool required by the Seismic Rehabilitation Grant Program for grant applications.

ASCE 41-17 provides several levels of evaluation (Tiers 1-3) depending on the level of evaluation and/or retrofit being performed. The Tier 1 evaluation is a quick checklist selected based on the type of construction and the performance objective of the building and is the baseline tool for preliminary seismic evaluations. In the case of this evaluation, a Tier 1 was performed to identify the likely structural deficiencies requiring retrofit to meet the performance objective stated below.

The OSSC classifies buildings into risk categories based on the type of building and occupancy type. The building's risk category informs the required performance objective post retrofit. Risk categories I and II cover low risk structures. Risk category III includes school buildings that are not required to be used as emergency shelters and are relatively low occupancy. Risk category IV includes emergency service buildings and school buildings that are required to be designed as emergency shelters (high occupancy spaces). Figure 2, below, identifies the performance objective for each risk category.

The primary objective of the adjusting performance objectives relative to risk category is to ensure that the subject building is capable of performing in the necessary manner following a seismic event. In the case of a risk category III building, the intention is to ensure that the building is adequately stable following an earthquake to provide egress for occupants out of the building. Prior to reoccupation, the building would need evaluated and significant structural damage preventing reoccupation may be present. For risk category IV structures, the intent is that the building can be inspected then immediately reoccupied following a seismic event to function in its intended role as an emergency service building or as a high occupancy space capable of acting as an emergency structure.

In accordance with the table below, these sections B & E of this building are categorized as a risk category IV structures and were evaluated to meet the Life Safety structural performance and Hazards Reduced nonstructural performance level for BSE-2E loading and the Immediate Occupancy structural performance and Position Retention nonstructural performance level for BSE-1E loading.

Table 2-2. Scope of Assessment Required for Tier 1 and Tier 2 with the Basic Performance Objective for Existing Buildings (BPOE)

Risk Category	Tier 1 and 2 ^a	
	BSE-1E	BSE-2E
I and II	Not evaluated	Collapse Prevention Structural Performance
	Life Safety Nonstructural Performance (3-C)	Hazards Reduced Nonstructural Performance ^b (5-D)
III	Not evaluated	Limited Safety Structural Performance ^c
	Position Retention Nonstructural Performance (2-B)	Hazards Reduced Nonstructural Performance ^b (4-D)
IV	Immediate Occupancy Structural Performance	Life Safety Structural Performance ^d
	Position Retention Nonstructural Performance (1-B)	Hazards Reduced Nonstructural Performance ^b (3-D)

^a For Tier 1 and 2 assessments of Risk Categories I–III, Structural Performance for the BSE-1E is not explicitly evaluated.

^b Compliance with ASCE 7 provisions for new construction is deemed to comply.

^c For Risk Category III, the Tier 1 screening checklists shall be based on the Collapse Prevention Performance Level (S-5), except that checklist statements using the Quick Check procedures of Section 4.4.3 shall be based on M_s factors taken as the average of the values for Life Safety and Collapse Prevention.

^d For Risk Category IV, the Tier 1 screening checklists shall be based on the Collapse Prevention Performance Level (S-5), except that checklist statements using the Quick Check procedures of Section 4.4.3 shall be based on M_s factors for Life Safety.

Figure 2
Building Performance Objectives

Source: Table 2-2, ASCE 41-17: American Society of Civil Engineers – Seismic Evaluation and Retrofit of Existing Buildings

4.0 Seismicity

Seismic design is based on site specific parameters that relate to the location of the building relative to faults and the soil that supports the building. The United States Geologic Survey has developed seismic design data that is utilized to perform the calculations specified in ASCE 41-17. The table below summarizes the factors appropriate for computing the seismic lateral loads for the design earthquake specified in ASCE 41-17.

SITE SPECIFIC SEISMICITY	
ASCE 7-16 Site Soil Classification	D
FEMA P-154 Seismicity Region (Table 2-2)	Moderately High
ASCE 41-17 Level of Seismicity (Table 2-4)	High
BSE-1E:	
S_{xs}	0.234
S_{x1}	0.175
Soil Condition Amplification Factors (F_a , F_v)	$F_a = 1.6$ $F_v = 2.4$
BSE-2E:	
S_{xs}	0.619
S_{x1}	0.502
Soil Condition Amplification Factors (F_a , F_v)	$F_a = 1.461$ $F_v = 2.128$

Source: SEAOC and OSHPD Seismic Design Maps, <https://seismicmaps.org/>

5.0 Site Specific Hazards

Site specific hazards were assessed as part of our engineering evaluation. The hazards evaluated in our analysis included liquefaction, slope failure/landslide, surface fault rupture, and tsunami potential. These potential hazards were evaluated using ASCE 41-17 guidelines, as well as information provided by the online Oregon HazVu: Statewide Geohazards Viewer, maintained by the Department of Geology and Mineral Industries (DOGAMI). Tsunami risk was evaluated using the ASCE Tsunami Hazard Tool. Results from the HazVu analysis are included in Appendix D along with a the geotechnical report. Unless noted below, the hazards listed above are not present at the site.

Liquefaction

This project is located within a liquefaction hazard area as identified by the DOGAMI Oregon HazVu. To ensure that an acceptable level of due diligence was performed during the application phase of the project a geotechnical engineer was hired to perform a review of the hazard and make recommendations based on available information with respect to the severity. Per the geotechnical report, attached in Appendix D, liquefaction is considered a low risk for the site and no mitigation is required.

6.0 Deficiencies and Repairs

The table below summarizes both the structural and nonstructural deficiencies noted in the Tier 1 evaluation and states both the proposed retrofit methodology and the plan keynote that corresponds to the scope items in the preliminary plans and the cost estimate. See Appendix B for complete Tier 1 check sheets. Drawings illustrating the proposed retrofit measures are attached in Appendix C.

Tier 1 Deficiency Description	Deficiency Statement	Repair Statement	Plan Key Note
IO BASIC CHECKLIST			
LOAD PATH	The structure does not contain a complete, well-defined load path, including structural elements and connections, that serves to transfer the inertial forces associated with the mass of all elements of the building to the foundation.	Provide a complete, well-defined load path by installing new elements and connections as needed to transfer inertial forces from all elements of the building to the foundation. (a) Diaphragm in-plane connection hardware (b) New Drag Beam	S1
ADJACENT BUILDINGS	The clear distance between the building being evaluated and any adjacent building is less than 0.5% of the height of the shorter building in low seismicity, 1.0% in moderate seismicity, and 3.0% in high seismicity.	Provide seismic isolation joint to avoid pounding of the taller structure into the lower structure. Provide all new gravity framing and lateral resisting elements as necessary to provide building separation. (a) Provide seismic separation joint and provide additional vertical seismic load resisting elements outside of the retrofit area as needed to avoid damage to the building parts being retrofitted. (b) Provide aa new steel moment frame to support adjacent canopy	S2
URM: IO CHECKLIST			

WALL ANCHORAGE	Exterior concrete or masonry walls that are dependent on the diaphragm for lateral support are not anchored for out-of-plane forces at each diaphragm level with steel anchors, reinforcing dowels, or straps that are developed into the diaphragm. Connections do not have strength to resist the connection force calculated in the Quick Check procedure of Section 4.4.3.7.	Install new out-of-plane anchorage.	S3
TRANSFER TO SHEAR WALLS	Diaphragms are not connected for transfer of seismic forces to the shear walls, or the connections are not able to develop the shear strength of the walls or diaphragms.	Install new in-plane hardware to resolve inertial forces.	S4
GIRDER–COLUMN CONNECTION	There is not a positive connection using plates, connection hardware, or straps between the girder and the column support.	Install a new positive connection using a new column to support existing beam	S5
PROPORTIONS	The height-to-thickness ratio of the shear walls at each story is greater than the following: Top story of multi-story building 9 First story of multi-story building 15 All other conditions 13	Install steel strong backs to resist out-of-plane seismic forces	S6
CROSS TIES	There are not continuous cross ties between diaphragm chords.	Provide new continuous cross ties between diaphragm chords. - Install new strapping between rafters	S7
STRAIGHT SHEATHING	Not all straight-sheathed diaphragms have aspect ratios less than 1-to-1 in the direction being considered.	Install new plywood diaphragm sheathing.	S8
SPANS	Not all wood diaphragms with spans greater than 12 ft consist of wood structural panels or diagonal sheathing.	Install new plywood diaphragm sheathing.	S9
BEAM, GIRDER, AND TRUSS SUPPORTS	Beams, girders, and trusses supported by unreinforced masonry walls or pilasters do not have independent secondary columns for support of vertical loads.	Provide new steel column to support gravity loads from girder while resisting horizontal seismic forces	S10
NONSTRUCTURAL CHECKLIST			
UNREINFORCED MASONRY	Unreinforced masonry or hollow-clay tile partitions are not braced at a spacing of at most 10 ft in Low or Moderate Seismicity, or at most 6 ft in High Seismicity.	Brace unreinforced masonry or hollow-clay tile partitions.	N1

OVERHEAD GLAZING	Glazing panes of any size in curtain walls and individual interior or exterior panes more than 16ft.2 in area are not laminated annealed or laminated heat-strengthened glass or are not detailed to remain in the frame when cracked.	Remove glazing and replace with new safety glass windows system	N2
TIES	Masonry veneer is not connected to the backup with corrosion-resistant ties. There is not a minimum of one tie for every 2-2/3 ft.2, or the ties have spacing greater than the following: for Life Safety in Low or Moderate Seismicity, 36 in.; for Life Safety in High Seismicity and for Position Retention in any seismicity, 24 in.	Secure existing masonry veneer with new stitch ties	N3
TALL NARROW CONTENTS	Contents more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 are not anchored to the structure or to each other.	Anchor contents to the structure.	N4
FALL-PRONE CONTENTS	Equipment, stored items, or other contents weighing more than 20lb whose center of mass is more than 4 ft above the adjacent floor level are not braced or otherwise restrained.	Brace equipment to structure.	N5
FALL-PRONE EQUIPMENT	Equipment weighing more than 20 lb whose center of mass is more than 4 ft above the adjacent floor level, and which is not in-line equipment, is not braced.	Brace and anchor equipment weighing more than 20 lb, whose center of mass is more than 4 ft above the adjacent floor level.	N6
TALL NARROW EQUIPMENT	Equipment more than 6ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 is not anchored to the floor slab or adjacent structural walls.	Anchor equipment more than 6ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 to the floor slab or adjacent structural walls.	N7

In addition to the structural and nonstructural deficiencies noted above, the gravity load resisting system was reviewed to identify obvious insufficient gravity components. Insufficient gravity elements can cause failure during seismic events. These gravity deficiencies are based on visual observations of the existing structural elements. No formal structural analysis was performed during this evaluation of the gravity resisting element.

Based upon ZCS's previous experience and discussions with site personnel the buildings contain hazardous materials. These materials will need to be dealt with on a case-by-case basis as they are encountered during the project.

7.0 Preliminary Construction Cost Estimate

The attached engineer's opinion of probable cost has been developed by ZCS. ZCS has a successful record of completing seismic rehabilitation projects within the State of Oregon. The prices provided in the attached cost estimate have been developed using the extensive list of past projects as a baseline for this project. These prices are based on Oregon BOLI wage rates. The cost estimate is broken down into multiple line items associated with each major task (general conditions, foundation, structural steel, MEP, etc) associated with the rehabilitation. Additional line items are included for design associated permit costs, and owner construction management. A complete breakdown of the cost estimate can be found in Appendix E.

DIRECT COST	
Construction	\$1,817,600
Engineering	\$293,900
Construction Management	\$61,000
Relocation	\$26,100
Construction Contingency	\$295,681
TOTALS AND SUMMARY	
Total Cost Estimate	\$2,494,281
Match Funds	\$0
Total Amount Requested from SRGP	\$2,494,281
Total Area	10,900 S.F.
Cost/Square Foot	\$228.83

8.0 Conclusion and Certification Statement

The findings described in this report have been limited to the lateral force-resisting structural system and general assessment of the gravity force-resisting elements. Based on our visual observations, we find the structure to be in relatively good condition and generally safe for occupancy. No significant damage to the existing structural system was discovered.

Given the current condition of the structure, the current code section on existing buildings does not mandate that upgrades are required unless the building is scheduled for repairs, alterations, additions, or change in occupancy. To clarify, upgrades outlined in this report are strictly at the discretion of the District.

Please contact our office if you would like to discuss our findings. Please review the attached schematic drawings that can be used to refine a scope and budget.

Certification Statement

ZCS Engineering & Architecture's professional staff has reviewed the subject building and the deficiencies noted in the Tier 1 evaluation, developed seismic retrofit solutions to rectify the deficiencies, and developed the engineering cost estimate. The project cost estimate was developed by ZCS based on unit costs from our extensive list of past seismic retrofit projects as a baseline. We certify to the best of our knowledge, based on known and readily identifiable existing conditions, that all the seismic deficiencies present in the building are included in the retrofit scope of work and that all the retrofit's scope of work elements are included in the cost estimate.



Matthew R. Smith, PE, SE

Appendix A: Figures



Figure 1: NORTHERN ELEVATION



Figure 2: ENTRY



Figure 3: CLASSROOM INTERIOR



Figure 4: CLASSROOM INTERIOR



Figure 5: GYMNASIUM NORTHERN ELEVATION



Figure 6: CORRIDOR

Appendix B: Tier 1 Check Sheets

17.1.2IO Basic Configuration Checklist

Table 17-3. Immediate Occupancy Basic Configuration Checklist

Status				Evaluation Statement	Tier 2 Reference	Commentary Reference	Comments
Very Low Seismicity							
Building System—General							
C	NC	N/A	U	LOAD PATH: The structure contains a complete, well-defined load path, including structural elements and connections, that serves to transfer the inertial forces associated with the mass of all elements of the building to the foundation.	5.4.1.1	A.2.1.1	-MISSING ROOF-TO-WALL IN-PLANE HARDWARE -NEW DRAG BEAM TO TRANSFER SEISMIC FORCES TO SHEAR WALLS
☐	☐	☐	☐				
C	NC	N/A	U	ADJACENT BUILDINGS: The clear distance between the building being evaluated and any adjacent building is greater than 0.5% of the height of the shorter building in low seismicity, 1.0% in moderate seismicity, and 3.0% in high seismicity.	5.4.1.2	A.2.1.2	-SEPARATION JOINT FOR BREEZEWAY CANOPY
☐	☐	☐	☐				
C	NC	N/A	U	MEZZANINES: Interior mezzanine levels are braced independently from the main structure or are anchored to the seismic-force-resisting elements of the main structure.	5.4.1.3	A.2.1.3	
☐	☐	☐	☐				
Building System—Building Configuration							
C	NC	N/A	U	WEAK STORY: The sum of the shear strengths of the seismic-force-resisting system in any story in each direction is not less than 80% of the strength in the adjacent story above.	5.4.2.1	A.2.2.2	
☐	☐	☐	☐				
C	NC	N/A	U	SOFT STORY: The stiffness of the seismic-force-resisting system in any story is not less than 70% of the seismic-force-resisting system stiffness in an adjacent story above or less than 80% of the average seismic-force-resisting system stiffness of the three stories above.	5.4.2.2	A.2.2.3	
☐	☐	☐	☐				
C	NC	N/A	U	VERTICAL IRREGULARITIES: All vertical elements in the seismic-force-resisting system are continuous to the foundation.	5.4.2.3	A.2.2.4	
☒	☐	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C ☒	NC ☐	N/A ☐	U ☐	GEOMETRY: There are no changes in the net horizontal dimension of the seismic-force-resisting system of more than 30% in a story relative to adjacent stories, excluding one-story penthouses and mezzanines.	5.4.2.4	A.2.2.5
C ☐	NC ☐	N/A ☐	U ☐	MASS: There is no change in effective mass of more than 50% from one story to the next. Light roofs, penthouses, and mezzanines need not be considered.	5.4.2.5	A.2.2.6
C ☐	NC ☐	N/A ☐	U ☐	TORSION: The estimated distance between the story center of mass and the story center of rigidity is less than 20% of the building width in either plan dimension.	5.4.2.6	A.2.2.7

Status				Evaluation Statement	Tier 2 Reference	Commentary Reference	Comments
Low Seismicity (Complete the Following Items in Addition to the Items for Very Low Seismicity)							
Geologic Site Hazards							
C	NC	N/A	U	LIQUEFACTION: Liquefaction-susceptible, saturated, loose granular soils that could jeopardize the building's seismic performance do not exist in the foundation soils at depths within 50 ft (15.2 m) under the building.	5.4.3.1	A.6.1.1	
☒	☐	☐	☐				
C	NC	N/A	U	SLOPE FAILURE: The building site is located away from potential earthquake-induced slope failures or rockfalls so that it is unaffected by such failures or is capable of accommodating any predicted movements without failure.	5.4.3.1	A.6.1.2	
☒	☐	☐	☐				
C	NC	N/A	U	SURFACE FAULT RUPTURE: Surface fault rupture and surface displacement at the building site are not anticipated.	5.4.3.1	A.6.1.3	
☒	☐	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Project Name Phoenix-Talent Element
 Project Number M-0317-22

Status				Evaluation Statement	Tier 2 Reference	Commentary Reference	Comments
Moderate and High Seismicity (Complete the Following Items in Addition to the Items for Low Seismicity)							
Foundation Configuration							
C	NC	N/A	U	OVERTURNING: The ratio of the least horizontal dimension of the seismic-force-resisting system at the foundation level to the building height (base/height) is greater than $0.6S_a$.	5.4.3.3	A.6.2.1	
☒	☐	☐	☐				
C	NC	N/A	U	TIES BETWEEN FOUNDATION ELEMENTS: The foundation has ties adequate to resist seismic forces where footings, piles, and piers are not restrained by beams, slabs, or soils classified as Site Class A, B, or C.	5.4.3.4	A.6.2.2	
☒	☐	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

17.18IO Structural Checklist for Building Types URM: Unreinforced Masonry Bearing Walls with Flexible Diaphragms and URMa: Unreinforced Masonry Bearing Walls with Stiff Diaphragms

Table 17-37. Immediate Occupancy Structural Checklist for Building Types URM and URMa

Status				Evaluation Statement	Tier 2 Reference	Commentary Reference	Comments
Very Low Seismicity							
Seismic-Force-Resisting System							
C	NC	N/A	U	REDUNDANCY: The number of lines of shear walls in each principal direction is greater than or equal to 2.	5.5.1.1	A.3.2.1.1	
☒	☐	☐	☐				
C	NC	N/A	U	SHEAR STRESS CHECK: The shear stress in the unreinforced masonry shear walls, calculated using the Quick Check procedure of Section 4.4.3.3, is less than 30 lb/in. ² (0.21 MPa) for clay units and 70 lb/in. ² (0.48 MPa) for concrete units.	5.5.3.1.1	A.3.2.5.1	Shear stress was found to be 9.3 to 12.4 psi for longitudinal and horizontal directions
☒	☐	☐	☐				
Connections							
C	NC	N/A	U	WALL ANCHORAGE: Exterior concrete or masonry walls that are dependent on the diaphragm for lateral support are anchored for out-of-plane forces at each diaphragm level with steel anchors, reinforcing dowels, or straps that are developed into the diaphragm. Connections have strength to resist the connection force calculated in the Quick Check procedure of Section 4.4.3.7.	5.7.1.1	A.5.1.1	Missing out-of-plane connections
☐	☒	☐	☐				
C	NC	N/A	U	WOOD LEDGERS: The connection between the wall panels and the diaphragm does not induce cross-grain bending or tension in the wood ledgers.	5.7.1.3	A.5.1.2	
☐	☐	☒	☐				
C	NC	N/A	U	TRANSFER TO SHEAR WALLS: Diaphragms are connected for transfer of seismic forces to the shear walls, and the connections are able to develop the lesser of the shear strength of the walls or diaphragms.	5.7.2	A.5.2.1	Missing in-plane connections
☐	☒	☐	☐				
C	NC	N/A	U	GIRDER-COLUMN CONNECTION: There is a positive connection using plates, connection hardware, or straps between the girder and the column support.	5.7.4.1	A.5.4.1	Connections between WF beams and columns not adequate for seismic loading.
☐	☒	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Project Name _____
 Project Number _____

Foundation System						
C	NC	N/A	U			
☐	☐	☒	☐	DEEP FOUNDATIONS: Piles and piers are capable of transferring the lateral forces between the structure and the soil.	A.6.2.3	
☐	☐	☒	☐	SLOPING SITES: The difference in foundation embedment depth from one side of the building to another does not exceed one story high.	A.6.2.4	

Status	Evaluation Statement	Tier 2 Reference	Commentary Reference	Comments
Low, Moderate, and High Seismicity (Complete the Following Items in Addition to the Items for Very Low Seismicity)				
Seismic-Force-Resisting System				
C	NC	N/A	U	
☐	☒	☐	☐	PROPORTIONS: The height-to-thickness ratio of the shear walls at each story is less than the following: Top story of multi-story building 9 First story of multi-story building 15 All other conditions 13
				5.5.3.1.2 A.3.2.5.2 Existing wall proportions are 18 and 22.5 for 12' and 15' walls
☐	☐	☒	☐	MASONRY LAYUP: Filled collar joints of multi-wythe masonry walls have negligible voids.
				5.5.3.4.1 A.3.2.5.3
Diaphragms (Stiff or Flexible)				
C	NC	N/A	U	
☐	☐	☒	☐	OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls are less than 15% of the wall length.
				5.6.1.3 A.4.1.4
☐	☐	☒	☐	OPENINGS AT EXTERIOR MASONRY SHEAR WALLS: Diaphragm openings immediately adjacent to exterior masonry shear walls are not greater than 4 ft (1.2 m) long.
				5.6.1.3 A.4.1.6
☐	☐	☒	☐	PLAN IRREGULARITIES: There is tensile capacity to develop the strength of the diaphragm at reentrant corners or other locations of plan irregularities.
				5.6.1.4 A.4.1.7
☐	☐	☒	☐	DIAPHRAGM REINFORCEMENT AT OPENINGS: There is reinforcing around all diaphragm openings larger than 50% of the building width in either major plan dimension.
				5.6.1.5 A.4.1.8
Flexible Diaphragms				
C	NC	N/A	U	
☐	☒	☐	☐	CROSS TIES: There are continuous cross ties between diaphragm chords.
				5.6.1.2 A.4.1.2 Attachments between rafters not adequate for seismic loading.

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Project Name _____
 Project Number _____

C	NC	N/A	U	STRAIGHT SHEATHING: All straight-sheathed diaphragms have aspect ratios less than 1-to-1 in the direction being considered.	5.6.2	A.4.2.1	Diaphragm aspect ratio greater than 1-1
☐	☒	☐	☐				
C	NC	N/A	U	SPANS: All wood diaphragms with spans greater than 12 ft (3.6 m) consist of wood structural panels or diagonal sheathing.	5.6.2	A.4.2.2	Spans greater than 12' with horizontal sheathing
☐	☒	☐	☐				
C	NC	N/A	U	DIAGONALLY SHEATHED AND UNBLOCKED DIAPHRAGMS: All diagonally sheathed or unblocked wood structural panel diaphragms have horizontal spans less than 30 ft (9.2 m) and aspect ratios less than or equal to 3-to-1.	5.6.2	A.4.2.3	
☐	☐	☒	☐				
C	NC	N/A	U	NONCONCRETE FILLED DIAPHRAGMS: Untopped metal deck diaphragms or metal deck diaphragms with fill other than concrete consist of horizontal spans of less than 40 ft (12.2 m) and have aspect ratios less than 4-to-1.	5.6.3	A.4.3.1	
☐	☐	☒	☐				
C	NC	N/A	U	OTHER DIAPHRAGMS: Diaphragms do not consist of a system other than wood, metal deck, concrete, or horizontal bracing.	5.6.5	A.4.7.1	
☒	☐	☐	☐				
Connections							
C	NC	N/A	U	STIFFNESS OF WALL ANCHORS: Anchors of concrete or masonry walls to wood structural elements are installed taut and are stiff enough to limit the relative movement between the wall and the diaphragm to no greater than 1/8 in. (3 mm) before engagement of the anchors.	5.7.1.2	A.5.1.4	Missing wall anchorage from diaphragm to masonry walls
☐	☐	☐	☐				
C	NC	N/A	U	BEAM, GIRDER, AND TRUSS SUPPORTS: Beams, girders, and trusses supported by unreinforced masonry walls or pilasters have independent secondary columns for support of vertical loads.	5.7.4.4	A.5.4.5	Pilaster are integral to URM walls and ineadequate for seismic forces
☐	☒	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

17.19 Nonstructural Checklist

Table 17-38. Nonstructural Checklist

Status				Evaluation Statement ^{a,b}	Tier 2 Reference	Commentary Reference	Comments
Life Safety Systems							
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. FIRE SUPPRESSION PIPING: Fire suppression piping is anchored and braced in accordance with NFPA-13.	13.7.4	A.7.13.1	
☐	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. FLEXIBLE COUPLINGS: Fire suppression piping has flexible couplings in accordance with NFPA-13.	13.7.4	A.7.13.2	
☐	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. EMERGENCY POWER: Equipment used to power or control Life Safety systems is anchored or braced.	13.7.7	A.7.12.1	
☐	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. STAIR AND SMOKE DUCTS: Stair pressurization and smoke control ducts are braced and have flexible connections at seismic joints.	13.7.6	A.7.14.1	
☐	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—MH; PR—MH. SPRINKLER CEILING CLEARANCE: Penetrations through panelized ceilings for fire suppression devices provide clearances in accordance with NFPA-13.	13.7.4	A.7.13.3	
☐	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—not required; PR—LMH. EMERGENCY LIGHTING: Emergency and egress lighting equipment is anchored or braced.	13.7.9	A.7.3.1	
☒	☐	☐	☐				
Hazardous Materials							
C	NC	N/A	U	HR—LMH; LS—LMH; PR—LMH. HAZARDOUS MATERIAL EQUIPMENT: Equipment mounted on vibration isolators and containing hazardous material is equipped with restraints or snubbers.	13.7.1	A.7.12.2	
☐	☐	☐	☐				
C	NC	N/A	U	HR—LMH; LS—LMH; PR—LMH. HAZARDOUS MATERIAL STORAGE: Breakable containers that hold hazardous material, including gas cylinders, are restrained by latched doors, shelf lips, wires, or other methods.	13.8.3	A.7.15.1	
☐	☐	☐	☐				
C	NC	N/A	U	HR—MH; LS—MH; PR—MH. HAZARDOUS MATERIAL DISTRIBUTION: Piping or ductwork conveying hazardous materials is braced or otherwise protected from damage that would allow hazardous material release.	13.7.3 13.7.5	A.7.13.4	
☐	☐	☐	☐				
C	NC	N/A	U	HR—MH; LS—MH; PR—MH. SHUTOFF VALVES: Piping containing hazardous material, including natural gas, has shutoff valves or other devices to limit spills or leaks.	13.7.3 13.7.5	A.7.13.3	
☒	☐	☐	☐				
C	NC	N/A	U	HR—LMH; LS—LMH; PR—LMH. FLEXIBLE COUPLINGS: Hazardous material ductwork and piping, including natural gas piping, have flexible couplings.	13.7.3 13.7.5	A.7.15.4	
☒	☐	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C	NC	N/A	U	HR—MH; LS—MH; PR—MH. PIPING OR DUCTS	13.7.3	A.7.13.6
☐	☐	☐	☐	CROSSING SEISMIC JOINTS: Piping or ductwork	13.7.5	
				carrying hazardous material that either crosses	13.7.6	
				seismic joints or isolation planes or is connected to		
				independent structures has couplings or other details		
				to accommodate the relative seismic displacements.		
Partitions						
C	NC	N/A	U	HR—LMH; LS—LMH; PR—LMH. UNREINFORCED	13.6.2	A.7.1.1
☐	☐	☐	☐	MASONRY: Unreinforced masonry or hollow-clay tile		
				partitions are braced at a spacing of at most 10 ft (3.0		
				m) in Low or Moderate Seismicity, or at most 6 ft (1.8		
				m) in High Seismicity.		
C	NC	N/A	U	HR—LMH; LS—LMH; PR—LMH. HEAVY PARTITIONS	13.6.2	A.7.2.1
☒	☐	☐	☐	SUPPORTED BY CEILINGS: The tops of masonry or		
				hollow-clay tile partitions are not laterally supported		
				by an integrated ceiling system.		
C	NC	N/A	U	HR—not required; LS—MH; PR—MH. DRIFT: Rigid	13.6.2	A.7.1.2
☐	☐	☐	☐	cementitious partitions are detailed to accommodate		
				the following drift ratios: in steel moment frame,		
				concrete moment frame, and wood frame buildings,		
				0.02; in other buildings, 0.005.		
C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.2	A.7.2.1
☒	☐	☐	☐	LIGHT PARTITIONS SUPPORTED BY CEILINGS: The tops		
				of gypsum board partitions are not laterally		
				supported by an integrated ceiling system.		
C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.2	A.7.1.3
☐	☐	☐	☐	STRUCTURAL SEPARATIONS: Partitions that cross		
				structural separations have seismic or control joints.		
C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.2	A.7.1.4
☐	☐	☐	☐	TOPS: The tops of ceiling-high framed or panelized		
				partitions have lateral bracing to the structure at a		
				spacing equal to or less than 6 ft (1.8 m).		
Ceilings						
C	NC	N/A	U	HR—H; LS—MH; PR—LMH. SUSPENDED LATH AND	13.6.4	A.7.2.3
☐	☐	☐	☐	PLASTER: Suspended lath and plaster ceilings have		
				attachments that resist seismic forces for every 12 ft ²		
				(1.1 m ²) of area.		
C	NC	N/A	U	HR—not required; LS—MH; PR—LMH. SUSPENDED	13.6.4	A.7.2.3
☐	☐	☐	☐	GYPSON BOARD: Suspended gypsum board ceilings		
				have attachments that resist seismic forces for every		
				12 ft ² (1.1 m ²) of area.		

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.4	A.7.2.2
☐	☐	☐	☐	INTEGRATED CEILINGS: Integrated suspended ceilings with continuous areas greater than 144 ft ² (13.4 m ²) and ceilings of smaller areas that are not surrounded by restraining partitions are laterally restrained at a spacing no greater than 12 ft (3.6 m) with members attached to the structure above. Each restraint location has a minimum of four diagonal wires and compression struts, or diagonal members capable of resisting compression.		
C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.4	A.7.2.4
☐	☐	☐	☐	EDGE CLEARANCE: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft ² (13.4 m ²) have clearances from the enclosing wall or partition of at least the following: in Moderate Seismicity, 1/2 in. (13 mm); in High Seismicity, 3/4 in. (19 mm).		
C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.4	A.7.2.5
☐	☐	☐	☐	CONTINUITY ACROSS STRUCTURE JOINTS: The ceiling system does not cross any seismic joint and is not attached to multiple independent structures.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H. EDGE	13.6.4	A.7.2.6
☐	☐	☐	☐	SUPPORT: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft ² (13.4 m ²) are supported by closure angles or channels not less than 2 in. (51 mm) wide.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.6.4	A.7.2.7
☐	☐	☐	☐	SEISMIC JOINTS: Acoustical tile or lay-in panel ceilings have seismic separation joints such that each continuous portion of the ceiling is no more than 2,500 ft ² (232.3 m ²) and has a ratio of long-to-short dimension no more than 4-to-1.		
Light Fixtures						
C	NC	N/A	U	HR—not required; LS—MH; PR—MH.	13.6.4	A.7.3.2
☒	☐	☐	☐	INDEPENDENT SUPPORT: Light fixtures that weigh more per square foot than the ceiling they penetrate are supported independent of the grid ceiling suspension system by a minimum of two wires at diagonally opposite corners of each fixture.	13.7.9	

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C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.9	A.7.3.3
☒	☐	☐	☐	PENDANT SUPPORTS: Light fixtures on pendant supports are attached at a spacing equal to or less than 6 ft. Unbraced suspended fixtures are free to allow a 360-degree range of motion at an angle not less than 45 degrees from horizontal without contacting adjacent components. Alternatively, if rigidly supported and/or braced, they are free to move with the structure to which they are attached without damaging adjoining components. Additionally, the connection to the structure is capable of accommodating the movement without failure.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H. LENS COVERS: Lens covers on light fixtures are attached with safety devices.	13.7.9	A.7.3.4
☐	☐	☐	☐			
Cladding and Glazing						
C	NC	N/A	U	HR—MH; LS—MH; PR—MH. CLADDING ANCHORS:	13.6.1	A.7.4.1
☐	☐	☐	☐	Cladding components weighing more than 10 lb/ft ² (0.48 kN/m ²) are mechanically anchored to the structure at a spacing equal to or less than the following: for Life Safety in Moderate Seismicity, 6 ft (1.8 m); for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 ft (1.2 m)		
C	NC	N/A	U	HR—not required; LS—MH; PR—MH. CLADDING ISOLATION: For steel or concrete moment-frame buildings, panel connections are detailed to accommodate a story drift ratio by the use of rods attached to framing with oversize holes or slotted holes of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02, and the rods have a length-to-diameter ratio of 4.0 or less.	13.6.1	A.7.4.3
☐	☐	☐	☐			
C	NC	N/A	U	HR—MH; LS—MH; PR—MH. MULTI-STORY PANELS:	13.6.1	A.7.4.4
☐	☐	☐	☐	For multi-story panels attached at more than one floor level, panel connections are detailed to accommodate a story drift ratio by the use of rods attached to framing with oversize holes or slotted holes of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02, and the rods have a length-to-diameter ratio of 4.0 or less.		

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C	NC	N/A	U	HR—not required; LS—MH; PR—MH. THREADED RODS: Threaded rods for panel connections detailed to accommodate drift by bending of the rod have a length-to-diameter ratio greater than 0.06 times the story height in inches for Life Safety in Moderate Seismicity and 0.12 times the story height in inches for Life Safety in High Seismicity and Position Retention in any seismicity.	13.6.1	A.7.4.9	
☐	☐	☐	☐				
C	NC	N/A	U	HR—MH; LS—MH; PR—MH. PANEL CONNECTIONS: Cladding panels are anchored out of plane with a minimum number of connections for each wall panel, as follows: for Life Safety in Moderate Seismicity, 2 connections; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 connections.	13.6.1.4	A.7.4.5	
☐	☐	☐	☐				
C	NC	N/A	U	HR—MH; LS—MH; PR—MH. BEARING CONNECTIONS: Where bearing connections are used, there is a minimum of two bearing connections for each cladding panel.	13.6.1.4	A.7.4.6	
☐	☐	☐	☐				
C	NC	N/A	U	HR—MH; LS—MH; PR—MH. INSERTS: Where concrete cladding components use inserts, the inserts have positive anchorage or are anchored to reinforcing steel.	13.6.1.4	A.7.4.7	
☐	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—MH; PR—MH. OVERHEAD GLAZING: Glazing panes of any size in curtain walls and individual interior or exterior panes more than 16 ft ² (1.5 m ²) in area are laminated annealed or laminated heat-strengthened glass and are detailed to remain in the frame when cracked.	13.6.1.5	A.7.4.8	GLAZING PANES ARE NOT LAMINATED ANNEALED
☐	☐	☐	☐				
Masonry Veneer							
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. TIES: Masonry veneer is connected to the backup with corrosion-resistant ties. There is a minimum of one tie for every 2-2/3 ft ² (0.25 m ²), and the ties have spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 36 in. (914 mm); for Life Safety in High Seismicity and for Position Retention in any seismicity, 24 in. (610 mm).	13.6.1.2	A.7.5.1	MASONRY VENEER NOT CONNECTED TO A BACKUP
☐	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. SHELF ANGLES: Masonry veneer is supported by shelf angles or other elements at each floor above the ground floor.	13.6.1.2	A.7.5.2	
☐	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. WEAKENED PLANES: Masonry veneer is anchored to the backup adjacent to weakened planes, such as at the locations of flashing.	13.6.1.2	A.7.5.3	
☐	☐	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C	NC	N/A	U	HR—LMH; LS—LMH; PR—LMH. UNREINFORCED MASONRY BACKUP: There is no unreinforced masonry backup.	13.6.1.1 13.6.1.2	A.7.7.2
☐	☐	☐	☐			
C	NC	N/A	U	HR—not required; LS—MH; PR—MH. STUD TRACKS: For veneer with cold-formed steel stud backup, stud tracks are fastened to the structure at a spacing equal to or less than 24 in. (610 mm) on center.	13.6.1.1 13.6.1.2	A.7.6.1
☐	☐	☐	☐			
C	NC	N/A	U	HR—not required; LS—MH; PR—MH. ANCHORAGE: For veneer with concrete block or masonry backup, the backup is positively anchored to the structure at a horizontal spacing equal to or less than 4 ft along the floors and roof.	13.6.1.1 13.6.1.2	A.7.7.1
☐	☐	☐	☐			
C	NC	N/A	U	HR—not required; LS—not required; PR—MH. WEEP HOLES: In veneer anchored to stud walls, the veneer has functioning weep holes and base flashing.	13.6.1.2	A.7.5.6
☐	☐	☐	☐			
C	NC	N/A	U	HR—not required; LS—not required; PR—MH. OPENINGS: For veneer with cold-formed-steel stud backup, steel studs frame window and door openings.	13.6.1.1 13.6.1.2	A.7.6.2
☐	☐	☐	☐			
Parapets, Cornices, Ornamentation, and Appendages						
C	NC	N/A	U	HR—LMH; LS—LMH; PR—LMH. URM PARAPETS OR CORNICES: Laterally unsupported unreinforced masonry parapets or cornices have height-to-thickness ratios no greater than the following: for Life Safety in Low or Moderate Seismicity, 2.5; for Life Safety in High Seismicity and for Position Retention in any seismicity, 1.5.	13.6.5	A.7.8.1
☐	☐	☐	☐			
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. CANOPIES: Canopies at building exits are anchored to the structure at a spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 10 ft (3.0 m); for Life Safety in High Seismicity and for Position Retention in any seismicity, 6 ft (1.8 m).	13.6.6	A.7.8.2
☒	☐	☐	☐			
C	NC	N/A	U	HR—H; LS—MH; PR—LMH. CONCRETE PARAPETS: Concrete parapets with height-to-thickness ratios greater than 2.5 have vertical reinforcement.	13.6.5	A.7.8.3
☐	☐	☐	☐			
C	NC	N/A	U	HR—MH; LS—MH; PR—LMH. APPENDAGES: Cornices, parapets, signs, and other ornamentation or appendages that extend above the highest point of anchorage to the structure or cantilever from components are reinforced and anchored to the structural system at a spacing equal to or less than 6 ft (1.8 m). This evaluation statement item does not apply to parapets or cornices covered by other evaluation statements.	13.6.6	A.7.8.4
☐	☐	☐	☐			

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Masonry Chimneys						
C	NC	N/A	U			
☐	☐	☐	☐	HR—LMH; LS—LMH; PR—LMH. URM CHIMNEYS: Unreinforced masonry chimneys extend above the roof surface no more than the following: for Life Safety in Low or Moderate Seismicity, 3 times the least dimension of the chimney; for Life Safety in High Seismicity and for Position Retention in any seismicity, 2 times the least dimension of the chimney.	13.6.7	A.7.9.1
☐	☐	☐	☐	HR—LMH; LS—LMH; PR—LMH. ANCHORAGE: Masonry chimneys are anchored at each floor level, at the topmost ceiling level, and at the roof.	13.6.7	A.7.9.2
Stairs						
C	NC	N/A	U			
☐	☐	☐	☐	HR—not required; LS—LMH; PR—LMH. STAIR ENCLOSURES: Hollow-clay tile or unreinforced masonry walls around stair enclosures are restrained out of plane and have height-to-thickness ratios not greater than the following: for Life Safety in Low or Moderate Seismicity, 15-to-1; for Life Safety in High Seismicity and for Position Retention in any seismicity, 12-to-1.	13.6.2 13.6.8	A.7.10.1
☐	☐	☐	☐	HR—not required; LS—LMH; PR—LMH. STAIR DETAILS: The connection between the stairs and the structure does not rely on post-installed anchors in concrete or masonry, and the stair details are capable of accommodating the drift calculated using the Quick Check procedure of Section 4.4.3.1 for moment-frame structures or 0.5 in. for all other structures without including any lateral stiffness contribution from the stairs.	13.6.8	A.7.10.2
Contents and Furnishings						
C	NC	N/A	U			
☐	☐	☐	☐	HR—LMH; LS—MH; PR—MH. INDUSTRIAL STORAGE RACKS: Industrial storage racks or pallet racks more than 12 ft high meet the requirements of ANSI/RMI MH 16.1 as modified by ASCE 7, Chapter 15.	13.8.1	A.7.11.1
☐	☐	☐	☐	HR—not required; LS—H; PR—MH. TALL NARROW CONTENTS: Contents more than 6 ft (1.8 m) high with a height-to-depth or height-to-width ratio greater than 3-to-1 are anchored to the structure or to each other.	13.8.2	A.7.11.2 CONTENTS NOT ANCHORED TO STRUCTURE
☐	☐	☐	☐	HR—not required; LS—H; PR—H. FALL-PRONE CONTENTS: Equipment, stored items, or other contents weighing more than 20 lb (9.1 kg) whose center of mass is more than 4 ft (1.2 m) above the adjacent floor level are braced or otherwise restrained.	13.8.2	A.7.11.3 CONTENTS NOT ANCHORED TO STRUCTURE

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.10	A.7.11.4	
☐	☐	☐	☐	ACCESS FLOORS: Access floors more than 9 in. (229 mm) high are braced.			
C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.7.7	A.7.11.5	
☐	☐	☐	☐	EQUIPMENT ON ACCESS FLOORS: Equipment and other contents supported by access floor systems are anchored or braced to the structure independent of the access floor.	13.6.10		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.8.2	A.7.11.6	
☒	☐	☐	☐	SUSPENDED CONTENTS: Items suspended without lateral bracing are free to swing from or move with the structure from which they are suspended without damaging themselves or adjoining components.			
Mechanical and Electrical Equipment							
C	NC	N/A	U	HR—not required; LS—H; PR—H. FALL-PRONE	13.7.1	A.7.12.4	EQUIPMENT NOT ANCHORED TO STRUCTURE
☐	☐	☐	☐	EQUIPMENT: Equipment weighing more than 20 lb (9.1 kg) whose center of mass is more than 4 ft (1.2 m) above the adjacent floor level, and which is not in-line equipment, is braced.	13.7.7		
C	NC	N/A	U	HR—not required; LS—H; PR—H. IN-LINE	13.7.1	A.7.12.5	
☐	☐	☐	☐	EQUIPMENT: Equipment installed in line with a duct or piping system, with an operating weight more than 75 lb (34.0 kg), is supported and laterally braced independent of the duct or piping system.			
C	NC	N/A	U	HR—not required; LS—H; PR—MH. TALL NARROW	13.7.1	A.7.12.6	EQUIPMENT NOT ANCHORED TO STRUCTURE
☐	☐	☐	☐	EQUIPMENT: Equipment more than 6 ft (1.8 m) high with a height-to-depth or height-to-width ratio greater than 3-to-1 is anchored to the floor slab or adjacent structural walls.	13.7.7		
C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.9	A.7.12.7	
☐	☐	☐	☐	MECHANICAL DOORS: Mechanically operated doors are detailed to operate at a story drift ratio of 0.01.			
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.1	A.7.12.8	
☒	☐	☐	☐	SUSPENDED EQUIPMENT: Equipment suspended without lateral bracing is free to swing from or move with the structure from which it is suspended without damaging itself or adjoining components.	13.7.7		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.1	A.7.12.9	
☐	☐	☐	☐	VIBRATION ISOLATORS: Equipment mounted on vibration isolators is equipped with horizontal restraints or snubbers and with vertical restraints to resist overturning.			
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.1	A.7.12.10	
☐	☐	☐	☐	HEAVY EQUIPMENT: Floor-supported or platform-supported equipment weighing more than 400 lb (181.4 kg) is anchored to the structure.	13.7.7		

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C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.7	A.7.12.11
☒	☐	☐	☐	ELECTRICAL EQUIPMENT: Electrical equipment is laterally braced to the structure.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.8	A.7.12.12
☒	☐	☐	☐	CONDUIT COUPLINGS: Conduit greater than 2.5 in. (64 mm) trade size that is attached to panels, cabinets, or other equipment and is subject to relative seismic displacement has flexible couplings or connections.		
Piping						
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.3	A.7.13.2
☒	☐	☐	☐	FLEXIBLE COUPLINGS: Fluid and gas piping has flexible couplings.	13.7.5	
C	NC	N/A	U	HR—not required; LS—not required; PR—H. FLUID	13.7.3	A.7.13.4
☒	☐	☐	☐	AND GAS PIPING: Fluid and gas piping is anchored and braced to the structure to limit spills or leaks.	13.7.5	
C	NC	N/A	U	HR—not required; LS—not required; PR—H. C-	13.7.3	A.7.13.5
☒	☐	☐	☐	CLAMPS: One-sided C-clamps that support piping larger than 2.5 in. (64 mm) in diameter are restrained.	13.7.5	
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.3	A.7.13.6
☐	☐	☐	☐	PIPING CROSSING SEISMIC JOINTS: Piping that crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements.	13.7.5	
Ducts						
C	NC	N/A	U	HR—not required; LS—not required; PR—H. DUCT	13.7.6	A.7.14.2
☐	☐	☐	☐	BRACING: Rectangular ductwork larger than 6 ft ² (0.56 m ²) in cross-sectional area and round ducts larger than 28 in. (711 mm) in diameter are braced. The maximum spacing of transverse bracing does not exceed 30 ft (9.2 m). The maximum spacing of longitudinal bracing does not exceed 60 ft (18.3 m).		
C	NC	N/A	U	HR—not required; LS—not required; PR—H. DUCT	13.7.6	A.7.14.3
☒	☐	☐	☐	SUPPORT: Ducts are not supported by piping or electrical conduit.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.6	A.7.14.4
☒	☐	☐	☐	DUCTS CROSSING SEISMIC JOINTS: Ducts that cross seismic joints or isolation planes or are connected to independent structures have couplings or other details to accommodate the relative seismic displacements.		
Elevators						
C	NC	N/A	U	HR—not required; LS—H; PR—H. RETAINER	13.7.11	A.7.16.1
☐	☐	☐	☐	GUARDS: Sheaves and drums have cable retainer guards.		
C	NC	N/A	U	HR—not required; LS—H; PR—H. RETAINER PLATE:	13.7.11	A.7.16.2
☐	☐	☐	☐	A retainer plate is present at the top and bottom of both car and counterweight.		

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.11	A.7.16.3
☐	☐	☐	☐	ELEVATOR EQUIPMENT: Equipment, piping, and other components that are part of the elevator system are anchored.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.11	A.7.16.4
☐	☐	☐	☐	SEISMIC SWITCH: Elevators capable of operating at speeds of 150 ft/min (0.30 m/min) or faster are equipped with seismic switches that meet the requirements of ASME A17.1 or have trigger levels set to 20% of the acceleration of gravity at the base of the structure and 50% of the acceleration of gravity in other locations.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.11	A.7.16.5
☐	☐	☐	☐	SHAFT WALLS: Elevator shaft walls are anchored and reinforced to prevent toppling into the shaft during strong shaking.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.11	A.7.16.6
☐	☐	☐	☐	COUNTERWEIGHT RAILS: All counterweight rails and divider beams are sized in accordance with ASME A17.1.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.11	A.7.16.7
☐	☐	☐	☐	BRACKETS: The brackets that tie the car rails and the counterweight rail to the structure are sized in accordance with ASME A17.1.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.11	A.7.16.8
☐	☐	☐	☐	SPREADER BRACKET: Spreader brackets are not used to resist seismic forces.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H. GO-SLOW ELEVATORS:	13.7.11	A.7.16.9
☐	☐	☐	☐	The building has a go-slow elevator system.		

^a Performance Level: HR = Hazards Reduced, LS = Life Safety, and PR = Position Retention.

^b Level of Seismicity: L = Low, M = Moderate, and H = High.

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Appendix C: Preliminary Seismic Retrofit Drawings

TALENT ELEMENTARY SCHOOL SEISMIC RETROFIT

PRELIMINARY DESIGN

PHOENIX-TALENT SCHOOL DISTRICT #4
307 WAGNER CREEK RD.
TALENT, OR 97540



45 Hawthorne Street, Suite 5, Medford,
Oregon 97504 | 541-500-8588

PHOENIX-TALENT
SCHOOL DISTRICT #4
401 W 4TH ST.
PHOENIX, OR 97535

TALENT
ELEMENTARY
SCHOOL SEISMIC
RETROFIT



REVISION ID:	DATE:
PROJECT NO:	M-0317-22
DRAWN:	MEG
CHECKED:	MRS
DATE:	DEC. 2022

COVER SHEET

G0.0

PRELIMINARY DESIGN

REPAIR KEYNOTES

STRUCTURAL REPAIRS:

- S1. PROVIDE A COMPLETE, WELL-DEFINED LOAD PATH BY INSTALLING NEW ELEMENTS AND CONNECTIONS AS NEEDED TO TRANSFER INERTIAL FORCES FROM ALL ELEMENTS OF THE BUILDING TO THE FOUNDATION.
(A) DIAPHRAGM IN-PLANE CONNECTION HARDWARE
(B) NEW DRAG BEAM
- S2. PROVIDE SEISMIC ISOLATION JOINT TO AVOID POUNDING OF THE TALLER STRUCTURE INTO THE LOWER STRUCTURE. PROVIDE ALL NEW GRAVITY FRAMING AND LATERAL RESISTING ELEMENTS AS NECESSARY TO PROVIDE BUILDING SEPARATION.
(A) PROVIDE SEISMIC SEPARATION JOINT AND PROVIDE ADDITIONAL VERTICAL SEISMIC LOAD RESISTING ELEMENTS OUTSIDE OF THE RETROFIT AREA AS NEEDED TO AVOID DAMAGE TO THE BUILDING PARTS BEING RETROFITTED.
(B) PROVIDE A NEW STEEL MOMENT FRAME TO SUPPORT THE ADJACENT CANOPY.
- S3. INSTALL NEW OUT-OF-PLANE ANCHORAGE.
- S4. INSTALL NEW IN-PLANE HARDWARE TO RESOLVE INERTIAL FORCES.
- S5. INSTALL A NEW POSITIVE CONNECTION USING A NEW COLUMN TO SUPPORT EXISTING BEAM.
- S6. INSTALL STEEL STRONG BACKS TO RESIST OUT-OF-PLANE SEISMIC FORCES.
- S7. PROVIDE NEW CONTINUOUS CROSS TIES BETWEEN DIAPHRAGM CHORDS.
- INSTALL NEW STRAPPING BETWEEN RAFTERS.
- S8. INSTALL NEW PLYWOOD DIAPHRAGM SHEATHING.
- S9. INSTALL NEW PLYWOOD DIAPHRAGM SHEATHING.
- S10. PROVIDE NEW STEEL COLUMN TO SUPPORT GRAVITY LOADS FROM GIRDER WHILE RESISTING HORIZONTAL SEISMIC FORCES.

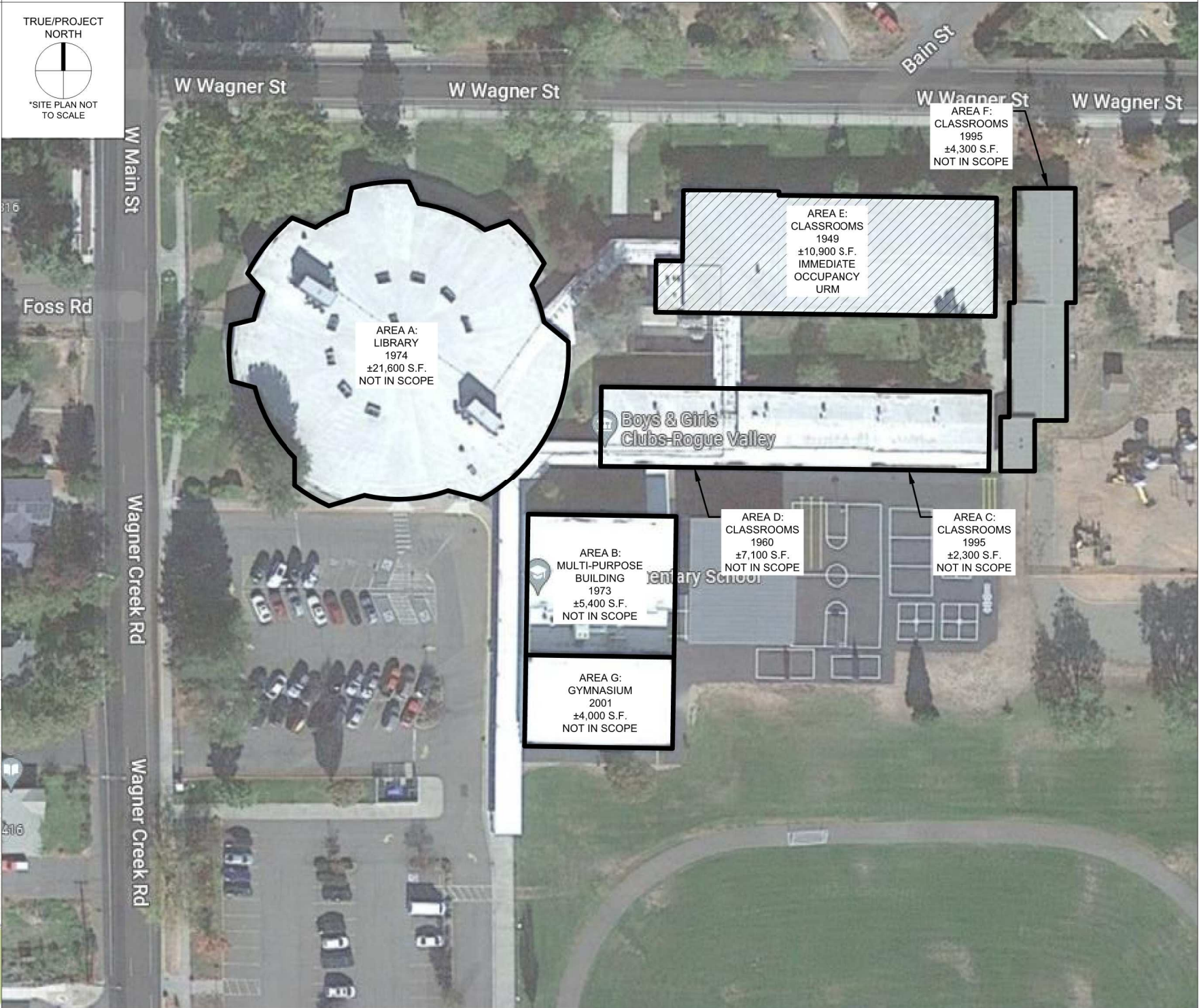
NON-STRUCTURAL REPAIRS:

- N1. BRACE UNREINFORCED MASONRY OR HOLLOW-CLAY TILE PARTITIONS
- N2. REMOVE GLAZING AND REPLACE WITH NEW SAFETY GLASS WINDOWS SYSTEM OR INFILL WALLS SEGMENTS.
- N3. SECURE EXISTING MASONRY VENEER WITH NEW STITCH TIES.
- N4. ANCHOR CONTENTS TO THE STRUCTURE.
- N5. BRACE EQUIPMENT TO STRUCTURE.
- N6. BRACE AND ANCHOR EQUIPMENT WEIGHING MORE THAN 20 lb., WHOSE CENTER OF MASS IS MORE THAN 4 FT. ABOVE THE ADJACENT FLOOR LEVEL.
- N7. ANCHOR EQUIPMENT MORE THAN 6FT HIGH WITH A HEIGHT-TO-DEPTH OR HEIGHT-TO-WIDTH RATIO GREATER THAN 3-TO-1 TO THE FLOOR SLAB OR ADJACENT STRUCTURAL WALLS.

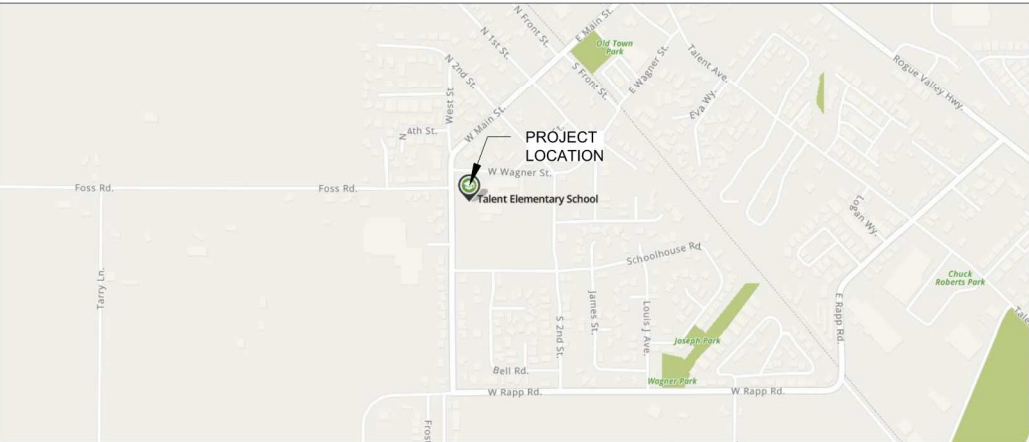
SHEET INDEX

- G0.0 COVER SHEET
S1.1 AREA E ROOF FRAMING PLAN

BUILDING KEY PLAN



VICINITY MAP



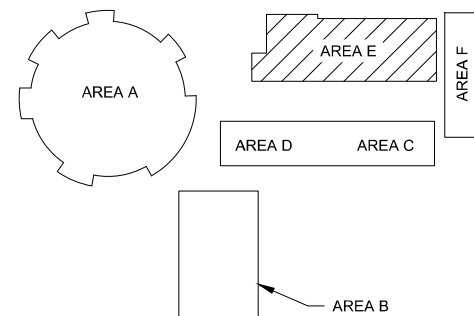
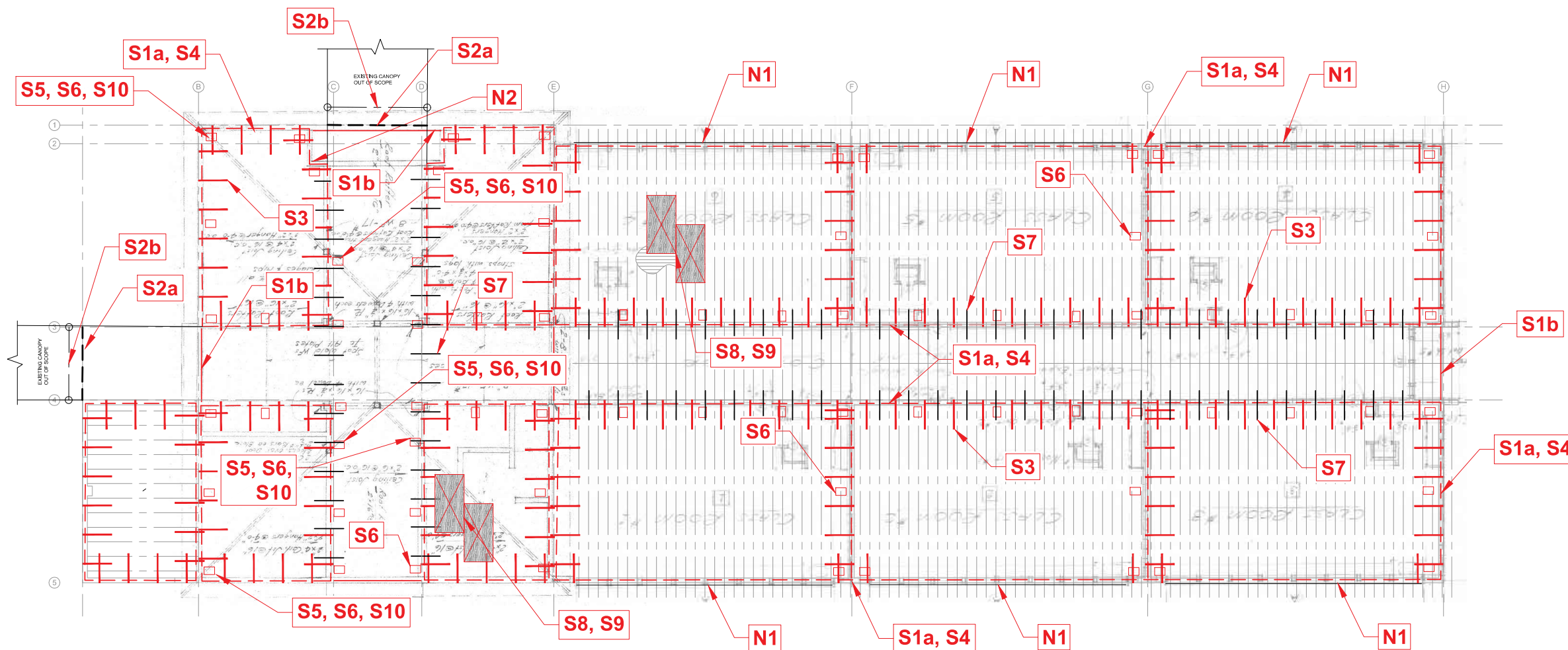
ONE INCH EQUALS FULL SCALE



45 Hawthorne Street, Suite 5, Medford,
Oregon 97504 | 541-600-8588

PHOENIX-TALENT
SCHOOL DISTRICT #4
401 W 4TH ST.
PHOENIX, OR 97535

TALENT
ELEMENTARY
SCHOOL SEISMIC
RETROFIT



REVISION ID	DATE
PROJECT NO:	M-0317-22
DRAWN:	MEG
CHECKED:	MRS
DATE:	DEC. 2022

AREA E ROOF
FRAMING PLAN

S1.1

PRELIMINARY DESIGN

ONE INCH EQUALS FULL SCALE

1
S1.1
AREA E ROOF FRAMING PLAN

1/8"=1'-0"

0
S1.1
CAMPUS KEY
NTS

Appendix D: Geotechnical Information



307 Wagner Creek Rd, Talent, OR 97540, USA

Latitude, Longitude: 42.2409177, -122.7914074



Date	10/27/2020, 6:25:39 PM
Design Code Reference Document	ASCE41-17
Custom Probability	
Site Class	D - Default (See Section 11.4.3)

Type	Description	Value
Hazard Level		BSE-2N
S_S	spectral response (0.2 s)	0.609
S_1	spectral response (1.0 s)	0.349
S_{XS}	site-modified spectral response (0.2 s)	0.799
S_{X1}	site-modified spectral response (1.0 s)	0.68
F_a	site amplification factor (0.2 s)	1.313
F_v	site amplification factor (1.0 s)	1.951
ssuh	max direction uniform hazard (0.2 s)	0.697
crs	coefficient of risk (0.2 s)	0.873
ssrt	risk-targeted hazard (0.2 s)	0.609
ssd	deterministic hazard (0.2 s)	1.5
s1uh	max direction uniform hazard (1.0 s)	0.406
cr1	coefficient of risk (1.0 s)	0.859
s1rt	risk-targeted hazard (1.0 s)	0.349
s1d	deterministic hazard (1.0 s)	0.6

Type	Description	Value
Hazard Level		BSE-1N
S_{XS}	site-modified spectral response (0.2 s)	0.533
S_{X1}	site-modified spectral response (1.0 s)	0.454

Type	Description	Value
Hazard Level		BSE-2E
S_S	spectral response (0.2 s)	0.424
S_1	spectral response (1.0 s)	0.236
S_{XS}	site-modified spectral response (0.2 s)	0.619
S_{X1}	site-modified spectral response (1.0 s)	0.502
f_a	site amplification factor (0.2 s)	1.461
f_v	site amplification factor (1.0 s)	2.128

Type	Description	Value
Hazard Level		BSE-1E
S_S	spectral response (0.2 s)	0.146
S_1	spectral response (1.0 s)	0.073
S_{XS}	site-modified spectral response (0.2 s)	0.234
S_{X1}	site-modified spectral response (1.0 s)	0.175
F_a	site amplification factor (0.2 s)	1.6
F_v	site amplification factor (1.0 s)	2.4

Type	Description	Value
Hazard Level		TL Data
T-Sub-L	Long-period transition period in seconds	16

DISCLAIMER

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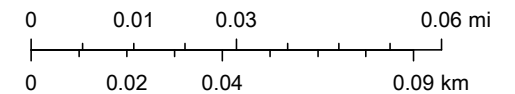
Talent Elementary School - Active Faults



November 10, 2020

- | | | |
|-------------------------------|-------------------|-----------------------------|
| ▪ State Owned/Leased Facility | Community College | Emergency Operations Center |
| Public Buildings | Police Station | Hospital |
| School | Fire Station | |

1:2,400



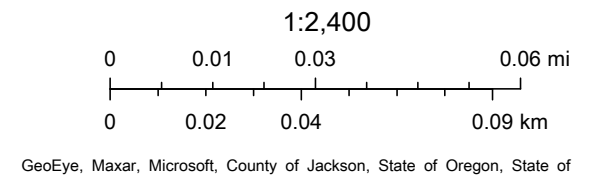
GeoEye, Maxar, Microsoft, County of Jackson, State of Oregon, State of

Talent Elementary School - Liquefaction Hazard



November 10, 2020

- | | | | |
|-------------------------------|-------------------|-----------------------------|----------|
| ▪ State Owned/Leased Facility | Community College | Emergency Operations Center | Moderate |
| Public Buildings | Police Station | Hospital | Low |
| School | Fire Station | High | |



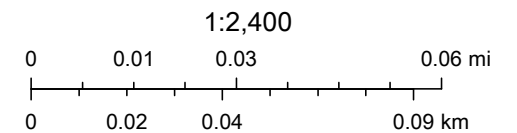
Talent Elementary School - Landslide Hazard



November 10, 2020

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> State Owned/Leased Facility | <ul style="list-style-type: none"> Community College | <ul style="list-style-type: none"> Emergency Operations Center |
| <ul style="list-style-type: none"> Public Buildings | <ul style="list-style-type: none"> Police Station | <ul style="list-style-type: none"> Hospital |
| <ul style="list-style-type: none"> School | <ul style="list-style-type: none"> Fire Station | |

- Landslide Hazard**
- Low - Landsliding Unlikely
 - Moderate - Landsliding Possible

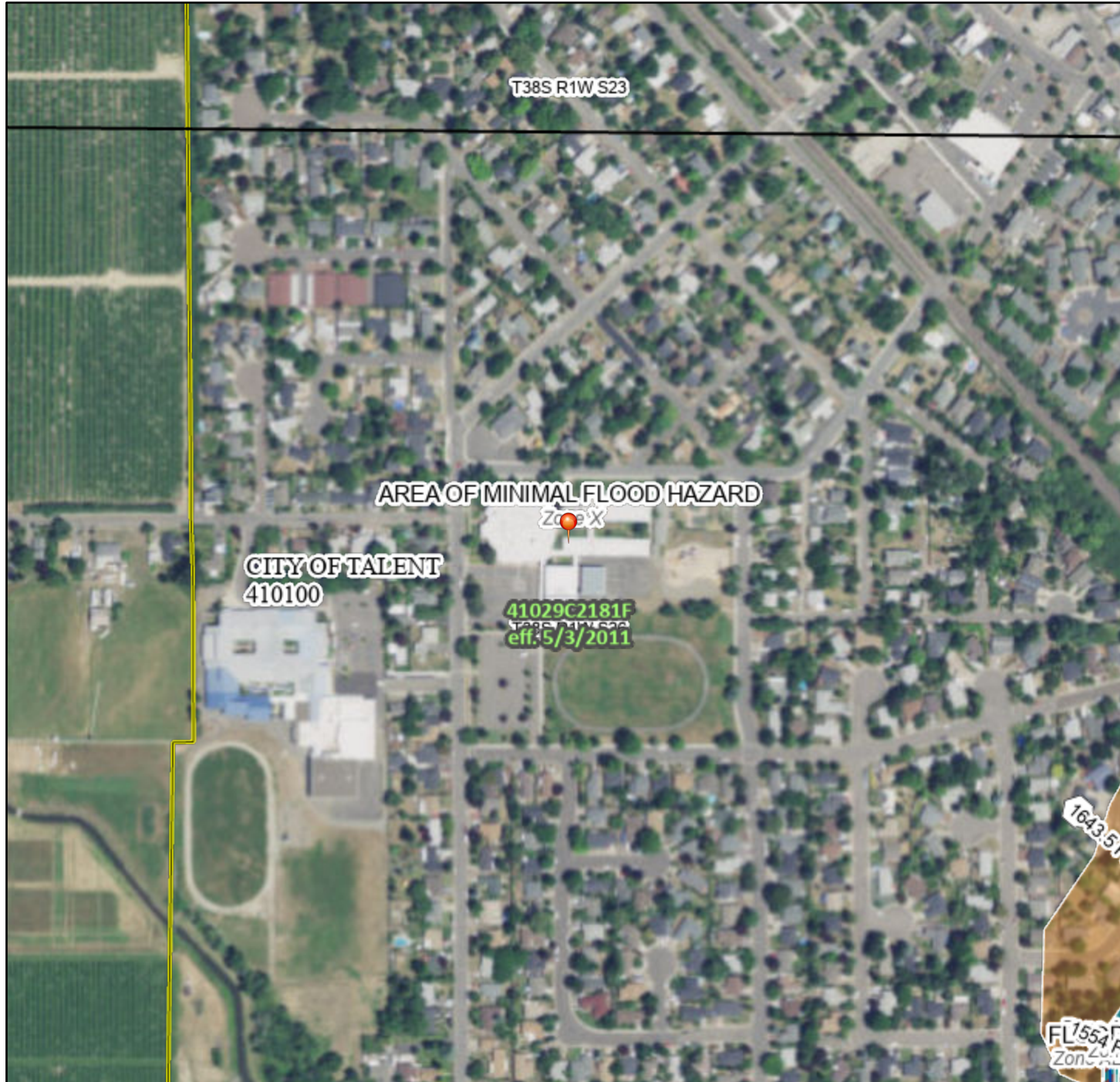


GeoEye, Maxar, Microsoft, County of Jackson, State of Oregon, State of

National Flood Hazard Layer FIRMMette



122°47'48"W 42°14'40"N



0 250 500 1,000 1,500 2,000 Feet 1:6,000

Basemap: USGS National Map: Orthoimagery: Data refreshed October, 2020

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS		Without Base Flood Elevation (BFE) Zone A, V, A99
		With BFE or Depth Zone AE, AO, AH, VE, AR
		Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD		0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile Zone X
		Future Conditions 1% Annual Chance Flood Hazard Zone X
		Area with Reduced Flood Risk due to Levee. See Notes. Zone X
		Area with Flood Risk due to Levee Zone D
OTHER AREAS		NO SCREEN Area of Minimal Flood Hazard Zone X
		Effective LOMRs
GENERAL STRUCTURES		Area of Undetermined Flood Hazard Zone D
		Channel, Culvert, or Storm Sewer
OTHER FEATURES		Levee, Dike, or Floodwall
		Cross Sections with 1% Annual Chance Water Surface Elevation
MAP PANELS		Coastal Transect
		Base Flood Elevation Line (BFE)
		Limit of Study
		Jurisdiction Boundary
		Coastal Transect Baseline
		Profile Baseline
		Hydrographic Feature
		Digital Data Available
		No Digital Data Available
		Unmapped



The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **12/12/2022 at 6:12 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.



**PRELIMINARY SEISMIC RETROFIT STUDY
TALENT ELEMENTARY SCHOOL
TALENT, OREGON**

For: Chris McKay
Phoenix Talent School District
PO BOX 698
Phoenix, Oregon 97535

By: THE GALLI GROUP
612 NW Third Street
Grants Pass, OR 97526
(541) 955-1611

02-5928-01
November 13, 2020

Table of Contents

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1
2.0 SITE AND PROJECT DESCRIPTION.....	1
3.0 FIELD EXPLORATION	1
4.0 LABORATORY TESTING	2
5.0 SUBSURFACE CONDITIONS	2
5.1 SOIL	2
5.2 GROUNDWATER.....	2
6.0 GEOLOGIC OR SEISMIC INDUCED HAZARDS	3
7.0 LIQUEFACTION EVALUATION	3
8.0 CONCLUSIONS.....	4
8.1 LIMITATIONS	4

LIST OF FIGURES

Figure 1	Vicinity Map
Figure 2	Site Plan with Boring Locations

APPENDIX A: Boring Logs



PRELIMINARY SEISMIC RETROFIT STUDY TALENT ELEMENTARY SCHOOL TALENT, OREGON

1.0 INTRODUCTION

This report presents results of our geotechnical and geological evaluation of the Talent Elementary School for a potential Seismic Retrofit of the school. The subject school is located on the east side of Wagner Creek Road, just north of School House Road. The site is mildly sloping to flat. Please see Figure 1, Vicinity Map, for a more precise location.

The purpose of this investigation and report was to accomplish a limited site surface and subsurface evaluation. The data gathered will be used in determining if the site is subject to liquefaction or other geologic hazard related to the structure during the design seismic event.

2.0 SITE AND PROJECT DESCRIPTION

The site is currently occupied by a functioning school, which consists of 6 or 7 structures connected via covered walkways or direct connections. The structures are surrounded by play fields, access roads, parking, walkways and open space.

We understand the project to consist of evaluating the site for possible severe geologic hazards (such as liquefaction). The findings will likely be used to determine if funding will be pursued to complete a full seismic retrofit of the structures on this campus. This would usually require structural upgrades including improved foundations and/or embedded footings/buttresses for resistance of vertical and lateral loads generated in a seismic event.

3.0 FIELD EXPLORATION

On November 2, 2020, Associate Engineer, Dennis Duru, M.Sc., E.I.T and our drilling crew, visited the site to accomplish the subsurface investigation. Three (3) exploratory borings were drilled approximately evenly spaced around the structure, at the locations shown on Figure 2, Site Plan. The borings penetrated to depths between 6.5 feet and 9.0 feet by our ATV-mounted solid stem auger drill rig. The borings were refilled with drill spoils. Those in asphalt areas had the top pounded full with cold patch asphalt.

A utility locate was completed prior to our investigation and our representative identified the field exploration locations away from the marked utilities. Standard Penetration Testing (SPT) was accomplished in each boring. This entails driving a 1½-inch diameter steel split spoon sampler by dropping a 140-pound weight for a 30-inch drop. The total number of blows it takes to drive the sampler the last 12 inches of an 18-inch drive is called the SPT N-value. These can be correlated with density and soil strength parameters from testing on thousands of other projects.

Our representative identified the final exploration location, logged subsurface soils and water conditions and obtained soil samples for transport to our laboratory. Visual classifications of the soils were made in the field and are presented in the Boring Logs in Appendix A, at the end of this report. Please note that in the logs, soil changes are depicted as distinct layers, while in nature they may be more gradual.

4.0 LABORATORY TESTING

Two soil samples were tested for expansion Index due to their clayey nature and the presence of expansive soils in the area. Test results indicate that the upper clayey soils have Moderate Expansion Potential with tested EI Value of 56. Moisture content tests were also accomplished on soil samples obtained by Standard Penetration Testing.

5.0 SUBSURFACE CONDITIONS

5.1 SOIL

The soils were somewhat similar around the group of structures. These were generally a surficial layer of organic topsoil and grass root zone. This was underlain by stiff to very stiff, silty Clay and gravelly Clay. Then there were layers of clayey, silty Sand, Clay, Clayey Silt, Silty Gravel and dense clayey Sand and Gravel.

Please see more specific soils information in the Boring Logs in Appendix A. Please note that the soils are shown as distinct layers in the Boring Logs while in nature they may change more gradually. Soils conditions may also change somewhat between the locations investigated.

5.2 GROUNDWATER

Generally, the soils encountered were moist to saturated. Groundwater (likely perched) was found at depths of 8.0 feet in B-2 and 7.5 feet in B-3. Water was not encountered in B-1. Water levels could rise to within 4 or 5 feet of the ground level during wetter months of the year. The surficial silty Clay soils are likely to become saturated and disturb easily during wetter periods of the year.

6.0 GEOLOGIC OR SEISMIC INDUCED HAZARDS

Flood Hazard. The site is not near streams or rivers. Therefore, it is not within a 100-year floodplain.

Landslides/Slope Instability. There are no slopes close to the site. Therefore, there is no possibility of slope failure, rock fall or slide run out damage at the site.

Liquefaction and Lateral Spread. The project is underlain by mixtures of silt, clay and sand mixtures, some with gravels. These were above and below the water table. Therefore, liquefaction and lateral spread is not considered to be a potential hazard at an elevation to adversely impact the structure foundations. See more in a later section of this report.

Expansive Soils. The project has expansive soils. Lab testing produced EI values of 58 and 62 which indicates these soils are moderately expansive (change in volume with change in moisture content).

Ground Rupture. No Quaternary faults were identified at the project site. Therefore, the risk of damage at the site due to ground rupture is considered very low.

Ground Shaking. The design of the structures shall be designed for the design PG_A of 0.25g.

Seismic Ground Amplification or Resonance. No hazardous amplification or resonance effects from seismic waves have been associated with the soil subsurface conditions in the project area.

Tsunami and Seiche. The site is approximately 80 miles inland from the coast, and not subject to tsunami hazard. The site is not located adjacent to a large lake or body of water, and therefore, not subject to seiche hazard.

7.0 LIQUEFACTION EVALUATION

The site is underlain by layers of silty Clay, clayey Sand, gravelly Clay, clayey Sand and Gravel, dense Sand and Gravel and very dense silty Gravel. These all appear to be discontinuous large lenses rather than continuous wide-reaching layers.

For liquefaction to take place during a seismic event, the conditions at the site must include loose Silts, sandy Silt, silty Sand or Sand. These soils must also be below the water table. During seismic shaking, the saturated soils attempt to reorient into a state of denser packing. However, because the pore water pressure within the soil cannot instantly dissipate the load taken by soil grain to grain contact is briefly taken by the water; which has zero shear strength. Therefore, the soil mass liquefies until pore pressures dissipate.

These conditions are NOT present at this site. The clay content prevents the soil grain movement that can cause liquefaction. Elsewhere the soils are dense and very dense. Such soils will not undergo densification during a seismic event. Also, water was below 7 feet depth. Therefore, liquefaction cannot take place.

Therefore, in our professional opinion, the site conditions found in the borings will not result in wide spread liquefaction during a seismic event that will have significant adverse impacts on the structures.

8.0 CONCLUSIONS

In our professional opinion, based on our field investigation, office review and previous work in the area, the soils conditions at the site are suitable for a “normal” seismic retrofit. Crushed rock structural fill over the clay, gravelly Clay and silty Sand and Gravel will provide adequate support of new foundations, gradebeams and/or buttresses (or small diameter piles could be used to limit overexcavation). In our opinion, this school site is not subject to large scale liquefaction that will severely adversely impact the structure.

CAUTION: Moderately Expansive Soils Present on the Site at Shallow Depth

Additional borings around the structures on this site could possibly find zones of soils that may liquefy. However, these are likely to be moderate to small in size and should not adversely impact the structure.

If a full seismic retrofit geotechnical design report is needed, additional tasks to be accomplished would be as followed:

1. 2 or 3 additional borings.
2. Laboratory testing for strength and settlement.
3. Evaluation of data for developing design parameters.

These could be used to provide a full scale Seismic Retrofit Design Report.

8.1 LIMITATIONS

The analyses, conclusions and recommendations contained in this report are based on-site conditions as they existed at the time of the study, and assume soils, rock and groundwater conditions exposed and observed in the borings during our investigation are representative of soils and groundwater conditions throughout the site. If during construction, subsurface conditions or assumed design information is found to be different, we should be advised at once so that we can review this report and reconsider our recommendations in light of the changed conditions. If there is a significant lapse of time (5 years) between submission of this report and the start of work at the site, if the project is changed, or if conditions have changed due to acts of God or construction at or adjacent to the site, it is recommended that this report be reviewed in light of the changed conditions and/or time lapse.

This report was prepared for the use of the School District and their design team for evaluating the need for a full scale Seismic Retrofit evaluation and report. It should be made available to contractors for information and factual data only. This report should not be used for contractual purposes as a warranty of site subsurface conditions. It should also not be used at other sites or for projects other than the one intended.

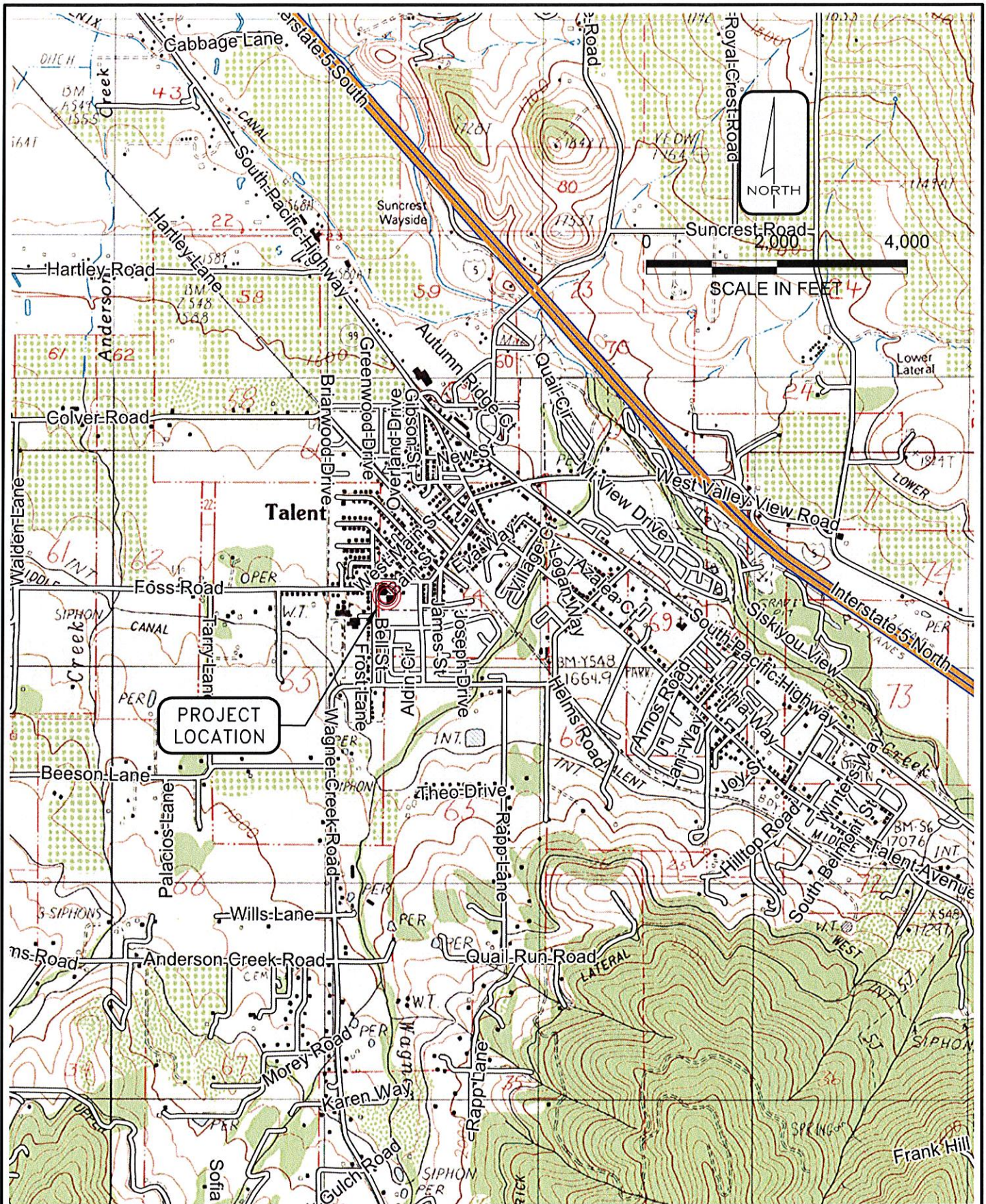
We have performed these services in accordance with generally accepted geotechnical engineering and professional geology practices in southern Oregon, at the time the study was accomplished. No other warranties, either expressed or implied, are provided.

THE GALLI GROUP
GEOTECHNICAL CONSULTING



William F. Galli, P.E., G.E.
Principal Engineer





THE GALLI GROUP
GEOTECHNICAL CONSULTING
612 NW 3rd Street
Grants Pass, OR 97526

VICINITY MAP

TALENT ELEMENTARY SCHOOL
TALENT, OREGON

DATE: NOVEMBER 2020
JOB NO: 02-5928-01
REV: 11/12/2020 9:06 AM
PREPARED BY: BD/MG3
5928-01 Talent Elementary School - 01 - Vicinity.dwg

FIGURE:

1

LEGEND

B-1 BORING NUMBER AND
APPROXIMATE LOCATION

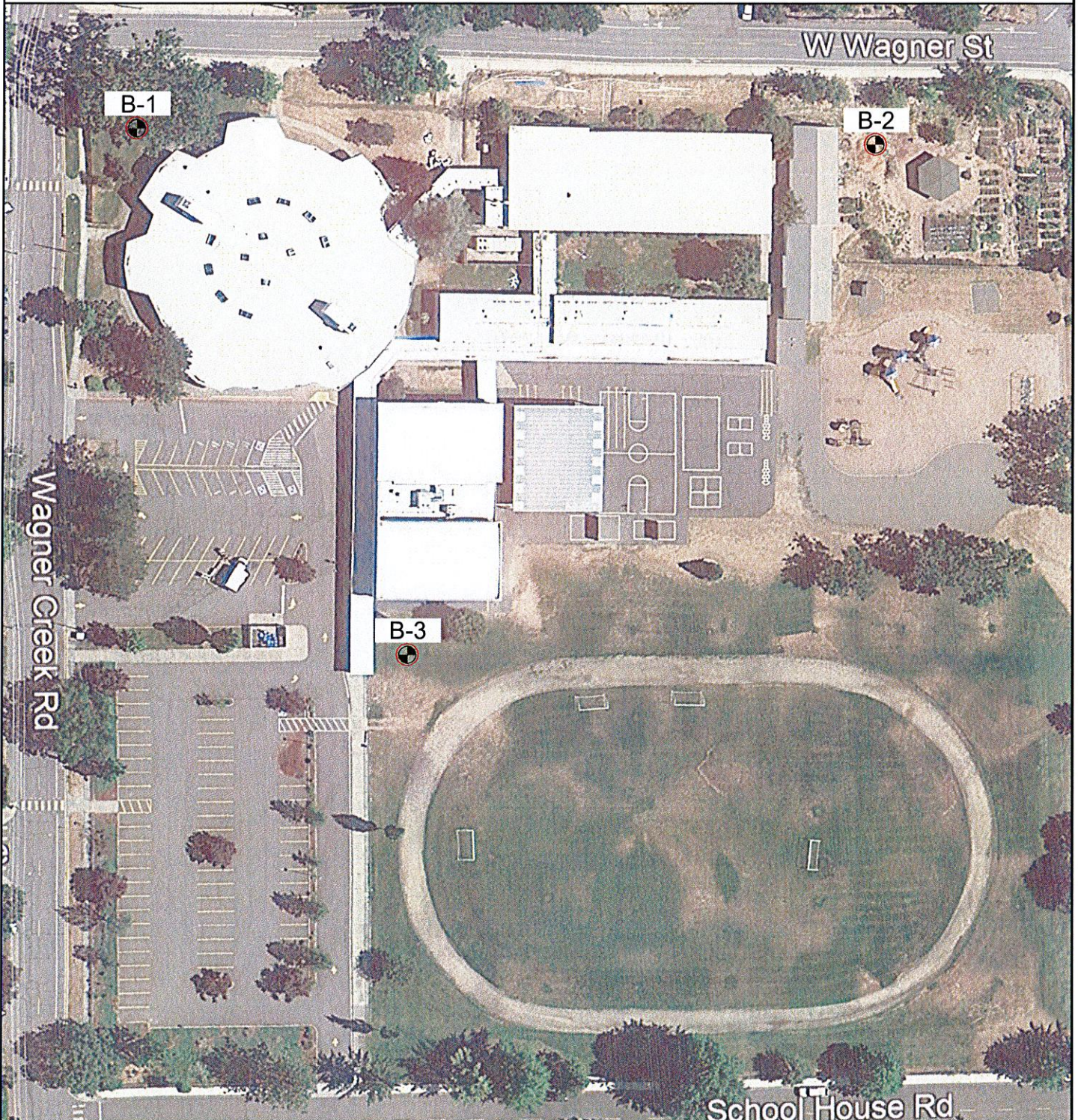


0 100 200



APPROX. SCALE IN FEET

AERIAL PHOTO PROVIDED
BY GOOGLE EARTH



THE GALLI GROUP
GEOTECHNICAL CONSULTING
612 NW 3rd Street
Grants Pass, OR 97526

SITE PLAN
WITH BORING LOCATIONS
TALENT ELEMENTARY SCHOOL
TALENT, OREGON

DATE: NOVEMBER 2020
JOB NO: 02-5928-01
REV: 11/12/2020 3:58 PM
PREPARED BY: BD/MG3
5928-02 Talent Elementary School - 02 - Site Plan.dwg

FIGURE:

2

APPENDIX A

BORING LOGS

BORING LOG B-1

Project: Talent Elementary School
Client: Talent School District
Location:
Driller: TGG (Blake, Ken)
Drill Rig: ATV Mounted, 4-inch Dia SSA
Depth To Water> Initial ∇ :

Project No.: 02-5928-01
Date: 11/2/2020
Elevation:
Logged By: Dennis Duru

At Completion ∇ :

Graphic Log	USCS	Description	Depth	Sample No. and Type	NMC	Standard Penetration Test			
						N	CURVE		
							10	30	50
	OL	Grass rootzone.	0.25						
	CH	Medium stiff, dark brown, gravelly Clay; moist.							
	CH/MH	Stiff, brown, clayey Silt; moist.	3.5						
	GM	Very dense, brown, silty Gravel; moist.	5.0						
			6.5						
		Bottom of boring at 6.5 feet. No free groundwater was encountered.	7						
			10.5						
			14						
			17.5						
			21						
			24.5						

Legend of Samplers:

Grab sample

SPT sample

Shelby tube sample

BORING LOG B-2

Project: Talent Elementary School
Client: Talent School District
Location:
Driller: TGG (Blake, Ken)
Drill Rig: ATV Mounted, 4-inch Dia SSA
Depth To Water> Initial ∇ :

Project No.: 02-5928-01
Date: 11/2/2020
Elevation:
Logged By: Dennis Duru

At Completion ∇ :

Graphic Log	USCS	Description	Depth	Sample No. and Type	NMC	Standard Penetration Test			
						N	CURVE		
							10	30	50
	OL	Grass rootzone.	0.5						
	CH	Medium stiff, dark brown, gravelly Clay; moist.							
				4.0					
	CL	Stiff, brown, Clay; moist.							
			7.5						
	GM	Very dense, brown, silty Gravel; moist.	9.0						
		Bottom of boring at 9.0 feet. No free groundwater was encountered. Seepage at 8.0 feet.							
			10.5						
			14						
			17.5						
			21						
			24.5						

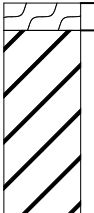
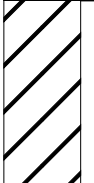
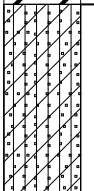
Legend of Samplers: Grab sample SPT sample Shelby tube sample

BORING LOG B-3

Project: Talent Elementary School
Client: Talent School District
Location:
Driller: TGG (Blake, Ken)
Drill Rig: ATV Mounted, 4-inch Dia SSA
Depth To Water> Initial ∇ :

Project No.: 02-5928-01
Date: 11/2/2020
Elevation:
Logged By: Dennis Duru

At Completion ∇ :

Graphic Log	USCS	Description	Depth	Sample No. and Type	NMC	Standard Penetration Test			
						N	CURVE		
							10	30	50
	OL	Organic topsoil/rootzone.	0.5						
	CH	Stiff, dark brown, Clay; moist.		S-1	21%				
			4.0						
	SC/SM	Medium dense, brown, clayey, silty Sand; moist.		S-1	15%	25			
			7						
	GC	Dense, brown, clayey Gravel; moist.	7.5	S-2	8%	58			
			9.0						
		Bottom of boring at 9.0 feet. No free groundwater was encountered. Seepage at 7.5 feet.							
			10.5						
			14						
			17.5						
			21						
			24.5						

Legend of Samplers:

 Grab sample

 SPT sample

 Shelby tube sample

Appendix E: Construction Cost Estimate Worksheets

ENGINEER'S OPINION OF PROBABLE COST - TALENT ELEMENTARY SCHOOL SEISMIC REHABILITATION

SUMMARY

Description	Deficiencies (Ref. Seismic Evaluation Report Sec. 7.0)	Quantity	Units	Unit Price	Total Price for Construction Item
GENERAL CONDITIONS					
General Conditions		10%	%		\$ 137,655.00
Preconstruction Services		2%	%		\$ 27,531.00
Escalation		7%	%		\$ 107,921.52
Bonding & Insurance		3%	%		\$ 46,252.08
Contractor Profit & Overhead		5%	%		\$ 77,086.80
General Conditions Subtotal					\$ 396,446.40
Non-Structural Elements					
Misc MEP	N1, N3	1	Lump Sum	\$ 88,900.00	\$ 88,900.00
Misc Non-Structural	N1, N2, N3, N4, N5, N6	1	Lump Sum	\$ 32,600.00	\$ 32,600.00
Non-Structural Subtotal					\$ 121,500.00
Construction Cost Per Building Part					
Building Part 'E' Subtotal					\$ 1,255,050.00
Sub-Total Construction Cost					\$ 1,773,000.00
Contingency					15%
Total Construction Cost					\$ 2,038,950.00
Cost Estimate Summary					
Engineering					\$ 294,600.00
Architectural Consulting				\$ 30,600.00	
Structural / Rehabilitation Engineering				\$ 224,300.00	
Geotechnical Consulting				\$ 19,400.00	
Materials Testing for Design				\$ 15,300.00	
ASCE 41-17 Tier 3 Evaluation for URM				\$ 5,000.00	
Construction Management					\$ 61,200.00
Construction					\$ 1,851,500.00
Sub-Total Construction Cost				\$ 1,773,000.00	
Special Inspection Services for Construction				\$ 17,300.00	
Permitting Fees				\$ 61,200.00	
Relocation of FF&E					\$ 26,600.00
Contingency					\$ 265,950.00
Total Project Funding Requirement					\$ 2,499,850.00

ENGINEER'S OPINION OF PROBABLE COST - TALENT ELEMENTARY SCHOOL SEISMIC REHABILITATION

BUILDING PART - 'E'

Description	Deficiencies (Ref. Seismic Evaluation Report Sec. 7.0)	Quantity	Units	Unit Price	Total Price for Construction Item
Demolition & Asbestos Abatement					
Built-Up Roof Demo	S8, S9	10500	Square Foot	\$ 4.00	\$ 42,000.00
Hard Demolition	S5, S6, S10, N1	6200	Square Foot	\$ 20.00	\$ 124,000.00
Soft Demolition	S1a, S3, S4, S7	10500	Square Foot	\$ 2.00	\$ 21,000.00
Demolition & Asbestos Subtotal					\$ 187,000.00
Foundation / Floor Strengthening Construction					
Spread Footings for Columns / Holdown	S5, S6, S10	72	Each	\$ 4,000.00	\$ 288,000.00
Concrete Repair & Patching	S5, S6, S10	1200	Square Foot	\$ 15.00	\$ 18,000.00
Floor Finish Patch / Replacement	S5, S6, S10	6200	Square Foot	\$ 7.00	\$ 43,400.00
Moment Frame Footings	S2b	4	Each	\$ 4,000.00	\$ 16,000.00
Foundation Level Subtotal					\$ 365,400.00
Wall Strengthening Construction					
Light Steel Columns	S5, S6, S10	72	EA	\$ 1,600.00	\$ 115,200.00
Brick Veneer Ties	N2	300	Square Foot	\$ 30.00	\$ 9,000.00
New Windows - Vinyl	N1	1900	Square Foot	\$ 40.00	\$ 76,000.00
Sheathing of Existing Walls	S1a, S4	1650	Square Foot	\$ 5.00	\$ 8,250.00
Structural Steel Frame	S2b	2	Tonn	\$ 21,800.00	\$ 43,600.00
Wall Strengthening Subtotal					\$ 252,050.00
Roof Strengthening Construction					
Block (E) Wood Diaphragm	S3, S9	5450	Square Foot	\$ 8.00	\$ 43,600.00
Diaphragm Attachments - Out-of-Plane	S3	300	Linear Foot	\$ 50.00	\$ 15,000.00
Diaphragm Attachments - In-Plane Shear	S1a, S4	550	Linear Foot	\$ 20.00	\$ 11,000.00
Blocking and Strapping Line	S7	400	Linear Foot	\$ 50.00	\$ 20,000.00
New Drag Beam	S1b	5	EA	\$ 2,500.00	\$ 12,500.00
New 6" polysociurinate rigid insulation	S8, S9	10500	Square Foot	\$ 12.00	\$ 126,000.00
New 3-ply Built Up Roof	S8, S9	10500	Square Foot	\$ 15.00	\$ 157,500.00
New Roof Sheathing	S8, S9	10500	Square Foot	\$ 4.00	\$ 42,000.00
Ceiling Repair	S1a, S3, S4, S7	5000	Square Foot	\$ 3.00	\$ 15,000.00
Seismic Isolation from Adjacent Building	S2a	20	Linear Foot	\$ 400.00	\$ 8,000.00
Roof Strengthening Subtotal					\$ 450,600.00
Building Part 'E' - Total Construction Cost					\$ 1,255,050.00

Appendix F: Rapid Visual Screening



SKETCH

Address: 307 Wagner Creek Rd
Talent, OR Zip: 97540

Other Identifiers: Section E

Building Name: Original Classroom

Use: Educational

Latitude: 42.2409177 **Longitude:** -122.7914074

Ss: 0.609 **Sr:** 0.349

Screener(s): SJL **Date/Time:** December 2022

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1949 ☐ EST

Total Floor Area (sq. ft.): 10,900 **Code Year:**

Additions: ☒ None ☐ Yes, Year(s) Built:

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☒ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential, # Units:

Soil Type: ☐ A ☐ B ☐ C ☒ D ☐ E ☐ F ☐ DNK
Hard Avg Dense Stiff Soft Poor
Rock Rock Soil Soil Soil Soil
If DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes/No/DNK Landslide: Yes/No/DNK Surf. Rupt.: Yes/No/DNK

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) ☐ Plan (type)

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other:

COMMENTS:

☐ Additional sketches or comments on separate page

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	☐ Do Not Know	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
URM																		
Basic Score		4.1	3.7	3.2	2.3	2.2	2.9	2.2	2.0	1.7	2.1	1.4	1.8	1.5	1.8	1.8	1.2	2.2
Severe Vertical Irregularity, V_{L1}		-1.3	-1.3	-1.3	-1.1	-1.0	-1.2	-1.0	-0.9	-1.0	-1.1	-0.8	-1.0	-0.9	-1.0	-1.0	-0.8	NA
Moderate Vertical Irregularity, V_{L1}		-0.8	-0.8	-0.8	-0.7	-0.6	-0.8	-0.6	-0.6	-0.6	-0.6	-0.5	-0.6	-0.6	-0.6	-0.6	-0.5	NA
Plan Irregularity, P_{L1}		-1.3	-1.2	-1.1	-0.9	-0.8	-1.0	-0.8	-0.7	-0.7	-0.9	-0.6	-0.8	-0.7	-0.7	-0.7	-0.5	NA
Pre-Code		-0.8	-0.9	-0.9	-0.5	-0.5	-0.7	-0.6	-0.2	-0.4	-0.7	-0.1	-0.4	-0.3	-0.5	-0.5	-0.1	-0.3
Post-Benchmark		1.5	1.9	2.3	1.4	1.4	1.0	1.9	NA	1.9	2.1	NA	2.1	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.3	0.6	0.9	0.6	0.9	0.3	0.9	0.9	0.6	0.8	0.7	0.9	0.7	0.8	0.8	0.6	0.9
Soil Type E (1-3 stories)		0.0	-0.1	-0.3	-0.4	-0.5	0.0	-0.4	-0.5	-0.2	-0.2	-0.4	-0.5	-0.3	-0.4	-0.4	-0.3	-0.5
Soil Type E (> 3 stories)		-0.5	-0.8	-1.2	-0.7	-0.7	NA	-0.7	-0.6	-0.6	-0.8	-0.4	NA	-0.5	-0.6	-0.7	-0.3	NA
Minimum Score, S_{MIN}		1.6	1.2	0.8	0.5	0.5	0.9	0.5	0.5	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	1.4

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.1; FEMA P-154 Collapse Potential Moderate (>1%)

EXTENT OF REVIEW

Exterior: ☐ Partial ☒ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☒ Entered
Drawings Reviewed: ☒ Yes ☐ No
Soil Type Source: OSHPD
Geologic Hazards Source: DOGAMI
Contact Person: Jordan St John

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ☐ No
Nonstructural hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?
☒ Pounding potential (unless $S_{L2} >$ cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☒ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☒ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame RC = Reinforced concrete URM INF = Unreinforced masonry infill MH = Manufactured Housing FD = Flexible diaphragm
BR = Braced frame SW = Shear wall TU = Tilt up LM = Light metal RD = Rigid diaphragm

ATTACHMENT G - TALENT MIDDLE SCHOOL SEISMIC EVALUATION REPORT



Seismic Evaluation Report For:

TALENT MIDDLE SCHOOL

102 Christian Ave, Talent, OR 97540

Phoenix-Talent School District



EXPIRES: 06-30-24

Prepared By:

ZCS Engineering & Architecture

Matthew R. Smith, PE, SE, Principal

524 Main Street, Suite 2, Oregon City, OR 97045

T: 503.659.2205 | E: MattS@zcsea.com



Project Summary Information						
Building Part	Building Part Name	Included in Retrofit	Year Built	Building Type***	Nonstructural Retrofits Included in Scope Y/N***	Previous Seismic Retrofit Y/N*** (Year if Yes)
A	Office & Classrooms	N	1945			
B	Gymnasium & Cafeteria	Y	1976 & 1989	RM1	Y	N
C	Classrooms	Y	1945	URM	Y	N
D	Gymnasium	N	1989			
E	Classrooms	N	2002			
*** Entries required ONLY for building parts included in proposed seismic retrofit. If building part was previously or is currently being retrofit, please list the building part's Risk Category and retrofit design Performance Objective, if known.						
Nonstructural deficiencies posing life safety risk MUST be included in the scope of work and budget.						
Seismic fragility inputs for existing buildings with previous seismic retrofits MUST be adjusted to reflect previous seismic retrofit measures completed for a building part.						
Total Retrofit Cost		\$4,932,380				
Retrofit Square Feet		30,400				
Retrofit Cost per Square Foot		\$162.25				
Is the campus within a tsunami, FEMA flood zone, landslide/slope instability, liquefaction potential or other high hazard area? If so, provide documentation (e.g. the Oregon Statewide Hazards Viewer by DOGAMI). ** Projects within the code defined Tsunami Design Zone require consultation with DOGAMI prior to application submittal. Applicant shall include such documentation with the application.						Yes, per DOGAMI HazVu, but ruled out per attached Geotech report.

Note: The hazard level of tsunami, flood zone, landslide/slope instability, and liquefaction must be explicitly answered either via DOGAMI website, DOGAMI consultation, and/or a geotechnical report. If the hazard level is unknown, it must be assumed to exist and be mitigated or otherwise resolved in the conceptual retrofit scope of work.

Engineering Report Checklist		
☒	Engineering Report Cover Page	
☒	Project Summary Page	Page 1
☒	Building Parts Identification	Page 5
☒	Statement of the Performance Objective	Page 7
	Summary of Deficiencies	
☒	Structural Seismic Deficiencies	Page 11
☒	Nonstructural Seismic Deficiencies	Page 13
	Summary of Mitigation/Retrofit	
☒	Structural Mitigation/Retrofit	Page 11
☒	Nonstructural Mitigation/Retrofit	Page 13
	Summary Construction Cost Estimate	
☒	Direct Cost	Page 16
☒	Indirect Soft Cost	Page 16
☒	Certification Statement by Engineer	Page 17
	ASCE 41-17 Tier 1 Checklist	
☒	Basic Configuration Checklist	Appendix B
☒	Building System Structural Checklist	Appendix B
☒	Nonstructural Checklist	Appendix B
☒	Retrofit Drawings & Sketches	Appendix C
☒	DOGAMI or Geotechnical Report	Appendix D
☒	Itemized Construction Cost Estimate	Appendix E
☒	Rapid Visual Screening	Appendix F

1.0 Project Introduction

Phoenix-Talent School District is located in Talent, Oregon in Jackson County. The District operates 6 facilities located within the community including the property of interest, Talent Middle School. The District has retained ZCS Engineering and Architecture (ZCS) to perform a seismic evaluation of Talent Middle School that provides the District with an objective, comprehensive analysis of the condition of the building's seismic resisting systems. The purpose of the evaluation is to determine the seismic lateral resisting system deficiencies when compared to buildings designed using modern building codes. This evaluation was performed in accordance with the American Society of Civil Engineers "Seismic Rehabilitation of Existing Buildings ASCE/SEI 41-17".

SEISMIC EVALUATION SNAPSHOT	
Street Address	102 Christian Avenue, Talent, OR
Evaluation Standard	ASCE 41-17 (Tier 1 Analysis)
Building's Risk Category	IV
Target Building Performance Level	Immediate Occupancy for BSE-1E and Life Safety for BSE-2E
Target Non-Structural Performance Level	Position Retention for BSE-1E and Hazards Reduced for BSE-2E
ASCE 41 Building Type	URM / RM1
FEMA P-154 Seismicity Region (Table 2-2)	Moderately High
ASCE 41-17 Level of Seismicity (Table 2-4)	High
Cost Estimate	\$4,932,380
Cost/Square Foot	\$162.25

2.0 Building Description

The buildings being considered in this report include the gymnasium, the cafeteria, and classrooms. ZCS has reviewed the buildings and their construction to classify their lateral systems as identified in ASCE 41-17. These lateral systems will be used throughout this evaluation. The lateral systems present consist of Reinforced Masonry Bearing Walls with Flexible Diaphragms, RM1, and Unreinforced Masonry Bearing Walls, URM. These determinations were made after observing the subject facilities and reviewing the available existing drawings. Descriptions of these structure types are listed below and specifically identify the lateral load resisting systems. In addition to the lateral systems present, ZCS has summarized the gravity load carrying systems of the subject facilities including later in this section.

Reinforced Masonry Bearing Walls with Flexible Diaphragms RM1 – These buildings have bearing walls that consist of reinforced brick or concrete block masonry. The floor and roof framing consists of steel or wood beams and girders or open web joists and are supported by steel, wood, or masonry columns. Seismic forces are resisted by the reinforced brick or concrete block masonry shear walls. Diaphragms consist of straight or diagonal wood sheathing, plywood, or unstopped metal deck and are flexible relative to the walls. The foundation system may consist of a variety of elements.

Unreinforced Masonry Bearing Walls URM –This building was initially reviewed as an RM1 construction type due to the presence of some reinforcing present in the wall construction. Through the RM1 Tier 1 evaluation it was determined that the walls are under reinforced. Accordingly, this building is classified as a URM. These buildings have a perimeter bearing walls that consist of unreinforced clay brick, stone, or concrete masonry. Interior bearing walls, where present, also consist of unreinforced clay brick, stone, or concrete masonry. In older construction, floor and roof framing consists of straight or diagonal lumber sheathing supported by wood joists, which, in turn, are supported on posts and timbers. In more recent construction, floors consist of structural panel or plywood sheathing rather than lumber sheathing. The diaphragms are flexible relative to the walls. Where they exist, ties between the walls and the diaphragms consist of anchors or bent steel plates embedded in the mortar joints and attached to framing. The foundation system may consist of a variety of elements.

Below is a figure identifying the building parts on campus and listing applicable information. See below for descriptions of building parts included in the evaluation and applicable building types as noted above.



BUILDING PARTS	
A	Construction Year: 1945 Building Name: Office & Classrooms ASCE 41-17 Building Type: RM1/W2 In Scope?: No
B	Construction Year: 1976 & 1989 Building Name: Gymnasium, Cafeteria & Classrooms ASCE 41-17 Building Type: RM1 In Scope?: Yes
C	Construction Year: 1945 Building Name: Classroom ASCE 41-17 Building Type: URM In Scope?: Yes
D	Construction Year: 1989 Building Name: Gymnasium ASCE 41-17 Building Type: RM1 In Scope?: No
E	Construction Year: 2002 Building Name: Classrooms ASCE 41-17 Building Type: W2 In Scope?: No

Figure 1

Talent Middle School Key Plan

**Photographs of the building parts included in this report are located in Appendix A.

Building Part B Construction:

- ASCE 41-17 Building Type(s):
 - RM1
- Roof Structure:
 - Unblocked plywood diaphragm supported by light timber trusses and glulam beams
 - Unblocked plywood diaphragm supported by open-web joists
 - Unblocked plywood diaphragm supported by plywood I-joists
- Walls:
 - Reinforced masonry walls
- Mezzanine:
 - Plywood sheathing floor diaphragm supported by dimensional floor joists

- Foundation:
 - Slab-on-grade foundation w/ reinforced concrete footings
- Notable Structural Features/Concerns:
 - Under designed glue-laminated beams in gymnasium

Building Part C Construction:

- ASCE 41-17 Building Type(s):
 - URM
- Roof Structure:
 - Straight sheathed roof diaphragm supported by light timber purlins and glulam beams
- Walls:
 - Unreinforced masonry walls
- Foundation:
 - Slab-on-grade foundation w/ concrete footings

3.0 Seismic Evaluation Methodology

The subject structure was evaluated using information gathered from site observations, available historic construction documents, and interviews with District staff. This information was then utilized to perform a structural evaluation as outlined in the American Society of Civil Engineer's "Seismic Evaluation and Retrofit of Existing Buildings – ASCE 41-17" (ASCE 41-17). ASCE 41-17 is referenced as the standard for seismic evaluations of existing buildings by the International Existing Building Code (IEBC) which is referenced by the Oregon Structural Specialty Code (OSSC). Further, ASCE 41-17 is the evaluation tool required by the Seismic Rehabilitation Grant Program for grant applications.

ASCE 41-17 provides several levels of evaluation (Tiers 1-3) depending on the level of evaluation and/or retrofit being performed. The Tier 1 evaluation is a quick checklist selected based on the type of construction and the performance objective of the building and is the baseline tool for preliminary seismic evaluations. In the case of this evaluation, a Tier 1 was performed to identify the likely structural deficiencies requiring retrofit to meet the performance objective stated below.

The OSSC classifies buildings into risk categories based on the type of building and occupancy type. The building's risk category informs the required performance objective post retrofit. Risk categories I and II cover low risk structures. Risk category III includes school buildings that are not required to be used as emergency shelters and are relatively low occupancy. Risk category IV includes emergency service buildings and school buildings that are required to be designed as emergency shelters (high occupancy spaces). Figure 2, below, identifies the performance objective for each risk category.

The primary objective of the adjusting performance objectives relative to risk category is to ensure that the subject building is capable of performing in the necessary manner following a seismic event. In the case of a risk category III building, the intention is to ensure that the building is adequately stable following an earthquake to provide egress for occupants out of the building. Prior to reoccupation, the building would need evaluated and significant structural damage preventing reoccupation may be present. For risk category IV structures, the intent is that the building can be inspected then immediately reoccupied following a seismic event to function in its intended role as an emergency service building or as a high occupancy space capable of acting as an emergency structure.

In accordance with the table below, these sections B and C of this building are categorized as a risk category IV structures and were evaluated to meet the Life Safety structural performance and Hazards Reduced nonstructural performance level for BSE-2E loading and the Immediate Occupancy structural performance and Position Retention nonstructural performance level for BSE-1E loading.

Table 2-2. Scope of Assessment Required for Tier 1 and Tier 2 with the Basic Performance Objective for Existing Buildings (BPOE)

Risk Category	Tier 1 and 2 ^a	
	BSE-1E	BSE-2E
I and II	Not evaluated	Collapse Prevention Structural Performance
	Life Safety Nonstructural Performance (3-C)	Hazards Reduced Nonstructural Performance ^b (5-D)
III	Not evaluated	Limited Safety Structural Performance ^c
	Position Retention Nonstructural Performance (2-B)	Hazards Reduced Nonstructural Performance ^b (4-D)
IV	Immediate Occupancy Structural Performance	Life Safety Structural Performance ^d
	Position Retention Nonstructural Performance (1-B)	Hazards Reduced Nonstructural Performance ^b (3-D)

^a For Tier 1 and 2 assessments of Risk Categories I–III, Structural Performance for the BSE-1E is not explicitly evaluated.

^b Compliance with ASCE 7 provisions for new construction is deemed to comply.

^c For Risk Category III, the Tier 1 screening checklists shall be based on the Collapse Prevention Performance Level (S-5), except that checklist statements using the Quick Check procedures of Section 4.4.3 shall be based on M_s factors taken as the average of the values for Life Safety and Collapse Prevention.

^d For Risk Category IV, the Tier 1 screening checklists shall be based on the Collapse Prevention Performance Level (S-5), except that checklist statements using the Quick Check procedures of Section 4.4.3 shall be based on M_s factors for Life Safety.

Figure 2
Building Performance Objectives

Source: Table 2-2, ASCE 41-17: American Society of Civil Engineers – Seismic Evaluation and Retrofit of Existing Buildings

4.0 Seismicity

Seismic design is based on site specific parameters that relate to the location of the building relative to faults and the soil that supports the building. The United States Geologic Survey has developed seismic design data that is utilized to perform the calculations specified in ASCE 41-17. The table below summarizes the factors appropriate for computing the seismic lateral loads for the design earthquake specified in ASCE 41-17.

SITE SPECIFIC SEISMICITY	
ASCE 7-16 Site Soil Classification	D
FEMA P-154 Seismicity Region (Table 2-2)	Moderately High
ASCE 41-17 Level of Seismicity (Table 2-4)	High
BSE-1E:	
S_{xs}	0.234
S_{x1}	0.175
Soil Condition Amplification Factors (F_a , F_v)	$F_a = 1.6$ $F_v = 2.4$
BSE-2E:	
S_{xs}	0.619
S_{x1}	0.503
Soil Condition Amplification Factors (F_a , F_v)	$F_a = 2.127$ $F_v = 1.461$

Source: SEAOC and OSHPD Seismic Design Maps, <https://seismicmaps.org/>

5.0 Site Specific Hazards

Site specific hazards were assessed as part of our engineering evaluation. The hazards evaluated in our analysis included liquefaction, slope failure/landslide, surface fault rupture, and tsunami potential. These potential hazards were evaluated using ASCE 41-17 guidelines, as well as information provided by the online Oregon HazVu: Statewide Geohazards Viewer, maintained by the Department of Geology and Mineral Industries (DOGAMI). Tsunami risk was evaluated using the ASCE Tsunami Hazard Tool. Results from the HazVu analysis are included in Appendix D along with the geotechnical report. Unless noted below, the hazards listed above are not present at the site.

Liquefaction

This project is located within a liquefaction hazard area as identified by the DOGAMI Oregon HazVu. To ensure that an acceptable level of due diligence was performed during the application phase of the project a geotechnical engineer was hired to perform a review of the hazard and make recommendations based on available information with respect to the severity. Per the geotechnical report, attached in Appendix D, liquefaction is considered a low risk for the site and no mitigation is required.

6.0 Deficiencies and Repairs

The table below summarizes both the structural and nonstructural deficiencies noted in the Tier 1 evaluation and states both the proposed retrofit methodology and the plan keynote that corresponds to the scope items in the preliminary plans and the cost estimate. See Appendix B for complete Tier 1 check sheets. Drawings illustrating the proposed retrofit measures are attached in Appendix C.

Tier 1 Deficiency Description	Deficiency Statement	Repair Statement	Plan Key Note
IO BASIC CHECKLIST			
LOAD PATH	The structure does not contain a complete, well-defined load path, including structural elements and connections, that serves to transfer the inertial forces associated with the mass of all elements of the building to the foundation.	Provide a complete, well-defined load path by installing new elements and connections as needed to transfer inertial forces from all elements of the building to the foundation.	S1
ADJACENT BUILDINGS	The clear distance between the building being evaluated and any adjacent building is less than 0.5% of the height of the shorter building in low seismicity, 1.0% in moderate seismicity, and 3.0% in high seismicity.	Provide seismic isolation joint to avoid pounding of the taller structure into the lower structure. Provide all new gravity framing and lateral resisting elements as necessary to provide building separation.	S2
MEZZANINES	Interior mezzanine levels are not braced independently from the main structure or are not anchored to the seismic-force-resisting elements of the main structure.	Anchor the mezzanine to the seismic-force-resisting elements of the main structure.	S3
RM1: IO CHECKLIST			
SHEAR STRESS CHECK	The shear stress in the reinforced masonry shear walls, calculated using the Quick Check procedure of Section 4.4.3.3, is greater than 70 lb/in. ²	Provide additional lateral resisting elements.	S4
WALL ANCHORAGE	Exterior concrete or masonry walls that are dependent on the diaphragm for lateral support are not anchored for out-of-plane forces at each diaphragm level with steel anchors, reinforcing dowels, or straps that are developed into the diaphragm. Connections do not have strength to resist the connection force calculated in the Quick Check procedure of Section 4.4.3.7.	Install new out-of-plane anchorage.	S5

WOOD LEDGERS	The connection between the wall panels and the diaphragm induces cross-grain bending or tension in the wood ledgers.	Install new out-of-plane anchorage.	S6
TRANSFER TO SHEAR WALLS	Diaphragms are not connected for transfer of seismic forces to the shear walls, or the connections are not able to develop the lesser of the shear strength of the walls or diaphragms.	Install new hardware for transfer of seismic forces from diaphragm to shear walls.	S7
PLAN IRREGULARITIES	There is not tensile capacity to develop the strength of the diaphragm at reentrant corners or other locations of plan irregularities.	Provide additional drag elements to transfer diaphragm tensile forces to wood diaphragms.	S8
CROSS TIES	There are not continuous cross ties between diaphragm chords.	Provide new continuous cross ties between diaphragm chords.	S9
DIAGONALLY SHEATHED AND UNBLOCKED DIAPHRAGMS	Not all diagonally sheathed or unblocked wood structural panel diaphragms have horizontal spans less than 30 ft and aspect ratios less than or equal to 3-to-1.	Install new blocked plywood diaphragm.	S10
URM: IO CHECKLIST			
SHEAR STRESS CHECK	The shear stress in the unreinforced masonry shear walls, calculated using the Quick Check procedure of Section 4.4.3.3, is greater than 30lb/in.2 for clay units and 70lb/in.2 for concrete units.	Provide new vertical lateral resisting elements.	S11
WALL ANCHORAGE	Exterior concrete or masonry walls that are dependent on the diaphragm for lateral support are not anchored for out-of-plane forces at each diaphragm level with steel anchors, reinforcing dowels, or straps that are developed into the diaphragm. Connections do not have strength to resist the connection force calculated in the Quick Check procedure of Section 4.4.3.7.	Install new out-of-plane anchorage.	S12
TRANSFER TO SHEAR WALLS	Diaphragms are not connected for transfer of seismic forces to the shear walls, or the connections are not able to develop the shear strength of the walls or diaphragms.	Install new hardware for transfer of seismic forces from diaphragm to shear walls.	S13

PROPORTIONS	The height-to-thickness ratio of the shear walls at each story is greater than the following: Top story of multi-story building 9 First story of multi-story building 15 All other conditions 13	Strengthen existing wall elements using new 2x wall framing.	S14
CROSS TIES	There are not continuous cross ties between diaphragm chords.	Provide new continuous cross ties between diaphragm chords.	S15
DIAGONALLY SHEATHED AND UNBLOCKED DIAPHRAGMS	Not all diagonally sheathed or unblocked wood structural panel diaphragms have horizontal spans less than 30 ft and aspect ratios less than or equal to 3-to-1.	Install new blocked plywood diaphragm.	S16
GRAVITY DEFICIENCIES			
GLULAMS	Existing glue laminated beams built prior to 1970 were under designed based on inadequate material stress information available at the time. This results in beams that cannot be relied upon to support code prescribed seismic loading.	Retrofit and strengthen beams to support code required seismic loading.	S17
NONSTRUCTURAL CHECKLIST			
SHUTOFF VALVES	Piping containing hazardous material, including natural gas, does not have shut off valves or other devices to limit spills or leaks.	Install shut off valves for piping containing hazardous material, including natural gas.	N1
INTEGRATED CEILINGS	Integrated suspended ceilings with continuous areas greater than 144 ft ² and ceilings of smaller areas that are not surrounded by restraining partitions are not laterally restrained at a spacing less than 12ft with members attached to the structure above. Each restraint location does not have a minimum of four diagonal wires and compression struts, nor diagonal members capable of resisting compression.	Install seismic bracing for integrated suspended ceilings.	N2
EDGE CLEARANCE	The free edges of integrated suspended ceilings with continuous areas greater than 144ft. ² does not have clearances from the enclosing wall or partition of at least the following: in Moderate Seismicity, 1/2 in.; in High Seismicity, 3/4 in.	Install free edge clearance for integrated suspended ceilings.	N3

EDGE SUPPORT	The free edges of integrated suspended ceilings with continuous areas greater than 144ft.2 are not supported by closure angles or channels not less than 2 in. wide.	Install free edge support for integrated suspended ceilings.	N4
INDEPENDENT SUPPORT	Light fixtures that weigh more per square foot than the ceiling they penetrate are not supported independent of the grid ceiling suspension system by a minimum of two wires at diagonally opposite corners of each fixture.	Provide independent support for light fixtures.	N5
PENDANT SUPPORTS	Light fixtures on pendant supports are not attached at a spacing equal to or less than 6 ft. Unbraced suspended fixtures are not free to allow a 360-degree range of motion at an angle not less than 45 degrees from horizontal without contacting adjacent components. Alternatively, if rigidly supported and/or braced, they are not free to move with the structure to which they are attached without damaging adjoining components. The connection to the structure is not capable of accommodating the movement without failure.	Provide independent support for light fixtures.	N6
LENS COVERS	Lens covers on light fixtures are not attached with safety devices.	Install safety devices for light fixture lens covers.	N7
OVERHEAD GLAZING	Glazing panes of any size in curtain walls and individual interior or exterior panes more than 16ft.2 in area are not laminated annealed or laminated heat-strengthened glass or are not detailed to remain in the frame when cracked.	Remove glazing and replace with new safety glass windows system.	N8
TALL NARROW CONTENTS	Contents more than 6 ft high with a height-to-depth or height-to-width ratio greater than 3-to-1 are not anchored to the structure or to each other.	Anchor contents to the structure.	N9
FALL-PRONE CONTENTS	Equipment, stored items, or other contents weighing more than 20lb whose center of mass is more than 4 ft above the adjacent floor level are not braced or otherwise restrained.	Brace equipment to structure.	N10

SUSPENDED CONTENTS	Items suspended without lateral bracing are not free to swing from or move with the structure from which they are suspended without damaging themselves or adjoining components.	Ensure that suspended items are free to swing from structure without damaging themselves or adjoining components.	N11
HEAVY EQUIPMENT	Floor-supported equipment weighing more than 400lb is not anchored to the structure.	Anchor floor-supported equipment weighing more than 400lb to the structure.	N12

In addition to the structural and nonstructural deficiencies noted above, the gravity load resisting system was reviewed to identify obvious insufficient gravity components. Insufficient gravity elements can cause failure during seismic events. These gravity deficiencies are based on visual observations of the existing structural elements. No formal structural analysis was performed during this evaluation of the gravity resisting element.

Existing glue laminated beams built prior to 1970 were under designed based on inadequate material stress information available at the time. This results in beams that cannot be relied upon to support code prescribed gravity loading. The beams will be retrofit and strengthened to support code required gravity loading. This is deficiency/repair/plan note S16.

Based upon ZCS's previous experience and discussions with site personnel the buildings contain hazardous materials. These materials will need to be dealt with on a case-by-case basis as they are encountered during the project.

7.0 Preliminary Construction Cost Estimate

The attached engineer's opinion of probable cost has been developed by ZCS. ZCS has a successful record of completing seismic rehabilitation projects within the State of Oregon. The prices provided in the attached cost estimate have been developed using the extensive list of past projects as a baseline for this project. These prices are based on Oregon BOLI wage rates. The cost estimate is broken down into multiple line items associated with each major task (general conditions, foundation, structural steel, MEP, etc) associated with the rehabilitation. Additional line items are included for design associated permit costs, and owner construction management. A complete breakdown of the cost estimate can be found in Appendix E.

Special Notes

- This building is an unreinforced masonry structure. Accordingly, it is acknowledged that a Tier 3 evaluation is required prior to the retrofit design. The consultant costs for the Tier 3 evaluation have been included in the cost estimate as a separate line item.

DIRECT COST	
Construction	\$3,512,500
Engineering	\$577,100
Construction Management	\$120,900
Relocation	\$50,400
Construction Contingency	\$671,480
TOTALS AND SUMMARY	
Total Cost Estimate	\$4,932,380
Match Funds	\$2,432,380
Total Amount Requested from SRGP	\$2,500,000
Total Area	30,400 S.F.
Cost/Square Foot	\$162.25

8.0 Conclusion and Certification Statement

The findings described in this report have been limited to the lateral force-resisting structural system and general assessment of the gravity force-resisting elements. Based on our visual observations, we find the structure to be in relatively good condition and generally safe for occupancy. No significant damage to the existing structural system was discovered.

Given the current condition of the structure, the current code section on existing buildings does not mandate that upgrades are required unless the building is scheduled for repairs, alterations, additions, or change in occupancy. To clarify, upgrades outlined in this report are strictly at the discretion of the District.

Please contact our office if you would like to discuss our findings. Please review the attached schematic drawings that can be used to refine a scope and budget.

Certification Statement

ZCS Engineering & Architecture's professional staff has reviewed the subject building and the deficiencies noted in the Tier 1 evaluation, developed seismic retrofit solutions to rectify the deficiencies, and developed the engineering cost estimate. The project cost estimate was developed by ZCS based on unit costs from our extensive list of past seismic retrofit projects as a baseline. We certify to the best of our knowledge, based on known and readily identifiable existing conditions, that all the seismic deficiencies present in the building are included in the retrofit scope of work and that all the retrofit's scope of work elements are included in the cost estimate.



Matthew R. Smith, PE, SE

Appendix A: Figures



Figure 1: NORTH ELEVATION



Figure 2: EASTERN ELEVATION



Figure 3: WESTERN ELEVATION



Figure 4: GYMNASIUM INTERIOR



Figure 5: CAFETERIA INTERIOR



Figure 6: SHOP INTERIOR

Appendix B: Tier 1 Check Sheets

17.1.2IO Basic Configuration Checklist

Table 17-3. Immediate Occupancy Basic Configuration Checklist

Status				Evaluation Statement	Tier 2 Reference	Commentary Reference	Comments
Very Low Seismicity							
Building System—General							
C	NC	N/A	U	LOAD PATH: The structure contains a complete, well-defined load path, including structural elements and connections, that serves to transfer the inertial forces associated with the mass of all elements of the building to the foundation.	5.4.1.1	A.2.1.1	-MISSING ROOF-TO-WALL IN-PLANE HARDWARE -NEW DRAG BEAM TO TRANSFER SEISMIC FORCES TO SHEAR WALLS
☐	☐	☐	☐				
C	NC	N/A	U	ADJACENT BUILDINGS: The clear distance between the building being evaluated and any adjacent building is greater than 0.5% of the height of the shorter building in low seismicity, 1.0% in moderate seismicity, and 3.0% in high seismicity.	5.4.1.2	A.2.1.2	-SEPARATION JOINT FOR BREEZEWAY CANOPY
☐	☐	☐	☐				
C	NC	N/A	U	MEZZANINES: Interior mezzanine levels are braced independently from the main structure or are anchored to the seismic-force-resisting elements of the main structure.	5.4.1.3	A.2.1.3	
☐	☐	☐	☐				
Building System—Building Configuration							
C	NC	N/A	U	WEAK STORY: The sum of the shear strengths of the seismic-force-resisting system in any story in each direction is not less than 80% of the strength in the adjacent story above.	5.4.2.1	A.2.2.2	
☐	☐	☐	☐				
C	NC	N/A	U	SOFT STORY: The stiffness of the seismic-force-resisting system in any story is not less than 70% of the seismic-force-resisting system stiffness in an adjacent story above or less than 80% of the average seismic-force-resisting system stiffness of the three stories above.	5.4.2.2	A.2.2.3	
☐	☐	☐	☐				
C	NC	N/A	U	VERTICAL IRREGULARITIES: All vertical elements in the seismic-force-resisting system are continuous to the foundation.	5.4.2.3	A.2.2.4	
☐	☐	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C ☐	NC ☐	N/A ☐	U ☐	GEOMETRY: There are no changes in the net horizontal dimension of the seismic-force-resisting system of more than 30% in a story relative to adjacent stories, excluding one-story penthouses and mezzanines.	5.4.2.4	A.2.2.5
C ☐	NC ☐	N/A ☐	U ☐	MASS: There is no change in effective mass of more than 50% from one story to the next. Light roofs, penthouses, and mezzanines need not be considered.	5.4.2.5	A.2.2.6
C ☐	NC ☐	N/A ☐	U ☐	TORSION: The estimated distance between the story center of mass and the story center of rigidity is less than 20% of the building width in either plan dimension.	5.4.2.6	A.2.2.7

Status				Evaluation Statement	Tier 2 Reference	Commentary Reference	Comments
Low Seismicity (Complete the Following Items in Addition to the Items for Very Low Seismicity)							
Geologic Site Hazards							
C	NC	N/A	U	LIQUEFACTION: Liquefaction-susceptible, saturated, loose granular soils that could jeopardize the building's seismic performance do not exist in the foundation soils at depths within 50 ft (15.2 m) under the building.	5.4.3.1	A.6.1.1	
☐	☐	☐	☐				
C	NC	N/A	U	SLOPE FAILURE: The building site is located away from potential earthquake-induced slope failures or rockfalls so that it is unaffected by such failures or is capable of accommodating any predicted movements without failure.	5.4.3.1	A.6.1.2	
☐	☐	☐	☐				
C	NC	N/A	U	SURFACE FAULT RUPTURE: Surface fault rupture and surface displacement at the building site are not anticipated.	5.4.3.1	A.6.1.3	
☐	☐	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Project Name Phoenix-Talent Element
 Project Number M-0317-22

Status				Evaluation Statement	Tier 2 Reference	Commentary Reference	Comments
Moderate and High Seismicity (Complete the Following Items in Addition to the Items for Low Seismicity)							
Foundation Configuration							
C	NC	N/A	U	OVERTURNING: The ratio of the least horizontal dimension of the seismic-force-resisting system at the foundation level to the building height (base/height) is greater than $0.6S_a$.	5.4.3.3	A.6.2.1	
☐	☐	☐	☐				
C	NC	N/A	U	TIES BETWEEN FOUNDATION ELEMENTS: The foundation has ties adequate to resist seismic forces where footings, piles, and piers are not restrained by beams, slabs, or soils classified as Site Class A, B, or C.	5.4.3.4	A.6.2.2	
☐	☐	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

17.1710 Structural Checklist for Building Types RM1: Reinforced Masonry Bearing Walls with Flexible Diaphragms and RM2: Reinforced Masonry Bearing Walls with Stiff Diaphragms

Table 17-35. Immediate Occupancy Structural Checklist for Building Types RM1 and RM2

Status				Evaluation Statement	Tier 2 Reference	Commentary Reference	Comments
Very Low Seismicity							
Seismic-Force-Resisting System							
C	NC	N/A	U	REDUNDANCY: The number of lines of shear walls in each principal direction is greater than or equal to 2.	5.5.1.1	A.3.2.1.1	
☐	☐	☐	☐				
C	NC	N/A	U	SHEAR STRESS CHECK: The shear stress in the reinforced masonry shear walls, calculated using the Quick Check procedure of Section 4.4.3.3, is less than 70 lb/in. ² (4.83 MPa).	5.5.3.1.1	A.3.2.4.1	Shear stress was found to be 9.3 to 12.4 psi for longitudinal and horizontal directions
☐	☐	☐	☐				
C	NC	N/A	U	REINFORCING STEEL: The total vertical and horizontal reinforcing steel ratio in reinforced masonry walls is greater than 0.002 of the wall with the minimum of 0.0007 in either of the two directions; the spacing of reinforcing steel is less than 48 in., and all vertical bars extend to the top of the walls.	5.5.3.1.3	A.3.2.4.2	Missing out-of-plane connections
☐	☐	☐	☐				
Connections							
C	NC	N/A	U	WALL ANCHORAGE: Exterior concrete or masonry walls that are dependent on the diaphragm for lateral support are anchored for out-of-plane forces at each diaphragm level with steel anchors, reinforcing dowels, or straps that are developed into the diaphragm. Connections have strength to resist the connection force calculated in the Quick Check procedure of Section 4.4.3.7.	5.7.1.1	A.5.1.1	
☐	☐	☐	☐				
C	NC	N/A	U	WOOD LEDGERS: The connection between the wall panels and the diaphragm does not induce cross-grain bending or tension in the wood ledgers.	5.7.1.3	A.5.1.2	Missing in-plane connections
☐	☐	☐	☐				
C	NC	N/A	U	TRANSFER TO SHEAR WALLS: Diaphragms are connected for transfer of seismic forces to the shear walls, and the connections are able to develop the lesser of the shear strength of the walls or diaphragms.	5.7.2	A.5.2.1	Connections between WF beams and columns not adequate for seismic loading.
☐	☐	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Project Name _____
Project Number _____

C	NC	N/A	U	FOUNDATION DOWELS: Wall reinforcement is doweled into the foundation, and the dowels are able to develop the lesser of the strength of the walls or the uplift capacity of the foundation.	5.7.3.4	A.5.3.5					
☐	☐	☐	☐								
C	NC	N/A	U	GIRDER-COLUMN CONNECTION: There is a positive connection using plates, connection hardware, or straps between the girder and the column support.	5.7.4.1	A.5.4.1					
☐	☐	☐	☐								
Stiff Diaphragms											
C	NC	N/A	U	TOPPING SLAB: Precast concrete diaphragm elements are interconnected by a continuous reinforced concrete topping slab.	5.6.4	A.4.5.1	Existing wall proportions are 18 and 22.5 for 12' and 15' walls				
☐	☐	☐	☐								
C	NC	N/A	U	TOPPING SLAB TO WALLS OR FRAMES: Reinforced concrete topping slabs that interconnect the precast concrete diaphragm elements are doweled for transfer of forces into the shear wall or frame elements.	5.7.2	A.5.2.3					
☐	☐	☐	☐								
Foundation System											
C	NC	N/A	U	DEEP FOUNDATIONS: Piles and piers are capable of transferring the lateral forces between the structure and the soil.		A.6.2.3					
☐	☐	☐	☐								
C	NC	N/A	U	SLOPING SITES: The difference in foundation embedment depth from one side of the building to another does not exceed one story.		A.6.2.4					
☐	☐	☐	☐								
Status	Evaluation Statement				Tier 2 Reference	Commentary Reference	Comments				
Low, Moderate, and High Seismicity (Complete the Following Items in Addition to the Items for Very Low Seismicity)											
Seismic-Force-Resisting System											
C	NC	N/A	U	REINFORCING AT WALL OPENINGS: All wall openings that interrupt rebar have trim reinforcing on all sides.	5.5.3.1.5	A.3.2.4.3					
☐	☐	☐	☐								
C	NC	N/A	U	PROPORTIONS: The height-to-thickness ratio of the shear walls at each story is less than 30.	5.5.3.1.2	A.3.2.4.4					
☐	☐	☐	☐								
Diaphragms (Stiff or Flexible)											
C	NC	N/A	U	OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls are less than 15% of the wall length.	5.6.1.3	A.4.1.4	Attachments between rafters not adequate for seismic loading.				
☐	☐	☐	☐								

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Project Name _____
Project Number _____

C	NC	N/A	U	OPENINGS AT EXTERIOR MASONRY SHEAR WALLS: Diaphragm openings immediately adjacent to exterior masonry shear walls are not greater than 4 ft (1.2 m) long.	5.6.1.3	A.4.1.6	Diaphragm aspect ratio greater than 1-1
☐	☐	☐	☐				
C	NC	N/A	U	PLAN IRREGULARITIES: There is tensile capacity to develop the strength of the diaphragm at reentrant corners or other locations of plan irregularities.	5.6.1.4	A.4.1.7	Spans greater than 12' with horizontal sheathing
☐	☐	☐	☐				
C	NC	N/A	U	DIAPHRAGM REINFORCEMENT AT OPENINGS: There is reinforcing around all diaphragm openings larger than 50% of the building width in either major plan dimension.	5.6.1.5	A.4.1.8	
☐	☐	☐	☐				
Flexible Diaphragms							
C	NC	N/A	U	CROSS TIES: There are continuous cross ties between diaphragm chords.	5.6.1.2	A.4.1.2	
☐	☐	☐	☐				
C	NC	N/A	U	STRAIGHT SHEATHING: All straight-sheathed diaphragms have aspect ratios less than 1-to-1 in the direction being considered.	5.6.2	A.4.2.1	
☐	☐	☐	☐				
C	NC	N/A	U	SPANS: All wood diaphragms with spans greater than 12 ft (3.6 m) consist of wood structural panels or diagonal sheathing.	5.6.2	A.4.2.2	Missing wall anchorage from diaphragm to masonry walls
☐	☐	☐	☐				
C	NC	N/A	U	DIAGONALLY SHEATHED AND UNBLOCKED DIAPHRAGMS: All diagonally sheathed or unblocked wood structural panel diaphragms have horizontal spans less than 30 ft (9.2 m) and aspect ratios less than or equal to 3-to-1.	5.6.2	A.4.2.3	Pilaster are integral to URM walls and ineadequate for seismic forces
☐	☐	☐	☐				
C	NC	N/A	U	NONCONCRETE FILLED DIAPHRAGMS: Untopped metal deck diaphragms or metal deck diaphragms with fill other than concrete consist of horizontal spans of less than 40 ft (12.2 m) and have aspect ratios less than 4-to-1.	5.6.3	A.4.3.1	
☐	☐	☐	☐				
C	NC	N/A	U	OTHER DIAPHRAGMS: Diaphragms do not consist of a system other than wood, metal deck, concrete, or horizontal bracing.	5.6.5	A.4.7.1	
☒	☐	☐	☐				
Connections							
C	NC	N/A	U	STIFFNESS OF WALL ANCHORS: Anchors of concrete or masonry walls to wood structural elements are installed taut and are stiff enough to limit the relative movement between the wall and the diaphragm to no greater than 1/8 in. before engagement of the anchors.	5.7.1.2	A.5.1.4	
☒	☐	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

17.18IO Structural Checklist for Building Types URM: Unreinforced Masonry Bearing Walls with Flexible Diaphragms and URMa: Unreinforced Masonry Bearing Walls with Stiff Diaphragms

Table 17-37. Immediate Occupancy Structural Checklist for Building Types URM and URMa

Status				Evaluation Statement	Tier 2 Reference	Commentary Reference	Comments
Very Low Seismicity							
Seismic-Force-Resisting System							
C	NC	N/A	U	REDUNDANCY: The number of lines of shear walls in each principal direction is greater than or equal to 2.	5.5.1.1	A.3.2.1.1	
☐	☐	☐	☐				
C	NC	N/A	U	SHEAR STRESS CHECK: The shear stress in the unreinforced masonry shear walls, calculated using the Quick Check procedure of Section 4.4.3.3, is less than 30 lb/in. ² (0.21 MPa) for clay units and 70 lb/in. ² (0.48 MPa) for concrete units.	5.5.3.1.1	A.3.2.5.1	
☐	☐	☐	☐				
Connections							
C	NC	N/A	U	WALL ANCHORAGE: Exterior concrete or masonry walls that are dependent on the diaphragm for lateral support are anchored for out-of-plane forces at each diaphragm level with steel anchors, reinforcing dowels, or straps that are developed into the diaphragm. Connections have strength to resist the connection force calculated in the Quick Check procedure of Section 4.4.3.7.	5.7.1.1	A.5.1.1	
☐	☐	☐	☐				
C	NC	N/A	U	WOOD LEDGERS: The connection between the wall panels and the diaphragm does not induce cross-grain bending or tension in the wood ledgers.	5.7.1.3	A.5.1.2	
☐	☐	☐	☐				
C	NC	N/A	U	TRANSFER TO SHEAR WALLS: Diaphragms are connected for transfer of seismic forces to the shear walls, and the connections are able to develop the lesser of the shear strength of the walls or diaphragms.	5.7.2	A.5.2.1	
☐	☐	☐	☐				
C	NC	N/A	U	GIRDER-COLUMN CONNECTION: There is a positive connection using plates, connection hardware, or straps between the girder and the column support.	5.7.4.1	A.5.4.1	
☐	☐	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Foundation System						
C	NC	N/A	U			
☐	☐	☐	☐	DEEP FOUNDATIONS: Piles and piers are capable of transferring the lateral forces between the structure and the soil.	A.6.2.3	
☐	☐	☐	☐	SLOPING SITES: The difference in foundation embedment depth from one side of the building to another does not exceed one story high.	A.6.2.4	

Status	Evaluation Statement	Tier 2 Reference	Commentary Reference	Comments		
Low, Moderate, and High Seismicity (Complete the Following Items in Addition to the Items for Very Low Seismicity)						
Seismic-Force-Resisting System						
☐	☐	☐	☐	PROPORTIONS: The height-to-thickness ratio of the shear walls at each story is less than the following: Top story of multi-story building 9 First story of multi-story building 15 All other conditions 13	5.5.3.1.2	A.3.2.5.2
☐	☐	☐	☐	MASONRY LAYUP: Filled collar joints of multi-wythe masonry walls have negligible voids.	5.5.3.4.1	A.3.2.5.3
Diaphragms (Stiff or Flexible)						
☐	☐	☐	☐	OPENINGS AT SHEAR WALLS: Diaphragm openings immediately adjacent to the shear walls are less than 15% of the wall length.	5.6.1.3	A.4.1.4
☐	☐	☐	☐	OPENINGS AT EXTERIOR MASONRY SHEAR WALLS: Diaphragm openings immediately adjacent to exterior masonry shear walls are not greater than 4 ft (1.2 m) long.	5.6.1.3	A.4.1.6
☐	☐	☐	☐	PLAN IRREGULARITIES: There is tensile capacity to develop the strength of the diaphragm at reentrant corners or other locations of plan irregularities.	5.6.1.4	A.4.1.7
☐	☐	☐	☐	DIAPHRAGM REINFORCEMENT AT OPENINGS: There is reinforcing around all diaphragm openings larger than 50% of the building width in either major plan dimension.	5.6.1.5	A.4.1.8
Flexible Diaphragms						
☐	☐	☐	☐	CROSS TIES: There are continuous cross ties between diaphragm chords.	5.6.1.2	A.4.1.2

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C	NC	N/A	U	STRAIGHT SHEATHING: All straight-sheathed diaphragms have aspect ratios less than 1-to-1 in the direction being considered.	5.6.2	A.4.2.1	
☐	☐	☐	☐				
C	NC	N/A	U	SPANS: All wood diaphragms with spans greater than 12 ft (3.6 m) consist of wood structural panels or diagonal sheathing.	5.6.2	A.4.2.2	
☐	☐	☐	☐				
C	NC	N/A	U	DIAGONALLY SHEATHED AND UNBLOCKED DIAPHRAGMS: All diagonally sheathed or unblocked wood structural panel diaphragms have horizontal spans less than 30 ft (9.2 m) and aspect ratios less than or equal to 3-to-1.	5.6.2	A.4.2.3	
☐	☐	☐	☐				
C	NC	N/A	U	NONCONCRETE FILLED DIAPHRAGMS: Untopped metal deck diaphragms or metal deck diaphragms with fill other than concrete consist of horizontal spans of less than 40 ft (12.2 m) and have aspect ratios less than 4-to-1.	5.6.3	A.4.3.1	
☐	☐	☐	☐				
C	NC	N/A	U	OTHER DIAPHRAGMS: Diaphragms do not consist of a system other than wood, metal deck, concrete, or horizontal bracing.	5.6.5	A.4.7.1	
☐	☐	☐	☐				
Connections							
C	NC	N/A	U	STIFFNESS OF WALL ANCHORS: Anchors of concrete or masonry walls to wood structural elements are installed taut and are stiff enough to limit the relative movement between the wall and the diaphragm to no greater than 1/8 in. (3 mm) before engagement of the anchors.	5.7.1.2	A.5.1.4	
☐	☐	☐	☐				
C	NC	N/A	U	BEAM, GIRDER, AND TRUSS SUPPORTS: Beams, girders, and trusses supported by unreinforced masonry walls or pilasters have independent secondary columns for support of vertical loads.	5.7.4.4	A.5.4.5	BEAMS MISSING SECONDARY SUPPORT
☐	☐	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

17.19 Nonstructural Checklist

Table 17-38. Nonstructural Checklist

Status				Evaluation Statement ^{a,b}	Tier 2 Reference	Commentary Reference	Comments
Life Safety Systems							
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. FIRE SUPPRESSION PIPING: Fire suppression piping is anchored and braced in accordance with NFPA-13.	13.7.4	A.7.13.1	
☒	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. FLEXIBLE COUPLINGS: Fire suppression piping has flexible couplings in accordance with NFPA-13.	13.7.4	A.7.13.2	
☒	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. EMERGENCY POWER: Equipment used to power or control Life Safety systems is anchored or braced.	13.7.7	A.7.12.1	
☒	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. STAIR AND SMOKE DUCTS: Stair pressurization and smoke control ducts are braced and have flexible connections at seismic joints.	13.7.6	A.7.14.1	
☒	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—MH; PR—MH. SPRINKLER CEILING CLEARANCE: Penetrations through panelized ceilings for fire suppression devices provide clearances in accordance with NFPA-13.	13.7.4	A.7.13.3	
☒	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—not required; PR—LMH. EMERGENCY LIGHTING: Emergency and egress lighting equipment is anchored or braced.	13.7.9	A.7.3.1	
☒	☐	☐	☐				
Hazardous Materials							
C	NC	N/A	U	HR—LMH; LS—LMH; PR—LMH. HAZARDOUS MATERIAL EQUIPMENT: Equipment mounted on vibration isolators and containing hazardous material is equipped with restraints or snubbers.	13.7.1	A.7.12.2	
☒	☐	☐	☐				
C	NC	N/A	U	HR—LMH; LS—LMH; PR—LMH. HAZARDOUS MATERIAL STORAGE: Breakable containers that hold hazardous material, including gas cylinders, are restrained by latched doors, shelf lips, wires, or other methods.	13.8.3	A.7.15.1	
☒	☐	☐	☐				
C	NC	N/A	U	HR—MH; LS—MH; PR—MH. HAZARDOUS MATERIAL DISTRIBUTION: Piping or ductwork conveying hazardous materials is braced or otherwise protected from damage that would allow hazardous material release.	13.7.3 13.7.5	A.7.13.4	
☒	☐	☐	☐				
C	NC	N/A	U	HR—MH; LS—MH; PR—MH. SHUTOFF VALVES: Piping containing hazardous material, including natural gas, has shutoff valves or other devices to limit spills or leaks.	13.7.3 13.7.5	A.7.13.3	MISSING SHUT OFF VALVE HANDLE
☐	☐	☐	☐				
C	NC	N/A	U	HR—LMH; LS—LMH; PR—LMH. FLEXIBLE COUPLINGS: Hazardous material ductwork and piping, including natural gas piping, have flexible couplings.	13.7.3 13.7.5	A.7.15.4	
☒	☐	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C	NC	N/A	U	HR—MH; LS—MH; PR—MH. PIPING OR DUCTS	13.7.3	A.7.13.6
☐	☐	☐	☐	CROSSING SEISMIC JOINTS: Piping or ductwork	13.7.5	
				carrying hazardous material that either crosses	13.7.6	
				seismic joints or isolation planes or is connected to		
				independent structures has couplings or other details		
				to accommodate the relative seismic displacements.		
Partitions						
C	NC	N/A	U	HR—LMH; LS—LMH; PR—LMH. UNREINFORCED	13.6.2	A.7.1.1
☐	☐	☐	☐	MASONRY: Unreinforced masonry or hollow-clay tile		
				partitions are braced at a spacing of at most 10 ft (3.0		
				m) in Low or Moderate Seismicity, or at most 6 ft (1.8		
				m) in High Seismicity.		
C	NC	N/A	U	HR—LMH; LS—LMH; PR—LMH. HEAVY PARTITIONS	13.6.2	A.7.2.1
☐	☐	☐	☐	SUPPORTED BY CEILINGS: The tops of masonry or		
				hollow-clay tile partitions are not laterally supported		
				by an integrated ceiling system.		
C	NC	N/A	U	HR—not required; LS—MH; PR—MH. DRIFT: Rigid	13.6.2	A.7.1.2
☐	☐	☐	☐	cementitious partitions are detailed to accommodate		
				the following drift ratios: in steel moment frame,		
				concrete moment frame, and wood frame buildings,		
				0.02; in other buildings, 0.005.		
C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.2	A.7.2.1
☐	☐	☐	☐	LIGHT PARTITIONS SUPPORTED BY CEILINGS: The tops		
				of gypsum board partitions are not laterally		
				supported by an integrated ceiling system.		
C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.2	A.7.1.3
☐	☐	☐	☐	STRUCTURAL SEPARATIONS: Partitions that cross		
				structural separations have seismic or control joints.		
C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.2	A.7.1.4
☐	☐	☐	☐	TOPS: The tops of ceiling-high framed or panelized		
				partitions have lateral bracing to the structure at a		
				spacing equal to or less than 6 ft (1.8 m).		
Ceilings						
C	NC	N/A	U	HR—H; LS—MH; PR—LMH. SUSPENDED LATH AND	13.6.4	A.7.2.3
☐	☐	☐	☐	PLASTER: Suspended lath and plaster ceilings have		
				attachments that resist seismic forces for every 12 ft ²		
				(1.1 m ²) of area.		
C	NC	N/A	U	HR—not required; LS—MH; PR—LMH. SUSPENDED	13.6.4	A.7.2.3
☐	☐	☐	☐	GYPSON BOARD: Suspended gypsum board ceilings		
				have attachments that resist seismic forces for every		
				12 ft ² (1.1 m ²) of area.		

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.4	A.7.2.2	SPACING OF RESTRAINTS IS GREATER THAN 12 FEET
☐	☐	☐	☐	INTEGRATED CEILINGS: Integrated suspended ceilings with continuous areas greater than 144 ft ² (13.4 m ²) and ceilings of smaller areas that are not surrounded by restraining partitions are laterally restrained at a spacing no greater than 12 ft (3.6 m) with members attached to the structure above. Each restraint location has a minimum of four diagonal wires and compression struts, or diagonal members capable of resisting compression.			
C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.4	A.7.2.4	CLEARANCE IS LESS THAN 1/2"
☐	☐	☐	☐	EDGE CLEARANCE: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft ² (13.4 m ²) have clearances from the enclosing wall or partition of at least the following: in Moderate Seismicity, 1/2 in. (13 mm); in High Seismicity, 3/4 in. (19 mm).			
C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.4	A.7.2.5	
☒	☐	☐	☐	CONTINUITY ACROSS STRUCTURE JOINTS: The ceiling system does not cross any seismic joint and is not attached to multiple independent structures.			
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.6.4	A.7.2.6	CLOSURE ANGLES ARE SMALLER THAN 2"
☐	☐	☐	☐	EDGE SUPPORT: The free edges of integrated suspended ceilings with continuous areas greater than 144 ft ² (13.4 m ²) are supported by closure angles or channels not less than 2 in. (51 mm) wide.			
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.6.4	A.7.2.7	
☒	☐	☐	☐	SEISMIC JOINTS: Acoustical tile or lay-in panel ceilings have seismic separation joints such that each continuous portion of the ceiling is no more than 2,500 ft ² (232.3 m ²) and has a ratio of long-to-short dimension no more than 4-to-1.			
Light Fixtures							
C	NC	N/A	U	HR—not required; LS—MH; PR—MH.	13.6.4	A.7.3.2	LIGHTS ARE NOT PROPERLY SUPPORTED
☐	☐	☐	☐	INDEPENDENT SUPPORT: Light fixtures that weigh more per square foot than the ceiling they penetrate are supported independent of the grid ceiling suspension system by a minimum of two wires at diagonally opposite corners of each fixture.	13.7.9		

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.9	A.7.3.3
☐	☐	☐	☐	PENDANT SUPPORTS: Light fixtures on pendant supports are attached at a spacing equal to or less than 6 ft. Unbraced suspended fixtures are free to allow a 360-degree range of motion at an angle not less than 45 degrees from horizontal without contacting adjacent components. Alternatively, if rigidly supported and/or braced, they are free to move with the structure to which they are attached without damaging adjoining components. Additionally, the connection to the structure is capable of accommodating the movement without failure.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H. LENS COVERS:	13.7.9	A.7.3.4
☐	☐	☐	☐	Len covers on light fixtures are attached with safety devices.		
Cladding and Glazing						
C	NC	N/A	U	HR—MH; LS—MH; PR—MH. CLADDING ANCHORS:	13.6.1	A.7.4.1
☐	☐	☐	☐	Cladding components weighing more than 10 lb/ft ² (0.48 kN/m ²) are mechanically anchored to the structure at a spacing equal to or less than the following: for Life Safety in Moderate Seismicity, 6 ft (1.8 m); for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 ft (1.2 m)		
C	NC	N/A	U	HR—not required; LS—MH; PR—MH. CLADDING ISOLATION:	13.6.1	A.7.4.3
☐	☐	☐	☐	For steel or concrete moment-frame buildings, panel connections are detailed to accommodate a story drift ratio by the use of rods attached to framing with oversize holes or slotted holes of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02, and the rods have a length-to-diameter ratio of 4.0 or less.		
C	NC	N/A	U	HR—MH; LS—MH; PR—MH. MULTI-STORY PANELS:	13.6.1	A.7.4.4
☐	☐	☐	☐	For multi-story panels attached at more than one floor level, panel connections are detailed to accommodate a story drift ratio by the use of rods attached to framing with oversize holes or slotted holes of at least the following: for Life Safety in Moderate Seismicity, 0.01; for Life Safety in High Seismicity and for Position Retention in any seismicity, 0.02, and the rods have a length-to-diameter ratio of 4.0 or less.		

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C	NC	N/A	U	HR—not required; LS—MH; PR—MH. THREADED RODS: Threaded rods for panel connections detailed to accommodate drift by bending of the rod have a length-to-diameter ratio greater than 0.06 times the story height in inches for Life Safety in Moderate Seismicity and 0.12 times the story height in inches for Life Safety in High Seismicity and Position Retention in any seismicity.	13.6.1	A.7.4.9	
☐	☐	☐	☐				
C	NC	N/A	U	HR—MH; LS—MH; PR—MH. PANEL CONNECTIONS: Cladding panels are anchored out of plane with a minimum number of connections for each wall panel, as follows: for Life Safety in Moderate Seismicity, 2 connections; for Life Safety in High Seismicity and for Position Retention in any seismicity, 4 connections.	13.6.1.4	A.7.4.5	
☐	☐	☐	☐				
C	NC	N/A	U	HR—MH; LS—MH; PR—MH. BEARING CONNECTIONS: Where bearing connections are used, there is a minimum of two bearing connections for each cladding panel.	13.6.1.4	A.7.4.6	
☐	☐	☐	☐				
C	NC	N/A	U	HR—MH; LS—MH; PR—MH. INSERTS: Where concrete cladding components use inserts, the inserts have positive anchorage or are anchored to reinforcing steel.	13.6.1.4	A.7.4.7	
☐	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—MH; PR—MH. OVERHEAD GLAZING: Glazing panes of any size in curtain walls and individual interior or exterior panes more than 16 ft ² (1.5 m ²) in area are laminated annealed or laminated heat-strengthened glass and are detailed to remain in the frame when cracked.	13.6.1.5	A.7.4.8	GLAZING PANES ARE NOT LAMINATED ANNEALED
☐	☐	☐	☐				
Masonry Veneer							
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. TIES: Masonry veneer is connected to the backup with corrosion-resistant ties. There is a minimum of one tie for every 2-2/3 ft ² (0.25 m ²), and the ties have spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 36 in. (914 mm); for Life Safety in High Seismicity and for Position Retention in any seismicity, 24 in. (610 mm).	13.6.1.2	A.7.5.1	MASONRY VENEER NOT CONNECTED TO A BACKUP
☐	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. SHELF ANGLES: Masonry veneer is supported by shelf angles or other elements at each floor above the ground floor.	13.6.1.2	A.7.5.2	
☐	☐	☐	☐				
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. WEAKENED PLANES: Masonry veneer is anchored to the backup adjacent to weakened planes, such as at the locations of flashing.	13.6.1.2	A.7.5.3	
☐	☐	☐	☐				

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C	NC	N/A	U	HR—LMH; LS—LMH; PR—LMH. UNREINFORCED MASONRY BACKUP: There is no unreinforced masonry backup.	13.6.1.1 13.6.1.2	A.7.7.2
☐	☐	☐	☐			
C	NC	N/A	U	HR—not required; LS—MH; PR—MH. STUD TRACKS: For veneer with cold-formed steel stud backup, stud tracks are fastened to the structure at a spacing equal to or less than 24 in. (610 mm) on center.	13.6.1.1 13.6.1.2	A.7.6.1
☐	☐	☐	☐			
C	NC	N/A	U	HR—not required; LS—MH; PR—MH. ANCHORAGE: For veneer with concrete block or masonry backup, the backup is positively anchored to the structure at a horizontal spacing equal to or less than 4 ft along the floors and roof.	13.6.1.1 13.6.1.2	A.7.7.1
☐	☐	☐	☐			
C	NC	N/A	U	HR—not required; LS—not required; PR—MH. WEEP HOLES: In veneer anchored to stud walls, the veneer has functioning weep holes and base flashing.	13.6.1.2	A.7.5.6
☐	☐	☐	☐			
C	NC	N/A	U	HR—not required; LS—not required; PR—MH. OPENINGS: For veneer with cold-formed-steel stud backup, steel studs frame window and door openings.	13.6.1.1 13.6.1.2	A.7.6.2
☐	☐	☐	☐			
Parapets, Cornices, Ornamentation, and Appendages						
C	NC	N/A	U	HR—LMH; LS—LMH; PR—LMH. URM PARAPETS OR CORNICES: Laterally unsupported unreinforced masonry parapets or cornices have height-to-thickness ratios no greater than the following: for Life Safety in Low or Moderate Seismicity, 2.5; for Life Safety in High Seismicity and for Position Retention in any seismicity, 1.5.	13.6.5	A.7.8.1
☐	☐	☐	☐			
C	NC	N/A	U	HR—not required; LS—LMH; PR—LMH. CANOPIES: Canopies at building exits are anchored to the structure at a spacing no greater than the following: for Life Safety in Low or Moderate Seismicity, 10 ft (3.0 m); for Life Safety in High Seismicity and for Position Retention in any seismicity, 6 ft (1.8 m).	13.6.6	A.7.8.2
☐	☐	☐	☐			
C	NC	N/A	U	HR—H; LS—MH; PR—LMH. CONCRETE PARAPETS: Concrete parapets with height-to-thickness ratios greater than 2.5 have vertical reinforcement.	13.6.5	A.7.8.3
☐	☐	☐	☐			
C	NC	N/A	U	HR—MH; LS—MH; PR—LMH. APPENDAGES: Cornices, parapets, signs, and other ornamentation or appendages that extend above the highest point of anchorage to the structure or cantilever from components are reinforced and anchored to the structural system at a spacing equal to or less than 6 ft (1.8 m). This evaluation statement item does not apply to parapets or cornices covered by other evaluation statements.	13.6.6	A.7.8.4
☐	☐	☐	☐			

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Masonry Chimneys						
C	NC	N/A	U			
☐	☐	☐	☐	HR—LMH; LS—LMH; PR—LMH. URM CHIMNEYS: Unreinforced masonry chimneys extend above the roof surface no more than the following: for Life Safety in Low or Moderate Seismicity, 3 times the least dimension of the chimney; for Life Safety in High Seismicity and for Position Retention in any seismicity, 2 times the least dimension of the chimney.	13.6.7	A.7.9.1
☐	☐	☐	☐	HR—LMH; LS—LMH; PR—LMH. ANCHORAGE: Masonry chimneys are anchored at each floor level, at the topmost ceiling level, and at the roof.	13.6.7	A.7.9.2
Stairs						
C	NC	N/A	U			
☐	☐	☐	☐	HR—not required; LS—LMH; PR—LMH. STAIR ENCLOSURES: Hollow-clay tile or unreinforced masonry walls around stair enclosures are restrained out of plane and have height-to-thickness ratios not greater than the following: for Life Safety in Low or Moderate Seismicity, 15-to-1; for Life Safety in High Seismicity and for Position Retention in any seismicity, 12-to-1.	13.6.2 13.6.8	A.7.10.1
☐	☐	☐	☐	HR—not required; LS—LMH; PR—LMH. STAIR DETAILS: The connection between the stairs and the structure does not rely on post-installed anchors in concrete or masonry, and the stair details are capable of accommodating the drift calculated using the Quick Check procedure of Section 4.4.3.1 for moment-frame structures or 0.5 in. for all other structures without including any lateral stiffness contribution from the stairs.	13.6.8	A.7.10.2
Contents and Furnishings						
C	NC	N/A	U			
☐	☐	☐	☐	HR—LMH; LS—MH; PR—MH. INDUSTRIAL STORAGE RACKS: Industrial storage racks or pallet racks more than 12 ft high meet the requirements of ANSI/RMI MH 16.1 as modified by ASCE 7, Chapter 15.	13.8.1	A.7.11.1
☐	☐	☐	☐	HR—not required; LS—H; PR—MH. TALL NARROW CONTENTS: Contents more than 6 ft (1.8 m) high with a height-to-depth or height-to-width ratio greater than 3-to-1 are anchored to the structure or to each other.	13.8.2	A.7.11.2 CONTENTS NOT ANCHORED TO STRUCTURE
☐	☐	☐	☐	HR—not required; LS—H; PR—H. FALL-PRONE CONTENTS: Equipment, stored items, or other contents weighing more than 20 lb (9.1 kg) whose center of mass is more than 4 ft (1.2 m) above the adjacent floor level are braced or otherwise restrained.	13.8.2	A.7.11.3 CONTENTS NOT ANCHORED TO STRUCTURE

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.10	A.7.11.4	
☐	☐	☐	☐	ACCESS FLOORS: Access floors more than 9 in. (229 mm) high are braced.			
C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.7.7	A.7.11.5	
☐	☐	☐	☐	EQUIPMENT ON ACCESS FLOORS: Equipment and other contents supported by access floor systems are anchored or braced to the structure independent of the access floor.	13.6.10		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.8.2	A.7.11.6	
☐	☐	☐	☐	SUSPENDED CONTENTS: Items suspended without lateral bracing are free to swing from or move with the structure from which they are suspended without damaging themselves or adjoining components.			
Mechanical and Electrical Equipment							
C	NC	N/A	U	HR—not required; LS—H; PR—H. FALL-PRONE	13.7.1	A.7.12.4	EQUIPMENT NOT ANCHORED TO STRUCTURE
☐	☐	☐	☐	EQUIPMENT: Equipment weighing more than 20 lb (9.1 kg) whose center of mass is more than 4 ft (1.2 m) above the adjacent floor level, and which is not in-line equipment, is braced.	13.7.7		
C	NC	N/A	U	HR—not required; LS—H; PR—H. IN-LINE	13.7.1	A.7.12.5	
☐	☐	☐	☐	EQUIPMENT: Equipment installed in line with a duct or piping system, with an operating weight more than 75 lb (34.0 kg), is supported and laterally braced independent of the duct or piping system.			
C	NC	N/A	U	HR—not required; LS—H; PR—MH. TALL NARROW	13.7.1	A.7.12.6	EQUIPMENT NOT ANCHORED TO STRUCTURE
☐	☐	☐	☐	EQUIPMENT: Equipment more than 6 ft (1.8 m) high with a height-to-depth or height-to-width ratio greater than 3-to-1 is anchored to the floor slab or adjacent structural walls.	13.7.7		
C	NC	N/A	U	HR—not required; LS—not required; PR—MH.	13.6.9	A.7.12.7	
☐	☐	☐	☐	MECHANICAL DOORS: Mechanically operated doors are detailed to operate at a story drift ratio of 0.01.			
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.1	A.7.12.8	
☐	☐	☐	☐	SUSPENDED EQUIPMENT: Equipment suspended without lateral bracing is free to swing from or move with the structure from which it is suspended without damaging itself or adjoining components.	13.7.7		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.1	A.7.12.9	
☐	☐	☐	☐	VIBRATION ISOLATORS: Equipment mounted on vibration isolators is equipped with horizontal restraints or snubbers and with vertical restraints to resist overturning.			
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.1	A.7.12.10	
☐	☐	☐	☐	HEAVY EQUIPMENT: Floor-supported or platform-supported equipment weighing more than 400 lb (181.4 kg) is anchored to the structure.	13.7.7		

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.7	A.7.12.11
☐	☐	☐	☐	ELECTRICAL EQUIPMENT: Electrical equipment is laterally braced to the structure.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.8	A.7.12.12
☐	☐	☐	☐	CONDUIT COUPLINGS: Conduit greater than 2.5 in. (64 mm) trade size that is attached to panels, cabinets, or other equipment and is subject to relative seismic displacement has flexible couplings or connections.		
Piping						
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.3	A.7.13.2
☐	☐	☐	☐	FLEXIBLE COUPLINGS: Fluid and gas piping has flexible couplings.	13.7.5	
C	NC	N/A	U	HR—not required; LS—not required; PR—H. FLUID	13.7.3	A.7.13.4
☐	☐	☐	☐	AND GAS PIPING: Fluid and gas piping is anchored and braced to the structure to limit spills or leaks.	13.7.5	
C	NC	N/A	U	HR—not required; LS—not required; PR—H. C-	13.7.3	A.7.13.5
☐	☐	☐	☐	CLAMPS: One-sided C-clamps that support piping larger than 2.5 in. (64 mm) in diameter are restrained.	13.7.5	
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.3	A.7.13.6
☐	☐	☐	☐	PIPING CROSSING SEISMIC JOINTS: Piping that crosses seismic joints or isolation planes or is connected to independent structures has couplings or other details to accommodate the relative seismic displacements.	13.7.5	
Ducts						
C	NC	N/A	U	HR—not required; LS—not required; PR—H. DUCT	13.7.6	A.7.14.2
☐	☐	☐	☐	BRACING: Rectangular ductwork larger than 6 ft ² (0.56 m ²) in cross-sectional area and round ducts larger than 28 in. (711 mm) in diameter are braced. The maximum spacing of transverse bracing does not exceed 30 ft (9.2 m). The maximum spacing of longitudinal bracing does not exceed 60 ft (18.3 m).		
C	NC	N/A	U	HR—not required; LS—not required; PR—H. DUCT	13.7.6	A.7.14.3
☐	☐	☐	☐	SUPPORT: Ducts are not supported by piping or electrical conduit.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.6	A.7.14.4
☐	☐	☐	☐	DUCTS CROSSING SEISMIC JOINTS: Ducts that cross seismic joints or isolation planes or are connected to independent structures have couplings or other details to accommodate the relative seismic displacements.		
Elevators						
C	NC	N/A	U	HR—not required; LS—H; PR—H. RETAINER	13.7.11	A.7.16.1
☐	☐	☐	☐	GUARDS: Sheaves and drums have cable retainer guards.		
C	NC	N/A	U	HR—not required; LS—H; PR—H. RETAINER PLATE:	13.7.11	A.7.16.2
☐	☐	☐	☐	A retainer plate is present at the top and bottom of both car and counterweight.		

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.11	A.7.16.3
☐	☐	☐	☐	ELEVATOR EQUIPMENT: Equipment, piping, and other components that are part of the elevator system are anchored.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.11	A.7.16.4
☐	☐	☐	☐	SEISMIC SWITCH: Elevators capable of operating at speeds of 150 ft/min (0.30 m/min) or faster are equipped with seismic switches that meet the requirements of ASME A17.1 or have trigger levels set to 20% of the acceleration of gravity at the base of the structure and 50% of the acceleration of gravity in other locations.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.11	A.7.16.5
☐	☐	☐	☐	SHAFT WALLS: Elevator shaft walls are anchored and reinforced to prevent toppling into the shaft during strong shaking.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.11	A.7.16.6
☐	☐	☐	☐	COUNTERWEIGHT RAILS: All counterweight rails and divider beams are sized in accordance with ASME A17.1.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.11	A.7.16.7
☐	☐	☐	☐	BRACKETS: The brackets that tie the car rails and the counterweight rail to the structure are sized in accordance with ASME A17.1.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H.	13.7.11	A.7.16.8
☐	☐	☐	☐	SPREADER BRACKET: Spreader brackets are not used to resist seismic forces.		
C	NC	N/A	U	HR—not required; LS—not required; PR—H. GO-SLOW ELEVATORS:	13.7.11	A.7.16.9
☐	☐	☐	☐	The building has a go-slow elevator system.		

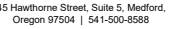
^a Performance Level: HR = Hazards Reduced, LS = Life Safety, and PR = Position Retention.

^b Level of Seismicity: L = Low, M = Moderate, and H = High.

Legend: C = Compliant, NC = Noncompliant, N/A = Not Applicable, U = Unknown

Appendix C: Preliminary Seismic Retrofit Drawings

PHOENIX-TALENT SCHOOL DISTRICT #4
102 CHRISTIAN AVE.
TALENT, OR 97540



TALENT MIDDLE SCHOOL SEISMIC RETROFIT

BUILDING KEY PLAN

*SITE PLAN NOT
TO SCALE

- N1. INSTALL SHUT OFF VALVES FOR PIPING CONTAINING HAZARDOUS MATERIAL, INCLUDING NATURAL GAS.
- N2. INSTALL SEISMIC BRACING FOR INTEGRATED SUSPENDED CEILINGS
- N3. INSTALL FREE EDGE CLEARANCE FOR INTEGRATED SUSPENDED CEILINGS.
- N4. INSTALL FREE EDGE SUPPORT FOR INTEGRATED SUSPENDED CEILINGS.
- N5. PROVIDE INDEPENDENT SUPPORT FOR LIGHT FIXTURES.
- N6. PROVIDE INDEPENDENT SUPPORT FOR LIGHT FIXTURES.
- N7. INSTALL SAFETY DEVICES FOR LIGHT FIXTURE LENS COVERS.
- N8. REMOVE GLAZING AND REPLACE WITH NEW SAFETY GLASS WINDOWS SYSTEM.
- N9. ANCHOR CONTENTS TO THE STRUCTURE.
- N10. BRACE MECHANICAL EQUIPMENT TO STRUCTURE.
- N11. ENSURE THAT ITEMS ARE FREE TO SWING FROM STRUCTURE WITHOUT DAMAGING THEMSELVES OR ADJOINING COMPONENTS.
- N12. ANCHOR FLOOR-SUPPORTED EQUIPMENT WEIGHING MORE THAN 400LB TO THE STRUCTURE.

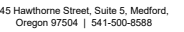
AREA D:
GYMNASIUM
1989
±10,600 S.F.
NOT IN SCOPE

REVISION ID:	DATE:
PROJECT NO:	M-0229-20
DRAWN:	MEG
CHECKED:	MRS
DATE:	DEC. 2022

COVER SHEET

G0.0

PRELIMINARY DESIGN



TALENT MIDDLE SCHOOL SEISMIC RETROFIT



REVISION ID:	DATE:

AREA A ROOF
FRAMING PLAN

S1.1

PRELIMINARY DESIGN

Appendix D: Geotechnical Information



Talent Middle School

102 Christian Ave, Talent, OR 97540, USA

Latitude, Longitude: 42.2397255, -122.7939386



Date	10/29/2020, 1:20:55 PM
Design Code Reference Document	ASCE41-17
Custom Probability	
Site Class	D - Default (See Section 11.4.3)

Type	Description	Value
Hazard Level		BSE-2N
S_S	spectral response (0.2 s)	0.609
S_1	spectral response (1.0 s)	0.349
S_{XS}	site-modified spectral response (0.2 s)	0.8
S_{X1}	site-modified spectral response (1.0 s)	0.681
F_a	site amplification factor (0.2 s)	1.313
F_v	site amplification factor (1.0 s)	1.951
ssuh	max direction uniform hazard (0.2 s)	0.698
crs	coefficient of risk (0.2 s)	0.873
ssrt	risk-targeted hazard (0.2 s)	0.609
ssd	deterministic hazard (0.2 s)	1.5
s1uh	max direction uniform hazard (1.0 s)	0.406
cr1	coefficient of risk (1.0 s)	0.859
s1rt	risk-targeted hazard (1.0 s)	0.349
s1d	deterministic hazard (1.0 s)	0.6

Type	Description	Value
Hazard Level		BSE-1N
S_{XS}	site-modified spectral response (0.2 s)	0.533
S_{X1}	site-modified spectral response (1.0 s)	0.454

Type	Description	Value
Hazard Level		BSE-2E
S_S	spectral response (0.2 s)	0.424
S_1	spectral response (1.0 s)	0.236
S_{XS}	site-modified spectral response (0.2 s)	0.619
S_{X1}	site-modified spectral response (1.0 s)	0.503
f_a	site amplification factor (0.2 s)	1.461
f_v	site amplification factor (1.0 s)	2.127

Type	Description	Value
Hazard Level		BSE-1E
S_S	spectral response (0.2 s)	0.146
S_1	spectral response (1.0 s)	0.073
S_{XS}	site-modified spectral response (0.2 s)	0.234
S_{X1}	site-modified spectral response (1.0 s)	0.175
F_a	site amplification factor (0.2 s)	1.6
F_v	site amplification factor (1.0 s)	2.4

Type	Description	Value
Hazard Level		TL Data
T-Sub-L	Long-period transition period in seconds	16

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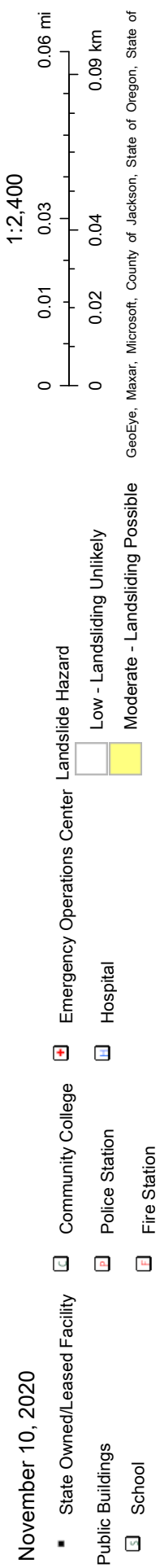
Talent Middle School - Active Faults



November 10, 2020

- State Owned/Leased Facility
- Community College
- Emergency Operations Center
- Public Buildings
- Police Station
- Hospital
- School
- Fire Station
- Active Faults

Talent Middle School - Landslide Hazard



■ State Owned/Leased Facility
 Public Buildings
 ■ School

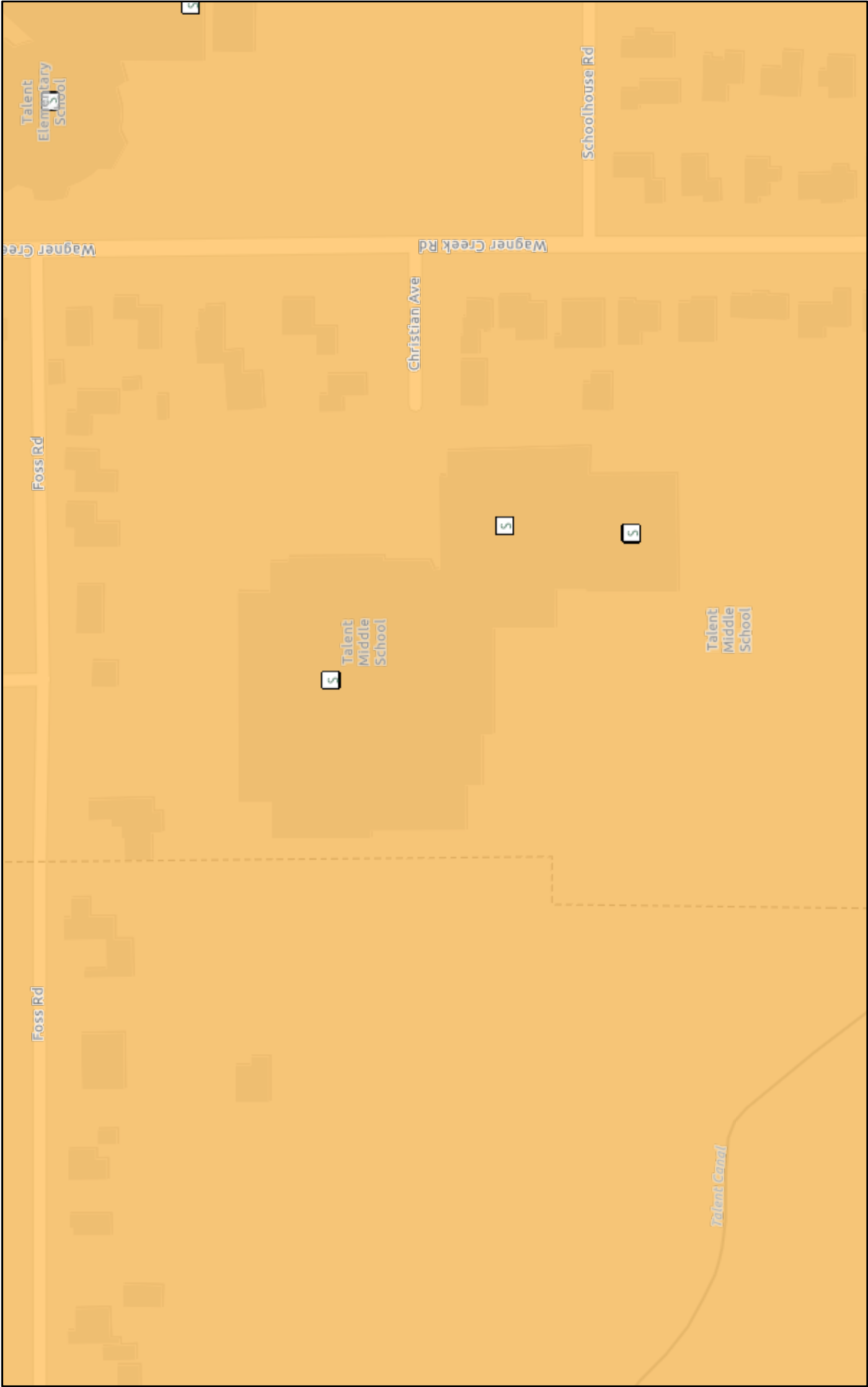
Community College
 Police Station
 Fire Station

Emergency Operations Center
 Hospital

Landslide Hazard
 Low - Landsliding Unlikely
 Moderate - Landsliding Possible

0 0.02 0.04 0.06 0.08 0.10 km
 GeoEye, Maxar, Microsoft, County of Jackson, State of Oregon, State of

Talent Middle School - Seismic Liquefaction



November 10, 2020

- State Owned/Leased Facility
- Community College
- Emergency Operations Center
- Public Buildings
- School
- Police Station
- Hospital
- Fire Station
- Moderate
- Low
- High

National Flood Hazard Layer FIRMette



122°47'58"W 42°14'38"N

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

Without Base Flood Elevation (BFE)
Zone A, V, A99

With BFE or Depth
Zone AE, AO, AH, VE, AR

Regulatory Floodway

SPECIAL FLOOD HAZARD AREAS

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile
Zone X

Future Conditions 1% Annual Chance Flood Hazard
Zone X

Area with Reduced Flood Risk due to Levee. See Notes.
Zone X

Area with Flood Risk due to Levee
Zone D

OTHER AREAS OF FLOOD HAZARD

NO SCREEN

Area of Minimal Flood Hazard
Zone X

Effective LOMRs

Area of Undetermined Flood Hazard
Zone D

OTHER AREAS

GENERAL STRUCTURES

Channel, Culvert, or Storm Sewer

Levee, Dike, or Floodwall

Cross Sections with 1% Annual Chance Water Surface Elevation

Coastal Transect

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

OTHER FEATURES

Digital Data Available

No Digital Data Available

Unmapped

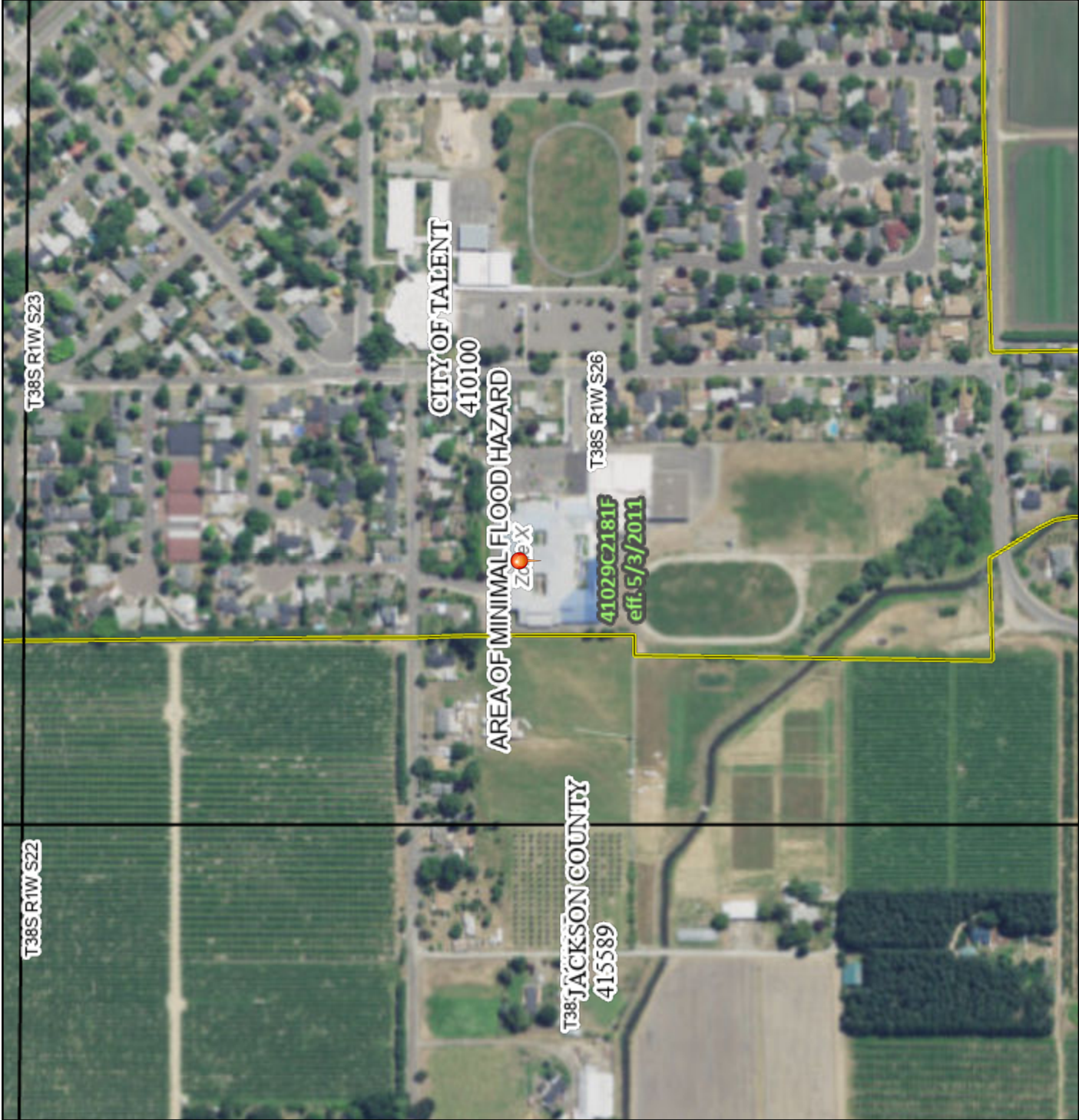
MAP PANELS

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **11/30/2022 at 5:56 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.





**PRELIMINARY SEISMIC RETROFIT STUDY
TALENT MIDDLE SCHOOL
TALENT, OREGON**

For: Chris McKay
Phoenix Talent School District
PO BOX 698
Phoenix, Oregon 97535

By: THE GALLI GROUP
612 NW Third Street
Grants Pass, OR 97526
(541) 955-1611

02-5928-01
November 13, 2020

Table of Contents

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1
2.0 SITE AND PROJECT DESCRIPTION.....	1
3.0 FIELD EXPLORATION	1
4.0 LABORATORY TESTING	2
5.0 SUBSURFACE CONDITIONS	2
5.1 SOIL	2
5.2 GROUNDWATER.....	2
6.0 GEOLOGIC OR SEISMIC INDUCED HAZARDS	3
7.0 LIQUEFACTION EVALUATION	3
8.0 CONCLUSIONS.....	4
8.1 LIMITATIONS	4

LIST OF FIGURES

Figure 1	Vicinity Map
Figure 2	Site Plan with Boring Locations

APPENDIX A: Boring Logs



PRELIMINARY SEISMIC RETROFIT STUDY TALENT MIDDLE SCHOOL TALENT, OREGON

1.0 INTRODUCTION

This report presents results of our geotechnical and geological evaluation of the Talent Middle School for a potential Seismic Retrofit of the school. The subject school is located on the west side of Wagner Creek Road, just north of School House Road. The site is mildly sloping to flat. Please see Figure 1, Vicinity Map, for a more precise location.

The purpose of this investigation and report was to accomplish a limited site surface and subsurface evaluation. The data gathered will be used in determining if the site is subject to liquefaction or other geologic hazard related to the structure during the design seismic event.

2.0 SITE AND PROJECT DESCRIPTION

The site is currently occupied by a functioning school, which consists of 4 or 5 structures connected via covered walkways or direct connection. Some areas appear to be large wings on the larger structure. The structures are surrounded by play fields, parking, bus lanes, access, walkways and open space.

We understand the project to consist of evaluating the site for possible severe geologic hazards (such as liquefaction). The findings will likely be used to determine if funding will be pursued to complete a full seismic retrofit of the structures on this campus. This would usually require structural upgrades including improved foundations and/or embedded footings/buttresses for resistance of vertical and lateral loads generated in a seismic event.

3.0 FIELD EXPLORATION

On November 2, 2020, Associate Engineer, Dennis Duru, M.Sc., E.I.T and our drilling crew, visited the site to accomplish the subsurface investigation. Three (3) exploratory borings were drilled approximately evenly spaced around the structure, at the locations shown on Figure 2, Site Plan. The borings penetrated to depths between 8.0 feet and 15.5 feet by our ATV-mounted solid stem auger drill rig. The borings were refilled with drill spoils. Those in asphalt areas had the top pounded full with cold patch asphalt.

A utility locate was completed prior to our investigation and our representative identified the field exploration locations away from the marked utilities. Standard Penetration Testing (SPT) was accomplished in each boring. This entails driving a 1½-inch diameter steel split spoon sampler by dropping a 140-pound weight for a 30-inch drop. The total number of blows it takes to drive the sampler the last 12 inches of an 18-inch drive is called the SPT N-value. These can be correlated with density and soil strength parameters from testing on thousands of other projects.

Our representative identified the final exploration location, logged subsurface soils and water conditions and obtained soil samples for transport to our laboratory. Visual classifications of the soils were made in the field and are presented in the Boring Logs in Appendix A, at the end of this report. Please note that in the logs, soil changes are depicted as distinct layers, while in nature they may be more gradual.

4.0 LABORATORY TESTING

Two soil samples were tested for expansion Index due to their clayey nature and the presence of expansive soils in the area. Test results indicate that the upper clayey soils have Moderate Expansion Potential with tested EI Value of 52. Moisture content tests were also accomplished on soil samples obtained by Standard Penetration Testing.

5.0 SUBSURFACE CONDITIONS

5.1 SOIL

The soils were somewhat similar around the group of structures. These were generally a surficial layer of AC and crushed rock in B-1 and B-2 and just crushed rock in B-3. This was underlain by stiff to very stiff, silty Clay and clayey, silty Sand. Then there were 2 to 3-foot layers of silty Sand and Gravel, clayey silty Sand and dense Sand and Gravel. In B-3 the crushed rock was underlain by 6.5 feet of medium dense, clayey, silty Sand and then 8.5 feet of medium dense, clayey Sand and Gravel.

Please see more specific soils information in the Boring Logs in Appendix A. Please note that the soils are shown as distinct layers in the Boring Logs while in nature they may change more gradually. Soils conditions may also change somewhat between the locations investigated.

5.2 GROUNDWATER

Generally, the soils encountered were moist to saturated. Groundwater (likely perched) was found at depths of 12.0 feet in B-1, 6.25 feet in B-2 and 7.75 feet in B-3. Water levels could rise to within 4 or 5 feet of the ground level during wetter months of the year. The surficial silty Clay soils are likely to become saturated and disturb easily during wetter periods of the year.

6.0 GEOLOGIC OR SEISMIC INDUCED HAZARDS

Flood Hazard. The site is not near streams or rivers. Therefore, it is not within a 100-year floodplain.

Landslides/Slope Instability. There are no slopes close to the site. Therefore, there is no possibility of slope failure, rock fall or slide run out damage at the site.

Liquefaction and Lateral Spread. The project is underlain by mixtures of silt, clay and sand mixtures, some with gravels. These were above and below the water table. Those below the water table are either very dense or clayey. Therefore, liquefaction and lateral spread is not considered to be a potential hazard at an elevation to adversely impact the structure foundations. See more in a later section of this report.

Expansive Soils. The project has expansive soils. Lab testing produced EI values of 58 and 62 which indicates these soils are moderately expansive (change in volume with change in moisture content).

Ground Rupture. No Quaternary faults were identified at the project site. Therefore, the risk of damage at the site due to ground rupture is considered very low.

Ground Shaking. The design of the structures shall be designed for the design PG_A of 0.25g.

Seismic Ground Amplification or Resonance. No hazardous amplification or resonance effects from seismic waves have been associated with the soil subsurface conditions in the project area.

Tsunami and Seiche. The site is approximately 80 miles inland from the coast, and not subject to tsunami hazard. The site is not located adjacent to a large lake or body of water, and therefore, not subject to seiche hazard.

7.0 LIQUEFACTION EVALUATION

The site is underlain by layers of silty Clay, clayey Sand, clayey Sand and Gravel, dense Sand and Gravel and very dense silty Gravel. These all appear to be discontinuous large lenses rather than continuous wide-reaching layers, as is typically the case in wide river-formed valleys such as this one.

For liquefaction to take place during a seismic event, the conditions at the site must include loose Silts, sandy Silt, silty Sand or Sand. These soils must also be below the water table. During seismic shaking, the saturated soils attempt to reorient into a state of denser packing. However, because the pore water pressure within the soil cannot instantly dissipate the load taken by soil grain to grain contact is briefly taken by the

water, which has zero shear strength. Therefore, the soil mass liquefies until the pressures dissipate.

These conditions are NOT present at this site. The clay content prevents the soil grain movement that can cause liquefaction. Elsewhere the soils are dense and very dense. Such soils will not undergo densification during a seismic event. Therefore, liquefaction cannot take place.

Therefore, in our professional opinion, the site conditions found in the borings will not result in wide spread liquefaction during a seismic event that will have significant adverse impacts on the structures.

8.0 CONCLUSIONS

In our professional opinion, based on our field investigation, office review and previous work in the area, the soils conditions at the site are suitable for a “normal” seismic retrofit. Crushed rock structural fill over the clay, gravelly Clay and silty Sand and Gravel will provide adequate support of new foundations and/or buttresses (or small diameter piles could be used to limit overexcavation). In our opinion, this school site is not subject to large scale liquefaction that will severely adversely impact the structure.

CAUTION: Moderately Expansive Soils Present on the Site at Shallow Depth

Additional borings around the structures on this site could possibly find zones of soils that may liquefy. However, these are likely to be moderate to small in size and should not adversely impact the structure.

If a full seismic retrofit geotechnical design report is needed, additional tasks to be accomplished would be as followed:

1. 2 or 3 additional borings.
2. Laboratory testing for strength and settlement.
3. Evaluation of data for developing design parameters.

These could be used to provide a full-scale Design Report.

8.1 LIMITATIONS

The analyses, conclusions and recommendations contained in this report are based on-site conditions as they existed at the time of the study, and assume soils, rock and groundwater conditions exposed and observed in the borings during our investigation are representative of soils and groundwater conditions throughout the site. If during construction, subsurface conditions or assumed design information is found to be different, we should be advised at once so that we can review this report and reconsider our recommendations in light of the changed conditions. If there is a significant lapse of time (5 years) between submission of this report and the start of work at the site, if the

project is changed, or if conditions have changed due to acts of God or construction at or adjacent to the site, it is recommended that this report be reviewed in light of the changed conditions and/or time lapse.

This report was prepared for the use of the School District and their design team for evaluating the need for a full scale Seismic Retrofit evaluation and report. It should be made available to contractors for information and factual data only. This report should not be used for contractual purposes as a warranty of site subsurface conditions. It should also not be used at other sites or for projects other than the one intended.

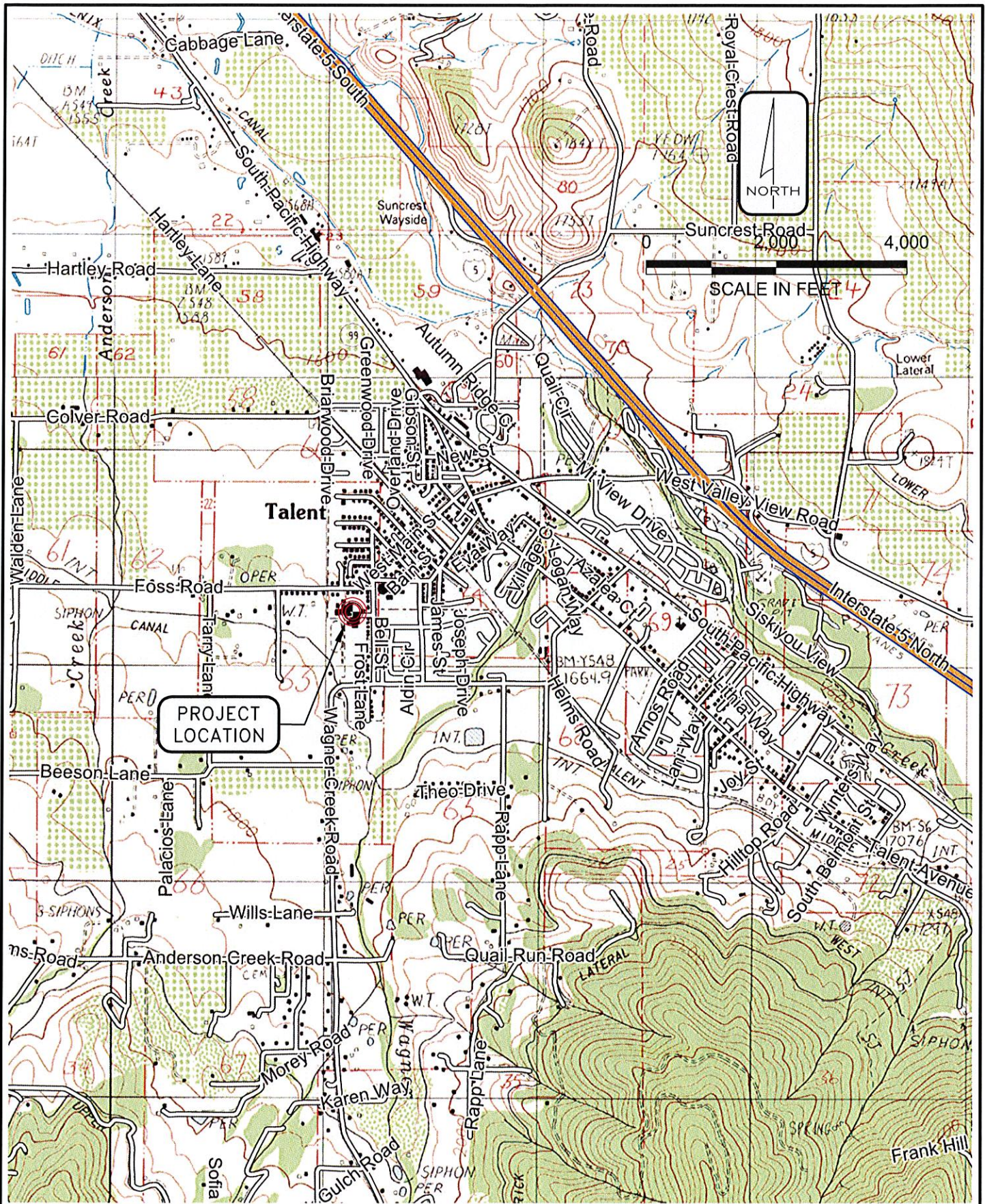
We have performed these services in accordance with generally accepted geotechnical engineering and professional geology practices in southern Oregon, at the time the study was accomplished. No other warranties, either expressed or implied, are provided.

THE GALLI GROUP
GEOTECHNICAL CONSULTING



William F. Galli, P.E., G.E.
Principal Engineer





THE GALLI GROUP
GEOTECHNICAL CONSULTING
612 NW 3rd Street
Grants Pass, OR 97526

VICINITY MAP

TALENT MIDDLE SCHOOL
TALENT, OREGON

DATE: NOVEMBER 2020
JOB NO: 02-5928-02
REV: 11/12/2020 9:02 AM
PREPARED BY: BD/MG3
5928-02 Talent Middle School - 01 - Vicinity.dwg

FIGURE:

1

LEGEND

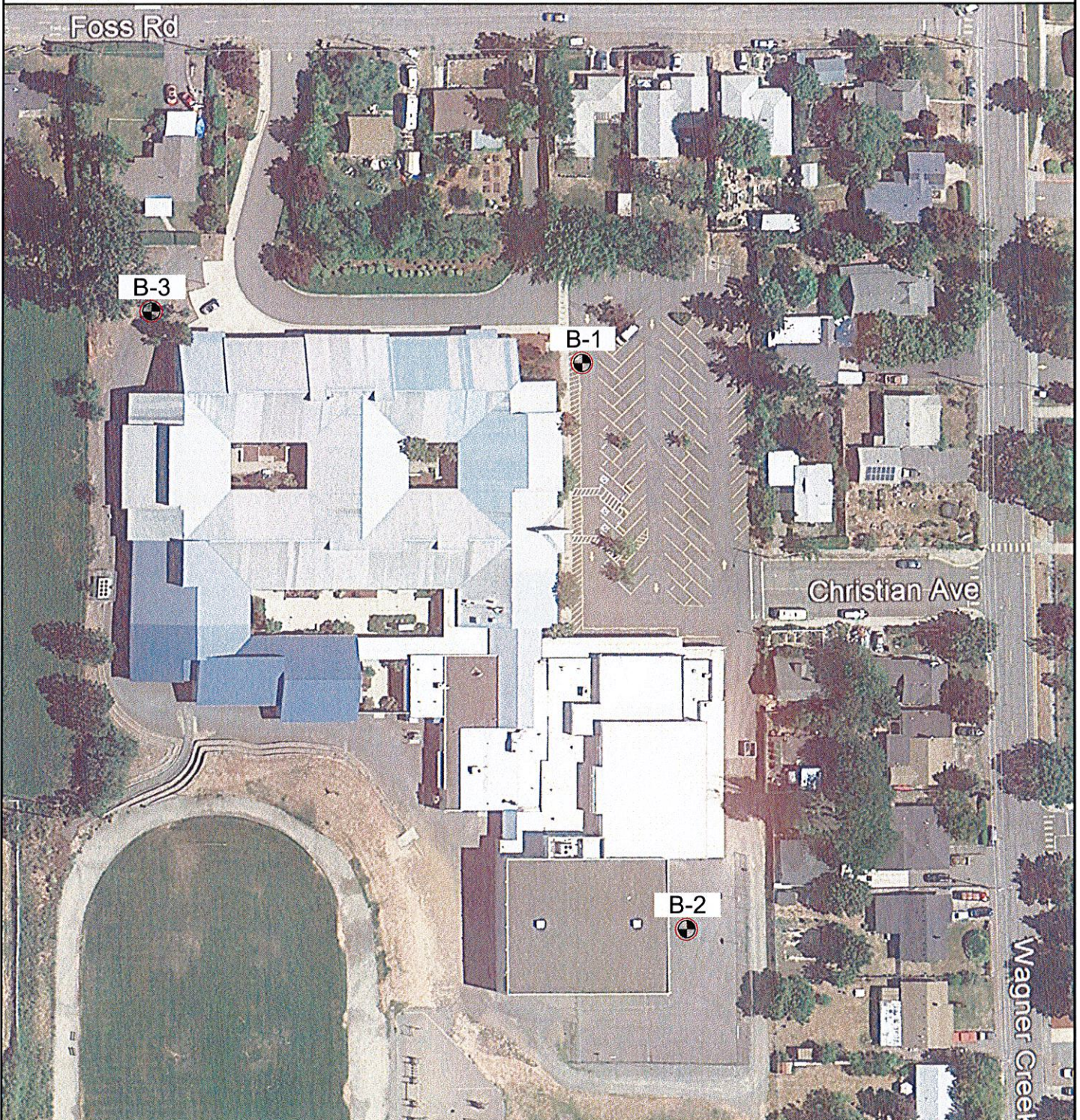
B-1 BORING NUMBER AND
APPROXIMATE LOCATION



0 100 200

APPROX. SCALE IN FEET

AERIAL PHOTO PROVIDED
BY GOOGLE EARTH



THE GALLI GROUP
GEOTECHNICAL CONSULTING

612 NW 3rd Street
Grants Pass, OR 97526

SITE PLAN
WITH BORING LOCATIONS
TALENT MIDDLE SCHOOL
TALENT, OREGON

DATE: NOVEMBER 2020
JOB NO: 02-5928-02
REV: 11/12/2020 3:45 PM
PREPARED BY: BD/MG3
5928-02 Talent Middle School - 02 - Site Plan.dwg

FIGURE:

2

APPENDIX A

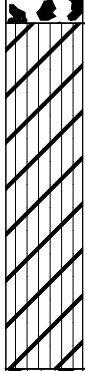
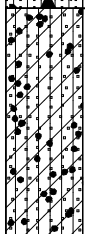
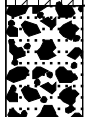
BORING LOGS

BORING LOG B-1

Project: Talent Middle School
Client: Talent School District
Location:
Driller: TGG (Blake, Ken)
Drill Rig: ATV Mounted rig, 4" dia SSA
Depth To Water> Initial ∇ :

Project No.: 02-5928-01
Date: 11/2/2020
Elevation:
Logged By: Dennis Duru

At Completion ∇ :

Graphic Log	USCS	Description	Depth	Sample No. and Type	NMC	Standard Penetration Test			
						N	CURVE		
							10	30	50
	FILL	4" of AC.	0.33	0					
	GW	4" of 3/4" minus crushed rock.	0.67						
	GW	10" of 4" minus crushed rock; sub-base.	1.5						
	CL-ML	Medium stiff, dark brown, silty Clay; moist.							
			2.5						
				S-1	23%	5			
			5						
				S-2	29%				
			6.0						
	SM/GM	Medium dense to dense, brown, silty, Sand and Gravel; moist.		S-3	22%	26			
			7.5						
				S-4	11%	36			
			9.0						
	SM/SC	Medium dense, red brown, clayey Silts and Sand; some gravel, moist.							
			10						
				S-5	21%	17			
			12.0						
	GW-SW	Dense, brown, Sand and Gravel; moist.		S-6	10%	36			
			12.5						
			13.5						
		Bottom of Boring at 13.5 Feet due to Auger refusal at 12.0 feet. No Free Groundwater Encountered.							
			15						
			17.5						

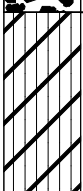
Legend of Samplers:  Grab sample  SPT sample  Shelby tube sample

BORING LOG B-2

Project: Talent Middle School
Client: Talent School District
Location:
Driller: TGG (Blake, Ken)
Drill Rig: ATV Mounted rig, 4" dia SSA
Depth To Water> Initial ∇ : 6.25

Project No.: 02-5928-01
Date: 11/2/2020
Elevation:
Logged By: Dennis Duru

At Completion ∇ : 6.25

Graphic Log	USCS	Description	Depth	Sample No. and Type	NMC	Standard Penetration Test			
						N	C U R V E		
							10	30	50
	FILL	2.75" of AC.	0.25						
	GW	1.5" minus crushed rock.							
			1.5						
	CL-ML	Medium stiff, dark brown, silty Clay; moist.							
			2.5						
			4.0		S-1	24%	8		
	SM/GM	Dense to very dense, brown, clayey Gravel; saturated.							
			5		S-2	13%	28		
			7.5		S-3	13%	65		
			8.5						
		Bottom of Boring at 8.5 Feet. Free Groundwater at 6.25 Feet.							
			10						
			12.5						
			15						
			17.5						

Legend of Samplers:  Grab sample  SPT sample  Shelby tube sample

BORING LOG B-3

Project: Talent Middle School
Client: Talent School District
Location:
Driller: TGG (Blake, Ken)
Drill Rig: ATV Mounted rig, 4" dia SSA
Depth To Water> Initial ∇ : 7.75

Project No.: 02-5928-01
Date: 11/2/2020
Elevation:
Logged By: Dennis Duru

At Completion ∇ :

Graphic Log	USCS	Description	Depth	Sample No. and Type	NMC	Standard Penetration Test			
						N	C U R V E		
							10	30	50
	GW SC/SM	6" of 1" minus crushed rock. Medium dense to dense, brown, silty, clayey Sand; some gravel, moist.	0.5						
			2.5	S-1	14%	23			
			5	S-2	12%	26			
	SM/GM	Medium dense, red brown, clayey Sand and gravel; wet to saturated.	7.0						
			7.5						
			10	S-3	25% 25%	16			
	GW-SW	Dense, brown, Sand and Gravel; moist.	12.0						
			12.5	S-4	17%	19			
			15						
		Bottom of Boring at 15.5 Feet due to Auger refusal at 14.0 feet. No Free Groundwater Encountered.	15.5						
			17.5						

Legend of Samplers:



Grab sample



SPT sample



Shelby tube sample

Appendix E: Construction Cost Estimate Worksheets

ENGINEER'S OPINION OF PROBABLE COST - PHOENIX-TALENT MIDDLE SCHOOL SEISMIC REHABILITATION

SUMMARY

Description	Deficiencies (Ref. Seismic Evaluation Report Sec. 7.0)	Quantity	Units	Unit Price	Total Price for Construction Item
GENERAL CONDITIONS					
General Conditions		10%	%		\$ 260,670.00
Preconstruction Services		2%	%		\$ 52,134.00
Escalation		7%	%		\$ 204,365.28
Bonding & Insurance		3%	%		\$ 87,585.12
Contractor Profit & Overhead		5%	%		\$ 145,975.20
				General Conditions Subtotal	\$ 750,729.60
Non-Structural Elements					
Misc MEP	N1, N12	1	Lump Sum	\$ 80,800.00	\$ 80,800.00
Misc Non-Structural	N2, N3, N4, N5, N6, N7, N9, N10	1	Lump Sum	\$ 32,400.00	\$ 32,400.00
New Restroom	S1, S5, S6, S7, S8	2	EA	\$ 25,000.00	\$ 50,000.00
				Non-Structural Subtotal	\$ 163,200.00
Construction Cost Per Building Part					
				Building Part 'B & C' Subtotal	\$ 2,443,500.00
Sub-Total Construction Cost					\$ 3,357,400.00
Contingency				20%	\$ 671,480.00
Total Construction Cost					\$ 4,028,880.00
Cost Estimate Summary					
Engineering					\$ 577,100.00
Architectural Consulting				\$ 60,400.00	
Structural / Rehabilitation Engineering				\$ 443,200.00	
Geotechnical Consulting				\$ 38,300.00	
Materials Testing for Design				\$ 30,200.00	
ASCE 41-17 Tier 3 Evaluation for URM				\$ 5,000.00	
Construction Management					\$ 120,900.00
Construction					\$ 3,512,500.00
Sub-Total Construction Cost				\$ 3,357,400.00	
Special Inspection Services for Construction				\$ 34,200.00	
Permitting Fees				\$ 120,900.00	
Relocation of FF&E					\$ 50,400.00
Contingency					\$ 671,480.00
Total Project Funding Requirement					\$ 4,932,380.00

ENGINEER'S OPINION OF PROBABLE COST - PHOENIX-TALENT MIDDLE SCHOOL SEISMIC REHABILITATION

BUILDING PART - 'B & C'

Description	Deficiencies (Ref. Seismic Evaluation Report Sec. 7.0)	Quantity	Units	Unit Price	Total Price for Construction Item
Demolition & Asbestos Abatement					
Soft Demolition	S1, S2, S3, S4, S5, S6, S7, S8	30500	Square Foot	\$ 2.00	\$ 61,000.00
Abatement	S1, S2, S3, S4, S5, S6, S7, S8	16800	Square Foot	\$ 5.00	\$ 84,000.00
Built-Up Roof Demo	S10, S16	30500	Square Foot	\$ 4.00	\$ 122,000.00
Hard Demolition	S2, S4, S11, S14	4700	Square Foot	\$ 20.00	\$ 94,000.00
Demolition & Asbestos Subtotal					\$ 361,000.00
Foundation / Floor Strengthening Construction					
Spread Footings for Columns / Holdown	S2	4	Each	\$ 4,000.00	\$ 16,000.00
Flooring Protection	S1, S5, S6, S7, S9, S10, S15, S17	7000	Square Foot	\$ 6.00	\$ 42,000.00
Shear Wall Footings - CMU / Concrete	S4	40	Linear Foot	\$ 300.00	\$ 12,000.00
Concrete Repair & Patching	S2, S4, S11, S14	4700	Square Foot	\$ 15.00	\$ 70,500.00
Floor Finish Patch / Replacement	S2, S4, S11, S14	4300	Square Foot	\$ 7.00	\$ 30,100.00
Shear Wall Footings - Wood Walls	S2, S11, S14	200	Linear Foot	\$ 300.00	\$ 60,000.00
Moment Frame Grade Beam Footings	S2	50	Linear Foot	\$ 300.00	\$ 15,000.00
Gym Floor Patch / Replacement	S2	1500	Square Foot	\$ 13.00	\$ 19,500.00
Foundation Level Subtotal					\$ 265,100.00
Wall Strengthening Construction					
New CMU / Concrete Shear Walls	S4	480	Square Foot	\$ 30.00	\$ 14,400.00
Light Steel Columns	S2	4	EA	\$ 1,600.00	\$ 6,400.00
Interior Wall Finish Repair	S2, S4, S11, S14, N8	3000	Square Foot	\$ 2.00	\$ 6,000.00
Exterior Finish Repair / Installation	N8	300	Square Foot	\$ 25.00	\$ 7,500.00
Painting	S2, S4, S11, S14, N8	4000	Square Foot	\$ 3.00	\$ 12,000.00
New Windows - Vinyl	N8	1200	Square Foot	\$ 40.00	\$ 48,000.00
Structural Steel Frame	S2	4.5	Tonn	\$ 21,800.00	\$ 98,100.00
New 2x Framed Shear Walls	S2, S11, S14	2400	Square Foot	\$ 10.00	\$ 24,000.00
New Wood Columns	S12	6	EA	\$ 350.00	\$ 2,100.00
Brick Veneer Ties	S11, S14	1600	Square Foot	\$ 30.00	\$ 48,000.00
Wall Strengthening Subtotal					\$ 266,500.00
Roof Strengthening Construction					
Diaphragm Attachments - In-Plane Shear	S1, S7, S13	1900	Linear Foot	\$ 20.00	\$ 38,000.00
Diaphragm Attachments - Out-of-Plane	S3, S5, S6	2100	Linear Foot	\$ 50.00	\$ 105,000.00
Ceiling Repair	S10, S16	30500	Square Foot	\$ 3.00	\$ 91,500.00
New Roof Sheathing	S10, S16	30500	Square Foot	\$ 4.00	\$ 122,000.00
New 3-ply Built Up Roof	S10, S16	30500	Square Foot	\$ 17.00	\$ 518,500.00
New 6" polyisocyanurate rigid insulation	S10, S16	30500	Square Foot	\$ 15.00	\$ 457,500.00
New Drag Beam	S9, S15	16	EA	\$ 2,500.00	\$ 40,000.00
Existing Beam Strengthening	S17	4	EA	\$ 15,000.00	\$ 60,000.00
Seismic Isolation from Adjacent Building	S2	200	Linear Foot	\$ 400.00	\$ 80,000.00
Ceiling Repair	S1, S2, S3, S5, S6, S7, S8, S9, S15	12800	Square Foot	\$ 3.00	\$ 38,400.00
Roof Strengthening Subtotal					\$ 1,550,900.00
Building Part 'B & C' - Total Construction Cost					\$ 2,443,500.00

Appendix F: Rapid Visual Screening

Rapid Visual Screening of Buildings for Potential Seismic Hazards
FEMA P-154 Data Collection Form

AREA B Level 1
MODERATELY HIGH Seismicity



SKETCH

Address: 102 Christina Ave.
Talent, Oregon Zip: 97540

Other Identifiers:

Building Name: Gymnasium, Cafeteria and Classrooms

Use: Educational

Latitude: 42.23964 **Longitude:** -122.79363

Ss: 0.609 **Sr:** 0.349

Screener(s): SDW **Date/Time:** 2/25/2022

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1976 ☐ EST

Total Floor Area (sq. ft.): 28,064 **Code Year:** DKN

Additions: ☐ None ☒ Yes, Year(s) Built: 1989

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☒ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential, # Units: _____

Soil Type: ☐ A ☐ B ☐ C ☒ D ☐ E ☐ F ☐ DNK
Hard Avg Dense Stiff Soft Poor DNK
Rock Rock Soil Soil Soil Soil
If DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes/No/DNK Landslide: Yes/No/DNK Surf. Rupt.: Yes/No/DNK

Adjacency: ☒ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☒ Vertical (type/severity) Steps in elevation
☒ Plan (type) Reentrant corners

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other: _____

COMMENTS:

☐ Additional sketches or comments on separate page

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	☐ Do Not Know	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
RM1																		
Basic Score		4.1	3.7	3.2	2.3	2.2	2.9	2.2	2.0	1.7	2.1	1.4	1.8	1.5	1.8	1.8	1.2	2.2
Severe Vertical Irregularity, V_{L1}		-1.3	-1.3	-1.3	-1.1	-1.0	-1.2	-1.0	-0.9	-1.0	-1.1	-0.8	-1.0	-0.9	-1.0	-1.0	-0.8	NA
Moderate Vertical Irregularity, V_{L1}		-0.8	-0.8	-0.8	-0.7	-0.6	-0.8	-0.6	-0.6	-0.6	-0.6	-0.5	-0.6	-0.6	-0.6	-0.6	-0.5	NA
Plan Irregularity, P_{L1}		-1.3	-1.2	-1.1	-0.9	-0.8	-1.0	-0.8	-0.7	-0.7	-0.9	-0.6	-0.8	-0.7	-0.7	-0.7	-0.5	NA
Pre-Code		-0.8	-0.9	-0.9	-0.5	-0.5	-0.7	-0.6	-0.2	-0.4	-0.7	-0.1	-0.4	-0.3	-0.5	-0.5	-0.1	-0.3
Post-Benchmark		1.5	1.9	2.3	1.4	1.4	1.0	1.9	NA	1.9	2.1	NA	2.1	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.3	0.6	0.9	0.6	0.9	0.3	0.9	0.9	0.6	0.8	0.7	0.9	0.7	0.8	0.8	0.6	0.9
Soil Type E (1-3 stories)		0.0	-0.1	-0.3	-0.4	-0.5	0.0	-0.4	-0.5	-0.2	-0.2	-0.4	-0.5	-0.3	-0.4	-0.4	-0.3	-0.5
Soil Type E (> 3 stories)		-0.5	-0.8	-1.2	-0.7	-0.7	NA	-0.7	-0.6	-0.6	-0.8	-0.4	NA	-0.5	-0.6	-0.7	-0.3	NA
Minimum Score, S_{MIN}		1.6	1.2	0.8	0.5	0.5	0.9	0.5	0.5	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	1.4

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 0.5 FEMA P-154 Collapse Potential High (>10%)

EXTENT OF REVIEW

Exterior: ☐ Partial ☒ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☒ Entered
Drawings Reviewed: ☐ Yes ☒ No
Soil Type Source: <https://gis.dogami.oregon.gov/maps/hazvu/>
Geologic Hazards Source: <https://gis.dogami.oregon.gov/maps/hazvu/>
Contact Person: Shaun Wilson

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} _____ ☐ No
Nonstructural hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?
☒ Pounding potential (unless $S_{L2} >$ cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☒ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☒ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame RC = Reinforced concrete URM INF = Unreinforced masonry infill MH = Manufactured Housing FD = Flexible diaphragm
BR = Braced frame SW = Shear wall TU = Tilt up LM = Light metal RD = Rigid diaphragm

Rapid Visual Screening of Buildings for Potential Seismic Hazards
FEMA P-154 Data Collection Form

AREA C Level 1
MODERATELY HIGH Seismicity



SKETCH

Address: 307 Wagner Creek Rd
Talent, OR Zip: 97540

Other Identifiers: Section E

Building Name: Original Classroom

Use: Educational

Latitude: 42.2409177 **Longitude:** -122.7914074

Ss: 0.609 **Sr:** 0.349

Screener(s): SJL **Date/Time:** December 2022

No. Stories: Above Grade: 1 Below Grade: 0 **Year Built:** 1949 ☐ EST

Total Floor Area (sq. ft.): 10,900 **Code Year:**

Additions: ☒ None ☐ Yes, Year(s) Built:

Occupancy: ☐ Assembly ☐ Commercial ☐ Emer. Services ☐ Historic ☐ Shelter
☐ Industrial ☐ Office ☒ School ☐ Government
☐ Utility ☐ Warehouse ☐ Residential, # Units:

Soil Type: ☐ A Hard Rock ☐ B Avg Rock ☐ C Dense Soil ☒ D Stiff Soil ☐ E Soft Soil ☐ F Poor Soil ☐ DNK If DNK, assume Type D.

Geologic Hazards: Liquefaction: Yes/No/DNK Landslide: Yes/No/DNK Surf. Rupt.: Yes/No/DNK

Adjacency: ☐ Pounding ☐ Falling Hazards from Taller Adjacent Building

Irregularities: ☐ Vertical (type/severity) ☐ Plan (type)

Exterior Falling Hazards: ☐ Unbraced Chimneys ☐ Heavy Cladding or Heavy Veneer
☐ Parapets ☐ Appendages
☐ Other:

COMMENTS:

☐ Additional sketches or comments on separate page

BASIC SCORE, MODIFIERS, AND FINAL LEVEL 1 SCORE, S_{L1}

FEMA BUILDING TYPE	☐ Do Not Know	W1	W1A	W2	S1 (MRF)	S2 (BR)	S3 (LM)	S4 (RC SW)	S5 (URM INF)	C1 (MRF)	C2 (SW)	C3 (URM INF)	PC1 (TU)	PC2	RM1 (FD)	RM2 (RD)	URM	MH
URM																		
Basic Score		4.1	3.7	3.2	2.3	2.2	2.9	2.2	2.0	1.7	2.1	1.4	1.8	1.5	1.8	1.8	1.2	2.2
Severe Vertical Irregularity, V_{L1}		-1.3	-1.3	-1.3	-1.1	-1.0	-1.2	-1.0	-0.9	-1.0	-1.1	-0.8	-1.0	-0.9	-1.0	-1.0	-0.8	NA
Moderate Vertical Irregularity, V_{L1}		-0.8	-0.8	-0.8	-0.7	-0.6	-0.8	-0.6	-0.6	-0.6	-0.6	-0.5	-0.6	-0.6	-0.6	-0.6	-0.5	NA
Plan Irregularity, P_{L1}		-1.3	-1.2	-1.1	-0.9	-0.8	-1.0	-0.8	-0.7	-0.7	-0.9	-0.6	-0.8	-0.7	-0.7	-0.7	-0.5	NA
Pre-Code		-0.8	-0.9	-0.9	-0.5	-0.5	-0.7	-0.6	-0.2	-0.4	-0.7	-0.1	-0.4	-0.3	-0.5	-0.5	-0.1	-0.3
Post-Benchmark		1.5	1.9	2.3	1.4	1.4	1.0	1.9	NA	1.9	2.1	NA	2.1	2.4	2.1	2.1	NA	1.2
Soil Type A or B		0.3	0.6	0.9	0.6	0.9	0.3	0.9	0.9	0.6	0.8	0.7	0.9	0.7	0.8	0.8	0.6	0.9
Soil Type E (1-3 stories)		0.0	-0.1	-0.3	-0.4	-0.5	0.0	-0.4	-0.5	-0.2	-0.2	-0.4	-0.5	-0.3	-0.4	-0.4	-0.3	-0.5
Soil Type E (> 3 stories)		-0.5	-0.8	-1.2	-0.7	-0.7	NA	-0.7	-0.6	-0.6	-0.8	-0.4	NA	-0.5	-0.6	-0.7	-0.3	NA
Minimum Score, S_{MIN}		1.6	1.2	0.8	0.5	0.5	0.9	0.5	0.5	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.2	1.4

FINAL LEVEL 1 SCORE, $S_{L1} \geq S_{MIN}$: 1.1; FEMA P-154 Collapse Potential Moderate (>1%)

EXTENT OF REVIEW

Exterior: ☐ Partial ☒ All Sides ☐ Aerial
Interior: ☐ None ☐ Visible ☒ Entered
Drawings Reviewed: ☒ Yes ☐ No
Soil Type Source: OSHPD
Geologic Hazards Source: DOGAMI
Contact Person: Jordan St John

LEVEL 2 SCREENING PERFORMED?

☐ Yes, Final Level 2 Score, S_{L2} ☐ No
Nonstructural hazards? ☐ Yes ☐ No

OTHER HAZARDS

Are There Hazards That Trigger A Detailed Structural Evaluation?
☒ Pounding potential (unless $S_{L2} >$ cut-off, if known)
☐ Falling hazards from taller adjacent building
☐ Geologic hazards or Soil Type F
☐ Significant damage/deterioration to the structural system

ACTION REQUIRED

Detailed Structural Evaluation Required?

☐ Yes, unknown FEMA building type or other building
☐ Yes, score less than cut-off
☒ Yes, other hazards present
☐ No

Detailed Nonstructural Evaluation Recommended? (check one)

☒ Yes, nonstructural hazards identified that should be evaluated
☐ No, nonstructural hazards exist that may require mitigation, but a detailed evaluation is not necessary
☐ No, no nonstructural hazards identified ☐ DNK

Where information cannot be verified, screener shall note the following: EST = Estimated or unreliable data OR DNK = Do Not Know

Legend: MRF = Moment-resisting frame RC = Reinforced concrete URM INF = Unreinforced masonry infill MH = Manufactured Housing FD = Flexible diaphragm
BR = Braced frame SW = Shear wall TU = Tilt up LM = Light metal RD = Rigid diaphragm