



TOWN OF FAIRFAX

STAFF REPORT

April 3, 2019

TO: Mayor and Town Council

FROM: Garrett Toy, Town Manager *GT*

SUBJECT: Approve preliminary design and approve agreement with Fredric C. Divine Architects (FCDA) for structural engineering and architectural services in an amount not to exceed \$37,000 for the design for the Pavilion Seismic Retrofit project

RECOMMENDATION

- 1) Approve preliminary design as shown on the attached plans
- 2) Authorize the Town Manager to execute an agreement with Fredric C. Divine Architects (FCDA) for services in an amount not to exceed \$37,000 to prepare plans and specs for the Pavilion Seismic Retrofit project

BACKGROUND

In 2008, the Town applied for a FEMA Hazard Mitigation grant for the seismic retrofit (i.e., building protection from earthquakes) and ADA improvements (i.e., bathrooms, doors, ramp) for the Fairfax Pavilion building. Around 2010, the Town was awarded a \$450,000 grant with a \$150,000 (25%) local match.

In December 2017, staff provided the Council with a historical time line of the project (see attached staff report from 2017) detailing the delays, actions, and meetings with the following "Agencies" since 2012:

- Federal Emergency Management Agency (FEMA)
- California State Historic Preservation Officer (SHPO)
- California Office of Emergency Services (Cal-OES)
- Federated Indians of Graton Rancheria (FIGR)

At the Council's December meeting, the Council authorized staff to sign the Programmatic Agreement (PA) for the project. All the above parties signed the PA by the end of February 2018. The fully executed PA allows the Town to conduct the necessary soil borings to determine the foundation design for the project. The site is a documented Native American shell mound site (i.e., midden) and the subject of prior studies. The primary concern of the above Agencies is limiting and mitigating the project's ground disturbance to the midden.

DISCUSSION

In May 2018, the Town approved an agreement with FCDA for geotechnical, structural engineering, archaeological, and architectural services for the preliminary foundation design

for the Pavilion Seismic Retrofit project. The scope of work was for the geological testing, update to conceptual structural plans based on the soil testing results, allowance for Tribe monitoring costs, allowance for architectural services needed for the PA, and services required per the Archaeological Treatment Plan (ATP) for the soil borings. Per the Archaeological Treatment Plan, which is an exhibit to the PA, the Town is required to retain a qualified archaeologist to examine and analyze the soil borings on-site.

The soil borings were performed in June 2018 and the draft ATP, which included the monitoring and analysis of the soil samples, was submitted to FEMA in August 2018. FEMA then distributed the ATP to all the Agencies for review and comment. FEMA approved the ATP approved in December 2018. At that time, FEMA authorized us to proceed with the preliminary foundation and ADA improvement designs.

The project is basically as originally envisioned: expanded ADA restrooms, ADA ramp and door improvements, and seismic retrofit improvements. The \$600,000 budget does not allow for any other improvements. Specifically, the ADA improvements are estimated to cost approximately \$320,000 and the seismic improvements, which consist of adding sheer walls at selected locations on the foundation, is estimated to cost \$200,000. The remaining \$80,000 would be for design, engineering, and construction management services. The budget does not provide for a project contingency which would be needed due to the age of the structure, construction history, and other potential unknown issues regarding the plumbing, electrical, and mechanical elements of the building.

The architect would also design for a bid alternate to include additional sheer walls within the building. While the current seismic retrofit design meets life-safety standards, in larger seismic events, the building may not be able to be restored to a habitable condition (i.e., must be demolished). The additional sheer walls would enhance the structure's lateral support and would increase its ability to be renovated after a seismic event.

The budget does not provide for any additional improvements such as replacing the roof or remodeling the kitchen. Staff recommends that such improvements be funded as a separate project so as not to require approval from FEMA and the other involved Agencies which would further complicate the design approval process. The State Prop 68 Parks Per Capita Program should become available soon and that program could be a source of funding for additional improvements.

Per the Programmatic Agreement, the Town must submit to FEMA the preliminary design for the project for review and approval by FEMA and the other Agencies. Before staff submits the design to FEMA for review, we wanted to confirm the Council's understanding of the project.

Attached is the FCDA proposal for construction design and engineering services. This contract does include the services needed to assist us with this initial design submittal to FEMA, which is due in April. FCDA has worked on this project from its inception and its sub-

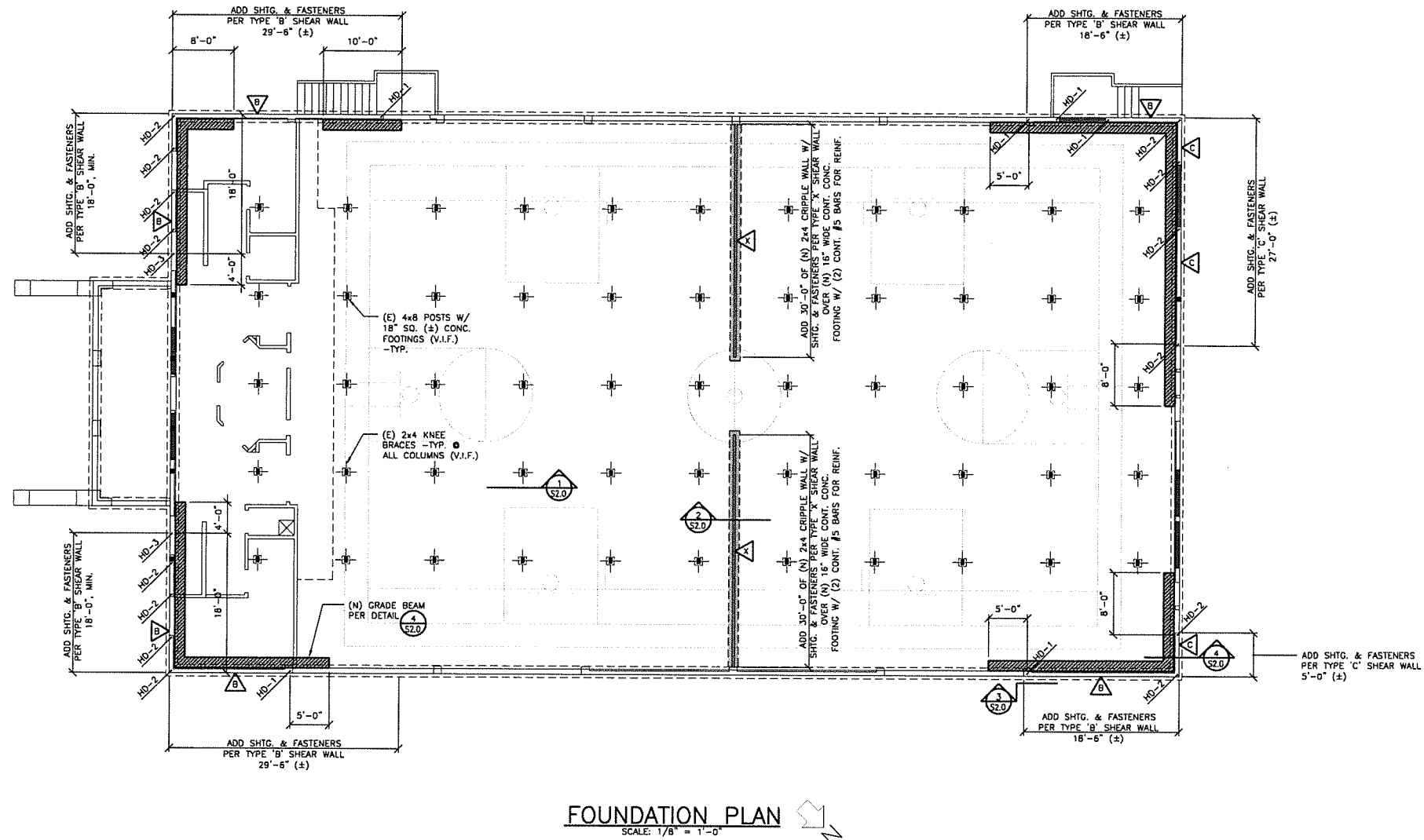
consultant team of Andersson/Woodrow structural design and engineering and Tom Origer & Associates is very familiar with the project. Based on the team's familiarity with the project and Origer's working relationship with FIGR, FEMA has granted us an exception to FEMA consultant selection process. This will allow the Town to forego FEMA's RFP process and contract with FCDA. The proposal is a not-to-exceed amount of \$37,000 plus a 10% administrative fee to manage the archaeologist (Origer) and FIGR agreements. The Town may enter into separate agreements with Origer and FIGR or amend the agreement with FCDA for FCDA to contract with those two entities at a later date. The scope of work includes services through bid award. We will amend the contract for construction management when we get to the construction period.

FISCAL IMPACT

The adopted FY18-19 Capital Improvement Program budget (Pavilion Fund 51-909) allocated \$65,000 for design and engineering services.

ATTACHMENTS

- A. Foundation Plan
- B. Restroom Plan
- C. Proposed Scope of Work (to be issued in a supplemental report)



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

PLAN NOTES:

- DENOTES SHEARWALL REFERENCE SHEAR WALL SCHEDULE
- DENOTES HOLDDOWN

FOUNDATION NOTES: Also see Structural Notes, Sheet S1.0

1. The owner shall hire a Geotechnical Engineer to evaluate the existing soils conditions present prior to proceeding with final retrofit design.
2. The contractor is responsible for verifying all dimensions with the site conditions.
3. All concrete shall attain a minimum compressive strength of 2500 psi at 28 days.
4. Reinforcing Steel: No. 4 and smaller bars - ASTM A615 Grade 40
No. 5 and larger bars - ASTM A615 Grade 60
5. Refer to the Shearwall Schedule for sill anchor bolt diameter and spacing at all shearwalls. At existing footings, use A307 threaded rod anchors with epoxy adhesive (see note 6) to meet the specified diameter and spacing.
6. Where plans specify "Epoxy Adhesive" or "Epoxy Anchor"; use Simpson SET Epoxy-Tie (ICC Report No. ESR-1772) with embedment per plan.

NOTE: Special Inspection is required DURING installation of adhesive anchors at all engineered shearwalls and hold-downs.

SHEARWALL SCHEDULE
2007 CBC TABLE 2306.4.1

Type	Material	Nail Spacing (EN) at Panel Edges	Sill Plytie Anchors		Footnotes	Allowable Shear (pl) Seismic	Wind
			Concrete	Wood			
X	1/2" STRUC 1 PLYWOOD	6d @ 6"	5/8" x 12" @ 40"	SDS 1/4x6 @ 12"	NA	260	364
A	1/2" STRUC 1 PLYWOOD	10d @ 4"	5/8" x 12" @ 32"	SDS 1/4x6 @ 8"	a, b, c, d	510	714
B	1/2" STRUC 1 PLYWOOD	10d @ 3"	5/8" x 12" @ 24"	SDS 1/4x6 @ 6"	a, b, c, d	655	931
C	1/2" STRUC 1 PLYWOOD	10d @ 2"	5/8" x 12" @ 16"	SDS 1/4x6 @ 4"	a, b, c, d	870	1218

General Notes:

1. Studs shall be spaced at 16" o.c. maximum (plywood may be installed either vertically or horizontally)
2. Space nails at 12" o.c. along intermediate framing members
3. All unsupported panel edges shall be blocked and edge-nailed (EN)
4. Use only Common or Galvanized Box nails for all panel and sill plate nailing (Galvanized nails shall be hot-dipped or tumbled)
5. All shear panels are to be continuous between horizontal diaphragms (roof to floor, floor to floor, floor to foundation)
6. Sill anchor bolts shall have a 7" min. embedment into concrete or masonry. There shall be a minimum of two anchor bolts, per piece of sill plate, with one bolt located not more than 12" or less than 4" from each end.
7. Plate washers (3" x 3" x 1/4" thick, minimum) shall be used on all sill anchor bolts in concrete.

Footnotes:

- (a) Studs and/or blocking at adjoining panel edges shall be 3x minimum (4x required at panel types EE and FF) and nails shall be staggered.
- (b) Sill plates shall be 3x minimum (4x sill plate required at panel types EE and FF)
- (c) 2x sill plates at existing walls may be upgraded by adding 2x blocking between studs and nailing with (4) 10d per block.
- (d) SDS 1/4x6: Simpson Strong-Drive wood screws into joist or blocking below. Pre-drilling may be required depending on moisture content of wood. Stagger screws in two rows (1 3/4 inch apart) into 4x joist or blocking where spacing is less than 6-inch on center. SDS screws in 4x sill plates shall be counter-bored (1-inch) to provide 2 3/4" penetration into 4x joist or blocking.
- (e) Portland cement plaster applied over expanded metal or woven wire lath fastened with No. 11 gage x 1-1/2" long galvanized nails with 7/16" dia. head (or No. 16 gage staples with 7/16" legs). Lath shall be furred a minimum of 1/4" and raling shall be to all studs, top & bottom plates, and blocking. Alternate nails may be used if their dimensions are not less than the specified dimensions. Self-furring lath shall not be used.

HOLDDOWN SCHEDULE

MARK	'SIMPSON' HOLDDOWN	ANCHOR SIZE & EMBEDMENT WITH 'SIMPSON' SET EPOXY	DETAIL REFERENCE
HD-1	HD10A	7/8"Ø WITH 13 1/4" EMBED.	3 S2.0
HD-2	HD14A	1"Ø WITH 15" EMBED.	3 S2.0 SIM.
HD-3	PHD2-SDS3	5/8"Ø WITH 9 1/2" EMBED.	3 S2.0 SIM.

ANDERSSON WOODROW
STRUCTURAL AND ARCHITECTURAL ENGINEERING
6 SCHOOL STREET, SUITE 180
FAIRFAX, CA 94930
PH: 415.453.3431 FAX: 415.453.1280

PROPOSED SEISMIC RETROFIT TO THE:
FAIRFAX PAVILION
FAIRFAX, CALIFORNIA





08.22.08

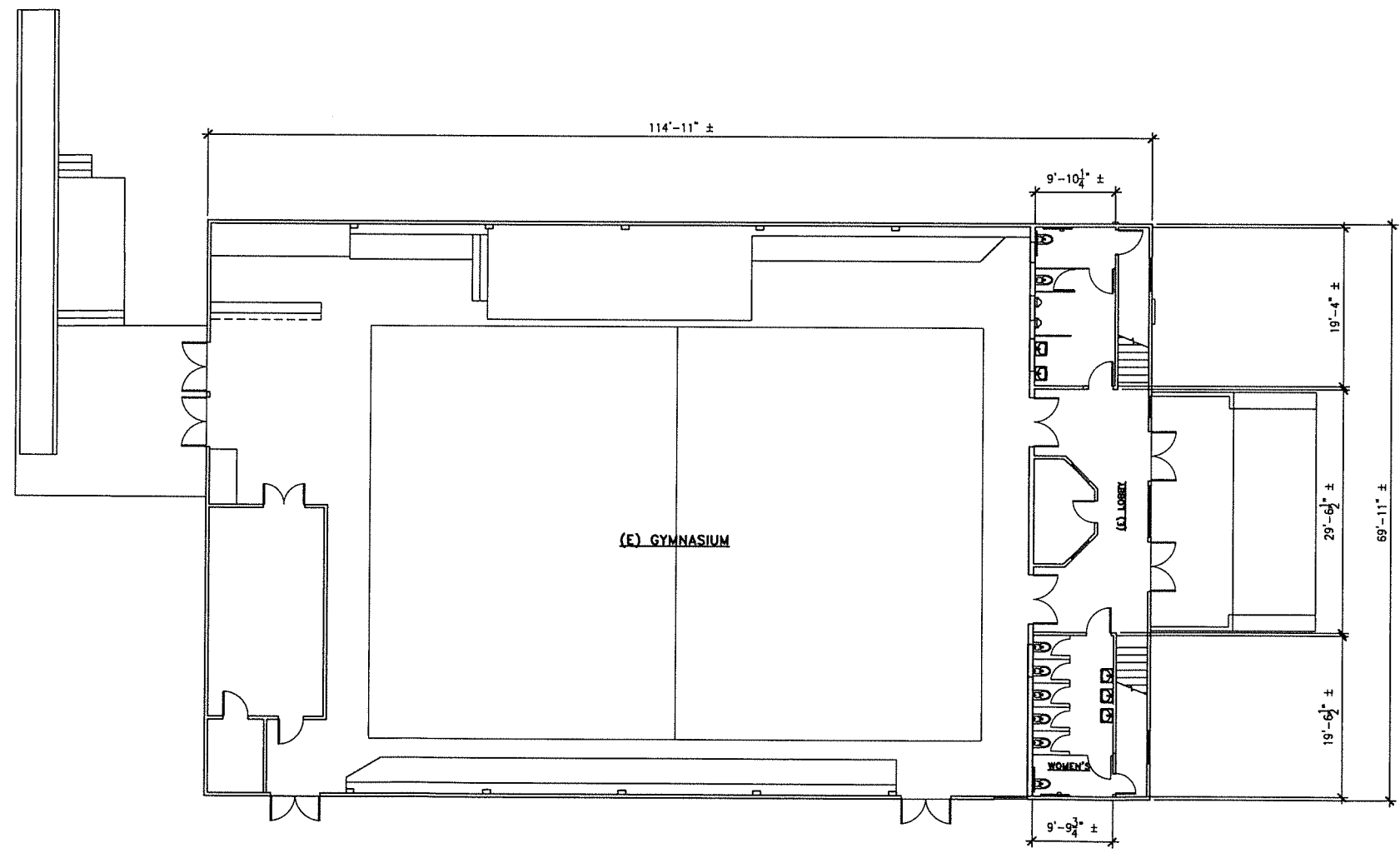
FOUNDATION PLAN

S1.1

NOT FOR CONSTRUCTION

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WALL LEGEND	
	EXISTING WALLS TO REMAIN
	NEW WALLS - 2x4S @ 16" o.c. U.N.O.
	EXISTING WALLS TO BE REMOVED
	NEW LOW WALLS - HEIGHT AS NOTED ON PLAN - 2x4S @ 16" o.c. U.N.O.



1 OVERALL FLOOR PLAN
A2.0
SCALE: 1/8" = 1'-0"
NORTE

Revisions	03/15/2011
▲ PRELIMINARY REVIEW PLAN	11/17/2011
▲ REVISED RESTROOM PLAN	12/22/2011
▲ FEMA PACKAGE	09/21/2010
▲ UPDATED PLANS	
Date	03/15/2011
Scale	As Noted
Drawn	
Job #	11003.00
Project/Type	DIVINE
A2.0	

AS BUILT PLAN

FOUNDATION REPAIR/
ACCESSIBILITY IMPROVEMENTS
142 BOLINAS ROAD
FAIRFAX, CA
FOR: TOWN OF FAIRFAX

A R C H I T E C T S
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