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STAFF REPORT

THE CITY OF NOVATO CALIFORNIA

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MEETING DATE: July 12, 2011

TO: City Council

FROM: Rajiv Parikh, Project Manager for City Administrative Offices Building Project

SUBJECT: **CIVIC CENTER CITY ADMINISTRATIVE OFFICES - APPROVAL OF ARCHITECTURAL SERVICES CONTRACT WITH RMW ARCHITECTURE AND CITY OFFICES PROJECT UPDATE**

REQUEST

Review the attached contract and discuss the scope of services for an architecture consultant to design the new city administrative offices building within the civic center. Receive update from staff on project status.

RECOMMENDATION

Approve an Architectural Services Contract with RMW Architecture and Interiors in the amount of $813,846 for the design and engineering of a new city office building to be located at the civic center.

DISCUSSION

On May 10, 2011, Council received a presentation on the results of a feasibility study for locating City administrative offices in the Civic Center. At that same meeting, Council also received a presentation of various options for locating the City offices, including at the Civic Center location identified in the feasibility study. Council then directed staff to pursue next steps in the development of the offices at the Civic Center site.

As part of that process, Council directed staff to solicit proposals from a short list of architectural firms and bring back 3 firms for interviews with Council and selection by Council. Staff subsequently prepared a solicitation for the proposals (Attachment #1) and transmitted that solicitation to the short list of ten firms on May 19, 2011. In response, staff received seven proposals from architectural firms. After reviewing the merits of the seven proposals, staff selected three firms to interview with Council: RMW Architecture & Interiors (RMW), FME Architecture & Design, and Field Paoli.

On June 13, 2011, Council interviewed the three architecture firms and unanimously chose to proceed with RMW. Over the past several weeks, staff worked with RMW to provide Council

Novato City Council
Agenda Staff Report
Date: _____
File No. _____

with some additional alternatives that could be included in the contract, at the discretion of city council. Included among these alternatives are items such as a physical model of the project (and surrounding buildings), civil engineering services necessary for compliance with the California Subdivision Map Act, additional 3-D modeling, and other optional consulting services.

FISCAL IMPACT

The overall contract amount, including basic services and recommended optional services, is $813,846 (see Attachment #2 for a breakdown of costs). However, it is anticipated that the City will proceed in phases with the project and the City will be obligated to pay only to the amount of work authorized and completed.

The architectural/engineering work will have several phases. The first phase will consist of work related to architectural programming, schematic design, design development and certain engineering work (survey, lot line adjustment, structural review, etc.). It is anticipated that that the first phase will cost approximately $350,000. Upon completion of the first phase, the second phase of the architecture/engineering for the project would be to release the consultants to prepare the construction documents. Preparation of the construction documents is estimated to cost approximately $300,000. Finally, the architecture/engineering team will be involved with certain aspects of construction oversight at an approximate cost of $200,000.

ALTERNATIVES

Do not approve the proposed contract and direct staff on next steps.

ATTACHMENTS

1. Solicitation for Proposal to Provide Architectural and Engineering Services for Design and Construction of a City Administrative Offices Building
2. Architect's Scope and Fees
3. Draft contract between RMW Architecture and the City of Novato for City Administrative Offices Building Project

SOLICITATION OF PROPOSAL TO PROVIDE

ARCHITECTURAL AND ENGINEERING SERVICES

FOR DESIGN AND CONSTRUCTION OF A

CITY ADMINISTRATIVES OFFICES BUILDING

NOVATO, CA

1.0 PURPOSE OF THIS SOLICITATION

The City seeks the services of qualified architectural and engineering consulting teams ("Service Providers"), led by architects licensed in California with expertise in all phases of planning and design of public or similar institutional buildings, for the design and construction of a City offices building in the Civic Center area ("Project" or "project"). Responses submitted to this Solicitation must clearly describe and explain joint ventures and other firm associations which are proposed for the project.

This Solicitation is the means for prospective Service Providers to submit their qualifications and proposals to the City, for the project described above, for the services described in this document.

Prospective Service Providers are strongly encouraged to view the materials posted on the City's website related to the City offices, which can be found at http://www.novato.org/Index.aspx?page=1534.

Prospective Service Providers are required to submit proposals and must directly respond to the criteria for qualifications, as further described in this Solicitation.

2.0 BACKGROUND INFORMATION

Prior to January 2005, the City of Novato had housed its administrative offices in the Civic Center area (bounded by Sherman Avenue, Delong Avenue, Machin Avenue and Cain Lane). In January 2005, due to concerns regarding the structural safety of its existing structures in the Civic Center area, the City began leasing space for its offices at 75 Rowland Way. Subsequently, the City demolished some of the older structures in the Civic Center area. The City also decided to renovate the former church structure at 901 Sherman Avenue as a multi-use facility for city council chambers, civic meetings, and community events. The newly renovated City Hall was opened in 2010, along with a new civic green the City added as part of that project. However, City offices have remained at 75 Rowland Way.

As a governmental entity with anticipated long term operations, the City of Novato has determined that it is more financially prudent to own an office building than to lease. The City is fortunate to have one-time financial resources from monies recently paid to the General Fund from the Redevelopment Agency that can be used to build a permanent office building for city staff.

On December 6, 2010, the City Council approved entering into a feasibility study to explore the cost, timing and impacts of building City offices in the Civic Center location which is an approximately 23,000 square foot portion of the paved area (currently the Civic Center parking lot) adjacent to the restored 901 Sherman City Hall. For purposes of the study it was assumed that no existing structures such as the Community House or the Scott House, would be moved or altered.

On May 10, 2011, the City Council received the results of the feasibility study and approved moving forward with building City offices at the Civic Center location. The building plan approved by the Council included one level of parking at surface, with two floors of office space above the parking level.

3.0 SCOPE OF SERVICES

The scope of architectural, engineering and related services desired for the projects described in this Solicitation may include some or all of the following services:

The scope of the work issued under the contract may include but is not limited to: pre-design studies, design, design review, procurement support, site investigations, site surveys, space planning, Project Development Studies, Building Evaluation Reports, Master Plans, concept designs, construction documents, estimating, record drawings, constructability reviews, technical design reviews, shop drawing review and approval, construction site inspection, and Post Construction Contract Award Services (PCCAS).

Disciplines and expertise that may be required to accomplish the scopes of the task orders include but are not limited to: architecture, mechanical, electrical, plumbing, civil, structural, fire protection, life safety, security, risk assessment, vertical transportation, space planning, interior architecture, master planning, report writing, quality control review, scheduling, surveying, LEED, sustainability, 3-D rendering, code compliance (including ADA), and civic work expertise.

3.1 **Site Analysis and Selection:** Not applicable;

3.2 **Site Acquisition Consultation:** Not applicable;

3.3 **Land Use Entitlement:** Support and/or participate in the preparation of environmental studies and reports as required under CEQA and related local and state laws and regulations; (Environmental site surveys and hazard documentation; EIR preparation; and site remediation services are not included in scope of services of this RFQ);

3.4 **Schematic and Design Development Studies:** Conduct or participate in planning, parking and traffic, zoning, geotechnical, on-site and off-site utility and related utilization studies required for project development and approvals;

3.5 **Functional Programming and Detailed Space Planning:** Conduct functional programming, design definition, and space planning for City office functions, including complete site, functional and space requirements, conceptual building, and test fit studies;

3.6 **Architectural and Engineering Design Services for New Construction:** Provide architectural, structural, civil, mechanical, electrical, plumbing, sustainable and LEED™ design for certification to current standards for Silver, low voltage system design including fire protection, security, audio-visual, telecommunications and IT-building automation systems integration; acoustical, interior design including furniture selection, specification, bidding and procurement coordination and assistance. Building information modeling ("BIM") and related services which may be required in connection with planning, design and construction of a new building project. Other services that may be requested include but may not be limited to, geotechnical engineering; land surveys; wind engineering; vibration control; life safety/code consulting; parking structure design; and art, where appropriate.

Additional or specialized services may be required in any or all project phases including conventional schematic design, design development, construction documents, bidding, and construction contract administration;

3.7 **Planning and Building Code Analyses:** Conduct and/or participate in all building and planning code analysis and reviews, including progressive and final analyses prior to design approvals, and during and after construction;

3.8 **Historic consulting or preservation services:** Provide specialized consulting where required in connection with restoration, preservation, or coordination of disciplines in adaptive reuse of historically significant building(s);

3.9 **Contracting and Sourcing:** Provide consultation on and analysis of methods of sourcing which may be used for the building projects subject to this solicitation, including (but not necessarily limited to) traditional design-bid-build, Construction Manager at Risk, and alternate approaches such as integrated project delivery; participate in preparation of associated conventional or unique contract documents required for procurement; participate in construction contract bid analysis of general and special construction and, or construction management contracts; (Legal services, construction management, and construction services are not included in the scope of services in this RFQ);

3.10 **Cost Analysis and Schedule Planning:** Provide for all aspects of project cost estimating and schedule planning, including construction estimating, life cycle costing, value engineering, constructability reviews, critical path, and special scheduling;

3.11 **Design Services for Furniture, Fixtures and Equipment:** Provide all services required to properly plan, design, specify and coordinate, select, bid and install furniture, fixtures, special finishes and equipment, including but not necessarily limited to: interior design, including millwork design and furniture specification, and finished material details;

3.12 **A/V, Telecommunications, Security, Low-Voltage Systems Design:** Provide all services required to properly plan, design and coordinate new and existing A/V, Telecommunications, Security and related low voltage systems associated with office equipment, including integration as appropriate with building automation system design.

3.13 **Site Planning and Landscape Architecture:** Provide all services required to properly plan, design, specify and coordinate exterior site design, including grading, parking lots, roads, driveways, hardscape, landscape, irrigation and coordination of underground utilities and/or building structures with landscape and hardscape elements;

3.14 **Construction Contract Administration:** Consistent with the scope stipulated in the attached contract, provide construction phase services, including (but not necessarily limited to) field administration and observations, RFI and submittal reviews and processing, review of testing and inspection reports required by the bid documents (testing laboratory or construction inspection services are not part of this RFQ), coordination of finishes, furnishings and equipment, evaluation of pricing and schedule impacts for consideration/negotiation of changes, and project contract completion, including punch list, warranty review, preparation of record drawings and closeout;

3.15 **Building Commissioning:** Not applicable;

3.16 **Move and Occupancy Planning:** Planning, design, and execution of temporary relocation, move planning, and start-up assistance.

4.0 SPECIFICS OF SUBMITTING A RESPONSIVE PROPOSAL

The following materials ("Materials") shall constitute a Proposal:

A. Cover Letter/Letter of Interest:

Provide a cover letter/letter of interest of not more than one page. This document shall include the name of your firm, address, telephone numbers, fax number, e-mail address, and name of Principal to contact.

B. Firm Organization, Credentials, Background:

Please provide a brief history of your firm including:.

i) Number of years in business
ii) Location of office which will perform work
iii) List of Basic Services provided by firm
iv) List of Architectural/Engineering Services provided by the firm under Basic agreement

C. Relevant Experience:

Please provide a list of up to ten of the most recent projects of similar size and scope including:

i) Project Name/location
ii) Year Completed/current status
iii) Client Name

D. Project Team:

i) Identify key team members assigned to the project and provide their qualifications.
ii) Identify proposed consultants for this project. Include resumes and related experience for members of those firms that may be assigned to the project.

E. Firm Resources:

i) Technical capabilities
ii) Project approach
iii) Experience working with public entities
iv) Experience working with Construction Manager At-Risk
v) Experience with podium-style parking/office projects
vi) Client references
vii) Any firm litigation in past five (5) years
viii) Statement of firm's financial stability

F. Fee Outline:

Proposed fee structures should be included for the Project and fees should be set forth for the various phases/aspects of the work described above (and not as a lump-sum). In particular, the fees should be outlined for

programming/space planning, schematic design/design development, construction documents, and construction administration/close-out.

G. Comments on City Contract:

Attached to this Solicitation is the City's contract form for the architectural and engineering services anticipated to be necessary for the project. Please review and provide any comments you may have relative to the contract form, including any objectionable language/clauses.

5.0 SUBMITTALS

Three (3) copies of the submittal package should be received by 4:30 pm on Thursday, June 2, 2011. The City reserves the right to reject any and all proposals. Any attempt to contact Council members may result in disqualification.

Deliver proposals to:

ATTN: Tom Adams
City of Novato
75 Rowland Way, Suite 200
Novato, CA 94945-3232

Refer all inquiries concerning this Solicitation to:

Rajiv Parikh
Project Manager
530 Alameda Del Prado, #305
Novato, CA 94949
Tel: 415-320-6434
rparikh@kasprops.com

Novato City Administrative Office Building

Summary of Fees for All Phases

Consultant	Discipline	Programming / Space Planning	Preliminary Design (Schematic Design / Design Development)	Construction Documents	Construction Admin	Total - Programming thru CA
		1	2	3	4	5
Basic Consulting Services						
RMW architecture and interiors	Architecture and Interiors	$44,500	$145,688	$147,000	$105,000	$442,188
SEI Engineers	Structural Engineering	$3,000	$10,000	$55,000	$11,000	$79,000
BKF	Civil Engineering	$6,100	$9,600	$14,300	$6,000	$36,000
Taylor Engineering	Specs	$6,000	$11,800	$5,800	$6,200	$29,800
Engineering Enterprise	Electrical Performance Specs	$5,600	$15,600	$5,400	$5,800	$32,400
Gabel Assoc	Energy Modeling		$725	$2,000		$2,730
Guttmann & Blaevoet	AV / Telecom / Security /	$3,270	$4,900	$18,000	$6,530	$32,700
Charles Salter Associates	Acoustical Consulting	$6,400	$3,200	$12,600	$2,000	$24,200
RHAA	Landscape Architecture	$13,950	$14,300	$14,600	$6,000	$48,850
As-Builts preparation (contingency @ +/- 2%)		$1,776	$4,316	$5,494	$2,971	$14,557
Subtotal Basic Consulting Services		$90,596	$220,129	$280,194	$151,501	$742,425
Estimated Reimbursable Expenses @ +/- 5%		$4,530	$11,006	$14,010	$7,575	$37,121
Total Fees-Labor Costs & Reimbursable Expenses						**$779,546**
Recommended Additional Consulting Services						
Boundary/Topo/Utility Surveys and Base Map	Civil					$11,100
Underground Utility Locator Service	Civil					$2,400
3D "Fly-through" visualization of Buildings and Site	Architectural					$9,000
3D "Fly-through" visualization of Building Interiors	Architectural					$2,800
Working model of adjacent properties and the site at 3/32" scale	Arch + Model Maker					$5,000
Upgraded Interior and Exterior Perspective presentation drawings	Architectural					$4,000
Subtotal Recommended Addtl. Consulting Services						$34,300
Optional Consulting Services (if requested)						
Stormwater Control Plan Report	Civil					$3,000
Stormwater Facilities O&M Plan	Civil					$2,500
3 to 4 rendered perspective views	Arch + Renderer					$8,000
Finished model of the adjacent properties and the site at 3/32"	Model Maker					$8,500
MEP systems commissioning for LEED (3rd Party)	MEP Engineers					$25,000
Cost Estimating services (Davis Langdon)	Cost Estimating	$7,000	12000	$16,000		$35,000

F. Fee Outline:

FEES

For the services described in the Solicitation of Proposal and in the City of Novato Architectural Services Agreement we have estimated fees on the attached spreadsheet for each phase and each consulting discipline.

1) Fees will be billed monthly on a percentage completion basis. Should additional services be requested and approved, RMW's hourly billing rates are as follows:

Principal (Bart McClelland)	$225 per hour
Architectural Design Director (Steve Worthington)	$175 per hour
Project Architect (Julie Johnson)	$135 per hour
Project Interior Designer	$115 per hour
Architectural Designer/ Interior Designer	$74-$120 per hour
Technical Support Staff	$75-$95 per hour

2) Reimbursable or out-of-pocket expenses are in addition to labor compensation and include actual expenditures made by RMW, its employees and consultants on behalf of the project. Expenses have also been estimated on the attached spreadsheet. They will be billed at the multiple of 1.10 times the cost to RMW. Expenses include but are not limited to:

   a. Expenses of transportation, living expenses in connection with out-of-town travel, long distance communications, and fees paid for securing approval of authorities having jurisdiction over the project. Travel within the Bay Area is not considered "out-of-town" and therefore not charged.
   b. Expenses of reproductions, CADD plotting, postage and handling of drawings, schedules, specifications, and other documents. Expense of graphic materials purchased specifically for the project.
   c. Fees charged by outside engineers and other consultants retained by us at your request to work on this project.
   d. If authorized in advance by Novato, expense of overtime work requiring higher than regular rates.
   e. Expense of renderings, models and mock-ups requested by Novato.
   f. Expense of any additional insurance coverage of limits, including professional liability insurance, requested by the owner in excess of that normally carried by RMW and its consultants.

ASSUMPTIONS AND QUALIFICATIONS

1) Consultants are limited to those noted above. Additional consultants if necessary and requested by the City will be added as an additional service.

2) Full services will be provided by RMW for the architecture and interior design, by the structural engineer, civil engineer, landscape architect and acoustical consultant. "Limited" services will be provided by the Mechanical, Electrical, Plumbing, Acoustical, Telecommunications, and Security consultants. Limited services include preparation of performance specifications, one-line drawings of the systems and review of design/build subcontractor's proposals during the bidding phase.

3) Project scope assumes that RMW will provide electronic base files to design-build Mechanical, Electrical, Plumbing, and Fire Protection subcontractors and will coordinate our work with each. Subcontractors will be responsible for coordination of their work with other design-build subcontractors.

4) Project fees assume that a CM/General Contractor will be selected not later than the end of the schematic phase and will be available for pre-construction cost estimating services.

5) Project scope assumes that the City will provide a geo-technical report. A civil topo-survey of site (in electronic form for the topo/ base information) will be prepared by the design team.

6) Program interview meetings will be scheduled to work within (4) anticipated RMW on-site meetings. Follow-up program confirmation meetings will be scheduled to work within (4) on-site meetings.

7) We have assumed limited assistance for Novato's move and occupancy planning to include coordination with the City's "Move Coordinator" who would be responsible for the inventory of all existing and new equipment and furnishings to be relocated to the new building as well as arranging for the actual physical move.

8) Stairs, curtain walls and exterior cladding will be designed and specified as Design/Build portions of the work.

EXCLUSIONS

a. Design Services beyond those stated in the RFP.
b. Additional work caused by project requirements which differs from the assumptions contained in this proposal.
c. Life cycle cost analysis.
d. Construction cost estimates and quantity takeoffs (we assume this will be completed by the CM).
e. Filing for permits with authorities having jurisdiction.
f. Consulting engineering design services except as specifically noted in the proposal.
g. Signage design and implementation.
h. Off-site improvements including traffic analysis or mitigations.
i. Environmental impact investigations and analyses.
j. Geotechnical engineering services.
k. LEED Certification costs.
l. Design/detailing of bidding alternates
m. Redesign to meet Construction Manager's budget after Design Development phase
n. Redesign to accommodate code changes or interpretations after start of construction documents.
o. Extension or compression of the design and construction schedule which is beyond the control of the design team.
p. Hazardous materials assessment or mitigation.
q. Redesign of low-voltage systems due to significant changes implemented after approval of documents or start of next phase of design, including contractor substitution or value engineering.
r. Preparing documents for separate equipment prebids, bidding packages, out of sequence services, "fast track" construction methods and or multiple subcontracts.
s. Preparation or review of operations and maintenance manuals.
t. Witness testing of equipment and preparation of written report of results
u. Survey of existing conditions due to incomplete or out of date drawings. Production of current as-built drawings for demolition or record purposes.

v. Commissioning services or attendance at additional meetings/site visits requested by the commissioning authority.
w. WAN Design and implementation oversight.
x. Telephone system design and implementation oversight.
y. Technology migration planning and oversight.
z. Telco circuit ordering, provisioning and oversight.
aa. Post – construction acoustical measurements or reports.
ab. Design of fountains, water features, water displays or underwater lighting systems.
ac. Off site mitigation measures or conditions of approval arising out of the entitlement process, including public utility infrastructure upgrades, street narrowing/widening, off-site utility relocation, etc. (Restriping of Machin Ave. is included in Civil fees.)
ad. Under foundation drainage and/or sump systems, including below grade dewatering and waterproofing underground utility systems.
ae. Design for the signalization or signal modifications of street intersections.
af. Post construction as-built or ALTA surveys.
ag. Preparation of formal SWPPP plans and filing of a NOI with the State Water Resources Control Board (required for projects over 1 acre).
ah. Providing services made necessary by the default of the Contractor, or by errors, defects or deficiencies in the work of the Contractor, or by failure of performance of either the Owner or the Contractor under the Contract for Construction.
ai. Traffic studies or reports.

AN AGREEMENT BETWEEN THE CITY OF NOVATO AND RMW ARCHITECTURE AND INTERIORS FOR ARCHITECTURAL SERVICES FOR A CITY ADMINISTRATIVE OFFICES BUILDING

RECITALS

A. The City of Novato (hereinafter "City") is desirous of constructing a city administrative offices building upon the City owned property located at Machin Avenue and Cain Lane. The City has budgeted the maximum amount of eleven million four hundred and five thousand dollars ($11,405,000) for the purpose of completing the design and construction of said project ("Project").

B. In order to properly plan and design the Project, City has solicited proposals for architectural services. Among other architects, RMW Architecture and Interiors (hereinafter "Architect") has responded with a proposal (dated June 2, 2011) and with a revised fee outline and summary of fees dated July 1, 2011(hereinafter "Proposal"). Said Proposal is attached hereto as **Exhibit "A"** and incorporated by this reference. In the event of the Proposal's inconsistency or conflict with this Agreement, this Agreement shall prevail. Said proposal, together with Architect's experience and knowledge, have been material inducements to the City to its execution of this Agreement.

C. Architect understands and agrees that only eight hundred and fourteen thousand dollars ($815,556) is available to cover (i) all basic, architectural and engineering services which Architect is hereby agreeing to perform and (ii) up to the allowance specified, all reimbursable expenses, Architect incurs in performing said services. The scope of services is predicated upon a construction budget which shall not exceed ten million five hundred and ninety thousand dollars ($10,590,000)

D. Under the terms and conditions of this Agreement, the City is desirous of retaining Architect to perform architectural services in connection with the design, construction and administration of the Project, as well as related services, all as more specifically described in this Agreement.

E. Architect represents and warrants that it is a duly organized and validly existing corporation in good standing under the laws of the state of California.

ARTICLE ONE
ARCHITECT'S BASIC SERVICES

1.1 In General.

The Project consists generally of the construction of a city administrative offices building of approximately 22,000 square feet located at Machin Avenue and Cain Lane in Novato,

California. The Architect's basic services shall consist of the five phases described in Paragraphs 1.2 through 1.6 below, inclusive, and shall include normal structural, and civil engineering services, mechanical and electrical engineering performance specification development, landscape architectural services, acoustical and audio visual services, and any and all other services described herein which are required to be satisfactorily performed by the Architect under the terms of this Agreement. The design will include all on site design and shall include the design of necessary off-site improvements. Architect shall perform all services in an expeditious manner and in accordance with the approach to work outline, described in the next sentence. Architect will not, however, be responsible for delays from causes beyond it's reasonable control. Architect shall submit for City's approval a schedule for the performance of Architect's services ("Approach to Work Outline") within ten (10) days after execution of this Agreement and shall include allowances for City's review and approval of submissions and allowances for approval of authorities having jurisdiction over the Project. Work on each item of service shall proceed step wise and Architect shall not proceed with any subsequent item of service until all necessary approvals have been issued by City in writing.

1.2 Preliminary Design Phase.

(a) The Architect shall review the Project as described by the City to ascertain and become knowledgeable of the requirements of the Project. In this connection, Architect expressly acknowledges that he has read and understood the Project Proposal attached hereto as **Exhibit "B"** and incorporated herein by reference. Architect further acknowledges that he has read and understands all the conditions of the Project as identified in **Exhibit "C"** attached hereto and incorporated herein by reference and that, where applicable Architect's construction documents shall incorporate and include said conditions. Exhibit "B" and "C" together shall constitute the Program under which the Project is to be undertaken.

(b) The Architect shall provide a preliminary evaluation of the Program and the Project budget requirements, each in terms of the other.

(c) The Architect shall review with the City alternative approaches to design and construction of the Project.

(d) The Architect shall prepare Preliminary Design Drawings based upon the City's Program, schedule and budget, consisting of drawings illustrating the scale and relationship of Project components. The Preliminary Design Drawings shall include a site plan and preliminary building plans, sections and elevations.

(e) The City plans to engage the services of a Construction Cost Estimator ("CCE") who will prepare and submit to the City a statement of probable construction costs based on the Program, current area, volume, or other unit costs and shall represent the CCE's best judgment as a professional familiar with the construction industry as to probable construction cost. City will provide said statement of probable construction costs to Architect as soon as available.

1.3 Design Development Phase

(a) Based on the approved Preliminary Design Drawings, any changes thereto approved in writing by the City, and any adjustments authorized by the City in the Program or Project budget, the Architect shall prepare, and submit for approval by the City, three (3) sets of Design Development Documents consisting of drawings and other documents to fix and describe the size and character of the entire Project as to architectural, structural, mechanical and electrical system, acoustical, audio visual, foodservice, materials, including interior finish materials, and such other elements as may be appropriate.

(b) The Architect shall, as set forth herein, contract for and administer the services provided by structural engineering, electrical engineering, mechanical engineering, civil engineering, geotechnical engineering, landscape architect, interior design, and cost estimation subconsultants as necessary to satisfactorily perform the services described in Paragraph 1.3 (a).

(c) The Architect shall work with the CCE to submit to the City a further statement of probable construction costs based upon the items described in 1.3(a) above.

1.4 Construction Documents Phase

(a) Based on the approved Design Development Documents and any further adjustments in the Program, the scope or quality of the Project or in the Project budget authorized by the City, the Architect shall prepare, and submit, for approval by the City, three (3) sets of Construction Documents consisting of drawings and plans and specifications setting forth in detail the requirements for the construction of the Project as well as coordination between consultants for the Project and shall include: (1) architectural (2) civil and structural engineering (3) landscape architecture (4) interior design/space planning. The Architect shall consult with the City's information technology ("IT") designer/provider concerning wiring and other necessary facilities, and shall show in the Construction Documents the facilities meeting the IT requirements, at no additional cost to the City. The Architect shall ensure that the plans and specifications comply with all requirements of law, including, but not limited to, the uniform codes, the Americans with Disabilities Act and the California Fair Employment and Housing Act (including Title 24 of the California Code of Regulations) as well as the requirements of agencies having approval authority over the Project. The level of detail shall be sufficient for the purposes of calling for bids pursuant to the California public bidding laws and constructing the building.

(b) The HVAC, plumbing, fire protection, electrical, lighting, Title 24 Lighting and Energy Compliance Documentation portions of the work may be included as Additional Services or be performed on a "design-build" basis where the Contractor, rather than Architect, is solely responsible for the design of such systems with the Contractor as the engineers of record for such systems. In the event that said services are performed on a "design build" basis, Architect and its consultants will prepare basis of design performance specifications for these disciplines to facilitate Contractor's design of the of the design-build work. Architect will review

design-build submittals to evaluate the general compliance of the design with the basis of design performance specifications. These reviews will not constitute acceptance of the design-build system by Architect or its consultants, nor diminish the responsibility of the design-build contractor and its subcontractors as "Engineers of Record."

(c) In engaging the services of the CCE, City will provide that the CCE work with the Architect in preparing the statement of probable construction cost and Architect shall work with the CCE to enable the final statement of probable construction cost to be delivered concurrently with delivery of the construction documents to City.

(d) The Architect, following City's approval of the construction documents shall submit the same to all agencies having jurisdiction over the Project.

(e) In preparing the Construction Documents described herein, the Architect shall respond to and incorporate all corrections made necessary by all reasonable and necessary plan check comments for all government agencies, including the City as part of its basic services as set forth herein and at no additional cost to the City. Said corrections shall only satisfy those plan check comments that pertain to the services the Architect is required to perform pursuant to the terms of this Agreement. The final Construction Documents shall be adequate to obtain building permits for the Project.

1.5 Bidding Phase.

(a) The Architect, shall assist the City in preparation of bidding forms and the conditions of the contract between the City and the Contractor(s). However, the City shall supply all construction contract provisions, bid forms and insurance requirements.

(b) The Architect shall prepare and deliver to the City bid documents in the number specified in Paragraph 1.4 (a), above, which include the construction documents developed by the Architect and approved by the City in accordance with Paragraph 1.4 for the purpose of soliciting bids to construct and implement the Project. The level of detail of said bid documents shall be sufficient for the purpose of (i) calling for and receiving bids pursuant to the California pubic bidding laws and (ii) constructing and successfully implementing the Project.

(c) The Architect shall assist the City in reviewing any bids received in response to the invitation to bid the construction and implementation of the Project. Architect shall evaluate and provide to the City, Architect's recommendations with respect to bidders' "or equal" submittals in response to the bid documents identifying a necessary item, work or product which is accompanied by the language "or equal" or "or equivalent".

(d) The Architect shall answer all requests for clarification from contractors proposing to bid on constructing and implementing the Project. Architect shall attend one pre-bid conference if such conference is held by the City.

(e) The City shall solicit bids within 90 days of issuance of final construction documents or such greater length of time as is agreed to by the parties. In the event that City receives lowest responsible bids that exceed the final statement of probable construction cost (or final cost estimate), made before advertising for bids, the Architect, at City's option and to the extent requested by City, agrees to revise the construction documents at no additional cost to City. In the event Architect is required to make said revisions, Architect shall furnish, without cost to the City, the revised plans and specifications and other bid documents required to be revised in the numbers required by the City for rebidding. Such revisions shall be made for the purpose of attempting to obtain a lower bid. The City shall cooperate with the Architect in revising or adjusting the Project Program, scope and quality, as required to reduce the construction cost to meet budget, and agrees to waive any delay claim due to the need to modify the design. Notwithstanding anything to the contrary stated hereinbefore, any and all services Architect may be required to render pursuant to this paragraph 1.5 (e) shall be considered part of Architect's basic services, and not "additional" services under Paragraph 3.2.

1.6 Construction Administration Phase.

(a) The Architect shall provide administration of the contract between the City and the Contractor(s) as set forth below. The Architect shall be a representative of and shall advise and consult with the City during the provision of Construction Administration services. The Architect shall have authority to act on behalf of the City only to the extent provided in this Agreement unless otherwise modified by written agreement.

(b) The Architect shall review properly prepared, timely requests by the contractor for additional information about the contract documents. A properly prepared request for additional information about the contact documents shall be in a form prepared or approved by the Architect and shall include a reasonably detailed written description that indicates the specific drawings or specifications in need of clarification and the nature of the clarification requested. If deemed appropriate by the Architect and approved by the City, the Architect shall prepare, reproduce and distribute supplemental drawings and specifications in response to requests for information by the contractor.

(c) 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.

(d) During the construction and implementation of the Project, the Architect shall consult with and advise the City with respect to the Project. The Architect shall visit the site at intervals appropriate to the stage of the contractor's operations (1) to become familiar with and to keep the City informed about the progress and quality of the portion of the work completed; (2) to determine if the work has been completed in substantial conformance with the contract documents; (3) to determine if the work is being performed in a manner indicating that the work, when completed, will be in accordance with the contract documents; (4) to advise the city in making a determination whether to approve or reject work failing to conform to the

contract documents; and (5) to exercise due diligence and good faith in endeavoring to guard the City against defects and deficiencies in the work. The Architect shall not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the work as long as the observations performed by the Architect enable the Architect to fully perform and discharge the duties set forth in the balance of this Paragraph 1.6 (d).

(e) The Architect shall report to the City all known deviations from the contract documents and from the most recent construction schedule submitted by the contractor. However, the Architect shall not be responsible for the contractor's failure to perform the work in accordance with the contract documents.

(f) The Architect shall at all reasonable times have access to the work wherever it is in preparation or progress.

(g) Unless the City deems it otherwise advisable, the City shall endeavor to communicate with the contractor through the Architect about matters relating to or arising out of the contract documents.

(h) The Architect shall consult with and provide professional advice to the City as to whether the work performed by contractor, subcontractor, material and equipment suppliers, their agents or employees, conforms to the contract documents. The Architect shall consult with and provide professional advice to the City as to whether it is necessary or advisable to require testing of the work performed under the contract documents. However, only the City shall have the authority to reject or test the work performed under the contract documents.

(i) The Architect shall review and take appropriate action on shop drawings, diagrams, illustrations, brochures, schedules and samples, and the results of tests and inspections and other data which the contractor is required to submit for the Project. Such review shall be only for conformance with the design concept of the work and with the Agreement documents. Architect shall assist in determining the acceptability of substitute materials and equipment proposed by the contractor and assist in receiving and reviewing maintenance and operating instructions, construction schedules, guarantees, bonds and certificates of inspection assembled by the contractor of the Project.

(j) The Architect shall review change orders as required and shall make recommendations to the City concerning the scope of the work and necessity of the work contemplated in the change order. In connection with the preparation of Change Orders where it is necessary for Architect to prepare additional drawings, specifications, or other supporting data, Architect shall be entitled to additional compensation for its services in connection with that Change Order pursuant to Paragraph 3.2 so long as the Change Order is one or more of the following:

(1) City-ordered changes in the Project.

(2) The failure of the contractor(s) to construct in accordance with the construction contract so long as the City decides to accept the erroneous construction and Architect is called upon to prepare additional drawings, specifications, or other supporting data demonstrating that the erroneous construction can be used.

(3) The discovery of unanticipated physical conditions such as soils conditions that materially differ from those described in the soils report.

(4) Contractor-initiated Change Orders which City chooses to approve.

(5) Contractor-initiated substitutions which City chooses to approve.

Should Change Orders become necessary for any of the above-listed causes, Architect shall be compensated for its services in accordance with Paragraph 3.2 of this Agreement. Architectural services reasonably appropriate to correct design errors, omissions or vagaries shall be provided at no cost to City.

(k) The Architect shall assist the City in making interpretations of the requirements of the contract documents, shall assist the City in making determinations of the performance thereunder by the contractor(s), and in making decisions on all claims of the contractor(s) relating to the execution and progress of the work on the Projects and all other matters and questions related thereto.

(l) Based on its on-site observations as an experienced and qualified design professional and on its review of the contractor's applications for payment and the accompanying data and schedules, the Architect shall assist the City in determining the amounts owing to the contractor, and certify such amounts to the City in writing; such certifications of payment will constitute a representation to the City based on such observations and review, that the work for the Project has progressed to the point indicated and that, to the best of Architect's knowledge, information and belief, the quality of such work is in accordance with the Agreement documents (subject to any qualifications stated in its approval).

(m) The Architect shall assist the City in conducting reviews (including on-site reviews) to determine if the Project is substantially complete, and a final review to determine if the Project has been completed in accordance with the Agreement documents and whether the contractor has fulfilled all of its obligations thereunder so that the City may approve final payment to the contractor.

(n) The Architect shall prepare a record set of drawings based upon the approved contractor’s final Project record drawings (General Contractors unverified representations of actual construction information provided on red-lined full sized prints showing the as-constructed Project configuration, “as built” drawings).

1.7 Interior Selection Task.

At an appropriate stage during the performance of the above-described tasks, the Architect shall submit, in writing, its selection of interior colors, carpets, and window treatments for City review and approval.

1.8 Electronic Format Requirements.

All documents and writings that the Architect is required to submit to the City hereunder shall also be submitted to the City as follows: (a) as to drawings, they shall be produced on Autocad, and (b) as to specifications, they shall be produced in Microsoft Word, except that presentation documents may be produced by hand at the sole discretion of Architect.

ARTICLE TWO

THE CITY'S RESPONSIBILITIES

2.1 City Responsibilities.

It shall be the duty of the City to:

(a) Make available to Architect requested data and information concerning the purposes and requirements of the Project. The Architect shall have the right to rely on the accuracy and completeness of all such data and information provided where such information has been secured as a result of a request in writing. The Architect shall provide prompt written notice to the City if the Architect becomes aware of any errors, omissions, or inconsistencies in such information.

(b) Upon request, furnish Architect with a survey of the Project site prepared by a registered surveyor or civil engineer which shall indicate existing structures, land features, improvements, sewer, water, gas, electrical and utility lines, elevations and boundary dimensions of the site, and borings, soundings and other tests of soil conditions.

(c) Pay all fees required by any reviewing or licensing agency, and secure all CEQA approvals. Architect will assist in the provision of planning documents for such approvals.

(d) Designate a representative authorized to act as liaison between the Architect and the City in the administration of this Agreement and any construction Agreements. The City hereby designates Michael Frank, City Manager or his/her designee, as may exist from time to time, as its liaison; should the City's liaison change in the future, the City shall notify Architect in writing pursuant to Paragraph 4.6.

(e) Review all documents submitted by the Architect and advise the Architect of decisions thereon within a reasonable time after submission.

ARTICLE THREE

COMPENSATION FOR ARCHITECT

3.1 Fee for Basic Services

Architect has agreed to provide all the basic services described in Article One for a fee not to exceed eight hundred and fourteen thousand dollars ($815,556); said fee to be paid for the following services in the following amounts; such fee shall constitute full compensation for all costs of basic services including but not limited to, the cost of labor of employees engaged by Architect, all fees, salaries and expenses paid to consulting engineers or other independent contractors or agents engaged by Architect, documents specified herein, renderings, drawings and tracings necessary for Architect's own use and reasonable City review purposes, all travel expenses, all telephone calls, typing, in-house reproductions and all items of general overhead.

The following shall be encompassed within the basic services Architect shall provide hereunder:

Architecture
Structural Engineering
Electrical Engineering Basis of Design Performance Specifications
Mechanical/Plumbing Engineering Basis of Design Performance Specifications
Civil Engineering
Landscape Engineering/Design
Interior Design
Acoustical / AV Engineer
Boundary, Topographic, Utility Survey and Base Map
Underground Utility Locator
“Fly through”3D Visualization of Building, Site, & Interiors
Working model of Adjacent Properties and Site at 3/32 inch scale
Upgraded Interior and Exterior Perspective Presentation Drawings

3.2 Fee for Additional Services

At City's written request, Architect shall provide additional services relating to the Project beyond those services previously described in this Agreement. Should City choose to purchase such additional services, Architect and City agree that such services shall be charged at the hourly rate set forth in **Exhibit "D"**, attached hereto, which shall constitute full compensation for such services and associated materials, expenses and overhead as described in Paragraph 3.1. Excluded expenses (i.e., reimbursable expenses described in Paragraph 3.3) shall be billed at cost and reimbursed by City as described in Paragraph 3.3. It is expressly understood

that the following items are not included within basic services and, if requested by City, shall be billed for at the relevant hourly rate per the attached **Exhibit "D"**:

- The HVAC, plumbing, fire protection, electrical, lighting, Title 24 Lighting and Energy Compliance Documentation portions of the work, except as set for forth in section 1.4 (b)
- Stormwater Control Plan Report
- Stormwater Facilities O&M Plan
- 3 to 4 Rendered Perspective Views
- Finished Model of the Adjacent Properties and the Site at 3/32 inch Scale
- MEP Systems Commissioning for LEED (Third party)
- Cost Estimating Services

3.3 Reimbursable Expenses

"Reimbursable expenses" are amounts expended for or on account of the Project by the Architect in the performance of its services hereunder. Said reimbursable expenses are costs incurred by the Architect in addition to the rendering of services. Said reimbursable expenses may be charged, at Architect's cost, to the City in addition to the fees specified in Paragraph 3.1, above, plus, 10% (the "administrative fee" for administration and other overhead expenses incurred in dealing with the matters that generate such reimbursable expenses). Certain expenses are included in the fee specified in Paragraph 3.1, and are considered reimbursable expenses which may be separately charged as aforesaid, namely,

Expenses of transportation, living expenses in connection with out-of-town travel, long distance communications, and fees paid for securing approval of authorities having jurisdiction over the project. Travel within the Bay Area is not considered "out-of town" and therefore not charged. Expenses of reproductions, CADD plotting, postage and handling of drawings, schedules, specifications, and other documents. Expense of graphic materials purchased specifically for the project. Fees charged by outside engineers and other consultants retained by Architect at City request to work on this project. If authorized in advance by the City, expense of overtime work requiring higher than regular rates. Expense of renderings, models and mock-ups requested by City. Expense of any additional insurance coverage of limits, including professional liability insurance, requested by the owner in excess of that normally carried by Architect and its consultants.

The Architect shall not incur or bill the City for more than thirty eight thousand eight hundred and thirty six ($38,836) in reimbursable expenses (including the 10% administration fee) without the express, written authorization of the City.

3.4 Manner of Payment

Each month Architect shall submit an invoice in a form satisfactory to City showing the work performed that month and monies due. Within forty-five (45) days from receipt of such invoice, City shall pay the sum due and owing less a ten percent (10%) retention. It is the

intention of the parties that payment for services be in proportion to services performed within each phase of service. In addition, the total amounts due and payable by City (including retention) for each phase of service shall not exceed the following amounts:

(a)	Preliminary Design Phase	$104,096
(b)	Design Development Phase	$240,929
(c)	Construction Documents Phase	$280,194
(d)	Construction Administration	$151,501
Total Contract Amount (Excluding Reimbursables)		$776,720

3.5 Payment of Retentions

(a) At the completion, to City's reasonable satisfaction, of the Construction Bidding Phase, City shall pay to Architect, all fees retained prior to said date pursuant to the 10% retention described in Paragraph 3.4.

(b) Upon substantial completion, to City's reasonable satisfaction, of the work to be performed pursuant to the remainder of this Agreement, City will pay to Architect all fees retained during the Construction Administration Phase pursuant to the 10% retention described in Paragraph 3.4.

3.6 Work Not Part of Project

Architect shall not be responsible for designing, redesigning or constructing the following:

Refer to Assumptions and Exclusions section of the attached Exhibit "A"

ARTICLE FOUR

ADDITIONAL PROVISIONS

4.1 Assignment

Neither party hereto shall assign, sublet or transfer any interest in or duty under this Agreement without the written consent of the other, and no assignment shall be of any force or effect whatsoever unless and until the other party shall have so consented.

4.2 Status of Architect

(a) The parties intend that the Architect, in performing the services hereunder specified, shall act as an independent contractor and shall have control of its work and the manner in which it is performed. The Architect is not considered to be an agent or employee of the City and is not entitled to participate in any pension plan, insurance, bonus or similar benefits the City provides to its employees.

(b) Architect will assign the personnel described in the Proposal to the Project. Any changes in the personnel assigned to the Project will be subject to City's reasonable approval.

4.3 Modification of Agreement

This writing is intended both as the final expression of the Agreement between the parties hereto with respect to the included terms and as a complete and exclusive statement of the terms of the Agreement pursuant to Code of Civil Procedure Section 1856. No modification of this Agreement shall be effective unless and until such modification is evidenced by a writing signed by both parties.

4.4 Consultants

Architect agrees that all consultants, sub-consultants and other agents retained by Architect in the performance of this Agreement shall be reputable experts licensed to practice in their respective professions.

4.5 Prosecution of Work

Upon execution of this Agreement, Architect shall proceed forthwith to carry out its terms.

4.6 Method and Place of Giving Notice, Submitting Bills and Making Payments

All notices, bills, and payments shall be made in writing and may be given by personal delivery, by fax, or by mail. If by fax, the identical notice shall also be sent by U.S. mail, first class with postage prepaid. Notices, bills and payments sent by mail should be addressed as follows:

CITY: City of Novato
75 Rowland Way #200
Novato, CA 94945

Attn: Michael Frank, City Manager

ARCHITECT:	Mailing Address	Billing Address
	160 Pine St., Ste. 400	9480 Madison Ave. Ste 2
	San Francisco, CA 94111	Orangevale, CA, 95662
	415.781.9800	916.989.1770

4.7 Termination

(a) At any time and without cause, the City shall have the right in its sole discretion to terminate this Agreement by giving written notice to the Architect. In the event of such termination, the City shall pay the Architect for all services satisfactorily rendered and expenses incurred hereunder prior to such termination.

(b) If the Architect should fail to perform any of its obligations hereunder, within the time and in the manner herein provided or otherwise violate any of the terms of this Agreement, the City may terminate this Agreement by giving written notice of such termination, stating the reasons for such termination. In such an event, the Architect shall be entitled to receive payment for all services satisfactorily rendered and reimbursable expenses incurred hereunder prior to such termination; provided, however, that there shall be deducted from such amount the amount of damage, if any, sustained by the City by virtue of the breach of this Agreement by the Architect.

(c) In no event shall compensation paid under either of the preceding paragraphs exceed the payment specified for each phase of work actually completed under Paragraph 3.4.

4.8 Records

(a) The Architect shall keep and maintain full and complete documentation and accounting records concerning all services performed that are compensable and all expenses reimbursable under this Agreement and shall make such documents and records available to authorized representatives of the City for inspection at any reasonable time.

(b) The Architect shall provide City with a copy of each letter, notice, order, etc., given the general or sub- contractor at the time or shortly thereafter each such letter, notice, order, etc., is given.

4.9 Ownership of Work Product

The City shall be the owner of and shall be entitled to possession of final design computations, plans, drawings, specifications, structural calculations, correspondence or other pertinent data and information ("Work Product") produced or compiled by Architect prior to termination of this Agreement by the City or upon completion of the work pursuant to this Agreement. City agrees to payment of all undisputed monies owed the Architect for all work

satisfactorily performed to the date of termination of this Agreement prior to receipt of the work product.

4.10 Non-Discrimination

The Architect shall comply with all applicable federal, state and local laws, rules and regulations in regard to non-discrimination in employment because of race, creed, color, sex, age, marital status, physical or mental disability or national origin or other prohibited basis.

4.11 Right to Adequate Assurance of Performance

Each party to this Agreement undertakes the obligation that the other's expectation of receiving due performance will not be impaired. When reasonable grounds for insecurity arises with respect to the performance of either party, the other may in writing demand adequate assurance of due performance and until it receives such assurance may, if reasonable, suspend any performance for which the agreed return has not been received. "Reasonable" includes not only the conduct of a party with respect to performance under this Agreement, but also conduct with respect to Architect's consultants. After receipt of a justified demand, failure to provide within a reasonable time, but not exceeding thirty (30) days, such assurance of due performance as is adequate under the circumstances of the particular case is a repudiation of this Agreement. Acceptance of any improper delivery, service or payment does not prejudice the aggrieved party's right to demand adequate assurance of future performance.

4.12 Attorney's Fees

In the event either party brings an action or proceeding for damages arising out of the other's performance under this Agreement or to establish the right or remedy of either party, the prevailing party shall be entitled to recover reasonable attorney's fees and costs as part of such action or proceeding. Any action to enforce the terms of this Agreement or for the breach thereof shall be brought and tried in the County of Marin.

4.13 Conflict of Interest

Architect promises that it presently has no interest, and shall not acquire any interest, direct or indirect, which would conflict in any manner or degree with the performance of its services hereunder. Architect further promises that in the performance of this Agreement that no person having any such interest shall be knowingly employed by it.

4.14 Cost Disclosure

In accordance with Government Code Section 7550, Architect agrees to state in a separate portion of any written reports the numbers and amounts of all Agreements and sub-contracts relating to the preparation of the report.

4.15 Third Party Beneficiary

The City and the Architect acknowledge that nothing in the Architect's engagement implies any undertaking by the Architect or the City for the benefit of, or which may be enforced by, any third party.

4.16 Indemnification

City has relied upon the professional ability and training of Architect as a material inducement to enter into this Agreement. Architect agrees that all its work will be performed in accordance with generally accepted professional practices and standards as well as the requirements of applicable federal, state and local laws, it being understood that approval or acceptance of Architect's work or acceptance of the project by City shall not operate as a waiver or release.

Architect assumes all responsibility for damages to property or injury or death to persons caused by Architect's services provided hereunder. To the extent permitted by law, Architect shall indemnify, hold harmless, release and defend City, its officers, employees and agents from and against any and all actions, claims, demands, damages, disability, losses, expenses, including attorney's fees and other defense costs or liability of any nature that may be asserted by any person or entity, including Architect, arising out of or relating to the negligence, recklessness, or willful misconduct of Architect or its agents in the performance of the Agreement, excepting only liabilities due to the sole or active negligence of City which are not contributed to by any act of or omission to perform some duty imposed by law or Agreement on Architect, its sub-consultants and either's agent or employees.

This indemnification obligation is not limited in any way by any limitation on the amount or type of damages or compensation payable by or for Architect under worker compensation, disability or other employee benefit costs, or acceptance of insurance certificates required under this Agreement, or the terms, applicability or limitation of any insurance held by Architect.

This indemnification obligation shall not apply to any actions, claims, demands, damages, disability, losses, expenses, including attorney's fees and other defense costs or liability of any nature that may be asserted by any person or entity arising out of or relating to reuse or modification for reuse of Architect’s work product by City. For the purposes of this paragraph, reuse shall mean the use of any of Architect’s work product for the construction of a structure on a site other than that contemplated in this Agreement.

4.17 Insurance

Without limiting Architect's indemnification provided hereunder, Architect shall take out and maintain the following policies of insurance with a company rated Best A:XIII:

(a) Worker's Compensation Insurance to cover its employees and the Architect shall require all sub-consultants similarly to provide Workers' Compensation Insurance as required by the Labor Code of the State of California for all of the sub- consultant's employees. All Workers' Compensation policies shall be endorsed with the provision that it will not be canceled without first giving thirty (30) days prior notice to the City and with the provision that states:

ALL RIGHTS OF SUBROGATION ARE HEREBY WAIVED AGAINST THE CITY, ITS OFFICERS AND EMPLOYEES WHEN ACTING WITHIN THE SCOPE OF THEIR APPOINTMENT OR EMPLOYMENT.

In case any class of employees engaged in hazardous work under this Agreement is not protected under Workers' Compensation statutes, the Architect shall provide, and shall cause its sub-consultants to provide, adequate and suitable insurance for the protection of its employees not otherwise protected. Such policy shall contain an endorsement providing that it may not be canceled without first giving thirty (30) days prior notice to the City.

(b) Commercial General Liability Insurance including Personal Injury and Property Damage Insurance for all activities of the Architect and its sub-consultants arising out of or in connection with this Agreement, written on a commercial general liability form including, but not limited to, Broad Form Property Damage, blanket contractual, completed operations, vehicle coverage and employers non-ownership liability coverage in an amount no less than $5 million dollars combined, single-limit personal injury and property damage for each occurrence. Each such policy shall be endorsed with the following specific language or equivalent language to the satisfaction of the City:

(1) The City of Novato is named as an additional insured for all liability arising out of activities performed by or on behalf of the named insured, including the City's supervision of the named insured, products and completed operations of the named insured and this policy protects the additional named insured, its officers, agents and employees against liability for personal and bodily injuries, deaths or property damage or destruction arising in any respect, directly or indirectly, in the performance of the Agreement.

(2) The inclusion of more than one insured shall not cooperate to impair the rights of one insured against another insured, and the coverages afforded shall apply a though separate policies had been issued to each insured.

(3) The insurance provided herein is primary and no insurance held or owned by the City of Novato shall be called upon to contribute to a loss.

(4) The coverage provided by this policy shall not be canceled without thirty (30) days prior written notice given to the City of Novato.

(5) This policy does not exclude explosion, collapse, underground excavation hazards or removal of lateral support.

(c) Professional liability insurance in an amount not less than $2 million dollars per occurrence and $5 million aggregate. The professional liability insurance policy shall include a provision stating that it may not be canceled without first giving thirty (30) days prior written notice to the City of Novato. In the event Architect's policy of insurance is issued on a "claims made" basis, Architect agrees to maintain the professional liability insurance required hereunder and with respect to this Project in effect for at least three (3) years after acceptance of the work.

The following documentation of insurance shall be submitted to the City evidencing its required insurance:

(1) Certificates of Insurance on the City form, a copy of which is attached as **Exhibit "E"** or industry standard ACORD forms**.** The certificates must be signed by the insurance agent and companies named.

(2) A broker's certification on the City form, a copy of which is attached as **Exhibit "F".** The certificate must be signed by the insurance agent/broker named.

(3) General Liability Endorsement, on the City form, a copy of which is attached as **Exhibit "G"** or alternatively on an insurance company form which evidences coverage at least as broad as that set forth on **Exhibit "G".** The endorsement must be signed by an individual authorized to legally bind the companies named.

(4) Automobile Liability Endorsement on the City form, a copy of which is attached as **Exhibit "H"** or alternatively on an insurance company form which evidences coverage at least as broad as that set forth on **Exhibit "H".** The endorsement must be signed by an individual authorized to legally bind the companies named.

(5) Worker's Compensation Endorsement on the City form, on the City form, a copy of which is attached as **Exhibit "I"** or alternatively on an insurance company form which evidences coverage at least as broad as that set forth on **Exhibit "I".** The endorsement must be signed by an individual authorized to legally bind the companies named.

(6) Certificate of Professional Liability Insurance on the City form, a copy of which is attached as **Exhibit "J"** or alternatively on an insurance company form which evidences coverage at least as broad as that set forth on

Exhibit "J". The certificates must be signed by the insurance agent/broker and companies named.

Architect all require all subcontractors and consultants to take out any maintain insurance coverage at least as broad as those identified in Paragraphs 4.17 (a), (b) and (c) above.

4.18 Corporate Authority

Each individual executing this Agreement on behalf of a corporation or other entity warrants that he/she is authorized to do so and that this Agreement constitutes a legally binding obligation of the entity which he/she represents.

4.19 Recitals and Exhibits Incorporated

Any and all exhibits referred to herein and attached hereto are incorporated by this reference. The recitals set forth herein are incorporated by this reference.

4.20 Definitions

(a) Definition of Construction Cost (s): The term "construction costs(s)" shall mean the total cost or, to the extent the Project is not completed, the estimated cost to the City of completing all elements of the Project designed or specified by the Architect and its sub-consultants. The construction cost(s) shall include the cost at current market rates of labor and materials furnished by the City, if any, and equipment designed, specified, selected, or specially provided for by the Architect, including the costs of management or supervision of construction installation provided by a separate construction manager or contractor, plus a reasonable allowance for their overhead and profit. In addition, a reasonable allowance for contingencies shall be included for market conditions at the time of bidding and for changes in the work. Construction costs (s) does not include the compensation of the Architect and the Architect's sub-consultants, the costs of the land, rights-of-way and financing or other costs that are the responsibility of the City pursuant to Paragraph 2.1

(b) "Contract documents" shall mean the agreement between the City and the contractor for the construction and implementation of the Project ("construction contract"); conditions of the construction contract (general, supplementary, special and other conditions); all bid documents made binding on the contractor; drawings, specifications and addenda issued prior to the execution of the construction contract; other documents referred to or listed in the construction contract; and modifications issued after execution of the construction contract.

(c) "Work" shall mean (unless the context indicates otherwise) the construction, installation, implementation and services required by the construction contract, whether completed or partially completed, including all labor, materials, equipment and services

provided or to be provided by the contractor to fulfill the contractor's obligations. The work may constitute the whole or part of the Project.

IN WITNESS WHEREOF the parties hereto execute this Agreement on the dates set forth below.

City of Novato:

By _____ Dated:
City Manager

ARCHITECT:

By _____ Dated:

APPROVED AS TO FORM:

_____ Dated: _____
City Attorney

Exhibits:

Exhibit "A": Architects Proposal
Exhibit "B": City's Project Proposal
Exhibit "C": Conditions of the Project
Exhibit "D": Hourly Rates
Exhibit "E": Certificate of Insurance
Exhibit "F": Agents/Broker's Certification
Exhibit "G": General Liability Endorsement
Exhibit "H": Automobile Liability Endorsement
Exhibit "I": Workers Compensation Endorsement
Exhibit "J": Certificate of Professional Liability Insurance

Exhibit A

PROPOSAL FOR ARCHITECTURE & ENGINEERING SERVICES FOR A NEW CITY ADMINISTRATIVE OFFICE BUILDING

prepared for

The City of Novato

RMW architecture & interiors

June 02, 2011

vision
function
space
culture
ideas
experience
RMW think
architecture & interiors listen
build
speak
learn

02 June 2011

Mr. Tom Adams
Sr. Management Analyst
City of Novato
75 Rowland Way, Suite 200
Novato, CA 94945

Re: Architectural and Engineering Services for Design and Construction of a City Administrative Office Building

Dear Mr. Adams:

Thank you for the opportunity to submit our qualifications and fee proposal for the City Office Building project. The RMW team has both a high level of interest and deep experience to assist the City with the design and construction of new City offices and parking at the Civic Center location. With a commitment to providing vision, value and integrated services, our team has proven experience in delivering innovative solutions on similar assignments. Our capabilities include:

speak vision

Expertise in Office Building Projects
Over the past 15 years, RMW has designed over 100 office buildings totaling over nine million square feet. More than a dozen of these projects have been for public agencies including the State of California, Caltrans, CSU and UC and the Department of Energy.

Successful Past Performance with Local, County and State Agencies
RMW has experience providing comprehensive facility programming, planning, architectural and interior design, project management and construction administration experience for our public and institutional clients. We recently completed a major project for the County of Marin – the Health & Wellness Campus in San Rafael. We have a real-world, pragmatic approach and understanding of the challenges facing public agencies today.

An Integrated Approach
RMW has deep experience with both office buildings and office interiors, providing the City a single point of responsibility for the design of the building. Our goal is to provide you with a high performance work environment that is as efficient and productive as it aesthetically compelling.

Attached is our proposal which includes relevant projects that illustrate our experience and project approach. We appreciate this opportunity to partner with the City of Novato. Please contact me with any questions.

Sincerely,

Bart McClelland, AIA, LEED® AP
Principal
RMW architecture & interiors
p: 415-490-1668
e: bmcclelland@rmw.com

160 Pine Street
Fourth Floor
San Francisco, CA 94111

Tel 415.781.9800
Fax 415.788.5216
www.rmw.com

vision
function
space
culture
ideas
experience

RMW architecture & interiors

think
listen
build
speak
learn

Think. Listen. Build. Learn. Speak. Active dialogue with our clients is the hallmark of our design practice.

Firm Organization, Credentials, Background

Vital Statistics

Contact Information
Bart McClelland, Principal
RMW architecture & interiors
160 Pine Street
San Francisco, CA 94111
Tel 415.781.9800
Fax 415.788.5216
bmcclelland@rmw.com
www.rmw.com

Offices
San Francisco
San Jose
Sacramento

Size
Employees 63

Staff
Registered Architects 20
Architectural Staff 10
Certified Interior Designers 9
Interior Design Staff 13
Support Staff 11
(Technical, Accounting, Human Resources, Librarian, Marketing, Administrative)
LEED® Accredited Professionals 40

Projects
Design of buildings and interiors for public agencies, high-tech and traditional corporate clients, developers and healthcare facilities.

RMW architecture & interiors is committed to understand a client's business in order to create design solutions that respond to the client's mission, objectives, and unique criteria. It is the goal of every principal and staff member to assume the role of resourceful collaborator—**one who listens, learns, and leads.**

We create work environments that encourage productivity, vitality, and harmony within a client's unique culture. To achieve this, we practice active, attentive listening. We care more about fostering a client's goals than planting an aesthetic signpost saying we've been there. Our design is for the client, not for our own ambition.

Background of Firm

Founded in San Francisco in 1970, RMW has expanded into a regional, award-winning architecture and interior design practice that is consistently listed among the top design firms in Northern California, and in the Bay Area's top 25.

Distinctive Services

Clients tell us that they appreciate our design ability, quality of staff, responsiveness, flexibility, integrity, and sensitivity to budgets and schedules. Following are some of the things they've said about us:

We hired them because:
"The combination of their experience and people made them the best choice to design our new headquarters . . . They provide excellent architecture and design services with the client's needs foremost in their minds."

They differ from their competitors because:
"RMW listens well to their clients. They are creative, responsible and flexible . . . The firm presents a depth of qualified individuals throughout the project team."

Their strengths are:
"Their attention to business issues, the owner's plan and their ability to collaborate and develop outstanding solutions . . . RMW has a good blend of senior architectural and interior design experience and young talent."

Firm Organization, Credentials, Background
continued

Project Staffing

No matter what size the project, a principal is always involved. Project teams are designed to fit the client's way of working, based on skills, experience, familiarity with the client, personality and availability. The depth of participation is determined by specific project requirements such as scope, budget, and schedule.

Resources

RMW's technical approach has grown to match that of our most sophisticated clients. In addition to communication of design concepts in-house through computerized 3-D modeling and animation, RMW also uses web-based project management services, allowing all consultants, clients and designers on each project to communicate efficiently.

Services

Pre-Design
scoping studies
feasibility analyses
site selection
lease negotiation
programming

Planning
site feasibility
master planning
site development

Architecture
architectural design
rehabilitation and restoration
architectural technology research
drawings and specifications
construction administration
post-construction evaluation
existing conditions survey

Interior Design
space planning
interior design
alternative officing design
drawings and specifications
construction administration
installation observation
post-occupancy evaluation
FF&E selection / specification
furniture contract coordination
existing conditions survey

O'Reilly Media Corporate Headquarters
Sebastopol, CA

Firm Organization, Credentials, Background
continued

Number of Years in Business

RMW as founded in 1970 and has been in business for 41 years.

Office Which Will Perform the Work

RMW's San Francisco studio will perform the work.

RMW's Basic Services Proposed for the New Administrative Office Building

Pre-Design
scoping studies
feasibility analyses
site selection
lease negotiation
programming

Architecture
architectural design
rehabilitation and restoration
architectural technology research
drawings and specifications
construction administration
post-construction evaluation
existing conditions survey
building integrated modeling (BIM)
code analysis

Planning
site feasibility
master planning
site development

Interior Design
space planning
interior design
alternative officing design
drawings and specifications
construction administration
installation observation
post-occupancy evaluation
FF&E selection / specification
furniture contract coordination
existing conditions survey

Relevant Experience

RMW has completed numerous office building projects of similar scope and magnitude for both public and private clients. We've enclosed several examples of relevant projects which demonstrate our design capabilities. We recognize that while many clients share similar characteristics, each organization is unique. Creating a space that reflects the values and culture of that individual organization is how we measure the success of a project.

Relevant projects are outlined in the following project sheets.

Jack London Square Ferry Landing

Oakland, California

Owner: Ellis Partners LLC
111 Sutter Street, Suite 800
San Francisco, CA 94104

Size/Uses: 1.6 acres; 32,000 sf

Services Performed: Full Site Planning and Architectural Design Services

Construction Costs: $7,000,000

Year Completed: 2007

Jack London Square is a large mixed use residential, office and retail district that occupies the western edge of Oakland where the city touches the Alameda estuary. RMW's new Ferry Landing building is a 32,000 sf mixed-use building designed to house retail/restaurant uses on the ground floor and offices and public viewing deck on the second floor. Located at the landing of the Oakland – San Francisco ferry, the building was designed to anchor the north end of the Jack London Square development and provide a scale transition from the adjacent hotel and the Port of Oakland's corporate offices. The design also meets the Port's and Bay Conservation and Development Commission's requirement for public access and views.

Contextual View

Staircase

Front Entrance

Jack London Square Jack London Marketplace

Oakland, California

Owner: Ellis Partners LLC
111 Sutter Street, Suite 800
San Francisco, CA 94104

Size/Uses: 4.1 acres; Office 102,900 sf; Retail 77,200 sf

Services Performed: Full Site Planning and Architectural Design Services

Construction Costs: $57,000,000

Year Completed: 2009

Award: 2010 DBIA Excellence Award

This project is at the center of the revitalization of Jack London Square and is part of a larger, 300 million dollar redevelopment initiative to create a vibrant new community in this historic waterfront district.

The Jack London Marketplace building is a 180,000 sf mixed-use office and retail project that will house the largest specialty food market of its kind on the West Coast. The ground floor will feature local and sustainably-produced meats, produce and other specialty products. The second floor will be occupied by casual dining, restaurants and specialty retail shops. The top four floors features Class A office spaces with panoramic views of the San Francisco Bay.

The project was awarded LEED® Silver certification, recognizing multiple initiatives undertaken during design and construction to reflect sustainability as a core value of the redevelopment of Jack London Square.

View from Waterfront

Exterior View

Harvest Hall

A mixed-use three-story building is fully integrated with two existing, locally-registered, historic buildings.

260 Homer

Palo Alto, California

Owner: Menlo Equities
490 California Avenue, 4th Floor
Palo Alto, CA 94306

Size/Uses: Office 30,000 sf; Condos 8,000 sf; Retail 800 sf; 144-Space Parking Structure

Services Performed: Full Site Planning and Architectural Design Services

Construction Costs: $18,800,000

Year Completed: September 2008

260 Homer is a three-story building consisting of 30,000 sf of office, a partial first floor of 800 sf of retail, a top floor of four condo units totaling approximately 8,000 sf, and 144 spaces of below grade parking. The success of the project was heightened by RMW's ability to integrate two existing, locally-registered, historic buildings on the property, within the developer's plan. The new construction joins what was previously a French laundry, and compliments a retired free-standing AME Zion Church. In keeping with the Secretary of the Interior's Standards for Rehabilitation of Historical Structures, the interiors of the historic buildings have been renovated to accommodate office users. Working with the existing constraints and program for the project, the building was designed to utilize sustainable design measures wherever possible. Daylight and views will be provided with a direct line of sight for 90% of building occupants. Other measures include storm water runoff management, reduction of heat island affect, and an increase in outside air ventilation rates. 260 Homer received LEED Gold® certification.

Contextual View

Exterior View

Exterior View

Class A look using a cost-effective building system.

Access Dental

Sacramento, California

Owner: Access Dental
8890 Cal Center Drive
Sacramento, CA 95826

Size/Uses: 1 Office Buildings; 46,000 SF

Services Performed: Programming, Site Assessment, Master Planning, Architectural and Interior Design Services

Construction Costs: $9,400,000

Year Completed: 2005

Access Dental purchased a 5-acre prime site, the last remaining parcel, in California Center. RMW has designed two 3-story Class A office buildings. Phase 1 is a 46,000 square foot headquarters building and Phase 2 is a future speculative office building for Access Dental. The tilted concrete construction system employs a blended framing system with volumetric articulations and contrasting aluminum and stone materials to create an interplay of forms that express program elements and add interest to the buildings' simple rectangular form. The crisp, modern international style buildings are sited around a formal garden courtyard with geometric reflecting pools, which will be visually enclosed by diagonally flanking outdoor patio wings on each building.

Site Plan

Exterior View

Detail View

Lobby

Keeping up with a company that moves at internet speed.

Agilent Technologies

Sonoma County, California

Owner: Agilent Technologies
1400 Fountaingrove Parkway
Santa Rosa, CA 95403

Size/Uses: 19.19 acres; 4 R&D Buildings, 309,960 gsf

Services Performed: Master Planning, Architectural and Interior Design Services

Construction Costs: $14,800,000

Year Completed: 1999

To meet exploding demand for its telecommunications products, Agilent's Light Wave Division needed a new manufacturing campus. They could not afford to wait two years to expand two existing campuses under normal circumstances.

Agilent approached Panattoni Development about their speculative project underway in Airport Business Center. Agilent liked RMW's design and was satisfied that the floorplates were flexible enough to meet their varied space requirements. Move-in would take place in only 11 months.

Four tilt-up concrete buildings surround a central landscaped courtyard. Freestanding vertical panels and a long curved parapet add style to the buildings' basic rectangular form.

Exterior View

Lobby

Exterior Detail

Exterior Detail

vision
function
space
culture
ideas
experience

RMW architecture & interiors

think
listen
build
speak
learn

Why did a leading publisher of books on system software and the Internet choose to be headquartered in Sebastopol?

O'Reilly Media Corporate Headquarters

Sebastopol, California

Owner: O'Reilly Media
1005 Gravenstein Hwy. North
Sebastopol, CA 94572

Size/Uses: 14 acres; 2 Office Buildings, 89,274 gsf + 6,000 sf Warehouse

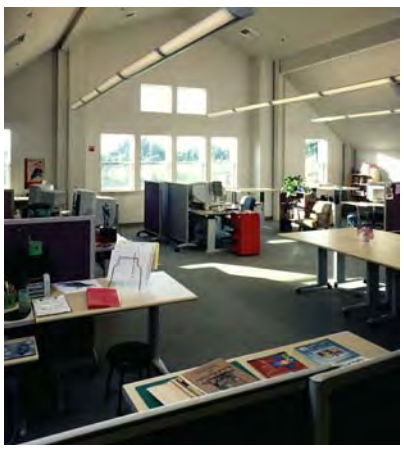
Services Performed: Master Planning, Site Planning, Architectural and Interior Design Services

Construction Costs: $10,796,000

Year Completed: 2001

O'Reilly Media pioneered online publishing by connecting people with the information they need. It's a growing international company with 270 employees. So why aren't they in Silicon Valley? Because they're a group of creative, bright, energetic people who like working far from the crowds. RMW made sure their new headquarters matched their image. To enhance employee interaction, two, 40,000 square foot office buildings and a warehouse form a quadrangle, recalling collegiate life. Floor plans unite previously fragmented departments. Natural light, open and private offices, and a two-story living-room-style reception area improve office life. And the architecture suits the residential neighborhood in design and scale. Dormers, sloped roofs, clapboard siding, and operable windows all proclaim that this is no standard office "box."

Central Quad



Open Space

Library

Open Office

vision
function
space
culture
ideas
experience

RMW architecture & interiors

think
listen
build
speak
learn

A sustainable campus consolidates wellness services to support the County's neediest citizens.

County of Marin
Health and Wellness Campus

San Rafael, California

Owner: County of Marin
Office of the Administrator
3501 Civic Center Drive, Room 404
San Rafael, CA 94903

Size/Uses: 5 Office Buildings; 75,000 sf

Services Performed: Master Planning, Site Planning, Full Architectural and Interior Design Services

Construction Costs: $28,000,000

Year Completed: 2008

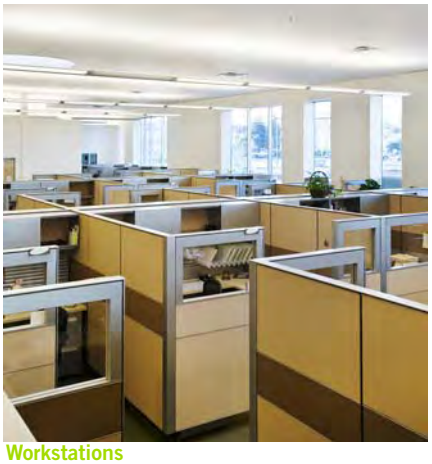
RMW provided master planning, architectural renovation and interior design services to transform an 8½ acre site into the new Health and Wellness Campus. The buildings consolidated various health and human services program onto one campus. Services include the County's HHS Health Clinics, WIC program, Children & Family Services and Adult, Youth & Family Mental Health programs. The buildings also house conference and training rooms for staff and client education and staff offices. The campus is open to the surrounding community with meeting rooms and courtyard intended to be a venue for cultural and community events. Occupancy of the site was 12 months after the start of construction.

The campus was awarded LEED® Gold certification.

Connection Center View

Courtyard

Staff Break Room



Workstations

Summary of Experience: Office Buildings & Campuses (partial list)

Autodesk

Corporate Headquarters, San Rafael *120,000 sf*

- Located in the Civic Center North Office Building, McInnis Parkway, San Rafael, the project's major program elements include executive and general offices, and common spaces including the customer briefing center, cafeteria, and fitness center.

Brocade Communications Systems, Inc.

Corporate Headquarters, San Jose *565,000 sf*

- Full interior design services for Brocade's new San Jose campus, consisting of two 7-story 220,000 sf buildings plus a 4-story 125,000 sf building which will house Brocade's corporate data center, electronic laboratory and server room. The first floor of the two towers will house common spaces including a cafeteria, executive briefing center, fitness center and conference rooms while the remaining floors will be offices and workstations for approximately 2,300 employees.

Cadence Design Systems

Corporate Headquarters Buildings 10, 5, 7 & 9 San Jose *1,010,000 sf*

- RMW provided architectural and interior design services for Cadence's corporate headquarters. Building 10 is a 5-story structure which includes executive, R+D and general administrative offices, cafeteria and auditorium. Building 5 includes executive suites and boardroom, Building 9 houses a full service executive briefing center.

California State University, East Bay

Student Services Building, Hayward *100,000 sf*

- RMW performed full architectural, interior design and construction administration services for the new CSU East Bay Student Services and Administration building. The facility will provide state-of-the-art administrative office space on its upper floors, while housing Enrollment and Student Services on the lower floors.

Hewlett-Packard

Buildings 31 and 32, Mountain View *70,000 sf*

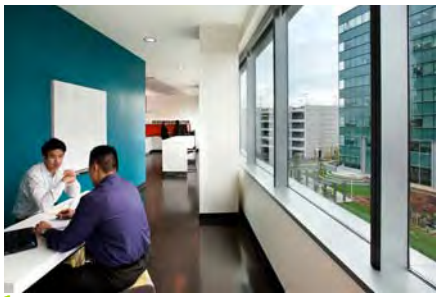
- Renovation of two connected buildings from warehouse to open office space. Program included fitness and aerobics rooms, conference rooms, maintenance lab, a full service cafeteria with indoor/outdoor dining and exterior improvements.

Juniper Networks, Inc.

Corporate Headquarters & New Campus, Sunnyvale *2,420,000 sf*

- Site, architectural and tenant improvement services for Juniper's Corporate Headquarters. Juniper moved its corporate headquarters and engineering staff from 1-story tilt-ups in multiple locations to three new 4-story office buildings in the Mathilda Research Centre.

1-3 Brocade Communication Systems



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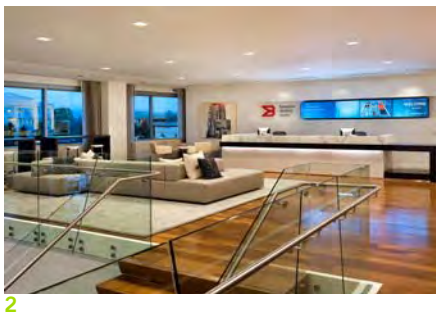

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Summary of Experience: Office Buildings & Campuses (partial list) continued

Letterman Digital Arts Center
New Digital Arts Campus, San Francisco *600,000 sf*
- Programming, design standards & guidelines, performance criteria and interior design services for the LucasArts Letterman Digital Arts Center in the Presidio. The project includes office and technical spaces and campus amenities including theatres, fitness center, a 350-seat cafeteria and a childcare center.

Levi Strauss & Co.
Worldwide Headquarters, San Francisco *600,000 sf*
- Master planning and workplace standards for Levi's Worldwide Headquarters including consulting for the company's future planning strategies which resulted in significant real estate savings.

PeopleSoft (now Oracle)
Corporate Campus, Pleasanton *382,000 sf*
- Interior design for PeopleSoft's corporate campus consisting of two 4-story buildings. Common areas include a cafeteria, fitness center, sports court and a landscaped courtyard, all along the "boardwalk," encouraging social interaction.

Sybase, Inc.
Corporate Headquarters, Dublin; 14.5 acres *420,000 sf*
- Programming, master planning and architectural and interior design services for Sybase's corporate campus. The campus features two buildings which house executive, management, engineering and administrative personnel, a 30,000 sf data center, 14,000 sf conference center, executive briefing center, full-service cafeteria and a fitness center.

Yahoo!
Corporate Headquarters, Sunnyvale *806,000 sf*
- Master planning, architectural and interior design services for new corporate headquarters. Campus features two 4-story and two 5-story office buildings that total 740,000 sf. The 2-story, 57,000 sf "Commons" building includes a cafeteria, training center, visitor and demo center, fitness center, Yahoo! store and a media room for AV productions and broadcasting.

Workplace of the Future, Santa Clara
- RMW proposed a new work environment of the future solution to update and reinvigorate Yahoo!'s workplace that focused on flexibility, collaboration and concentration. RMW also created electronic work environment of the future guidelines for real estate and facility staff use worldwide.

1 HP San Francisco
2-3 Cadence Design Systems

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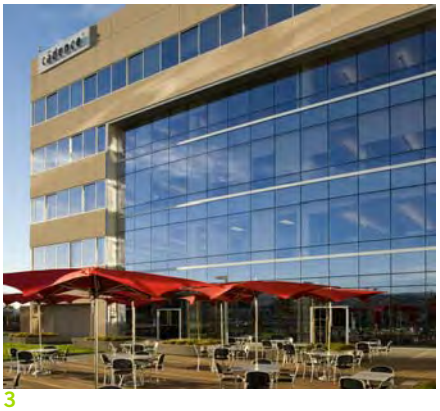

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Project Team: Organizational Chart

City of Novato
New City Administrative Office Building
Project Team

Consultants

Civil Engineering
BKF Engineers
Daniel Schaefer, PE, LEED® AP

Mechanical Engineering
Taylor Engineering
Glenn Friedman, PE, LEED® AP

Electrical Engineering
The Engineering Enterprise
Brian Smith
Kristina Martin, PE, LC, LEED® AP

Structural Engineering
SEI
Sam Koerper, SE

Acoustical / Security / Telecom
Charles Salter Associates
David Schwind, FAES
Thomas Keller, CDT
David Nussbaum, RCDD, PMP

Landscape Architecture
RHAA
Manuela King, ASLA, LEED® AP

RMW architecture & interiors

Architectural & Interior Design

Bart McClelland, AIA, LEED® AP
Project Principal

Steve Worthington, AIA, LEED® AP
Director of Architectural Design

Julie Johnson, AIA, LEED® AP
Project Architect

Ron Aguila
Sr. Interior Designer / Planner

Additional Design and Technical Staff

Project Team

RMW will dedicate a team who will provide continuity throughout the duration of the project. The same individuals responsible for the design will be responsible throughout construction. The project team members are based in RMW's San Francisco office.

Bart McClelland, AIA, LEED® AP, Project Principal
Bart will be ultimately responsible for the delivery of professional services. He will direct the work, be involved in all major judgments and decisions and will assume overall responsibility for the conduct of the work. Bart will participate in all major project meetings.

Steve Worthington, AIA, LEED® AP, Director of Architectural Design
Steve will be responsible for leading the architectural design for the project. He will focus on the functional planning and design elements of the buildings. He will be active in project design presentations and be available throughout the duration of the project.

Julie Johnson, AIA, LEED® AP, Project Architect
Julie will organize and direct the day-to-day requirements of the project team. She will be responsible for the production of documents as well as coordination with consultants and the general contractor.

Ron Aguila, Sr. Interior Designer / Planner
Ron will work with the team to lead the design efforts and develop design solutions for the project. He will lead the programming effort, interior master planning and interior design for all office environments. He will participate in major presentations, provide relevant judgments on the suitability of design alternatives and coordinate with RMW's principal and project team.

Project Team
continued

Consultant Team

We are proposing a team of highly qualified consultants assembled specifically for the new City of Novato Administrative Office Building. RMW has worked with each of the firms and has developed our lines of communication and quality control processes in order to produce well documented and coordinated projects.

Civil Engineering
BKF Engineers
1646 N. California Blvd., Ste. 400 925.940.2200
Walnut Creek, CA 94596
Daniel Schaefer, Vice President and Principal

The BKF Civil team provides solutions to engineering issues associated with land development and redevelopment, transportation, utility, and infrastructure projects throughout California. These projects include both traditional design-bid-build delivery methods and design-build methods, as well as a host of other less traditional models. BKF Civil develops plans, specifications, and estimates for public and private projects. Additionally, they work closely with clients in determining project feasibility, entitlement planning, and permitting.

Relevant Projects
- California State Automobile Association, Headquarters at Station Landing, Walnut Creek
- Affymetrix Manufacturing Facility, West Sacramento
- Orinda City Offices, Orinda
- Varian, Inc., IRD Facility, Walnut Creek
- Chevron Corporate Campus, San Ramon
- Walnut Creek Library, Walnut Creek
- East Contra Costa County Courthouse, Pittsburg

Mechanical Engineering
Taylor Engineering
1080 Marina Village Parkway, Ste. 501 510.749.9135
Alameda, CA 94501
Glenn Friedman, Principal

Taylor Engineering (TE) is a nationally recognized firm specializing in

1 Orinda City Offices
2 AAA Headquarters at Station Landing
3 East Contra Costa County Courthouse


1

2


3

Project Team
continued

building mechanical systems design, energy conservation, indoor air quality and energy management & control systems. TE has extensive experience designing systems for commercial, institutional and residential projects, as well as design-bid-build and design/build projects. All TE employees have contracting or field experience, which ensures that their designs are practical, complete, well-coordinated, and on budget.

Relevant Projects

- Alameda GSA, Country Counsel Offices, Oakland
- Orinda City Offices, Orinda
- Barclays Global Investors, 400 Howard, San Francisco
- Capitol Area East End Complex, Sacramento
- StopWaste.org Offices, Oakland
- Morgan Hill Recreation Center, Morgan Hill
- Santa Clara Community Center, Santa Clara
- Jack London Square, Oakland

1 Morgan Hill Recreation Center
2 Pixar II Office Building
3 Symantec Fox Hills Office Building


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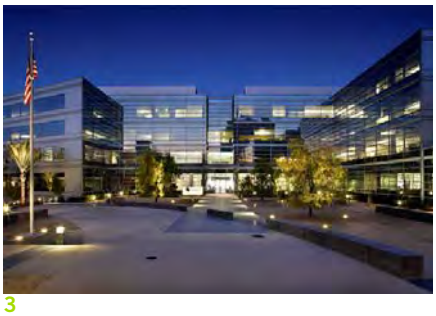
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Electrical Engineering
The Engineering Enterprise
1305 Marina Village Parkway 510.769.7600
Alameda, CA 94501
Brian Smith, Principal

The Engineering Enterprise (TEE) is an engineering firm with extensive experience in both new construction and renovation projects, ranging from small retail stores to large office campus facilities. TEE has provided electrical design services for over 130 office building projects with a total area of 30,000,000 square feet. The firm specializes in electrical engineering, lighting & lighting control systems, life safety & security systems, energy conservation analysis and equipment acceptance & maintenance testing coordination. TEE has been involved in numerous LEED projects, most notably the Platinum-certified Chartwell School in Seaside. TEE is also involved in the Inderkum HS project, which includes a roof mounted 400 KW PV system, one of the first large-scale PV applications in California.

Relevant Projects

- San Joaquin County Administration Building, Stockton
- UC Merced, Technical Classroom & Office Building, Merced
- Jack London Square, Oakland
- SPCA, Leanne B. Roberts Animal Care Center, San Francisco

Project Team
continued

- Hewlett Foundation Office Building, San Mateo
- Pixar II Office Building, Emeryville
- Symantec Fox Hills Office Building, Culver City
- Capitol Area East End Complex, Sacramento
- Barclays Global Investors, 400 Howard, San Francisco

Structural Engineering
Structural Engineers Incorporated
4970 El Camino Real, Suite 100 650.938.2200
Los Altos, CA 94022
Samuel Koerper, Principal

Structural Engineers Incorporated (SEI) is a design and consulting firm specializing retail, commercial and industrial buildings ranging from single story tilt-up to mid-rise structural steel frame construction. SEI provides complete consulting services including analysis and design, value engineering, preparation of contract documents and construction administration.

Relevant Projects
- Santa Clara County Social Services Agency, San Jose
- Communications Hill Fire Station #33, San Jose
- Rowland Office Plaza, Novato
- 1290 Kifer Rd., Sunnyvale
- 3412 Hillview Ave., Palo Alto
- 1637 Bordeauz Dr., Sunnyvale
- 10900 Tantan Ave., Cupertino
- West Bernardo Dr., San Diego

Acoustical / Security / Telecom
Charles Salter Associates
130 Sutter Street, Ste. 500 415.397.0442
San Francisco, CA 94104
David Schwind, Senior Vice President

Charles M. Salter Associates (CSA) specializes in acoustics, audiovisual system design, telecommunications and security. With a staff of over 40, they are involved in more than 900 projects per year in nine major service areas. CSA is experienced in working with local, state, and federal public agencies. As part of the General Services Administration Workplace 20-20

1 1290 Kifer Rd.
2 3412 Hillview Ave.
3 San Louis Obispo County Government Center


1


2


3

Project Team
continued

Program, CSA conducted hundreds of acoustical measurements in over 20 federal buildings across the U.S.

Relevant Projects

- PJKK Federal Building, Honolulu, HI
- EGWW Federal Building, Portland, OR
- 50 United Nations Plaza Federal Building, San Francisco
- San Louis Obispo County Government Center, San Louis Obispo
- Richmond Civic Center, Richmond
- Morgan Hill County Courts, Morgan Hill
- Oakland Federal Building, Oakland
- County of Fresno Downtown Office Building, Fresno
- Emeryville City Council Chambers, Emeryville

1 Morgan Hill Courthouse
2 LBNL Solar Energy Research Center
3 Las Positas College Student and Administrative Services Building


1


2


3

Landscape Architecture
RHAA
225 Miller Avenue 415.383.7900
Mill Valley, CA 94941
Manuela King, Principal

RHAA is a federally certified Disadvantaged Business Enterprise specializing in landscape architecture and planning, with offices in Mill Valley and San Francisco. Throughout its 53-year history, RHAA has sustained commitment to creating places that enrich the fabric of their communities. They facilitate a design and visioning process to enable clients to see their ideas become reality. Numerous national and local design awards validate the high quality and success of this work. Testament to their high standard of service is the fact that a high percentage of their work comes from repeat clients.

Relevant Projects

- Las Positas College, Student and Administrative Services Building, Livermore
- Novato City Hall, Novato
- County of Marin, Civic Center Campus, Library, and Courtroom, San Rafael
- City College of San Francisco, Chinatown Campus, San Francisco
- University of California, Lawrence Berkeley National Lab, Solar Energy Research Center, Berkeley
- Yahoo! Corporate Campus, Sunnyvale

Resumes

PROFESSIONAL QUALIFICATIONS

Name: Bart McClelland

Role in this Subcontract: Project Principal

Years Experience: 32

Firm Name & Location: RMW architecture & interiors, San Francisco

Education and Degree:

- Bachelor of Environmental Design, Miami University, 1979, Oxford, OH

Current Professional Registrations:

- Registered Architect: California, 1987, C-21696
- LEED AP

Other Professional Qualifications:

- Discovery Conference on Architectural Practice, Panel Member & Speaker, 2000
- Practice Management Certificate, Advanced Management Institute, 1999
- Member of the American Institute of Architects

Awards & Recognition:

- Miami University Department of Architecture, Award for Excellence in Design
- "The Psychophysics of Mass/Space," Man-Environment Systems, November, 1978
- Sybase B-Trium, Emeryville, California: San Francisco Chapter, Interior Architecture Award for Design Excellence, Commercial over 10,000 sf; IIDA Interior Design Award, One of the Ten Best Projects in 1996; Interior Design Magazine; June 1996

RMW architecture & interiors
Bart McClelland AIA, LEED® AP
Project Principal

Bart McClelland joined RMW architecture & interiors in 1985 as a Project Manager. In 2001, he was named a Principal in the firm. Bart's focus over the past 20 years has been on integrating architectural and interior design in institutional and advanced technology organizations.

County of Marin, Health & Wellness Campus, San Rafael
Principal-In-Charge — Five buildings totaling 75,000 sf were renovated to house the new Health & Wellness Campus. The design took advantage of the existing building and site to improve site circulation and linked two other buildings with a new connecting structure. Services include master planning, complete site redesign, architectural renovation, interior design, and furniture/finishes design and specifications. This project is LEED Gold certified.

Department of Veterans Affairs, Mental Health Training Center, Palo Alto
Principal-In-Charge — RMW is providing full architectural, interior design, and construction administration services for a new 14,500 sf 2-story health education facility. This $8.5M facility consolidates training functions scattered across the campus into a state-of-the-art facility that will service the training needs of the Palo Alto Campus and other VA facilities within the region.

Cadence Design Systems, Office Building 5, San Jose
Principal-In-Charge — RMW redesigned 10,000 sf of existing lobby and executive office spaces, providing a new reception space for visitors and clients that showcases Cadence technology. A frameless glass wall secures the elevator lobby and leads to a curved stairway that wraps around the elevator shaft.

University of California, Lawrence Livermore National Laboratory, Buildings 142, 262 & 264, Livermore
Principal-In-Charge — RMW designed a series of 20,000 sf 2-story prototype office buildings to replace outmoded, temporary buildings. The compact building footprint utilizes design/build delivery methods, can be situated in a variety of locations, and the interior closed office plans exceeded the highly efficient program demanded by the Lab.

Cadence Design Systems, Office Building 10, San Jose
Principal-In-Charge — RMW provided architectural and interior design services for this 208,000 sf office building to consolidate Cadence's software development groups.

Resumes
continued

PROFESSIONAL QUALIFICATIONS

Name: Steven Worthington

Role in this Subcontract: Architectural Designer

Years Experience: 30

Firm Name & Location: RMW architecture & interiors, San Francisco

Education and Degree:
- Bachelor of Science in Architecture, Georgia Institute of Architecture, 1979, Atlanta, GA
- Urban Design Certificate, L'Ecole des Beaux Arts Paris, 1979, Paris, FR

Current Professional Registrations:
- Registered Architect: California, 2000, C-28233
- LEED AP

Other Professional Qualifications:
- AIA San Francisco, Board of Directors, 2002-2004
- Center for the Built Environment, Board Member, 2000-2008
- Member of the American Institute of Architects
- Member of the U.S. Green Building Council

Awards & Recognition:
- Design-Build Institute of America, 2010, Excellence Award, Jack London Market, Oakland
- Marble Institute of America, Craftsmanship & Design Award, 2005, Esquire Plaza, Sacramento
- AIA COTE Award, 2003, San Mateo Forensic Laboratory
- AIA, Best of the Bay, 2002, 150 California

* **Participation of Lead Designer:** Steve Worthington was the Lead Designer/Lead Planner on these projects prior to joining RMW.

RMW architecture & interiors
Steven Worthington AIA, LEED® AP
Director of Architectural Design

Steve has over 30 years of architectural design experience on a broad range of project types, including commercial, mixed-use, higher education, public, and healthcare.

Jack London Square, Ferry Landing, Oakland
Lead Designer — A 32,000 sf mixed use building designed to house retail and restaurant uses on the ground floor and offices and public viewing deck on the second floor. This newly constructed building anchors the north end of the Jack London Square development and provides a scale transition from the adjacent hotel and the Port of Oakland's corporate offices.

Jack London Square, Jack London Marketplace, Oakland
Lead Designer — The second of four projects that RMW designed for this area, the Marketplace is a 170,000 sf mixed-use office and retail project with lively plazas, public spaces and spectacular views of the San Francisco Bay. This project was awarded LEED Silver certification.

Pleasanton Corporate Commons, Pleasanton*
Lead Designer — Pleasanton Corporate Commons is a LEED-EB Silver Certified suburban office campus that consists of four, 150,000 sf office buildings. The buildings are connected by a landscaped pedestrian promenade, and the site features a significant public art installation.

GSA, Social Security Administration Headquarters, Birmingham, AL*
Lead Designer — Steve provided full design-build architectural services for this 600,000 gsf project encompassing offices, a cafeteria, a fitness center, day care center, and 1765 car parking structure. This project achieved LEED Gold certification, incorporating daylight harvesting, green roofs, water recycling, and environmental interior finishes.

100 California Street, San Francisco
Lead Designer — RMW provided a full building options study that was implemented in multiple phases. Alternatives included a vertical and horizontal addition. Implementation has included renovation of the lobby and entry plaza as well as a floor by floor seismic upgrade, HazMat abatement and renovation. Work was sequenced to allow building occupants to remain during construction, and future renovations are in the conceptual design stage.

Resumes
continued

PROFESSIONAL QUALIFICATIONS

Name: Julie Johnson

Role in this Subcontract: Project Architect

Years Experience: 16

Firm Name & Location: RMW architecture & interiors, San Francisco

Education and Degree:
- Bachelor of Environmental Design, Miami University, 1995, Oxford, OH
- AIAS Summer Scholar's Research Grant, 1996

Current Professional Registrations:
- Registered Architect: California, 2005, C-30212
- LEED AP

Other Professional Qualifications:
- Board of Directors, San Francisco Design Museum, 2001

Awards & Recognition:
- Institute of International Education, Academic Excellence Scholarship, 1995
- Faculty-elected Student Speaker at Commencement Ceremony, 1995

RMW architecture & interiors
Julie Johnson AIA, LEED® AP
Project Architect

Julie has 16 years of architectural experience including public buildings, office buildings, and workplace environments for higher education, public, healthcare, corporate, and hospitality clients. Julie excels at solving technical, complex design problems in a multi-disciplinary team environment.

Jack London Square, Ferry Landing, Oakland
Project Architect — A 32,000 sf mixed use building designed to house retail and restaurant uses on the ground floor and offices and public viewing deck on the second floor. This newly constructed building anchors the north end of the Jack London Square development.

Jack London Square, Jack London Marketplace, Oakland
Project Architect — The Marketplace is a 170,000 sf mixed-use office and retail project with lively plazas, public spaces and spectacular views of the San Francisco Bay. This project achieved LEED Silver certification.

John Wiley and Sons, Branch Office, San Francisco
Project Architect — RMW is providing interior design services for 3 floors totaling 46,300 sf of corporate office space. RMW participated in site selection, space planning, concept designs and construction documents, and selection of interior fixtures and furnishings.

University of California, Lawrence Berkeley National Laboratory, Building 74 and General Purpose Laboratory, Berkeley
Project Architect — Architectural and interior design services for two buildings on the LBNL campus, including both new construction and renovation work.

Hudson Pacific Properties, Corporate Offices, San Francisco
Project Architect — 5,600 sf of new tenant improvements. RMW is providing interior design, furniture and finishes specifications, and construction administration services.

XAD, Inc., Corporate Offices, San Francisco
Project Architect — 7,600 sf of new tenant improvements. RMW provided interior design, furniture and finishes specifications, and construction administration services.

Resumes
continued

PROFESSIONAL QUALIFICATIONS

Name: Ron Aguila

Role in this Subcontract: Senior Interior Designer / Space Planner

Years Experience: 35

Firm Name & Location: RMW architecture & interiors, San Francisco

Education and Degree:

- Bachelor of Architecture, Cum Laude, University of Southern California, Los Angeles, 1975, Los Angeles, CA

RMW architecture & interiors
Ron Aguila
Programmer/Space Planner
Associate

Ron joined RMW in 2000 and is a Senior Designer and Programmer with extensive experience in a wide range of client, program, and building types.

County of Marin, Heath & Wellness Campus, San Rafael
Programmer/Space Planner — Five buildings totaling 75,000 sf were renovated to house the new Health & Wellness Campus. The design took advantage of the existing building and site to improve site circulation and linked two other buildings with a new connecting structure. Services include master planning, complete site redesign, architectural renovation and interior design. This project is LEED Gold certified.

California State University, East Bay, Student Services and Administration Building, Hayward
Programmer/Space Planner — This newly constructed facility provides state-of-the-art enrollment and Student Services on the lower floors while housing administrative office space on its upper floors. The building occupies a gateway site and provides a strong landmark presence at the entry to the CSU East Bay campus. The building has been well received by faculty, staff and students alike for its airy, light filled public spaces and pleasant working environment.

Cadence Design Systems, Office Building 5, San Jose
Programmer/Space Planner — RMW redesigned 10,000 sf of existing lobby and executive office spaces, providing a new reception space for visitors and clients that showcases Cadence technology. A frameless glass wall secures the elevator lobby and leads to a curved stairway that wraps around the elevator shaft.

Department of Veterans Affairs, Mental Health Training Center, Palo Alto
Programmer/Space Planner — RMW is providing full architectural, interior design, and construction administration services for a new 14,500 sf 2-story health education facility. This $7M facility consolidates training functions scattered across the campus into a state-of-the-art facility that will service the training needs of the Palo Alto Campus and other VA facilities within the region.

Resumes
continued

PROFESSIONAL QUALIFICATIONS

Name: Daniel Schaefer

Role in this Subcontract: Civil Project Manager

Years Experience: 21

Firm Name & Location: BKF Engineers, Walnut Creek

Education and Degree:

- BS Civil Engineering, California Polytechnic State University, San Luis Obispo

Current Professional Registrations:

- Registered Civil Engineer:
  California, 51158
  Nevada, 017565
  Hawaii, 14215
- LEED AP

BKF Engineers
Daniel Schaefer PE, LEED® AP
Civil Project Manager

As a Principal and Vice President at BKF, Mr. Schaefer specializes in facilitating sustainable . His 21 years of joint public and private experience provide a unique perspective to projects. In working with clients to create a shared vision, Mr. Schaefer implements those ideals into practical design solutions and straight-forward construction. His insightful contributions during the feasibility, alternative analysis, planning and entitlement/environmental review of projects ensures that a project's viability (e.g. financial, regulatory, constraints) is considered early in the process.

California State Automobile Association, Headquarters at Station Landing, Walnut Creek
- Civil Principal-in-Charge for the new 255,000 sf CSAA building and parking structure.
- BKF worked with the design team to entitle the project with the County.
- Prepared construction drawings for the on and off-site improvements
- Earned LEED Gold Certification

Contra Costa County, Brentwood Civic Center, Brentwood
- Civil Principal-in-Charge for the new civic center, parking garage, park, and multi use facility to serve the City.
- Work required major upgrading of the utility infrastructure throughout the downtown area.
- Developed site grading, drainage, and utility improvements.
- Designed improvements to comply with NPDES C.3 criteria.

East Contra Costa County Courthouse, Pittsburg
- Redevelopment of civic center area to support construction of the new East Contra Costa County Courthouse building.
- Developed storm water management plan to comply with C.3 provisions.
- Prepared construction documents for the civil and site improvements including the design for the storm water control measures.
- Processed plans through the Administrative Office of the Courts (AOC) Office of Court Construction and Management (OCCM).

Varian, Inc., IRD Facility, Walnut Creek
- Civil Principal-in-Charge for retrofitting and expanding existing Campus.
- Prepared construction drawings for the on and off-site improvements associated with the campus and developed a storm water control and operations/maintenance plan that complied with Agency standards.

Resumes
continued

PROFESSIONAL QUALIFICATIONS

Name: Glenn Friedman

Role in this Subcontract: Lead Mechanical Engineer

Years Experience: 30

Firm Name & Location: Taylor Engineering, Alameda

Education and Degree:

- Bachelor of Science in Chemical Engineering, University of California, Berkeley, 1980
- Carrier Corporation, Building Systems Design Course, 1981

Current Professional Registrations:

- Registered Mechanical Engineer: California, 1984, M-22870
- American Society of Heating, Refrigeration, and Air-Conditioning Engineers (ASHRAE)
- LEED AP

Other Professional Qualifications:

- ASHRAE Technology Award for the Orinda City Offices Building
- ASHRAE Technology Award for the University of California, Merced, Sierra Terraces Dormitories
- Teacher of "X472 HVAC System Design Considerations", UC Berkeley Extension
- Author of Energy-Saving Dorms, ASHRAE Journal, May 2010

Taylor Engineering, LLC
Glenn Friedman PE, LEED® AP
Lead Mechanical Engineer

Glenn Friedman is considered an authority on HVAC and energy management & control systems. His projects include healthcare, manufacturing, schools, casinos, municipalities, offices, malls, restaurants, hotels, retail and high-end custom residences throughout the Bay Area.

Orinda City Offices, Orinda
Mechanical Engineer — City offices including City Hall, Police Station, City Offices, Emergency Operations Center. The building features direct/indirect evaporative cooling and natural ventilation. The mixed-mode cooling system uses natural ventilation for much of the year and compressorless indirect-direct evaporative cooling when needed. Occupant comfort controls consist of thermostats, operable windows, and ceiling fans. Green design strategies used throughout. Project beats Title-24 by 55% and is LEED NC Gold certified.

Morgan Hill Recreation Center, Morgan Hill
Mechanical Engineer — A one story multipurpose recreation center including full service kitchen, aerobics and fitness rooms, gym, offices, daycare, lounges, locker rooms, and 10,000 sf natatorium. Packaged VAV with HW reheat in community spaces. Packaged VAV single zone in gym. VAV indirect evaporative cooler with heat pipe heat recovery and auxiliary DX in the natatorium. Designed to achieve Silver level but not submitted for certification.

StopWaste.org Offices, Oakland
Mechanical Engineer — Alameda County Waste Management Authority wanted a building that reflected their commitment to green building. The project is a remodel of an intercity Oakland building that achieved a LEED Platinum rating. Project features include extensive use of recycled materials, minimized construction waste, variable volume HVAC using small packaged modulating DX units, direct digital controls with monitoring and trending ability, operable windows, extensive daylight views and demand control ventilation.

Alameda GSA, County Counsel Offices, Alameda
Mechanical Engineer — Full Plan & Spec Design of the fourth floor County Counsel Offices of the Alameda County Administration Building utilizing a double duct system.

Santa Clara Community Center, Santa Clara
Mechanical Engineer — Plan & Spec design for community center renovation using central chilled water plant, hot water plant, VAV air handler and full energy management control system.

Resumes
continued

PROFESSIONAL QUALIFICATIONS

Name: Brian E. Smith

Role in this Subcontract: Electrical Engineering Principal

Years Experience: 33

Firm Name & Location: The Engineering Enterprise, Alameda

Education and Degree:

- Graduate, Heald Engineering Institute, 1977

Other Professional Qualifications:

- Construction Specifications Institute, CSI, Member
- United States Green Building Council, Member

The Engineering Enterprise
Brian E. Smith
Electrical Engineering Principal

Brian Smith joined The Engineering Enterprise in 1978, was appointed a Principal of the firm in 1989 and was named President of the company in 2001. Mr. Smith is experienced in the design and management of a wide variety of lowrise and highrise commercial office, educational, governmental, industrial and institutional projects, incorporating the design and engineering of life safety, lighting and daylighting control, security, power distribution, voice/data cable and communication/signal distribution systems. He is responsible for the development of the electrical design criteria and adherence to the project schedule.

Technical Classroom & Office Building, University of California, Merced
Electrical Engineering Principal — New three-story, 93,000 sf facility including lecture halls, teaching labs, large auditorium space, classrooms, administrative offices and support areas, as well as faculty and graduate student offices. This project received LEED Gold certification.

Jack London Square, Ferry Landing and Marketplace, Oakland
Electrical Engineering Principal — Addition of four new buildings at the existing Jack London Square Complex consisting of a two-story, 28,400 sf mixed-use building, plus large common area, a 168,768 sf mixed-use building with large common area, an 8,000 SF single-story, kiosk-type retail building and a six-level parking garage with 30,000 sf of retail space and an Amtrak bus terminal on the ground floor.

Pixar II Office Building, Emeryville
Electrical Engineering Principal — New three-story, 154,000 sf office building, plus basement incorporating administrative offices, conference rooms, kitchenettes, coffee bar, food service areas and two screening rooms.

Barclays Global Investors, 400 Howard, San Francisco
Electrical Engineering Principal — Interior build-out of a new ten-story, 276,000 sf office building with two levels of below grade parking, open and enclosed office areas, trading floors, MDF and IDF rooms, multi-purpose meeting rooms, conference rooms, mailroom, coffee/copy areas and file/storage areas.

Resumes
continued

PROFESSIONAL QUALIFICATIONS

Name: Kristina K. Martin

Role in this Subcontract: Electrical Engineering Principal

Years Experience: 24

Firm Name & Location: The Engineering Enterprise, Alameda

Education and Degree:

- Bachelor of Science, Architectural Engineering, with Honors, University of Kansas, 1987, Lawrence, KS

Current Professional Registrations:

- Registered Engineer: California, 1996, E15303
- Lighting Certification NCQLP – LC (IES)
- LEED AP

Other Professional Qualifications:

- Member of the Illuminating Engineering Society
- Member of the National Society of Professional Engineers
- Member of US Green Building Council

The Engineering Enterprise
Kristina K. Martin PE, LC, LEED® AP
Electrical Engineering Principal

Kristina Martin has been a Project Designer of lighting, power and signal systems for numerous educational, government, healthcare and hospitality facilities since joining The Engineering Enterprise in 1989. Ms. Martin has an innate appreciation for architectural design issues and building systems coordination. Ms. Martin's responsibilities will include full electrical engineering for the project, including spec writing, development of working drawings, and the management and coordination of the electrical design team.

Hewlett Foundation Office Building, San Mateo
Electrical Engineering Principal — New two-story, 48,000 sf, office building with 100% raised floor, including the use of a 5 kw photovoltaic system, day-lighting controls, occupancy sensors, motorized clerestory window controls, monitoring of power consumption and provisions for a future 100 kw hydrogen cell. This project received LEED Gold certification.

University of California, Merced, Technical Classroom & Office Building, Merced
Electrical Engineering Principal — New three-story, 93,000 sf facility including lecture halls, teaching labs, large auditorium space, classrooms, administrative offices and support areas, as well as faculty and graduate student offices. This project received LEED Gold certification.

Symantec Fox Hills Office Building, Culver City
Electrical Engineering Principal — Two new four-story office buildings, totaling 500,000 sf with 100% raised floor, a 3 kw photovoltaic system for exterior lighting, occupancy sensors, low voltage lighting controls and monitoring/trending of power consumption for each quadrant and floor. This project received LEED Silver certification.

Jack London Square, Ferry Landing and Marketplace, Oakland
Electrical Engineering Principal — Addition of four new buildings at the existing Jack London Square Complex consisting of a two-story, 28,400 sf mixed-use building, plus large common area, a 168,768 sf mixed-use building with large common area, an 8,000 sf single-story, kiosk-type retail building and a six-level parking garage with 30,000 sf of retail space and an Amtrak bus terminal on the ground floor.

Resumes
continued

PROFESSIONAL QUALIFICATIONS

Name: Samuel J. Koerper

Role in this Subcontract: Structural Engineering Principal

Years Experience: 32

Firm Name & Location: Structural Engineers Incorporated, Los Altos

Education and Degree:

- Bachelor of Science Civil Engineering, Montana State University, 1976, Bozeman, MT
- Master of Science Civil Engineering, San Jose State University, 1981, San Jose, CA

Current Professional Registrations:

- Registered Structural Engineer:
  California, 1986, 2799
  Arizona, 2001, 36416
  Washington, 2010, 46582

Other Professional Qualifications:

- Member of SEAONC – Structural Engineers Association of Northern California

Structural Engineers Incorporated
Samuel J. Koerper SE
Structural Engineering Principal

Sam was one of the founding Principals of Structural Engineers Incorporated (SEI) in 1990. He has been the Structural Project Principal for many large projects with SEI, ranging from institutional facilities at Stanford University to new medical office buildings for Kaiser Permanente to large commercial buildings in Silicon Valley.

Valley Christian High School, San Jose
Structural Engineering Principal — This project consists of a new private high school facility that includes a three story classroom and administration building of approximately 60,000 square feet, a two level gymnasium and multi-purpose building of approximately 60,000 square feet, a baseball stadium and football stadium.

DuPont Fabros Technology, Data Center, Santa Clara
Structural Engineering Principal — This project consists of a new data center with the square footage totaling approximately 383,000 square feet. In addition, the project includes the construction of a new electrical substation

Cabrillo Community College, Allied Health Complex, Aptos
Structural Engineering Principal — The project consists of two new buildings for Cabrillo Community College that will house functions related to out-patient health care. The north building is a one-story structure of approximately 26,000 square feet and the south building is a two-story structure of approximately 25,000 square feet.

VF Outdoor Campus, Alameda
Structural Engineering Principal — This complex of two-story tilt-up buildings will serve as the new corporate headquarters for VF Outdoor. This campus consists of 4 buildings, each with a different footprint totaling approximately 160,000 square feet.

Rowland Office Plaza, Novato
Structural Engineering Principal — A new three-story steel framed office building at 88 Rowland Way.

Resumes
continued

PROFESSIONAL QUALIFICATIONS

Name: David R. Schwind

Role in this Subcontract: Acoustical Consultant

Years Experience: 35

Firm Name & Location: Charles M. Salter Associates, San Francisco

Education and Degree:

- B.S.E. Interdisciplinary Engineering, Purdue University, West Lafayette, IN, 1974

Other Professional Qualifications:

- Fellow of the Audio Engineering Society
- Purdue University, Distinguished Engineering Alumni Award, 2011
- Purdue University, Outstanding Interdisciplinary Engineer Award, 2002
- Corporate Member of the American Institute of Architects
- Member of the Acoustical Society of America
- Member of the Institute of Noise Control Engineers

Charles M. Salter Associates
David R. Schwind FAES
Acoustical Consultant

David Schwind, Senior Vice President at CSA, has been consulting in acoustics since 1975. His expertise includes architectural acoustics, audio system design, and noise and vibration control. Mr. Schwind consults on the acoustical design for laboratories, office spaces, conference centers, film and broadcast studios, and multi purpose auditoriums. He develops acoustical specifications for buildings and prepares reports analyzing noise sources and receivers.

50 United Nations Plaza Federal Building, San Francisco
Acoustical Consultant — Acoustical issues for the TI include compliance with GSA acoustical standards, ventilation system noise and vibration reduction, noise insulation from exterior noise sources, sound insulation between acoustically sensitive spaces, speech privacy, and reduction of reverberant noise with sensitivity for the historical fabric of the building. The GSA is planning to occupy the 6-story, 350,000 square foot, 1936 Beaux Arts building as its Pacific Rim region headquarters when it is completed.

Newport Beach City Hall, Newport Beach
Acoustical Consultant — Acoustical services during the expansion include environmental noise insulation, HVAC noise and vibration reduction, MEP noise mitigation for compliance with the Noise Ordinance, interior sound insulation, and room acoustics. The new design will improve and expand the building and the surrounding grounds, making it visually appealing as well as functional. With this project, the City is aiming for a LEED Silver certification, and the planned date of completion is summer 2012.

Doerr-Hosier Center at the Aspen Institute, Aspen, CO
Acoustical Consultant — A new, 22,000 square foot, $15 million business center. The LEED Gold certified center includes a large conference space, lobby, meeting rooms, and a reflecting pool that serves as a geothermal energy center to heat and cool the facility.

Genentech Building 10, Vacaville
Acoustical Consultant — A design-build project that includes conference, video conference, training, and lab spaces as well as typical open and private offices.

Resumes
continued

PROFESSIONAL QUALIFICATIONS

Name: Thomas D. Keller

Role in this Subcontract: Security Consultant

Years Experience: 21

Firm Name & Location: Charles M. Salter Associates, San Francisco

Education and Degree:

- California State University, Hayward, CA, 1988

Other Professional Qualifications:

- Member of the American Society of Industrial Security
- Corporate Allied Member of the American Institute of Architects
- Committee Member of the Academy of Architecture for Justice

Charles M. Salter Associates
Thomas D. Keller CDT
Security Consultant

Thomas Keller, Principal Consultant at CSA, has worked in the security systems industry as both a security consultant and construction project manager since 1989. He specializes in designing comprehensive security systems that include enterprise electronic access control, video surveillance, intrusion detection, and emergency communications systems. With 20 combined years as a technical project manager implementing complex security systems and designing solutions as a consultant, Mr. Keller brings a rare set of hands-on skills and experience to his projects.

Santa Clara Northside Branch Library, Santa Clara
Security Consultant — Security systems consulting for a single-story library following the City Technology Standards.

Arroyo Grande Police Station, Arroyo Grande
Security Consultant — Security consulting for a police station with secure parking, cells and sallyports, and secure storage of evidence and armory. Designing access control, video surveillance, intercom, and detention control system.

Bill Santucci Justice Center, Roseville*
Security Consultant — Security systems consulting for a new, $57 million 110,700 square foot, 3-level justice facility with 9 courtrooms and secure holding and transfer facilities from county jail. Design included access control, video surveillance, and intrusion detection.

County of Alameda Superior Court, Oakland*
Security Consultant — Designed intercom, video surveillance, and door management alarm systems to control exiting and circulation within the historic facility. Integrated systems with screening stations to allow operators to monitor and respond to requests to access doors and metal detectors.

*Prior to joining Charles M. Salter Associates, Inc.

Resumes
continued

PROFESSIONAL QUALIFICATIONS

Name: David E. Nussbaum

Role in this Subcontract: Telecommunications Consultant

Years Experience: 10

Firm Name & Location: Charles M. Salter Associates, San Francisco

Education and Degree:

- B.S. International Business/Economics, California State University Northridge, 2005

Other Professional Qualifications:

- Project Management Professional (PMP, Project Management Institute, 9 April 2008, #1142776
- Registered Communications Distribution Designer (RCDD), BICSI, 18 September 2006, #163536
- Author of Electronic Safety and Security Design Reference Manual, 2nd Edition, IP Based ESS Design, Subject Matter Expert Team Leader, BICSI, 2008

Charles M. Salter Associates
David E. Nussbaum RCDD, PMP
Telecommunications Consultant

David Nussbaum, Senior Consultant at CSA, provides systems planning, design, construction administration, and project management services for telecommunications infrastructure and communications systems for various types of buildings and applications. He is experienced in producing construction grade drawings and specifications to accurately convey the design intent, while minimizing change orders, scope creep, and project delays.

Bascom Community Center, San Jose
Telecommunications Consultant — Telecommunications consulting for a new 40,000 square foot community center and library designed for LEED Silver certification.

Seventrees Library and Community Center, San Jose
Telecommunications Consultant — Telecommunications consulting for a new library and community center.

Santa Clara Northside Branch Library, Santa Clara
Telecommunications Consultant - Telecommunications consulting for a single-story library following the City Technology Standards.

Alexandria East River Science Project, New York City, NY
Telecommunications Consultant — Provided telecommunications consulting for a 17-story building in New York City consisting of an executive conference center, an auditorium, two 3-meal restaurants, and a high-tech lobby videowall.

Mitchell Kapor Foundation, The Curve Building, Oakland
Telecommunications Consultant — Provided telecommunications consulting for the renovation of this philanthropic organization's historic office building in downtown Oakland to serve as their technology centric "think-tank." Project includes a 144-seat auditorium, several presentation rooms, a number of conference rooms, a fitness center, a cafe, gallery, future retail, and offices.

Resumes
continued

PROFESSIONAL QUALIFICATIONS

Name: Manuela King

Role in this Subcontract: Landscape Architect

Years Experience: 26

Firm Name & Location: RHAA Landscape Architects & Planners, Mill Valley

Education and Degree:
- Master of Landscape Architecture, University of Oregon
- Bachelor of Landscape Architecture, University of Oregon
- Bachelor of Science, Pennsylvania State University

Current Professional Registrations:
- Landscape Architect:
  California #3271
  Kentucky #734
- LEED AP

Other Professional Qualifications:
- Chair, Beautification and Streetscapes Advisory Committee, Union Square Business Investment District, San Francisco
- Society for College and University Planning (SCUP)
- INSTRUCTOR, U.C. Berkeley, Department of Landscape Architecture Extension Program, 1988-96.
- Dean's Fellowship in Architecture, University of Oregon, 1983-1985.
- Creative Home Landscaping, Co-author, pub

RHAA Landscape Architects & Planners
Manuela King ASLA, LEED® AP
Landscape Project Principal

As a Principal in RHAA, Manuela King has been instrumental in the design of a wide variety of high-profile projects. These include urban design and planning, park and recreation planning, residential design, and commercial and professional facilities. Her interests include the relationship between art, architecture, landscape architecture and contemporary urban design. She is a strong advocate of sustainable design in all her projects.

Novato City Hall, Novato
Landscape Architect — RHAA created the preliminary design studies for a potential new city hall and civic plaza for the growing city of Novato. Design concepts for the building and adjacent plaza were designed to bring together the city's history with its needs for the future. Interpretive elements, art pieces and a water feature were designed to create a new and lively public civic space for Novato.

County of Marin, Civic Center Master Design Guidelines, San Rafael
Landscape Architect — RHAA created a set of specific design guidelines to address the key design elements of possible future development or renovation projects at the Civic Center. The report addresses issues such as site organization, buildings and architecture, landscape and site elements, and an evaluation of potential future development sites.

Las Positas College, Student & Administrative Services Bldg., Livermore
Landscape Architect — RHAA was hired as the landscape architect for the new 73,000 square-foot Student & Administrative Services Building which will be the new gateway to the campus. The new building will house all student and administrative services functions in one location. The new building and surrounding site improvements will serve as the central gateway to the campus.

Yahoo! Corporate Campus, Sunnyvale
Landscape Architect — RHAA is currently working as a subconsultant to RMW Architects on the expansion of Yahoo's Sunnyvale campus. The design takes its cues from the existing site while offering a range of new experiences to engage employees and attract new recruits. In developing towards these design objectives, the plan must also account for parking requirements and environmental goals such as vegetated stormwater runoff collection, permeable and reflective paving solutions, and shade trees to counter urban heat island effect.

Firm Resources

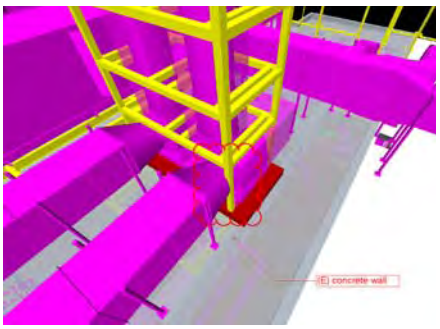
Technical Capabilities

Building Information Modeling

Since 2004, RMW has standardized its project delivery platform on a Building Information Model (BIM) Software system: Revit by Autodesk. Revit 2011 is implemented and being utilized on all major projects at RMW. Our project process and methodology has been integrated with a suite of digital collaborative design tools including BIM for drawing coordination, conflict resolution and construction planning. RMW consultant team members are also well versed with BIM technologies enabling our projects to benefit from the added value of parametric modeling.

Utilizing information sharing and management software, RMW will provide a BIM Share Site to host BIM files accessible on line to all members of the project team. At significant phases (schematic design, design development, construction documents) a document set will be prepared that "freezes" the model at a particular moment in time allowing for reviews and bidding. This process ensures coordination between the drawing packages, identifies conflicts before they get to the field, and speeds completion of the project since ideally, construction and shop drawings use the same model. This tracks all of the way through construction and commissioning, resulting in an As-Built tool that the City can continue using through the life of the building.

1 UC LBNL Bldg. 74 BIM Model
2 UC LBNL Bldg. 74 Construction Photo



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Utilizing BIM for the project has multiple benefits including:

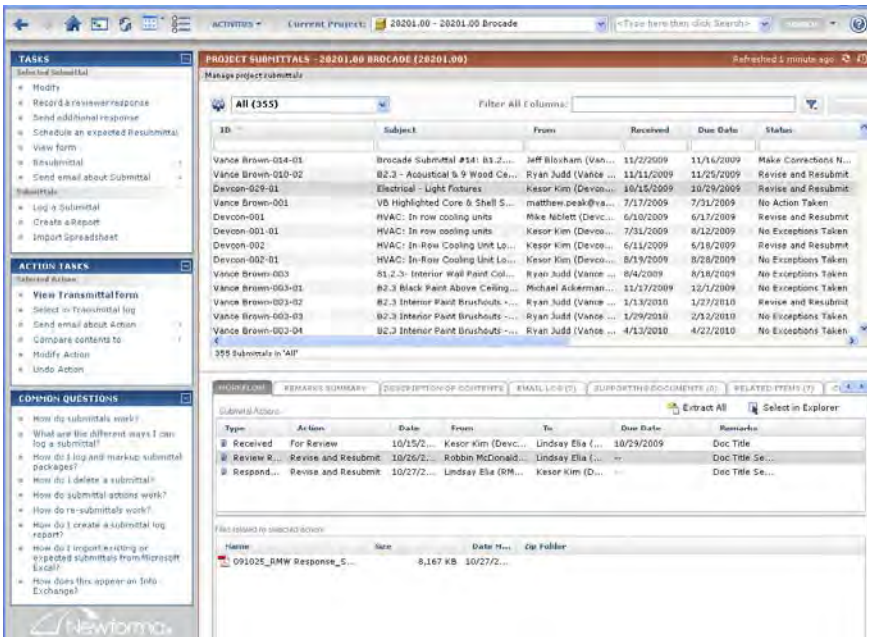
a) Increased and improved coordination of design components
b) Fewer RFI's during construction phase
c) Ability to visualize design in 3-dimensions

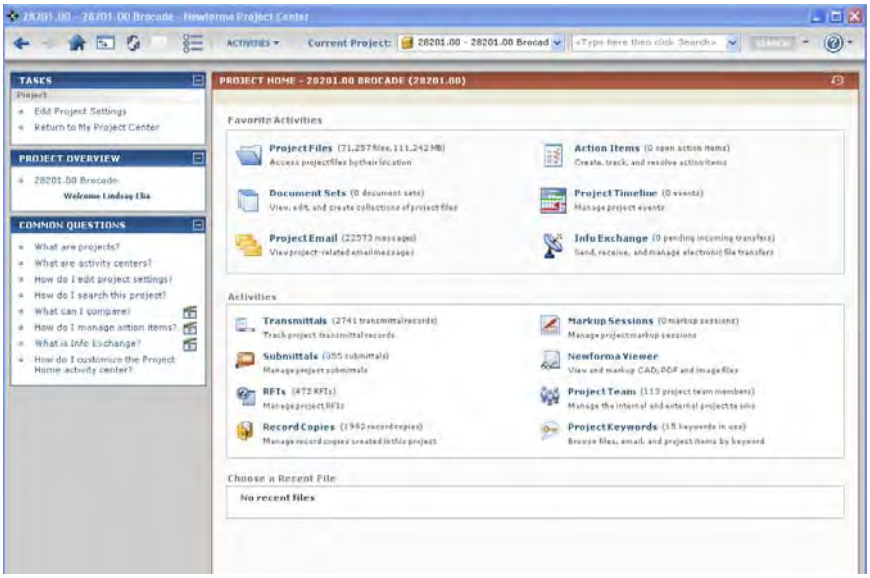
RMW is versatile, experienced and a strong advocate for the use of BIM in the design and construction industry. RMW projects have benefited for years from the use of BIM on its projects; and continue to see improvements in technology allowing for the enhanced delivery of projects, especially new construction projects.

In addition to the creation of the BIM model and face-to-face meetings with the City and our team, we are robust users of other forms of technology to facilitate communication, whether through email, teleconferencing,

Firm Resources
continued

video conferencing or Newforma Project Information Management, our online project management system which will be utilized by the entire design team. RMW is also conversant with other online project management systems including CMiC and Primavera Contract Manager.





Newforma Project Information Management System Screen Shots

Firm Resources
continued

Project Approach

1 Safeway Headquarters
2 Bayside Towers
3 Yahoo! Headquarters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RMW's practice is rooted in successful collaboration within interdisciplinary teams that includes engineering consultants, construction managers, general contractors, sub-contractors, cost controllers and diverse subject matter experts. At the heart of the collaborative effort is a sustained focus on effective communications. Effective communications and an understanding of each team member's roles and responsibilities establish a work process that capitalizes on the team's mutual interest in a successful project outcome.

Project Management

As the prime consultant, RMW will have the responsibility for project planning, routine communications and delivery of services and will lead and manage the efforts of the sub-consultants. Project Principal Bart McClelland has the proven ability to assimilate and prioritize information leading to the effective direction of the larger A/E team. Bart provides leadership in a diligent, client-focused manner. He will oversee the project to ensure that contractual, schedule, budget and technical requirements are met. Bart has successfully managed numerous similar projects for our public clients including Marin and Contra Costa Counties, the Department of Veterans Affairs and the University of California. Bart has applied his skills as a LEED AP on a variety of new and remodeled facilities including the Marin Health & Wellness Campus, which received LEED Gold certification.

Bart will utilize the following tools and processes to ensure that the City of Novato Administrative Office Building project moves forward smoothly and efficiently:

Project Plan - When initiating the project, Bart will review and analyze the program, schedule and budget parameters to develop a comprehensive Project Plan. The Project Plan sets forth the tasks required, assigning responsibility, setting elapsed time targets and milestones and estimating time required for completion of each task. The Project Plan is a working document drafted by RMW and reviewed by the City to assure the appropriateness of the overall project scope. The Project Plan prevents scope creep by ensuring that the whole team has consensus on project objec-

Firm Resources
continued

tives, and that they are being mapped to the project itself. The Project Plan also addresses Quality Assurance of the documentation being developed for the project. The Project Plan will be built around the schedule to support required information gathering, programming, meetings, research and design efforts. A key component of the project plan is the development of a cost model that will guide the City and Design Team in the development of the Contract Documents.

Cost Control - One of RMW's highest priorities is bringing a project in, on or below budget. We have been able to consistently achieve this by using a proactive management style and a cost modeling approach that reflects our belief that "designing to cost, rather than costing a design" is our primary responsibility. Working with the City's Construction Manager, project costs will be developed on a detailed, line-by-line, spreadsheet based on current CSI industry standard formatting and division of work. In consultation with the City, contingencies are established to reflect design and scope complexity, and ongoing changing market conditions.

Schedule Control - RMW has the resources to effectively define and manage the project design schedule. We utilize the collective experience of the entire design team to ensure that the preparation of the design and construction documents go smoothly, and to serve as an important input to the master project schedule prepared by the City's Construction Manager. To maintain the project's momentum and adhere to the strategy of the Project Plan, we review the schedule on a monthly basis and adjust as required. At the conclusion of each phase we review the successes and deficiencies of the previous phase to readjust our efforts. This continual process of reviewing and readjusting ensures that the City's requirements are kept foremost in mind.

Quality Assurance - Project Architect Julie Johnson will oversee the Project Specific Quality Assurance Program, which begins with the planning and the scheduling of a project specific, phase by phase tech-checking process that becomes part of the Project Plan. Project team members tech-check continuously at the time the documents are being produced and senior members of the firm tech-check at milestones of the production process. Prior to the final review submittal all documents are reviewed by an independent in-house or third party tech checker.

build experience

Firm Resources
continued

RMW's experience on traditional design-bid-build work-especially publicly bid work attests to the effectiveness of our cost control and schedule process:

Project	Bid Date	Budget	Bid Results	Bid % Variance	Change Orders	Project / Actual Schedule
Lawrence Berkeley National Lab Building 74 Renovation	Jan-10	$15.5M	$15.2M	-2%	Under Const.	Under Const
County of Marin Health & Wellness Campus	Jan-07	$28M	$27M	-4%	6%	12 mo / 12 mo
Cabrillo College Allied Health Complex	Mar-08	$24M	$20.2M	-16%	5.7*	25 mo / 25 mo
California State University, East Bay Student Services Building	Jul-07	$33.4M	$31.7M	-5%	2%	44 mo / 48 mo
State of California Department of Rehabilitation	Feb-05	$18M	$16.8M	-7%	2%	38 mo / 38 mo
Lawrence Livermore National Lab Terascale Facility	Dec-01	$58M	$56.4M	-3%	3%	60 mo / 58 mo
Yahoo! Corporate Headquarters	Oct-00	$132M	$128.5M	-3%	1%	26 mo / 24 mo

* includes owner-initiated change orders

Construction Documents

RMW employs a number of proven strategies to effectively coordinate and produce quality Construction Documents to minimize field conflicts, expedite permit review times and substantially reduce field generated RFI's. The strategies for ensuring Construction Documents' effectiveness include the following:

a) Confirmation of design intent against the Owner's design criteria document and validating building system designs
b) Conduct preliminary meetings with Authorities Having Jurisdiction (AHJ's) to review scope of work and discuss potential challenge areas of the project
c) Development of a complete Building Information Model (BIM) to optimize coordination of building systems and eliminate physical system conflicts through early clash detection and virtual construction techniques

These strategies, used in concert, will guide the Construction Documentation effort to a level of completeness and thoroughness that ensure a smooth implementation phase.

Checking and validating the Owner's design criteria documents against the project design at the start of the Construction Documents phase, ensures

Firm Resources
continued

that operational, performance, maintenance and other requirements are addressed and incorporated into the project. A thorough cross check of designed systems confirms design intent, captured scope and identifies potential gaps to be addressed. This will be conducted by the appropriate design team members.

Permit procurement planning is integral to the RMW's work process. Early project meetings with AHJ's are conducted to review scope and confirm project understanding. These meetings will be attended by the RMW's senior project manager and the project architect. Project scope clarifications are captured in memo form and issued back to AHJ's with recommended solutions. These early meetings will facilitate increased project understanding for the AHJ's and consequently a more efficient permit review period for the project.

A complete BIM model will be developed for the project to ensure coordinated construction efforts and streamlined scheduling of materials staging and installation. A BIM work room may be setup to facilitate communication and efficient work flow. Hardware and software will be coordinated to optimize interoperability. Navisworks will be used as the environment to coordinate complex MEPF systems with the building structure and envelope. Systems coordination will happen in 'real time' with virtual construction effectively minimizing field generated RFI's.

These strategies will be employed for the project to ensure a positive project outcome, minimize risk for involved parties and expedite permit procurement. These strategies will be utilized along with the RMW team's deep experience in delivering projects successfully.

Experience Working with Public Entities

Over the course of our 41 year history, RMW has effectively collaborated and worked with our public and institutional clients. Our approach to collaborating with diverse project stakeholders is founded on the idea that effective communication is the key to successful outcomes. We employ the notion of “One Team” for each project the firm takes on. The One Team concept effectively erases the lines that separate the constituent participants and stakeholders of the project. We realized early on that each project team member brings a unique and valuable perspective to bear on

Firm Resources
continued

the project with ideas that may come from the owner, the owner's third party consultant, an outside subject matter expert, a peer reviewer, the contractor or from within the design team. Full collaboration and engagement is anticipated and encouraged of all team members to realize the concept of One Team. Time tested tools and barometers of progress are utilized to track and gauge the effectiveness of communications with expert sources. Three tools facilitate the exchange of ideas and track progress for implementation:

- Project Meetings and Reporting
- A robust information exchange tool
- In-depth dialogue with subject matter experts

1-3 Jack London Square, Ferry Landing

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On-going communication and coordination activities are a key part of our approach since these activities are vital to the implementation of the work plan. Progress Meetings with the City's Project Manager will be particularly important. We see these Progress Meetings as the main conduit of information flow between project participants. We will maintain notes for all Progress Meetings in the form of an Issue/Action Tracking Report and submit minutes within 72 hours of the meetings. It is important that these meetings accurately track the progress of the project so that we are all working from current documents.

Newforma Project Information Management will be used in the collaboration process with stakeholders and design team member for information sharing and the exchange of ideas. Newforma catalogs information exchange transactions allowing team members to track when information is uploaded and downloaded.

Experience Working With CM At-Risk

RMW has extensive experience providing A/E services to corporate and public agency clients for the planning and implementation of projects utilizing alternative project delivery methods, including design-build (d-b), CM-at-risk and multiple prime contracting in order to best meet our client's schedule and budget. Over the years we've established successful relationships with owners, developers, contractors and construction managers to deliver high quality design and construction management projects that reflect the needs of the community. By utilizing alternative delivery

Firm Resources
continued

build experience

methods, we are able to work with the larger project team to maximize efficiencies while minimizing costs. RMW was recently the Executive Architect for the new Caltrans District 3 Headquarters in Marysville which utilizes a design-build delivery method. We also have experience in the development of Bridging Documents for our clients; we recently completed that preparation of bridging documents for the Stanford Linear Accelerator Center, including Performance Criteria, Design and Construction Guidelines and Performance specifications, which is now out to bid to Design Build teams. Our work on both Design Build teams and preparation of Bridging Documents gives us additional insight on how to best utilize alternative project delivery processes to our Clients advantage.

Utilizing the CM-At Risk method yields several advantages for owners including minimizing project risk. The CM team is able to analyze budget and schedule issues in the design stage, before construction work commences, reducing the possibility of late stage value engineering, project redesign and cost overruns. By combining the design expertise of the A/E team with the hands-on knowledge of the general contractor or CM during the design phase of the project, owners have another tool to ensure they are receiving the best services for their project dollar. A common approach to CM-At Risk services included the following steps:

- Upon schematic design approval, the Owners pre-selected CM begins preparing bid packages that allow specialty trade contractors to bid directly to the owner, which enables the owner to pay their prices directly without a general contractor's markup.

- The CM firm assigns a construction manager from its staff to work with the project architect in preparing these packages. The CM provides information on materials availability, scheduling, constructability, and costs of materials and systems. This helps the project architect make design decisions more rapidly and with greater confidence. The project architect and CM write the specifications together, eliminating loss of understanding of design intent as the project moves from design development to construction.

- When the packages are bid, it is the CM's job to coordinate the specialty contractors' work. The CM represents the owner's interests on the site on a daily basis. The project architect reviews general

Firm Resources
continued

progress; approves shop drawings, submittals, and change orders; and certifies contractor requests for payment-after careful review by the CM.

- The CM is responsible for the project schedule. The schedule is prepared by the CM during the preparation of the construction documents and is included in the specifications. Bidders use the schedule to prepare their prices. The CM maintains the schedule during construction through weekly meetings with the contractors to verify delivery of all materials and equipment at the job site.

- It is necessary to define the bid packages carefully, clearly indicating on the drawings and specifications which contractor is to perform each portion of the work.

To make the service work, owners must provide more performance. In place of a single construction contract, there are perhaps twenty to twenty-five contracts. This results in an increase in paperwork for both the owner and the architect. Preparing construction contracts and monthly review of the contractors' requests for payment is a normal duty for the CM; maintaining contractual responsibilities with this many contractors increases the owner's responsibility. Owners will also have to ensure that a sufficient number of qualified CM entities are available and have the interest and wherewithal to successfully undertake the project.

Project Experience - RMW A/E Services for CM-At Risk Projects

- Contra Costa County
  Clinic Building, Martinez 10,000 sf
  Programming, site planning full architectural and Interior Design services.

Project Experience - RMW A/E Services for Design-Build Projects

- California Housing Finance Agency
  Headquarters Building, Sacramento 120,000 sf
  Programming, technical performance specifications, site selection, due diligence.

Firm Resources
continued

- County of Sonoma
  Human Services Department Office Building 295,000 sf
  Programming, master planning, technical performance specifications.

- Department of Transportation (Caltrans)
  District 3 Headquarters Building, Marysville 230,000 sf
  Programming, master planning, architectural, and interior design services (performance documents for design-build delivery).

- Genentech
  Office and Lab Buildings, Vacaville 135,000 sf
  Programming, master planning and schematic design services directly to Genentech. For the completion of the project, RMW worked directly with the general contractor in a design-build collaboration.

- University of California, Berkeley
  Mixed-Use Building, Berkeley 190,000 sf
  Planning, site & building design, programming, conceptual design services.

- Stanford Linear Acclerator Center
  Research Office Building , Menlo Park 40,000 sf
  Preparation of Design and Construction Guidelines, Performance Specifications.

- Lawrence Livermore National Laboratory
  Facilities Infrastructure Replacement Program 60,000 sf
  Architect of record for the design and construction of three 20,000 sf, two-story office buildings.

- Contra Costa County, GSD
  DCD Office Building 60,000 sf
  Proposal for Programming, technical performance specifications, bridging documents for the Department of Conservation and Development at the County's Summit Campus in Martinez.

1 Cadence Design Systems, Building 10
2 Genentech, Interior Corridor
3 Lawrence Livermore National Lab, Building 142


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Firm Resources
continued

Experience With Podium-Style Parking/Office Projects

Podium Style Parking

RMW has worked for a variety of clients in the planning and implementation of projects utilizing podium parking. This solution is commonly encountered on congested, sloping sites, where parking close to the building is at a premium. We are familiar with the issues with this approach to meeting onsite parking requirements including:

- Structural "soft-story" and lateral bracing solutions that minimize impacts to parking and car circulation.

- Marrying of the parking structure column bay modules with efficient office planning column bay modules to ensure that both parking and office areas flexible and efficient.

- High water-table and geotechnical considerations, particularly with subterranean podium parking arrangements

- Creating a positive visual appearance, and creating a sense of entry at grade, while screening vehicular access and parking areas.

1-2 Yahoo! Headquarters
3 Bayside Towers

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Project Experience - Podium Style Parking for Office Building Projects

- Safeway, Inc. 350 Cars
  Headquarters Administrative Building, Pleasanton
  Site planning and design services for two level podium parking and a freestanding parking structure.

- Yahoo! 900 Cars
  Headquarters Building, Sunnyvale
  Programming, site planning and design services for single level podium parking at a new 2M square foot campus site.

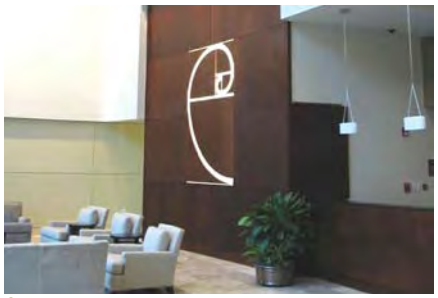
- Bayside Towers 530 Cars
  Future Office Building Three, Foster City
  Programming, site planning and design services for two level podium parking on a constricted bay side site with a high water table.

Firm Resources
continued

Office Building Projects

RMW understands the issues involved in programming and designing productive and comfortable work environments. We have been involved in the design and construction of over 100 office buildings and office building campuses, totaling more than 9 million square feet. In addition to our architectural capabilities, a significant percentage of RMW's professional staff are trained and certified interior designers, providing our clients the opportunity to achieve fully integrated work environments where the building systems, architecture and interiors are comprehensively coordinated. Because RMW strives for a 50/50 balance between our architectural and interior design portfolios, we are also fully capable of providing furniture programming, budgeting, design, selection, documentation and installation observation for furniture.

1 Sybase
2 Juniper Networks
3 Cadence Design Systems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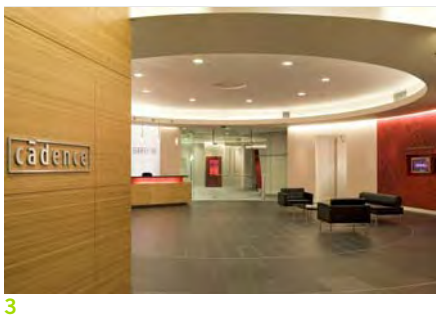

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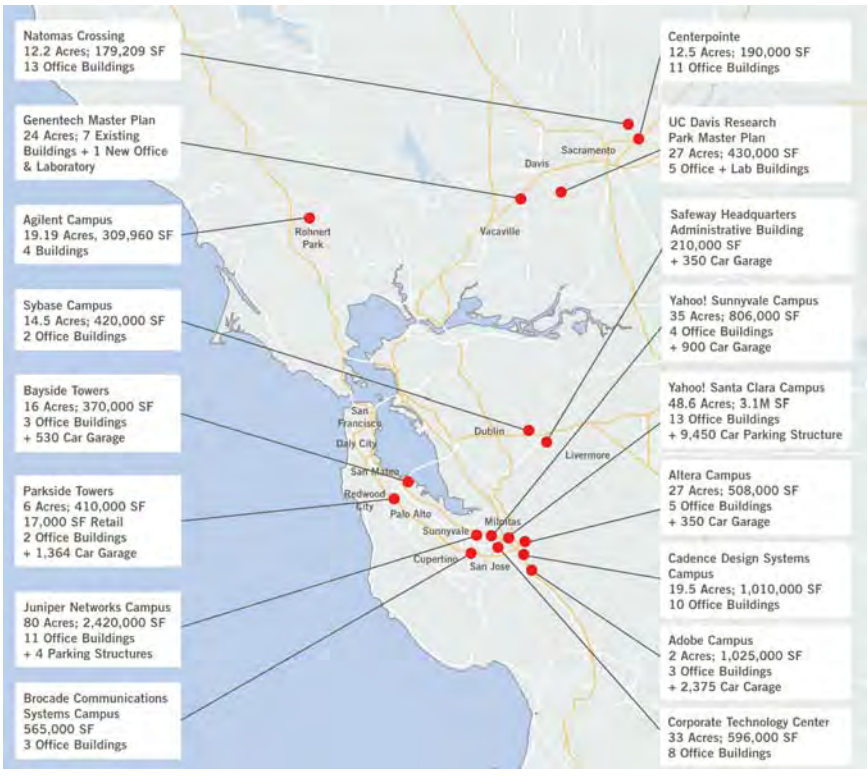


Firm Resources
continued

Client References

Marin Health & Wellness Campus
- Jeanne Miche, Project Manager — 415.507.2604
  County of Marin, Office of the Administrator
  3501 Civic Center Drive, Room 404
  San Rafael, CA 94903

Cadence Design Systems
- Dave Tricaso, VP Workplace Services — 408.944.7565
  2655 Seely Road
  San Jose, CA 95134

Lawrence Livermore National Lab
- Anna Maria Bailey, Facility Manager — 925.423.2842
  7000 East Avenue
  Livermore, CA 94551

Jack London Square
- Dean Rubinson, Development Manager — 415.391.9800
  Ellis Partners LLC
  111 Sutter Street, Suite 800
  San Francisco, CA 94104

Juniper Networks Campus
- John Lucas, Dir. Global RE & Workplace Services — 408.936.2748
  Juniper Networks
  1194 N. Mathilda Avenue
  Sunnyvale, 94089

Novato City Administrative Office Building

Summary of Fees for All Phases

Consultant	Discipline	Programming / Space Planning	Preliminary Design (Schematic Design / Design Development)	Construction Documents	Construction Admin	Total - Programming thru CA
		1	2	3	4	5
Basic Consulting Services						
RMW architecture and interiors	Architecture and Interiors	$44,500	$145,688	$147,000	$105,000	$442,188
SEI Engineers	Structural Engineering	$3,000	$10,000	$55,000	$11,000	$79,000
BKF	Civil Engineering	$6,100	$9,600	$14,300	$6,000	$36,000
Taylor Engineering	Specs	$6,000	$11,800	$5,800	$6,200	$29,800
Engineering Enterprise	Electrical Performance Specs	$5,600	$15,600	$5,400	$5,800	$32,400
Gabel Assoc	Energy Modeling		$725	$2,000		$2,730
Guttmann & Blaevoet	AV / Telecom / Security /	$3,270	$4,900	$18,000	$6,530	$32,700
Charles Salter Associates	Acoustical Consulting	$6,400	$3,200	$12,600	$2,000	$24,200
RHAA	Landscape Architecture	$13,950	$14,300	$14,600	$6,000	$48,850
As-Builts preparation (contingency @ +/- 2%)		$1,776	$4,316	$5,494	$2,971	$14,557
Subtotal Basic Consulting Services		$90,596	$220,129	$280,194	$151,501	$742,425
Estimated Reimbursable Expenses @ +/- 5%		$4,530	$11,006	$14,010	$7,575	$37,121
Total Fees-Labor Costs & Reimbursable Expenses						**$779,546**
Recommended Additional Consulting Services						
Boundary/Topo/Utility Surveys and Base Map	Civil					$11,100
Underground Utility Locator Service	Civil					$2,400
3D "Fly-through" visualization of Buildings and Site	Architectural					$9,000
3D "Fly-through" visualization of Building Interiors	Architectural					$2,800
Working model of adjacent properties and the site at 3/32" scale	Arch + Model Maker					$5,000
Upgraded Interior and Exterior Perspective presentation drawings	Architectural					$4,000
Subtotal Recommended Addtl. Consulting Services						$34,300
Optional Consulting Services (if requested)						
Stormwater Control Plan Report	Civil					$3,000
Stormwater Facilities O&M Plan	Civil					$2,500
3 to 4 rendered perspective views	Arch + Renderer					$8,000
Finished model of the adjacent properties and the site at 3/32"	Model Maker					$8,500
MEP systems commissioning for LEED (3rd Party)	MEP Engineers					$25,000
Cost Estimating services (Davis Langdon)	Cost Estimating	$7,000	12000	$16,000		$35,000

F. Fee Outline:

FEES

For the services described in the Solicitation of Proposal and in the City of Novato Architectural Services Agreement we have estimated fees on the attached spreadsheet for each phase and each consulting discipline.

1) Fees will be billed monthly on a percentage completion basis. Should additional services be requested and approved, RMW's hourly billing rates are as follows:

Principal (Bart McClelland)	$225 per hour
Architectural Design Director (Steve Worthington)	$175 per hour
Project Architect (Julie Johnson)	$135 per hour
Project Interior Designer	$115 per hour
Architectural Designer/ Interior Designer	$74-$120 per hour
Technical Support Staff	$75-$95 per hour

2) Reimbursable or out-of-pocket expenses are in addition to labor compensation and include actual expenditures made by RMW, its employees and consultants on behalf of the project. Expenses have also been estimated on the attached spreadsheet. They will be billed at the multiple of 1.10 times the cost to RMW. Expenses include but are not limited to:

   a. Expenses of transportation, living expenses in connection with out-of-town travel, long distance communications, and fees paid for securing approval of authorities having jurisdiction over the project. Travel within the Bay Area is not considered "out-of-town" and therefore not charged.
   b. Expenses of reproductions, CADD plotting, postage and handling of drawings, schedules, specifications, and other documents. Expense of graphic materials purchased specifically for the project.
   c. Fees charged by outside engineers and other consultants retained by us at your request to work on this project.
   d. If authorized in advance by Novato, expense of overtime work requiring higher than regular rates.
   e. Expense of renderings, models and mock-ups requested by Novato.
   f. Expense of any additional insurance coverage of limits, including professional liability insurance, requested by the owner in excess of that normally carried by RMW and its consultants.

ASSUMPTIONS AND QUALIFICATIONS

1) Consultants are limited to those noted above. Additional consultants if necessary and requested by the City will be added as an additional service.

2) Full services will be provided by RMW for the architecture and interior design, by the structural engineer, civil engineer, landscape architect and acoustical consultant. "Limited" services will be provided by the Mechanical, Electrical, Plumbing, Acoustical, Telecommunications, and Security consultants. Limited services include preparation of performance specifications, one-line drawings of the systems and review of design/build subcontractor's proposals during the bidding phase.

3) Project scope assumes that RMW will provide electronic base files to design-build Mechanical, Electrical, Plumbing, and Fire Protection subcontractors and will coordinate our work with each. Subcontractors will be responsible for coordination of their work with other design-build subcontractors.

4) Project fees assume that a CM/General Contractor will be selected not later than the end of the schematic phase and will be available for pre-construction cost estimating services.

5) Project scope assumes that the City will provide a geo-technical report. A civil topo-survey of site (in electronic form for the topo/ base information) will be prepared by the design team.

6) Program interview meetings will be scheduled to work within (4) anticipated RMW on-site meetings. Follow-up program confirmation meetings will be scheduled to work within (4) on-site meetings.

7) We have assumed limited assistance for Novato's move and occupancy planning to include coordination with the City's "Move Coordinator" who would be responsible for the inventory of all existing and new equipment and furnishings to be relocated to the new building as well as arranging for the actual physical move.

8) Stairs, curtain walls and exterior cladding will be designed and specified as Design/Build portions of the work.

EXCLUSIONS

a. Design Services beyond those stated in the RFP.
b. Additional work caused by project requirements which differs from the assumptions contained in this proposal.
c. Life cycle cost analysis.
d. Construction cost estimates and quantity takeoffs (we assume this will be completed by the CM).
e. Filing for permits with authorities having jurisdiction.
f. Consulting engineering design services except as specifically noted in the proposal.
g. Signage design and implementation.
h. Off-site improvements including traffic analysis or mitigations.
i. Environmental impact investigations and analyses.
j. Geotechnical engineering services.
k. LEED Certification costs.
l. Design/detailing of bidding alternates
m. Redesign to meet Construction Manager's budget after Design Development phase
n. Redesign to accommodate code changes or interpretations after start of construction documents.
o. Extension or compression of the design and construction schedule which is beyond the control of the design team.
p. Hazardous materials assessment or mitigation.
q. Redesign of low-voltage systems due to significant changes implemented after approval of documents or start of next phase of design, including contractor substitution or value engineering.
r. Preparing documents for separate equipment prebids, bidding packages, out of sequence services, "fast track" construction methods and or multiple subcontracts.
s. Preparation or review of operations and maintenance manuals.
t. Witness testing of equipment and preparation of written report of results
u. Survey of existing conditions due to incomplete or out of date drawings. Production of current as-built drawings for demolition or record purposes.

v. Commissioning services or attendance at additional meetings/site visits requested by the commissioning authority.
w. WAN Design and implementation oversight.
x. Telephone system design and implementation oversight.
y. Technology migration planning and oversight.
z. Telco circuit ordering, provisioning and oversight.
aa. Post – construction acoustical measurements or reports.
ab. Design of fountains, water features, water displays or underwater lighting systems.
ac. Off site mitigation measures or conditions of approval arising out of the entitlement process, including public utility infrastructure upgrades, street narrowing/widening, off-site utility relocation, etc. (Restriping of Machin Ave. is included in Civil fees.)
ad. Under foundation drainage and/or sump systems, including below grade dewatering and waterproofing underground utility systems.
ae. Design for the signalization or signal modifications of street intersections.
af. Post construction as-built or ALTA surveys.
ag. Preparation of formal SWPPP plans and filing of a NOI with the State Water Resources Control Board (required for projects over 1 acre).
ah. Providing services made necessary by the default of the Contractor, or by errors, defects or deficiencies in the work of the Contractor, or by failure of performance of either the Owner or the Contractor under the Contract for Construction.
ai. Traffic studies or reports.

SOLICITATION OF PROPOSAL TO PROVIDE

ARCHITECTURAL AND ENGINEERING SERVICES

FOR DESIGN AND CONSTRUCTION OF A

CITY ADMINISTRATIVES OFFICES BUILDING

NOVATO, CA

1.0 PURPOSE OF THIS SOLICITATION

The City seeks the services of qualified architectural and engineering consulting teams ("Service Providers"), led by architects licensed in California with expertise in all phases of planning and design of public or similar institutional buildings, for the design and construction of a City offices building in the Civic Center area ("Project" or "project"). Responses submitted to this Solicitation must clearly describe and explain joint ventures and other firm associations which are proposed for the project.

This Solicitation is the means for prospective Service Providers to submit their qualifications and proposals to the City, for the project described above, for the services described in this document.

Prospective Service Providers are strongly encouraged to view the materials posted on the City's website related to the City offices, which can be found at http://www.novato.org/Index.aspx?page=1534.

Prospective Service Providers are required to submit proposals and must directly respond to the criteria for qualifications, as further described in this Solicitation.

2.0 BACKGROUND INFORMATION

Prior to January 2005, the City of Novato had housed its administrative offices in the Civic Center area (bounded by Sherman Avenue, Delong Avenue, Machin Avenue and Cain Lane). In January 2005, due to concerns regarding the structural safety of its existing structures in the Civic Center area, the City began leasing space for its offices at 75 Rowland Way. Subsequently, the City demolished some of the older structures in the Civic Center area. The City also decided to renovate the former church structure at 901 Sherman Avenue as a multi-use facility for city council chambers, civic meetings, and community events. The newly renovated City Hall was opened in 2010, along with a new civic green the City added as part of that project. However, City offices have remained at 75 Rowland Way.

As a governmental entity with anticipated long term operations, the City of Novato has determined that it is more financially prudent to own an office building than to lease. The City is fortunate to have one-time financial resources from monies recently paid to the General Fund from the Redevelopment Agency that can be used to build a permanent office building for city staff.

On December 6, 2010, the City Council approved entering into a feasibility study to explore the cost, timing and impacts of building City offices in the Civic Center location which is an approximately 23,000 square foot portion of the paved area (currently the Civic Center parking lot) adjacent to the restored 901 Sherman City Hall. For purposes of the study it was assumed that no existing structures such as the Community House or the Scott House, would be moved or altered.

On May 10, 2011, the City Council received the results of the feasibility study and approved moving forward with building City offices at the Civic Center location. The building plan approved by the Council included one level of parking at surface, with two floors of office space above the parking level.

3.0 SCOPE OF SERVICES

The scope of architectural, engineering and related services desired for the projects described in this Solicitation may include some or all of the following services:

The scope of the work issued under the contract may include but is not limited to: pre-design studies, design, design review, procurement support, site investigations, site surveys, space planning, Project Development Studies, Building Evaluation Reports, Master Plans, concept designs, construction documents, estimating, record drawings, constructability reviews, technical design reviews, shop drawing review and approval, construction site inspection, and Post Construction Contract Award Services (PCCAS).

Disciplines and expertise that may be required to accomplish the scopes of the task orders include but are not limited to: architecture, mechanical, electrical, plumbing, civil, structural, fire protection, life safety, security, risk assessment, vertical transportation, space planning, interior architecture, master planning, report writing, quality control review, scheduling, surveying, LEED, sustainability, 3-D rendering, code compliance (including ADA), and civic work expertise.

3.1 **Site Analysis and Selection:** Not applicable;

3.2 **Site Acquisition Consultation:** Not applicable;

3.3 **Land Use Entitlement:** Support and/or participate in the preparation of environmental studies and reports as required under CEQA and related local and state laws and regulations; (Environmental site surveys and hazard documentation; EIR preparation; and site remediation services are not included in scope of services of this RFQ);

3.4 **Schematic and Design Development Studies:** Conduct or participate in planning, parking and traffic, zoning, geotechnical, on-site and off-site utility and related utilization studies required for project development and approvals;

3.5 **Functional Programming and Detailed Space Planning:** Conduct functional programming, design definition, and space planning for City office functions, including complete site, functional and space requirements, conceptual building, and test fit studies;

3.6 **Architectural and Engineering Design Services for New Construction:** Provide architectural, structural, civil, mechanical, electrical, plumbing, sustainable and LEED™ design for certification to current standards for Silver, low voltage system design including fire protection, security, audio-visual, telecommunications and IT-building automation systems integration; acoustical, interior design including furniture selection, specification, bidding and procurement coordination and assistance. Building information modeling ("BIM") and related services which may be required in connection with planning, design and construction of a new building project. Other services that may be requested include but may not be limited to, geotechnical engineering; land surveys; wind engineering; vibration control; life safety/code consulting; parking structure design; and art, where appropriate.

Additional or specialized services may be required in any or all project phases including conventional schematic design, design development, construction documents, bidding, and construction contract administration;

3.7 **Planning and Building Code Analyses:** Conduct and/or participate in all building and planning code analysis and reviews, including progressive and final analyses prior to design approvals, and during and after construction;

3.8 **Historic consulting or preservation services:** Provide specialized consulting where required in connection with restoration, preservation, or coordination of disciplines in adaptive reuse of historically significant building(s);

3.9 **Contracting and Sourcing:** Provide consultation on and analysis of methods of sourcing which may be used for the building projects subject to this solicitation, including (but not necessarily limited to) traditional design-bid-build, Construction Manager at Risk, and alternate approaches such as integrated project delivery; participate in preparation of associated conventional or unique contract documents required for procurement; participate in construction contract bid analysis of general and special construction and, or construction management contracts; (Legal services, construction management, and construction services are not included in the scope of services in this RFQ);

3.10 **Cost Analysis and Schedule Planning:** Provide for all aspects of project cost estimating and schedule planning, including construction estimating, life cycle costing, value engineering, constructability reviews, critical path, and special scheduling;

3.11 **Design Services for Furniture, Fixtures and Equipment:** Provide all services required to properly plan, design, specify and coordinate, select, bid and install furniture, fixtures, special finishes and equipment, including but not necessarily limited to: interior design, including millwork design and furniture specification, and finished material details;

3.12 **A/V, Telecommunications, Security, Low-Voltage Systems Design:** Provide all services required to properly plan, design and coordinate new and existing A/V, Telecommunications, Security and related low voltage systems associated with office equipment, including integration as appropriate with building automation system design.

3.13 **Site Planning and Landscape Architecture:** Provide all services required to properly plan, design, specify and coordinate exterior site design, including grading, parking lots, roads, driveways, hardscape, landscape, irrigation and coordination of underground utilities and/or building structures with landscape and hardscape elements;

3.14 **Construction Contract Administration:** Consistent with the scope stipulated in the attached contract, provide construction phase services, including (but not necessarily limited to) field administration and observations, RFI and submittal reviews and processing, review of testing and inspection reports required by the bid documents (testing laboratory or construction inspection services are not part of this RFQ), coordination of finishes, furnishings and equipment, evaluation of pricing and schedule impacts for consideration/negotiation of changes, and project contract completion, including punch list, warranty review, preparation of record drawings and closeout;

3.15 **Building Commissioning:** Not applicable;

3.16 **Move and Occupancy Planning:** Planning, design, and execution of temporary relocation, move planning, and start-up assistance.

4.0 SPECIFICS OF SUBMITTING A RESPONSIVE PROPOSAL

The following materials ("Materials") shall constitute a Proposal:

A. Cover Letter/Letter of Interest:

Provide a cover letter/letter of interest of not more than one page. This document shall include the name of your firm, address, telephone numbers, fax number, e-mail address, and name of Principal to contact.

B. Firm Organization, Credentials, Background:

Please provide a brief history of your firm including:.

i) Number of years in business
ii) Location of office which will perform work
iii) List of Basic Services provided by firm
iv) List of Architectural/Engineering Services provided by the firm under Basic agreement

C. Relevant Experience:

Please provide a list of up to ten of the most recent projects of similar size and scope including:

i) Project Name/location
ii) Year Completed/current status
iii) Client Name

D. Project Team:

i) Identify key team members assigned to the project and provide their qualifications.

ii) Identify proposed consultants for this project. Include resumes and related experience for members of those firms that may be assigned to the project.

E. Firm Resources:

i) Technical capabilities
ii) Project approach
iii) Experience working with public entities
iv) Experience working with Construction Manager At-Risk
v) Experience with podium-style parking/office projects
vi) Client references
vii) Any firm litigation in past five (5) years
viii) Statement of firm's financial stability

F. Fee Outline:

Proposed fee structures should be included for the Project and fees should be set forth for the various phases/aspects of the work described above (and not as a lump-sum). In particular, the fees should be outlined for

programming/space planning, schematic design/design development, construction documents, and construction administration/close-out.

G. Comments on City Contract:

Attached to this Solicitation is the City's contract form for the architectural and engineering services anticipated to be necessary for the project. Please review and provide any comments you may have relative to the contract form, including any objectionable language/clauses.

5.0 SUBMITTALS

Three (3) copies of the submittal package should be received by 4:30 pm on Thursday, June 2, 2011. The City reserves the right to reject any and all proposals. Any attempt to contact Council members may result in disqualification.

Deliver proposals to:

ATTN: Tom Adams
City of Novato
75 Rowland Way, Suite 200
Novato, CA 94945-3232

Refer all inquiries concerning this Solicitation to:

Rajiv Parikh
Project Manager
530 Alameda Del Prado, #305
Novato, CA 94949
Tel: 415-320-6434
rparikh@kasprops.com

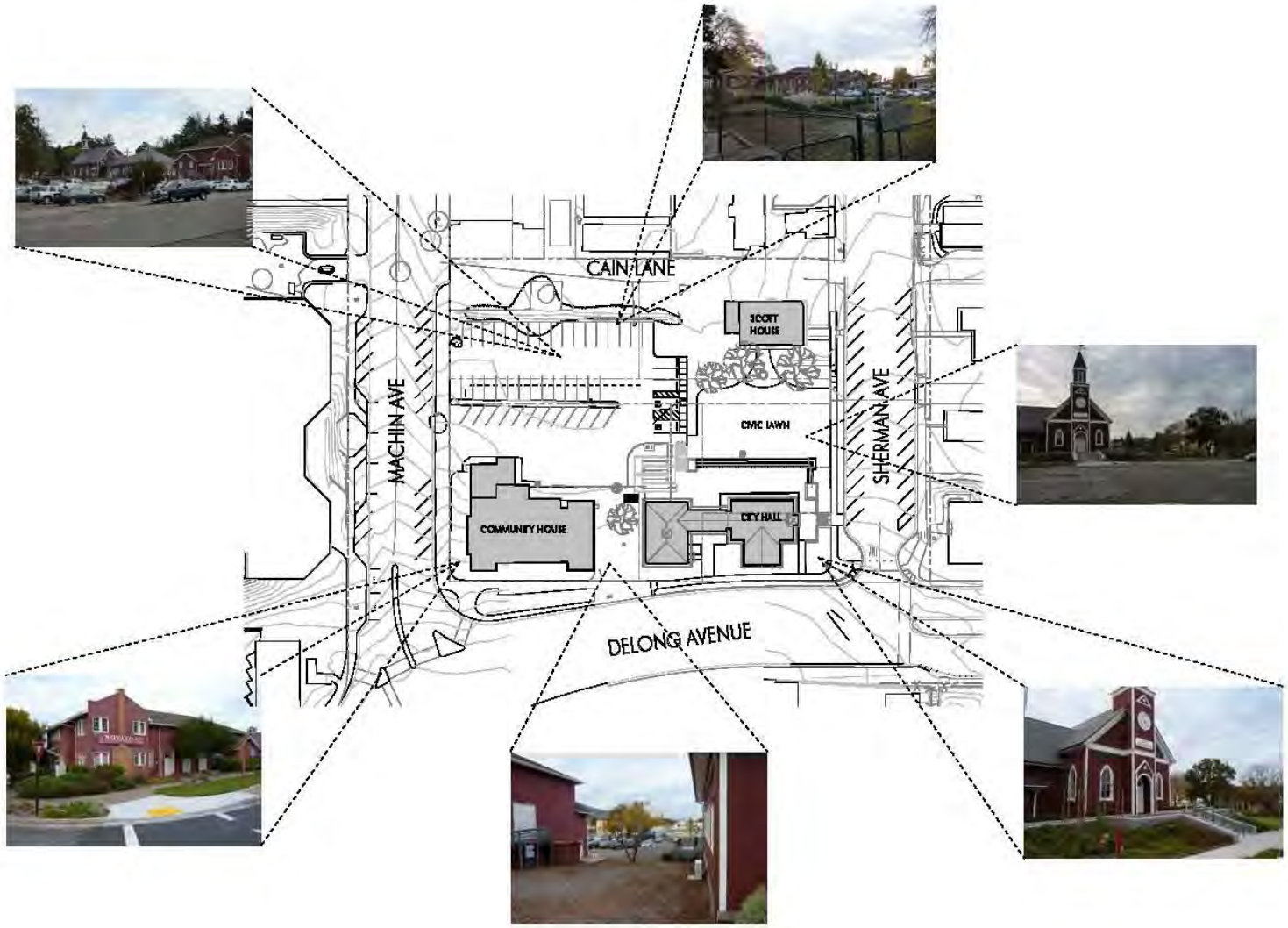
Exhibit C

NOVATO CITY OFFICES

Tuesday, April 12, 2011

FME ARCHITECTURE + DESIGN

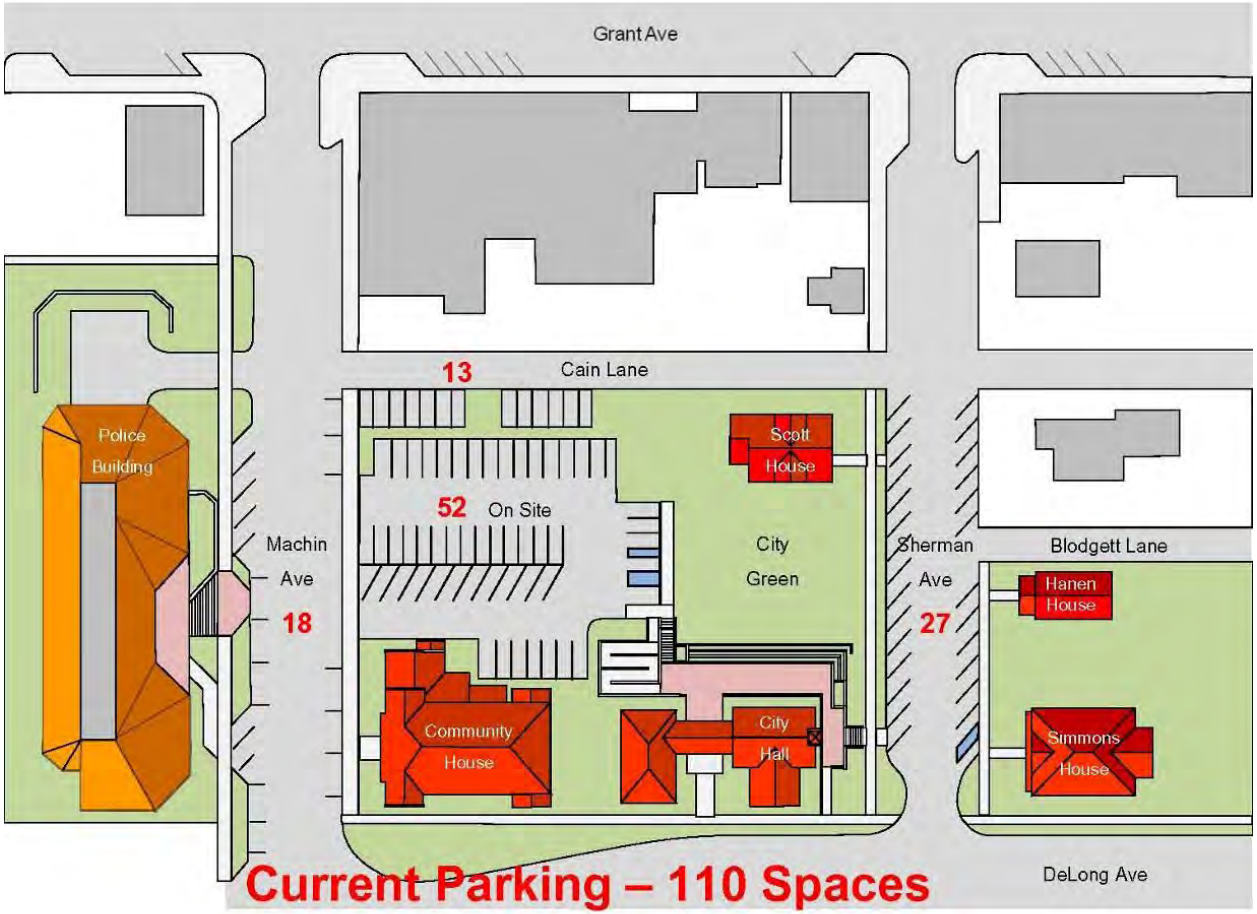
EXISTING SITE ELEMENTS



SITE - EXISTING

Parking Information

(E) Surface Parking = 65 Spaces
(E) Offsite Street Parking = 45 Spaces
Total = 110 Spaces



OPTION 2

Design Pros

- Surface Parking connection to garage only, creates additional parking spaces in garage & along Cain Lane
- Lobby at Civic Green Level
- Restroom access at Civic Green Level
- Connection to existing City Hall plaza
- Building step back at 2nd Floor
- Requires less grading and transitions on site

Design Cons

- No Cain Lane access to garage
- No handicap van parking in garage due to reduced floor to floor height

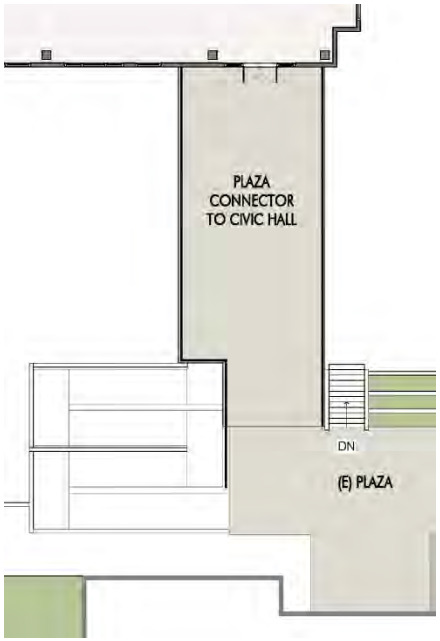
FME ARCHITECTURE + DESIGN

OPTION 2 - SITE PLAN

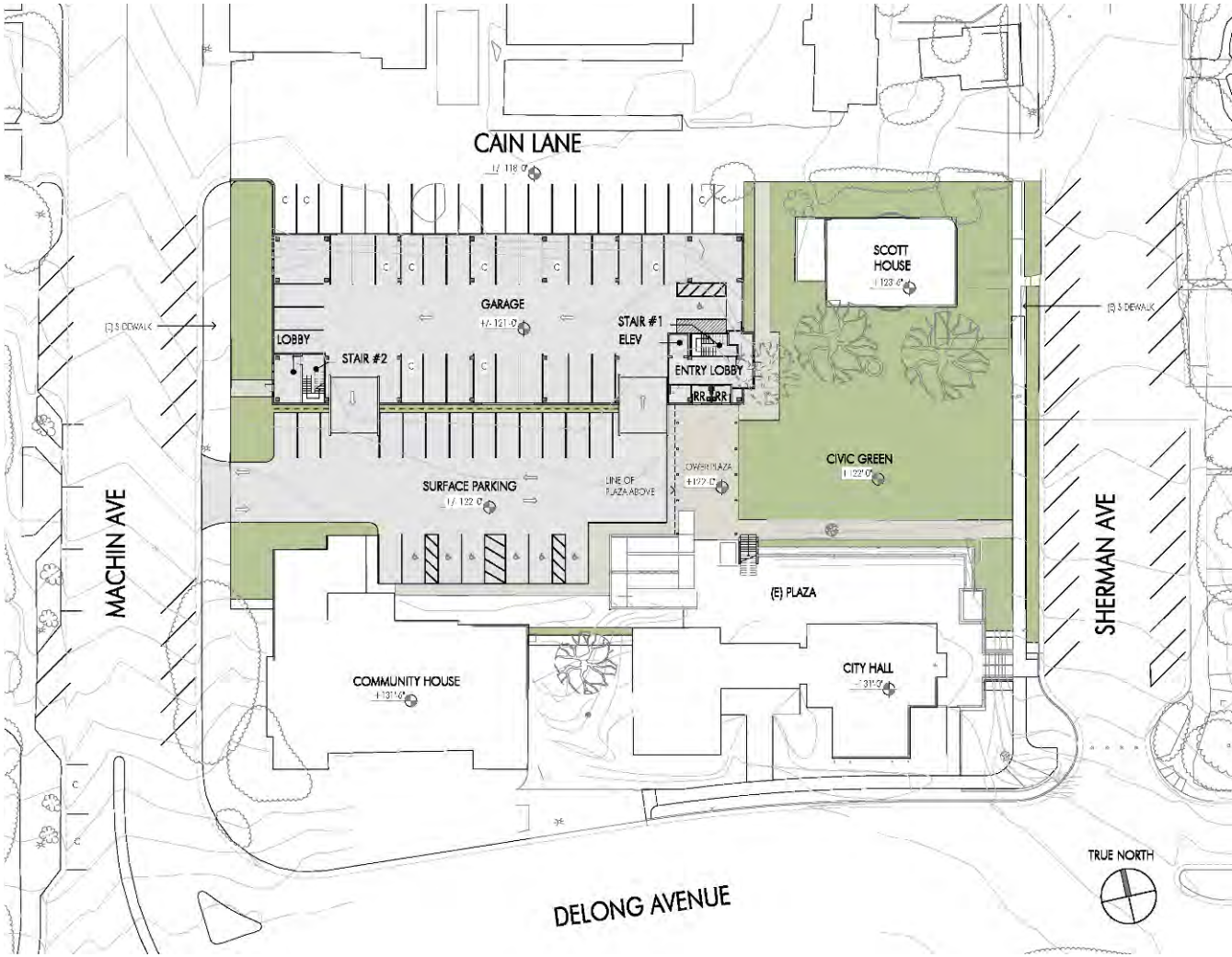
Parking Information

Surface Parking = 39 Spaces
Garage Parking = 28 Spaces
Street Parking = 47 Spaces
Total = 114 Spaces

Parking Level Area 12,100 SF
Parking Garage Efficiency = 432 SF/Space



Enlarged First Floor Connection at Plaza



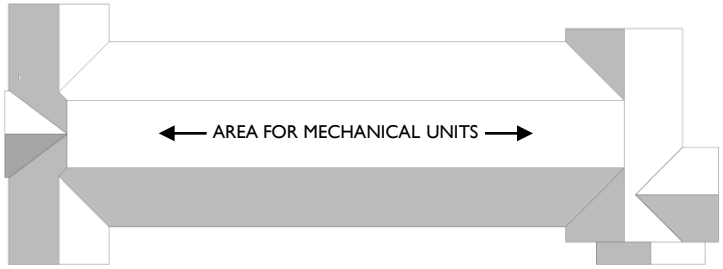
MIE ARCHITECTURE + DESIGN

OPTION 2 – PLANS

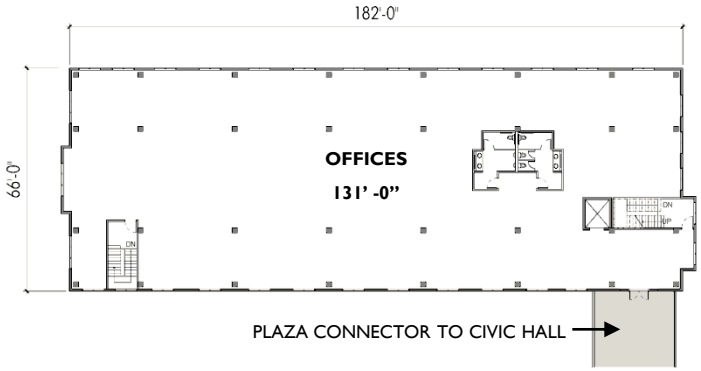
Plan Information

Gross Area

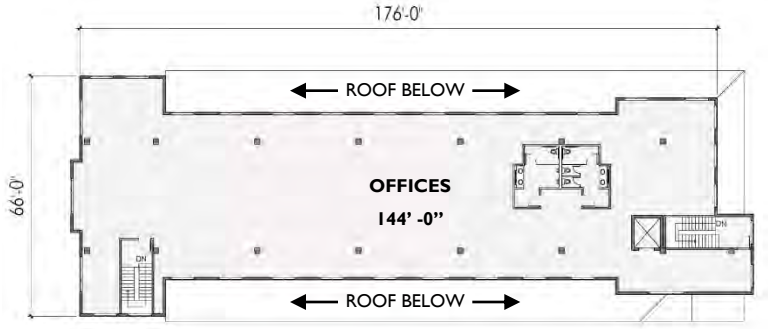
First Floor	12,150 SF
Second Floor	9,063 SF
Total	21,213 SF



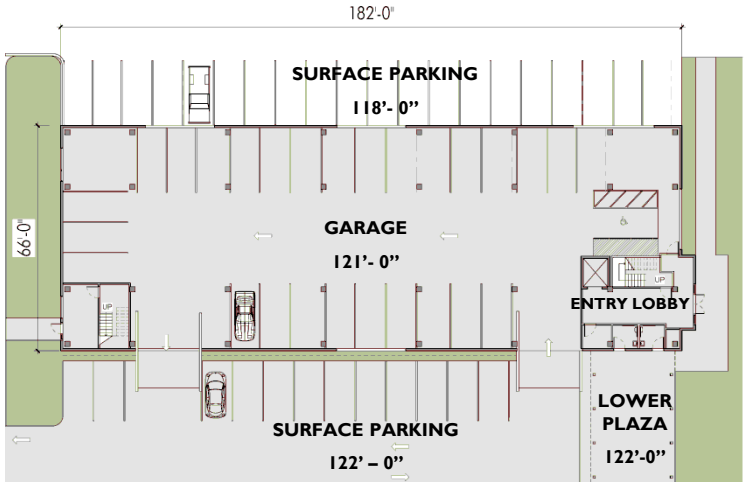
ROOF PLAN



1ST FLOOR PLAN



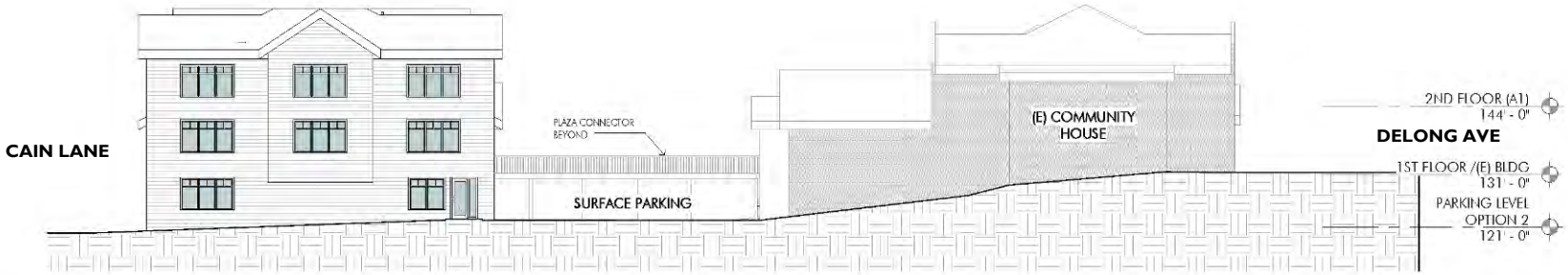
2ND FLOOR PLAN



PARKING LEVEL

ARCHITECTURE + DESIGN

OPTION 2 – ELEVATIONS

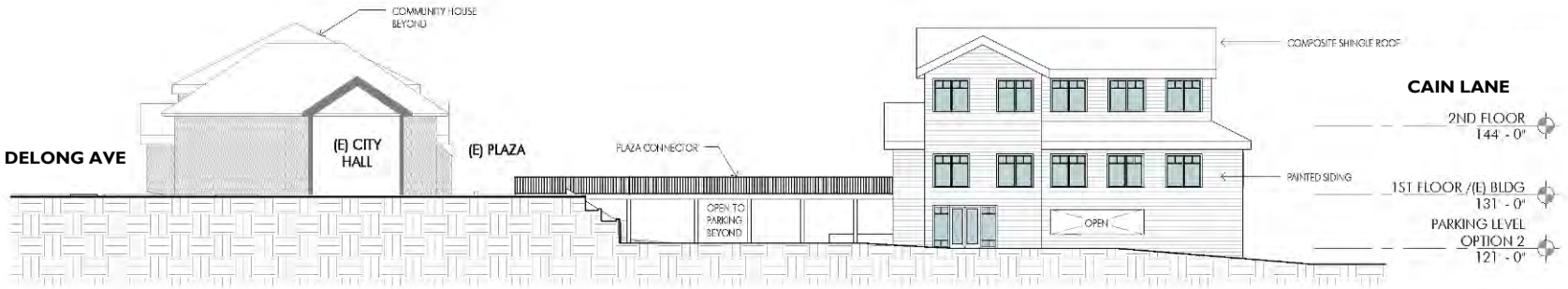


WEST ELEVATION

SOUTH ELEVATION

FME ARCHITECTURE + DESIGN

OPTION 2 – ELEVATIONS

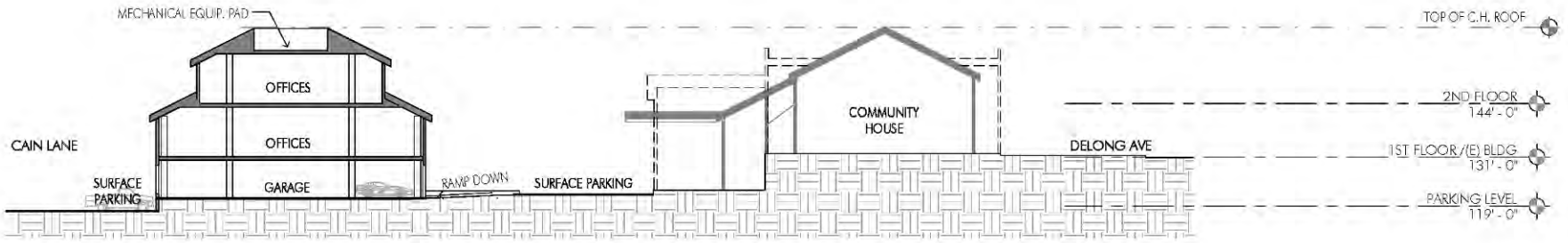


EAST ELEVATION

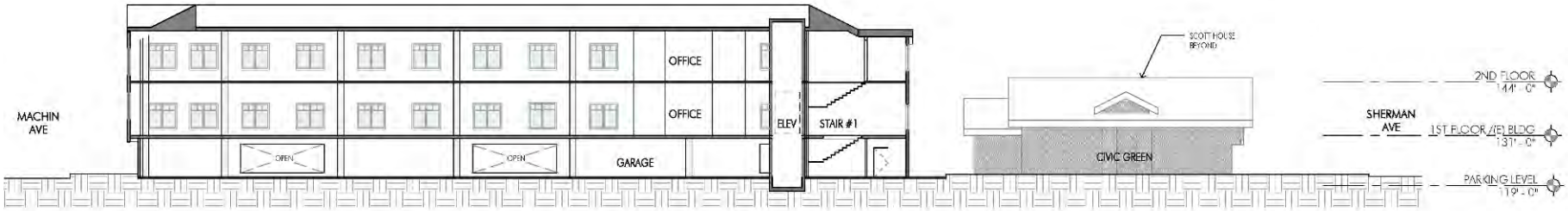
NORTH ELEVATION

FME ARCHITECTURE + DESIGN

OPTION 2 - SECTIONS

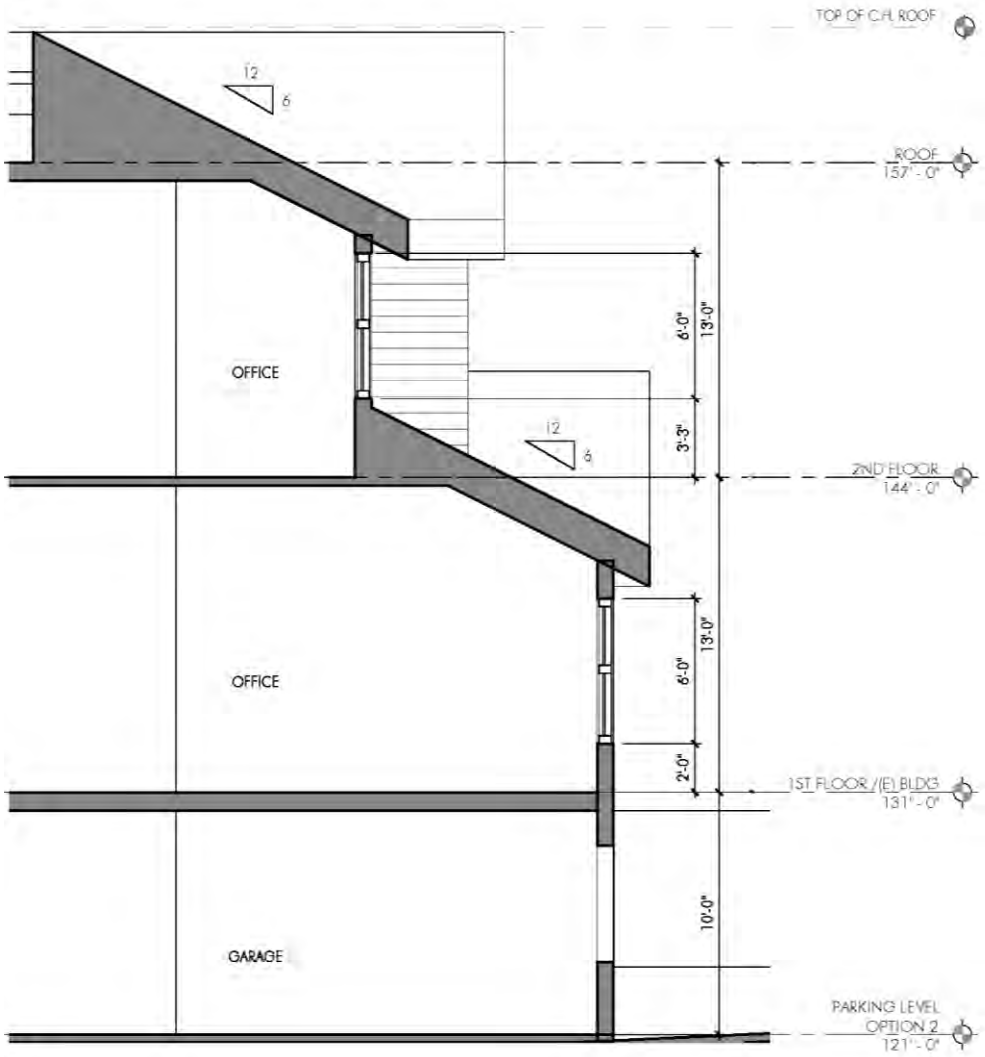


N-S SECTION LOOKING TOWARDS SHERMAN



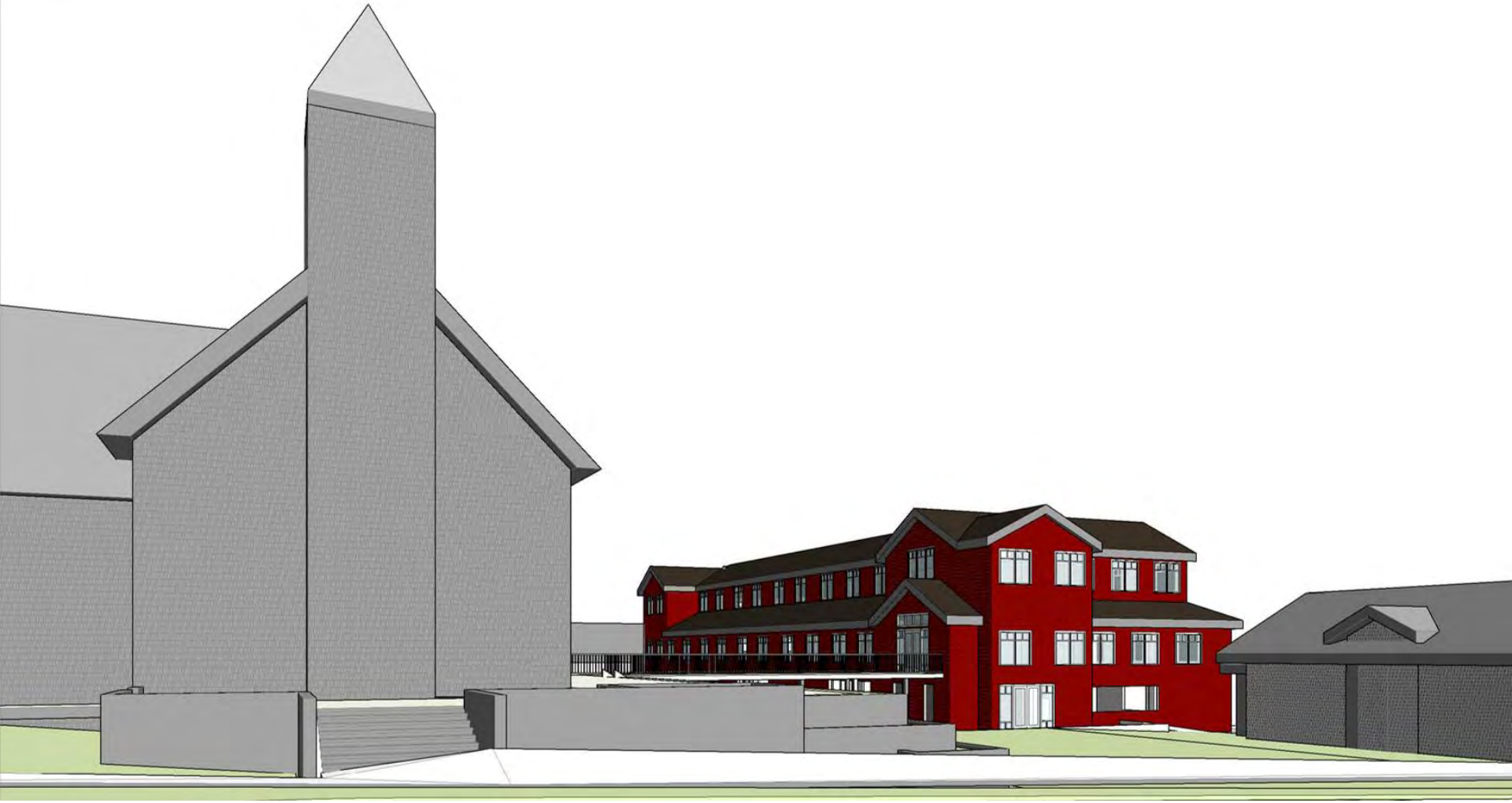
E-W SECTION LOOKING TOWARDS CAIN

TYPICAL WALL SECTION



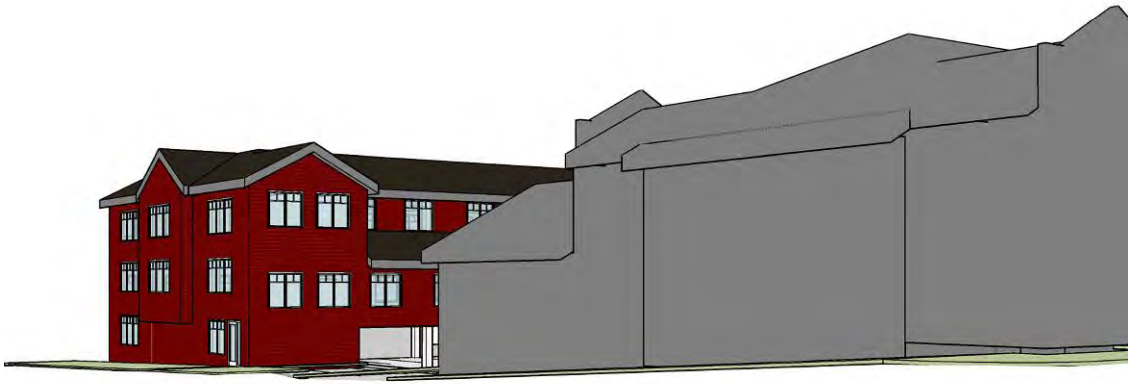
FME ARCHITECTURE + DESIGN

OPTION 2 – 3D VIEWS



VIEW FROM SHERMAN AVE. & DELONG AVE.

OPTION 2 – 3D VIEWS

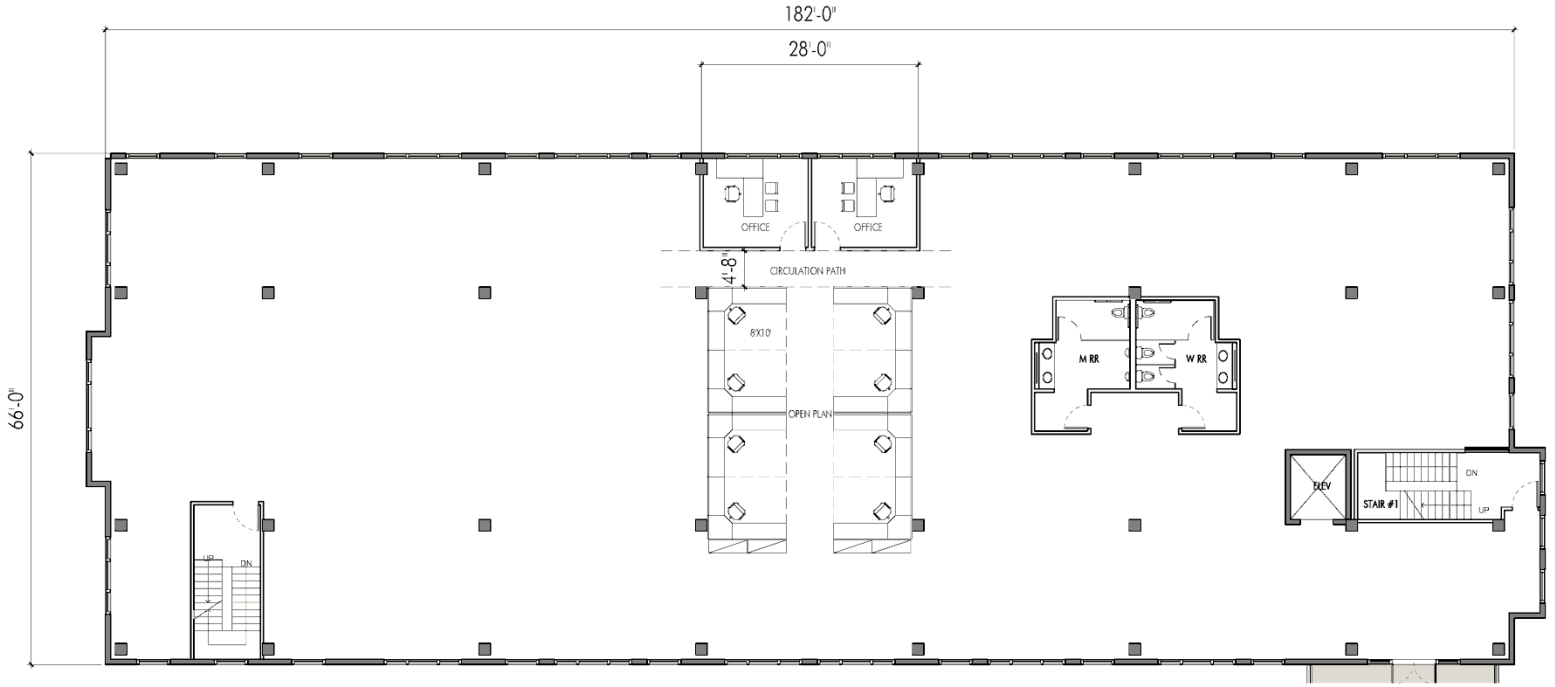


VIEW FROM MACHIN AVE. & DELONG AVE.

VIEW FROM CAIN LANE & MACHIN AVE.

FME ARCHITECTURE + DESIGN

HYPOTHETICAL SINGLE BAY SPACE PLAN



FME ARCHITECTURE + DESIGN

BUILDING MATERIALS

NAIL-FIN WINDOWS

LAP SIDING

COMPOSITE SHINGLE ROOF

Structural System Narrative
Novato City Building – Scheme C

PROJECT:	**Novato City Building**
DATE:	**February 24, 2011**
REFERENCE DRAWINGS:	**KPFF Structural Sheets: PSC – 1, 2, 3 & 4**
GEOTECHNICAL REPORT:	**Herzog Geotechnical Consulting Engineers, titled "Supplemental Geotechnical Investigation, Novato City Offices, Novato, California", dated January 12th, 2011.**

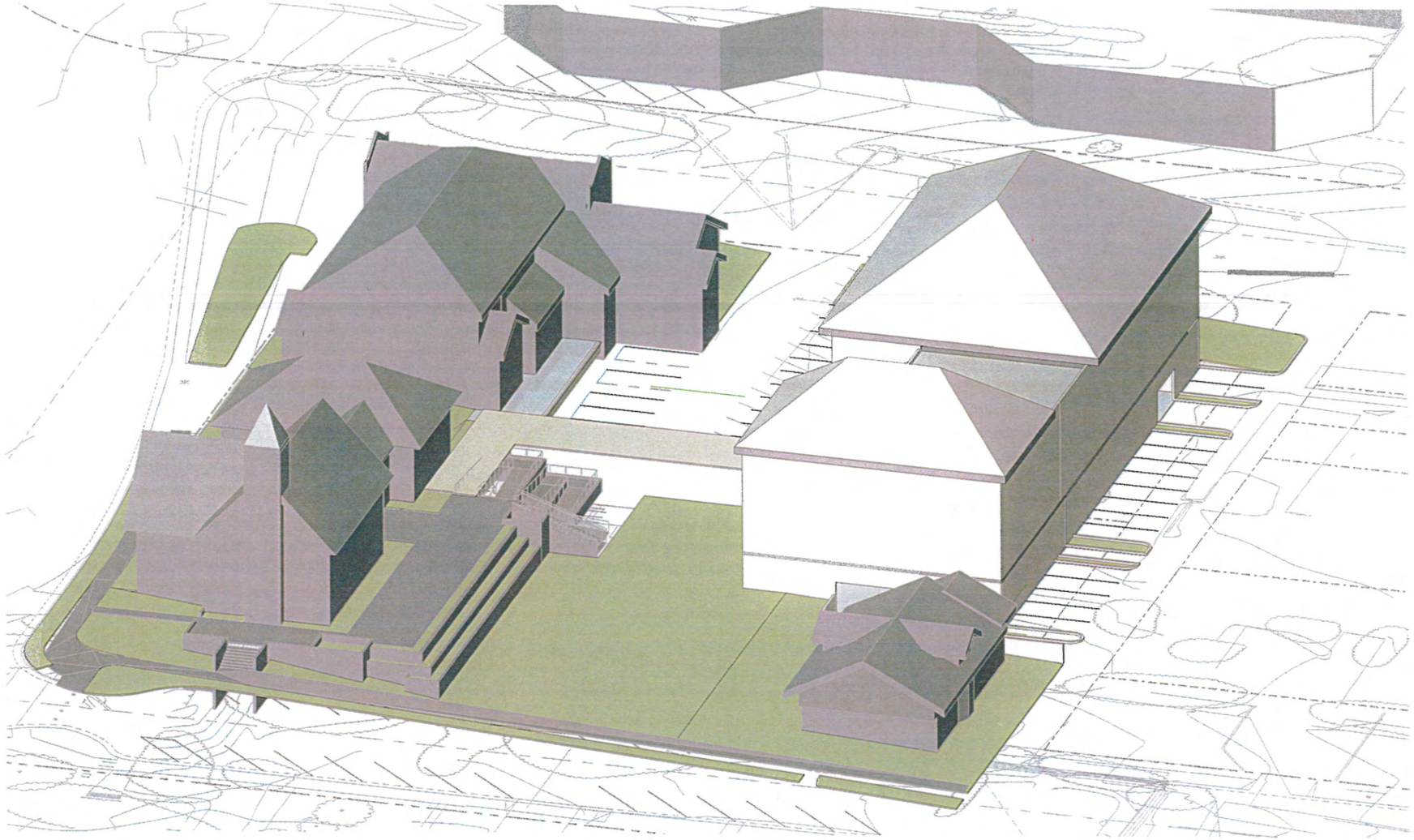
PROJECT SPECIFIC DATA OR ASSUMPTIONS:

Location:	Novato, CA
Project Description:	2 story steel framed office building over a concrete podium and 1 level on grade / partial subterranean parking.
Building Code	2010 California Building Code
Live Load Design	Roof, sloping 16 psf, reducible Roof, flat 20 psf, reducible Office space 80 psf, reducible + 15PSF partitions Office corridors 100 psf, reducible
Pile/Pier Capacity:	undetermined kips, DL+LL
Water Table Depth:	1 to 4 feet below grade.

QUANTITY ESTIMATES:

#	ELEMENT	SIZE, REINF, ETC.	REMARKS
1	Driven or Torque Down Steel Piles	Provide 10'-0" minimum embedment into bedrock. The bedrock elevation varies over the site.	Estimate 58 piles at an average pile length of 22'-0".
2	Subgrade Preparation	4" crushed rock	
3	Structural Slab on Grade	12" structural concrete slab on grade. Estimate 8 psf of rebar.	f'c=4,000 psi at 28 days. Use low shrinkage aggregates (0.04%) at 28 days, and a maximum 0.45 water:cement ratio.
4	Typical Continuous Concrete Grade Beams	3'-0" wide x 3'-0" deep Continuous Grade Beam (including slab depth). Estimate with plf of rebar.	f'c=4,000 psi at 28 days

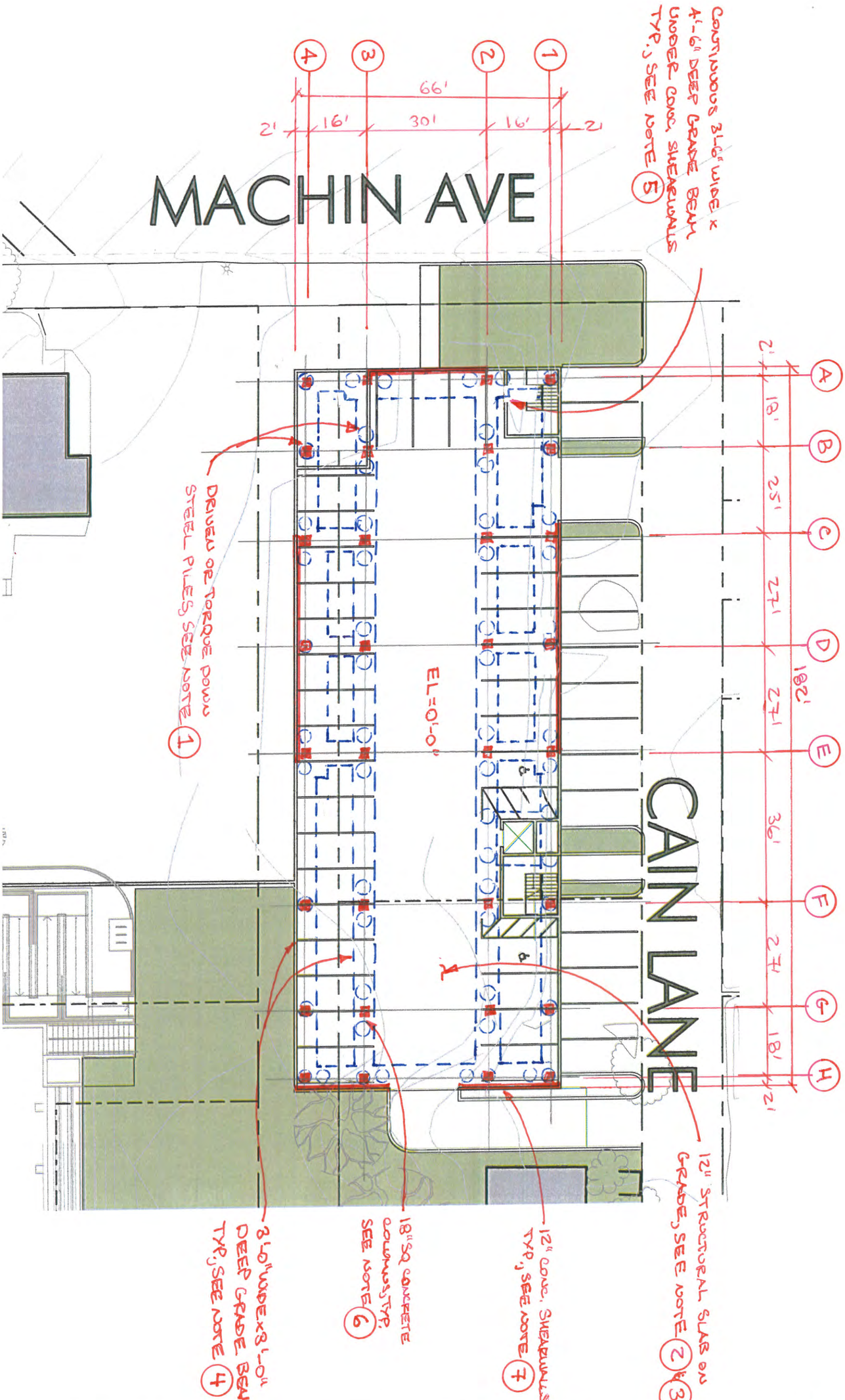
5	Continuous Concrete Grade Beams under Concrete Shear Walls	3'-6" wide x 4'-6" deep Continuous Grade Beam (including slab depth) with 60 plf of rebar estimated	f'c=4,000 psi at 28 days
6	Concrete Columns	18" square concrete columns to underside of podium slab. Estimate 45 plf of rebar .	f'c=4,000 psi at 28 days
7	Concrete Shear Walls	12" thick concrete shear walls with 10 psf of rebar estimated.	f'c=4,000 psi at 28 days.
8	Post Tensioned Podium Slab	9" cast-in-place post-tensioned slab with no drop panels. Estimate 1.0 psf of P.T. and 2.5 psf of rebar.	f'c=3,000 psi at 96 hours, 5,500 psi at 28 days. Use low shrinkage mix, 0.45 water:cement ratio, max.
9	Office Floor Framing	3-1/4" thick lightweight concrete fill on 3"-20 gage composite metal decking (vented) on steel beams and girders (3/4" headed studs at 12" on center typical on all beams and girders. Assume 16 psf of steel weight. Assume steel columns extend to the podium level only.	f'c=4,000 psi at 28 days. Structural steel will be ASTM A992. Alternate: 2-1/2" hardrock concrete fill on 3"-20 ga metal deck with spray fireproofing.
10	Roof Framing	1 1/2"-18 gage bare metal decking on steel beams and girder. Assume 14 psf of steel weight.	Structural steel will be ASTM A992.
11	Lateral Force Resisting System – office.	Special steel moment frames where shown on plans	Structural steel will be ASTM A992.



3D VIEW

PARKING INFORMATION - SCHEME C

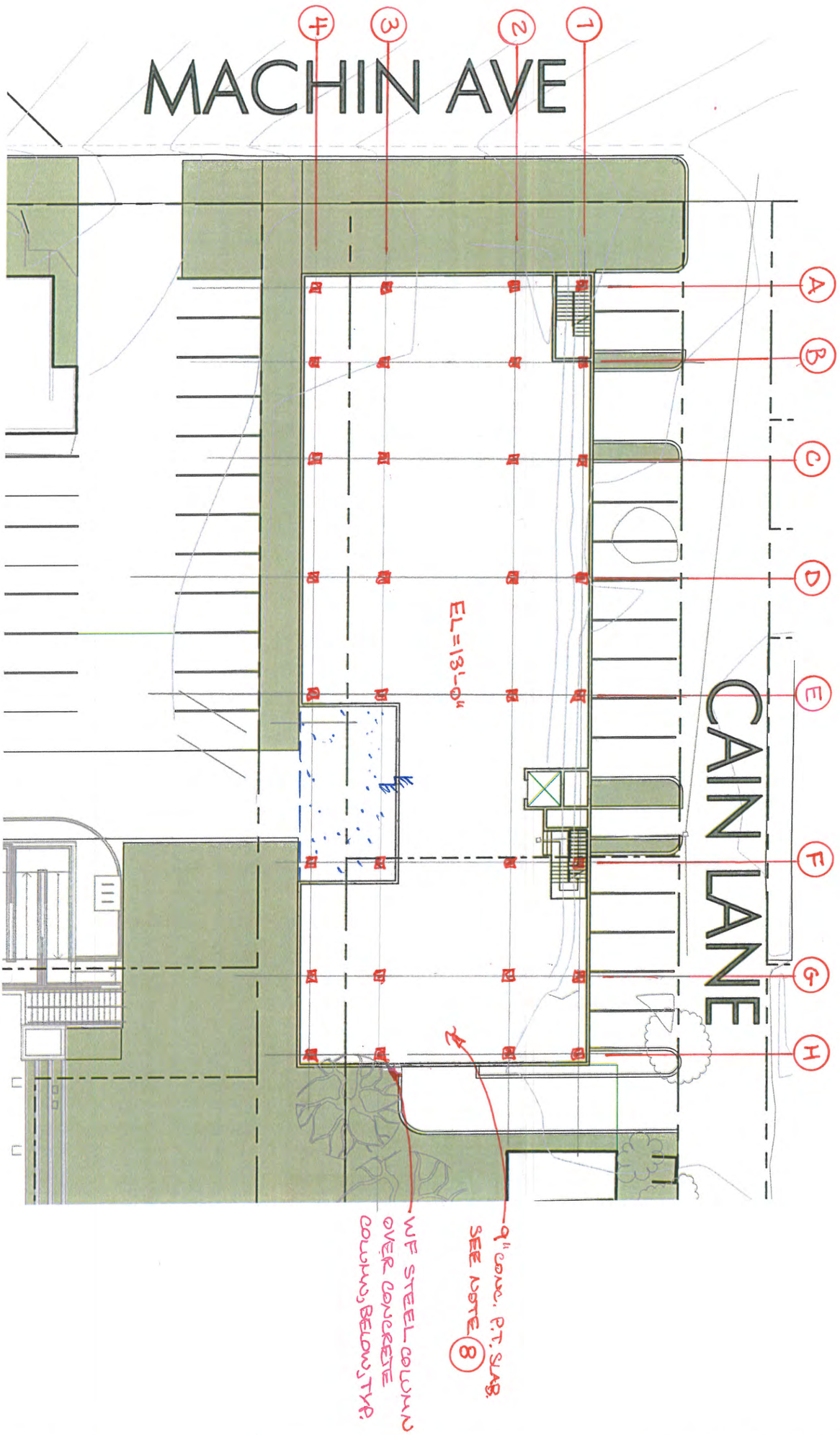
ON SITE PARKING – 77 SPACES



SCHEME C - FOUNDATION/PARKING LEVEL PLAN

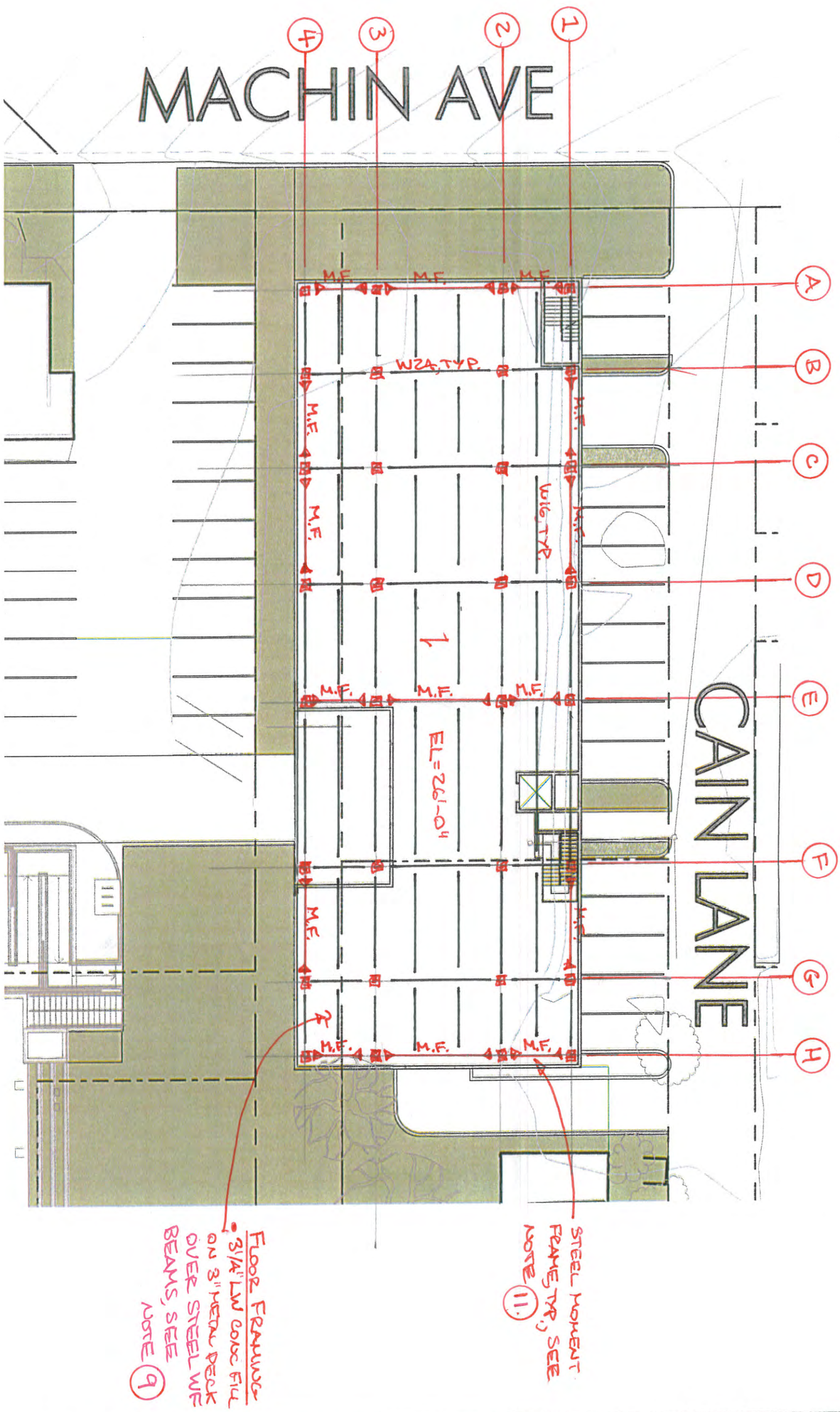
kpff Consulting Engineers 221 Main St, Suite 800 San Francisco, California 94105 (415) 989-1004 Fax 989-1552	PROJECT NAME NOVATO CITY BUILDING NOVATO, CALIFORNIA	JOB NO. 111020.00
	SHEET TITLE SCHEME C - FOUNDATION/PARKING PLAN	SHEET NO. PSC-1
	SIGNED DATE 2/24/2011	

SCHEME C - GROUND FLOOR PLAN



kpff Consulting Engineers 221 Main St, Suite 800 San Francisco, California 94105 (415) 989-1004 Fax 989-1552	PROJECT NAME NOVATO CITY BUILDING NOVATO, CALIFORNIA	JOB NO. 111020.00
	SHEET TITLE SCHEME C - GROUND FLOOR PLAN	SHEET NO. PSC-2
	SIGNED DATE 2/24/2011	

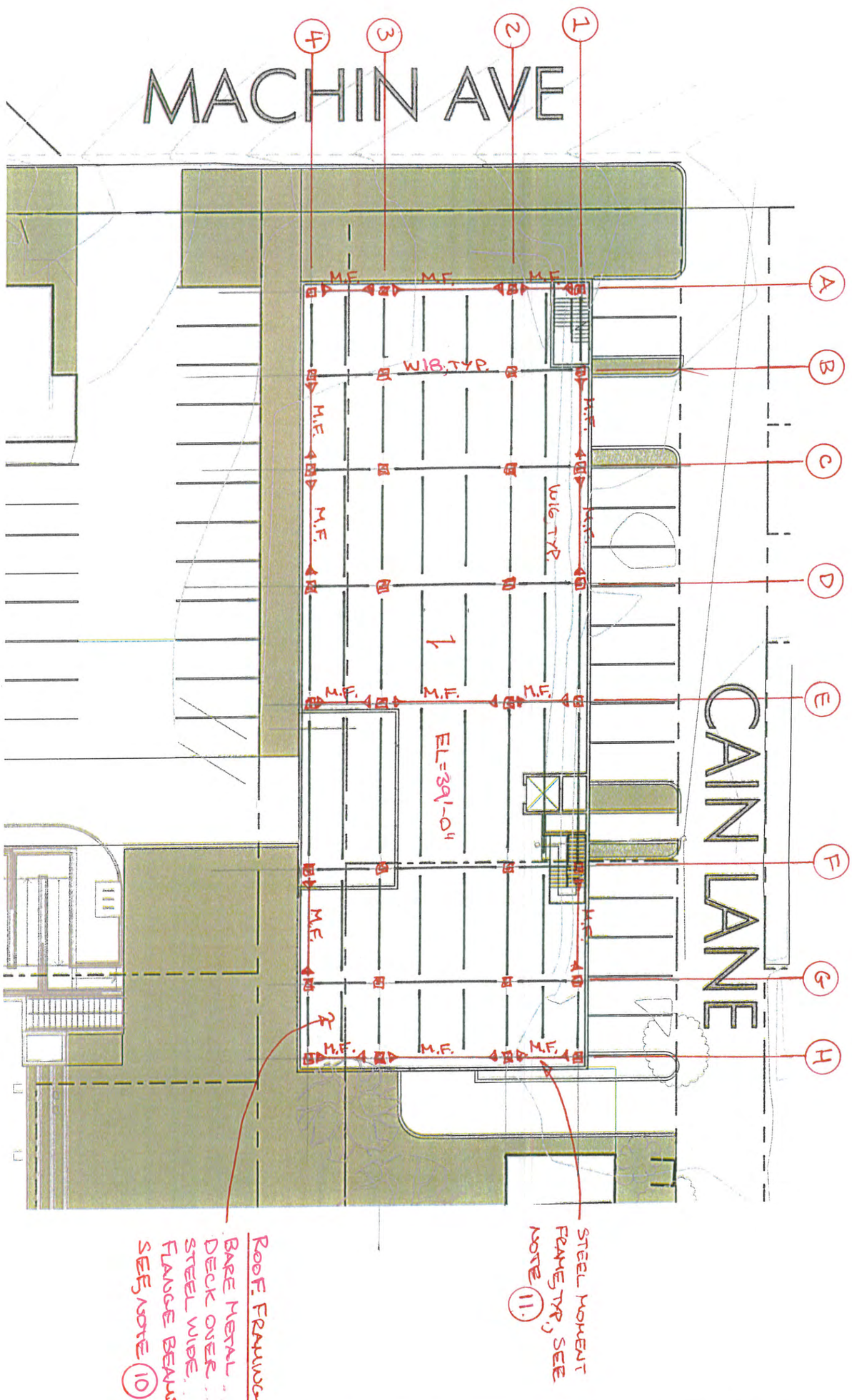
SCHEME C - 2ND FLOOR FRAMING PLAN



kpff Consulting Engineers
221 Main St, Suite 800
San Francisco, California 94105
(415) 989-1004 Fax 989-1552

PROJECT NAME: NOVATO CITY BUILDING, NOVATO, CALIFORNIA	JOB NO.: 111020.00
SHEET TITLE: SCHEME C - 2ND FLOOR FRAMING	SHEET NO.: PSC-3
SIGNED	DATE: 2/24/2011

SCHEME C - ROOF FRAMING PLAN



kpff Consulting Engineers 221 Main St, Suite 800 San Francisco, California 94105 (415) 989-1004 Fax 989-1552	PROJECT NAME NOVATO CITY BUILDING NOVATO, CALIFORNIA	JOB NO. 111020.00
	SHEET TITLE SCHEME C - ROOF FRAMING PLAN	SHEET NO. PSC-4
	SIGNED DATE 2/24/2011	

City of Novato Preliminary Space Planning Report

EXECUTIVE SUMMARY

The purpose of this report is to provide information to assist the City in determining the overall future building size for a new City administration building. Based on our findings, we recommend a building size that fits within a range between 19,500 and 22,500 square feet.

The existing administration offices at 75 Rowland were visited and documented, interviews with administrative leadership were conducted and a spreadsheet has been prepared that represents the likely square footage range for an assumed future two-story building. Staffing projections for the next five years and ten years have also been incorporated. Based on the study we have completed, this represents the inclusion of functions that are currently part of the City administration offices.

In connection with our work, we have identified possible shared spaces such as break rooms, copy rooms and record storage. However, we have also provided some redundancies such as allocating space for two reception areas, should the City find that it needs one on each floor. For record storage, we have provided for future expansion space, allocating more space than the City is using at the present. However, it should be noted that interviewees stated that efforts are being made and can be made in the future to reduce the amount of active files.

Extra civic functions such as the provision of a large community meeting room or a large public lobby that might accommodate civic events have not been included in these tabulations. The overall size of the building will also be dependent on whether additional functions are included in the final building program.

It should be noted that the range of square footage projected is based on factors such as the load factor/efficiency of the floor layout, potential office and conference room configurations, restrooms required by code and growth of departments. For example, if it was found to be functionally possible to aggregate several conference rooms, then the square footage range will drop toward the lower threshold of the range stated above. In our experience, the actual square footage tends to be an iterative process, in which the amount is recalculated several times as the building/floor plans are prepared and revised.

GENERAL PRINCIPLES AND TRENDS

IFMA Standards

An authoritative source of standardized data for offices is the IFMA (International Facilities Management Association). The following charts summarize some of their findings for typical office sizes and space allocations. Although these are dated from 1994 and 1997, a 2009 update did not modify these numbers. There is a slight difference between the commercial world of office space and governmental agency space allocations, with large government spaces in general sized down from the private sector by about 10-20%.

In the U.S., private offices are concentrated at senior management job levels. The use of open plan predominates for professional, technical, and clerical workers. In the 1990's,

most organizations pared down to as few as three different office sizes and configurations so most workers could be moved into existing spaces with minimal changes.

We have used the following IFMA standards in this report:

U.S. Space Standards (International Facility Management Association,1997)

Job function	Space per Employee – 1994 Space per Employee - 1997	
Upper management, 95% private office, 5% open plan	289 sq. ft. / 26.9m2	1994
	280 sq. ft. / 26.0 m2	1997
Senior management, 85% private office, 15% open plan	200 sq. ft. / 18.6m2	1994
	193 sq. ft. / 17.9 m2	1997
Middle management,65% private office, 35% open plan	151 sq. ft. / 14.0 m2	1994
	142 sq. ft. / 13.2 m2	1997
Senior professional, 40% private office, 60% open plan	115 sq. ft. / 10.7 m2	1994
	114 sq. ft. / 10.6 m2	1997
Technical/professional, 15% priv.off.,80% open, 5% bullpen	90 sq. ft. / 8.4 m2	1994
	92 sq. ft. / 8.6 m2	1997
Senior clerical, 9% priv.off., 86% open plan, 5% bullpen	81 sq. ft. / 7.5 m2	1994
	84 sq. ft. / 7.8 m2	1997
General clerical, 5% priv.off., 82% open plan, 13% bullpen	69 sq. ft. / 6.4 m2	1994
	73 sq. ft. / 6.8 m2	1997

BOMA Standards

The BOMA Standard (Building Owners And Managers Association) has been the generally accepted method for measuring office space for many years. The purpose of the Standard Method For Measuring Floor Area in Office Buildings is to allow for communication and computation of a building's square footage on a clear and understandable basis. This standard can and should be used in measuring office space in old as well as new buildings. It is applicable to any architectural design or type of construction.

The BOMA Experience Exchange Report found that the average U.S. cubicle or management station is 90 square feet, while the average private office is 186 square feet. Bullpen spaces for multiple workers average 1,402 square feet. Many jobs in IT programming use private offices around 120 square feet.

Usable Area

This measures the actual occupiable area of a floor or an office suite and is of use to a tenant in evaluating space offered by a landlord and in allocating the space required to house personnel and furniture. The Usable Area of a floor is equal to the sum of all Usable Areas on that floor. The amount of Usable Area on a multi-tenant floor can vary over the life of a building as corridors expand and contract and as floors are remodeled. Usable Area can be converted to Rentable Area by the use of a conversion factor. The Usable Area of an office is computed by measuring to the finished surface side of the office side of corridor and other permanent walls, to the center of the partitions that separate the office from adjoining Usable Areas, and to the inside finished surface of the dominant portions of the permanent outer building walls.

Rentable Area
This method measures the tenant's pro-rata portion of the entire office floor, excluding elements of the building that penetrate through the floor to areas below. The Rentable Area of a building is fixed for the life of a building and is not affected by changes in corridor sizes and configuration. This method is recommended for measuring the total income producing area of a building and for use in computing the tenant's pro-rata share of a building for purposes of rent escalation. The Rentable Area of an office on the floor is computed by multiplying the Usable Area of that office by the quotient of the division of the Rentable Area of the floor by the Usable Area of the floor resulting in the R/U Ratio.

Load Factor
The Load Factor is the percentage of space on a floor that is not usable, expressed as a percent of Usable Area. It is also known as the Common Area Factor or the Loss Factor. Most all measurements in commercial properties have a rentable square feet (the amount of space paid for) and the usable square feet (the amount of functional space that can be used). The rentable is always greater or equal to the usable and is measured by the building's Load Factor. The Load Factor is a percentage that takes into account the common areas (lobby, hallways, etc), HVAC systems, ducts, pillars, etc. The greater common area, the higher the Load Factor, the less usable square footage to rentable square footage. Average Load Factors in Class A buildings in the Bay Area range from 15-25%, meaning there is an additional 15-25% square footage added to the particular space the tenant occupies. This allows the landlord the ability to share some of the common area costs with tenants, by inflating the portion of space on which they pay rent. The load factor for single-tenant buildings is generally a bit less due to a reduced need for additional corridors and common areas.

We have used load factors of 110% and 120% in our spreadsheets to present the range for commercial office space in the San Francisco Bay Area.

Load Factor (Load) = R/U Ratio - 1.

Conversion Formulas	
Rentable Area ÷ Usable Area	R/U Ratio
Usable Area x R/U Ratio	Rentable Area
Rentable Area ÷ R/U Ratio	Usable Area
Usable Area x (1 + Load)	Rentable Area

Trends
Today, the trend in commercial offices is toward smaller offices and more open work areas with workstations. For example, in the 1970's, U.S. Corporations typically allocated 500 to 700 square feet per employee to build an effective office. Today's average is little more than 200 square feet per person (not including load factor). The space allocation is expected to be reduced further by 2015, projected to be between 50 to 100 square feet per person.
(MSN Good Design, http://www.good.is/post/your-office-is-getting-smaller/)

Many U.S. corporations tend to allot about 64 square feet (an 8' x 8' space) for a typical office worker. Some go as small as 6' x 6", or 48 square feet.

The "lean-and-mean" movement which has occurred over the last decade has caused many organizations to pare office sizes down as far as possible to save real estate costs, with some moving to offices as small as 6' x 6'. This resizing resulted in higher densities than many office floor plates were set up to accommodate, so HVAC, acoustic support, and elements had to be adapted. Along with more use of user-moveable furniture and less concern about adherence to strict workstation standards, there is a higher degree of interest in overall workplace cost control.

A study of workstations determined that the ideal workstation for a full-time computer user would be 8.7 feet by 8 feet. A U-shaped station model was developed based on task analysis and ergonomic measurements for typical computer-based workers. (Cohen, James, Tavelra, Karsh, Scholz, & Smith, 1995, p. 1669).

Perception of workstation sizes is also a matter of comparison. If your peers have bigger offices, your office will definitely seem too small. Psychological research has also flagged a "loss of space versus your last office" condition as a potential performance issue. "Analysis found a substantial decrease in job satisfaction for workers whose workspace floor area has been reduced by more than 25 percent" (Brill, Margulis, Konar, & BOSTI, 1984, p. 108).

Additionally, businesses have been utilizing "work hubs". Although the concept of work hubs has been used to signify a variety of different ideas, for the purposes of this report, the work hub concept is the creation of concentrated work areas based on a center of interest, importance, or activity. Generally, this means a work area with a concentration of cubes that might open into each other to make it easy to share information; or it can also mean shared counters and a shared work area which could be shared by numerous people.

Sources:
Haworth, Changing Nature of Work and Trends White Paper
International Facility Management Association (1997) Benchmarks III
Brill, Margulis, Konar & BOSTI (1984). Using office design to increase productivity, Vol.1, Buffalo, N.Y., Workplace Design and Productivity, Inc.
Cohen, James, Tavelra, Karsh, Scholz & Smith (1995) Handbook of human factors and ergonomics (2nd edition), Wiley, N.Y.

On Tuesday, January 4, 2011, this consultant conducted a series of interviews to ascertain current and future city offices space needs. The meetings were held with the following administrators:

Cathy Capriola, Assistant City Manager
Sheri Hartz, City Clerk
Dan Weakley, Human Resources Manager
Pam Shinault, Parks & Recreation Director
Jason Nutt, Public Works Director with Patrice Valdivieso, Public Works Analyst
Dave Wallace, Community Development Director

Following is a summary of the interview results concerning the staffing space needs, preferred functional adjacencies, file and storage space needs, printing and copying space needs, privacy and security needs and other related issues.

Staffing Needs

Central Administration

Central Administration consists of the City Manager, the Assistant City Manager, the City Clerk, Senior Management Analyst, Executive Secretary, Word Processor, and Senior Administrative Clerk (Receptionist). [Currently, there is an Assistant to the City Manager, however, the incumbent is retiring and the position is being eliminated].

A total of four offices are needed for Central Administration- City Manager, Assistant City Manager, City Clerk and the Senior Management Analyst (who could perhaps share an office of reasonable size with another analyst). An office of the analysts is important due to confidential or sensitive projects that they may work on (such as human resource projects) in the future. The Senior Administrative Clerk/Receptionist needs a cubicle workstation with a public counter. This space should be large enough to accommodate some shared equipment and storage.

Redevelopment / Economic Development

Redevelopment / Economic Development consists of two full-time staff people – Redevelopment Administrator (office) and Senior Management Analyst (workstation cubicle). In addition, there are plans for this work unit to use interns regularly in the future as a means to augment staffing levels. A workstation cubicle will be needed for a future intern.

Administrative Services Department

The Administrative Services Department consists of three major divisions – Human Resources/Risk Management, Finance, and Information Technology.

Human Resources – Staffing includes a Human Resources Manager (office), Human Resources Analyst (office) and an Administrative Clerk II (private space; could be a

workstation cubicle if it is in a private, confidential area. Based on workload, one more professional HR position should be planned for that would require an additional office.

Finance – Staffing includes Finance Manager (office), Accountant/Analyst (office), 4 Senior Account Clerks (workstation cubicles now are in a work hub format). The current staffing arrangement works well.

Information Technology – Staffing includes IT Manager (office), Computer Technician (cubicle in a shared work hub), contract part-time IT Analyst (cubicle in a work hub near the main computer room) It was recommended that there be an addition of one workstation cubicle to hire another professional IT position based on workload and staffing needs as the city adds more software. Overall, the current space for IT is sub-par. There is a need for flexible space for interns as well. The IT staff needs a production area to build and repair computers, another locked storage area for computers and equipment, plus a climate controlled server room. Generally, IT requires slightly more area because of additional equipment.

For the conference rooms, the current space is awkward and does not hold more than 12 around the table at one time. City staff does hold meetings with some regularity that have15-20 in attendance. We recommend a larger conference room, which could be multi-purpose and used as a closed-session room.

Adjacency

The Administrative Services Department consists of the Human Resources Manager and staff, the Finance Manager and staff, Information Technology Manager and staff, and the Redevelopment Administrator and Senior Management Analyst. The Administrative Services need to be near the Central Administration offices. They share analysts and regularly deal with issues of budget and financing and citywide issues. HR and Finance should be together; however, it is also important for business license to be near the front counter to receive business license customers. Redevelopment administrators could be physically located with Community Development staff instead of being placed with Central Administration.

Work Hubs:

The current work hub configuration for Central Administration is working well at the present. This allows three management positions to share one Executive Secretary.

The current Account Clerk work hub is also working well. In the future, there may be a need for analysts to be in a hub configuration for easy access to each other.

For file security, the Senior Administrative Clerk (HR) needs a private lockable office or a small space that could be part of the Administrative hub, where the complete Administrative hub would be lockable.

A lockable Human Resources/Finance work hub might include an office with the HR manager, lockable HR files and HR analysts adjacent to the Manager with the financial analysts with lockable financial files also included.

For IT, a secure, lockable work hub could be provided where the IT Manager could have oversight to a general work space that included clean work stations as well as a production work area for repair work and sufficient equipment storage.

Problems with the Reception Area

There were concerns regarding the reception area in a new facility. There may be a problem due to lack of resources for receptionist staffing. Currently, there is a Senior Administrative Clerk in Central Administrative that acts as the centralized receptionist for the City. The other reception location is on the 1st floor with clerical staff in the Community Development one-stop shop. Assuming there is a two-story building, there may be a need for two reception areas, one on each floor. This is difficult since the City does not have a dedicated receptionist staffing position after July 1, 2011. A first floor receptionist could "buzz up" or otherwise communicate to the second floor as a way to potentially resolve the problem.

The City offices work with the visiting public in two main ways. 75% of the visitors are for the Community Development Department and15% are for Business Licenses, although this may decrease with the more automation of business license services in the future. (Parks Recreation and Community Services dramatically decreased the number of visitors coming to 75 Rowland by decentralizing class registration to occur at two locations in the community rather than occur at the city offices). Now, Community Development receives the majority of the public using a system of three rotating staff members for initial reception and intake.

There is a need for a large public waiting area for Community Development. The public area for Community Development is now approximately 25'x30.' The Community Development Director thinks this size room has served them well. In a downtown location, there will probably be an increase in public use of the City offices due to closer proximity than currently. Therefore, if the reception spaces for Central Administration and Community Development are combined, this room may need to be enlarged further. In addition, the future may allow customers to provide more self-service and use of computers while they are waiting which may require additional space.

On the second floor of 75 Rowland, a Senior Administrative Clerk has been assigned to function as the general receptionist for the City. This position answers the general City phone line and helps customers with a variety of needs. In addition, this position provides general clerical support to Central Administrative and Administrative Services. There is a need for ESL skills for the non-English speaking public that walks-in.

One idea that the Assistant City Manager expressed was to plan for a wrap-around counter with two reception workspaces adjacent to a general waiting area, with a wall behind the reception desk for general staff privacy. In the past, the City had tried to rotate clerical staff into reception position but the rotating of staff did not work well and the public complained of bad service. There are currently 7 clerical staff members remaining on the staff located at 75 Rowland.

Printing and Copying
There is a need for a centralized production work area functionally close to Finance (which is charged with monitoring some of the shared equipment) yet easily accessible to the other departments that will be using the larger printer, postage machine, folding machine, etc. This equipment needs to be in a closed area in order to ensure noise protection.

Files
Human Resources files need to be centralized and personnel files need to be in a locked room and a locked cabinet. Some of the current files could be moved to the offsite file storage location so that the active file need could be approximately 2/3 the size of the current file area.

The Assistant City Manager has an ultimate vision of a centralized Records Retention Center with rolling file cabinets to be used for all staff for permanent records. These permanent records need to be in a fire safe area as well. She referenced her experience in Citrus Heights with a successful file storage area, not accessible to the public that contained vaults with files, a long layout area for rolled maps and a scanning station.

Other issues highlighted
1. The downstairs conference room needs to be usable as a community room. This would be rentable space for civic organizations or the general public for events. The City will need the ability to lock-off City offices to allow for evening use of this room.
2. The Engineers need better drawing layout space
3. The restrooms need to be larger than current facilities in order to accommodate showers.

The City Clerk's Office

Staffing
The City Clerk is part of Central Administration. There are currently three staff members. They have lost two staff in the last five years. They need one office and two workstations. The private office is used for personnel meetings and small conferences with city council members and superiors.

The City Clerk participates in the executive management team meetings that are led by the City Manager in the City Manger's large conference room. They do not have a need for an additional conference room.

Her existing office is 14 x18 but could be smaller without inhibiting her work. She currently has seven file cabinets of approximately 21 lineal feet x four shelves height in her offices that are all "active records." These do not need to be in her office but need to be nearby and lockable. She prefers a record retention center that would centralize all sensitive files in one lockable space

Adjacency

She likes the current Administrative hub that puts her adjacent to the City Manager, the Assistance City Manager, the Executive Secretary and the large conference room.

She needs to be more adjacent to her support staff. Currently this is not the case, with _____ _____ sharing space within the Finance work hub located far away from the Administrative hub.

_____ _____, who is not in the department, also helps with back-up website assignments so it would be helpful if she remained adjacent.

Problems
Her office is adjacent to a hallway with improper sound isolation so she hears the metal doors opening and closing noises all the time.

_____ _____, her staff member who works on web postings and needs frequent interaction with department administration, is isolated and close to a noisy conference room. _____ also mentioned the need to ergonomically adjust her workstation (This would be a general comment concerning all work stations.)

Other space needs/shared space opportunities:

Printing and Copying
The City Clerk creates binders, prints and collates. They could use a shared copy room with sufficient layout space.

Files
Permanent records are now stored off-site. These are permanent records for all departments, not just administrative. She envisions a centralized permanent record storage area that includes rolling files on tracks, a workstation with a scanner and possibly access for public research.

Administrative Services Division's Human Resources, IT and Finance Departments

Staffing
There are currently 3 HR staff, 2 IT staff and 6 staff in Finance. They have recently lost one position in Finance. The growth of one position in IT was projected for the future. The Human Resources Manager's current office is 10x12.' He sees the need for 8 private offices, one for each of the three managers, one each for the account analyst, HR analyst, administrative analyst, HR benefits and the IT manager (currently the IT manager does not have an office). He projected the need for 6 workstations, including the need for a station for part-time or sub-contracted consultants.

There is the need for high privacy for confidential conversations within HR concerning personnel or benefits topics. The Finance Manager and IT manager could have a shared space with one small conference room between them.

For other meetings they use a shared conference room with Engineering currently due to the existing circumstance of adjacency and are willing to share smaller conference rooms in the future. It is rare to call a meeting with more than 3 or 4 people.

Adjacency
The Finance Department working all together makes them more efficient. The manager's office is directly adjacent to the Finance hub so he has direct oversight. This is the most important adjacency in his opinion.

Security
IT must have secure server rooms. HR needs lockable personnel and risk management file storage. The payroll tech needs a private area to talk about paycheck issues.

Problems
IT has equipment storage needs for PC's and laptops and miscellaneous equipment. This storage could be part of a workroom. IT has no private workroom now. The existing server room is 13 x 23' with three workstations one of which is a third-party vendor workstation.

There is a need for more file space. There are 11 lateral file cabinets stored in the hallway. These files need to be consolidated to a larger centralized file room

There is also a separate, central file room that is 17x15' with 7 more lateral files and 10 standard files, a check printer and 30x24"x4' high safe. Some consolidation and re-organization of the on-site files is in order to determine the appropriate room size for the Administrative file storage needs.

Additional needs
They would like to have a training room as part of the facility. Ideally they would like to do training each month. It would usually be for 10-15 people but occasionally for 30-40 people. They currently use the Hamilton Community Facility, the Police Department or the Corporation Yard training rooms.

They need a flexible space with a few computer stations for the testing of HR applicants. There is also a need for additional "hotelling" workstations for occasional auditors or for temporary business license support.

Parks and Recreation Department

Staffing
The Parks and Recreation Department needs two offices. They need 8 workstations. There are four full-time staff that work at the City offices; there are two full-time staff that use workstations on a half-time basis. They need a dedicated workstation for the IVR (voice recording). They use two small conference rooms now that hold 6 people that are approximately 9 x 12'. This department has lost 25% of their staff recently and projects the addition of one staff member over the next five years.

Adjacency
Parks & Recreation mostly coordinates with Public Works and Engineering.

Problems
The director's current office (12x13) is a little small but she uses the adjacent conference room for meeting.

The IVR station and the word-processing station needs to be in a quiet area.
She hopes that new offices will have individual climate controls because now the west facing windows for their offices create uncomfortable heat gain problems that they can't really regulate.

Files
They need map storage- this could be a shared space with Public Works. They need locked storage for personnel files. They have 20 personnel, 700 volunteers and 300 part-time workers. There are six double 4-drawer lateral files, 8 lateral files, 6 standard file cabinets and reference bookcases that need to be located in a file storage room. They need active record retention for the thousands of registrations for Parks & Recreation programs and facility rental agreements.

Printing and Copying
They prefer a separate copy machine and fax machine area with counter space for collating. They have reprographic needs for newsletters and school flyers.

Requests
They need large bin-size mailbox spaces for sending mail bundles off-site.
They requested healthy choice vending machines in the break room.

Staff will walk during their lunch hour and need lockers, a workout room with shower and dressing area. The department is predominantly women now and they do not want to have to share a facility with the police department when and if the city offices are relocated downtown.

Their current kitchenette is a galley type that does not give them a break room. They requested a break room/kitchenette with a stove, dishwasher, garbage disposal, microwave and coffee area.

Public Works Department

Staffing
The Public Works Department and Engineering Division have seventeen staff, two interns and one volunteer. They currently have three offices and request six offices for supervisors and above. Supervisors need privacy to have meetings with their staff. They need 14 workstations for full-time staff. They need 3 small workstations to provide flex space for three people, interns and part-time staff. They need at least two small workstations with terminals for a monitoring system and a PMP computer. They use two conference rooms. They have a weekly meeting with 12 people and they also use a smaller conference room for meetings.

Adjacency
The team supervisors need to be adjacent to their teams.

Problems
The Maintenance staff is not currently staffed at the City offices but will need to be included. Maintenance has one supervisor who will need an office and five mainline staff who are rarely at a desk but whose space needs will be accommodated. They are part of the Corporation Yard but there is no space allocated for them over at that

location. They will need a large materials storage closet. They would need ground floor access with equipment and vehicle needs adjacent.

The department also needs drawing layout space. They think the solution is either to have each cubicle outfitted with an oversized plan table or to create a pod with an oversized table and noise control.

The current layout has become hodge-podge with some workstations in use and some empty. Other than the Engineer area that is grouped together in one room, the work layout is too linear. They have the need for individual heaters because they don't have effective climate control.

Files
The files right now are spread out throughout the department. They have a need for a centralized lockable file storage area. They can't keep all of their flat files in one location because it causes too much concentrated point load on the building's structure.

A total of 49 file units are in use in areas that are not within dedicated closed door offices. Most of them have approximately 75% contents inside of them at this time.

The summary of storage units by work section is:

GIS (Geographic Information Systems and Mapping)
1 cabinet /2 book shelves/9 file cabinets (12 units total)

ADMIN/CLERICAL
5 book shelves/4 file cabinets (9 units total)

CIP Engineering Common Room
1 file cabinet/5 bookshelves (6 units total)

CIP/PP
1 bookshelf shared (1 unit)

PRIVATE PROJECTS
2 bookshelves/19 file cabinets (21 units)

The off-site storage area for both Private Projects and CIP Engineering at Building 500 at Hamilton is comprised of two adjacent rooms.

The largest is 18.5 x 21.5, or 397.75 sq. ft.; the smaller one is 18.5 x 7, or 129.5 sq. ft (combined 527.25 sq. ft.) The files themselves take up approximately 2/3's of the total area, but some room is needed for Maintenance staff to navigate around and place boxes on the shelves.

Printing and Copying
They would like a centralized printing and plotting area within their own department that is noise controlled. Currently the folding machine is the loudest and it is in an open area.

Requests
They would like coat racks for foul weather gear.

Community Development Department

Staffing

The Community Development Department has 19 staff. They currently have 7 offices and 13 workstations. They have recently lost four planners, one analyst, front counter staff, a building inspector and a code enforcement staff. They are requesting 4 offices and 15 workstations. The four offices are for the Community Development Director (his current office is 11x15'), the planning manager, the building official and the building office manager. The current smaller offices are 9' x 11.'

The current staffing level may not be adequate over the long term if development in the community returns to previous levels. Their expansion in the future would include one management analyst and two planners, equaling 3 additional workstations. They may need two additional workstations for consultants or temporary staff.

They currently have three conference rooms but one has code enforcement file cabinets stored within it. There is a need for a minimum of 2 conference rooms. This is important because the staff conducts multiple simultaneously scheduled meetings with the public.

Adjacency

The current adjacency that exists within the Community Development Department now, with planners in one area and building inspectors and code enforcement officer nearby, works well. This department is the main point of contact with the public so it makes sense for the Community Development Department to be on the first floor but consequently they are more isolated from direct contact with City Administration except for the weekly City Manager's meeting.

The director thinks it would be better if he was more in the center of the office rather than where he is now on the perimeter. He would like to see managers grouped in the middle with staff all around them. He would like to see the planners grouped together.

He thinks it is beneficial to have staff close to the front counter and one conference room must be near to the front counter.

Planning staff is located more in the back of the office and they tend to be on the phone much more. Planning could benefit from being nearer the front counter as long as there was adequate acoustic and visual separation from counter activities.

Building inspectors tend to be more out in the field. After the One-Stop period is over in the morning they are out of the office for most of the day.

Reception Area

Currently they have a lobby waiting area that is 25x30.' He thinks the size of the lobby has worked well. People congregate in the lobby. They have been operating a One-Stop Shop each morning between 9 and 11 a.m. where all staff from every division are available to expedite projects. There is usually a line of 6-8 people waiting at the reception desk at 9 a.m. The receptionist is trained to do a quick "triage" to determine the initial needs. Overall, they average about 25 people a day between 9 and 11 a.m. After that time, it is much quieter and the public use is much less intensive.

Problems
Filing and storage are problem areas for them because of the volume of large drawings they are required to store.

The staff tends to informally congregate around the printers or in the corridors and hold informal conversations about projects that are useful but too loud and disturbing to those trying to do other work.

Files and Storage
Files that are currently being worked on are held at the workstations of the staff. The storage of building permanent plans creates more of a problem for his department. The Planning files are currently in one room approximately 10 x 14.' The Building file room is approximately 10 x 25.' They have been working to digitize files but they do not have the resources to do the digitizing currently. Paper filing is sometimes more accessible and thus easier to use. They charge a fee for plan storage and therefore plans need to be held longer than the minimum mandated standards. The residential projects require more limited storage but the commercial projects are larger and held onto for a much longer time.

Files should be stored in more of a central core area so they are more conveniently accessible.

They also have offsite storage that is coordinated through the City Clerk's office and is included in the City Clerk's projected offsite file room needs.

Printing and Copying
He thinks printers and copiers should be in a central room that is closer to where staff meets the public (but that could have noise impacts).

They currently have two 4x8' tables for laying out drawings as well as oversized counters in the reception area for meeting and working with the public at the One-Stop Shop.

Attached, please find spreadsheets that summarize the space needs that have been discussed in this report. It should be noted that these spreadsheets are intended to demonstrate the ranges and variables that affect square footage needs. For example, the first spreadsheet is based on a 20% load factor, while the second spreadsheet is based on a 10% load factor. The third spreadsheet reflects the work station sizes of 8 x 8, also based on a 10% load factor. Although these represent various space needs, we believe that range of square footage needs is between 19,500 square feet and 22,500 square feet, depending on the factors discussed in the report.

Additionally, it should be noted that we have included names and titles for illustrative and reference purposes only, so that there is some context for the positions we observed.

	Functional Areas- City of Novato		Quantity	Size		Net S.F.	Load	Gross SF
Entry Lobby/Reception/Restrooms	**2,525 S.F.**							
1	Entry Vestibule		1	8 x	8	64	120%	77
2	Entrance Lobby/Waiting & Reception		1	20 x	24	480	120%	576
3	Kitchenette		1	4 x	12	48	120%	58
4	Public Restrooms (one floor)		2	10 x	18	360	120%	432
5	Staff Restrooms (two floors)	including shower area	4	12 x	24	1152	120%	1382
Central Administration, 7 staff	**3,372 S.F.**							
	Private offices		4					
6	City Manager		1	14 x	19	266	120%	319
7	Assistant City Mgr		1	14 x	19	266	120%	319
8	City Clerk		1	12 x	16	192	120%	230
9	Analyst		1	11 x	12	132	120%	158
10	Analyst		(shared office)					
11	Future Office		1	12 x	14	168	120%	202
	Workstations		4					
12	Executive Secretary		1	10 x	10	100	120%	120
13	Word Processor		1	8 x	10	80	120%	96
14	Reception		1	10 x	10	100	120%	120
15	Intern		1	8 x	10	80	120%	96
16	Conference Room	20 seats	1	14 x	28	392	120%	470
17	File storage (City Clerk)	in office or adjacent	7	3 x	4	84	120%	101
18	Permanent Records		1	20 x	40	800	120%	960
19	Closed Session Conf Rm	adjacent to Conf. Rm for add'l. seats	1	10 x	15	150	120%	180
Administrative Services, 14 staff	**3,334 S.F.**							
	Private offices		6					
20	H.R. Manager		1	12 x	16	192	120%	230
21	Finance Manager		1	11 x	13	143	120%	172
22	Principal Accountant		1	11 x	13	143	120%	172
23	H.R. Analyst		1	11 x	13	143	120%	172
24	Admin. Analyst		1	11 x	13	143	120%	172
25	Redev. Administrator		1	11 x	13	143	120%	172
27	IT Manager		1	11 x	13	143	120%	172
	Workstations		9					
28	H.R, Benefits		1	11 x	13	143	120%	172
29	Payroll Tech		1	8 x	10	80	120%	96
30	Account Clerk		1	8 x	10	80	120%	96
31	Accounts Payable		1	8 x	10	80	120%	96

26	Redev. Analyst		1	8 x	10	80	120%	96
32	Business Lic. Clerk		1	8 x	10	80	120%	96
33	IT Temp		1	8 x	10	80	120%	96
34	IT Contractor	part-time (not in staff count)	1	8 x	10	80	120%	96
35	Central File storage room		1	25 x	25	625	120%	750
36	IT Server Room/Equip Stor		1	20 x	20	400	120%	480
Parks and Recreation, 6 staff		**2,360 S.F.**						
	Private offices		**2**					
37	Parks & Rec Director		1	12 x	16	192	120%	230
38	Parks & Rec Deputy Dir.		1	11 x	13	143	120%	172
	Workstations		**8**					
39	Recreation Supervisor		1	10 x	10	100	120%	120
40	Recreation Supervisor		1	10 x	10	100	120%	120
41	Parks & Rec Office Mgr.		1	8 x	10	80	120%	96
42	Rec Coordinator		1	8 x	10	80	120%	96
43	Clerk		1	8 x	10	80	120%	96
44	Remote access		2	8 x	8	128	120%	154
45	IVR		1	8 x	8	64	120%	77
46	Future		1	8 x	8	64	120%	77
47	Conference Rooms		2	12 x	14	336	120%	403
48	File storage room		1	12 x	20	240	120%	288
49	Kitchenette, break room		1	12 x	15	180	120%	216
50	Locker room	request (could be in common)	1	12 x	15	180	120%	216
Public Works, 18 staff		**4,224 SF**						
	Private offices		**7**					
51	Public Works Director		1	12 x	16	192	120%	230
52	Public Works Analyst		1	11 x	13	143	120%	172
53	Principal Engineer		1	11 x	13	143	120%	172
54	Senior Engineer		1	11 x	13	143	120%	172
55	GIS Coordinator		1	11 x	13	143	120%	172
56	Senior Engineer		1	11 x	13	143	120%	172
57	Maintenance Supervisor		1	11 x	13	143	120%	172
	Workstations		**20**					
58	Public Works Clerk		1	8 x	10	80	120%	96
59	Engineer		1	10 x	10	100	120%	120
60	Engineer		1	10 x	10	100	120%	120
61	Engineer		1	10 x	10	100	120%	120
62	Engineer		1	10 x	10	100	120%	120
63	GIS Tech		1	8 x	10	80	120%	96
64	Public Works Inspector		1	8 x	10	80	120%	96

65	Public Works Inspector		1	8 x	10	80	120%	96
66	Engineer		1	8 x	10	80	120%	96
67	Eng. Intern		1	8 x	10	80	120%	96
68	Eng. Intern/addl. Terminals	seasonal and dummy terminals	4	8 x	8	256	120%	307
69	Maintenance Staff		5	8 x	8	320	120%	384
70	Maintenance Storage Rm		1	10 x	15	150	120%	180
71	Conference Room		2	12 x	16	384	120%	461
72	File Storage Room		14	3 x	4	168	120%	202
73	Drawing Layout Space		2	4 x	8	64	120%	77
74	Coat racks		1	4 x	8	32	120%	38
75	Print/ GIS Plotter Room		1	12 x	18	216	120%	259
Community Development, 19 staff		**4,717 S.F.**						
	Private offices		**4**					
76	Community Dev. Dir.		1	12 x	16	192	120%	230
77	Planning Manager		1	11 x	13	143	120%	172
78	Building Official		1	11 x	13	143	120%	172
79	Building Office Manager		1	11 x	13	143	120%	172
	Workstations		**18**					
80	Principal Planner		1	8 x	10	80	120%	96
81	Senior Planner		1	8 x	10	80	120%	96
82	Senior Planner		1	8 x	10	80	120%	96
83	Planner		1	8 x	10	80	120%	96
84	Planning Sr. Admin.Clerk		1	8 x	10	80	120%	96
85	Housing Coordinator		1	8 x	10	80	120%	96
86	Senior Building Inspector		1	8 x	10	80	120%	96
87	Building Inspector		1	8 x	10	80	120%	96
88	Building Inspector		1	8 x	10	80	120%	96
89	Building Admin. Clerk		1	8 x	10	80	120%	96
90	Building Admin. Clerk		1	8 x	10	80	120%	96
91	Building Word Processor		1	8 x	10	80	120%	96
92	Code Enforcement Officer		1	8 x	10	80	120%	96
93	Code Enforcement Inspector		1	8 x	10	80	120%	96
94	Code Enforcement Inspector		1	8 x	10	80	120%	96
95	Consultants/TempStaff/Exp.		3	8 x	8	192	120%	230
96	Future	1 Analyst, 2 Planners	3	8 x	8	192	120%	230
97	Future		2	8 x	8	128	120%	154
98	Reception Area/Waiting		1	25 x	30	750	120%	900

99	Conference Rooms		2	12 x	16	384	120%	461
100	Planning File Room		1	10 x	15	150	120%	180
101	Building File Room		1	10 x	25	250	120%	300
102	Drawing Layout Space		2	4 x	8	64	120%	77
Staff Break Rooms/Copy Rooms/ Storage		**2,462 S.F.**						
103	Break Rooms	Used in common, two floors)	4	10 x	15	600	120%	720
104	Copy Rooms	Used in common, two floors)	2	10 x	15	300	120%	360
105	Records Storage	Used in common, two floors)	2	15 x	20	600	120%	720
106	Office Equipment	Used in common, two floors)	4	9 x	10	360	120%	432
107	Office Supplies Closet	Used in common, two floors)	2	6 x	8	96	120%	115
108	Janitors Closet		2	6 x	8	96	120%	115

Not included in the tabulation

Off-site file and record storage

Total Square Footage:

22,994

	Functional Areas- City of Novato		Quantity	Size		Net S.F.	Load	Gross SF
Entry Lobby/Reception/Restrooms	**2,314 S.F.**							
1	Entry Vestibule		1	8 x	8	64	110%	70
2	Entrance Lobby/Waiting & Reception		1	20 x	24	480	110%	528
3	Kitchenette		1	4 x	12	48	110%	53
4	Public Restrooms (one floor)		2	10 x	18	360	110%	396
5	Staff Restrooms (two floors)	including shower area	4	12 x	24	1152	110%	1267
Central Administration, 7 staff	**3,091 S.F.**							
	Private offices		4					
6	City Manager		1	14 x	19	266	110%	293
7	Assistant City Mgr		1	14 x	19	266	110%	293
8	City Clerk		1	12 x	16	192	110%	211
9	Analyst		1	11 x	12	132	110%	145
10	Analyst		(shared office)					
11	Future Office		1	12 x	14	168	110%	185
	Workstations		4					
12	Executive Secretary		1	10 x	10	100	110%	110
13	Word Processor		1	8 x	10	80	110%	88
14	Reception		1	10 x	10	100	110%	110
15	Intern		1	8 x	10	80	110%	88
16	Conference Room	20 seats	1	14 x	28	392	110%	431
17	File storage (City Clerk)	in office or adjacent	7	3 x	4	84	110%	92
18	Permanent Records		1	20 x	40	800	110%	880
19	Closed Session Conf Rm	adjacent to Conf. Rm for add'l. seats	1	10 x	15	150	110%	165
Administrative Services, 14 staff	**3,056 S.F.**							
	Private offices		6					
20	H.R. Manager		1	12 x	16	192	110%	211
21	Finance Manager		1	11 x	13	143	110%	157
22	Principal Accountant		1	11 x	13	143	110%	157
23	H.R. Analyst		1	11 x	13	143	110%	157
24	Admin. Analyst		1	11 x	13	143	110%	157
25	Redev. Administrator		1	11 x	13	143	110%	157
27	IT Manager		1	11 x	13	143	110%	157
	Workstations		9					
28	H.R, Benefits		1	11 x	13	143	110%	157
29	Payroll Tech		1	8 x	10	80	110%	88
30	Account Clerk		1	8 x	10	80	110%	88
31	Accounts Payable		1	8 x	10	80	110%	88

26	Redev. Analyst		1	8 x	10	80	110%	88
32	Business Lic. Clerk		1	8 x	10	80	110%	88
33	IT Temp		1	8 x	10	80	110%	88
34	IT Contractor	part-time (not in staff count)	1	8 x	10	80	110%	88
35	Central File storage room		1	25 x	25	625	110%	688
36	IT Server Room/Equip Stor		1	20 x	20	400	110%	440
Parks and Recreation, 6 staff		**2,164 S.F.**						
	Private offices		**2**					
37	Parks & Rec Director		1	12 x	16	192	110%	211
38	Parks & Rec Deputy Dir.		1	11 x	13	143	110%	157
	Workstations		**8**					
39	Recreation Supervisor		1	10 x	10	100	110%	110
40	Recreation Supervisor		1	10 x	10	100	110%	110
41	Parks & Rec Office Mgr.		1	8 x	10	80	110%	88
42	Rec Coordinator		1	8 x	10	80	110%	88
43	Clerk		1	8 x	10	80	110%	88
44	Remote access		2	8 x	8	128	110%	141
45	IVR		1	8 x	8	64	110%	70
46	Future		1	8 x	8	64	110%	70
47	Conference Rooms		2	12 x	14	336	110%	370
48	File storage room		1	12 x	20	240	110%	264
49	Kitchenette, break room		1	12 x	15	180	110%	198
50	Locker room	request (could be in common)	1	12 x	15	180	110%	198
Public Works, 18 staff		**3,872 SF**						
	Private offices		**7**					
51	Public Works Director		1	12 x	16	192	110%	211
52	Public Works Analyst		1	11 x	13	143	110%	157
53	Principal Engineer		1	11 x	13	143	110%	157
54	Senior Engineer		1	11 x	13	143	110%	157
55	GIS Coordinator		1	11 x	13	143	110%	157
56	Senior Engineer		1	11 x	13	143	110%	157
57	Maintenance Supervisor		1	11 x	13	143	110%	157
	Workstations		**20**					
58	Public Works Clerk		1	8 x	10	80	110%	88
59	Engineer		1	10 x	10	100	110%	110
60	Engineer		1	10 x	10	100	110%	110
61	Engineer		1	10 x	10	100	110%	110
62	Engineer		1	10 x	10	100	110%	110
63	GIS Tech		1	8 x	10	80	110%	88
64	Public Works Inspector		1	8 x	10	80	110%	88

65	Public Works Inspector		1	8 x	10	80	110%	88
66	Engineer		1	8 x	10	80	110%	88
67	Eng. Intern		1	8 x	10	80	110%	88
68	Eng. Intern/addl. Terminals	seasonal and dummy terminals	4	8 x	8	256	110%	282
69	Maintenance Staff		5	8 x	8	320	110%	352
70	Maintenance Storage Rm		1	10 x	15	150	110%	165
71	Conference Room		2	12 x	16	384	110%	422
72	File Storage Room		14	3 x	4	168	110%	185
73	Drawing Layout Space		2	4 x	8	64	110%	70
74	Coat racks		1	4 x	8	32	110%	35
75	Print/ GIS Plotter Room		1	12 x	18	216	110%	238
Community Development, 19 staff		**4,324 S.F.**						
	Private offices		**4**					
76	Community Dev. Dir.		1	12 x	16	192	110%	211
77	Planning Manager		1	11 x	13	143	110%	157
78	Building Official		1	11 x	13	143	110%	157
79	Building Office Manager		1	11 x	13	143	110%	157
	Workstations		**18**					
80	Principal Planner		1	8 x	10	80	110%	88
81	Senior Planner		1	8 x	10	80	110%	88
82	Senior Planner		1	8 x	10	80	110%	88
83	Planner		1	8 x	10	80	110%	88
84	Planning Sr. Admin.Clerk		1	8 x	10	80	110%	88
85	Housing Coordinator		1	8 x	10	80	110%	88
86	Senior Building Inspector		1	8 x	10	80	110%	88
87	Building Inspector		1	8 x	10	80	110%	88
88	Building Inspector		1	8 x	10	80	110%	88
89	Building Admin. Clerk		1	8 x	10	80	110%	88
90	Building Admin. Clerk		1	8 x	10	80	110%	88
91	Building Word Processor		1	8 x	10	80	110%	88
92	Code Enforcement Officer		1	8 x	10	80	110%	88
93	Code Enforcement Inspector		1	8 x	10	80	110%	88
94	Code Enforcement Inspector		1	8 x	10	80	110%	88
95	Consultants/TempStaff/Exp.		3	8 x	8	192	110%	211
96	Future	1 Analyst, 2 Planners	3	8 x	8	192	110%	211
97	Future		2	8 x	8	128	110%	141
98	Reception Area/Waiting		1	25 x	30	750	110%	825

99	Conference Rooms		2	12 x	16	384	110%	422
100	Planning File Room		1	10 x	15	150	110%	165
101	Building File Room		1	10 x	25	250	110%	275
102	Drawing Layout Space		2	4 x	8	64	110%	70
Staff Break Rooms/Copy Rooms/ Storage		**2,257 S.F.**						
103	Break Rooms	Used in common, two floors)	4	10 x	15	600	110%	660
104	Copy Rooms	Used in common, two floors)	2	10 x	15	300	110%	330
105	Records Storage	Used in common, two floors)	2	15 x	20	600	110%	660
106	Office Equipment	Used in common, two floors)	4	9 x	10	360	110%	396
107	Office Supplies Closet	Used in common, two floors)	2	6 x	8	96	110%	106
108	Janitors Closet		2	6 x	8	96	110%	106

Not included in the tabulation

Off-site file and record storage

Total Square Footage:

21,078

	Functional Areas- City of Novato		Quantity	Size		Net S.F.	Load	Gross SF
Entry Lobby/Reception/Restrooms	**2,314 S.F.**							
1	Entry Vestibule		1	8 x	8	64	110%	70
2	Entrance Lobby/Waiting & Reception		1	20 x	24	480	110%	528
3	Kitchenette		1	4 x	12	48	110%	53
4	Public Restrooms (one floor)		2	10 x	18	360	110%	396
5	Staff Restrooms (two floors)	including shower area	4	12 x	24	1152	110%	1267
Central Administration, 7 staff	**3,091 S.F.**							
	Private offices		4					
6	City Manager		1	14 x	19	266	110%	293
7	Assistant City Mgr		1	14 x	19	266	110%	293
8	City Clerk		1	12 x	16	192	110%	211
9	Analyst		1	11 x	12	132	110%	145
10	Analyst		(shared office)					
11	Future Office		1	12 x	14	168	110%	185
	Workstations		4					
12	Executive Secretary		1	10 x	10	100	110%	110
13	Word Processor		1	8 x	10	80	110%	88
14	Reception		1	10 x	10	100	110%	110
15	Intern		1	8 x	10	80	110%	88
16	Conference Room	20 seats	1	14 x	28	392	110%	431
17	File storage (City Clerk)	in office or adjacent	7	3 x	4	84	110%	92
18	Permanent Records		1	20 x	40	800	110%	880
19	Closed Session Conf Rm	adjacent to Conf. Rm for add'l. seats	1	10 x	15	150	110%	165
Administrative Services, 14 staff	**2,933 S.F.**							
	Private offices		6					
20	H.R. Manager		1	12 x	16	192	110%	211
21	Finance Manager		1	11 x	13	143	110%	157
22	Principal Accountant		1	11 x	13	143	110%	157
23	H.R. Analyst		1	11 x	13	143	110%	157
24	Admin. Analyst		1	11 x	13	143	110%	157
25	Redev. Administrator		1	11 x	13	143	110%	157
27	IT Manager		1	11 x	13	143	110%	157
	Workstations		9					
28	H.R, Benefits		1	11 x	13	143	110%	157
29	Payroll Tech		1	8 x	8	64	110%	70
30	Account Clerk		1	8 x	8	64	110%	70
31	Accounts Payable		1	8 x	8	64	110%	70

26	Redev. Analyst		1	8 x	8	64	110%	70
32	Business Lic. Clerk		1	8 x	8	64	110%	70
33	IT Temp		1	8 x	8	64	110%	70
34	IT Contractor	part-time (not in staff count)	1	8 x	8	64	110%	70
35	Central File storage room		1	25 x	25	625	110%	688
36	IT Server Room/Equip Stor		1	20 x	20	400	110%	440
Parks and Recreation, 6 staff		**2,111 S.F.**						
	Private offices		**2**					
37	Parks & Rec Director		1	12 x	16	192	110%	211
38	Parks & Rec Deputy Dir.		1	11 x	13	143	110%	157
	Workstations		**8**					
39	Recreation Supervisor		1	10 x	10	100	110%	110
40	Recreation Supervisor		1	10 x	10	100	110%	110
41	Parks & Rec Office Mgr.		1	8 x	8	64	110%	70
42	Rec Coordinator		1	8 x	8	64	110%	70
43	Clerk		1	8 x	8	64	110%	70
44	Remote access		2	8 x	8	128	110%	141
45	IVR		1	8 x	8	64	110%	70
46	Future		1	8 x	8	64	110%	70
47	Conference Rooms		2	12 x	14	336	110%	370
48	File storage room		1	12 x	20	240	110%	264
49	Kitchenette, break room		1	12 x	15	180	110%	198
50	Locker room	request (could be in common)	1	12 x	15	180	110%	198
Public Works, 18 staff		**3,784 SF**						
	Private offices		**7**					
51	Public Works Director		1	12 x	16	192	110%	211
52	Public Works Analyst		1	11 x	13	143	110%	157
53	Principal Engineer		1	11 x	13	143	110%	157
54	Senior Engineer		1	11 x	13	143	110%	157
55	GIS Coordinator		1	11 x	13	143	110%	157
56	Senior Engineer		1	11 x	13	143	110%	157
57	Maintenance Supervisor		1	11 x	13	143	110%	157
	Workstations		**20**					
58	Public Works Clerk		1	8 x	10	80	110%	88
59	Engineer		1	10 x	10	100	110%	110
60	Engineer		1	10 x	10	100	110%	110
61	Engineer		1	10 x	10	100	110%	110
62	Engineer		1	10 x	10	100	110%	110
63	GIS Tech		1	8 x	8	64	110%	70
64	Public Works Inspector		1	8 x	8	64	110%	70

65	Public Works Inspector		1	8 x	8	64	110%	70
66	Engineer		1	8 x	8	64	110%	70
67	Eng. Intern		1	8 x	8	64	110%	70
68	Eng. Intern/addl. Terminals	seasonal and dummy terminals	4	8 x	8	256	110%	282
69	Maintenance Staff		5	8 x	8	320	110%	352
70	Maintenance Storage Rm		1	10 x	15	150	110%	165
71	Conference Room		2	12 x	16	384	110%	422
72	File Storage Room		14	3 x	4	168	110%	185
73	Drawing Layout Space		2	4 x	8	64	110%	70
74	Coat racks		1	4 x	8	32	110%	35
75	Print/ GIS Plotter Room		1	12 x	18	216	110%	238
Community Development, 19 staff		**4,060 S.F.**						
	Private offices		4					
76	Community Dev. Dir.		1	12 x	16	192	110%	211
77	Planning Manager		1	11 x	13	143	110%	157
78	Building Official		1	11 x	13	143	110%	157
79	Building Office Manager		1	11 x	13	143	110%	157
	Workstations		18					
80	Principal Planner		1	8 x	8	64	110%	70
81	Senior Planner		1	8 x	8	64	110%	70
82	Senior Planner		1	8 x	8	64	110%	70
83	Planner		1	8 x	8	64	110%	70
84	Planning Sr. Admin.Clerk		1	8 x	8	64	110%	70
85	Housing Coordinator		1	8 x	8	64	110%	70
86	Senior Building Inspector		1	8 x	8	64	110%	70
87	Building Inspector		1	8 x	8	64	110%	70
88	Building Inspector		1	8 x	8	64	110%	70
89	Building Admin. Clerk		1	8 x	8	64	110%	70
90	Building Admin. Clerk		1	8 x	8	64	110%	70
91	Building Word Processor		1	8 x	8	64	110%	70
92	Code Enforcement Officer		1	8 x	8	64	110%	70
93	Code Enforcement Inspector		1	8 x	8	64	110%	70
94	Code Enforcement Inspector		1	8 x	8	64	110%	70
95	Consultants/TempStaff/Exp.		3	8 x	8	192	110%	211
96	Future	1 Analyst, 2 Planners	3	8 x	8	192	110%	211
97	Future		2	8 x	8	128	110%	141
98	Reception Area/Waiting		1	25 x	30	750	110%	825

99	Conference Rooms		2	12 x	16	384	110%	422
100	Planning File Room		1	10 x	15	150	110%	165
101	Building File Room		1	10 x	25	250	110%	275
102	Drawing Layout Space		2	4 x	8	64	110%	70
Staff Break Rooms/Copy Rooms/ Storage		**2,257 S.F.**						
103	Break Rooms	Used in common, two floors)	4	10 x	15	600	110%	660
104	Copy Rooms	Used in common, two floors)	2	10 x	15	300	110%	330
105	Records Storage	Used in common, two floors)	2	15 x	20	600	110%	660
106	Office Equipment	Used in common, two floors)	4	9 x	10	360	110%	396
107	Office Supplies Closet	Used in common, two floors)	2	6 x	8	96	110%	106
108	Janitors Closet		2	6 x	8	96	110%	106

Not included in the tabulation

Off-site file and record storage

Total Square Footage:

20,550

HERZOG
GEOTECHNICAL
CONSULTING ENGINEERS

January 12, 2011
Project Number 1579-03-10

City of Novato
c/o Mr. Rajiv Parikh
530 Alameda Del Prado, #305
Novato, California 94949

RE: Report
Supplemental Geotechnical Investigation
Novato City Offices
Novato, California

Dear Mr. Parikh:

This presents the results of our supplemental geotechnical investigation for the proposed City of Novato Offices at Machin Avenue and Cain Lane in Novato, California. The scope of our investigation was to review selected geologic references, review our previous work and borings at the site, observe exposed site conditions, drill three borings in the project area, perform laboratory testing, conduct engineering analyses, and develop geotechnical conclusions and recommendations for the design and construction of the project. Our scope of work was outlined in our proposal dated December 9, 2010.

PROJECT DESCRIPTION

The project will consist of a new office building over an above-grade parking structure. The project footprint is shown on the plan by Daniel MacDonald, AIA dated November 11, 2010.

WORK PERFORMED

Prior to performing our investigation, we reviewed our previous work and work by others at the site, and selected geologic references. We explored the subsurface conditions in the project area on December 28, 2010 to the extent of three supplemental test borings ranging between approximately 15-1/2 and 24 feet deep, and extending into bedrock. Due to limited access, the test borings were drilled with all-terrain drilling equipment. The locations of the recent and previous test borings are shown on the attached *Site Plan*, Plate 1.

Our Consulting Project Engineer observed the drilling, logged the subsurface conditions encountered, and collected soil samples for visual examination and laboratory testing. Samples were retrieved using Sprague and Henwood and Standard Penetration Test samplers driven with a 140-pound hammer. Penetration resistance blow counts were obtained by dropping the hammer through a 30-inch free fall. The samplers were driven 18 inches, and the number of blows was recorded for each 6 inches of penetration. These blow counts were then correlated to equivalent standard penetration resistance blow counts. The blows per foot recorded on the boring logs represent the accumulated number of correlated standard penetration blows that were required to drive the sampler the last 12 inches or fraction thereof.

Logs of our previous and recent test borings are presented on Plates 2 through 7. The soils encountered are described in accordance with the criteria presented on Plate 8. Bedrock is described in accordance with the *Engineering Geology Rock Terms* presented on Plate 9. The logs depict our interpretation of subsurface conditions on the date and at the depths indicated. The stratification lines on the logs represent the approximate boundaries between soil types; the actual transitions may be gradational.

Selected samples were laboratory tested to determine their moisture content, dry density, plasticity and shear strength. Laboratory test results are posted on the boring logs in the manner described on the *Key to Test Data*, Plate 8. The results of Atterberg Limits (plasticity) testing are presented on Plate 10. The results of unconsolidated undrained triaxial (Tx-UU) strength testing are presented on Plate 11.

FINDINGS

Site Conditions

The site is situated at the southeast corner of the intersection of Machin Avenue and Cain Lane in Novato California. The site is an asphalt paved parking lot which slopes gently down towards the north. The parking lot is bounded by landscape areas, walkways and buildings.

Subsurface Conditions

The site is within the Coast Range Geomorphic Province, which includes San Francisco Bay and the northwest-trending mountains that parallel the coast of California. These features were formed by tectonic forces resulting in extensive folding and faulting of the area. Previous geologic mapping by Rice (1973) indicates that the site lies near a contact separating alluvial deposits to the northeast from bedrock of the Franciscan Melange to the southwest. The Melange unit typically consists of a heterogeneous mixture of sandstone, sheared shale, metavolcanic rock, serpentinite and chert.

Our test borings and the previous geotechnical work by others indicate that the site is generally underlain by widely varying thicknesses fill, colluvium/alluvium, and residual soils overlying bedrock. The fill encountered generally consists of soft to medium stiff sandy clay and silt, and of loose to medium dense silty gravel. The colluvial and alluvial soil encountered generally consist of sandy and gravelly clay and clayey sand which were deposited by slopewash and stream processes. The colluvial and alluvial soils are generally weak and compressible. The residual soils encountered consist of medium stiff to very stiff sandy and gravelly clay derived from the in-place weathering of the underlying parent bedrock. Portions of the soils at the site are moderately to highly expansive. Expansive soils undergo changes in volume with changes in moisture content, and can cause slabs, pavements and lightly loaded foundations to heave and crack. Bedrock encountered in the borings generally consisted of firm to moderately hard sandstone, shale and serpentinite.

The approximate locations of our previous borings (B-1 through B-3) and our recent borings (B-1A through B-3A) and of the previous borings by Harding Lawson Associates (H-1 and H-2) and Cooper-Clark & Associates (C-6 through C-8) are shown on the *Site Plan* (Plate 1). We understand that the Cooper-Clark & Associates boring logs are not available. Our borings and the HLA borings encountered the following profiles:

	Depth (feet)			
Boring	**Fill**	**Colluvium/Alluvium**	**Residual Soil**	**Bedrock**
B-1	0-4.0	4.0-6.2	6.2-8.0	8.0-10.5+
B-2	0-2.0	2.0-15.0	---	15.0-16.0+
B-3	0-1.5	1.5-3.5	3.5-8.5	8.5-10.2+
B-1A	---	0-17.5	---	17.5-20.5+
B-2A	0-1.0	1.0-22.5	---	22.5-24.0+
B-3A	0-2.0	2.0-13.5	---	13.5-15.5+
H-1	0-4.0	4.0-9.0	9.0-12.0	12.0-16.5+
H-2	0-8.0	---	8.0-17.0	17.0-20.0+

Descriptions of the subsurface conditions encountered are presented on the boring logs.

Groundwater

Free groundwater was encountered in Borings 1A and 3A at approximately 1-1/2 feet deep, and in Boring 2A at about 7 feet deep. Free groundwater was encountered in our previous Boring 1 at a depth of about 3-3/4 feet, but free water did not develop in Borings 2 or 3 at the time of that investigation. Free water was encountered between 1 and 4 feet deep in all of Harding Lawson Associates February 1987 borings. Groundwater levels at the site are expected to fluctuate over time due to variations in rainfall and other factors.

GEOLOGIC AND SEISMIC HAZARDS

Fault Rupture

The property is not within a current Alquist-Priolo Earthquake Fault Zone (EFZ), and we did not observe geomorphic features that would suggest the presence of active faulting at the site. As such, we judge that the risk of ground rupture along a fault trace is low at this site.

Ground Shaking

The San Francisco Bay Region has experienced several historic earthquakes from the San Andreas and other associated active faults. Mapped active faults (those experiencing surface rupture within the past 11,000 years) nearest the site are summarized in the following table.

Fault	Distance		Moment Magnitude[1]	Acceleration (g)[2]	
	Miles	Kilometers		M[3]	M+1[3]
San Andreas (Northern)	12.4	20.0	7.9	0.27	0.46
Healdsburg/Rodgers Creek	8.5	13.6	7.5	0.25	0.44
Hayward	9.4	15.1	7.1	0.24	0.42
Seal Cove/San Gregorio	15.7	25.3	7.0	0.19	0.33

(1) Estimated maximum magnitudes from CDMG (1996) Open File Report 96-08, and Cao et al. (2002).
(2) Peak ground acceleration averaged from New Generation Attenuation (NGA) relationships by Abrahamson and Silva (2008), Boore and Atkinson (2008), Campbell and Bozorgnia (2008) and Chiou and Youngs (2008). Estimated shear wave velocity (V_{S30}) = 255 m/s. NGA values have been increased 16% to determine maximum rotated ground motion component per ASCE-7-05 Revision #3 (2009).
(3) M = mean value; M+1 = mean+1 standard deviation value.

Deterministic information generated for the site considering the proximity of active faults and estimated ground accelerations are presented in the table above. The estimated ground accelerations were derived from the above-referenced mean attenuation relationships, and are based on the published estimated maximum earthquake moment magnitudes for each fault, the shortest distance between the site and the respective fault, the type of faulting, and the estimated shear wave velocities of the on-site geologic materials. The deterministic evaluation of the potential for ground shaking assumes that the anticipated maximum magnitude earthquake produces fault rupture at the closest proximity to the site, and does not take recurrence intervals or other probabilistic effects into consideration. This evaluation also does not consider directivity effects or other phenomena which may act to amplify ground motions.

Data presented by the Working Group on California Earthquake Probabilities (USGS, 2008) estimates the chance of one or more large earthquakes (Magnitude 6.7 or greater) in the San Francisco Bay region within the next 30 years to be 63 percent. Consequently, we judge that the site will likely be subject to strong earthquake shaking during the life of the improvements.

Liquefaction

During ground shaking from earthquakes, liquefaction can occur in saturated, loose, cohesionless sands. The occurrence of this phenomenon is dependent on many factors, including the intensity and duration of ground shaking, soil density, particle size distribution, and position of the ground water table (Idriss and Boulanger, 2008). Regional mapping by the Association of Bay Area Governments (ABAG, 2004) indicates that the site is situated within an area of low liquefaction susceptibility, but lies immediately south of an area of high liquefaction susceptibility. The soils encountered in our test borings were relatively dense or contained a high percentage of fine grained materials (silt and clay). Thus, we judge that the likelihood of liquefaction during ground shaking is low.

Densification

Densification can occur in low density, uniformly-graded sandy soils above the groundwater table. We judge that significant densification is unlikely to occur in the areas explored because of the relative dense condition and/or high silt and clay content of the soils encountered in the test borings.

CONCLUSIONS

Based on the results of our investigation, we conclude that the project is feasible from a geotechnical standpoint provided that the recommendations presented in this report are incorporated into the project. The primary geotechnical concerns are discussed below.

Foundations

Our test borings indicate that the project area is underlain by widely varying thicknesses of relatively weak soils and expansive which are subject to differential settlement under foundation loads and to expansive soil heave. We therefore conclude that the proposed improvements should be supported on drilled piers which extend into undisturbed bedrock. We estimate that differential settlements of foundations designed in accordance with the recommendations contained in this report will be on the order of half an inch.

Slab and Pavement Support

To avoid differential settlement, interior and garage slabs should consist of structural slabs designed to span between pier foundations supported in bedrock. In order to prevent expansive soil heave, structural slabs must be separated from the underlying expansive soils by an approved void forming product.

Exterior slabs-on-grade, driveways, walkways and other elements supported on the ground surface will be subject to differential movement. Settlement and expansive soil movement of exterior slabs and pavements can be reduced, but not eliminated, by removing weak and expansive soils located beneath and within 3 horizontal feet of planned slabs and pavements to at least 30 inches below the proposed finished subgrade or 30 inches below existing grade, whichever is deeper, and backfilling with compacted non-expansive fill. Expansive soils exposed in the bottom of overexcavations should be scarified, moisture conditioned to above optimum moisture content to cause expansion to occur, and recompacted as outlined in this report. Although these measures will reduce expansive soil movement, we anticipate that slabs and pavements could still experience about an inch of differential movement. If this will not be acceptable, it will be necessary to support the exterior slabs on pier foundations, and to increase the depth of overexcavation and non-expansive fill beneath pavements.

Site Excavation and Grading

High moisture contents of some near surface soils and the shallow groundwater conditions may cause soft "pumping" conditions which may require additional overexcavation, geotextile reinforcement, and imported granular fill. To reduce the risks of such costly special construction methods, it would be prudent to perform site grading during the late summer and fall months, to properly dewater the site prior to excavation, to perform the excavation within soft areas from unexcavated perimeter areas using an excavator, and restricting trucks or equipment from the soft subgrade soils.

Geotechnical Drainage

Control of both surface and subsurface drainage are critical to good long-term performance in expansive soil areas. It is important that water be conducted away from foundations, slabs and pavements in order to reduce moisture changes in the underlying expansive soils. All roofs should be provided with gutters and downspouts. Drains from the project should extend to an approved storm drain.

RECOMMENDATIONS

Seismic Design

Based on the results of our investigation, the following seismic design criteria were developed in accordance with the *California Building Code* (2010) and *International Building Code* (2009):

Site Class	C
Site Coefficient F_a	1.0
Site Coefficient F_v	1.3
0.2 sec Spectral Acceleration S_S	1.50
1.0 sec Spectral Acceleration S_1	0.60
0.2 sec Max Spectral Response S_{MS}	1.50
1.0 sec Max Spectral Response S_{M1}	0.78
0.2 sec Design Spectral Response S_{DS}	1.00
1.0 sec Design Spectral Response S_{D1}	0.52

Foundation Support

Drilled, cast-in-place, reinforced concrete piers should be at least 18 inches in diameter, and should extend at least 6 feet into bedrock. Design pier depths and diameters should be calculated by the Project Structural Engineer using the criteria presented below. The materials encountered in the pier excavations should be evaluated by our representative in the field during drilling.

The portion of the piers extending at least 3 feet below finished grade can impose a passive equivalent fluid pressure of 200 pounds per cubic foot (pcf) acting over 2 pier diameters. The portion of piers extending into bedrock can impose a passive equivalent fluid pressure of 450 pcf acting over 2 pier diameters, and vertical dead plus real live loads of 1000 pounds per square foot (psf) in skin friction. These values may be increased by 1/3 for seismic and wind loads, but should be decreased by 1/3 for determining uplift resistance. Skin friction should be neglected in the soils above the bedrock, and end bearing should be neglected due to the uncertainty of mobilizing end bearing and skin friction simultaneously.

A compressible void form product (Econo-Void or equivalent) should be provided beneath grade beams for protection against expansive soil uplift. Expansive soils exert uplift forces on concrete overpours. Grade beams should be formed above the trench to prevent overpours, and care should be taken to prevent overpours (mushrooming) at the tops of piers.

Groundwater will be encountered, and it will therefore be necessary to dewater the holes and/or place concrete by the tremie method. Caving soils may be encountered, in which was it will be

necessary to case the holes. Casing should be carefully maintained ahead of the drill to avoid causing settlement of adjacent areas. Casing should be removed from the holes simultaneous with concrete placement.

Retaining Walls

Retaining walls should be supported in rock on foundations designed in accordance with the recommendations presented in this report. Free-standing retaining walls backfilled with non-expansive soil should be designed to resist active lateral earth pressures equivalent to those exerted by a fluid weighing 45 pounds per cubic foot (pcf) where the backslope is level, and 60 pcf for backfill at a 2:1 slope. Retaining walls restrained from movement at the top and backfilled with non-expansive soil should be designed to resist an "at-rest" equivalent fluid pressure of 60 pcf for level backfill and 75 pcf for backfill at a 2:1 slope. For intermediate slopes, interpolate between these values. Where wall backfill will be subject to vehicular loading, a traffic surcharge equivalent to 2 feet of additional backfill should also be added to walls. A minimum factor of safety against instability of 1.5 should be used to evaluate static stability of retaining walls. If site geometry precludes backfilling the zone above a 1:1 line projected up from the base of the wall with non-expansive fill, we should be consulted to provide appropriate design pressures.

The seismic stability of walls may be evaluated based on an additional uniform lateral earth pressure of 20xH psf (where H is the height of the wall in feet). The factor of safety against instability under seismic loading should be at least 1.1.

Retaining walls should be fully backdrained. The backdrains should consist of 4-inch diameter, rigid perforated pipe surrounded by a drainage blanket. The top of the drain pipe should be at least 8 inches below lowest adjacent downslope grade. The pipe should be PVC Schedule 40 or ABS with an SDR of 35 or better, and the pipe should be sloped to drain at least 1 percent by gravity to an approved outlet. Accessible subdrain cleanouts should be provided, and should be maintained on a routine basis. The drainage blanket should consist of clean, free-draining crushed rock or gravel wrapped in a filter fabric such as Mirafi 140N. Alternatively, the drainage blanket could consist of Caltrans Class 2 "Permeable Material", in which case the filter fabric may be omitted. A prefabricated drainage structure such as Mirafi Miradrain may also be used provided that the backdrain pipe is embedded in at least 1 cubic foot of permeable material per lineal foot of pipe. The drainage blanket should be continuous, at least 1 horizontal foot thick, and should extend to within 1 foot of the surface. The uppermost 1 foot should be backfilled with compacted soil to exclude surface water.

Where migration of moisture through retaining walls would be detrimental or undesirable, retaining walls should be waterproofed as specified by the Project Architect or Structural Engineer.

In order to reduce expansive soil heave against retaining walls, the zone located above a 1:1 plane projected up from the base of the wall should consist of approved non-expansive Select Fill. Wall backfill should be spread in level lifts not exceeding 8 inches in thickness, brought to near the optimum moisture content, and compacted to at least 90 percent relative compaction. Relative compaction refers to the in-place dry density of a soil expressed as a percentage of the maximum dry density of the same material, as determined by the ASTM D1557 test procedure. Optimum moisture content is the water content of the soil (percentage by dry weight) corresponding to the maximum dry density. Retaining walls will yield slightly during backfilling. Therefore, walls should be backfilled prior to building onto or adjacent to the walls, and should be properly braced during the backfilling operations. Backfilling adjacent to walls should be performed only with hand-operated equipment to avoid over-stressing the walls.

Even well compacted backfill will settle about 1 percent of its thickness. Therefore, slabs and other improvements crossing the backfill should be designed to span or to accommodate this settlement.

Interior and Garage Slabs

Interior and garage slabs should be designed to structurally span between pier supported elements.

Interior and garage slab subgrade should be sloped to drain into 12 inch deep trenches excavated no more than 20 feet apart beneath each slab. The trenches should be lined completely with a filter fabric such as Mirafi 140N, or equivalent. Four inch diameter rigid-perforated PVC or ABS (Schedule 40 or SDR 35) pipe should be placed on an inch of drain rock at the bottom of the trenches with perforations down. The pipes should be sloped to drain by gravity to solid pipes which outlet at an approved erosion resistant area. The trenches should be backfilled with drain rock up to slab subgrade elevation. The filter fabric should be wrapped over the top of the drain rock.

Interior and garage slabs should be underlain by a capillary moisture break consisting of at least 4 inches of free-draining, crushed rock or gravel (slab base rock) at least 1/4 inch, and no larger than 3/4 inch, in size. Moisture vapor detrimental to floor coverings or stored items will condense on the undersides of slabs. A moisture vapor barrier should therefore be installed over the capillary break. The barrier should be specified by the slab designer. It should be noted that conventional concrete slab-on-grade construction is not waterproof. The local standard under-slab construction of crushed rock and vapor barrier will not prevent moisture transmission through slab-on-grade. Where moisture sensitive floor coverings are to be installed, a waterproofing expert and/or the flooring manufacturer should be consulted for their recommended moisture and vapor protection measures, including moisture barriers, concrete admixtures and/or sealants.

Structural slabs should be underlain by an approved void forming product for protection from expansive soil heave. The void forms should consist of at least a 2-inch thick degradable and compressible paper product (SureVoid®, or equivalent). The capillary moisture break should be installed beneath the void form, and the moisture barrier should be carefully installed over the top of the void form.

Exterior Slabs and Pavements

Existing soils beneath and within 3 horizontal feet of planned exterior slabs or pavements should be excavated at least 30 inches below the proposed finished slab or pavement subgrade or 30 inches below existing grade, whichever is deeper. Additional overexcavation may be required depending on conditions observed by our representative in the field during construction. The depth and extent of required overexcavation should be approved in the field by Herzog Geotechnical prior to placement of fill or improvements. Performance can be enhanced by increasing the depth of overexcavation. Expansive materials encountered during overexcavation should be segregated and not used in Select Fill zones. Vaults, pipes, tanks and other buried objects should be removed, and the resultant voids cleaned and backfilled with approved fill which is placed and compacted as outlined below.

Temporary slopes should be laid back or shored in conformance with OSHA standards. All temporary slopes and shoring should be contractually established as solely the responsibility of the Contractor, and design and inspection of temporary slopes and shoring are specifically excluded from our scope of work.

The on-site soils are likely to be wet and will require considerable drying. If high groundwater is encountered, it will be necessary to dewater the site well in advance of grading. Where soft or yielding conditions are encountered, it may be necessary to deepen overexcavations and to blanket the bottom of the overexcavated surface with an approved geotextile stabilization fabric (Mirafi 600X, or equivalent). The depth and extent of required overexcavations and the requirement for stabilization fabric should be evaluated in the field by Herzog Geotechnical during construction. Trucks or construction equipment can cause "pumping" and damage of weak and wet subgrade soils, and can cause a substantial increase in the amounts of overexcavation required. The contractor should not operate trucks or equipment on deflecting areas. Excavation within soft areas should be performed from unexcavated perimeter areas using an excavator. In areas where yielding is encountered, additional overexcavation and select granular imported material may be required. The Contractor should provide unit prices for overexcavation, placement and compaction of imported granular fill, and for installation of geotextile reinforcing.

Soils exposed by required excavations should be scarified to a depth of at least 8 inches, moisture conditioned to at least 3 percent above optimum moisture content, and recompacted to between 90 and 93 percent relative compaction with light equipment. Relative compaction refers to the

in-place dry density of a soil expressed as a percentage of the maximum dry density of the same material, as determined by the ASTM D1557 test procedure. Optimum moisture content is the water content of the soil (percentage by dry weight) corresponding to the maximum dry density.

In portions of excavations extending more than 30 inches below planned slab or pavement subgrade, the excavated material may be replaced in lifts not exceeding 8 inches in uncompacted thickness, moisture conditioned to at least 3 percent over optimum moisture content, and recompacted to between 90 and 93 percent relative compaction to within 30 inches of the proposed slab or pavement subgrade. Within the upper 30 inches, non-expansive Select Fill should be placed in lifts not exceeding 8 inches in uncompacted thickness, moisture conditioned, and compacted to at least 90 percent relative compaction. The upper 6 inches of subgrade should be moisture conditioned and compacted to at least 95 percent relative compaction, and should be smooth and unyielding.

All backfill material should be free of organic matter. The material should not contain rocks or lumps larger than 4 inches in greatest dimension, and no more than 15 percent should be larger than 2 inches. The upper 30 inches of Select Fill material in and within 3 horizontal feet of proposed pavements and slabs-on-grade should consist of clean well-graded soil with little or no potential for expansion. The Select Fill material should have a plasticity index of 15 percent or less, and a maximum liquid limit of 40 percent. Herzog Geotechnical should approve all imported fill prior to it being brought to the site.

Non-structural slabs should be at least 5 inches thick (or at least 6 inches thick for driveways) and should be reinforced at least with #4 reinforcing bars spaced at 12 inches on-center each way to control cracking due to differential movement. Control joints should be provided as determined by the Structural Engineer. Reinforcement should be continuous across joints. All slabs should be as designed by the project structural engineer.

Asphalt Pavements

Driveway pavements should be underlain by properly compacted fill as outlined in the *Exterior Slabs and Pavements* section of this report. The upper 6 inches of subgrade should be moisture conditioned and compacted to at least 95 percent relative compaction, and should be smooth and unyielding. Aggregate baserock should be compacted to at least 95 percent relative compaction to provide a smooth unyielding surface. Characteristics and placement of asphalt concrete and aggregate base, and preparation for the subgrade should conform to the *California Department of Transportation Standard Specifications*, latest edition, except that the test method for compaction should be determined by ASTM D1557.

Based on the results of our investigation, we recommend that a Select Fill R-value of 10 be assumed for preliminary design. If desired, the actual R-value of the in-place subgrade soils can be determined during grading, and the design modified. Based on an R-value of 10, and assumed

Traffic Indices (T.I) and using California Division of Highways Standard Design Manual 7-651.1 (July 1, 1991), we recommend the preliminary asphalt pavement thicknesses presented in the following table.

		Thickness (inches) [1]		
Area	T.I.	Asphalt Concrete Surfacing	Class 2 Aggregate Base[2]	Aggregate Subbase[3]
Driveway &	6.0	3.5	6.0	7.0
Truck Service		3.5	11.5	----
		9.0	----	----
Automobile	4.5	3.0	6.0	6.0
Parking		3.0	7.0	----
		7.5		

(1) These thicknesses are the recommended minimum. Increasing asphalt concrete thickness in place of Class 2 aggregate base would increase the life and durability of pavement section.

(2) R-value = 78 minimum

(3) R-value = 50 minimum

In heavy traffic areas, a design TI of greater than 6.0 may be warranted. An evaluation of projected traffic loading should be performed by the project Civil Engineer. Where pavements will be subjected to heavy trucks, self-loading garbage trucks or concentrated loads, reinforced concrete slabs should be used. Drainage swales in the pavement should be constructed with reinforced concrete.

Soils beneath and within 3 feet of planned pavements should be overexcavated and replaced with non-expansive Select Fill as outlined in the *Site Preparation and Grading* section of this report. The subgrade should be examined by our field engineer during construction to confirm that conditions are as anticipated. The upper 6 inches of subgrade should be moisture conditioned and compacted to at least 95 percent relative compaction and should be smooth and unyielding. Aggregate baserock should be compacted to at least 95 percent relative compaction to provide a smooth unyielding surface. Characteristics and placement of asphalt concrete and aggregate base, and preparation for the subgrade should conform to the *California Department of Transportation Standard Specifications*, latest edition; except that the test method for compaction should be determined by ASTM D1557. Where pavements will abut lawn or planter areas, the pavement section should be protected from irrigation with a 6 inch thick cutoff wall extending at least 6 inches below the bottom of the baserock.

Utility Trenches

Trenches should be backfilled with material that is mechanically compacted to at least 90 percent relative compaction. Uncompacted lift thicknesses should not exceed 8 inches. Compaction by jetting should not be permitted. In order to prevent utility trench backfill conducting water into

the expansive soils beneath the building or pavements, granular backfill should not be used beneath the building or pavements. Governmental or public utility requirements exceeding those listed above should govern where applicable.

Geotechnical Drainage

Positive drainage should be provided away from foundations, slopes and retaining walls. Ponding of surface water should not be allowed. All roofs should be provided with gutters and downspouts. Downspouts should be connected into closed conduits which discharge at the storm drain. Conduit should consist of rigid PVC or ABS pipe which is Schedule 40, SDR 35 or equivalent. Downspouts, surface drains and subsurface drains should be checked for blockage, and cleared and maintained on a regular basis. Surface drains and downspouts should be maintained entirely separate from retaining wall backdrains and foundation drains.

Foundation drains should be installed adjacent to perimeter foundations. Perimeter retaining wall backdrains may be substituted for foundation drains. The drains should consist of trenches which extend 18 inches deep, or 12 inches below lowest adjacent interior grade, whichever is deeper, and which are sloped to drain at least 1 percent by gravity. The trenches should be lined completely with a filter fabric such as Mirafi 140N, or equivalent. A 4-inch diameter rigid perforated PVC or ABS pipe (Schedule 40, SDR 35 or equivalent) should be placed on a 1-inch thick layer of drain rock at the bottom of the trenches with perforations down. The pipes should be sloped to drain at least 1 percent by gravity to a non-perforated pipe (Schedule 40, SDR 35 or equivalent) which discharges at an approved outlet. The trench for the perforated pipe should be backfilled to within 6 inches of the ground surface with drain rock. The filter fabric should be wrapped over the top of the drain rock. The upper 6 inches of the trenches should be backfilled with compacted clayey soil to exclude surface water. The trench for the non-perforated outlet pipe should be completely backfilled with compacted soil.

Supplemental Services

Our conclusions and recommendations are contingent upon Herzog Geotechnical being retained to review the project plans and specifications to evaluate if they are consistent with our recommendations, and being retained to provide intermittent observation and appropriate field and laboratory testing during clearing, void excavation and backfilling, pier drilling, slab and pavement subgrade overexcavation and backfill compaction, wall backdrainage and backfilling, pavement subgrade and baserock compaction, void form installation, and subdrainage installation to evaluate if subsurface conditions are as anticipated and to check for conformance with our recommendations. We should also be notified to observe the completed project. Steel, concrete, asphaltic concrete, slab moisture barriers, shoring, surface drainage facilities and waterproofing should be inspected by the appropriate party, and are not part of our scope of work.

If during construction subsurface conditions different from those described in this report are observed, or appear to be present beneath excavations, we should be advised at once so that these conditions may be reviewed and our recommendations reconsidered. The recommendations made in this report are contingent upon our being notified to review changed conditions.

If more than 18 months have elapsed between the submission of this report and the start of work at the site, or if conditions have changed because of natural causes or construction operations at or adjacent to the site, the recommendations of this report may no longer be valid or appropriate. In such case, we recommend that we review this report to determine the applicability of the conclusions and recommendations considering the time elapsed or changed conditions. The recommendations made in this report are contingent upon such a review.

We should be notified at least 48 hours before the beginning of each phase of work requiring our observation, and upon resumption after interruptions. These services are performed on an as-requested basis and are in addition to this geotechnical reconnaissance. We cannot provide comment on conditions, situations or stages of construction that we are not notified to observe.

LIMITATIONS

This report has been prepared for the exclusive use of The City of Novato and their consultants for the proposed project described in this report. Our services consist of professional opinions and conclusions developed in accordance with generally-accepted geotechnical engineering principles and practices. We provide no other warranty, either expressed or implied. Our conclusions and recommendations are based on the information provided us regarding the proposed construction, the results of our field exploration and laboratory testing programs, and professional judgment. Verification of our conclusions and recommendations is subject to our review of the project plans and specifications, and our observation of construction.

The test boring logs represent subsurface conditions at the locations and on the date indicated. It is not warranted that they are representative of such conditions elsewhere or at other times. Site conditions and cultural features described in the text of this report are those existing at the time of our field exploration and may not necessarily be the same or comparable at other times. The location of the test borings was established in the field by reference to existing features, and should be considered approximate only.

The scope of our services did not include an environmental assessment or an investigation of the presence or absence of hazardous, toxic or corrosive materials in the soil, surface water, ground water or air, on or below, or around the site, nor did it include an evaluation or investigation of the presence or absence of wetlands. Our work also did not address the evaluation or mitigation of mold hazard at the site.

We appreciate the opportunity to be of service to you. If you have any questions, please call us at (415) 388-8355.

Sincerely,
HERZOG GEOTECHNICAL

Craig Herzog, G.E.
Principal Engineer

Attachments: References
Plates 1 - 11
Harding Lawson Associates (1987) Boring Logs

REFERENCES

Abrahamson, N.A. and Silva, W.J., 2008, *Summary of the Abrahamson and Silva NGA Ground Motion Relations*, Earthquake Spectra, February, 2008, Vol. 24, No. 1.

ASCE-7-05, 2009, *Proposal 2-8, Revision #3, SCOPE: Revise Sec. 16.1.3.2.*

Association of Bay Area Governments, 2004, *Interactive Liquefaction Susceptibility Map*, ABAG Earthquake Program

Boore, D.M., and Atkinson, G.M., 2008, *Ground-Motion Prediction Equations for the Horizontal Component of PGA, PGV and 5% Damped PSA at Spectral Periods Between 0.01 to 10s*, Earthquake Spectra, February, 2008, Vol. 24, No. 1.

Cao, T., et al., June 2003, *The Revised California Probabilistic Seismic Hazard Maps,* California Geological Survey.

Campbell, K.W., and Bozorgnia, Y., 2008, *NGA Ground Motion Model for Geometric Mean Horizontal Component of PGA, PGV, PGD and 5% Damped Linear Elastic Response Spectra for Periods Ranging from 0.01 to 10s*, Earthquake Spectra, Feb. 2008, Vol. 24, No. 1.

Chiou, B.S.J., and Youngs, R.R., 2008, *Chiou-Youngs NGA Ground Motion Relations for the Geometric Mean Horizontal Component of Spectral Ground Motion Parameters*, Earthquake Spectra, February, 2008, Vol. 24, No. 1.

Cooper-Clark Associates, September 1976, *Excerpt from Preliminary Soil Investigation, Proposed Downtown Civic Center, Novato, California, (included in December 1986 EIR for Novato Civic Center.*

Huang, Y.N., Whittaker, A.S. and Luco, N., February 2008, *Maximum Spectral Demands in the Near-Fault Region*, Earthquake Spectra, Volume 24, No. 1, pages 319-341.

Harding Lawson Associates, March 18, 1987, *Geotechnical Investigation, Novato Civic Center, Novato, California,* HLA Job No. 922,023.01.

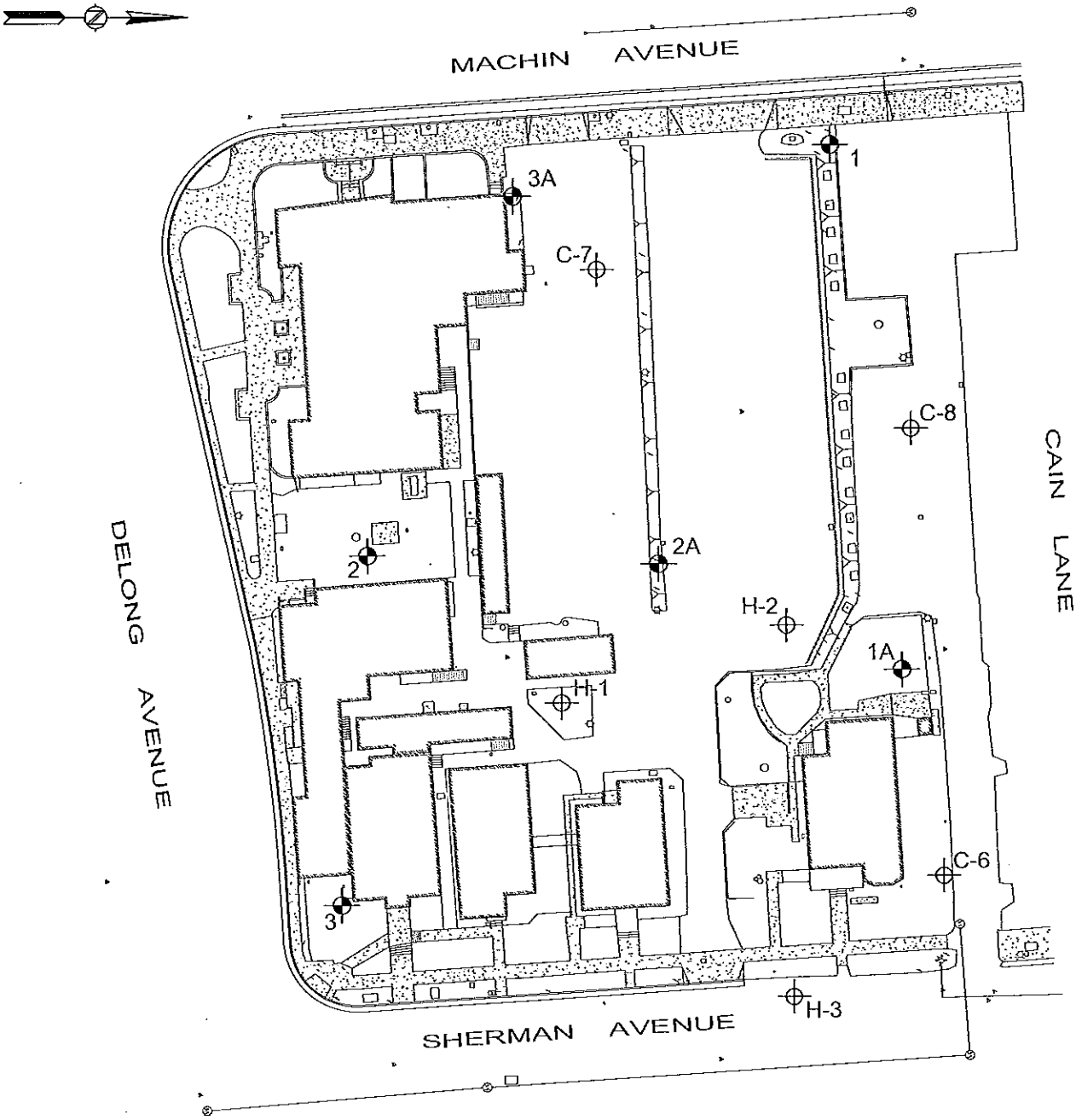
Idriss, 2008, *An NGA Empirical Model for Estimating the Horizontal Spectral Values Generated by Shallow Crustal Earthquakes*, Earthquake Spectra, February, 2008, Vol. 24, No. 1.

Idriss, I.M., and Boulanger, R.W., 2008, *Soil Liquefaction During Earthquakes,* Earthquake Engineering Research Institute, Monograph No. MNO-12.

Petersen, et. al., 1996, *Probabilistic Seismic Hazard Assessment for the State of California,* California Department of Conservation, Division of Mines and Geology, Open File Report 96-08.

Rice, Salem J., 1973, *Geology and Geologic Hazards of the Novato Area, Marin County, California*, California Division of Mines and Geology, Preliminary Report 21.

U.S. Geologic Survey, 2008, *The Uniform California Earthquake Rupture Forecast, Version 2 (UCERF 2),* by 2007 Working Group on California Earthquake Probabilities, USGS Open File Report 2007-1437.



EXPLANATION

- 1A — Herzog Geotechnical Boring (2010)
- 3 — Herzog Geotechnical Boring (2005)
- H-3 — HLA Test Boring (1987)
- C-6 — Cooper Clark & Associates Boring (1976 & 1977)

60 30 0 60
scale feet

Reference: CSW/Stuber-Stroeh Engineering Group, undated.

HERZOG GEOTECHNICAL CONSULTING ENGINEERS

Job. No: 1579-03-10
Appr:
Drwn: LPDD
Date: JAN 2011

SITE PLAN
Novato City Office Building
Novato, California

PLATE 1

EQUIPMENT: 4" Flight Auger
LOGGED BY: G.M.
ELEVATION: **
START DATE: 4-21-05
FINISH DATE: 4-21-05

Other Laboratory Tests	Pocket Penetrometer (ksf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200 sieve	Blows/Foot *	Sample	DEPTH (FEET)	
							0	DARK BROWN GRAVELLY SILT (ML), medium stiff, moist (Fill)
							1	BROWN SILTY GRAVEL (GM), loose, moist (Fill)
LL=28, PI=9, see Plate 10					2		2	RED-BROWN SANDY CLAY (CL), soft, wet (Fill)
							3	
							4	free water encountered at 3.7 feet
		20.6	105		5		5	MOTTLED ORANGE-DARK BROWN SANDY CLAY (CL), soft to medium stiff, saturated
							6	LIGHT GRAY GRAVELLY CLAY (CH), stiff, saturated
							7	
							8	LIGHT GRAY-GREEN SERPENTINITE, sheared, firm, friable, highly weathered
		10.9	129		10		9	
							10	BOTTOM OF BORING 1 @ 10.5 FEET

* Converted to equivalent standard penetration blow counts.
** Existing ground surface at time of investigation.

HERZOG GEOTECHNICAL CONSULTING ENGINEERS

Job No: 1579-03-10
Appr:
Drwn: LPDD
Date: JAN 2011

LOG OF BORING 1

Novato City Office Building

Novato, California

PLATE 2

EQUIPMENT: 4" Flight Auger
LOGGED BY: G.M.
ELEVATION: **
START DATE: 4-21-05
FINISH DATE: 4-21-05

Other Laboratory Tests	Pocket Penetrometer (ksf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200 sieve	Blows/Foot *	Sample	DEPTH (FEET)	
							0	ORANGE-BROWN SANDY SILT (ML), medium stiff, moist
							1	RED-BROWN SILTY GRAVEL (GM), loose to medium dense, moist
		13.9	113		26		2	RED-BROWN GRAVELLY CLAY (CL), stiff, moist
							3	RED-BROWN CLAYEY GRAVEL (GC), medium dense, moist
		18.1	107		26		4	RED-BROWN GRAVELLY CLAY (CL), stiff, moist
							5	
							6	
							7	ORANGE-BROWN CLAYEY GRAVEL (GC), dense, moist
							8	RED-BROWN SANDY CLAY (CL-CH), stiff, moist
					27		9	MOTTLED BROWN-BLUE-GRAY SANDY CLAY (CH), stiff to very stiff, moist
							10	
							11	
					28		12	
							13	
					56		14	
							15	YELLOW-BROWN SANDSTONE WITH INTERBEDDED SHALE, moderately hard, weak, highly weathered
							16	BOTTOM OF BORING 2 @ 16 FEET No Free Water Encountered

* Converted to equivalent standard penetration blow counts.
** Existing ground surface at time of investigation.

HERZOG GEOTECHNICAL CONSULTING ENGINEERS

Job No: 1579-03-10
Appr:
Drwn: LPDD
Date: JAN 2011

LOG OF BORING 2

Novato City Office Building
Novato, California

PLATE 3

EQUIPMENT: 4" Flight Auger
LOGGED BY: G.M.
ELEVATION: **
START DATE: 4-21-05
FINISH DATE: 4-21-05

Other Laboratory Tests	Pocket Penetrometer (ksf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200 sieve	Blows/Foot * Sample	DEPTH (FEET)	
						0	RED-BROWN SANDY SILT (ML), soft, moist
LL=45, PI=22, see Plate 10					7	1–2	ORANGE-BROWN GRAVELLY CLAY (CL), medium stiff, moist
						3–4	OLIVE-GRAY SANDY CLAY (CH), medium stiff, moist to wet
LL=77, PI=52, see Plate 10 Tx-UU, see Plate 11		28.1	96		8	5–8	
					21/4"	9	YELLOW-BROWN SHEARED SERPENTINITE, firm, friable, highly weathered
						10	ORANGE-BROWN SANDSTONE, moderately hard, moderately strong, highly weathered

BOTTOM OF BORING 3 @ 10.25 FEET
No Free Water Encountered

* Converted to equivalent standard penetration blow counts.
** Existing ground surface at time of investigation.

HERZOG GEOTECHNICAL CONSULTING ENGINEERS

Job No: 1579-03-10
Appr:
Drwn: LPDD
Date: JAN 2011

LOG OF BORING 3

Novato City Office Building

Novato, California

PLATE 4

EQUIPMENT: 4" Flight Auger | ELEVATION: **
LOGGED BY: G.M. | START DATE: 12-28-10
FINISH DATE: 12-28-10

Other Laboratory Tests	Pocket Penetrometer (ksf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200 sieve	Blows/Foot *	Sample	DEPTH (FEET)	
							0	ORANGE-BROWN SANDY CLAY (CL), soft, wet to saturated, with gravel
		17.1	111		1		1	▽ free water encountered at 1-1/2'
							2	
							3	
							4	
		22.4	105		5		5	
							6	
							7	
							8	
							9	MOTTLED ORANGE-DARK-BROWN GRAVELLY CLAY (CL), very stiff, saturated
		16.4	118		26		10	
							11	
							12	
							13	
					25		14	
							15	
							16	
							17	
							18	GRAY SHEARED SERPENTINITE, firm, friable, highly weathered
					34		19	
							20	BOTTOM OF BORING 1A @ 20.5 FEET

* Converted to equivalent standard penetration blow counts.
** Existing ground surface at time of investigation.

HERZOG GEOTECHNICAL CONSULTING ENGINEERS

Job No: 1579-03-10
Appr:
Drwn: LPDD
Date: JAN 2011

LOG OF BORING 1A

Novato City Office Building

Novato, California

PLATE 5

EQUIPMENT: 4" Flight Auger
LOGGED BY: G.M.
ELEVATION: **
START DATE: 12-28-10
FINISH DATE: 12-28-10

Other Laboratory Tests	Pocket Penetrometer (ksf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200 sieve	Blows/Foot * Sample	DEPTH (FEET)	
						0	RED-BROWN SANDY SILT (ML), soft, moist (Fill)
						1	
LL=44, PI=25, see Plate 10		19.9	105		2	2	ORANGE-BROWN SANDY CLAY (CL), soft, moist to wet
						3	
						4	BROWN SANDY CLAY (CH), soft, moist to wet
		24.4	104		15	5	
						6	
						7	▽ free water encountered at 7'
						8	MOTTLED ORANGE-BROWN GRAVELLY CLAY (CL), medium stiff to stiff, saturated
						9	
		18.6	110		19	10	
						11	
						12	
						13	
					26	14	
						15	
						16	
						17	
						18	MOTTLED YELLOW-GRAY-BROWN SANDY CLAY (CL) stiff, saturated, with sandstone gravels
					24	19	
						20	
						21	
						22	
					48	23	OLIVE-BROWN SHEARED SHALE, firm, friable, highly weathered
						24	BOTTOM OF BORING 2A @ 24.0 FEET

* Converted to equivalent standard penetration blow counts.
** Existing ground surface at time of investigation.

HERZOG GEOTECHNICAL CONSULTING ENGINEERS

Job No: 1579-03-10
Appr:
Drwn: LPDD
Date: JAN 2011

LOG OF BORING 2A

Novato City Office Building
Novato, California

PLATE 6

Other Laboratory Tests	Pocket Penetrometer (ksf)	Moisture Content (%)	Dry Density (pcf)	% Passing #200 sieve	Blows/Foot *	Sample	DEPTH (FEET)	
							0	RED-BROWN SANDY SILT (ML), soft, moist (Fill)
							1	▽ free water encountered at 1-1/2'
							2	RED-BROWN SANDY CLAY (CH), soft, saturated (Fill)
							3	
							4	ORANGE-BROWN CLAYEY SAND (SC), medium dense, saturated
		15.6	117		13		5	YELLOW-BROWN SANDY CLAY (CH), stiff, saturated
							6	
							7	
							8	RED-BROWN GRAVELLY CLAY (CL), very stiff, saturated
							9	
		20.2	108		31		10	
							11	
							12	
							13	
							14	ORANGE-BROWN SANDSTONE, firm, friable, highly weathered
					36		15	
								BOTTOM OF BORING 3A @ 15.5 FEET

EQUIPMENT: 4" Flight Auger
LOGGED BY: G.M.
ELEVATION: **
START DATE: 12-28-10
FINISH DATE: 12-28-10

* Converted to equivalent standard penetration blow counts.
** Existing ground surface at time of investigation.

MAJOR DIVISIONS					TYPICAL NAMES
COARSE GRAINED SOILS More than Half > #200 sieve	GRAVELS MORE THAN HALF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS WITH LITTLE OR NO FINES	GW		WELL GRADED GRAVELS, GRAVEL-SAND
			GP		POORLY GRADED GRAVELS, GRAVEL-SAND MIXTURES
		GRAVELS WITH OVER 12% FINES	GM		SILTY GRAVELS, POORLY GRADED GRAVEL-SAND-SILT MIXTURES
			GC		CLAYEY GRAVELS, POORLY GRADED GRAVEL-SAND-CLAY MIXTURES
	SANDS MORE THAN HALF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	CLEAN SANDS WITH LITTLE OR NO FINES	SW		WELL GRADED SANDS, GRAVELLY SANDS
			SP		POORLY GRADED SANDS, GRAVELLY SANDS
		SANDS WITH OVER 12% FINES	SM		SILTY SANDS, POOORLY GRADED SAND-SILT MIXTURES
			SC		CLAYEY SANDS, POORLY GRADED SAND-CLAY MIXTURES
FINE GRAINED SOILS More than Half < #200 sieve	SILTS AND CLAYS LIQUID LIMIT LESS THAN 50		ML		INORGANIC SILTS AND VERY FINE SANDS, ROCK FLOUR, SILTY OR CLAYEY FINE SANDS, OR CLAYEY SILTS WITH SLIGHT PLASTICITY
			CL		INORGANIC CLAYS OF LOW TO MEDIUM PLASTICITY, GRAVELLY CLAYS, SANDY CLAYS, SILTY CLAYS, LEAN CLAYS
			OL		ORGANIC CLAYS AND ORGANIC SILTY CLAYS OF LOW PLASTICITY
	SILTS AND CLAYS LIQUID LIMIT GREATER THAN 50		MH		INORGANIC SILTS, MICACEOUS OR DIATOMACIOUS FINE SANDY OR SILTY SOILS, ELASTIC SILTS
			CH		INORGANIC CLAYS OF HIGH PLASTICITY, FAT CLAYS
			OH		ORGANIC CLAYS OF MEDIUM TO HIGH PLASTICITY, ORGANIC SILTS
HIGHLY ORGANIC SOILS			Pt		PEAT AND OTHER HIGHLY ORGANIC SOILS

UNIFIED SOIL CLASSIFICATION SYSTEM

			Shear Strength, psf / Confining Pressure, psf	
Consol	Consolidation	Tx	2630 (240)	Unconsolidated Undrained Triaxial
LL	Liquid Limit (in %)	Tx sat	2100 (575)	Unconsolidated Undrained Triaxial, saturated prior to test
PL	Plastic Limit (in %)	DS	3740 (960)	Unconsolidated Undrained Direct Shear
PI	Plasticity Index	TV	1320	Torvane Shear
Gs	Specific Gravity	UC	4200	Unconfined Compression
SA	Sieve Analysis	LVS	500	Laboratory Vane Shear
■	Undisturbed Sample (2.5-inch ID)	FS	Free Swell	
◪	2-inch-ID Sample	EI	Expansion Index	
◧	Standard Penetration Test	Perm	Permeability	
⊠	Bulk Sample	SE	Sand Equivalent	

KEY TO TEST DATA

HERZOG GEOTECHNICAL CONSULTING ENGINEERS

Job No: 1579-03-10
Appr:
Drwn: LPDD
Date: JAN 2011

SOIL CLASSIFICATION CHART AND KEY TO TEST DATA
Novato City Office Building
Novato, California

PLATE 8

ROCK SYMBOLS

 SHALE OR CLAYSTONE

 CHERT

 SERPENTINITE

 SILTSTONE

 PYROCLASTIC

 METAMORPHIC ROCKS

 SANDSTONE

 VOLCANIC

 DIATOMITE

 CONGLOMERATE

 PLUTONIC

 SHEARED ROCKS

LAYERING

MASSIVE	Greater than 6 feet
THICKLY BEDDED	2 to 6 feet
MEDIUM BEDDED	8 to 24 inches
THINNLY BEDDED	2-1/2 to 8 inches
VERY THINNLY BEDDED	3/4 to 2-1/2 inches
CLOSELY LAMINATED	1/4 to 3/4 inches
VERY CLOSELY LAMINATED	Less than 1/4 inch

JOINT, FRACTURE, OR SHEAR SPACING

VERY WIDELY SPACED	Greater than 6 feet
WIDELY SPACED	2 to 6 feet
MODERATELY SPACED	8 to 24 inches
CLOSELY SPACED	2-1/2 to 8 inches
VERY CLOSELY SPACED	3/4 to 2-1/2 inches
EXTREMELY CLOSELY SPACED	Less than 3/4 inch

HARDNESS

SOFT - Pliable; can be dug by hand

FIRM - Can be gouged deeply or carved with a pocket knife

MODERATELY HARD - Can be readily scrached by a knife blade; scratch leaves heavy trace of dust and is readily visable after the powder has been blown away

HARD - Can be scratched with difficulty; scratch produces little powder and is often faintly visable

VERY HARD - Cannot be scratched with pocket knife; leaves a metallic streak

STRENGTH

PLASTIC - Capable of being molded by hand

FRIABLE - Crumbles by rubbing with fingers

WEAK - An unfractured specimen of such material will crumble under light hammer blows

MODERATELY STRONG - Specimen will withstand a few heavy hammer blows before breaking

STRONG - Specimem will withstand a few heavy ringing hammer blows and usually yields large fragments

VERY STRONG - Rock will resist heavy ringing hammer blows and will yield with difficulty only dust and small flying fragments

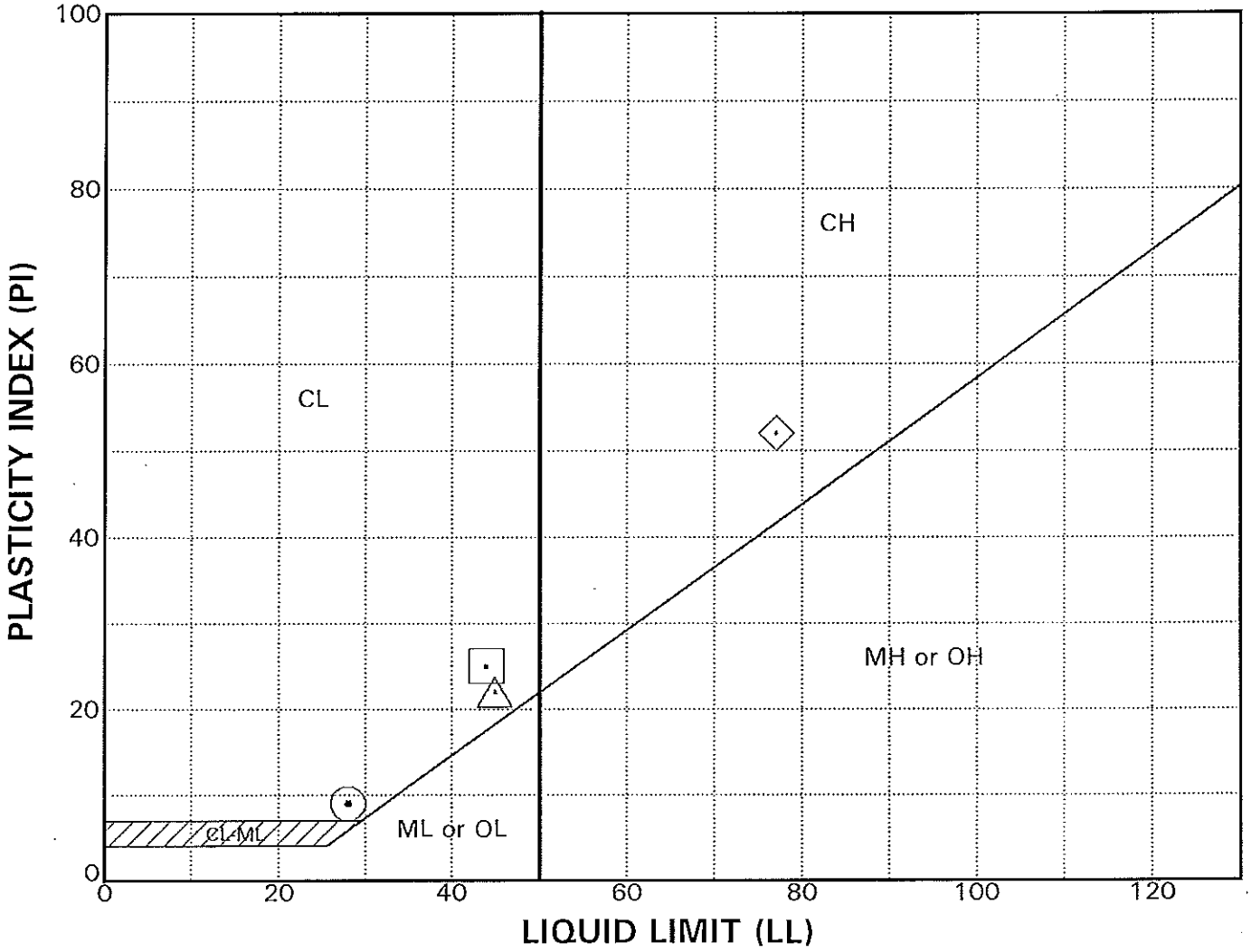
DEGREE OF WEATHERING

HIGHLY WEATHERED - Abundant fractures coated with oxides, carbonates, sulphates, mud, etc., thourough discoloration, rock disintegration, mineral decomposition

MODERATELY WEATHERED - Some fracture coating, moderate or localized discoloration, little to no effect on cementation, slight mineral decomposition

SLIGHTLY WEATHERED - A few stained fractures, slight discoloration, little or no effect on cementation, no mineral decomposition

FRESH - Unaffected by weathering agents, no appreciable change with depth



SAMPLE SOURCE	CLASSIFICATION	LIQUID LIMIT (%)	PLASTIC LIMIT (%)	PLASTICITY INDEX (%)	% PASSING #200 SIEVE
⊙ Bor. 1 @ 1.5'	Red-Brown Sandy Clay (CL)	28	19	9	
⊡ Bor. 2A @ 1.5'	Orange-Brown Sandy Clay (CL)	44	19	25	
△ Bor. 3 @ 1.5'	Orange-Brown Gravelly Clay (CL)	45	23	22	
◇ Bor. 3 @ 4.8'	Olive-Gray Sandy Clay (CL)	77	25	52	

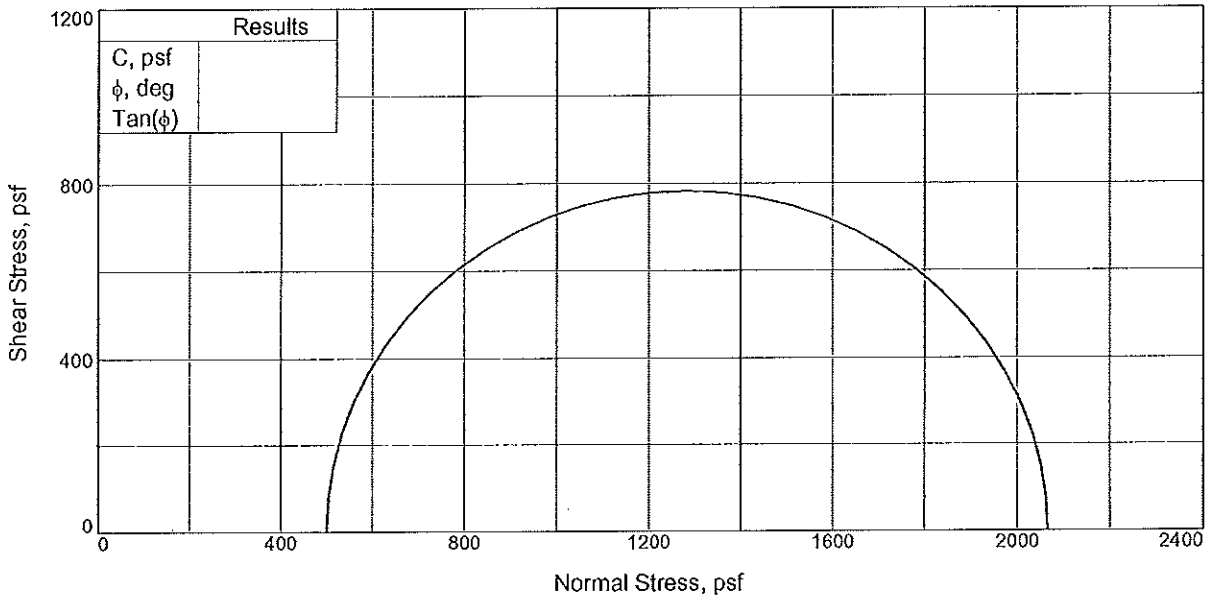
HERZOG
GEOTECHNICAL
CONSULTING ENGINEERS

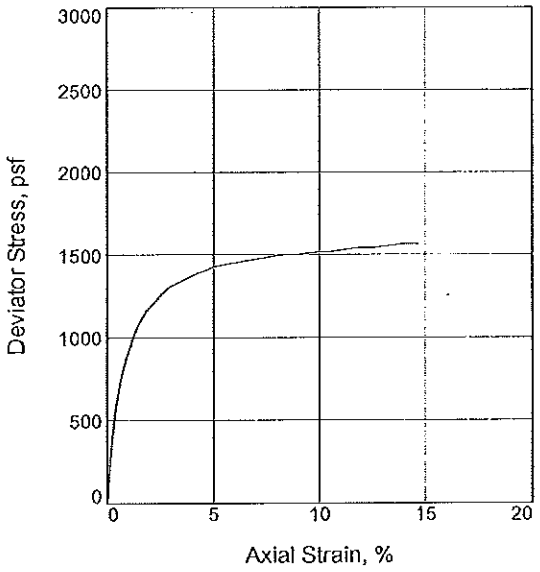
Job No: 1579-03-10
Appr:
Drwn: LPDD
Date: JAN 2011

PLASTICITY CHART

Novato City Office Building
Novato, California

PLATE
10





Sample No.		1
Initial	Water Content,	28.1
	Dry Density, pcf	95.8
	Saturation,	100.0
	Void Ratio	0.7586
	Diameter, in.	2.42
	Height, in.	5.60
At Test	Water Content,	28.1
	Dry Density, pcf	95.8
	Saturation,	100.0
	Void Ratio	0.7586
	Diameter, in.	2.42
	Height, in.	5.60
Strain rate, in./min.		0.08
Back Pressure, psf		0.0
Cell Pressure, psf		499.7
Fail. Stress, psf		1565.3
Strain, %		13.9
Ult. Stress, psf		
Strain, %		
σ_1 Failure, psf		2065.0
σ_3 Failure, psf		499.7

Type of Test:
Unconsolidated Undrained
Sample Type: Undisturbed
Description: Olive Green Fat Clay (CH)

LL= 77 **PL=** 25 **PI=** 52
Assumed Specific Gravity= 2.70

Source of Sample: Boring B-3 Depth: 4.75'

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CONSULTING ENGINEERS

Job. No: 1579-03-10
Appr:
Drwn: LPDD
Date: JAN 2011

Tx-UU TEST DATA
Novato City Office Building
Novato, California

PLATE
11

HARDING LAWSON ASSOCIATES (1987)
BORING LOGS

8237

Equipment 6" Flight Auger

Elevation 23.0 feet** Date 2/9/87

Laboratory Tests	Blows/foot*	Moisture Content (%)	Dry Density (pcf)	Core Recovery (%)	Cored Interval	Depth (ft)	Sample
	3					0	
	30					5	
	23					10	
	27/6"					15	
						20	
						25	
						30	
						35	
						40	

RED-BROWN SANDY CLAY (CL) with gravel, soft, moist — FILL

▽ water level, 2-18-87

BROWN CLAY (CL) very stiff, saturated — COLLUVIUM

MOTTLED GRAY AND BROWN GRAVELLY CLAY (CL) very stiff, saturated — RESIDUAL SOIL

BROWN MELANGE intensely sheared clay-like rock gouge with inclusions of more competent sandstone

* Blow counts converted to equivalent Standard Penetration values

** Elevation referenced to Mean Sea Level Datum

Harding Lawson Associates
Engineers, Geologists & Geophysicists

Log of Boring 1
Novato Civic Center
Novato, California

PLATE 2

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
LM	922,023.01		2/87		

8238

Equipment 6" Flight Auger

Elevation 19.0 feet Date 2/9/87

Laboratory Tests	Blows/foot	Moisture Content (%)	Dry Density (pcf)	Core Recovery (%)	Cored Interval	Depth (ft)	Sample
	8					0	
LL(27.0) PI(8.4)	4					5	
	25					10	
	35					15	
	46					20	
						25	
						30	
						35	
						40	

DARK BROWN CLAY (CH) soft to medium stiff, moist with organics and fertilizers

▽ water level, 2-18-87

becomes soft, saturated at 3.0 feet

FILL

MOTTLED BROWN AND GRAY SANDY CLAY (CL) with gravel, very stiff, saturated, (from deeply weathered melange)

RESIDUAL SOIL

MOTTLED GRAY AND GREEN MELANGE intensely sheared clay-like rock gouge, containing moderately hard and moderately strong siltstone inclusions

numerous slickensided surfaces at 19.0 - 20.0 feet

Harding Lawson Associates
Engineers, Geologists & Geophysicists

Log of Boring 2
Novato Civic Center
Novato, California

PLATE 3

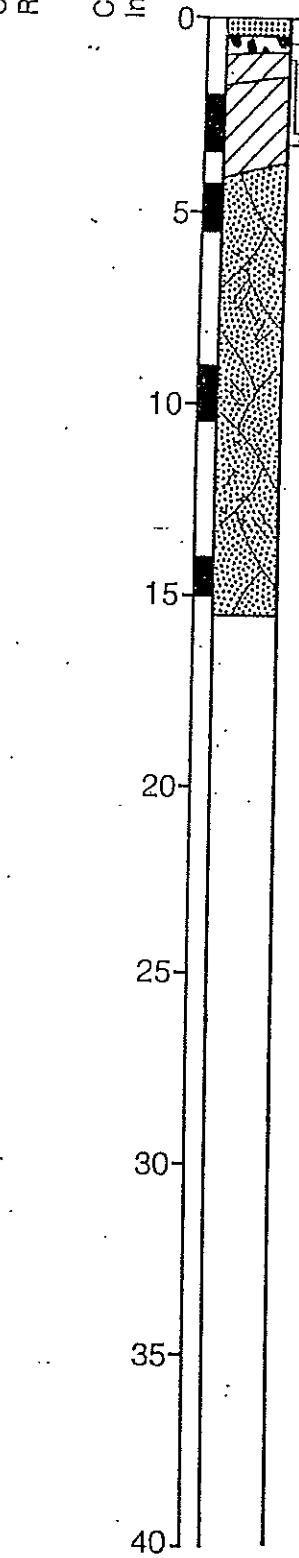
DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
LM	922,023.01		2/87		

8239

Equipment 6" Flight Auger

Elevation 21.5 feet Date 2/9/87

Laboratory Tests	Blows/foot	Moisture Content (%)	Dry Density (pcf)	Core Recovery (%)	Cored Interval	Depth (ft)	Sample
	7					0	
TxUU 2284 (576)	29					5	
	50					10	
	49					15	
						20	
						25	
						30	
						35	
						40	



ASPHALT CONCRETE
AGGREGATE BASE
water level, 2-18-87
DARK GRAY SANDY CLAY (CL) medium stiff, wet
RED-BROWN GRAVELLY CLAY (CL) very stiff, wet
GRAY-GREEN MELANGE
intensely sheared clay-like rock gouge containing more competent siltstone and graywacke inclusions
4.0 - 8.0 feet, predominantly clay-like gouge
8.0 - 15.0 feet, predominantly serpentinized siltstone and sandstone, intensely fractured, weak to moderately hard, moderately strong with numerous very smooth slickensided fracture surfaces

COLLUVIUM
RESIDUAL SOIL

Harding Lawson Associates
Engineers, Geologists & Geophysicists

Log of Boring 3
Novato Civic Center
Novato, California

PLATE 4

DRAWN	JOB NUMBER	APPROVED	DATE	REVISED	DATE
LM	922,023.01		2/87		

WALKER
PARKING CONSULTANTS

606 South Olive Street, Suite 1100
Los Angeles, CA 90014

Voice: 213.488.4911
Fax: 213.488.4983
www.walkerparking.com

April 22, 2011

Thomas Adams
Management Analyst
The City of Novato
75 Rowland Way #200
Novato, CA 94945-5054

Re: Civic Center Parking Feasibility Analysis – Novato, California
Supply, Demand and Shared Parking Analysis
Walker Project No. 33-1674.00

Dear Mr. Adams:

Thank you for retaining Walker Parking Consultants ("Walker") to perform the parking analysis which examines the additional parking demand that will be generated by the addition of the City's Civic Center office building to the City of Novato's downtown core. This draft letter report contains the assumptions that were used to project parking demand for the new building, as well as analyses of parking supply and demand in the designated study area. Finally, we present Walker's findings, which we also summarize below.

EXECUTIVE SUMMARY

Walker analyzed and projected the increased demand for parking in Downtown Novato that will result from the opening of the planned Civic Center office building. Our findings were as follows:

- The users of the new building are projected to generate a demand for 81± spaces during the 12:00 PM downtown peak parking demand hour, 106± spaces during the 10:00 AM hour, and 95± spaces during the 2:00 PM hour. The difference in parking demand between the two periods is primarily the result of variations in the demand for parking for visitors to the Civic Center.
- Combining the additional demand for parking in the future with current demand results in a total peak demand in the study area of 472± parking spaces during the noon hour.
- Based on the City's surveyed on- and off-street public supply of 394 parking spaces, the possible loss of spaces resulting from the construction of the new building, the addition of available public spaces adjacent to the study area, and the addition of 75 spaces in the SMART lot, we calculate an effective parking supply of 518 to 540 spaces. When compared with our peak parking demand projections the result is a parking surplus of 46± to 68± parking spaces. This number suggests a sufficient amount of parking will exist

to accommodate the projected future demand for parking generated by the new building *provided that the potential for 75 parking spaces in the SMART lot is realized and that these spaces are utilized by the downtown employees and the public.*

- To the extent that Downtown Novato experiences parking issues, both currently and in the future, our findings indicate that the issues are likely related both to the way in which spaces are managed as well as the number of spaces that are available. This suggests that simply adding parking spaces may not solve the issue of a perceived parking shortage. Whether or not more spaces are added, the parking system will require more active management.
- Improved parking management will result in greater utilization of the underutilized private parking system as well as other underutilized spaces in the area. The supply of private parking spaces in the downtown is a valuable, potentially useful, but underutilized resource.

The addition and use of parking spaces in the SMART lot is crucial to accommodate the planned growth and resulting future increases in the demand for parking in the Downtown area. Without this lot, based on future projections, the supply of parking in the eastern portion of Downtown Novato will be inadequate. Even with the addition of the lot, the ability of the parking system to accommodate future development in the area that was not considered in this report is likely to be challenging.

Finally, we reiterate that the City's efforts to provide adequate supply of parking to serve the downtown and planned Civic Center office building should be as focused on management of the existing parking supply, which can accommodate a significantly greater number of vehicles, as well as the addition of new parking spaces. Parking management measures, which typically include an element of enforcement, have costs associated with them. However, while from a parking management perspective, revenue generation should not be a goal of these measures, such measures typically can and do generate revenue which offset their costs.

PURPOSE OF PARKING ANALYSIS

The City of Novato is planning to reintroduce its city hall functions and employees to the City's downtown area with the construction of a new Civic Center office building. City administrative services are currently housed in offices on Rowland Way, several miles from the City's historic downtown. The proposed building, which will contain up to a maximum of 25,000 square feet, will be built on or above what is known as the City Hall Parking Lot, which is located on Machin Avenue across the street from the headquarters of the Novato Police Department.

The construction of the building may or may not result in the elimination of existing parking spaces. In this report both scenarios (the maintaining or elimination of some existing spaces) are examined. In either case, the new building is expected to house approximately 75 City employees. Parking for these employees will need to be accommodated within the downtown

area. The City's administrative services had been located in the downtown area until 2004. However, since that time, the number and popularity of the businesses Downtown have increased. Some downtown businesses and the City's police department are concerned that cars belonging to the employees of the new Civic Center office building will overwhelm the district's parking supply, making it difficult or impossible for their customers and employees to park. The City has therefore requested that Walker perform a parking study in order to quantify the impact of the new civic center building in the City's downtown and whether or not the current parking supply is adequate to accommodate the projected increase in parking demand.

STUDY AREA AND METHODOLOGY

The City of Novato's downtown commercial district is centered upon Grant Avenue from Seventh Street on the west to Railroad Avenue on the east, a distance of approximately 3,700 linear feet. For the purpose of analyzing the parking supply and demand in the area, the City's Planning Division has divided the area into six zones, as shown in Figure 1.

Zones 1 through 3 are located east of Redwood Highway. The future location of the new Civic Center building, above the existing City Hall Parking Lot, is located in Zone 2 on Machin Avenue. For the purposes of determining parking adequacy in the area, it was agreed in consultations with City staff that the focus of the study would be the area east of Redwood Highway. In addition to the spaces included in Zones 1 through 3, City staff identified an additional 69 on- and off-street parking spaces that are located adjacent to the study area and within a reasonable proximity of the Civic Center site. We therefore include these spaces in the analysis. They are designated as "periphery" spaces. As we note later in the report, we believe this to be a reasonable though conservative assumption, as acceptable walking distances for some parking user groups (such as downtown employee and city employee long-term parkers) would allow for an acceptable parking supply for downtown to be in some cases more than 1,200 feet from a destination.

METHODOLOGY

In the following study we examine the current supply and demand for parking in Downtown Novato, make parking demand projections for the new Civic Center office building, and then compare the parking supply with our future demand projections in order to determine whether or not the study area will experience a parking deficit or surplus.

Since 2005, the City has performed annual surveys of the public parking spaces within the six downtown zones to quantify the extent of their availability and usage. As part of these surveys, occupancy counts are conducted on a weekday at 12:15 PM, 2:15 PM, and 5:15 as the City has determined these times to reflect three different possible peak conditions. We believe that the assumption is reasonable as each count is likely to reflect the lunch time, typical work day, and late afternoon parking demand conditions.

While, in our experience, the peak parking demand generated by office uses occurs either in the mid morning or early afternoon (roughly 10:00 AM and 2:00 PM), the peak demand for parking in a smaller downtown commercial district, particularly one with restaurant activity, occurs during the lunch hour.

We note that the City's parking surveys do not include the private supply of parking in the area, presumably because the City has little control over this resource. We discuss this issue later in the report, but note that in general the private parking supply in smaller commercial districts plays an important role in accommodating parking demand but also tends to be underutilized.

SHARED PARKING

Some of the principles supporting this analysis of the future demand for parking in downtown Novato stem from the concept of shared parking, an accepted practice widely used in commercial districts and mixed-use developments. The Urban Land Institute first published *Shared Parking* in 1983. The publication explains the concept of shared parking and describes the use of a model to forecast peak parking conditions for mixed-use developments, and/or urban settings. Walker contributed to that original publication and subsequently led the team that researched and wrote *Shared Parking, 2nd Edition*, published in 2005.

Shared parking is the use of a parking area to serve two or more individual land uses without conflict or encroachment. Shared parking is key to the success of older commercial districts like the Downtown Novato core because it allows for a greater concentration and density of land uses; parking is used and provided more efficiently. The ability to share parking spaces is the result of two conditions:

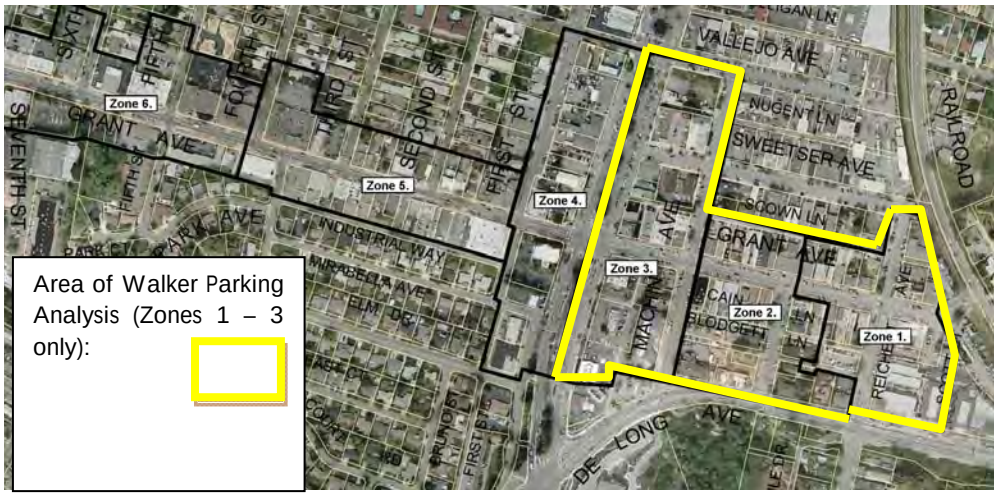
1. Variations in the accumulation of vehicles by hour, by day, or by season at the individual land uses, and
2. Relationships among the land uses that result in visiting multiple land uses on the same auto trip.

A key goal of a shared parking analysis is establishing a balance between providing adequate parking to support a development from a commercial standpoint while minimizing the negative aspects of excessive resources, including land, devoted to parking, which tends to detract from the attractiveness and convenience of a downtown. In general, a shared parking analysis considers the types, quantities and user groups of land uses for a development, as well as site- and market-specific characteristics.

Allowing multiple land uses and entities to share parking spaces has allowed for and led to the creation of many popular developments and districts, resulting in the combination of office, residential, retail, and entertainment districts that rely heavily on shared parking for economic viability; traditional downtowns in large and small cities alike have depended on the practice in order to be compact, walkable and economically viable. In the same way, mixed-use projects have also benefited from the shared parking principle, which offers multiple benefits to a

community, not the least of which is a lesser environmental impact from the reduction in required parking needed to serve commercial developments as well as the ability to create a more desirable mix of uses in one location.

Figure 1: Downtown Novato and Parking Analysis Study Area



CURRENT CONDITIONS

When performing an analysis regarding parking adequacy it is important to start with a baseline. Therefore, we first use the public parking supply within the study area, as identified by the City, as well as how those spaces were utilized throughout the course of the day. We also discuss briefly the public-available private parking supply and the demand for these spaces.

PUBLIC PARKING SUPPLY

The public parking supply consists of both on-street and off-street parking. Table 1 shows the breakdown of the parking supply within the study area between the two types of public parking. The total number of publicly available spaces is 460. The total number of publicly-owned spaces is 484 spaces, which includes the reserved spaces in the City Hall lot. Although they are not available to the general public for parking, their elimination would impact the overall parking supply downtown. We therefore include them in this analysis.

Table 1: Study Area – Existing Public Parking Supply

Zone	On-street Spaces	% of Public Supply	Off- street Spaces	% of Public Supply	Total
Zone 1 - Public Spaces	93	19%	44	9%	137
Zone 2 - Public Spaces	89	18%	29	6%	118
Zone 3 - Public Spaces	139	29%	0	0%	139
Total Zones 1 - 3	321	66%	73	15%	394
Study Area Periphery	40	8%	26	5%	66
Total Public Spaces	*361*	*78%*	*99*	*22%*	*460*
Reserved Spaces - City Hall Lot	0	n/a	24	n/a	24
Total - Study Area	**361**	**75%**	**123**	**25%**	**484**

Source: City of Novato, 2010 and 2011

ON-STREET

In older commercial districts like Downtown Novato, the purpose of on-street parking spaces is generally to provide the most convenient parking option within the parking system, which is the availability of convenient, short-term parking close to businesses for the customers who need it. The availability of this short-term parking option is important because generally the shorter the motorist's stay at a destination, the less distance they are willing to walk from their car to their destination.

Available on-street parking spaces are typically easy to identify, allow for quick entry and exit, and in most cases are within convenient proximity to the parkers' destination. On-street parking spaces are therefore premium spaces; many parkers will spend significant amounts of time and energy "cruising" in search of a parking space in order to find on-street parking before considering parking in an off-street parking lot or structure. As a result, in the busiest sections of commercial areas, on-street spaces should serve as many parkers as possible and be designated for those most in need of a quick visit as opposed to those needing parking all day. Both of these goals are accomplished when on-street spaces are used by short-term parkers who turn the spaces over quickly. On-street parking spaces are also typically shared among the different land uses in the area. They turn over faster than other spaces as well. As a result of both these characteristics, they typically serve far more vehicles over the course of a day or week than do other spaces in the parking system.

It is worth noting therefore that, not only is the on-street parking supply typically the most desirable in which to park, within our study area the 361 on-street spaces represent 75% of the publicly owned supply (including reserved spaces) and 78% of the publicly available parking supply.

OFF-STREET PUBLIC PARKING

The off-street public parking in this analysis includes the public portion of the 53-space lot on which the Civic Center office building will be constructed. The lot is located in Zone 2. Of the 53 total spaces, 24 of the spaces are reserved for City- (typically Police Department) related vehicles. Parking is available to the general public in the 29 remaining spaces. Most of these 29 spaces are signed as being restricted to parking that is two hours or less. We also include the 44 spaces in the Zenk Lot in Zone 1 and 26 spaces that have been designated as two-hour spaces in the garage serving Whole Foods are shown in the study area periphery, off-street section, as these were not included in the 2010 city count.

PRIVATE PARKING SUPPLY

As noted, the City's surveys of parking supply and demand have not included the off-street private parking supply. Walker's studies of downtown parking always include the private supply of parking, even when it is associated with individual businesses. The private parking supply represents an important part of a downtown parking supply and the way in which it is utilized impacts the public parking supply.

Within Zones 1 – 3 Walker identified more than 200 privately owned parking spaces that were available to people conducting business in Downtown Novato.

In most cases, the City has required that the private parking be provided by the property owner or business. Although it is often the case that business owners, employees, or customers prefer to utilize public (usually on-street) parking, private parking represents a tremendous resource when it can be utilized. To the extent that it is underutilized, it can even represent a liability as empty parking lots can be aesthetically displeasing and increase empty space and distances between destinations in a pedestrian-oriented district. Underutilized parking areas can even present safety or security issues.

People can be encouraged to use these private spaces in a number of ways. First, it is common for business owners, employees and their customers to seek out on-street spaces before considering parking in a surface lot that is associated with their destination. To the extent that restrictions on parking in on-street spaces are not actively enforced, appropriate enforcement will encourage some if not many of these drivers to park in the appropriate private spaces. More on-street spaces would then be made available for those drivers who do not have other options.

In some communities, the city may create an agreement with property owners whose parking lots are underutilized, in order to take advantage of existing parking spaces rather than building new spaces. These agreements effectively allow any member of the public to park in these lots and may involve a monthly lease fee and the assumption of liability by the city for the parking lot.

While there is obviously a cost to the city in this effort, it will nearly always be less than the cost of acquiring land or building its own parking facility.

PUBLIC PARKING DEMAND

Table 2 shows the most recent parking occupancies within Zones 1 – 3 for 2010 and the occupancy rates for the preceding five years, which were provided by City staff.[1] According to documents provided by City staff, the annual supply of parking tended to shift over the past five years, with increases or decreases of about 30 parking spaces. We therefore do not include the parking supply numbers in this table. We note that despite the changes in parking supply, however, parking demand, particularly during the 12:15 peak have remained fairly consistent.

Table 2: Public Parking Demand 2005 - 2010

	12:15 PM Peak[1]					
Zones 1 - 3	2010	2009	2008	2007	2006	2005
Occupancy Rate	70%	64%	65%	71%	63%	58%
Most Recent Occupancy	274					
	2:15					
Zones 1 - 3	2010	2009	2008	2007	2006	2005
Occupancy Rate	57%	56%	51%	61%	50%	61%
Most Recent Occupancy	224					
	5:15					
Zones 1 - 3	2010	2009	2008	2007	2006	2005
Occupancy Rate	50%	45%	41%	50%	41%	36%
Most Recent Occupancy	197					

[1]Only in 2005, did 2:15 PM and not 12:15 PM experience peak conditions.

Source: City of Novato, 2010

TURNOVER OF SPACES IN PUBLIC PARKING LOTS

It is worth noting not only how many parking spaces were occupied, but how these spaces are used. Walker conducted a license plate inventory of the cars parked in the 17 "Two - Hour" restricted parking spaces in the City Hall Parking Lot from 10:15 AM to 2:15 PM. All twelve of the cars parked at 10:15 AM remained for more than four hours in the lot.

[1] These do not occupancy rates do not include either the peripheral spaces or the reserved spaces located in the City Hall Parking Lot.

PRIVATE PARKING DEMAND

Because historical data did not include private parking spaces within the study area, on March 2, 2011, Walker conducted one survey of parking occupancy rates in private parking spaces in the area, during the 12:15 PM peak hour. This was done for the purpose of observing the overall parking occupancy rate for the more than 200 private parking spaces. Walker determined that, with the exception of the 33-space parking lot which serves the McDonalds restaurant, the overall occupancy rate for the private parking lots in the area was less than 40%. This suggests that even at the peak, there are 100 to 150 private parking spaces that sit vacant in the study area.

FUTURE CONDITIONS

Various parking user groups will utilize the new Civic Center. These groups include employees, visitors, reserved (VIP), fleet vehicles, and police vehicles.

GENERATORS OF NEW PARKING DEMAND

CIVIC CENTER PARKING DEMAND PROJECTIONS – EMPLOYEES

We project the additional demand for parking created by the downtown Civic Center based on the assumptions noted below, which were developed through our conversations with City staff, Walker's methodology for projecting parking and our parking demand data base.

- Total number of employees: The new Civic Center is expected to bring an additional 75 employees to the downtown core over the next 20 years.
- Drive alone mode share: 95% of employees will drive alone to the work place. We use this assumption based on the high driving ratio of City employees described by City staff.[2]
- Oversell factor: The greater the number of employees who work at a given location, the less likelihood that all of them will be at the site (and require parking) at any given time. This is the result of visits out in the field, meetings, illness, vacations, doctors and other appointments. For locations where employees require parking permits, the ability to issue more employee parking permits than spaces is known in the parking industry as "oversell" and is a common industry practice. In the case of the Novato Civic Center, we use a low oversell factor of 1.08, which assumes that eight percent of employees are not in the office at any one time. Depending on the type of office use, oversell factors often reach from 1.20 to 1.40. Our assumption is very conservative.

[2] This includes statistics that 80% of City employees live outside of Marin County and just 20% live in the City of Novato. Policies that incentivize employees to use alternative means of transportation, without penalizing employees that must drive to work are often employed by city governments as a parking management measure.

- Effective supply factor: It is an industry-standard practice to provide a "cushion" in the number of parking spaces that a parking system needs. This effective supply factor demonstrates that the effective supply of parking spaces that can be relied upon tends to be less than the actual number of spaces in a parking facility or system.

  The purpose of the effective supply "cushion" in the number of spaces is to reduce the amount of time needed for drivers to find the last few spaces that are available within a given parking facility or to allow for a few spaces to be removed from service as a result of misparked vehicles, construction or obstacles such as broken glass, which may render a parking space unusable.

  In this analysis, we will apply the effective supply factor to the downtown parking system's parking supply, rather than the office's parking demand.

  The effective supply factor that is used varies based on the parking user group's familiarity with the parking system. Parking for employees, who use their parking system on a daily basis and therefore know space availability patterns well, is typically provided using a 95% or higher effective supply factor. By contrast an effective supply factor for customer parking is usually 90% or 85% for on-street parking spaces.

- Time of day/presence factors: Parking demand varies considerably throughout the day, even by hour. In Table 4 we project parking demand for the site on an hourly basis.

Based on this data, we project a peak employee parking demand for the new Civic Center building of 66± spaces.

CIVIC CENTER PARKING DEMAND PROJECTIONS - VISITORS

Through our research the Walker Parking/Urban Land Institute Shared Parking Model has determined that the peak parking demand ratio for visitors at a typical office building is 0.3 spaces per 1,000 square feet of gross floor area for buildings of 25,000 square feet or less. In our experience, overall visitor parking demand at municipal office buildings is roughly equivalent. However, in order to be conservative, we use a peak visitor parking demand ration of 0.9 spaces per 1,000 square feet.

For visitors, as with employees, it is important to note that the peak only occurs at certain times of the day. Table 3 shows that the projected peak demand for visitors of 23 spaces occurs during the 10:00 AM hour on weekdays as this is the time of One-Stop Shop for the Community Development department. However the noon hour, which is when the downtown core currently experiences its peak parking demand, is likely to be a low point for visitor demand during the day. At that time we project a peak demand for just four spaces as a result of the lower demand of city business conducted during the lunch hour.

Table 3: Projected Parking Demand – Employees and Visitors

City Hall	Metric	Demand/ SF	Drive Ratio	Oversell	Peak Demand
Employees	75 employees		0.95	0.92	66 spaces
Visitors	25 ksf	0.9	1.0	1.0	23 spaces

RESERVED PARKING

A reserved parking space is the same as one that is occupied one hundred percent of the time. Because reserved parking spaces cannot be shared, they tend to sit vacant for more time than other spaces. While we recognize the need to provide these spaces, the inability to share these spaces is inefficient and results in increased costs to the City for providing parking.

We assume six reserved spaces for the Civic Center during the day and an additional five reserved spaces after 5:00 PM for council members for a total of eleven spaces at that time. To the extent that reserved spaces can be provided during non-peak times only, it allows for a more efficient use of the parking supply.

NON-POLICE DEPARTMENT CITY FLEET VEHICLES

According to City staff, the City has 15 permanent fleet vehicles. We assume that all of these vehicles will be parked at the Civic Center when City offices are closed but that a significant percentage will be in the field during the day. We therefore assume that 60% of fleet vehicles will require reserved parking during the day and that during peak hours some fleet vehicles will be in the field.

In the case of many parking systems that have fleet vehicles, we note that it is not uncommon for employees to park their cars in the morning, and make visits in the field in City fleet vehicles, which are parked in "Reserved for City Vehicles" spaces. The result is a doubling of the parking impact on the parking supply. To the extent possible, the practice of reserving parking spaces during the hours of peak demand for City employees should be minimized. We would expect that these peak hours would in fact coincide with the times when fleet vehicles are most likely to be taken into the field. We also note that, to the extent possible, spaces reserved for fleet vehicles should be shared with one another, (i.e. it would be best to sign spaces as "Reserved for City Vehicle" versus "Reserved for Public Works Vehicle", etc.).

POLICE DEPARTMENT

The Police Department has expressed concern over the ability of the parking system to accommodate its needs once there is competition between the parking demand generated by the new Civic Center and the Department. In a meeting with Walker Parking, the Department stated that it would need 20 to 25 parking spaces for its use, in addition to what it currently parks on the site of Department headquarters.

While the need for 20 to 25 spaces is not an increase in the current demand for parking, this demand currently appears to be accommodated in the 24 reserved spaces located in the City Hall lot. If these spaces are eliminated, this demand for parking would need to be accommodated elsewhere. Although regular occupancy data was not collected for reserved spaces, Walker field staff did observe these spaces nearly or at 100% occupancy.

CIVIC CENTER PARKING DEMAND – HOURLY

Based on the above discussion Table 4 shows the projected parking demand for the Civic Center on an hourly basis, during a peak month.

Table 4: Projected Parking Demand by Hour - Civic Center + Off-Site Police Department

Civic Center		Percent of peak present													
User Group		6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM
Visitor		0%	1%	20%	100%	100%	70%	15%	45%	45%	45%	15%	10%	5%	2%
Employee		3%	30%	75%	95%	100%	100%	90%	90%	100%	100%	90%	50%	25%	10%
	Peak by Use	Projected Civic Center Parking Demand by Hour													
Visitor	23	0	1	5	23	23	17	4	11	11	11	4	3	2	1
Employee	66	2	20	50	63	66	66	60	60	66	66	60	33	17	7
Reserved	11	6	6	6	6	6	6	6	6	6	6	6	11	11	11
Fleet Vehicles - Unreserved	6	0	0	6	3	2	2	2	2	3	6	0	0	0	0
Fleet Vehicles - Reserved	15	15	15	9	9	9	9	9	9	9	9	15	15	15	15
Total - Civic Center	*n/a*	*23*	*42*	*76*	*104*	*106*	*100*	*81*	*88*	*95*	*98*	*85*	*62*	*45*	*34*
Police Department[A] (Non HQ)	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Total		**47**	**66**	**100**	**128**	**130**	**124**	**105**	**112**	**119**	**122**	**109**	**86**	**69**	**58**

[A]We assume that all 24 reserved spaces in the "City Hall" lot that will be eliminated are either fully occupied at peak and/or will need to be replaced.

Projected peak parking demand Civic Center office.
Current study area peak parking demand.

Source: Walker Parking Consultants, 2011

TOTAL FUTURE DEMAND

Table 5 shows a total projected peak future demand of 472 parking spaces during the noon hour peak and contains a breakdown of this demand by generator and/or location:

- Zones 1 – 3: The peak parking demand of 274 vehicles for Zones 1 – 3 was observed during the most recent (2010) parking occupancy counts performed by the City.
- "Peripheral" parking: As noted earlier, the City identified 40 on-street and 29 off-street parking spaces (contained in the Whole Foods garage) in addition to the public parking spaces surveyed that could accommodate some demand from the Downtown core. Although specific occupancy data is not available for these spaces, City staff identified levels of infrequent to heavy use of the on-street spaces, which were used to estimate a peak demand of 16 spaces. Current occupancy rates for the 26 spaces available to the general public in the Whole Foods garage that are provided as public parking were assumed to be 20% to 40% in accordance with our experience with parking demand for parking in specialty supermarkets. This estimate is likely conservatively high given City staff's observations that parking demand, even for the supermarket, tended to result in spaces always being available. Occupancy rates for the public spaces are likely lower than demand for the supermarket spaces.
- City Hall Lot - currently reserved spaces: Demand for these spaces, and the spaces that will need to replace them, was assumed to be 100%. These spaces were not included in the City's 2010 parking count as they are reserved and not available for public parking.
- 999 Grant: The 65-space demand projection was provided by City staff, based on a Fehr and Peers parking study performed in 2008. We show a reduction in demand for demand outside of the lunch hour as a result of the project's restaurant component.

NEW CIVIC CENTER

The earlier analysis demonstrates that demand for an additional 81 parking spaces will be generated by the new Civic Center office building in Novato's downtown core during the peak demand, which we project to occur during the noon hour. A demand for an additional 106 and 95 spaces will be generated during the 10:00 AM and 2:00 PM hours respectively. Despite this increase in parking demand, we note that the highest demand for parking overall Downtown will still occur during the noon hour for which the parking system should be planned

In Table 5 we show the total projected demand for parking within the study area once the Civic Center office building is fully operational.

Table 5: Total Future Parking Demand - Downtown Core

Parking Demand by Location[A]	12:15 PM	2:15 PM
2010 Occupancy - Zones 1 - 3	274	224
Peripheral Spaces	28	22
City Hall Lot - Demand for Reserved Spaces	24	24
Projected Add'l Demand - New Civic Center	81	95
999 Grant Development	65	55
Total Projected Future Demand	**472**	**420**

[A] The source of the parking demand projections for each generator is discussed above.

Sources: City of Novato (2010 and 2011), Fehr and Peers (2008), Walker Parking Consultants (2011).

SPECIAL EVENTS

We note that City staff has stated that on infrequent occasions increases in parking demand could occur as the result of special events that take place at the 901 Sherman property, multiagency training at the Police Department Headquarters or the Farmer's Market, for which "set-up" begins at 3:00 PM. While these events will affect parking demand, we note that the parking system supply should be planned and provide for typical peak days and not infrequent events. In our experience, providing parking spaces that will sit empty most of the year is unnecessarily expensive, wasteful and creates numerous aesthetic, planning and potentially safety challenges. City staff has suggested that parking impacts from these events should be addressed through management strategies; we concur.

TOTAL FUTURE SUPPLY

Per discussions with the City, we understand that there are two possible scenarios with regard to the supply of parking in the study area once the office building is constructed. They are as follows:

SCENARIO 1: PODIUM PARKING - NO EXISTING SPACES ELIMINATED

Under this scenario, the new building is built on a podium above the City Hall Parking Lot, preserving the parking spaces below. One option presented by the architect would add four (4) spaces and the other option would subtract four (4) spaces. However these numbers will change over time with further engineering feasibility analysis; for the purpose of this study we assume no net change in the number of spaces.

SCENARIO 2: NO PODIUM - CHANGES IN THE NUMBER OF SPACES IN AND ADJACENT TO PARKING LOT

Under this scenario, we assume that the building is not constructed on a podium but that some existing parking spaces in the City Hall Parking Lot are eliminated. Based on information provided by the architect, we assume the following changes in the number of spaces provided:

- An increase of seven (7) spaces on Cain Lane;
- A loss of 34 reserved and public parking spaces on the City Hall/Civic Center site;[3] and
- A total increase of four (4) on-street parking spaces along Machin and Sherman Avenues.[4]

The result is a net loss of twenty three (23) parking spaces in and around the planned development site.

OTHER ADDITIONAL SPACES – 999 GRANT AND SMART LOT

In addition to the changes noted above, we note the following potential additions to the parking supply within the study area:

- Six (6) public spaces to be included as part of the 999 Grant project (built on land provided by the Police Department);
- 21 spaces provided for the development; and
- 75± spaces in the SMART lot, located on the eastern edge of the study area.[5]

[3] Our data currently indicates 53 parking spaces in the City Hall Parking Lot, 29 of which are public. Of the 34 surface lot spaces that would be lost, we assume that 10 would be public and 24 would be reserved spaces.

[4] We assume an increase of four (4) on-street parking spaces, three (3) on Machin Avenue and one (1) on Sherman Avenue. We understand that some analyses project the addition of one to five more angled parking spaces; our assumption may be conservative.

The table below shows the results of these and other changes in the parking supply within the study area.

Table 6: Future Parking Supply – No Podium Scenario

	Parking Spaces
Current Supply (Table 1)	484
Net change around development site (no podium)	-23
Net change in parking supply - 999 Grant	27
Potential Spaces in SMART Lot	75
Total Future Supply	**563**

FUTURE PARKING ADEQUACY

Based on the future public parking supply number for the study area of 563 spaces, an effective supply factor of 0.92 and the parking demand projections described above, Table 7 shows a surplus in the total number of parking spaces in the study area after the new Civic Center office building becomes operational, under both scenarios.

We note that in order for the parking supply to be used appropriately and to minimize inconvenience to the public, proper parking management measures including the enforcement of appropriate time restrictions for on- and off-street parking will need to be implemented. In addition, as noted elsewhere in this letter report, Walker found the private off-street parking supply in the area to be significantly underutilized overall. As all the parking in the area works as one parking system, efforts to use the private parking supply as it is intended would increase the parking adequacy for both the public parking supply and the entire parking system.

We note that this future parking adequacy calculation does not take into account the significant availability of private parking spaces in the area, even during the peak parking demand times. We suggest that at least some private parking be included in this analysis and that the adequacy of the parking supply in the future is therefore greater than an examination of the public parking supply suggests.

[5] While preliminary drawings have been created that demonstrate a potential supply of roughly 100 parking spaces in the SMART lot, these drawings are conceptual and do not include an engineering analysis. Preliminary review indicates that mandated storm water prevention measures, circulation, feasibility and other amenities such as landscaping elements and lighting would the decrease the supply of spaces. In order to be conservative, we assume 75 potential spaces in the SMART lot. Any additional development in the lot would further decrease the supply and likely increase the demand for parking spaces in that location.

Table 7: Future Parking Adequacy

	Scenario 1: Podium (no change in parking supply)		Scenario 2: No Podium (net loss of spaces)	
	12:15 PM	**2:15 PM**	**12:15 PM**	**2:15 PM**
Future Public Parking Supply[A]	586	586	563	563
Effective Supply Factor[B]	0.92	0.92	0.92	0.92
Effective Supply	540	540	518	518
Total Projected Future Demand for Parking Spaces	472	420	472	420
Parking Adequacy	**68**	**120**	**46**	**98**

[A]Data from the City indicates a current supply of parking spaces within the study area of 394 spaces, but 430 spaces in 2009. One reason for the 36-space discrepancy was that the 24 reserved spaces in the civic center lot were included in the 2009 numbers, but not in the 2010 numbers as they are not considered public spaces. The remaining discrepancy of 12 spaces is partially due to traffic circulation and parking changes related to the Millworks development.

[B]We use a blended effective supply ratio to account for both employee and visitor parking demand.

Source: Walker Parking Consultants, 2011

FUTURE PARKING SUPPLY – NOVATO POLICE DEPARTMENT

Although we have projected that, with the addition of parking supply in the SMART lot, the number of parking spaces within the study area should be adequate to accommodate future parking demand, provided that the public parking supply is appropriately managed, we note that providing the Police Department with the reserved spaces in the location that it may need them likely presents more than a challenge of satisfying the number of parking spaces needed.

When meeting with Police Department staff and discussing Department needs Walker design staff observed the Police headquarters site and opportunities to add at least eight additional parking spaces including:

- an area of at-grade parking in front of the Police Department where spaces are significantly wider than necessary. These spaces could be reasonably and comfortably reduced such that four (4) more spaces could be added;
- a plaza area at the entrance to the Police Department where an additional four (4) spaces could be reasonably added as well.

Other areas on the Police headquarters' site (including the area north of the building, at the entrance to the garage) could likely also accommodate more surface parking spaces albeit likely requiring a structural effort to do so. We note that these spaces, in and of themselves, would not be sufficient to replace the 24 reserved spaces that may be eliminated at the planned Civic Center office building site.

CONCLUSION

While the existing supply of public parking in Downtown Novato is more than adequate to meet the current demand, the addition of the new Civic Center office building and the resulting increase in parking demand and elimination of parking supply, will severely strain the parking supply east of Redwood Highway. Additional development planned for the area then results in a shortage of parking. This shortage can be remediated with the addition of parking spaces in the SMART lot although significant parking management efforts (and the costs associated with enforcement) will be required for the parking system to function efficiently. We would suggest that these efforts will be required moving forward regardless of the type of development and associated parking that comes to the Downtown. We note that there are significant numbers of underutilized private parking spaces in and around Downtown as well, many of which are in locations that are generally more convenient than the SMART lot.

Parking is an important consideration for a built out area such as the downtown where available land is scarce and future development is largely contingent upon parking availability. At the same time, the ability to share parking, offer an attractive pedestrian environment and thereby more efficiently use land and increase the intensity of development can be viewed as an opportunity. Nonetheless, a key consideration for virtually all proposed downtown projects would be the impact on future downtown business attraction, revitalization, and overall downtown vibrancy.

In this way, it is our understanding that the parking impacts of a new city office building that does not provide sufficient on-site parking has the potential to impede future downtown development. According to the City of Novato's current Downtown parking ordinance, parking is not required for new buildings of 10,000 sf or less and may or may not be required for a building with greater than 10,000 sf of new or expanded area if a parking study shows it would not have impacts. However, we understand that any development project that causes peak Downtown parking occupancy to approach or exceed the 90% threshold jeopardizes the flexibility in parking requirements that could be provided to other new development. We have projected that a non-podium parking scenario (such as the Scenario 2 discussed) results in parking occupancies during the lunchtime peak that exceed the 90% threshold; this suggests that the parking waiver would be eliminated.

It is in this way that the under-parking a City office building project may impede future private and public development downtown. Requiring new development to provide parking in a land constrained area such as downtown may hinder the growth and vibrancy of downtown. City staff

has identified to Walker vacant buildings such as the Community House, Simmons House, Hanen House, and Scott House that do not have onsite parking but would likely generate peak hour demand depending on the manner in which they were reused.

As is usually the case in smaller downtowns that face parking challenges, the issue facing Downtown Novato is just as much related to the quantity of available spaces as how these spaces are managed. While providing more public spaces can ameliorate the impact of an increase in parking demand, the City will need to focus on encouraging greater utilization of existing spaces as well. Short-term parking spaces will need to be managed such that they serve customers and visitors. Long-term parkers, primarily employees, may not have parking spaces available on or immediately adjacent to the site where they work.

The purpose of a parking supply is ultimately to increase access to an area or destination. Therefore parking should not be analyzed in a vacuum, but looked at as part of a larger system of "access." To the extent that more employees will be working downtown, we assume that downtown business will have access to a larger customer base, not as a result of a larger parking supply, but through more people working in the area that will already be parked and then become pedestrians. In this way, walking distances and parking supply are inevitably linked.

A downtown parking system generally cannot and be expected to provide parking users with the same parking supply that they would experience in a shopping mall or office park (although it should be noted that significant walking distances are also often required in these types of locations, just as in a downtown, but "line-of-sight" and other factors often result in different perceptions of those distances). In our experience, a downtown thrives because of the density and accessibility of a number of destinations, which is made possible by the condensing of the parking supply into spaces and facilities that can be shared.

The data which was both provided by the City and collected by Walker suggests that some parkers are not parking in areas that have been designated for them, but are instead competing with customers and visitors by parking in short-term spaces. To the extent that (particularly short-term) parking restrictions can be more appropriately enforced, we project that the number of usable parking spaces in the area would, effectively, increase as more private and reserved parking spaces would be used for those for whom they are designated. In short, by any appropriate method, the supply of private spaces is a resource that should be optimized to the extent possible.

Ultimately the ability of a parking system to accommodate a larger number of cars has as much to do with how it is managed as the number of spaces. Efficient parking management in any downtown requires some degree of walking and the associated attention to the quality of the pedestrian experience. Arguably, similar issues exist in suburban style office parks and developments where the experience of walking through parking lots or parking structures, often for comparable distances, must be considered as well. There are tradeoffs for visitors and employees related to both types of development. However, most of these tradeoffs are related to factors that extend beyond, and may in fact be given more weight than, strictly parking issues.

These include the density of businesses and destinations that are accessible once the visitor has exited their car, the pedestrian experience, a sense of place and the overall ambience of a downtown. These factors should be considered in their entirety. In our experience, ultimately, the destination and not the amount of parking, is the draw.

Thank you very much for the opportunity to present our findings to you. We look forward to your comments and discussing this draft report with you.

Sincerely,

WALKER PARKING CONSULTANTS

Steffen Turoff
Consultant

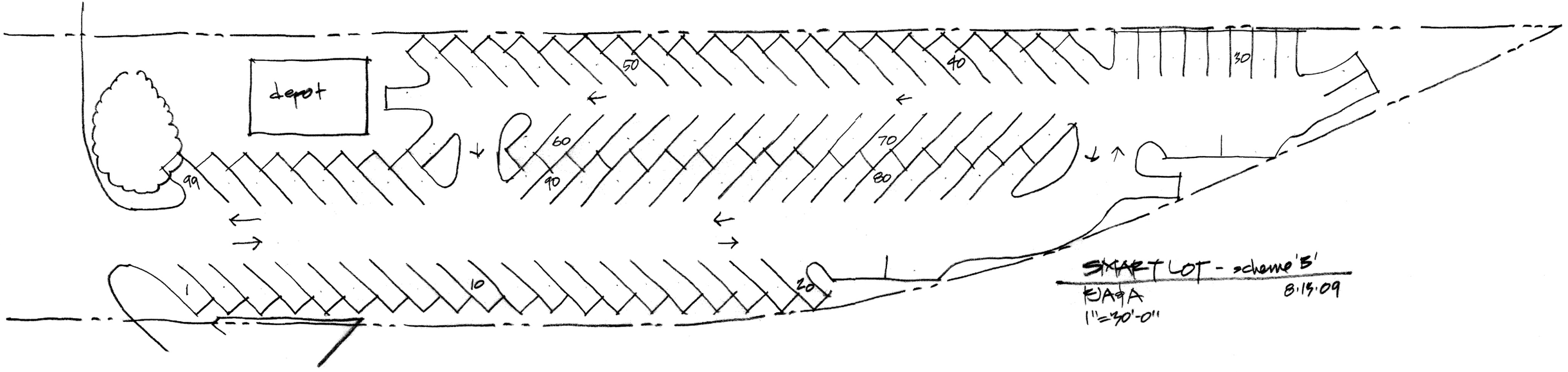
Jorge Romero
Project Manager

SIT:sit

cc: Ezra Kramer, Walker Parking Consultants

Attachment 1 – SMART lot – Scheme B
Attachment 2 – 999 Grant Parking Study
Attachment 3 – Whole Foods Parking Plan

Attachment 1
SMART Iot – Scheme B


depot
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SMART LOT - scheme 'B'
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Attachment 2
999 Grant Parking Study

FEHR & PEERS
TRANSPORTATION CONSULTANTS

MEMORANDUM

Date: August 7, 2008

To: Chip Fuller, Catlin Properties

From: Greg Riessen, Fehr & Peers

Subject: ***999 Grant Parking Analysis Update***

SF08-0387

Fehr & Peers is pleased to submit this memorandum documenting our parking analysis for the proposed 999 Grant development in downtown Novato, California. The proposed development would demolish a vacant two-story office building and replace it with a two story development, consisting of retail, bank and restaurant uses on the ground floor and office above. Fehr & Peers performed a parking analysis for a previous proposal on this site in April 2006. This memo documents the parking impact associated with the proposed project. Figure 1 shows the project location.

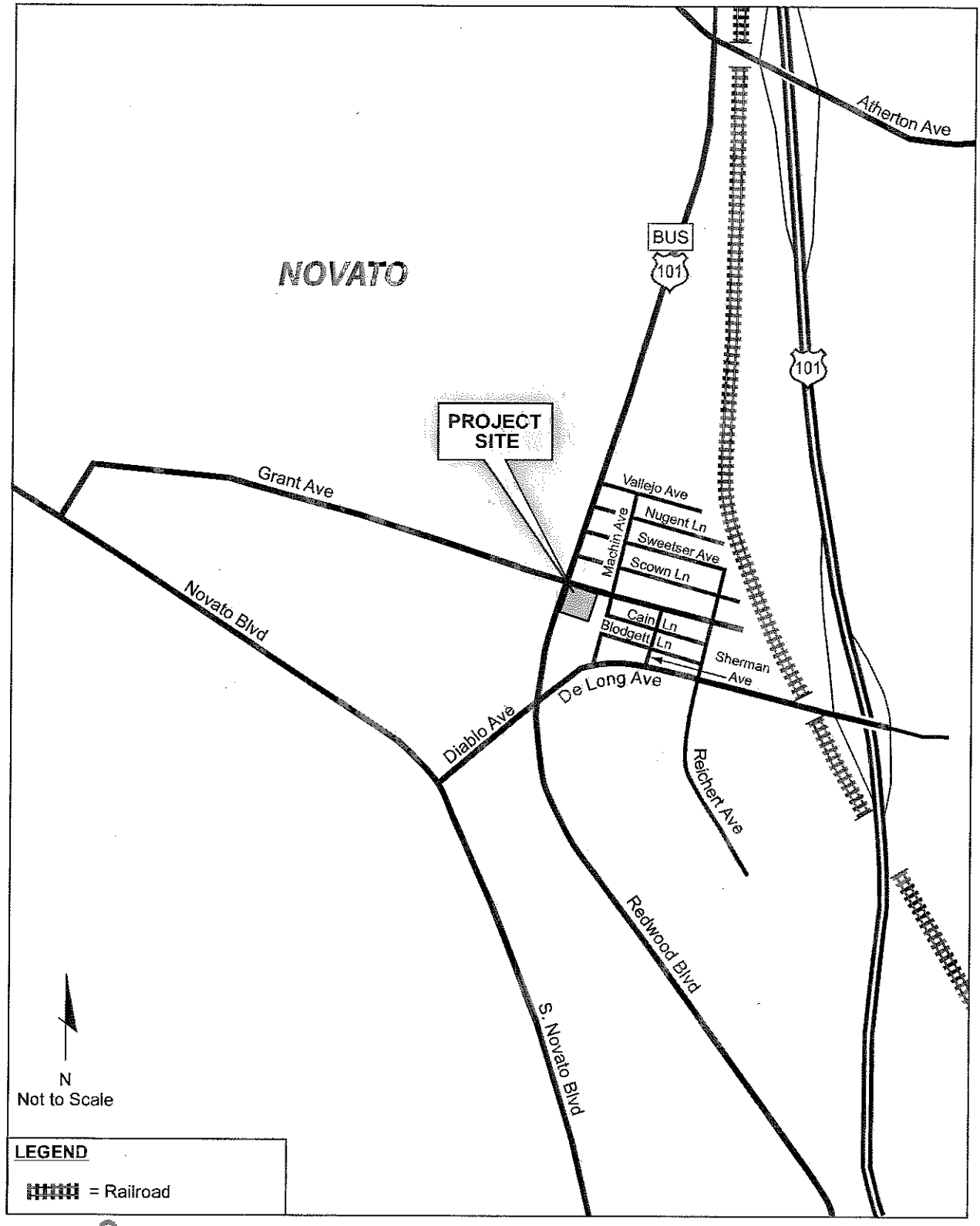
There are two purposes to this parking study. First, to determine if the on-site parking spaces at 999 Grant Avenue, combined with available public parking within walking distance of the site, would meet the proposed project's parking demand. Second, to ensure that the parking demand of the project would not cause the parking occupancy rate within the study area to exceed the City's threshold of 90 percent occupancy, per the City's Zoning Ordinance, §19.30 of the Municipal Code.

This study evaluated the proposed project parking demand, required supply according to the City of Novato parking code, potential for shared parking between the proposed restaurant and office uses, and available public parking in the vicinity of the project. This memorandum documents the results of the study.

PROJECT BACKGROUND

The project would demolish a vacant two-story office building and build in its place a two-story structure with 4,500 square feet of retail space, a 3,000 square foot restaurant and a 2,500 square foot bank on the ground floor, and 10,000 square feet of office space on the top floor. The existing site provides 24 parking spaces, which are currently utilized by adjacent land uses. With the construction of the proposed project, vehicles using the existing spaces would be displaced to public spaces on-street or to off-street public parking lots.

The project will have 21 parking spaces within the property line. As part of the project, an existing retaining wall between the project site and the existing Novato police station will be removed. In its place, an additional 13 parking spaces would be constructed, for a total of 34 spaces. Figure 2 shows the project site plan.



999 Grant Avenue Parking Study

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June 2008
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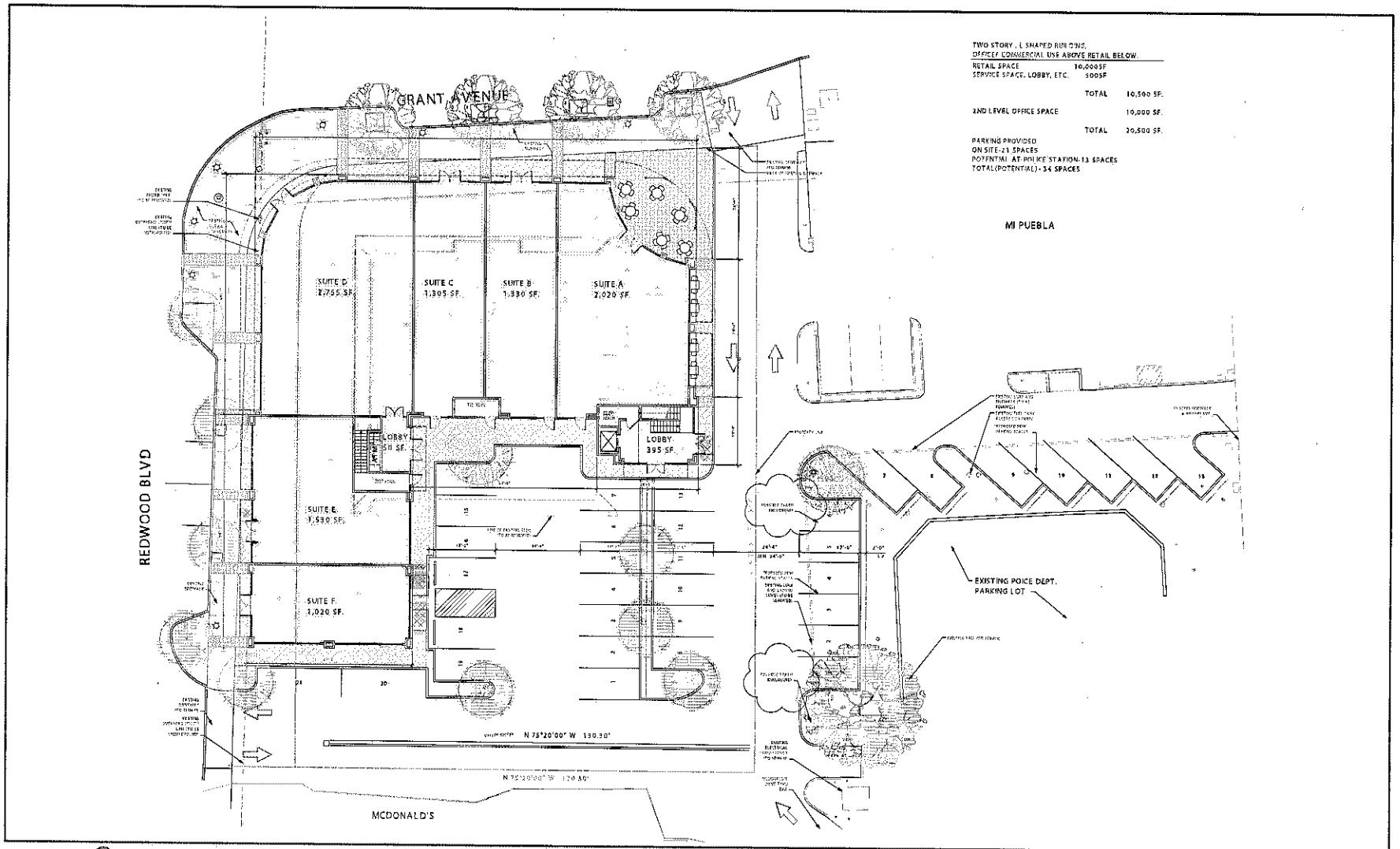
STUDY AREA

FIGURE 1



999 Grant Avenue Parking Study

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SITE PLAN

FIGURE 2

PARKING SUPPLY AND DEMAND

Parking supply refers to the number of parking spaces provided, while parking demand refers to the number of parked vehicles. This study evaluated the parking supplies that would be required for the development based on the City of Novato *Municipal Code Chapter XIX Zoning 19.30 Parking and Loading* as of June 2008. It also provides estimates of parking demand based on information in the Institute of Transportation Engineers' (ITE) *Parking Generation*, 3rd Edition (2004) and Urban Land Institute's (ULI) *Shared Parking*, (2nd Edition). The results are presented in Table 1.

TABLE 1
PROPOSED PROJECT PARKING SUPPLY AND DEMAND ESTIMATES

Land Use	Size	City Code Parking Supply[1]	ITE Peak Parking Demand of Each Use[2]	Peak Hour (11 am-12 pm) Parking Demand[2,3]
Bank	2,500 sf	5	6	4
Restaurant	3,000 sf	12	17	16
Retail	4,500 sf	15	12	11
Office	10,000 sf	33	28	27
Total		***65***	**63**	**58**
Total with 10% Vacancy[4]			***70***	***64***

Notes: sf = square-feet

1. Based on Table 3-7 *City of Novato Municipal Code Chapter XIX Zoning 19.30 Parking and Loading* as of June 2008, for uses in the downtown overlay area. Bank should supply one space for each 500 square feet, restaurant should supply one space per each 250 square feet, retail should supply one parking space per 300 square feet and office should supply one parking space per 300 square feet.
2. Based on Institute of Transportation Engineers' (ITE), *Parking Generation*, 3rd Edition (2004) average rate of 2.30 vehicles per 1,000 square feet of bank, 5.55 parked vehicles per 1,000 square feet of high-turnover (sit-down) restaurant, 2.65 parked vehicles per 1,000 square-feet of shopping center (Land Use Code 820) and 2.84 parked vehicles per 1,000 square-feet of office building (Land Use Code 701).
3. Based on Urban Land Institute, *Shared Parking*, 2nd Edition for community shopping center, family restaurant, bank and office, the peak overall parking demand for the four uses would occur between 11:00 a.m. and 12:00 p.m. when the retail use would have a parking demand of 85 to 95 percent, the bank will have a demand of 60 percent and the office and restaurant uses would have a parking demand of 90 to 100 percent. Therefore, parking supply is reduced by five spaces when shared parking is taken into account.
4. ITE and *Shared Parking* calculate parking demand. The parking supplies to accommodate these demands are estimated by applying a 10 percent factor as recommended by *Parking*, ENO Foundation to ensure drivers can locate a space within the parking lot without re-circulating through the parking areas. This is consistent with the City's zoning ordinance which requires a vacancy of 10 percent within downtown.

Source: Fehr & Peers, 2008.

City Code Requirements

Within the downtown overlay district, City code requires one space per 300 square feet for general retail, one space per 500 square feet of bank, one space per 250 square feet of restaurant and one space per 300 square feet for office (above the ground floor). As Table 1 shows, City code requires the project to provide a supply of 65 parking spaces.

ITE Parking Demand

ITE estimates an average peak parking demand of 2.65 parked vehicles per 1,000 square feet of retail, 5.55 parked vehicles per 1,000 square feet of restaurant, 2.30 parked vehicles per 1,000 square feet of bank and 2.84 parked vehicles per 1,000 square feet of office. Table 1 shows the peak demand for each use. If each use's peak demand were to occur simultaneously, this project would require 63 spaces.

The ITE rate calculates parking demand. To calculate parking supply based on parking demand projections, *Parking*, ENO Foundation, recommends applying a factor of 10 to 15 percent to ensure that drivers are able to locate an available parking space without re-circulating through the parking areas. Consistent with the City's parking code, which establishes a maximum parking occupancy of 90 percent (or a parking vacancy of 10 percent) within downtown, a factor of 10 percent was applied to the parking demand estimates. As shown in Table 1, the applicable parking supplies to meet the estimated parking demand would be 70 spaces, based on ITE rates and assuming that peaks for individual land uses occurred simultaneously.

Shared Parking

Parking demand peaks at different times for different land uses. Therefore, the overall peak parking demand of a mixed-use development may be lower than the sum of the peak demands for the individual uses. Accordingly, the provided parking supply may be reduced, especially if the spaces are not assigned to individual uses and can be shared among the uses. This concept is referred to as "shared parking."

The shared parking concept was applied to the development to determine whether a reduction in parking supply and demand would result. Peak parking demand for the development would occur between 11:00 a.m. and 12:00 p.m. with the retail use at 85 to 95 percent of the total parking demand, the bank use at 60 percent of total demand, and the office and restaurant uses at 90 to 100 percent of total demand. Since most of the uses peak at approximately the same time, the ability to share parking is low. As shown in Table 1, the peak parking demand using shared parking would be 58 parked vehicles for the building. The parking supply needed to meet the calculated shared parking demand (90 percent occupancy rate) would be 64 spaces.

STUDY AREA PARKING SURVEY

A study area perimeter was established around the project site, to determine if the 90 percent threshold is currently met, or if the project would cause that threshold to be exceeded. The study area, which represents a typical walking distance from the project site, is shown in Figure 3.

As part of the City mandate to maintain 90 percent parking occupancy downtown, the Planning Division of the Community Development Department performs an annual downtown parking occupancy survey. Each block of each downtown street is surveyed at noon, 2 pm and 5 pm to determine peak occupancy rates. The survey determined that, within the project study area, there exist 386 on-street parking spaces. The most recent survey was conducted in November 2007.

Additionally, four off-street parking lots were surveyed by Fehr & Peers in June 2008. A city-owned lot with 37 spaces (signed for 3 hour parking from 9 am to 6 pm), is located between Cain Lane and Blodgett Lane, and between Sherman Avenue and Reichert Avenue. A second, smaller city lot with no time restrictions is located immediately to the north across Cain Lane, with 11 spaces. One block to the east is a third city lot just north of City Hall; some of the spaces require a permit, but there are 25 spaces which do not (signed for 2 hour parking from 9 am to 6 pm). The fourth lot that was surveyed is the private lot at the existing structure. As noted above, it has 24 spaces which are currently utilized by adjacent land uses.

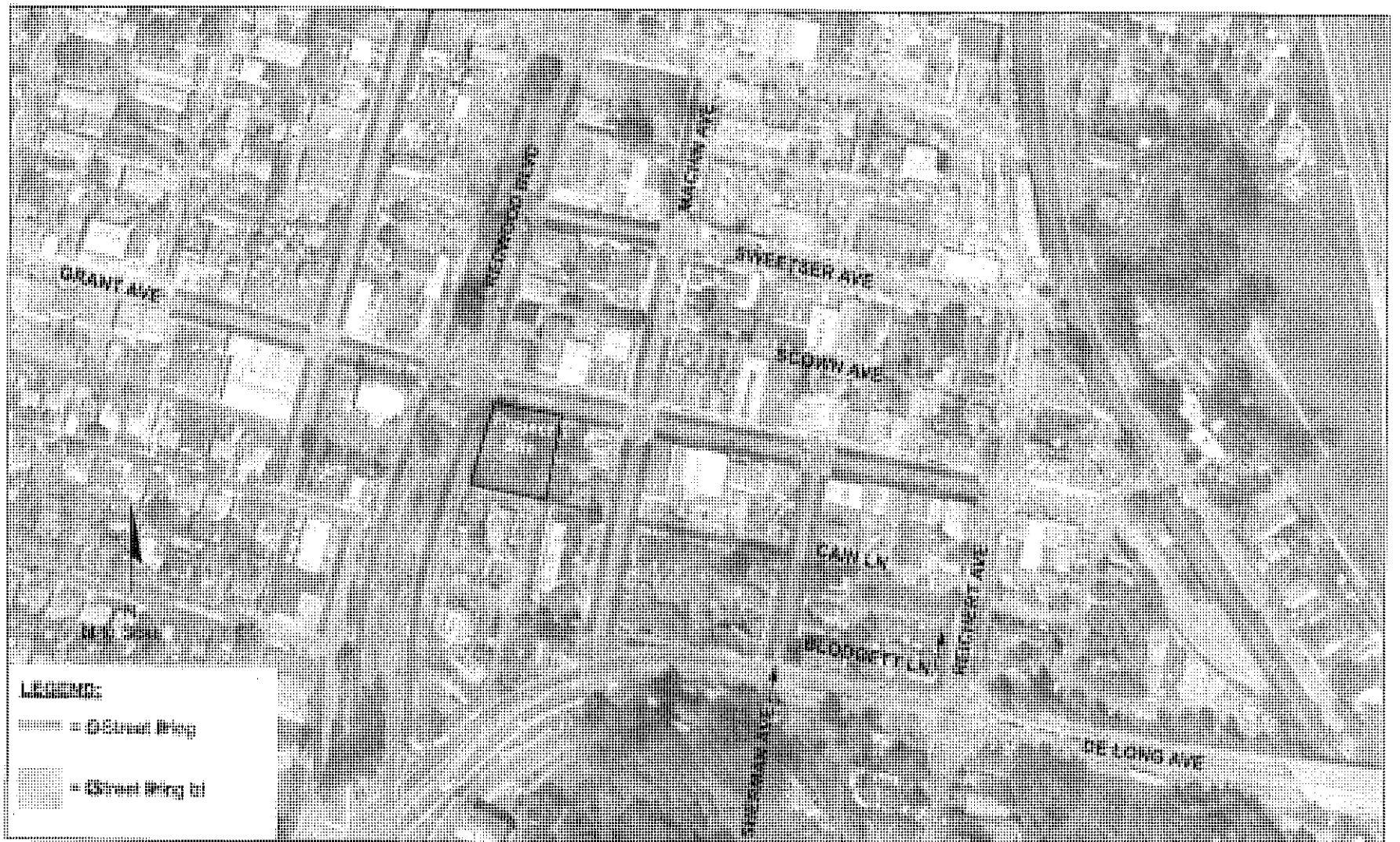
The total number of public off-street and on-street parking spaces near the site is 459 spaces (excluding the existing private lot at the site). Table 2 presents the overall occupancy within walking distance of the project site. Parking survey results are presented in the Appendix.

TABLE 2
EXISTING STUDY AREA PARKING DEMAND BY HOUR

Time	Number of Vehicles Parked	Occupancy (Number of Parked Vehicles/Number of Spaces)	Available Spaces
12:00 p.m.	307	67%	152
2:00 p.m.	270	59%	189
5:00 p.m.	267	58%	192
Average	***281***	***61%***	***178***

Source: City of Novato 2007, Fehr & Peers 2008.

As shown in Table 2, the peak parking demand occurs at 12 pm, where 67 percent of public parking spaces are occupied near the project site.



Fehr & Peers
TRANSPORTATION CONSULTANTS

June 2008
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STUDY AREA PARKING SUPPLY

FIGURE 3

As noted earlier, vehicles from adjacent land uses currently make use of the existing lot at the project site. The survey revealed that occupancy of the 24 spaces at the site was 15, 12 and 7 vehicles at noon, 2 pm and 5 pm, respectively. Upon completion of the project, these vehicles would be displaced to public parking spaces. The 2 pm survey (12 vehicles) counted vehicles which likely were all commuters who work at nearby land uses, and excluded any vehicles using the parking during lunch. These 12 vehicles would be displaced and would have to find alternative, all-day parking, because most of the downtown streets and public lots are signed for 2 to 4 hour parking limits. The site would also generate its own parking demand, as shown in Table 1.

Assuming that the project will require 70 parking spaces (worst-case from Table 1), but only 34 are built on site, 36 more spaces will be necessary. Table 3 shows the overall downtown parking occupancy at the peak hour (12 pm), with the added demand of 36 vehicles from the project and 15 displaced vehicles that used to park at the project site.

TABLE 3
PROJECT STUDY AREA PEAK HOUR PARKING DEMAND

Time	Number of Vehicles Parked	Occupancy (Number of Parked Vehicles/Number of Spaces)	Available Spaces
12:00 p.m.	358[1]	78%	101

1. Assuming 307 parked vehicles, plus 36 vehicles from the project, plus 15 displaced vehicles.
Source: Fehr & Peers, 2008.

The project sponsor has indicated that the 13 parking spaces to be built on the existing retaining wall may not be constructed. If these parking spaces were not built, this would raise the number of cars parked off the site by 13, bringing the total number parked from 358 to 371. This would raise the parking occupancy from 78% to 81% downtown, which is still well under the 90% occupancy mandate.

CONCLUSION

As discussed above, the project will require a parking supply of 65 spaces according to City code, 70 according to ITE rates, and 64 according to the shared parking concept. Using the most conservative demand analysis (the ITE rate), the project would need a supply of 70 vehicles. Of these 70 vehicles, 36 of them, plus an additional 15 vehicles displaced by the project, would need to park off-site, either on the street or in a lot.

12 of the vehicles displaced at the existing vacant site are likely commuters seeking all-day parking. While most of the streets and public lots in the survey have a time restriction designed to discourage commuter parking, there are parking spaces available downtown which could accommodate these commuters. These include the parking lot on the north side of Cain Street, First Street, and Front Street.

Adding these 51 vehicles to the surveyed downtown parking demand, the overall peak hour downtown occupancy will increase from 65 to 78 percent (or 81 percent if the retaining wall is not converted to parking spaces, as noted above). This is only during the peak hour of parking demand (at 12 pm); during the rest of the day, parking occupancy rates will be lower.

This is below the 90 percent threshold as set by the City ordinance. Therefore, parking supply for the proposed development could be provided on-street or within public parking lots (even accounting for displacement of parking demand currently accommodated on-site). No new parking supplies would be needed to remain below the City's occupancy threshold.

We hope you have found this memorandum useful. Please contact Greg Riessen at (415) 348-0300 with any questions.

Attachment 3
Whole Foods Parking Plan

PARKING PLAN

for

Millworks
Mixed-Use Project
900 Reichert Avenue & 790 Delong Avenue

In

Novato, California

4/30/09

APPROVED BY:
City Attorney
Engineering
Planning
5/4/09

Prepared by:
International Parking Design, Inc.
1201 Marina Village Parkway, Suite 100
Alameda, CA 94501
510-473-0300

Prepared for:
Signature Properties
4670 Willow Road, Suite 200
Pleasanton, CA 94588
925-463-9350

Project Description:

The project is located in the City of Novato, in a triangular site between Scott Court and Delong Avenue near Highway 101. The Project consists of a commercial component on the first two levels which includes a 37,520 s.f. of Whole Foods grocery store and 199 parking spaces on two levels of parking and a residential component above grocery store and parking consisting of 124 residential units and parking for 187 cars. The parking component of the project can hold 386 cars. A breakdown of the parking requirements for both the commercial and residential portion of the project are outlined in Exhibit A.

Parking Operation:

A. Whole Foods Store Parking (199 – spaces levels one and two)

1. The access to the lower level of parking is off Scott Court and the second level is off Delong Avenue. There is an internal "express ramp" along Delong Avenue connecting both floors to provide convenient access to all the parking for customers. Schematic of the lower level and upper level of the commercial parking are attached as Exhibit B and C.
2. All parking spaces will be restricted to 2-hour parking. Of the 199 parking spaces 160 will be signed "Whole Foods Parking Only". Enforcement will be implemented by Whole Foods private security and cars parked longer than 2-hours will be subject to tow.
3. The parking garage will be open during business hours which are anticipated to be 6:00 am to 9:00 pm. Seven days a week.

B. Residential Parking (170 – spaces of which 17 will accommodate 2 cars)

1. Access to the residential parking garage will be off of Delong Avenue on the third level of the structure (see attached Exhibit D). The entrance to the residential parking garage will be secured with a roll-up door controlled by an Automatic Vehicle Identification ("AVI") system.
2. Each unit will have assigned a designated parking space at close of escrow.
3. Prior to close of escrow each buyer will acknowledge there parking space in writing.
4. Parking will be common area and owned by the homeowners association.
5. One bedroom units will be assigned one parking space; the majority of the two bedroom units will be assigned 2 parking spaces or 1 space that can accommodate 2 cars; 3 bedroom units will be assigned two spaces.

Whole Foods Mixed Use Project Parking
Exhibit A.

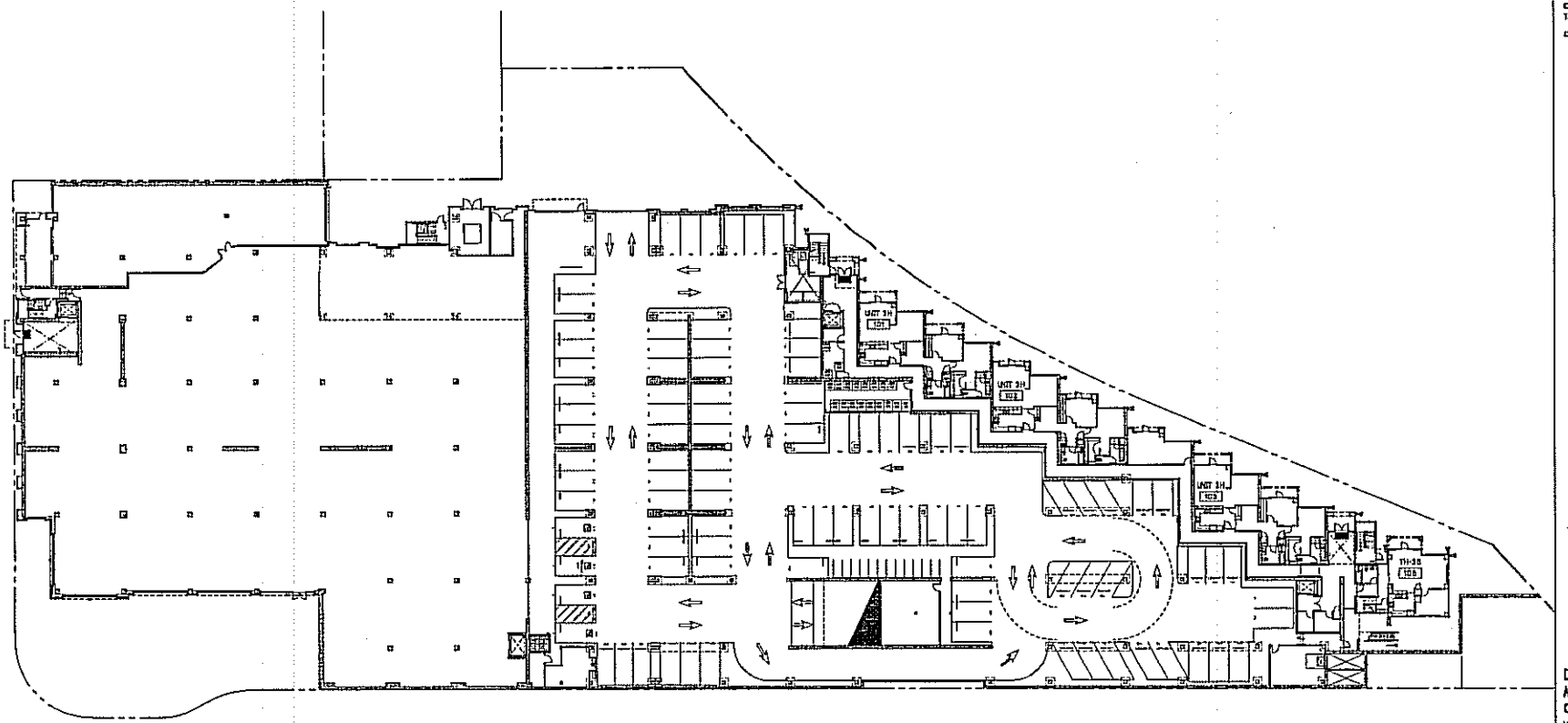
Table 1. Parking Computations and Ratios

Type	Required Parking Ratio	Proposed Project	Parking Spaces Required
1-bedroom unit	1 space per unit	43 units	43
2-bedroom unit	1.5 spaces per unit	73 units	110
3-bedroom unit	2 spaces per unit	8 units	16
Guest parking	1 space for each 4 units	124 units	31
Total residential parking required		124 units	200
General retail	1 space for each 300 sf, plus 1 space for each company vehicle, plus 1 space for each 1,000 sf of outdoor display area	37,520 sf + up to 10,254 sf Mezzanine	160
Total commercial parking required		**Up to 47,784 sf**	**160**

Table 2. Proposed Parking

Type	Proposed Parking	Required Parking	Shortfall/Surplus
Residential	187*	200	-13 spaces
Commercial	199	160	+39 spaces
Total	**386**	**360**	**+26 spaces**

* this number includes 170 individual spaces of which 17 can accommodate 2 cars



HARRISON KOMATSU IVELICH & TUCKER
ARCHITECTS PLANNING INTERIORS
510 16th Street, Suite 340
Oakland, California 94607
T. 510. 625. 1800
OAKLAND SAN FRANCISCO

DELONG AVE MIXED USE CONDOMINIUMS
NOVATO, CALIFORNIA

JOB NO. 1070
DRAWN CW
CHECKED HC
JOB CAPTAIN CW
DATE

DRAWING TITLE
1ST FLOOR PLAN

SCALE 1" = 10'-0"

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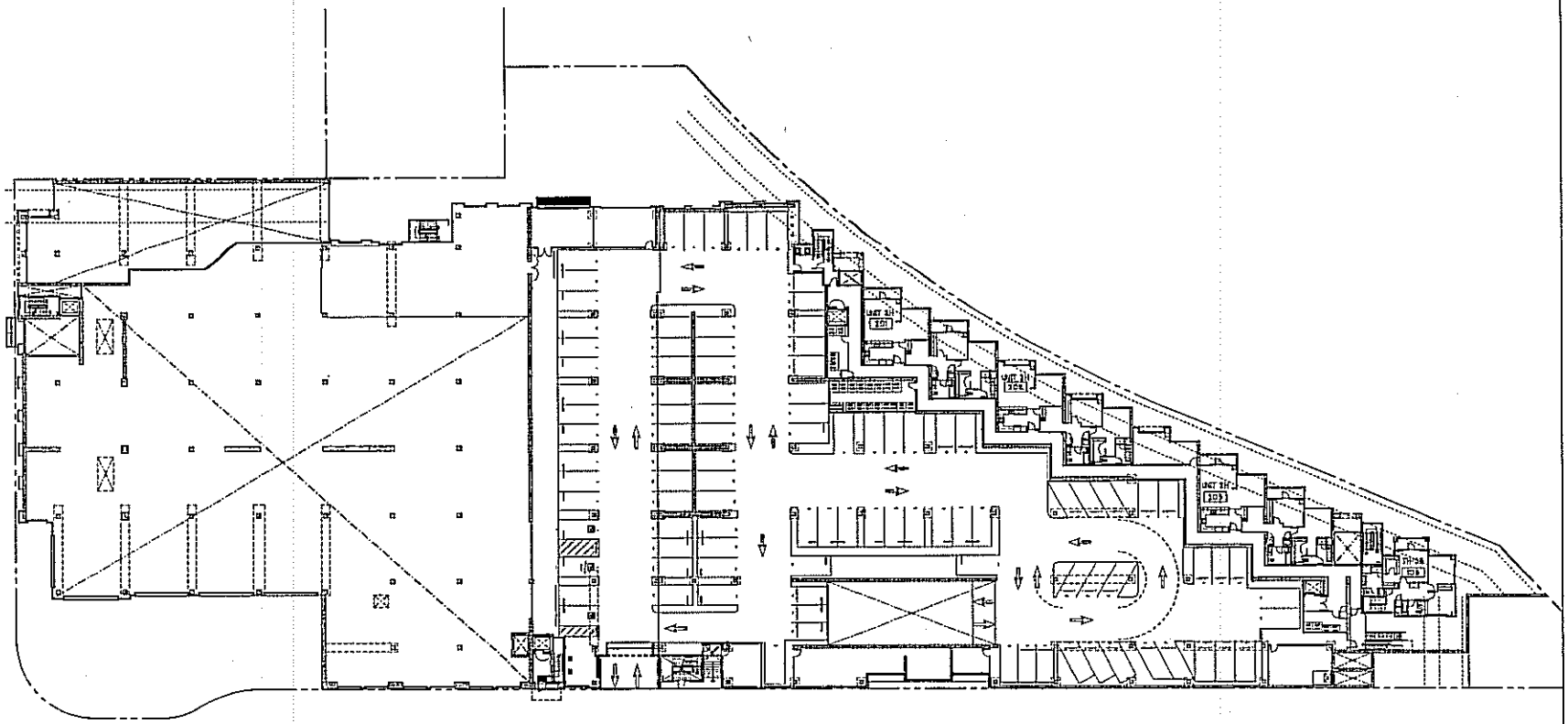

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ARCHITECTURE PLANNING INTERIORS

OAKLAND SAN FRANCISCO

DELONG AVE
MIXED USE
CONDOMINIUMS
NOVATO, CALIFORNIA

JOB NO. 8070
DRAWN CW
CHECKED RC
JOB CAPTAIN CW
DATE

DRAWING TITLE
2ND FLOOR PLAN

SCALE 1" = 10'-0"

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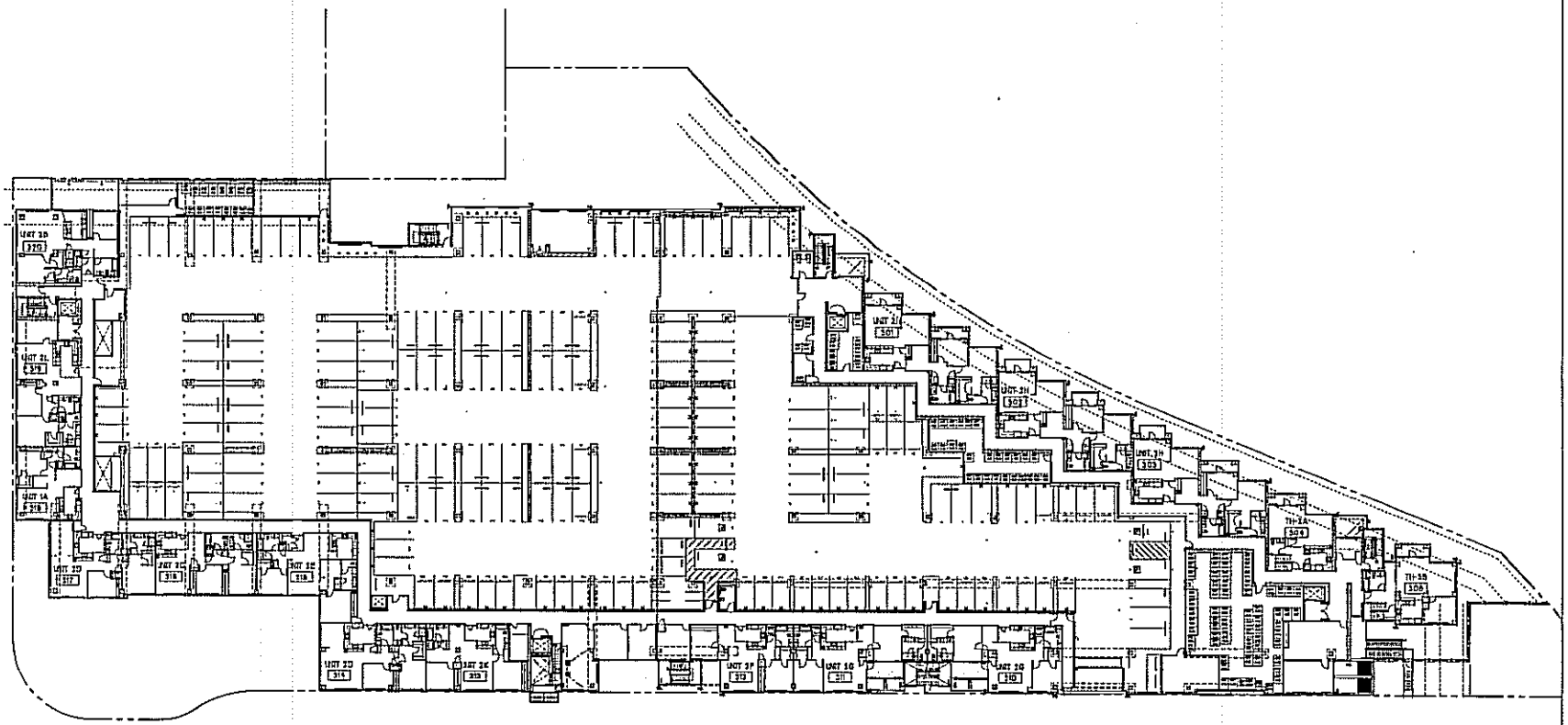

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OAKLAND SAN FRANCISCO

DELONG AVE MIXED USE CONDOMINIUMS

NOVATO, CALIFORNIA

JOB NO. 0715
DRAWN CN
CHECKED RC
JOB CAPTAIN CN
DATE

DRAWING TITLE

3RD FLOOR PLAN

SCALE 1" = 30'-0"

A2.3

Alan Lazure

From: Alan Lazure
Sent: Thursday, March 18, 2010 11:46 AM
To: Alan Lazure
Subject: Signature Parking

From: "Patrick Vanness"
Date: Wed, 6 Feb 2008 14:19:33 -0700
To: "Alan Lazure"
Subject: RE: IPD, Inc. Parking Operational Plan - Whole Foods

Alan,

The following is our response to the questions raised by Ellen regarding the Draft parking facilities plan. Please review and let me know if you would like to meet with Dilip from IPD and myself to discuss the parking garage operation further. If there are further comments let me know I would like to put this document in final form and attach to the CC& R's.

1) Will the Guest Parking be located in the Residential Garage? and if so, how will "Visitors" access the Residential Garage with the AVI security gate?

All guests parking in the residential garage will need to arrange access with the resident they are visiting upon arrival at the project. Access to the garage will be regulated by a security system that is designed to only grant access to those who have an electronic opener. Residents will be provided two openers when they close escrow.

2) Per Exhibit A Table 2, there is a shortage of parking in the Residential Garage (-13 spaces) but, extra spaces in the Commercial Garage (+39 spaces). Will Residents and/or their Guests be able to use the extra spaces within the Commercial Garage, or at least have 13 spaces to make up the loss in the residential garage? Is there direct access into the residential building from the Commercial Parking area for guests? Or will they have to go to the street?

Guests of residents will be able to use the retail garage in the same manor as the general public. The spaces in the garage will be signed either Whole Foods Parking Only with a two hour limit or just a two hour limit. Cars left in the garage after hours will have to wait until the next morning to move. Guests will be able to park for two hours without being subject to tow just like the rest of the general public. There is no direct access from the retail garages to the residential section of the project. The lack of direct access is intentional. In our experience the biggest concern of our homeowners is security. When a person buys in a multi-family building the security they feel regarding their environment relates to the security of the building common area. Our buyers want to know that only residents and invited guests are accessing the common areas of the project. Anyone visiting the site will access the project through a secure entrance either on Delong or Reichert. There will be a security system installed at those entrances to allow residents to regulate who can gain access to the building. If a guest parks in the retail garage they will enter the project through either the Reichert or Delong residential lobby. Unless previously arranged by a resident the guest will contact the resident they are visiting through the security systems located at the Delong and Reichert lobbies. No guest will be able to access the residential garage without prior arrangement of a resident. This is imperative to maintain the security of the project

3) It says that **ALL** of the parking spaces within the Whole Foods Commercial Parking Garage are restricted to 2-hours only and subject to towing. Where will the Whole Foods' employees park within the garage? I assume their

shifts are longer than 2 hours. This also would prohibit use by residents and their guests. (see my second comment above.)

Whole Foods will regulate the usage of the Retail Parking garage and therefore will allow there employees to park longer than two hours. There is no way to differentiate a residential guest from a member of the general public. All residential guests will have to follow the same rules as the general public.

Sincerely,

Patrick Van Ness

SCHEDULE I
PRICING DATA FOR CITY OF NOVATIO
ADMINISTRATIVE OFFICE BUILDING

RMW Architecture & Interiors
Architectural and interior design, sustainability consulting

LABOR CATEGORIES	Hourly rates from 7/1/11 through 9/30/13
Principal	$275
Principal	$225
Senior Project Manager	$165
Sr. Designer	$125
Architectural Design Director	$175
Interior Designer	$115
Jr. Designer	$95
Sr. Project Architect	$150
Project Architect	$135
Job Captain	$115
Specification Writer	$125
Project Administrator	$115
Project Assistant	$75
CADD/BIM Manager	$125
Intern	$55

SCHEDULE I
PRICING DATA FOR CITY OF NOVATIO
ADMINISTRATIVE OFFICE BUILDING

BKF ENGINEERS
Civil Engineering

LABOR CATEGORIES	Hourly rates from 7/1/11 through 9/30/13
Principal	$ 196.00
Project Manager	$162.00
Engineer/Surveyor III	$142.00
Engineer/Surveyor II	$124.00
Engineer I/Surveyor I	$110.00
Technician III	$120.00
2-Man Survey Crew	$240.00
	$
	$
	$
	$
	$
	$

SCHEDULE I
PRICING DATA FOR CITY OF NOVATIO
ADMINISTRATIVE OFFICE BUILDING

CHARLES M. SALTER ASSOCIATES, INC.
Acoustics

LABOR CATEGORIES	Hourly rates from 7/1/11 through 9/30/13
Senior Vice President	$250
Vice President	$230
Principal Consultant	$190
Senior Consultant	$145
Consultant	$125
Technical Assistant	$90

SCHEDULE I
PRICING DATA FOR CITY OF NOVATIO
ADMINISTRATIVE OFFICE BUILDING

GUTTMANN & BLAEVOET
Telecom/Security/AV

LABOR CATEGORIES	Hourly rates from 7/1/11 through 9/30/13
Principal in Charge	$231.00
Principal Telecom	$155.00
Senior Project Manager	$
Sr. Designer	$
Architectural Design Director	$
Interior Designer	$
Jr. Designer	$
Sr. Project Architect	$
Project Architect	$
Job Captain	$
Specification Writer	$155.00
Project Administrator	$
Project Assistant	$87.00
CADD/BIM Manager	$121.00
Intern	$

SCHEDULE I
PRICING DATA FOR CITY OF NOVATIO
ADMINISTRATIVE OFFICE BUILDING

Gabel Associates, LLC
Energy Modeling

LABOR CATEGORIES	Hourly rates from 7/1/11 through 9/30/13
Principal	$
Principal	$
Senior Project Manager	$100
Sr. Designer	$
Architectural Design Director	$
Interior Designer	$
Jr. Designer	$
Sr. Project Architect	$
Project Architect	$
Job Captain	$
Specification Writer	$
Project Administrator	$
Project Assistant	$
CADD/BIM Manager	$
Intern	$

SCHEDULE I
PRICING DATA FOR CITY OF NOVATO ADMINISTRATIVE OFFICE BUILDING

ROYSTON HANAMOTO Alley & Abey
Landscape Architecture

LABOR CATEGORIES	Hourly rates from 7/1/11 through 9/30/13
Principal/ Partner	$229
Principal 1	$206
Senior Associate	$141
Associate	$130
Assistant	$104
Tech 2	$80
Project Cost Accountant	$118

SCHEDULE I
PRICING DATA FOR CITY OF NOVATIO
ADMINISTRATIVE OFFICE BUILDING

Structural Engineers Incorporated
Structural Engineering

LABOR CATEGORIES	Hourly rates from 7/1/11 through 9/30/13
Sr. Principal	$170.00
Jr. Principal	$150.00
Structural Engineer	$135.00
Civil Engineer	$110.00
Sr. Project Engineer	$100.00
Jr. Project Engineer	$90.00
CADD	$90.00
	$
	$
	$
	$
	$
	$
	$
	$

SCHEDULE I
PRICING DATA FOR CITY OF NOVATIO
ADMINISTRATIVE OFFICE BUILDING

The Engineering Enterprise/Taylor Engineering
MEP

LABOR CATEGORIES	Hourly rates from 7/1/11 through 9/30/13
Principal	$210.
Associate	$190.
Sr. Project Engineer/Designer	$170.
Engineer	$150.
Lighting Designer	$145.
Designer	$130.
CAD Technician	$110.
Project Administrator	$75.

Exhibits D, E, F, G, H, and I (Insurance certificates, insurance endorsements, and insurance policy information) as defined on page 17 of the contract have been discussed with the consultant and the consultant's insurance agent. The City will require the insurance coverage as specified within the contract Section 4.17 - Insurance.

Prior to the execution of the contract, the City will obtain the insurance related Exhibits D – I from the consultant and include them with the fully executed contract.