College of the Redwoods
Request for Proposals for
Geotechnical Engineer of Record Services

College of the Redwoods (the "College") invites proposals from qualified Geotechnical Engineer firms to perform as the Geotechnical Engineer of Record on the new **Physical Education Replacement Project** at the College of the Redwoods Eureka Campus.

Interested firms are invited to submit their proposals, which shall include an electronic copy of the requested materials by email or mailed thumb drive to Julia Morrison, Vice President, Administrative Services at the address listed below.

Questions regarding this RFP may be directed to Leslie Marshall at Leslie-Marshall@redwoods.edu, Director of Facilities and Planning.

All proposals shall be received on or before: **June 18th, 2024 @ 2:00 PM P.S.T.** All proposals must be submitted electronically by email via electronic link (Google Drive, Dropbox, etc.) to Leslie-Marshall@redwoods.edu, or a thumb drive by mail to: College of the Redwoods, Facilities and Maintenance Office, Attn: Leslie Marshall, 7351 Tompkins Hill Road, Eureka, CA 95501.

All responses to this RFP received by the specified deadline will be reviewed by the College for completeness, content, experience, and qualifications. For those firms deemed most qualified, further evaluation and interviews may be conducted as part of the final selection process. However, the College reserves the right to complete the selection process without proceeding to an interview process, and may choose to select based on the information supplied in the Statement of Qualifications and Proposal.

This request does not commit the College to award a contract. The College expressly reserves the right to reject any and all proposals or accept all or part of any proposals. The College reserves the right to select the firm(s) whose qualifications, in the College's sole judgment, best meet the needs of the College.

RFP DUE TIME AND DATE:	**June 18th, 2024 @ 2:00 PM P.S.T.**
DELIVERY LOCATION:	College of the Redwoods Facilities and Maintenance Office, Attn: Leslie Marshall 7351 Tompkins Hill Rd, Eureka, CA 95501 -or- Leslie-Marshall@redwoods.edu
PURCHASING CONTACT:	Julia Morrison
E-MAIL:	Julia-Morrison@redwoods.edu

THIS RFP IS A SOLICITATION FOR PROPOSALS AND NOT A CONTRACT OR OFFER TO CONTRACT.

REDWOODS COMMUNITY COLLEGE DISTRICT

Request for Proposals

Geotechnical Engineer of Record Services

SECTION A - GENERAL INFORMATION

1. INTRODUCTION

College of the Redwoods (the "College") is a public community college located on the north coast of California. Serving one of the largest geographical areas in California, the district includes Del Norte and Humboldt counties, and parts of western Trinity County. Home to nearly 280,000 residents, the district covers almost 10,000 square miles. The College has an educational center in Crescent City and an Instructional Site in the Hoopa Valley and downtown Eureka to better serve the needs of the region.

The District was formed on January 14, 1964, by an election of Humboldt County voters. The educational goal of the District is to provide accessible and relevant transfer, career and adult education of the highest quality. Approximately 6,000 students attend CR each year, resulting in about 3,000 full-time equivalent students. CR employs approximately 80 full-time and 250 part-time faculty, while the administrative, managerial and classified staff include roughly 230 employees.

Degree and certificate programs are offered in liberal arts education, career technical fields, and health occupation and first responder fields. The District developed seventeen degrees for transfer to guarantee smooth transfer from CR to the CSU system. Cal Poly Humboldt, which resides within CR's service area, is by far the main 4-year institution to which CR students transfer. The most popular degrees received are liberal arts associate's degrees in *Arts & Humanities* and *Behavioral and Social Sciences.*

The District also has specialized, nationally or regionally accredited programs in Automotive Technology, Drafting and 3D Modeling, Construction Technology, CAD/CAM Manufacturing, and its Law Enforcement Academy. CR has award-winning paramedic and police academy programs. CR also offers non-credit courses and certificates and workforce and community education. In 2015, CR began to offer instruction to prisoners in the maximum-security Pelican Bay State Prison in Crescent City. CR also offers more than thirty percent of all instruction in an online modality.

CR students are facing the same serious challenges as college students throughout California. The District has recently taken significant actions to address students' food, housing, and mental health challenges. A food pantry and resource center was established to provide students with food, clothing, and other essentials. A room and board scholarship was established so that students facing housing challenges could reside in the residence halls. A mental health professional was contracted from outside the College to provide

counseling to students in crisis. These efforts are helping, but the community strives for more support to help students meet basic needs so that they can succeed academically.

The current College physical environment consists of 3 main locations with additional leased facilities for off-site instruction. The main Eureka campus is 268 acres with 27 buildings that total 497,765 of GSF. The Del Norte campus in Crescent City is 35 acres with 8 buildings that total 30,598 GSF. Shively Farm is a 38 acre site approx. 20 miles from the main campus and is a working farm with a residence and several out buildings.

Around 2007, the District received information that many of its present buildings posed hazards to students because of their location atop fault lines. With financial assistance from the state, and in response to geological reports, the District opened its new Administration Building and Theater in 2012, Humanities and Science Buildings in 2013 and a new Creative Arts Complex was opened in Fall 2023. The new Physical Education Replace Existing Project construction phase should start mid 2024.

2. PROJECT DESCRIPTION – Physical Education Replace Existing

This project proposes to construct a new 39,246 GSF Physical Education Gymnasium and Field House to replace the existing buildings that sits in an area of the campus identified as seismically insecure. The new buildings are designed to accommodate the needs of the College now and in support of the Education Master Plan in the future. The complex is to be constructed in an area that has been cleared by the California Geological Survey and the construction documents have been approved by the Division of the State Architect. The new buildings will be completed and occupied prior to demolition of the existing building, which will be part of this project.

The estimated total cost of construction is $65.602 million.

3. REQUEST FOR PROPOSALS ANTICIPATED SCHEDULE

The following schedule has been established by the College for selection of a Geotechnical firm:

May 22nd, 2024	Announcement of the request for qualifications/proposal and transmittal of the RFP to potential firms;
June 11th, 2024	Final questions due;
June 13th, 2024	Responses to questions;
June 18th, 2024 @ 2:00 PM P.S.T.	RFP Responses due;
June 19th, 2024	Evaluation of all proposals;

July 2nd, 2024	Recommendation of the selected firm and approval by the College's Board of Trustees;
July 3rd, 2024	Notification of RFP award; and
TBD	Contract Negotiations and Notice to Proceed.

This timeline may be revised as needed. Evaluations, selection and recommendation will be based on the firm's response, demonstrated competence, experience and overall qualifications as presented in the statement of qualifications.

4. SCOPE OF SERVICES

The scope of services required by this RFP includes the following services:

The selected firm will be the Geotechnical Engineer of Record for the PE Replacement Project. Provide Geotechnical Support including testing, reports, support, and engineering analyses based on field observations of the final subgrade and suitability of subgrade soils for constructability of the planned improvements for the PE & Fieldhouse buildings and retaining wall adjacent to the Fieldhouse structure. Engineering Oversight, Meetings, and Project Management regarding geotechnical topics to the design team, as needed.

Geotechnical services to include review of test results and recommendations for the below items, but not limited to:

1. Follow GE requirements of Appendix A: DSA Form 103-19 (attached), and associated project drawings, available upon request. (LOR & SI by Others, contracted separately by the College)
2. The scope of such services could include: Geotechnical support and oversight of the work and the testing labs, and construction observation and reporting (see above Scope).

Such services may include: reviewing background information, conducting field studies, coordination with architectural firms or design teams, and attendance of various meetings.

3. Review available information in the Geotechnical Reports:
    a. Geotechnical and Geologic Hazard Evaluation Report – New Gymnasium, College of the Redwoods, May 1, 2020, LACO
    b. Geotechnical and Geologic Hazard Evaluation Report – New Fieldhouse Building, College of the Redwoods, December 30, 2020, LACO

c. Addendum Number 2 to Geotechnical and Geologic Hazards Evaluation Report – New Gymnasium and Fieldhouse Building, November 16, 2021, LACO

d. Addendum to Note 48 compliant Geotechnical and Geologic Hazard Evaluation Report, New fieldhouse Building Retaining Walls, December 1, 2022, LACO

A. CONSULTANT'S TEAM EXPERIENCE:

Minimum 5 years' experience in providing Geotechnical services.

B. CONSULTANT IS EXPECTED TO PERFORM THE FOLLOWING:

1. Supervision of all work by a registered geotechnical engineer and/or a registered engineering geologist.
2. Familiarity and experience with relevant Code and CDE requirements pertaining to the assessment and remediation of geological, soils and seismic conditions that are relevant to school sites in California.
3. Familiarity and experience with DSA Testing and Inspection Requirements and the use of approved DSA Material Testing Laboratories.
4. Inspection and preparation of surfaces to receive compacted fill in accordance with all building department and CDE requirements;
5. Supervision and certification of the placement and compaction of fill, including all required review of tests and reports.
6. Geological, seismic, and geotechnical testing and experience and expertise respecting all of the foregoing and; preparation of reports respecting all of the foregoing, which reports shall include foundation and underground steel protection recommendations as appropriate.
7. At a minimum, be certified with the California Board of Professional Engineers and Land Surveyors (CBPELS). Certification Number and any other license/certifications relating to this RFQ.
8. Work as a liaison with Regulatory Agencies. Liaison with regulatory agencies is required in order to provide guidance to the District and others as deemed necessary.
9. Perform Regulatory Agency Requirements. Tasks may include regulatory agency required surveillance.
10. Coordinate and work with District staff and consultants.
11. Attend meetings and Other General Duties: Consultant must attend various pre-construction meetings, provide project oversight and/or project closeout assistance as necessary, and be available or on-site throughout the duration of the project, as required.
12. Consult with the Architect and consulting engineers regarding recommendations, including interpretation and clarification where requested.

13. Provide edit of the Architect's earthwork, rock removal and trenching specification masters to conform to the recommendations of the report.
14. Provide review of final specifications and drawings and furnish the Architect with a letter stating the contract documents conform to the recommendations of the Geotechnical Report.
15. Respond to questions and/or corrections required by review agencies and design engineers (i.e. DSA, California Geologic Survey – Note 48, structural engineer, etc.), issue addenda as necessary to complete design and secure necessary approvals.
16. The CONSULTANT shall be responsible for assisting the DISTRICT in gathering information and processing forms required by applicable governing authorities, such as building departments, and DSA, in a timely manner and assist with the proper PROJECT close-out, if necessary.
17. If work requested by the Architect pursuant to this Article involves additional charge, prior written approval of the DISTRICT shall be obtained before proceeding.
18. CONSULTANT shall file all Interim Verified Reports, a Verified Report and any other documents that are necessary for the PROJECT's timely inspection and close-out as required by the applicable governmental agencies and/or authorities having jurisdiction over the PROJECT including, but not limited to, the Division of the State Architect ("DSA"). The CONSULTANT shall observe the construction of the PROJECT during the course of construction, at no additional cost to the DISTRICT, to maintain such personal contact with the PROJECT as is necessary to assure the CONSULTANT that the Contractor's Work is being completed, in every material respect, in compliance with the DSA approved Construction Documents.
19. The CONSULANT shall meet with the Architect, Project Inspector, DISTRICT, Contractor, Laboratory of Record and Special Inspectors as needed throughout the completion of the PROJECT to verify, acknowledge and coordinate the testing and special inspection program required by the DSA approved Construction Documents.
20. The CONSULTANT shall prepare Interim Verified Reports (Form DSA 293) and submit such Interim Verified Reports to the DSA, the Project Inspector and the DISTRICT prior to the Project Inspector's approval and sign off of any of the following sections of the Project Inspection Cards issued by the DSA as applicable:
    i. Initial Site Work
    ii. Foundation
    iii. Vertical Framing
    iv. Horizontal Framing
    v. Appurtenances
    vi. Non-Building Site Structures
    vii. Finish Site Work
    viii. Other Work
    ix. Final

21. Upon the substantial completion of the PROJECT, the CONSULTANT shall prepare and submit to the DSA, Project Inspector and the DISTRICT written Verified Report, on Form DSA 293, pursuant to Title 24 of the California Code of Regulations. The CONSULTANT shall also submit a signed Verified Report to the DSA, Project Inspector and the DISTRICT upon any of the following events:
    i. Work on the PROJECT is suspended for a period of more than one month.
    ii. The services of the CONSULTANT are terminated for any reason prior to the completion
    iii. of the PROJECT.
    iv. DSA requests a Verified Report.

C. GENERAL REQUIREMENTS:

1. All work shall be performed by qualified personnel under the supervision of a Registered Professional Engineer. All reports shall bear the seal of a Registered Professional Engineer.
2. The CONSULTANT shall make a written record of all meetings, conferences, discussions and decisions made between or among the CONSULTANT and any other party related to the PROJECT, including the DISTRICT, Architect or Contractor, during all phases of the PROJECT and concerning any material condition in the requirements, scope, performance and/or sequence of the work. The CONSULTANT shall provide a copy of such record to the DISTRICT.
3. During the term of this AGREEMENT, the CONSULTANT shall coordinate its services with the DISTRICT, Architect, Project Inspector, Contractor, and any other parties necessary to ensure that the requirements applicable to the CONSULTANT related to the DSA's Project Inspection Card (Form 152) procedure and any subsequent revisions or updates there to issued or required by the DSA, or any other/alternate processes are being met in compliance with the DSA's requirements. The CONSULTANT shall take all action necessary as to not delay progress in meeting any of the DSA's requirements. The CONSULTANT shall meet any applicable requirements set forth in the DSA's Construction Oversight Process Procedure (PR 13-01) and any subsequent revisions or updates thereto issued or required by the DSA. Any references to the DSA requirements, DSA forms, documents, manuals applicable to the PROJECT shall be deemed to include and incorporate any revisions or updates thereto.

Project Location: Redwoods Community College District
7351 Tompkins Hill Rd
Eureka, CA 95501

D. Fee Schedule (Hourly Rates)

1. Fee Schedules submitted in response to any future contract(s) for Geotechnical Engineer of Record services will generally include the position description(s), the hours associated with the particular position, and a detailed staffing plan.

SECTION B – PROPOSAL INSTRUCTIONS

INSTRUCTIONS FOR SUBMITTING PROPOSALS

GENERAL: The College intends to select the firm that best meets the College's needs to perform the Geotechnical Engineer of Record services as described in this Request for Proposal.

1. RECEIPT OF PROPOSALS: All proposals shall be delivered to **Julia Morrison, Vice President, Administrative Services** of the College by the time and date and in the manner specified in this Request for Proposals.

2. ACCEPTANCE OR REJECTION OF PROPOSALS: The Board of Trustees will accept the proposals or combination of proposals for the projects. The Board of Trustees reserves the right to reject any and all proposals, or any or all items of any proposal.

3. PROPOSAL FORM REQUIREMENTS: All proposals must be typed. No corrections can be made after the time for submitting the proposals.

4. ASSIGNMENT PROHIBITED: No contract awarded under this proposal shall be assigned except with the written approval of the Board of Trustees. Any attempted assignment in violation of the provision shall be voided at the option of the Board.

5. FEDERAL OR STATE REGULATIONS: The Consultant's proposal and any contract entered into are subject to all applicable statutes of the United States and of the State of California and all applicable regulations and orders of the Federal and State governments now in effect or which shall be in effect during the period of such contract.

6. NON-DISCRIMINATION: The Consultant shall not discriminate against any employee or applicant for employment because of sex, race, creed, color, national origin, religion, age or non-job related handicap or disability.

7. INSURANCE: The Consultant shall provide evidence of adequate liability and professional liability insurance, as determined by the College.

PROPOSAL REQUIREMENTS: All materials submitted to the College in response to this Request for Proposal will remain property of the College. Your firm's Proposal should include the following information:

1. COVER LETTER/LETTER OF INTEREST (5 points)

   Maximum of two (2) pages. Must include name of firm, address, telephone and fax numbers, and name of Principal to contact. The letter must be signed by a representative of the firm with authorization to bind the firm by contract.

2. DESCRIPTION OF FIRM AND KEY SUB-CONSULTANT FIRMS (IF APPLICABLE) (10 points)

   Consultant Firms
   - History, number of years in business in California, staff size
   - Location of office which will perform the work
   - Size of staff, number of licensed professionals in the office who will perform the work.

   Sub-Consultant Firms
   - Describe the relationship of your firm and any sub-consultants.
   - For each sub-consultant firm, provide the following information:
     - Description of the services the firm will be providing
     - History, number of years in business, staff size
     - Location of office which will perform the work
     - Size of staff, number of professionals in the office which will perform the work
     - Description of extent and duration of prior working relationship with your firm (number and type of projects, number of years)
     - Fees to be charged.

3. RELEVANT EXPERIENCE (30 points)

   List relevant project inspection experience and include:
   - Project name and location
   - Year completed or current status
   - Client, contact person, and phone number
   - Project cost

4. COMPANY TRACK RECORD (45 points)

   - Has your firm ever been terminated or dismissed by a client or replaced by another firm during any educational and/or related project? If so, explain in detail.
   - Describe by example your experience in meeting schedules and timelines. Describe an approach you have taken to expedite a schedule.
   - Provide a statement of your firm's financial stability.
   - Does your firm have any current or pending litigation? If so, please describe.
   - Has your firm ever defaulted on a contract within the past five (5) years or declared bankruptcy, or been placed in receivership within the past five (5) years?
   - Name of the prime professional license holder exactly as on file with the requisite licensing authorities.

5. DESCRIPTION OF FEE STRUCTURE (10 points)

   Describe your typical fee structure for a project of this type and scope. The specific fee for the project will be negotiated with the firm ranked highest in the selection process. If a reasonable fee cannot be agreed upon, the District may elect to consider the next

highest ranking firm.

SECTION C – PROPOSAL EVALUATION AND SELECTION

EVALUATION AND SELECTION PROCESS

The College's selection committee will perform the selection process in three phases:

1. **Qualification Phase:** Receive and review Proposals and selection of a "short list" of finalists.
2. **Interview Phase**: Interview the finalists, check backgrounds and select the preferred Geotechnical firm(s) for recommendation to the College Board of Trustees.
3. **Approval Phase**: The College Board of Trustees will vote to approve a Geotechnical firm(s).

The following criteria, in no particular order, will be used in evaluating and selecting the prospective firm(s):

A. Clarity of submittal and responsiveness to RFP.

B. Project Team – Qualifications, education and relevant experience of the key team members.

C. Project Management – Project planning, coordination, scheduling, cost control, capabilities and techniques.

D. Quality Control – Quality of previous projects and record of budget and schedule performance.

E. Project Approach – The techniques, procedures and tools used in other similar projects applicable to this project.

F. Any other criteria deemed relevant to the selection.

EVALUATION CRITERIA

The College will evaluate each firm's proposals, background, and experience to determine if, in its sole and absolute discretion, a firm is adequately qualified to deliver the Project.
The evaluation criteria to be used in the evaluation process are:

1. Cover Letter/Letter of Interest	5 points
2. Description of Firm and Key Principals	10 points
3. Relevant Experience	30 points
5. Company Track Record	45 points
6. Description of Fee Structure	10 points
Total Possible Points	100 points

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2019 CBC

Application Number:	**School Name:**	**School District:**
01-119705	College of the Redwoods	Redwoods Community College District
DSA File Number:	**Increment Number:**	**Date Created:**
12-C1		2023-12-20 10:07:59

2019 CBC

IMPORTANT: This form is only a summary list of structural tests and some of the special inspections required for the project. Generally, the structural tests and special inspections noted on this form are those that will be performed by the Geotechnical Engineer of Record, Laboratory of Record, or Special Inspector. The actual complete test and inspection program must be performed as detailed on the DSA approved documents. The appendix at the bottom of this form identifies work NOT subject to DSA requirements for special inspection or structural testing. The project inspector is responsible for providing inspection of all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-load wood diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 2, Chapter 17A (2019 CBC).

****NOTE:** Undefined section and table references found in this document are from the CBC, or California Building Code.

KEY TO COLUMNS

1. TYPE	2. PERFORMED BY
Continuous – Indicates that a continuous special inspection is required **Periodic** – Indicates that a periodic special inspection is required **Test** – Indicates that a test is required	**GE** – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative. **LOR** – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335. **PI –** Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA. **SI** – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

Application Number:	**School Name:**	**School District:**
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Geotechnical Reports: Project has a geotechnical report, or CDs indicate soils special inspection is required by GE

	S1. GENERAL:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify that: • Site has been prepared properly prior to placement of controlled fill and/or excavations for foundations. • Foundation excavations are extended to proper depth and have reached proper material. • Materials below footings are adequate to achieve the design bearing capacity.	**Periodic**	**GE***	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)

	S2. SOIL COMPACTION AND FILL:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Perform classification and testing of fill materials.	**Test**	**LOR***	* Under the supervision of the geotechnical engineer.
☑	**b.** Verify use of proper materials, densities and inspect lift thicknesses, placement and compaction during placement of fill.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative. (Refer to specific items identified in the Appendix for exemptions where soils SI and testing may be conducted under the supervision of a geotechnical engineer or LOR's engineering manager. In such cases, the LOR's form DSA 291 shall satisfy the soil SI and test reporting requirements for the exempt items.)
☑	**c.** Compaction testing.	**Test**	**LOR***	* Under the supervision of the geotechnical engineer. (Refer to specific items identified in the Appendix for exemptions where soils testing may be conducted under the supervision of a geotechnical engineer or LOR's engineering manager. In such cases, the LOR's form DSA 291 shall satisfy the soil test reporting requirements for the exempt items.)

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

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	S3. DRIVEN DEEP FOUNDATIONS (PILES):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Verify pile materials, sizes and lengths comply with the requirements.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative.
☐	**b.** Determine capacities of test piles and conduct additional load tests as required.	**Test**	**LOR***	* Under the supervision of the geotechnical engineer.
☐	**c.** Inspect driving operations and maintain complete and accurate records for each pile.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative.
☐	**d.** Verify locations of piles and their plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and record any pile damage.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative.
☐	**e.** Steel piles.	Provide tests and inspections per STEEL section below.		
☐	**f.** Concrete piles and concrete filled piles.	Provide tests and inspections per CONCRETE section below.		
☐	**g.** For specialty piles, perform additional inspections as determined by the registered design professional in responsible charge.	*	*	* As defined on drawings or specifications.

	S4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Note**
☐	**a.** Inspect drilling operations and maintain complete and accurate records for each pier.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)

Application Number: 01-119705	**School Name:** College of the Redwoods	**School District:** Redwoods Community College District
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	Test or Special Inspection	Type	Performed By	Code References and Note
☐	**b.** Verify pier locations, diameters, plumbness, bell diameters (if applicable), lengths and embedment into bedrock (if applicable); record concrete or grout volumes.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
☐	**c.** Confirm adequate end strata bearing capacity.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
☐	**d.** Concrete piers.	Provide tests and inspections per CONCRETE section below.		

	S5. RETAINING WALLS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Placement, compaction and inspection of backfill.	**Continuous**	**GE***	**1705A.6.1.** * By geotechnical engineer or his or her qualified representative. (See S2 above).
☑	**b.** Placement of soil reinforcement and/or drainage devices.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative.
☐	**c.** Segmental retaining walls; inspect placement of units, dowels, connectors, etc.	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative. See DSA IR 16-3.
☐	**d.** Concrete retaining walls.	Provide tests and inspections per CONCRETE section below.		
☑	**e.** Masonry retaining walls.	Provide tests and inspections per MASONRY section below.		

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2019 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

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	S6. OTHER SOILS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Soil Improvements	**Test**	**GE***	Submit a comprehensive report documenting final soil improvements constructed, construction observation and the results of the confirmation testing and analysis to CGS for final acceptance. * By geotechnical engineer or his or her qualified representative.
☐	**b.** Inspection of Soil Improvements	**Continuous**	**GE***	* By geotechnical engineer or his or her qualified representative.
☑	**c.** Installation of Cast in Drilled Hole soldier piles.	**Continuous**	**GE**	By geotechnical engineer or their qualified representative. Reference specifications 31 66 20 and CBC 1812A.
☑	**d.** Installation of cast in place concrete whalers and ground anchors at soldier pile walls, including performance and proof test of anchors.	**Continuous**	**GE**	By geotechnical engineer or their qualified representative. Reference specifications 31 66 20 and CBC 1812A.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2019 CBC

Table 1705A.3; ACI 318-14 Sections 26.12 & 26.13

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	C1. CAST-IN-PLACE CONCRETE			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify use of required design mix.	**Periodic**	**SI**	**Table 1705A.3 Item 5, 1910A.1.**
☑	**b.** Identifiy, sample, and test reinforcing steel.	**Test**	**LOR**	**1910A.2;** ACI 318-14 Section 26.6.1.2; DSA IR 17-10. (See Appendix for exemptions.)
☑	**c.** During concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	**Test**	**LOR**	**Table 1705A.3 Item 6**; ACI 318-14 Sections 26.5 & 26.12.
☑	**d.** Test concrete (f'_c).	**Test**	**LOR**	**1905A.1.15;** ACI 318-14 Section 26.12.
☑	**e.** Batch plant inspection: **Periodic**	**See Notes**	**SI**	Default of **'Continuous'** per **1705A.3.3**. If approved by DSA, batch plant inspection may be reduced to **'Periodic'** subject to requirements in Section **1705A.3.3.1,** or eliminated per **1705A.3.3.2.** See IR 17-13. (See Appendix for exemptions.)
☑	**f.** Welding of reinforcing steel.	Provide special inspection per STEEL, Category S/A4(d) & (e) and/or S/A5(g) & (h) below.		

	C2. PRESTRESSED / POST-TENSIONED CONCRETE (IN ADDITION TO SECTION C1):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Sample and test prestressing tendons and anchorages.	**Test**	**LOR**	**1705A.3.4, 1910A.3**
☐	**b.** Inspect placement of prestressing tendons.	**Periodic**	**SI**	**1705A.3.4, Table 1705A.3 Items 1 & 9.**

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	**c.** Verify in-situ concrete strength prior to stressing of post-tensioning tendons.	**Periodic**	**SI**	**Table 1705A.3 Item 11.** Special inspector to verify specified concrete strength test prior to stressing.
☐	**d.** Inspect application of post-tensioning or prestressing forces and grouting of bonded prestressing tendons.	**Continuous**	**SI**	**1705A.3.4, Table 1705A.3 Item 9;** ACI 318-14 Section 26.13

	C3. PRECAST CONCRETE (IN ADDITION TO SECTION C1):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Inspect fabrication of precast concrete members.	**Continuous**	**SI**	ACI 318-14 Section 26.13.
☐	**b.** Inspect erection of precast concrete members.	**Periodic**	**SI***	**Table 1705A.3 Item 10.** * May be performed by PI when specifically approved by DSA.

	C4. SHOTCRETE (IN ADDITION TO SECTION C1):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Inspect shotcrete placement for proper application techniques.	**Continuous**	**SI**	**1705A.19, Table 1705A.3 Item 7, 1908A.6, 1908A.7, 1908A.8, 1908A.9, 1908A.11, 1908A.12.** See ACI 506.2-13 Section 3.4, ACI 506R-16.
☑	**b.** Sample and test shotcrete (f'_c).	**Test**	**LOR**	**1908A.5, 1908A.10.**

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Table 1705A.3; ACI 318-14 Sections 26.12 & 26.13

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	C5. POST-INSTALLED ANCHORS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Inspect installation of post-installed anchors	**See Notes**	**SI***	**1617A.1.19, Table 1705A.3 Item 4a (Continuous) & 4b (Periodic), 1705A.3.8** (See Appendix for exemptions). ACI 318-14 Sections 17.8 & 26.13. * May be performed by the project inspector when specifically approved by DSA.
☑	**b.** Test post-installed anchors.	**Test**	**LOR**	**1910A.5.** (See Appendix for exemptions.)

	C6. OTHER CONCRETE:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.**			

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1705A.4; TMS 602-16, Tables 3 and 4.

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	M1. STRUCTURAL MASONRY: **(f'm = 2000 psi)**			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Mill certificate indicates compliance with requirements for reinforcement, anchors, ties, fasteners and metal accessories. See item C1(b) for identification, sampling and testing of reinforcing steel.	**Periodic**	**SI***	**2103A.4**; TMS 602-13 Article 1.5B.2 & 2.4. * To be performed by qualified LOR representative. Applicable testing by LOR. See IR 17-10.16 for unidentified reinforcing steel.
☑	**b.** Producer's certificate of compliance for masonry units, mortar and grout materials.	**Test**	**LOR**	**1705A.4, 2103A.2.1, 2103A.3, 2103A.5;** TMS 602-16 Articles 1.5B.2 2.1, 2.2, 2.6A and 2.6B, and Table 6 footnote 3.
☑	**c.** Test masonry (f'_m).	**Test**	**LOR**	**1705A.4. For Unit Strength: 2105A.3** (2114.6.1+); TMS 602-16 Articles 1.4B.2 ,1.5B.1 & 1.5B.2. **For Prism (required when f'_m > 2000 psi):2105A.2;** TMS 602-16 Articles 1.4B.3, 1.4B.4, 1.5B.1 & 1.5B.2.
☑	**d.** Verify proportions or properties of site-prepared, premixed or preblended mortar.	**Periodic**	**SI**	TMS 602-16, Table 3 Item 5, Table 4 Item 1a. DSA PR 20-01.
☑	**e.** Verify proportions or properties of site-prepared, premixed or preblended grout.	**Periodic**	**SI**	TMS 602-16, Table 3 Item 5, Table 4 Item 2d.
☐	**f.** Batch plant inspection:	**See Notes**	**SI**	Default of **'Continuous'** per **1705A.3.3**. If approved by DSA, batch plant inspection may be reduced to **'Periodic'** subject to requirements in Section **1705A.3.3.1,** or eliminated per **1705A.3.3.2.** See IR 17-13. (See Appendix for exemptions.)
☑	**g.** Test core-drilled samples.	**Test**	**LOR**	**2105A.4**. (See Appendix for exemptions.)
☐	**h.** Inspect preparation of prisms.	**Continuous**	**SI**	TMS 602-16 Articles 1.4.B.3 & 1.4.B.4 & Table 4 Item 4.
☑	**i.** Verify size, location and condition of all dowels, construction supporting masonry, etc.	**Periodic**	**SI**	
☑	**j.** Verify size, grade and type of reinforcement, connectors, and anchor bolts. Verify size and location of structural members.	**Periodic**	**SI**	TMS 602-16 Table 4, Items 1c & 3c.

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1705A.4; TMS 602-16, Tables 3 and 4.

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	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	**k.** Inspect placement of reinforcement, anchor bolts, and connectors.	**Continuous**	**SI**	TMS 602-16 Table 4 Item 2c.
☑	l. Placement, consolidation, and reconsolidation of grout.	**Continuous**	**SI**	TMS 602-16 Table 4 Item 3h.
☑	**m.** Inspect placement of masonry units and construction of mortar joints.	**Periodic**	**SI**	TMS 602-16 Table 4 Item 3b.
☑	**n.** Verify preparation, construction and protection of masonry during cold weather (temperature below 40° F) or hot weather (temperature above 90° F).	**Periodic**	**SI***	TMS 602-16 Table 4 Item 3f. * May be performed by the project inspector when specifically approved by DSA.
☑	**o.** Inspect type, size and location of anchors and all other items to be embedded in masonry including other details of anchorage of masonry to structural members, frames and other construction.	**Continuous**	**SI**	TMS 602-16 Table 4 Item 3d.
☑	**p.** Inspect grout space, including mortar protrusions, prior to placement of grout.	**Continuous**	**SI**	TMS 602-16 Table 4 Item 2a.
☐	**q.** Welding of reinforcing steel.	TMS 602-16 Table 4 Item 3e. Provide special inspection per STEEL, Category S/A4(d) & (e) and/or S/A5(g) & (h) below.		

	Test or Special Inspection	Type	Performed By	Code References and Notes
	M2. VENEER OR GLASS BLOCK PARTITIONS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Verify proportions of siteprepared mortar and grout and/or verify certification of premixed mortar.	**Periodic**	**SI**	TMS 602-16 Table 3 Item 5 and Table 4 Items 1a & 2d.
☐	**b.** Inspect placement of units and construction of mortar joints.	**Periodic**	**SI**	TMS 602-16 Table 4 Item 3b.
☐	**c.** Inspect placement of wire, connectors and anchors	**Periodic**	**SI**	TMS 602-16 Table 4 Item 2c.
☐	**d.** Inspect type, size and location of anchors and all other items to be embedded in masonry veneer including details of anchorage of masonry to veneer backing, frames and other construction.	**Periodic**	**SI**	TMS 602-16 Table 4 Item 3d.
☐	**e.** Verify preparation, construction and protection of masonry during cold weather (temperature below 40^{o} F) or hot weather (above 90^{o} F).	**Periodic**	**SI***	TMS 602-16 Table 4 Item 3f. * May be performed by the project inspector when specifically approved by DSA.
☐	**f.** Test adhered veneer bond strength.	**Test**	**LOR**	**1410.2.1**; TMS 402 Article 12.3.2.4. **(Field constructed mock-up laboratory tested in accordance with ASTM C482).**

	M3. POST-INSTALLED ANCHORS IN MASONRY:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Inspect installation of postinstalled anchors	**See Notes**	**SI***	**1617A.1.19, 1705A.4, Table 1705A.3 Item 4a (Continuous) & 4b (Periodic);** ACI 318-14 Sections 17.8 & 26.13. * May be performed by the project inspector when specifically approved by DSA. (See Appendix for exemptions.)

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1705A.4; TMS 602-16, Tables 3 and 4.

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☐	**b.** Test post-installed anchors.	**Test**	**LOR**	**1705A.4, 1910A.5.** (See Appendix for exemptions.)

	M4. OTHER MASONRY:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.**			

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1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

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	S/A1. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	**Periodic**	*	**Table 1705A.2.1 Item 3a–3c.** 2202A.1**;** AISI S100-16 Section A3.1 & A3.2, AISI S240-15 Section A3 & A5, AISI S220-15 Sections A4 & A6. * By special inspector or qualified technician when performed off-site.
☑	**b.** Test unidentified materials	**Test**	**LOR**	**2202A.1.**
☑	**c.** Examine seam welds of HSS shapes	**Periodic**	**SI**	DSA IR 17-3.
☑	**d.** Verify and document steel fabrication per DSA-approved construction documents.	**Periodic**	**SI**	Not applicable to cold-formed steel light-frame construction, except for trusses (**1705A.2.4**).
☐	**e.** Buckling restrained braces.	**Test**	**LOR**	Testing and special inspections in accordance with IR 22-4.

	S/A2. HIGH-STRENGTH BOLTS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify identification markings and manufacturer's certificates of compliance conform to ASTM standards specified in the DSA-approved documents.	**Periodic**	**SI**	**Table 1705A.2.1 Items 1a & 1b, 2202A.1;** AISC 360-16 Section A3.3, J3.1, and N3.2; RCSC 2014 Section 1.5 & 2.1; DSA IR 17-8 & DSA IR 17-9.
☑	**b.** Test high-strength bolts, nuts and washers.	**Test**	**LOR**	**Table 1705A.2.1 Item 1c, 2213A.1**; RCSC 2014 Section 7.2; DSA IR 17-8.
☑	**c.** Bearing-type ("snug tight") connections.	**Periodic**	**SI**	**Table 1705A.2.1 Item 2a, 1705A.2.6, 2204A.2**; AISC 360-16 J3.1, J3.2, M2.5 & N5.6; RCSC 2014 Section 9.1; DSA IR 17-9.
☑	**d.** Pretensioned and slip-critical connections.	*	**SI**	**Table 1705A.2.1 Items 2b & 2c, 1705A.2.6, 2204A.2;** AISC 360-16 J3.1, J3.2, M2.5 & N5.6; RCSC 2014 Sections 9.2 & 9.3; DSA IR 17-9. * "Continuous" or "Periodic" depends on the tightening method used.

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1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

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	S/A3. WELDING:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS.	**Periodic**	**SI**	**1705A.2.5, Table 1705A.2.1 Items 4 & 5**; AWS D1.1 and AWS D1.8 for structural steel; AWS D1.2 for Aluminum; AWS D1.3 for cold-formed steel; AWS D1.4 for reinforcing steel; DSA IR 17-3.
☑	**b.** Verify weld filler material manufacturer's certificate of compliance.	**Periodic**	**SI**	DSA IR 17-3.
☑	**c.** Verify WPS, welder qualifications and equipment.	**Periodic**	**SI**	DSA IR 17-3.

	S/A4. SHOP WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	**Continuous**	**SI**	**Table 1705A.2.1 Items 5a.1–4;** AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	**b.** Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds.	**Periodic**	**SI**	**1705A.2.2, Table 1705A.2.1 Items 5a.5 & 5a.6;** AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	**c.** Inspect welding of stairs and railing systems.	**Periodic**	**SI**	**1705A.2.1**; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3.
☐	**d.** Verification of reinforcing steel weldability other than ASTM A706.	**Periodic**	**SI**	**1705A.3.1**; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
☑	**e.** Inspect welding of reinforcing steel.	**Continuous**	**SI**	**Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2, 1903A.8;** AWS D1.4; DSA IR 17-3.

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1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-16; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

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	Test or Special Inspection	Type	Performed By	Code References and Notes
	S/A5. FIELD WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	**Continuous**	**SI**	**Table 1705A.2.1 Items 5a.1–4;** AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
☑	**b.** Inspect single-pass fillet welds ≤ 5/16”.	**Periodic**	**SI**	**Table 1705A.2.1 Item 5a.5;** AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
☑	**c.** Inspect end-welded studs (ASTM A-108) installation (including bend test).	**Periodic**	**SI**	**2213A.2**; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1; DSA IR 17-3.
☑	**d.** Inspect floor and roof deck welds.	**Periodic**	**SI**	**1705A.2.2, Table 1705A.2.1 Item 5a.6;** AISC 360-16 (AISC 341-16 as applicable); AWS D1.3; DSA IR 17-3.
☑	**e.** Inspect welding of structural cold-formed steel.	**Periodic**	**SI***	**1705A.2.5; AWS D1.3; DSA IR 17-3.** The quality control provisions of AISI S240-15 Chapter D shall also apply. * May be performed by the project inspector when specifically approved by DSA.
☑	**f.** Inspect welding of stairs and railing systems.	**Periodic**	**SI***	**1705A.2.1;** AISC 360-16 (AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3. * May be performed by the project inspector when specifically approved by DSA.
☑	**g.** Verification of reinforcing steel weldability.	**Periodic**	**SI**	**1705A.3.1**; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
☑	**h.** Inspect welding of reinforcing steel.	**Continuous**	**SI**	**Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2, 1903A.8;** AWS D1.4; DSA IR 17-3.

	Test or Special Inspection	Type	Performed By	Code References and Notes
	S/A6. NONDESTRUCTIVE TESTING:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Ultrasonic	**Test**	**LOR**	**1705A.2.1, 1705A.2.5;** AISC 341-16 J6.2, AISC 360-16 N5.5; ANSI/ASNT CP-189, SNT-TC-1A; AWS D1.1, AWS D1.8; DSA IR 17-2.
☑	**b.** Magnetic Particle	**Test**	**LOR**	**1705A.2.1, 1705A.2.5;** AISC 341-16 J6.2, AISC 360-16 N5.5; ANSI/ASNT CP-189, SNT-TC-1A; AWS D1.1, AWS D1.8; DSA IR 17-2.
☐	**c.**	**Test**	**LOR**	

	Test or Special Inspection	Type	Performed By	Code References and Notes
	S/A7. STEEL JOISTS AND TRUSSES:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Verify size, type and grade for all chord and web members as well as connectors and weld filler material; verify joist profile, dimensions and camber (if applicable); verify all weld locations, lengths and profiles; mark or tag each joist.	**Continuous**	**SI**	**1705A.2.3, Table 1705A.2.3;** AWS D1.1; DSA IR 22-3 for steel joists only. **1705A.2.4;** AWS D1.3 for cold-formed steel trusses.

	Test or Special Inspection	Type	Performed By	Code References and Notes
	S/A8. SPRAY APPLIED FIRE-PROOFING:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.** Examine structural steel surface conditions, inspect application, take samples, measure thickness and verify compliance of all aspects of application with DSA-approved documents.	**Periodic**	**SI**	**1705A.14.**
☐	**b.** Test bond strength.	**Test**	**LOR**	**1705A.14.6.**
☐	**c.** Test density.	**Test**	**LOR**	**1705A.14.5.**

	Test or Special Inspection	Type	Performed By	Code References and Notes
	S/A9. ANCHOR BOLTS AND ANCHOR RODS:			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☑	**a.** Anchor Bolts and Anchor Rods	**Test**	**LOR**	Sample and test anchor bolts and anchor rods not readily identifiable per procedures noted in DSA IR 17-11.
☐	**b.** Threaded rod not used for foundation anchorage.	**Test**	**LOR**	Sample and test threaded rods not readily identifiable per procedures noted in DSA IR 17-11.

	Test or Special Inspection	Type	Performed By	Code References and Notes
	S/A10. Other Steel			
	Test or Special Inspection	**Type**	**Performed By**	**Code References and Notes**
☐	**a.**			

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

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Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests **/** special inspections noted. **Items marked as exempt shall be identified on the approved construction documents**. The project inspector shall verify all construction complies with the approved construction documents.

	SOILS:
☐	1. Deep foundations acting as a cantilever footing designed based on minimum allowable pressures per CBC Table 1806A.2 and having no geotechnical report for the following cases: A) free standing sign or scoreboard, B) cell or antenna towers and poles less than 35'-0" tall (e.g., lighting poles, flag poles, poles supporting open mesh fences, etc.), C) single-story structure with dead load less than 5 psf (e.g., open fabric shade structure), or D) covered walkway structure with an apex height less than 10'-0" above adjacent grade.
☐	2. Shallow foundations, etc. are exempt from special inspections and testing by a Geotechnical Engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.

	CONCRETE/MASONRY:
☐	1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding" in the Appendix below) given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding."
☐	2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.
☐	3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1.16. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.
☐	4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.

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	CONCRETE/MASONRY:
☐	5. Testing of reinforcing bars is not required for items given in CBC Section 1910A.2 subject to the requirements and limitations in that section.

	WELDING:
☐	1. Solid-clad and open-mesh fences, gates with maximum leaf span of 10', and gates with a maximum rolling section of 10' all having an apex height less than 8'-0" above lowest adjacent grade. When located above circulation or occupied space below, these gates/fences are not located within 1.5x gate/fence height (max 8'-0") to the edge of floor or roof.
☐	2. Handrails, guardrails, and modular or relocatable ramps associated with walking surfaces less than 30" above adjacent grade (excluding post base connections per the 'Exception' language in Section 1705A.2.1); fillet welds shall not be ground flush.
☐	3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5/8" thickness and apex less than 20'-0" in height and not over an exit way. Maximum tributary load to a member shall not exceed the equivalent of that occurring from a 10'x10' opening in a 15' tall wall for a header or king stud.
☐	4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 2000# (equipment only) (connections of such frames to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	5. Manufactured components (e.g., Tolco, B-Line, Afcon, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to superstructure elements using welding will require special inspection as noted in selected item(s) for sections S/A3, S/A4 and/or S/A5 located in the Steel/Aluminum category).
☐	7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400# and resulting composite center of mass (including component's center of mass) ≤4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20# for discrete units or <5 plf for distributed systems.

DSA 103-19: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS(SIGNATURE), 2019 CBC

Application Number:	**School Name:**	**School District:**
01-119705	College of the Redwoods	Redwoods Community College District
DSA File Number:	**Increment Number:**	**Date Created:**
12-C1		2023-12-20 10:07:59

Name of Architect or Engineer in general responsible charge:

Jessica Napier, SE

Name of Structural Engineer (When structural design has been delegated):

Signature of Architect or Structural Engineer:  Date: 12/20/2023

Note: To facilitate DSA electronic mark-ups and identification stamp application, DSA recommends against using secured electronic or digital signatures.

DSA STAMP

DSA 103-19: LIST OF REQUIRED VERIFIED REPORTS, CBC 2019

Application Number:	**School Name:**	**School District:**
01-119705	College of the Redwoods	Redwoods Community College District
DSA File Number:	**Increment Number:**	**Date Created:**
12-C1		2023-12-20 10:07:59

1. Soils Testing and Inspection: Geotechnical Verified Report Form DSA 293
2. Structural Testing and Inspection: Laboratory Verified Report Form DSA 291
3. Concrete Batch Plant Inspection: Laboratory Verified Report Form DSA 291
4. Post-installed Anchors: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
5. Masonry Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
6. Shop Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
7. Field Welding Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
8. High-Strength Bolt Installation Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292
9. Steel Joist Fabrication Inspection: Laboratory Verified Report Form DSA 291, or, for independently contracting SI, Special Inspection Verified Report Form DSA 292