

UNIVERSITY OF CALIFORNIA, SANTA BARBARA

BERKELEY • DAVIS • IRVINE • LOS ANGELES • MERCED • RIVERSIDE • SAN DIEGO • SAN FRANCISCO



SANTA BARBARA • SANTA CRUZ

OFFICE OF DESIGN & CONSTRUCTION SERVICES and PHYSICAL FACILITIES

CONTRACTING SERVICES
Building 439
Santa Barbara, California 93106-1030
Telephone (805) 893-3356
Fax (805) 893-8592

SENT VIA: FAX ON THIS DATE
 HAND DELIVERY ON THIS DATE
 FEDERAL EXPRESS ON THIS DATE
 UNITED PARCEL SERVICE ON THIS DATE

HOLDERS OF PLANS AND SPECIFICATIONS:

Santa Catalina Towers Restroom & Deck Renovation
Project No. FM090053S/987711

Addendum No. 2

November 24, 2008

Enclosed is **ADDENDUM NO. 2** to the Construction Documents on the above-captioned project.

Bid date has been changed to **Wednesday, December 3, 2008 at 2:30 P.M.** to be held at:

CONTRACTING SERVICES
Facilities Management, Bldg. 439,
Door #E, Reception Counter
University of California, Santa Barbara
Santa Barbara, CA 93106-1030.

Late arrivals shall be disqualified. Please allow time for unforeseen traffic delays, securing a parking permit and potential parking problems.

A handwritten signature in black ink, appearing to read "Anna Galanis".

Anna Galanis
Director, Contracting Services

ADDENDUM NUMBER 2
to the
CONSTRUCTION DOCUMENTS

November 24, 2008

GENERAL

The following changes, additions or deletions shall be made to the following document(s) as Indicated; all other conditions shall remain the same.

I. ADVERTISEMENT

Item No.

1. Second Page, first sentence, **Change** to read in its entirety: "Bid Deadline: Sealed bids must be received on or before 2:30 P.M. on **Wednesday, December 3, 2008.**
Sealed Bids will be received only at: Contracting Services, Facilities Management, Building 439, Door E, Reception Counter, University of California, Santa Barbara, Santa Barbara, CA 93106-1030."

II. SUPPLEMENTARY INSTRUCTIONS TO BIDDERS

Item No.

1. Number 4, **Change** to read in its entirety: "Bids will be received on or before the Bid Deadline: 2:30 P.M., **Wednesday, December 3, 2008** and only at: Contracting Services, Facilities Management, Building 439 Door E, Reception Counter, University of California, Santa Barbara, Santa Barbara, CA 93106-1030."

III. SPECIFICATION

Item No.

1. Table of Contents:
Replace in it's entirety with attached Revised Section, Table of Contents.
2. Section 05720 Handrail and Railings:
Replace in it's entirety with attached Revised Section 05720, Handrails and Landings.

3. Section 08120 Aluminum Doors and Frames:
Replace in it's entirety with attached Revised Section 08120, Aluminum Doors and Frames.
4. Section 08700 Finish Hardware:
Replace in it's entirety with attached Revised Section 08700, Hardware.
5. Section 09120 Ceiling Suspension System:
Replace in it's entirety with attached Revised Section 09120, Ceiling Suspension Systems.
6. Section 09500 Acoustic Ceiling Treatment:
Delete this section in it's entirety.
7. Section 09779 Sanitary Ceiling Panels”:
Replace in it's entirety with attached Revised Section 09779, Sanitary Ceiling Panels.
8. Section 10800 Toilet Room Accessories”:
Replace this section in it's entirety with attached Revised Section 10800, Toilet Room Accessories.
9. Section 15000:
Replace page 2 of this section in it's entirety with attached Revised Page 2.
10. Section 15300:
Replace page 1 of this section in it's entirety with attached Revised Page 1.
11. Section 15940:
Replace page 2 of this section in it's entirety with attached Revised Page 2.
12. Section 16515:
Replace page 3 of this section in it's entirety with attached Revised Page 3.

IV. DRAWINGS

Item No.

1. Sheet T-1 “Title Sheet & General Notes”:
Replace DCFM Life Safety Notes in its entirety with attached DCFM Life Safety Notes.
2. Sheet A-5.1 “Schedule and Details”:
Replace Door Schedule Notes in its entirety with attached Door Schedule Notes.

3. Sheet A-5.1 “Schedule and Details”:
Replace Door Types Notes in its entirety with attached Door Types Notes.
4. Sheet A-5.1 “Schedule and Details”:
Replace Typ. Door Jamb/Head Sim. in its entirety with attached Typ. Door Jamb/Head Sim..
5. Sheet A-7.1 “Details”:
Replace Decking Detail Note 8 in its entirety with attached Decking Detail Notes.
6. Sheet A-7.1 “Details”:
Replace New Wall Detail Note 1 in its entirety with attached New Wall Detail Notes.
7. Sheet E.1 “Lighting Fixture Schedule Symbols”:
Replace Registered Professional Electrical Engineer Stamp with Signed Registered Professional Electrical Stamp.
8. Sheet E-1 “Lighting Fixture Schedule Symbols”:
Replace in its entirety with attached E-1 Lighting Fixture Schedule Symbols.
9. Sheet E.2 “Site Electrical Plan Schedules”:
Replace Registered Professional Electrical Engineer Stamp with Signed Registered Professional Electrical Stamp.
10. Sheet E-2 “Site Electrical Plan Schedules”:
Replace in its entirety with attached E-2 Site Electrical Plan Schedules.
11. Sheet E.3 “Pool Showers, Electrical Plans, Diagrams”:
Replace Registered Professional Electrical Engineer Stamp with Signed Registered Professional Electrical Stamp.
12. Sheet E-3 “Pool Showers, Electrical Plans, Diagrams”:
Replace in its entirety with attached E-3 Pool Showers, Electrical Plans, Diagrams
13. Sheet M.1 “Abbreviations, Symbols, Schedules, & Mechanical Demo Plan”:
Replace Registered Professional Mechanical Engineer Stamp with Signed Registered Professional Mechanical Stamp.
14. Sheet M-1 “Abbreviations, Symbols, Schedules, & Mechanical Demo Plan”:
Replace in its entirety with attached M-1 Abbreviations, Symbols, Schedules, & Mechanical Demo Plan.

15. Sheet M.2 “Mechanical Floor & Roof Plans”:
Replace Registered Professional Mechanical Engineer Stamp with Signed Registered Professional Mechanical Stamp.
16. Sheet M-2 “Mechanical Floor & Roof Plans”:
Replace in its entirety with attached M-2 Mechanical Floor & Roof Plans.
17. Sheet P.1 “Abbreviations, Symbols, Schedules, & Plumbing Demo Plan”:
Replace Registered Professional Engineer Stamp with Signed Registered Professional Stamp.
18. Sheet P-1 “Abbreviations, Symbols, Schedules, & Plumbing Demo Plan”:
Replace in its entirety with attached P-1 Abbreviations, Symbols, Schedules, & Plumbing Demo Plan.
19. Sheet P.2 “Plumbing Floor & Roof Plans”:
Replace Registered Professional Engineer Stamp with Signed Registered Professional Stamp.
20. Sheet P-2 “Plumbing Floor & Roof Plans”:
Replace in its entirety with attached P-2 Pool Showers, Electrical Plans, Diagrams
21. Sheet S1.1 “General Notes Abbreviations”:
Replace Registered Professional Structural Engineer Stamp with Signed Registered Professional Structural Stamp.
22. Sheet S1.1 “General Notes Abbreviations”:
Replace in its entirety with attached S1.1 General Notes Abbreviations.
23. Sheet S1.2 “Typical Details”:
Replace Registered Professional Structural Engineer Stamp with Signed Registered Professional Structural Stamp.
24. Sheet S1.2 “Typical Details”:
Replace in its entirety with attached S1.2 Typical Details.
25. Sheet S2.1 “ Foundation Plan Roof Framing Plan”:
Replace Registered Professional Structural Engineer Stamp with Signed Registered Professional Structural Stamp.
26. Sheet S2.1 “ Foundation Plan Roof Framing Plan”:
Replace Numbered Notes (this sheet only) in its entirety with attached Numbered Notes (this sheet only).
27. Sheet S3.1 “Details”:

Replace Registered Professional Structural Engineer Stamp with Signed Registered Professional Structural Stamp.

28. Sheet S3.1 “Details”:

Replace Deck Attachment @ (E) Wall Note 3 in its entirety with attached Deck Attachment @ (E) Wall Note 3.

17. Sheet S3.1 “Details”:

Replace (N) Jamb @ (E) Concrete Wall Note 6 in its entirety with attached (N) Jamb @ (E) Concrete Wall Note 6

END OF ADDENDUM NO. 2

TABLE OF CONTENTS

PAGE No.

DIVISION 1	-	GENERAL REQUIREMENTS	
Section -01010		Summary of Work -----	1-2
01012		Information & Procedures Instructions (RFI) -----	1-2
01014		Contractor's Use of the Project Site -----	1-2
01051		Project Coordination -----	1-1
01070		Cutting & Patching -----	1-2
01080		Regulatory Requirements -----	1-3
01090		Abbreviations, Symbols, Definitions-----	1-5
01200		Project Meetings-----	1-2
01300		Submittals -----	1-3
01310		Contract Schedules -----	1-4
01340		Shop Drawings, Product Data and Samples-----	1-5
01400		Quality Control -----	1-3
01500		Construction Facilities and Temporary Controls -----	1-2
01565		Hazardous Materials Procedures -----	1-1
01600		Material and Equipment-----	1-2
01620		Anchors and Fasteners -----	1-3
01640		Product Options and Substitutions -----	1-6
01700		Project Closeout -----	1-2
01710		Cleanup & Disposal -----	1-2
01720		Contractor's As-Built Documents -----	1-2
01740		Guarantees, Warranties, Bonds, Service, & Maintenance Contracts -----	1-4
DIVISION 2	-	SITework	
		Section 02110- Selective Demolition	
		Section 02225- Trenching Backfilling and Compacting	
DIVISION 3	-	CONCRETE	
		Section 03300- Cast in place concrete-----	1-23
DIVISION 4		NOT USED	
DIVISION 5	-	METALS	
		Section 05400- Cold Formed Metal Framing-----	1-9
		Section 05720 Handrail and Railings-----	1-3
DIVISION 6	-	WOOD AND PLASTICS	
		Section 06100- Rough Carpentry-----	1-12
		Section 06730- Composite Decking and Trim-----	1-4
DIVISION 7		THERMAL AND MOISTURE PROTECTION	
		Section 07200- Building insulation-----	1-2
		Section 07900- Caulking and Sealants-----	1-5
		Section 07840- Firestopping-----	1-4
DIVISION 8	-	DOORS & WINDOWS	
		Section 08120- Aluminum Doors and Frames -----	1-4

	Section 08700- Finish Hardware-----	1-8
DIVISION 9 -	FINISHES	
	Section 09120- Ceiling Suspension Systems-----	1-5
	Section 09250- Gypsum Board-----	1-5
	Section 09300- Tile Work-----	1-5
	Section 09779- Sanitary Ceilings Panels-----	1-2
	Section 09900- Painting--	1-10
DIVISION 10	SPECIALTIES	
	Section 10440- Identifying Devices-----	1-2
	Section 10800- Toilet Room Accessories-----	1-3
DIVISION 11	NOT USED	
DIVISION 12 -	NOT USED	
DIVISION 13	NOT USED	
DIVISION 14	NOT USED	
DIVISION 15	MECHANICAL	
	Section 15000- MECHANICAL REQUIREMENTS-----	1-4
	Section 15140- SUPPORTS AND ANCHORS -----	1-4
	Section 15190- MECHANICAL IDENTIFICATION-----	1-2
	Section 15260- PIPING INSULATION-----	1-4
	Section 15300- FIRE PROTECTION SYSTEM-----	1-12
	Section 15410- PLUMBING PIPING-----	1-7
	Section 15430- PLUMBING SPECIALTIES-----	1-4
	Section 15440- PLUMBING FIXTURES-----	1-2
	Section 15890- DUCTWORK-----	1-4
	Section 15910- DUCTWORK ACCESSORIES-----	1-2
	Section 15940- AIR OUTLEST AND INLETS-----	1-2
	Section 15990- TESTING, ADJUSTING AND BALANCING -----	1-3
DIVISION 16 -	ELECTRICAL	
	SECTION 16010- BASIC ELECTRICAL SYSTEMS-----	1-6
	SECTION 16110- RACEWAYS-----	1-4
	SECTION 16120- WIRES AND CABLES-----	1-4

SECTION 16135-ELECTRICAL BOXES AND FITTINGS-----	1-4
SECTION 16142- ELECTRICAL CONNECTIONS FOR EQUIPMENT---	1-4
SECTION 16143- WIRING DEVICES-----	1-3
SECTION 16190- SUPPORTING DEVICES-----	1-4
SECTION 16195- ELECTRICAL IDENTIFICATION-----	1-4
SECTION 16452- GROUNDING-----	1-3
SECTION 16515- LIGHTING-----	1-4

DIVISION 5 -Metals
SECTION 05720 -- HANDRAILS AND RAILINGS

PART 1-GENERAL

1.01 DESCRIPTION

- A. Furnish and install aluminum tube railings and railing components.
 - 1. Furnish sleeves to be cast in concrete.
- B. RELATED WORK
 - 1. Cast-in-Place Concrete

1.02 REFERENCES

- A. Aluminum Association (AA)
 - 1. ABH-21 Aluminum Brazing Handbook
 - 2. ASD-1 Aluminum Standards and Data
 - 2. DAF-45 Designation System for Aluminum Finishes
 - 3. SAA-46 Standards for Anodized Architectural Aluminum
 - 5. B 221 Specification for Aluminum-Alloy Bars, Rods, Wires, Shapes and Tubes.
 - 6. B 429 Specification for Aluminum-Alloy Extruded Structural Pipe and Tube.
 - 7. E 985 Specification for Permanent Metal Railing Systems and Rails for Buildings
- B. Americans with Disabilities Act Accessibility Guidelines (ADAAG)

1.03 REQUIREMENTS

- A. Check governing codes for requirements.
 - 1. Guardrail assemblies and attachments shall withstand a minimum concentrated load of 120 pounds applied horizontally or vertically down at any point on the top rail.

1.04 SUBMITTALS

- A. Submit shop drawings and product data under provisions of Section 01340.
- B. Indicate component details, materials, finishes, connection and joining methods, and the relationship to adjoining work.
- C. Submit manufacturer's installation instructions under provisions of Section 01340.
- D. Submit samples of the following:
 - 1. typical 4 foot section.

1.05 QUALITY ASSURANCE

- A. Qualifications:
 - 1. Furnish references listing projects of similar size and scope
- B. Regulatory Requirements:
 - 1. Components and installation are to be in accordance with state and local code authorities
 - 2. Components and installation are to follow current ADA and ICC/ANSI A117.1 guidelines.
- C. Certifications

1. Furnish certification that all components and fittings are furnished by the same manufacturer or approved by the primary component manufacturer.
2. Furnish certification that components were installed in accordance to the manufacturer's engineering data to meet the specified design loads.

D. Pre-Installation Meeting

1. Prior to the beginning of work, conduct a pre-job conference at the job site.

1.06 DELIVERY, STORAGE AND HANDLING

A. Deliver materials to the job site in good condition and properly protected against damage to finished surfaces.

B. Storage on site:

1. Store material in a location and in a manner to avoid damage. Stacking shall be done in a way, which will prevent bending.
2. Store material in a clean, dry location away from uncured concrete and masonry. Cover with waterproof paper, tarpaulin, or polyethylene sheeting in a manner that will permit circulation of air inside the covering.
3. Keep handling on site to a minimum. Exercise particular care to avoid damage to finishes of material.

PART 2 –PRODUCTS

2.01 ACCEPTABLE MANUFACTURER

Railing tube and components shall match existing material, profile and sizes.

2.02 MATERIALS AND FINISHES

A. Aluminum:

1. Extruded Pipe: Alloy 6063-T6 meeting ASTM B 221
2. Extruded Bars, Shapes and Mouldings: Alloy 6063-T52 meeting ASTM B 221
3. Castings: Almag 35 meeting ASTM B 26
4. Finish : Match existing.

2.02 RAILING SYSTEM

A. Railing system shall be mounted per construction documents.

2.03 RAILS

A. Fabricate rails from aluminum as per existing

2.04 POSTS

A. Fabricate posts from aluminum tubing.

B. Top Rail: Teak wood to match existing.

1. Maximum Spacing: 4 inches center to center.

C. Rail Height: As indicated on the drawings.

2.05 FASTENERS

- A. All mechanical fasteners used in the assembly of aluminum railings shall be manufactured from stainless steel.
- 2.06 FABRICATION
- A. Form rail-to-end post connections and all changes in rail direction to match existing
 - B. Cut material square and remove burrs from all exposed edges, with no chamfer.
 - C. Make exposed joints butt tight and flush.
 - D. Close exposed ends of pipe by use of appropriate end cap.
 - E. For posts set in concrete, furnish matching sleeves or inserts not less than 5 inches long.
 - F. Verify dimensions on site prior to shop fabrication.

PART 3-EXECUTION

3.01 PREPARATION

- A. Supply items to be cast in concrete.
- B. Examine areas to receive railing system. Notify University Architect if areas are not acceptable. Do not begin installation until unacceptable conditions have been corrected.

3.02 DISSIMILAR METALS

- A. When aluminum components come into contact with dissimilar metals, surfaces shall be kept from direct contact by painting the dissimilar metal with a heavy coat of a proper primer.
- B. When aluminum components come into contact with cement or lime mortar, exposed aluminum surfaces shall be painted with methacrylate lacquer

3.03 INSTALLATION

- A. Install in accordance with shop drawings and manufacturer's instructions at locations indicated on the drawings.
- B. Erect work square and level, rigid, and free from distortion or defects detrimental to appearance or performance.

3.04 PROTECTION

- A. Protect railing system and finish from damage during construction.

3.05 CLEANING

- A. As installation is completed, wash thoroughly using clean water and soap; rinse with clean water.
- B. Do not use acid solution, steel wool or other harsh abrasives.
- C. If stain remains after washing, remove finish and restore in accordance with NAAMM Metal Finishes Manual.

3.06 REPAIR OF DEFECTIVE WORK

- A. Remove stained or otherwise defective work and replace with material that meets specification requirements.

END OF SECTION

DIVISION – DOORS and WINDOWS
SECTION 08120 ALUMINUM DOORS AND FRAMES

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Aluminum Doors.
- B. Aluminum Door Frames.

1.2 RELATED SECTIONS

- A. Section 08710 - Door Hardware: Hanging and latching hardware for interior doors.
- B. Section 09250 - Plaster and gypsum board: Interior partitions.

1.3 REFERENCES

- A. AAMA 603.8 - Voluntary Performance Requirements and Test Procedures for Pigmented Organic Coatings on Extruded Aluminum.
- B. AAMA 607.1 - Voluntary Guide Specification and Inspection Methods for Clear Anodic Finishes for Architectural Aluminum.
- C. AAMA 609 - Cleaning and Maintenance for Architecturally Finished Aluminum.
- D. ASTM B 221 - Standard Specification for Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Profiles, and Tubes; 2005.
- E. NFPA - National Fire Protection Association.
- F. CBC - California Building Code.

1.4 SUBMITTALS

- A. Submit under provisions of Section 01340.
- B. Manufacturer's data sheets on each product to be used, including:
 - 1. Preparation instructions and recommendations.
 - 2. Storage and handling requirements and recommendations.
 - 3. Installation methods.

- C. Shop Drawings: Show fabrication and installation details for all components. Include plan, elevation and section details and attachments to other Work.
- D. Selection Samples: For each finish product specified, two complete sets of color chips representing manufacturer's full range of available colors and patterns.
- E. Verification Samples: For each finish product specified, two samples, minimum size 6 inches (150 mm) square, representing actual product, color, and patterns.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Single manufacturer with a minimum of 5 years experience in manufacturing and engineering, fabricating interior aluminum doors, frames and other components of aluminum framing shall provide all primary products specified in this section.
- B. Installer Qualifications: Installer shall have a minimum of five (5) years experience successfully installing systems of similar type and scope as those specified in this section.
- C. Mock-Up: Provide a mock-up for evaluation of surface preparation techniques and application workmanship.
 - 1. Finish areas designated by University Representative.
 - 2. Do not proceed with remaining work until workmanship, color, and sheen are approved by University Representative.
 - 3. Refinish mock-up area as required to produce acceptable work.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Store products in manufacturer's unopened packaging until ready for installation.

1.7 PROJECT CONDITIONS

- A. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.

1.8 WARRANTY

- A. Upon project closeout, provide to owner a copy of the manufacturer's limited warranty against manufacturing defect for a duration of two (2) years.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Acceptable Manufacturer: Custom Components Company, 13902 Lynmar Blvd. ; Tampa, FL 33626; Toll Free Tel: 800-516-9474; Fax: 813-855-3706; Email: [request info](mailto:requestinfo); Web: www.usrailings.com , or equal.
- B. Requests for substitutions will be considered in accordance with provisions of Section 01640.

2.2 MATERIALS

- A. Extruded Aluminum: ASTM B 221 Alloy 6063-T5 or alloy and temper required to suit structural and finish requirements.
- B. Louvers: As shown on drawings. Material to match doors.

2.3 COMPONENTS

- A. Door Frames: 0.062 inch (1.6mm) thick aluminum reinforced at hinge and strike points.
 - 1. Throat Depth: To match nominal wall depth.
- B. Hardware:
 - 1. Fasteners: Aluminum
 - 2. Fasteners: Non-magnetic stainless steel.
 - 3. Fasteners: Fully concealed.
 - 4. Hinges: 4 1/2 inches x 4 1/2 inches x .134 inch thickness (standard weight), 5 knuckle aluminum hinges.
 - 5. Prepare frames to receive door hanging and closure hardware. Coordinate with section 08710.

2.4 FABRICATION

- A. Machine jambs and prepare for hardware, with concealed reinforcement plates, drilled and tapped as required, and fastened within the frame with concealed screws.
- B. Provide concealed corner reinforcements and alignment clips for precise butt or mitered connections.
- C. Fabricate all components to provide secure installation with no exposed fasteners.

2.5 FINISHES

- A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations relative to applying and designating finishes.
- B. Finish: Class II, Clear Anodic Finish - AA-M12C22A31 complying with AAMA 607.1
 - 1. Mechanical Finish: Non-specular as fabricated.
 - 2. Chemical Finish: Etched, medium matte anodic coating, Architectural Class II clear coating. Minimum 0.010mm (.0004 inches) thick.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Examine floor, walls and ceilings for suitable conditions where aluminum frames are to be installed.
- B. Verify that wall thickness does not exceed standard tolerances allowed by throat size indicated.

- C. Do not begin installation until substrates have been properly prepared.
- D. If substrate preparation is the responsibility of another installer, notify University Representative of unsatisfactory preparation before proceeding.

3.2 PREPARATION

- A. Clean surfaces thoroughly prior to installation.
- B. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's written installation instructions and approved shop drawings.
- B. Install frames plumb and square, securely anchored to substrates with fasteners recommended by the frame manufacturer.
- C. Where applicable, comply with manufacturer's recommendation for remedying loose fitting trim conditions.

3.4 CLEANING AND ADJUSTING

- A. Clean exposed frames promptly after installation using cleaning methods recommended by the frame manufacturer.
- B. Clean and maintain anodized aluminum according to AAMA 609.
- C. Touch-up, repair or replace damaged products before Substantial Completion.
- D. Touch-Up marred areas so repair is not visible from a distance of 48 inches (1219mm). Substantially damaged frames that cannot be satisfactorily repaired must be removed and replaced prior to final inspection.

3.5 PROTECTION

- A. Protect installed products until completion of project.

END OF SECTION

DIVISION 8 DOORS AND WINDOWS
08700 HARDWARE

PART 1- General

1.01 DESCRIPTION

- A). Exterior doors shall be aluminum construction.
- B) No knock down frame shall be used. No exposed dimples are allowed if frames are to be installed after walls are erected. Frames shall protected during installation.
- C) If a door or frame is damaged, restore to new or replace. Comply with VOC regulations when repairing damage.
- D) The University shall check the installation of finish hardware at the completion of the Project.
- E) Warranty: Furnish a written guarantee against defective materials and workmanship for a period of ten (10) years for door closers and two (2) years for the remainder of the hardware, Per Section 01740
- F) Shop drawing review of hardware submitted shall be accomplished only after all aspects influencing hardware can be reviewed at the same time. No partial submittal reviews will be performed.

2.0 Products **NOTE:** Where aluminum doors and Frames are specified make proper adjustments to hardware as required for protection of dissimilar metals and other consequences of the use of Aluminum Doors and Frames. Quality and grade shall remain as specified..

- A) Fasteners
 - 1) Fasten thresholds with machine screws, anchors and caulk around the perimeter with a clear silicon sealant.

- 2) Only fasteners provided by the hardware manufacturer shall be used.
- 3) Provide through-bolts for closers and exit devices on wood doors.

B) Hinges

- 1) Provide heavy weight geared hinges on exterior openings with school top cap, full concealed for new construction; full concealed for existing frames with new doors; or full surface for existing doors and frames.
- 2) For interior openings, provide three-knuckle, button tip, full mortise ball bearing template butts with non-rising stainless steel pins.
- 3) Provide out-swinging door hinges with non-removable pins.
- 4) Provide out-swinging exterior door hinges with non-removable pins and security studs.
- 5) Provide heavy weight butts for doors over 42" in width; more than 1-3/4" thick, and over 7'-6" in height
- 6) Provide three hinges per leaf up to 7'-6" in height, and then four hinges up to 9'-6" in height
- 7) Provide anchor hinges on doors with exit device and classroom doors. For each electrical hinge provide a junction box that is fastened to the frame jamb. Provide electrical hinges with the number of wires required by the electrical hardware feed, plus two extra wires. Continuous circuit hinges shall have wires concealed.
- 8) At high use doors in areas such as vivariums, loading docks, and selected areas within laboratories, provide heavy duty full mortise hinge.
- 9) Hinges shall be provided from the following products:

PART 2 -DESCRIPTION	HAGER PRODUCT NUMBER	STANLEY PRODUCT NUMBER
Steel-Standard Weight Butt-Ball Bearing	AB700	CB1900
Steel Heavy Weight Butt-Ball Bearing	AB750	CB1901
Non-ferrous Standard Weight Butt-Ball Bearing	AB800	CB1960
Non-ferrous Heavy Weight Butt-Ball Bearing	AB850	CB1961
Anchor Hinges – Heavy Weight Steel Section 08700	AB7508 Hardware	CB1909

Anchor Hinges – Heavy Weight Stainless Steel	AB5392	CB1969
Gear Hinge, Heavy Duty – Double Bearing – Half Surface		920A DB-SC
Gear Hinge, Heavy Duty – Double Bearing Surface		930A DB-SC

C) Locks and Trim

- 1) Provide wrought strike boxes and curved lip strikes with proper lip length to protect trim of the frame, with a projection of no more than 1/8” beyond frame trim or the inactive leaf of a pair of doors. Provide cast cylinder collars.
- 2) Provide latch protectors for the type of lock on exterior out swinging doors. Provide electrical mortise locksets, with solenoid operation, concealed within the lock body.
- 3) Locks and trim shall be provided from the following products:

LOCK TYPE	SCHLAGE	BEST
Mortise	L9000 Series	35H Series
Cylindrical Schlage D-Lever series. Use in retro-fit cylinder lock applications as required, otherwise use mortise lock	D Series	93K Series

D) Keying and Cylinders

- 1) Schlage Everest Interchangeable Core Patented Key System or Best keyway as directed by the University.
- 2) Provide cylinders and lockset from one manufacturer, prepared for interchangeable core. Provide construction cores
- 3) Provide permanent cores to University at least six (6) weeks prior to job completion.
- 4) Permanent cores will be combined by the University.
- 5) Consult with Cesar Lugo, Lead Locksmith (451-6829) for additional and specific instructions.

E) Exit Devices

- 1) Provide rim exit devices on single doors; rim exit devices on pairs of doors with mullions where egress requirements allow.
- 2) Provide heavy duty exit devices that have quiet return of push bar, heavy chassis mounting design, with one piece removable covers, and interchangeable removable core cylinders of the lockset manufacturer. Exit devices shall be Von Duprin series 99 , no

known equal. Devices shall be NL function with VR900 series pull except rated doors that shall have 994L-F trim

- 3) Provided cylinder dogging on non-labeled exit devices. Thru-bolted trim to the lock stile chassis. Use the same type of lever on the locksets with the break-a-way feature.
 - 4) Provide keyed removable mullions with interchangeable removable core cylinders. Von Duprin KR series with MT54 storage bracket approved by the campus. No known equal.
 - 5) When provided, electronic exit devices, power supplies and electronic access controls shall be of one manufacturer. Provide manufacturer's complete wiring illustration.
- F) Magnet hold open units shall be provided with through bolts and back plates.
- G) Door Closers
- 1) Surface door closers to be heavy duty, full cover, hydraulic type with high strength cast iron case, full rack and pinion construction of heavy steel.
 - 2) Surface closers to have adjustable spring power. Supply closer with separate, regulating screw valves for closing speed, latching speed, and backcheck control.
 - 3) Closer arms; heavy duty forged steel, rectangular shape the full length of the arm, painted to match the finish of the closer
 - 4) Mount the closer body and arms on the non-public side of the opening; on the interior side of the exterior openings. Provide LCN Heavy Duty Use model 4040/41 surface closers, no known equal.
 - 5) Use electronic low energy door operator where required for ADA access. Provide LCN Electric Auto-Equalizer series 4630/4640, no known equal.
 - 6) Floor closer not acceptable for campus.
- H) Door Stops and Holders
- 1) Door stops shall be provided for each door leaf. Provide for every door either:
 - a) Floor stop: (first choice): Ives, Hagar or equal. Ives FS436 Series for interior use and Ives FS444 for heavy duty use or equal
 - b) Wall stop (second choice) Ives, Hagar or equal. Ives WS406/WS407 Series or equal.
 - c) Overhead stop (third choice). Glynn Johnson 900 & 100 series, Hagar or equal. Use only where floor or wall stops are inadvisable. When used, use heavy duty hinges or continuous hinges. No hold open stops

- 1) Provide kick plates on high use doors, non-labeled lab doors, classrooms, janitor's closets, storage rooms and rest room doors.
 - 2) Provide 16 gauge stainless steel, beveled three sides, kickplates 10" high by 2" less than door width on single openings, and 12" high by 1" less than door width, on paired openings.
- J) Flushbolts
- 1) Ives FB50-60 Series flushbolts or equal

K) Thresholds and Seals

- 1) Provide stainless steel thresholds with a non-slip coating at exterior doors. Thresholds shall cover the full width of the opening, and wrap the frame from face to face. Cover expansion joints, floor differences and floor rises with the properly configured threshold, cutting and notching for the frame stop/soffit/rabbets. Exterior thresholds shall have beveled side edges. Thresholds shall match the wall width.
- 2) Provide aluminum thresholds for interior openings. Provide finish to match hardware.
- 3) Provide labeled openings with “soft puff” intumescent seals.
- 4) Where automatic door bottoms are requested; they shall be surface mounted. Concealed automatic door bottoms shall not be used.
- 5) Provide seals with screw-on fasteners; no adhesive applied seals.
- 6) Manufacturers: Pemko, Zero or equal

M) Finishes

- 1) Provide 626, Satin Chromium plated, 630, Stainless Steel or 613, per the choice of the University Representative.

N) Supply to the University the following attic stock items:

- 1) Two locksets of each function with cylinders in the keyway used for the Project.
- 2) Two surface mounted door closers. One set of instruction sheets for each item provided.
- 3) One set of parts lists for each item provided
- 4) One each of non-standard tool required for installation of each item provided.
- 5) 500 key blanks
- 6) Key Cabinet with 100% expansion.

Santa Catalina Towers – Restrooms

UCSB

HW - 01

1 SGL DOOR 01 EXTERIOR / TOILET

3'0" x 7'0" x 1-3/4" x ALD x ALF x NON-RTD

Each Assembly to have:

3	EA HINGE	5BB1 4.5 X 4.5	630	IVE
1	EA RESTROOM LOCK	L9486BDC 17A L583-375 & L583-363	630	SCH
1	EA PERMANENT IC CORE	PROVIDED BY UNIVERSITY LOCKSMITH	626	
1	EA SURFACE CLOSER	4041 DEL SRI X ST1630	689	LCN
1	EA OVERHEAD STOP	100S	630	GLY
1	EA KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA MOP PLATE	8400 6" X 1" LDW	630	IVE
1	SET SEALS	303APK	AL	PEM
1	EA DOOR SWEEP	315CN	AL	PEM
1	EA THRESHOLD	AS REQUIRED	AL	PEM

HW – 02

1 SGL DOOR 02 EXTERIOR / TOILET

3'0" x 7'0" x 1-3/4" x ALD x ALF x NON-RTD

Each Assembly to have:

3	EA HINGE	5BB1 4.5 X 4.5	630	IVE
1	EA RESTROOM LOCK	L9486BDC 17A L583-375 & L583-363	630	SCH
1	EA PERMANENT IC CORE	PROVIDED BY UNIVERSITY LOCKSMITH	626	
1	EA SURFACE CLOSER	4041 DEL SRI	689	LCN
1	EA KICK PLATE	8400 10" X 2" LDW	630	IVE
1	EA MOP PLATE	8400 6" X 1" LDW	630	IVE
1	EA WALL STOP	WS407CVX	630	IVE
1	SET SEALS	303APK	AL	PEM
1	EA DOOR SWEEP	315CN	AL	PEM
1	EA THRESHOLD	AS REQUIRED	AL	PEM

END OF SECTION

SECTION 09779
SANITARY CEILING PANELS

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes: Waterproof, sanitary, ceiling panels installed in suspended ceiling grid of rest rooms.
- B. Related sections:
 - 1. Section 09120 - Metal Support Assemblies: Ceiling suspension system to receive sanitary ceiling panels.

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM) Publications:
 - 1. ASTM E84 - Surface Burning Characteristics of Building Materials.

1.03 SUBMITTALS

- A. Provide in accordance with Section 01300 - Submittal Procedures:
 - 1. Product data for ceiling panels showing compliance with specified requirements.
 - 2. Shop drawings: Indicate panel layout, dimensions, and installation details.
 - 3. Sample: 5 by 7 inches minimum size sample for sanitary ceiling panel in selected type, finish, and color.
 - 4. Manufacturer's installation and maintenance instructions.

1.04 QUALITY ASSURANCE

- A. Sanitary ceiling panels shall comply with:
 - 1. NSF Requirements

1.05 DELIVERY, STORING, AND HANDLING

- A. During delivery and storage keep sanitary ceiling panels flat on smooth dry surface. Avoid extreme temperature changes.
- B. Do not install sanitary panels until building is enclosed, painting is complete, and temperature and humidity are similar to conditions of completed, occupied building.
- C. Prior to installation, store materials for 24 hours minimum in area of installation to achieve temperature stability.

PART 2 - PRODUCTS

2.01 ACCEPTABLE MANUFACTURERS

- A. Parkland Plastics, Inc., P.O. Box 339, 104 Yoder Drive, Middlebury, Indiana 46540; 800-835-4110; www.parklandplastics.com. or approved equal.
- B. Requests to use equivalent products of other manufacturers shall be submitted in accordance with Section 01630 - Product Substitution Procedures.

2.02 SANITARY CEILING PANELS

- A. Type: Waterproof, sanitary ceiling panels; SpectraTile as imported by Parkland Plastics, Inc. or approved equal.
- B. Material: Extruded polyvinylchloride (PVC) foam with embossed surface texture with 100 percent recyclable content.
- C. Surface finish and color: White. Flat, smooth panel.
- D. Performance characteristics:
 - 1. Resistant to fungi and bacteria growth, cleaning agents, acids, and other chemicals.
 - 2. No yellowing or color change with corrosive environments.
- E. Fire tested in accordance with ASTM E84:
- F. Physical properties: 23 3/4" by 23-3/4" by 5/32" thk.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Coordinate ceiling panel installation with provision of suspended metal ceiling grid system specified in Section 09100 - Metal Support Assemblies.
- B. Verify that plumbing, mechanical, and electrical services above ceilings have been installed, tested, and approved.

3.02 INSTALLATION

- A. Install sanitary ceiling panels in accordance with manufacturer's instructions and approved shop drawings at locations indicated on Drawings.
- B. Cutting: Cut panels to fit irregular grid and perimeter edge trim. Cut with skill saw or table saw. Use hole saw to cut penetrations for recessed light fixtures, sprinkler heads, and other components.
- C. Fit ceiling panels in place, free from damaged edges or other defects. Install level, in uniform plane, and free from twist or warp.
- D. Install hold-down clips to retain panels tight to grid system adjacent to exterior doors.
- E. Cleaning: Vacuum or brush grid and panels to remove dust. Clean grid and panels of all marks, smudges, and clinging dirt with moist cloth and mild soap. Remove all debris from space above ceiling.
- F. Protect installed panels from subsequent construction activities.

END OF SECTION

DIVISION 10 SPECIALTIES
SECTION 10800 TOILET ROOM ACCESSORIES

PART 1- GENERAL

1.01 DESCRIPTION

- A. Principal work in this Section;
 - 1. Toilet room accessories (Grab Bars and Mirrors)
- B. Related work;
 - 1. Cutouts, openings and recesses in toilet compartment and walls for installation of accessories.
 - 2. Supports for toilet room accessories: Cold formed metal Framing, and Miscellaneous Metals.
 - 3. Waste receptacles, paper towel dispenser, seat cover dispenser, toilet paper dispenser, feminine napkin dispenser, feminine napkin receptacle by others

1.02 QUALITY ASSURANCE

- A. Manufacturers:
 - 1. The Drawings and these Specifications are base on accessories made by Bobrick Washroom Equipment, Inc. This is to establish the standard of quality, function and design required for the project.
- B. Uniformity: All toilet room accessories installed on the project shall be products of one manufacturer, except as noted otherwise.

1.03 SUBMITTALS

- A. Submit manufacturers' catalog cuts and data sheets, complete parts list, and installation requirements for each accessory specified in accordance with the requirements of Section 01340.
- B. Furnish the University with operating instructions and keys required for equipment and locks.

1.04 HANDLING

- A. Keep protective covers on accessories until their installation is complete, then remove at final cleanup.

PART 2- PRODUCTS

- A. Bobrick or equal

2.01 MATERIALS

- A. Stainless steel: AISI Type 302/304 complying with ASTM A167.
- B. Sheet steel: Cold-rolled commercial quality, complying with ASTM A336, 20-gauge minimum
- C. Galvanized Steel: ASTM A527, G60 zinc coating, and 20-gauge minimum
- D. Mounting devices: Galvanized steel
- E. Fasteners: Stainless steel where exposed. Galvanized is acceptable where concealed. Provide spanner head design where exposed.

2.02 FABRICATION

- A. Fabricate units with seamless one piece flanges on exposed faces. Miter corner, weld and grind smooth and flush with parent metal so that welds are invisible on exposed surfaces.
- B. Hang doors or panels on continuous stainless steel piano hinges.
- C. Conceal anchoring devices.
- D. Master key locked dispensing units. Key coin boxes of coin-operated dispensing units separately from the lock on the unit.
- E. Finish exposed surfaces with AISI No. 4 finish, except where a knurled surface is specified for grab bars.
- F. Grind smooth all edges both inside and out which are likely to come in contact with the public and maintenance personnel.

PART 3- EXECUTION

3.01 INSPECTION

- A. Check openings and supports to receive accessories and make sure that unsuitable conditions that would effect quality and execution of this work are corrected before proceeding with installation.

3.02 INSTALLATION

- A. Coordinate installation with toilet partitions and other toilet room accessories for proper installation and function.
- B. Drill holes to correct size and location. Install accessories plumb, level, and equally spaced (where applicable).

- C. Attach accessories with screws or bolts to steel studs or backing plates. Do not use molly or toggle bolts in gypsum board.
- D. Adjust accessories for proper operation. After completion of installation, clean and polish exposed surfaces after removal of protective coverings.
- E. Deliver keys and instruction sheets to the University Representative as specified above.

END OF SECTION

- D. In case of conflict between the referenced codes and ordinances, or between the Specifications and the General and Supplementary Conditions, the more stringent requirements shall govern.

1.05 CONDITIONS

- A. Substitutions: Materials or products specified by brand name, trade name, or catalog reference, shall establish a standard of quality and performance. If the Contractor wishes to substitute materials or products other than those specified, submit such substitutions for evaluation as specified per Division 1 General Requirements and per the Bidding Requirements.
- B. Inspection of conditions: Examine existing conditions before starting Work. Verify existing utilities, site conditions and points of connection. Report to the University's Representative in writing, before Work begins, conditions which prevent proper performance of this Work. Beginning Work of this Section without reporting unsuitable conditions to University's Representative constitutes acceptance of conditions by Contractor. Perform required removal, repair, or replacement of this Work at no additional cost to University.
- C. Obtain and pay for all permits, fees, connection charges, and temporary service charges required for execution of Work included in Division 15 Sections where required.
- D. Drawings show pipe and ductwork diagrammatically.
- E. Adhere to Drawings as closely as possible in laying out Work.
- F. Vary run of piping, run and shape of ductwork, and offset as required to avoid structural and other interferences as approved by the University's Representative.
- G. Clean plumbing fixtures, exposed piping and trim immediately prior to Substantial Completion and per requirements in Division 1.
- H. Remove from site: packing cartons, scrap materials and other rubbish resulting from operations of Work prior to Substantial Completion.
- I. Cutting shall cause no damage to structure. Do not cut, notch, bore or modify structural members without prior consent by the University's Representative. Comply with Division 1 "Cutting and Patching Section".
- J. Contractor shall pay all costs of design and installation, including reviewing cost, resulting from substitutions of products. All substitutions shall have prior approval before installation.
 - 1. Acceptance of substitutions by the University's Representative does not change this requirement.

1.06 COORDINATION WITH WORK SPECIFIED IN OTHER SECTIONS

- A. Coordinate with work specified in other sections to avoid construction delays and maintain required clearances. Make ductwork and equipment layouts available before start of Work.

1.07 QUALITY ASSURANCE:

- A. Carry out Work in a workmanship manner satisfactory to and approved by the University's Representative. Materials or equipment not installed in a manner satisfactory and approved by University's Representative shall be removed and replaced without additional cost to University.

1.08 SAFETY

- A. The Contractor shall make all necessary provisions to create a safe Work environment for the construction workers and the public.

SECTION 15300 - FIRE PROTECTION SYSTEM

PART 1 - GENERAL

1.1 DESCRIPTION OF WORK

- A. All components required deferred approval.
- B. Provide all materials and equipment and perform all labor required to design and install a complete fire protection system from the water main connection and throughout the building, in accordance with this specification, NFPA 13, Factory Mutual and Campus Fire Marshal regulations.
- C. Provide personnel and materials to perform all acceptance tests and to assist in inspections. Test to be witnessed by the Campus Fire Marshal.
- D. Perform flow test to obtain water supply data that will be used in the hydraulic design of the system. Test shall be witnessed by the Campus Fire Marshal.

1.2 WORK SPECIFIED ELSEWHERE

- A. Section 07840: Firestopping.
- B. Section 09900: Painting.

1.3 CLASSIFICATIONS

- A. The following general hazard classifications shall be used:
 - 1. Classrooms, office space, corridors, assembly areas, and residential facilities shall be classified as light hazard occupancies with a design density of .10 per NFPA 13 Section 5-2.3.
 - 2. Laboratories and mechanical space shall be classified as ordinary group I occupancies with a design density of .15 per NFPA 13 Section 5-2.3.

The contractor shall provide the required density in accordance with NFPA 13 for areas different than above.

1.4 QUALIFICATIONS

- A. Contractor or subcontractor shall hold a valid California C-16 contractor's license at time of installation.
- B. Contractor shall be experienced in this type of installation.

1.5 REFERENCE STANDARDS – CHECK WITH CAMPUS FIRE MARSHAL FOR EDITION

- A. National Fire Protection Association (NFPA)
 - 1. 13 Installation of Sprinkler Systems.
 - 2. 14 Installation of Standpipe and Hose Systems (Where applicable).

2. Anemostat
3. Kruger
4. Or equal

PART 3 - EXECUTION

3.01 INSTALLATION

- A. Install in accordance with manufacturer's instructions.
- B. Check location of outlets and inlets and make necessary adjustments in position to conform to architectural features, symmetry, and lighting arrangement.
- C. Install diffusers to ductwork with airtight connection.
- D. Provide balancing dampers on duct take-off to diffusers, and grilles and registers, whether dampers are specified as part of the diffuser, or grille and register assembly or not.
- E. Paint ductwork visible behind air outlets and inlets matte black.

END OF SECTION 15940

1. High intensity discharge ballast shall be rated High Power Factor, CBM certified and UL listed for use in the specified fixtures. High intensity discharge fixtures in interior spaces shall have encased & potted type ballasts for quiet operation. Ballasts for Metal Halide fixtures used in interior spaces shall be "Auto-Regulated" type, encased and potted.
 2. The one-year guarantee for material and labor mentioned elsewhere in these specifications shall apply to the replacement of ballasts which develop excessive noise, heat or do not function properly.
- J. Lamps:
1. Furnish and install all Fluorescent, and High Pressure Sodium Lamps as indicated on the drawings, and in accordance with the fixture manufacturer's specifications.
 2. Provide lamps as manufactured by General Electric, Sylvania or equal.
 3. Fluorescent lamps shall be year 2008 date coded. Unless otherwise noted, 48 inch fluorescent lamps shall be rated F32T8, rapid start, medium bipin, energy saving type having a color temperature of 3500 degrees Kelvin, a color rendering index (CRI) not less than 85 and an initial lumen output of 3050 lumens.

PART 3 – EXECUTION

3.01 INSTALLATION OF LIGHTING FIXTURES

- A. Install lighting fixtures at locations and heights as indicated, complying with manufacturer's written instructions, applicable requirements of NEC, NECA's "Standard of Installation," NEMA standards, and recognized industry practices to ensure that products fulfill requirements.
- B. Coordinate with other electrical Work as necessary for proper interface.
- C. Fasten fixtures securely to indicated structural support.
- D. Recessed Fluorescent Fixtures: Fixtures shall be compatible with the ceiling system installed.
- E. Install backing and supportive structure within ceilings and walls for mounting fixtures. Installation shall be capable of supporting five (5) times the fixture weight.
- F. Wire fixtures with conductors suitable for the voltage, current, and temperature to which the conductors will be subjected.

3.02 ADJUST AND CLEAN

- A. Clean lighting fixtures of dirt and debris and replace burned-out lamps before final acceptance of the installation.
- B. Protect installed lighting fixtures from damage during entire period of construction. Replace all damaged components and assemblies at no additional cost to the University.

3.03 FIELD QUALITY CONTROL

DCFM LIFE SAFETY NOTES

1. CONTRACTOR TO PROTECT ANY SPRINKLER PIPE, ALARM INITIATING DEVICES, NOTIFICATION APPLIANCES OR ANY OTHER FIRE PROTECTION EQUIPMENT. IF ANY OF THESE ELEMENTS IN THEIR EXISTING LOCATIONS ARE TO BE COMPROMISED IN ANY WAY CONTRACTOR SHOULD NOTIFY THE FIRE MARSHALL SO HE CAN DO A SITE VISIT FOR PURPOSES OF MAINTAINING A CODE COMPLIANT FUNCTIONAL SYSTEM OF LIFE SAFETY PROTECTION.
2. FIRE SPRINKLER MODIFICATIONS TO BE PERFORMED BY A CONTRACTOR HOLDING A C-16 LICENSE
3. FIRE SPRINKLER MODIFICATIONS TO BE PERFORMED BY A CONTRACTOR HOLDING A C-16 LICENSE PRIOR TO INSTALLATION CONTRACTOR TO SUBMIT SHOP DRAWINGS AND PRODUCT DATA FOR REVIEW AND APPROVAL BY DCFM.

2

DCFM: Designated Campus Fire Marshal

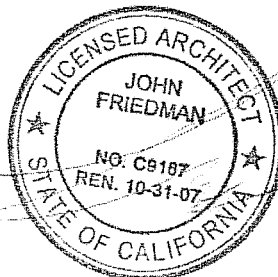
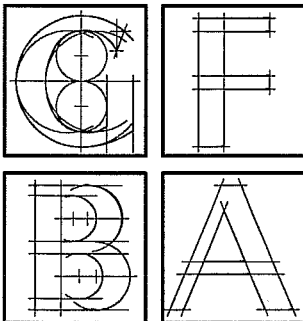
DCFM LIFE SAFETY NOTES

SHEET T-1

Revisions 11/18/08

2

1



Santa Catalina Towers Restroom and Deck Renovation

University of California Santa Barbara
Santa Barbara, CA

Contracts #: FM090053S/997711

Project #:

UCSB Dwg. #: 860-203

Drawn By: AFM Checked By: JBF

Date: 08/08/2008

Scale: As Noted

Sheet Description

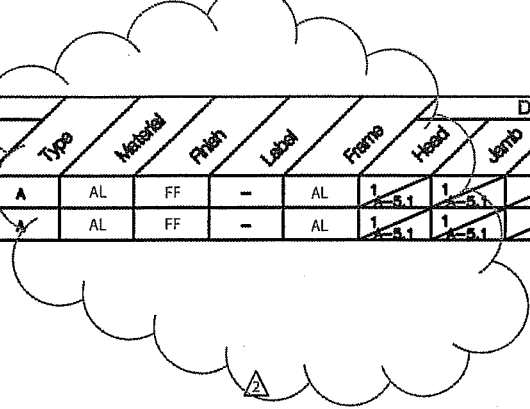
GFBA ARCHITECTS
architects . planners . engineers

16573 Ventura Boulevard
Suite 201
Encino, California 91436

TEL. (818) 905-8814
FAX. (818) 905-8998

Addendum No. 2
November 24, 2008



Door No	Door Size			Type	Material	Finish	Label	Frame	Details			Hardware	Remarks / Hardware
	Width	Height	Thickness						Head	Jamb	St		
1	3'-0"	6'-10"	-	A	AL	FF	-	AL	1	1	1		
2	3'-0"	6'-10"	-	A	AL	FF	-	AL	1	1	1		

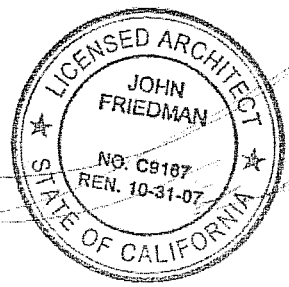
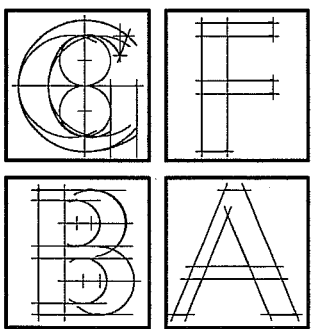


DOOR SCHEDULE

ROOM NO.	ROOM NAME	FLOOR MATERIAL	BASE MATERIAL	CEILING MATERIAL	CEILING HEIGHT	WALL MATERIAL/PAIN COLOR SEE FLOOR PLAN FOR ORIENTATION				REMARKS
						1	2	3	4	
101	POOL EQUIPMENT ROOM									NOT A PART
102	TOILET	TILE	TILE	ACT-1	7'-0" MIN.					COLORS AND MATERIALS TO BE SELECTED
103	TOILET	TILE	TILE	ACT-1	7'-0" MIN.					COLORS AND MATERIALS TO BE SELECTED

ROOM FINISH SCHEDULES
SHEET A-5.1

Revisions 11/18/08  



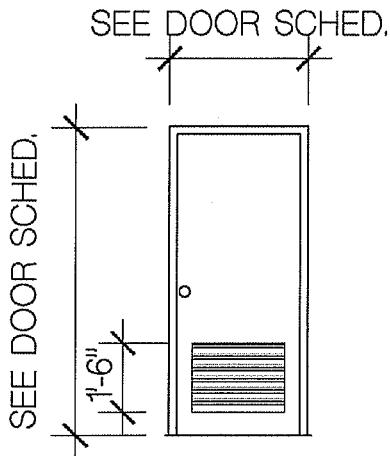
**Santa Catalina Towers
Restroom and Deck
Renovation**
University of California Santa Barbara
Santa Barbara, CA

Contracts #: FM090053S/987711
Project #:
UCSB Dwg. #: 860-203
Drawn By: AFM Checked By: JBF
Date: 08/08/2008
Scale: As Noted
Sheet Description

GFBA ARCHITECTS
architects . planners . engineers

16573 Ventura Boulevard
Suite 201
Encino, California 91436
TEL. (818) 905-8814
FAX. (818) 905-8998

Addendum No. 2
November 24, 2008



(A) SINGLE LOUVERED DOOR

MATERIALS

- AL - ALUMINUM STOREFRONT
- HM - HOLLOW METAL
- SC - SOLID CORE WOOD
(PAINT GRADE)

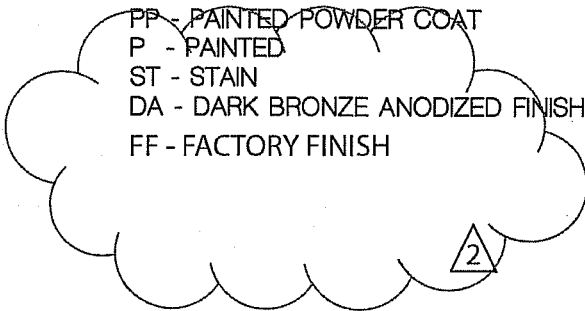
NOTES:

ALL EXIT DOORS SHALL BE OPENABLE FROM INSIDE WITHOUT THE USE OF A KEY OR SPECIAL KNOWLEDGE OR EFFORT.

FINISHES

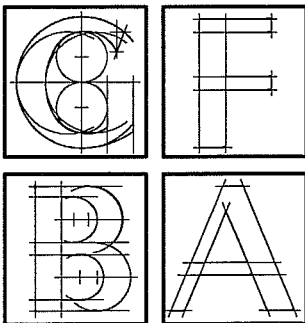
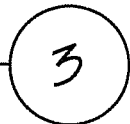
- PP - PAINTED POWDER COAT
- P - PAINTED
- ST - STAIN
- DA - DARK BRONZE ANODIZED FINISH
- FF - FACTORY FINISH

WIDTH AND HEIGHT OF REQUIRED EXIT DOORWAYS TO COMPLY WITH TITLE 24, 1005.7.



DOOR TYPES
SHEET A-5.1

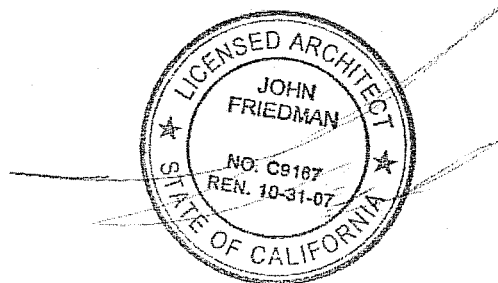
Revisions 11/18/08



GFBA ARCHITECTS
architects . planners . engineers

16573 Ventura Boulevard
Suite 201
Encino, California 91436

TEL. (818) 905-8814
FAX. (818) 905-8998



**Santa Catalina Towers
Restroom and Deck
Renovation**

University of California Santa Barbara
Santa Barbara, CA

Contracts #: FM090053S/987711

Project #:

UCSB Dwg. #: 860-203

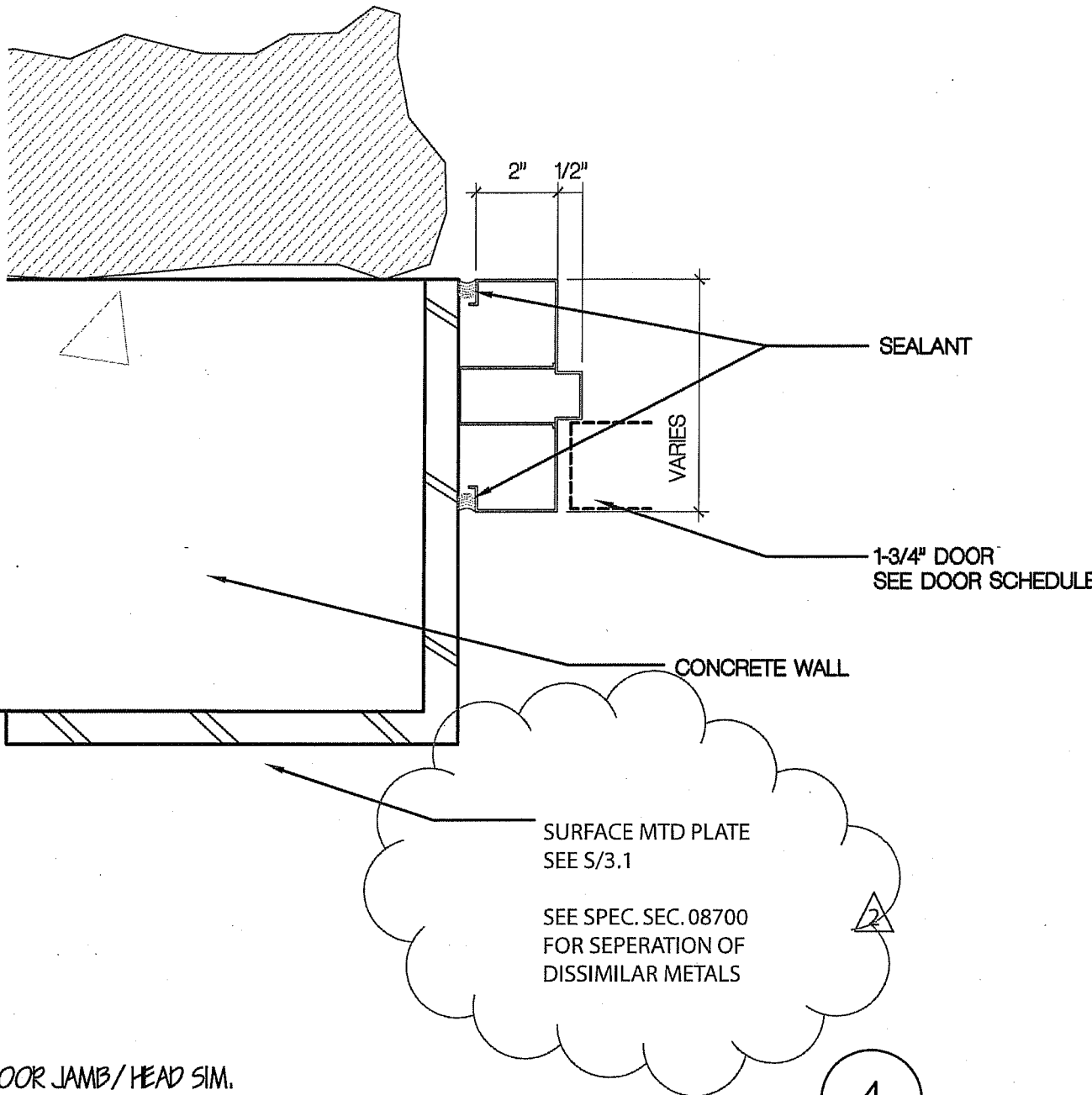
Drawn By: AFM Checked By: JB

Date: 08/08/2008

Scale: As Noted

Sheet Description

**Addendum No. 2
November 24, 2008**

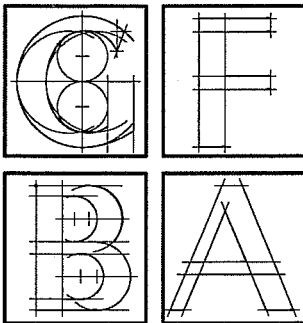


TYP. DOOR JAMB/HEAD SIM.
SHEET A-5.1

Revisions 11/18/08

2

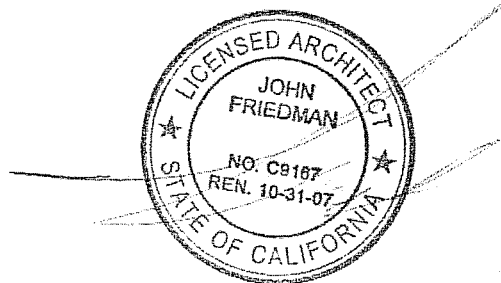
4



GFBA ARCHITECTS
architects . planners . engineers

16573 Ventura Boulevard
Suite 201
Encino, California 91436

TEL. (818) 905-8814
FAX. (818) 905-8998



**Santa Catalina Towers
Restroom and Deck
Renovation**

University of California Santa Barbara
Santa Barbara, CA

Contracts #: FM090053S/997711

Project #:

UCSB Dwg. #: 860-203

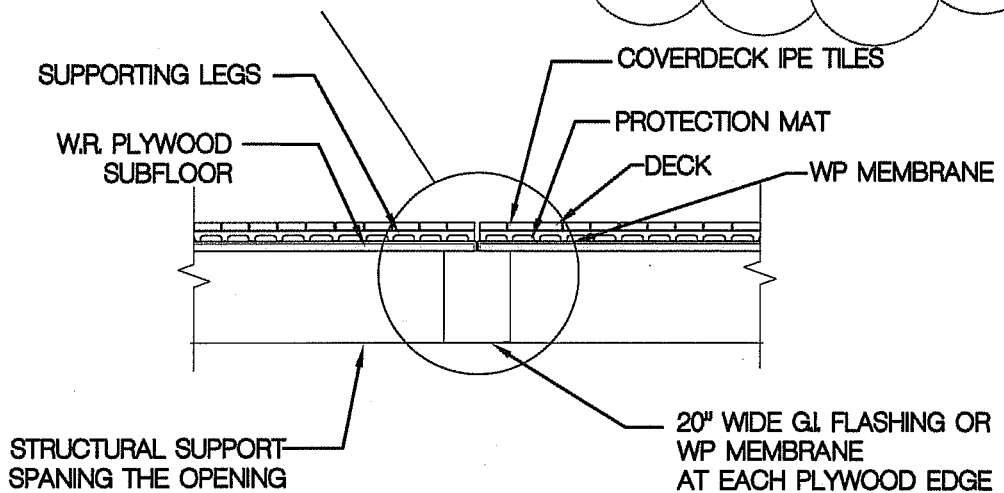
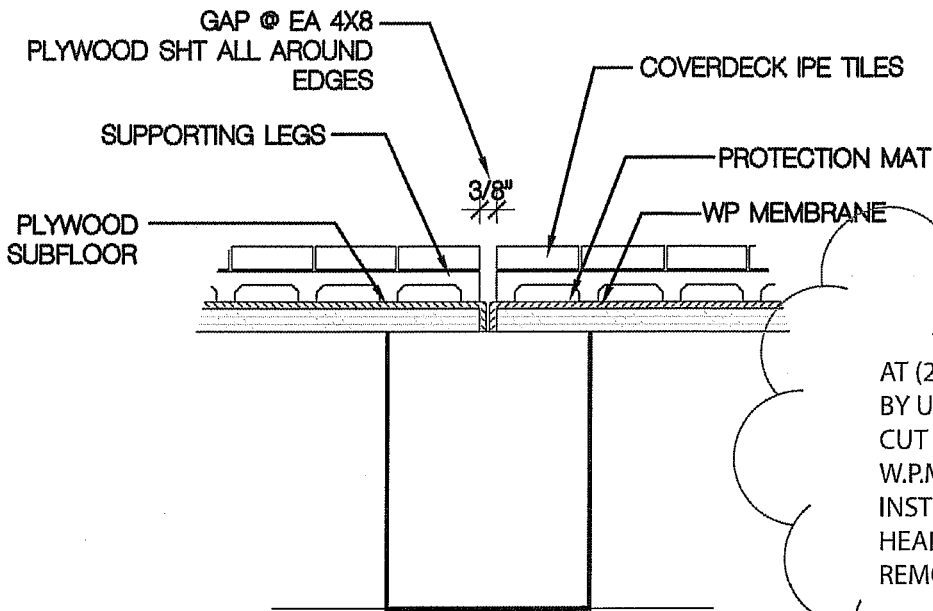
Drawn By: AFM Checked By: JBF

Date: 08/08/2008

Scale: As Noted

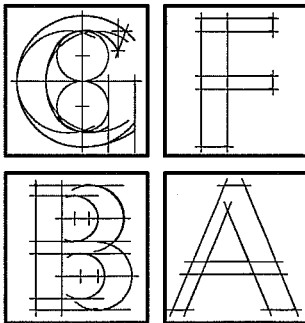
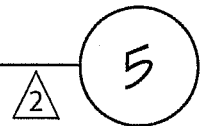
Sheet Description

Addendum No. 2
November 24, 2008



DECKING DETAIL - 8
SHEET A-7.1

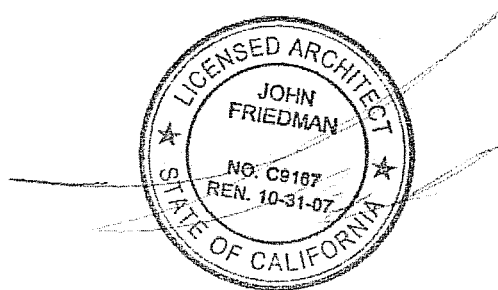
Revisions 11/18/08



GFBA ARCHITECTS
architects . planners . engineers

16573 Ventura Boulevard
Suite 201
Encino, California 91436

TEL. (818) 905-8814
FAX. (818) 905-8998



*Santa Catalina Towers
Restroom and Deck
Renovation*

University of California Santa Barbara
Santa Barbara, CA

Contracts #: FM090053S/997711

Project #:

UCSB Dwg. #: 860-203

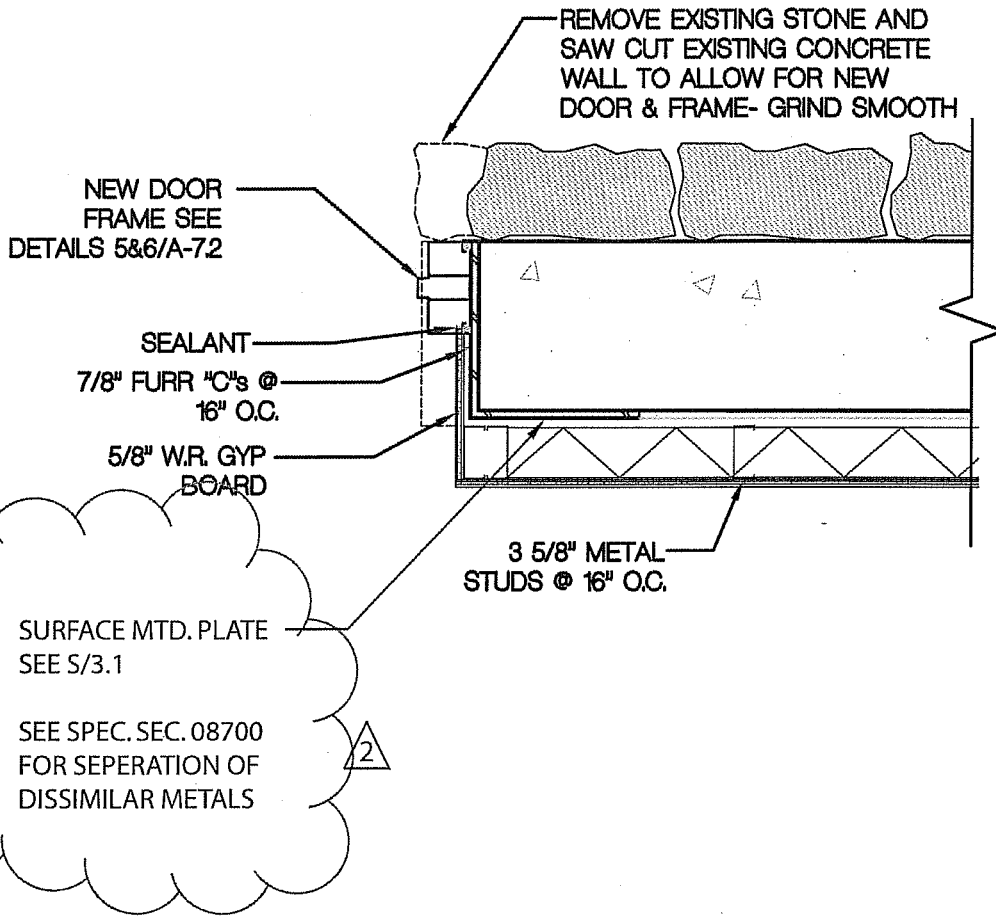
Drawn By: AFM Checked By: JBF

Date: 08/08/2008

Scale: As Noted

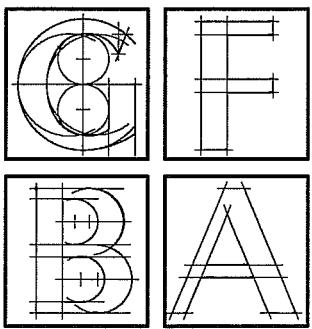
Sheet Description

Addendum No. 2
November 24, 2008



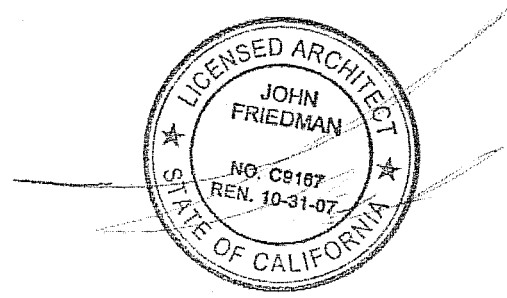
NEW WALL DETAIL - 1
SHEET A-7.I

Revisions 11/18/08 2 6



GFBA ARCHITECTS
architects . planners . engineers

16573 Ventura Boulevard
Suite 201
Encino, California 91436
TEL. (818) 905-8814
FAX. (818) 905-8998



*Santa Catalina Towers
Restroom and Deck
Renovation*

*University of California Santa Barbara
Santa Barbara, CA*

Contracts #: FM090053S/987711
Project #: _____
UCSB Dwg. #: 860-203
Drawn By: AFM Checked By: JBFB
Date: 08/08/2008
Scale: As Noted
Sheet Description _____

**Addendum No. 2
November 24, 2008**

NUMBERED NOTES THIS SHEET ONLY

- 1 (2) #5x48" HORIZONTAL DOWELS AT BOTTOM OF (N) FOOTING. SET 8" INTO (E) FOOTING WITH EPOXY ADHESIVE PER

7
SI.2

- 2 #5 @ 12" O.C. DOWELS SET 6" INTO (E) CONCRETE WALL WITH EPOXY ADHESIVE, LAP 30" WITH HORIZONTAL BARS.

- 3 (N) L 6x8x $\frac{1}{2}$ GALVANIZED STEEL ANGLE LEDGER WITH $\frac{5}{8}$ " ϕ THREADED RODS @ 24" O.C. SET 6" INTO (E) CONCRETE WITH EPOXY ADHESIVE.

2

SHEET S2.1

s|e
inc.
studio engineers inc.
structural consultants

1108 De La Vina Street, Suite A
Santa Barbara, CA 93101
p: 805.962.2780
f: 805.962.2768
e: jtasca@studioengineersinc.com
w: www.studioengineersinc.com



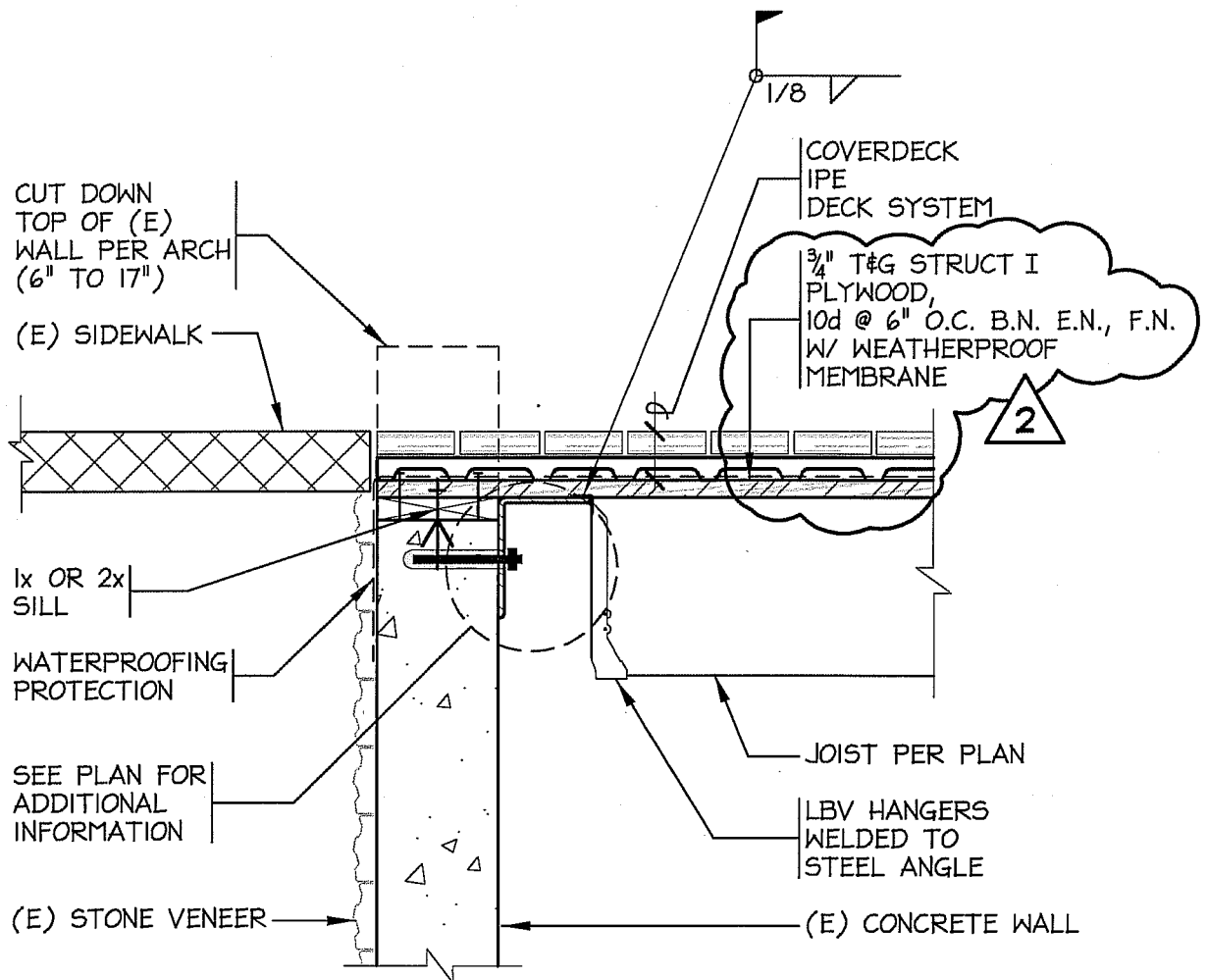
11-19-08
Revisions

2

Project Name:
UCSB Catalina Hall
SEI #08-032

RS2

Addendum No. 2
November 24, 2008



ALTERNATE

DECK ATTACHMENT @ (E) WALL
SHEET S3.1

SCALE: 1"=1'-0"

3

s|e
 inc.
studio engineers inc.
 structural consultants

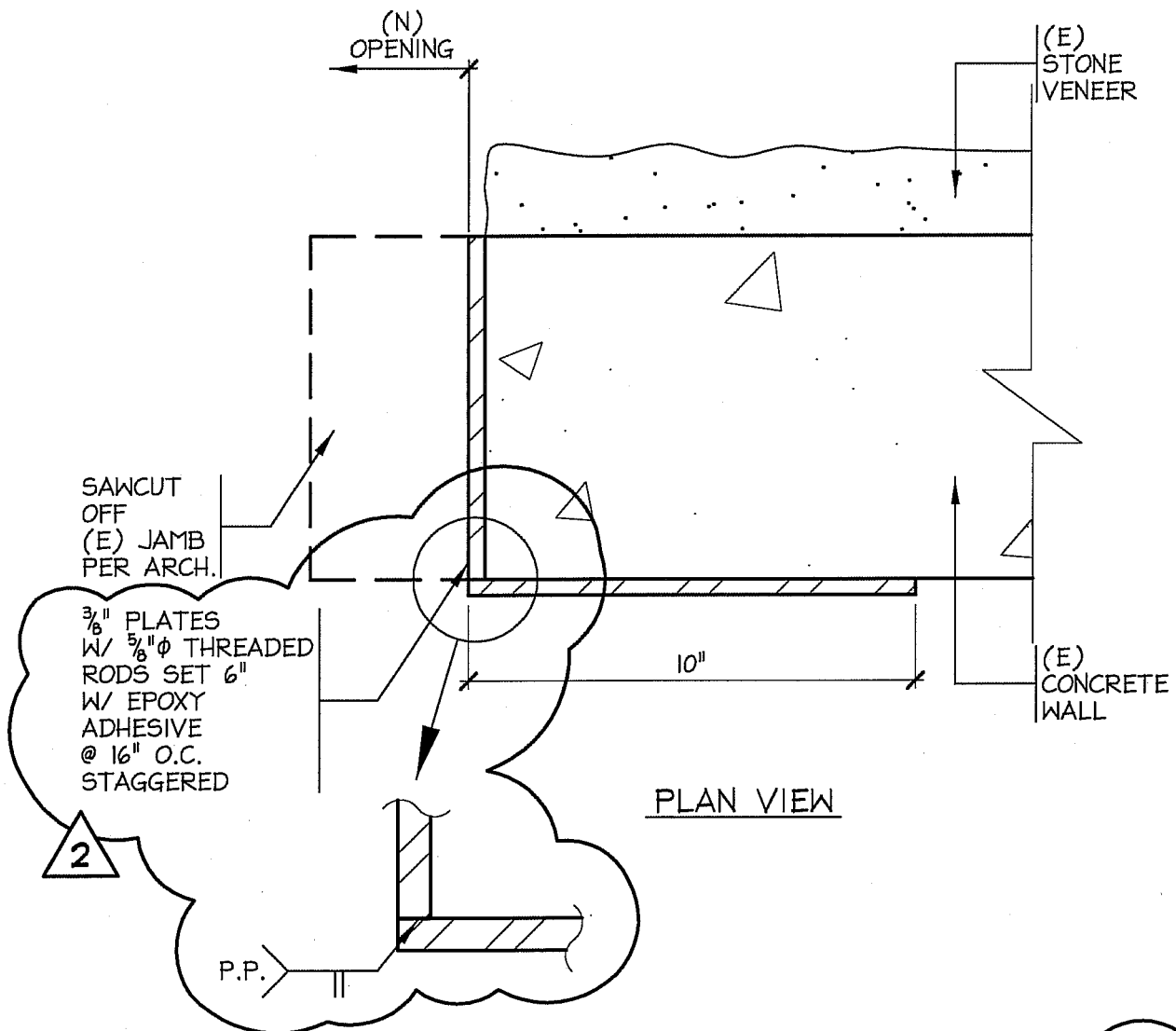
1108 De La Vina Street, Suite A
 Santa Barbara, CA 93101
 p: 805.962.2780
 f: 805.962.2768
 e: jtasca@studioengineersinc.com
 w: www.studioengineersinc.com



11-19-08 2
 Revisions

Project Name:
UCSB Catalina Hall
 SEI #08-032

RSI



PLAN VIEW

(N) JAMB @ (E) CONCRETE WALL

SHEET S3.1

SCALE: 3" = 1'-0"

6

11-19-08 2
Revisions

Project Name: **UCSB Catalina Hall** **RS3**
SEI #08-032

s|e
inc.
studio engineers inc.
structural consultants

1108 De La Vina Street, Suite A
Santa Barbara, CA 93101
p: 805.962.2780
f: 805.962.2768
e: jtasca@studioengineersinc.com
w: www.studioengineersinc.com



Addendum No. 2
November 24, 2008

DRAWINGS

Item No.

1. Sheet T-1: **Replace** DCFM Life Safety Notes with attached Revised DCFM Life Safety Notes.
2. Sheet A5.1:
 - A. **Replace** Door Schedule and Door Types with attached Revised Door Schedule and Door Types.
 - B. **Replace** Detail 1/A-5.1 with attached Revised Detail 1/A-5.1
3. Sheet A7.1: **Replace** Details 1/A-7.1 and 8/A-7.1 with attached Revised Details 1/A-7.1 and 8/A-7.1..
4. Sheet S2.1: **Replace** 'Numbered Notes' with attached Revised 'Numbered Notes' (RS2).
5. Sheet S3.1
 - A. **Replace** Alternate Detail 3/S3.1 with attached Revised Alternate Detail 3/S3.1 (RS1).
 - B. **Replace** Detail 6/S3.1 with attached Revised Detail 6/S3.1 (RS3).

GENERAL NOTES

- THE DRAWINGS SERVE AS WORKING DRAWINGS ONLY, INDICATING DIAGRAMMATICALLY THE GENERAL LAYOUT OF THE SYSTEMS AND THEIR VARIOUS COMPONENTS AND EQUIPMENT. EXAMINE ALL EXISTING CONDITIONS AS APPLICABLE. BECOME ACQUAINTED WITH SPECIFICATIONS AND DRAWINGS FOR ALL PORTIONS OF THE PROJECT. NOTIFY OWNER'S REPRESENTATIVE OF ANY APPARENT DISCREPANCIES (BEFORE BIDDING IF POSSIBLE) BETWEEN SPECIFICATIONS AND DRAWINGS FOR DIFFERENT PARTS OF THE WORK, OR OF ANY INCONSISTENCIES BETWEEN THE SPECIFICATIONS AND DRAWINGS AND THE EXISTING CONDITIONS. SECURE AND FOLLOW OWNER'S REPRESENTATIVE INSTRUCTIONS.
- ALL SCALED AND FIGURED DIMENSIONS ARE APPROXIMATE AND ARE GIVEN FOR ESTIMATE PURPOSES ONLY. CAREFULLY CHECK AND VERIFY ALL DIMENSIONS AND SIZES IN ORDER TO DETERMINE IF EQUIPMENT AND MATERIALS WILL FIT TOGETHER AND IF THE DIMENSIONS OF THE ASSEMBLY ARE COMPATIBLE WITH THE SPACE PROVIDED. WHERE EQUIPMENT IS FURNISHED BY OTHERS, VERIFY DIMENSIONS AND REQUIREMENTS BEFORE PROCEEDING WITH THE ROUGHING-IN OF CONNECTIONS. FIELD VERIFICATION OF LOCATIONS SHOWN ON PLANS IS NECESSARY SINCE ACTUAL LOCATIONS, DISTANCES, MOUNTING HEIGHTS, ETC., MAY BE AFFECTED BY FIELD CONDITIONS. THE RIGHT IS RESERVED TO MAKE ANY REASONABLE CHANGE IN LOCATION OF EQUIPMENT OR OTHER FEATURES SHOWN ON PLANS PRIOR TO ROUGH-IN WITHOUT ADDITIONAL COST TO THE OWNER.
- WHERE APPARATUS AND EQUIPMENT HAVE BEEN INDICATED ON THE DRAWINGS, DIMENSIONS HAVE BEEN TAKEN FROM TYPICAL EQUIPMENT OF THE CLASS INDICATED. CAREFULLY CHECK THE DRAWINGS TO SEE THAT THE CONTEMPLATED EQUIPMENT WILL FIT ACCEPTABLY INTO THE SPACES PROVIDED, REGARDLESS OF WHETHER OR NOT IT MAY HAVE BEEN APPROVED FOR QUALITY AND UTILITY AS AN EQUAL.
- THE ELECTRICAL INSTALLATION WORK THAT IS SHOWN AS "EXISTING" WAS OBTAINED FROM THE ORIGINAL BUILDING'S RECORD DRAWINGS, AND FROM LIMITED FIELD INVESTIGATIONS. THE CONTRACTOR SHALL VISIT THE CONSTRUCTION SITE PRIOR TO SUBMITTING THE ELECTRICAL CONSTRUCTION BID TO VERIFY THE EXISTING CONDITIONS. THE CONTRACTOR SHALL INCLUDE IN THE BID ALLOWANCES FOR ALL DEVIATIONS & UNKNOWN.

**** END OF NOTES ****

SYMBOLS LIST

<p>A or A FLUORESCENT LIGHTING FIXTURE, RECESSED, SURFACE OR PENDANT MOUNTED AS INDICATED, WITH J-BOX IN CEILING ADJACENT TO FIXTURE. ["A" INDICATES TYPE OF FIXTURE AND DESCRIBED IN FIXT. SCHEDULE]</p> <p>FLUORESCENT LIGHTING FIXTURE, WALL MOUNTED ON FLUSH OUTLET BOX OR AS INDICATED.</p> <p>POST-TOP FIXTURE WITH NUMBER OF FIXTURES AS INDICATED.</p> <p>LIGHTING FIXTURE, PENDANT MOUNTED OR SURFACE MOUNTED ON FLUSH OUTLET BOX OR AS INDICATED.</p> <p>LIGHTING FIXTURE, WALL MOUNTED ON FLUSH OUTLET BOX OR AS INDICATED.</p> <p>EXIT LIGHT FIXTURE WITH DIRECTIONAL ARROWS WHERE INDICATED, SURFACE OR PENDANT MOUNTED ON FLUSH CEILING OUTLET BOX OR AS INDICATED.</p> <p>EXIT LIGHT FIXTURE WITH DIRECTIONAL ARROWS WHERE INDICATED, WALL MOUNTED ON FLUSH OUTLET BOX, OR FLUSH WALL MOUNTED AS INDICATED.</p> <p>FLOODLIGHT FIXTURE, MOUNTING AS INDICATED OR DETAILED.</p> <p>BATTERY POWERED EMERGENCY LIGHTING UNIT.</p> <p>JUNCTION BOX WITH BLANK COVER. +15" U.O.N.</p> <p>JUNCTION BOX WITH FLEXIBLE CONNECTION. +15" U.O.N.</p> <p>SINGLE POLE TOGGLE SWITCHES IN FLUSH WALL OUTLET BOX. SUBSCRIPTS INDICATE FIXTURES CONTROLLED & A GANGED ASSEMBLY W/QTY OF SWITCHES INDICATED BY SUBSCRIPTS. '3' INDICATES 3-WAY SWITCH. +46" U.O.N.</p> <p>DUPLEX RECEPTACLE WITH HALF OUTLET SWITCHED. +15" U.O.N.</p> <p>DUPLEX RECEPTACLE, FLOOR MOUNTED IN FLUSH FLOOR OUTLET BOX, OR IN FLOOR PEDESTAL AS NOTED ON DRAWINGS.</p> <p>DUPLEX/FOURPLEX RECEPTACLE. +15" U.O.N.</p> <p>DUPLEX RECEPTACLE MOUNTED SIDEWAYS. +15" U.O.N.</p> <p>DUPLEX RECEPTACLE ON "AFCI" PROTECTED BRANCH CIRCUIT. +15" U.O.N.</p> <p>SPECIAL RECEPTACLE (DESCRIBED ON DRAWINGS). +15" U.O.N.</p> <p>TELEPHONE OUTLET IN RECESSED OUTLET BOX. +15" U.O.N. "W" INDICATES WALL MOUNTED INSTRUMENT WITH OUTLET BOX MOUNTED AT +54" U.O.N.</p> <p>DATA OUTLET IN RECESSED OUTLET BOX. +15" U.O.N.</p> <p>COAXIAL CABLE-TV OUTLET. +15" U.O.N.</p> <p>THERMOSTAT (MTG. HT. PER MECH. DWGS.)</p> <p>FIRE ALARM MANUAL PULL STATION.</p> <p>FIRE ALARM COMBINATION HORN/STROBE.</p> <p>FIRE ALARM STROBE.</p> <p>FIRE ALARM SMOKE DETECTOR, WALL OR CEILING MOUNTED.</p> <p>FIRE ALARM HEAT DETECTOR, CEILING MOUNTED.</p>	<p>FLUORESCENT LIGHTING FIXTURE, RECESSED, SURFACE OR PENDANT MOUNTED AS INDICATED, WITH J-BOX IN CEILING ADJACENT TO FIXTURE. ["A" INDICATES TYPE OF FIXTURE AND DESCRIBED IN FIXT. SCHEDULE]</p> <p>FLUORESCENT LIGHTING FIXTURE, WALL MOUNTED ON FLUSH OUTLET BOX OR AS INDICATED.</p> <p>POST-TOP FIXTURE WITH NUMBER OF FIXTURES AS INDICATED.</p> <p>LIGHTING FIXTURE, PENDANT MOUNTED OR SURFACE MOUNTED ON FLUSH OUTLET BOX OR AS INDICATED.</p> <p>LIGHTING FIXTURE, WALL MOUNTED ON FLUSH OUTLET BOX OR AS INDICATED.</p> <p>EXIT LIGHT FIXTURE WITH DIRECTIONAL ARROWS WHERE INDICATED, SURFACE OR PENDANT MOUNTED ON FLUSH CEILING OUTLET BOX OR AS INDICATED.</p> <p>EXIT LIGHT FIXTURE WITH DIRECTIONAL ARROWS WHERE INDICATED, WALL MOUNTED ON FLUSH OUTLET BOX, OR FLUSH WALL MOUNTED AS INDICATED.</p> <p>FLOODLIGHT FIXTURE, MOUNTING AS INDICATED OR DETAILED.</p> <p>BATTERY POWERED EMERGENCY LIGHTING UNIT.</p> <p>JUNCTION BOX WITH BLANK COVER. +15" U.O.N.</p> <p>JUNCTION BOX WITH FLEXIBLE CONNECTION. +15" U.O.N.</p> <p>SINGLE POLE TOGGLE SWITCHES IN FLUSH WALL OUTLET BOX. SUBSCRIPTS INDICATE FIXTURES CONTROLLED & A GANGED ASSEMBLY W/QTY OF SWITCHES INDICATED BY SUBSCRIPTS. '3' INDICATES 3-WAY SWITCH. +46" U.O.N.</p> <p>DUPLEX RECEPTACLE WITH HALF OUTLET SWITCHED. +15" U.O.N.</p> <p>DUPLEX RECEPTACLE, FLOOR MOUNTED IN FLUSH FLOOR OUTLET BOX, OR IN FLOOR PEDESTAL AS NOTED ON DRAWINGS.</p> <p>DUPLEX/FOURPLEX RECEPTACLE. +15" U.O.N.</p> <p>DUPLEX RECEPTACLE MOUNTED SIDEWAYS. +15" U.O.N.</p> <p>DUPLEX RECEPTACLE ON "AFCI" PROTECTED BRANCH CIRCUIT. +15" U.O.N.</p> <p>SPECIAL RECEPTACLE (DESCRIBED ON DRAWINGS). +15" U.O.N.</p> <p>TELEPHONE OUTLET IN RECESSED OUTLET BOX. +15" U.O.N. "W" INDICATES WALL MOUNTED INSTRUMENT WITH OUTLET BOX MOUNTED AT +54" U.O.N.</p> <p>DATA OUTLET IN RECESSED OUTLET BOX. +15" U.O.N.</p> <p>COAXIAL CABLE-TV OUTLET. +15" U.O.N.</p> <p>THERMOSTAT (MTG. HT. PER MECH. DWGS.)</p> <p>FIRE ALARM MANUAL PULL STATION.</p> <p>FIRE ALARM COMBINATION HORN/STROBE.</p> <p>FIRE ALARM STROBE.</p> <p>FIRE ALARM SMOKE DETECTOR, WALL OR CEILING MOUNTED.</p> <p>FIRE ALARM HEAT DETECTOR, CEILING MOUNTED.</p>	<p>2 # 12 & 1 # 12G. - 1/2"C.</p> <p>3 # 12 & 1 # 12G. - 1/2"C.</p> <p>4 # 12 & 1 # 12G. - 3/4"C.</p> <p>6 # 12 & 1 # 12G. - 3/4"C.</p> <p>CONDUIT HOME RUN WITH 3 # 12 & 1 # 12G. TO PANEL "A", CIRCUITS 1 & 3.</p> <p>CONDUIT RISER UP.</p> <p>CONDUIT RISER DOWN.</p> <p>CONDUIT RUN STUBBED OUT, MARKED AND CAPPED.</p> <p>CONDUIT RUN CONCEALED IN OR ABOVE CEILING, OR IN WALLS.</p> <p>CONDUIT RUN IN OR BELOW FLOOR, OR BELOW GRADE.</p> <p>CONDUIT RUN EXPOSED.</p> <p>MOTOR, SIZE AS INDICATED.</p> <p>SYMBOL SHOWN WITH SUBSCRIPT (EX) INDICATES EXISTING DEVICE OR LIGHT FIXTURE REMAIN, U.O.N. REINSTALL AND RECONNECT AS REQUIRED BY THE WORK OF THIS PROJECT, INCLUDING NEW CONDUIT AND CONDUCTORS AS REQUIRED OR AS INDICATED.</p> <p>OCCUPANCY SENSOR, WALL OR CEILING MOUNTED AS NOTED ON PLANS.</p> <p>COMBINATION PHOTOCELL & MOTION DETECTOR.</p> <p>INTERCOM SPEAKER, MOUNTING HEIGHT PER OWNER.</p> <p>+48" INDICATES MOUNTING HEIGHT FROM FINISHED FLOOR OR GRADE TO CENTER-LINE.</p>	<p>2 # 12 & 1 # 12G. - 1/2"C.</p> <p>3 # 12 & 1 # 12G. - 1/2"C.</p> <p>4 # 12 & 1 # 12G. - 3/4"C.</p> <p>6 # 12 & 1 # 12G. - 3/4"C.</p> <p>CONDUIT HOME RUN WITH 3 # 12 & 1 # 12G. TO PANEL "A", CIRCUITS 1 & 3.</p> <p>CONDUIT RISER UP.</p> <p>CONDUIT RISER DOWN.</p> <p>CONDUIT RUN STUBBED OUT, MARKED AND CAPPED.</p> <p>CONDUIT RUN CONCEALED IN OR ABOVE CEILING, OR IN WALLS.</p> <p>CONDUIT RUN IN OR BELOW FLOOR, OR BELOW GRADE.</p> <p>CONDUIT RUN EXPOSED.</p> <p>MOTOR, SIZE AS INDICATED.</p> <p>SYMBOL SHOWN WITH SUBSCRIPT (EX) INDICATES EXISTING DEVICE OR LIGHT FIXTURE REMAIN, U.O.N. REINSTALL AND RECONNECT AS REQUIRED BY THE WORK OF THIS PROJECT, INCLUDING NEW CONDUIT AND CONDUCTORS AS REQUIRED OR AS INDICATED.</p> <p>OCCUPANCY SENSOR, WALL OR CEILING MOUNTED AS NOTED ON PLANS.</p> <p>COMBINATION PHOTOCELL & MOTION DETECTOR.</p> <p>INTERCOM SPEAKER, MOUNTING HEIGHT PER OWNER.</p> <p>+48" INDICATES MOUNTING HEIGHT FROM FINISHED FLOOR OR GRADE TO CENTER-LINE.</p>																																																
		<h3>ABBREVIATIONS</h3> <table border="0"> <tr> <td>C.</td> <td>CONDUIT</td> <td>GFCI/GFI</td> <td>GROUND-FAULT CIRCUIT INTERRUPTER</td> </tr> <tr> <td>C.O./CO</td> <td>CONDUIT ONLY W/PULL CORD</td> <td>N.I.C.</td> <td>NOT IN CONSTRUCTION</td> </tr> <tr> <td>(EX)/EX</td> <td>EXISTING TO REMAIN</td> <td>N.T.S.</td> <td>NOT TO SCALE</td> </tr> <tr> <td>(EXR)/EXR</td> <td>EXISTING TO BE REMOVED, OR RELOCATED.</td> <td>TYP.</td> <td>TYPICAL</td> </tr> <tr> <td>TW</td> <td>TANDEM WIRING</td> <td>U.G.(U/G)</td> <td>UNDERGROUND</td> </tr> <tr> <td>DNS</td> <td>DO NOT SWITCH</td> <td>WP.</td> <td>WEATHERPROOF</td> </tr> <tr> <td>C.B.</td> <td>CIRCUIT BREAKER</td> <td>NL</td> <td>NIGHT LIGHT [DO NOT SWITCH]</td> </tr> <tr> <td>(N)</td> <td>NEW</td> <td>CFL</td> <td>COMPACT FLUORESCENT</td> </tr> <tr> <td>CLG.</td> <td>CEILING</td> <td>AFCI/AFI</td> <td>ARC-FAULT CIRCUIT INTERRUPTER</td> </tr> <tr> <td>A.F.F.</td> <td>ABOVE FINISHED FLOOR</td> <td>U.O.N.</td> <td>UNLESS OTHERWISE NOTED</td> </tr> <tr> <td>N.O.</td> <td>NORMALLY OPEN</td> <td>FACP</td> <td>FIRE ALARM CONTROL PANEL</td> </tr> <tr> <td>N.C.</td> <td>NORMALLY CLOSED</td> <td></td> <td></td> </tr> </table>		C.	CONDUIT	GFCI/GFI	GROUND-FAULT CIRCUIT INTERRUPTER	C.O./CO	CONDUIT ONLY W/PULL CORD	N.I.C.	NOT IN CONSTRUCTION	(EX)/EX	EXISTING TO REMAIN	N.T.S.	NOT TO SCALE	(EXR)/EXR	EXISTING TO BE REMOVED, OR RELOCATED.	TYP.	TYPICAL	TW	TANDEM WIRING	U.G.(U/G)	UNDERGROUND	DNS	DO NOT SWITCH	WP.	WEATHERPROOF	C.B.	CIRCUIT BREAKER	NL	NIGHT LIGHT [DO NOT SWITCH]	(N)	NEW	CFL	COMPACT FLUORESCENT	CLG.	CEILING	AFCI/AFI	ARC-FAULT CIRCUIT INTERRUPTER	A.F.F.	ABOVE FINISHED FLOOR	U.O.N.	UNLESS OTHERWISE NOTED	N.O.	NORMALLY OPEN	FACP	FIRE ALARM CONTROL PANEL	N.C.	NORMALLY CLOSED		
C.	CONDUIT	GFCI/GFI	GROUND-FAULT CIRCUIT INTERRUPTER																																																
C.O./CO	CONDUIT ONLY W/PULL CORD	N.I.C.	NOT IN CONSTRUCTION																																																
(EX)/EX	EXISTING TO REMAIN	N.T.S.	NOT TO SCALE																																																
(EXR)/EXR	EXISTING TO BE REMOVED, OR RELOCATED.	TYP.	TYPICAL																																																
TW	TANDEM WIRING	U.G.(U/G)	UNDERGROUND																																																
DNS	DO NOT SWITCH	WP.	WEATHERPROOF																																																
C.B.	CIRCUIT BREAKER	NL	NIGHT LIGHT [DO NOT SWITCH]																																																
(N)	NEW	CFL	COMPACT FLUORESCENT																																																
CLG.	CEILING	AFCI/AFI	ARC-FAULT CIRCUIT INTERRUPTER																																																
A.F.F.	ABOVE FINISHED FLOOR	U.O.N.	UNLESS OTHERWISE NOTED																																																
N.O.	NORMALLY OPEN	FACP	FIRE ALARM CONTROL PANEL																																																
N.C.	NORMALLY CLOSED																																																		

LIGHTING FIXTURE SCHEDULE

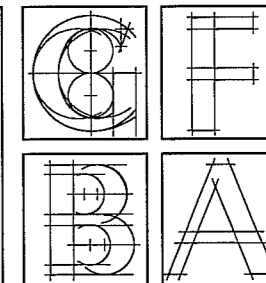
- | | |
|---|--|
| <ol style="list-style-type: none"> PRIOR TO BIDDING, CONTRACTOR SHALL DETERMINE CEILING CONSTRUCTION AND MOUNTING REQUIREMENT FOR EACH FIXTURE AT EACH LOCATION INCLUDING THOSE FIXTURES WHERE CEILING TYPE IS INDICATED. FIELD-VERIFY THE TYPE OF LAMP WITH UNIVERSITY'S REPRESENTATIVE PRIOR TO ORDERING LIGHTING FIXTURE. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. | <ol style="list-style-type: none"> CATALOG NUMBERS AND DESCRIPTIONS SHALL BE VERIFIED BY CONTRACTOR PRIOR TO SUBMISSION OF SHOP DRAWING. ANY CONFLICTS SHALL BE BROUGHT TO THE ATTENTION OF THE UNIVERSITY'S REPRESENTATIVE. NOT APPLICABLE. |
|---|--|

TYPE	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	LAMP		INPUT POWER (VA)	MOUNTING
				TYPE	QTY/WATTS		
A	LIGHTOLIER	Frame-In-Kit: 8242HUVLC Reflector Trim: 8098VWH	8-3/4" APERTURE, WET-LOCATION LISTED, VANDAL-RESISTANT, HIGH IMPACT ACRYLIC, SEMI-TRANSPARENT FLUSH-LENS DIFFUSER, WHITE FLANGE, 120 VOLT ELECTRONIC H.P.F. THERMALLY PROTECTED CLASS "P" BALLAST.	TTT, 4-PIN 4100° K. 82 C.R.I.	2/32	64	CLG., RECESSED
B	LIGHTOLIER	Frame-In-Kit: 8242HUVLC Reflector Trim: 8098VWH	SAME AS TYPE "A" WITH AN INTEGRAL EMERGENCY BATTERY PACK.	TTT, 4-PIN 4100° K. 82 C.R.I.	2/32	64	CLG., RECESSED
C	LUMINAIRE LIGHTING CORP.	CRV 13 - 1 PLT32 - 120V - OP - BLK - GLR	13.125" DIA., 4.0" DEEP, VANDAL-RESISTANT, WET-LOCATION LISTED, HIGH IMPACT 0.130" THICK POLYCARBONATE LENS (OPAL) WITH 6-SPOKE POLYCARBONATE GRILL, 120V ELECTRONIC CLASS "P" H.P.F. BALLAST (10% THD) WITH FUSE & FUSE HOLDER.	PLT32 (INCLUDED)	1/32	32	WALL, ON RECESSED OUTLET BOX

Ⓧ INSTALL LIGHTING FIXTURE AS CLOSE TO T-BAR CEILING AS POSSIBLE.

R. E. Job No. 0810

Rodriguez Engineering
Consulting Electrical Engineers
275 Aspen Way • Santa Barbara, CA 93111
(805) 967-4724

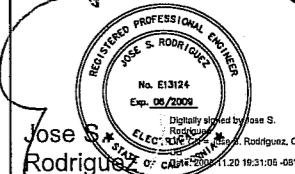


GFBA ARCHITECTS
architects . planners . engineers

16573 Ventura Boulevard
Suite 201
Encino, California 91436
TEL. (818) 905-8814
FAX. (818) 905-8898

*Santa Catalina Towers
Restroom and Deck
Renovation*

University of California-Santa Barbara
Santa Barbara, CA



Issued For: _____ Date: _____ Rev: _____
Addendum No. 2
November 24, 2008

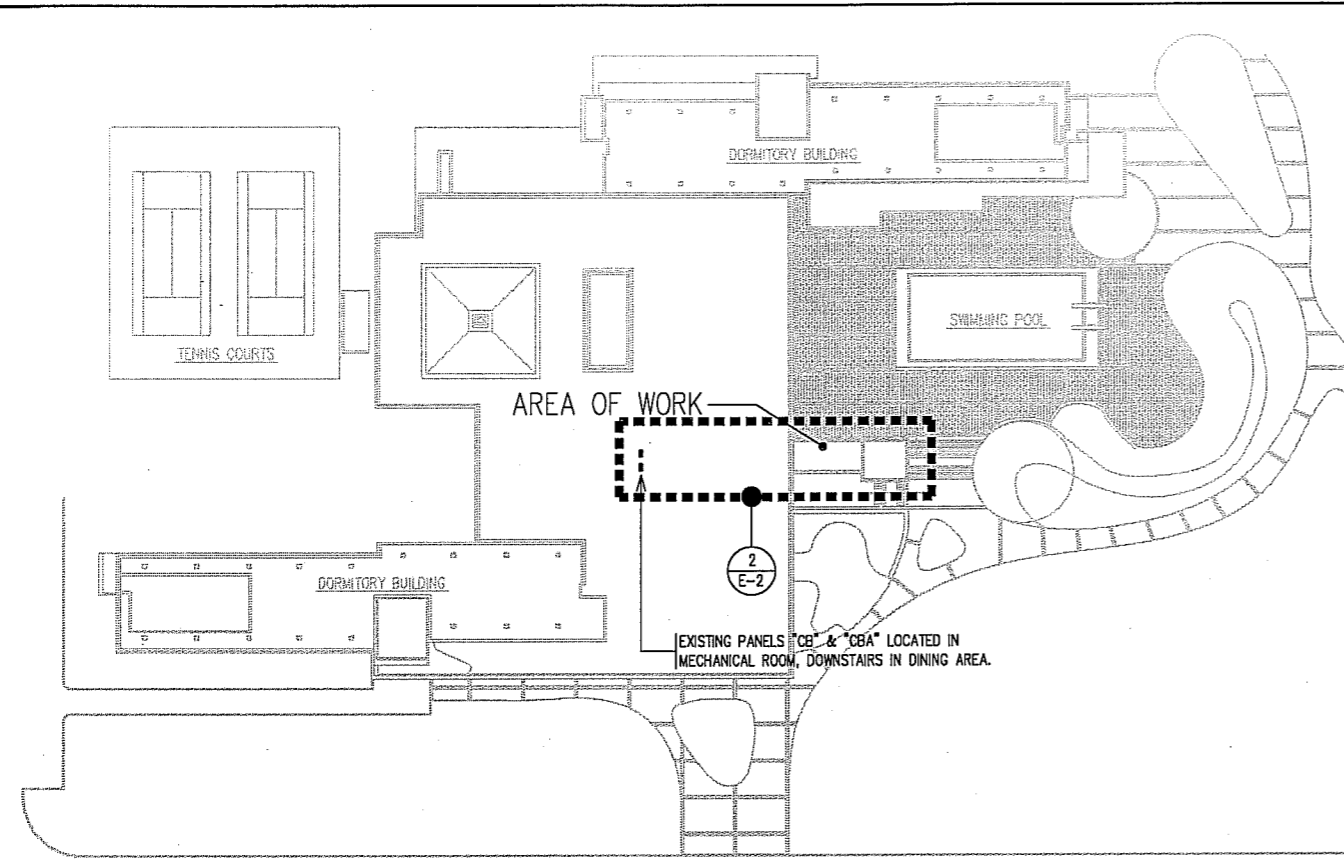
As instruments of service, all designs, ideas, and information shown on these drawings are and shall remain the property of the Designer. No part thereof shall be copied, disclosed to others, or used in connection with any work or project other than the specific project for which they have been prepared and developed without the written consent of The Designer. Visual contact with these drawings shall constitute conclusive evidence of acceptance of these restrictions.

Contract #: FM0900535/987711
Project #: _____
UCSB Dwg #: 880-203
Drawn By: FH Checked By: JF
Date: 09/25/2008
Scale: As Noted
Sheet Description:

**LTG. FIXTURE
SCHEDULE,
SYMBOLS**

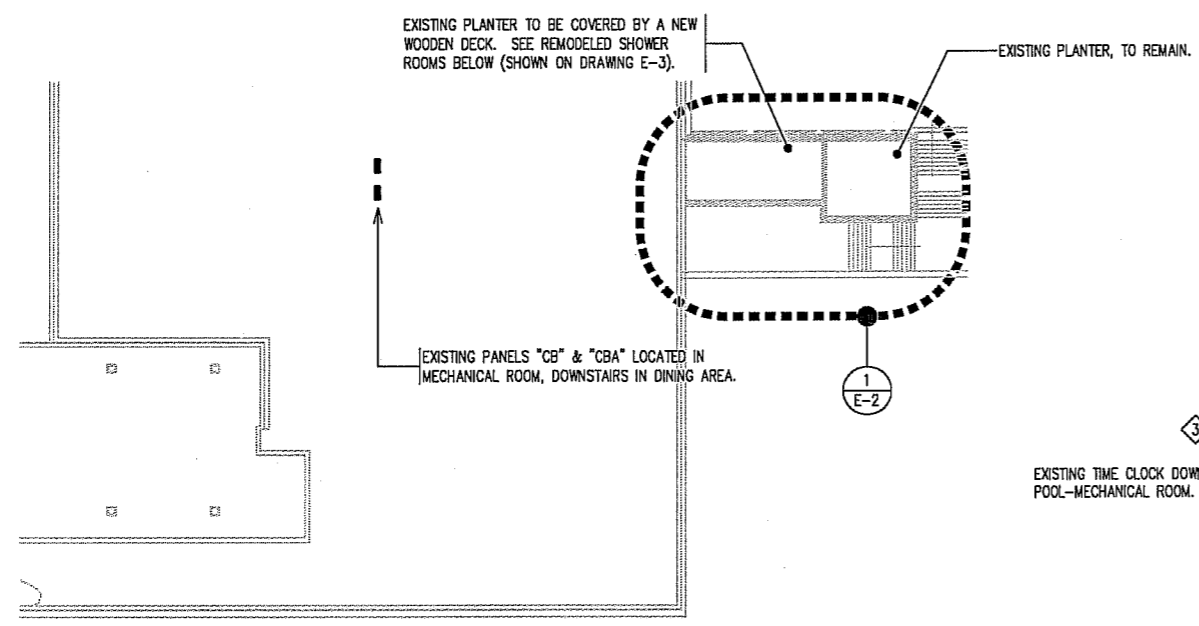
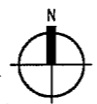
Sheet Number:

E-1



PARTIAL SITE PLAN

SCALE: 1" = 40'-0"



PARTIAL SITE PLAN

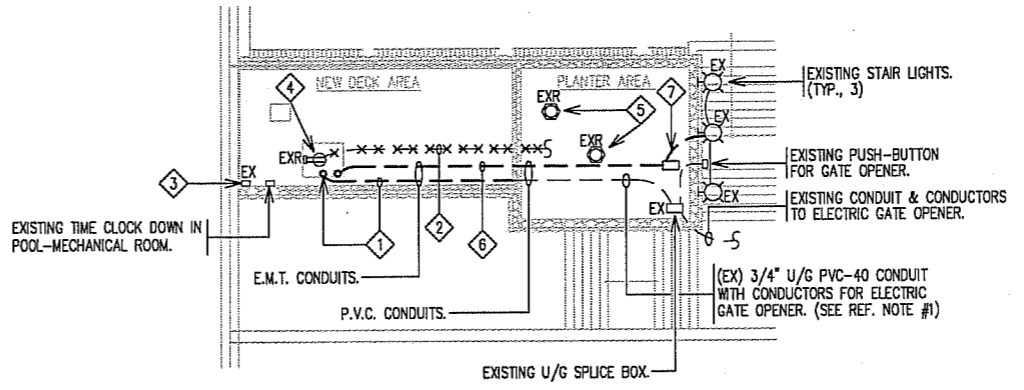
SCALE: 1" = 20'-0"

2

- ### REFERENCE NOTES
- 1 REPLACE EXISTING SECTION OF 3/4 INCH P.V.C. CONDUIT WITH NEW 3/4 INCH E.M.T. CONDUIT. EXISTING CONCRETE MECHANICAL SHAFT WILL BE CUT DOWN BELOW NEW DECK FRAMING, THE NEW CONDUIT PENETRATION INTO CONCRETE SHAFT SHALL ALSO BE LOWER. PROVIDE NEW CONDUCTORS (FOR EXISTING ELECTRIC GATE OPENER, TO MATCH EXISTING) AS REQUIRED FOR A COMPLETE INSTALLATION.
 - 2 REMOVE EXISTING 1/2 INCH P.V.C. CONDUIT AND CONDUCTORS FOR EXISTING LANDSCAPE UP-LIGHTS AND STAIR LIGHTS. PULL CONDUIT AND CONDUCTORS BACK TO J-BOX LOCATED ADJACENT TO TIME CLOCK IN POOL MECH. ROOM. (ALSO SEE REF. NOTES # 4, 6, & 7).
 - 3 EXISTING 1-GANG W.P. OUTLET BOX (SURFACE MOUNTED AT +30" ON PLANTER WALL) WITH 3#12 A.W.G. CAPPED CONDUCTORS. REMOVE THE BRANCH CIRCUIT CONDUCTORS BACK TO NEAREST ACCESSIBLE J-BOX. PROVIDE W.P. BLANK COVER-PLATE ON J-BOX.
 - 4 REMOVE EXISTING RECEPTACLE & OUTLET BOX LOCATED INSIDE DUCT BELOW THE STEEL COVER. REMOVE THE CONDUIT & CONDUCTORS BACK TO J-BOX LOCATED ADJACENT TO TIME CLOCK IN POOL MECH. RM. (ALSO SEE REFERENCE NOTE # 2)
 - 5 REMOVE EXISTING U/G LIGHTING FIXTURE HOUSINGS FOR PREVIOUS LANDSCAPE LIGHTS. PROVIDE NEW U/G CONDUIT AND CONDUCTORS TO RECONNECT THE EXISTING STAIR LIGHTS FROM THE NEW U/G PULL-BOX.
 - 6 PROVIDE NEW 3/4 INCH E.M.T. CONDUIT AND CONDUCTORS FOR EXISTING STAIR LIGHTS. RUN THE NEW CONDUIT FROM J-BOX LOCATED ADJACENT TO TIME CLOCK IN POOL MECHANICAL ROOM. TRANSITION FROM E.M.T. CONDUIT TO P.V.C. SCHEDULE 40 CONDUIT WHERE THE CONDUIT ENTERS THE PLANTER AREA. INTERCEPT THE EXISTING LIGHTING BRANCH CIRCUIT FOR THE STAIR LIGHTS AT THE J-BOX LOCATED ADJACENT TO THE TIME CLOCK. IDENTIFY, IN THE FIELD, THE PANEL & CIRCUIT NUMBER AND PROVIDE THE INFORMATION ON RED-LINE MARK-UPS.
 - 7 PROVIDE NEW 11" x 17" FIBER-GLASS UNDER GROUND PULL/SPLICE BOX. INTERCEPT EXISTING CONDUCTORS FOR THE STAIR LIGHTS. PROVIDE CONDUIT AND CONDUCTORS AS REQUIRED TO RECONNECT THE STAIR LIGHTS.

EXISTING PANEL 'CB'

BUS: 225A		MAIN BRKR: LUGS ONLY		MOUNTING: SURFACE		
MFG: CUTLER - HAMMER		FED: BOTTOM		FEEDER: SEE ONE LINE DIAGRAM		
SERVICE: 208Y/120V, 3Ø, 4W, 5/Ø		LOCATION: Mech. Room (Dining Area)		CABLE: SEE ONE LINE DIAGRAM		
CIRCUIT LOCATION/DESCRIPTION	A	B	C.B.	CKT NO.	CIRCUIT LOCATION/DESCRIPTION	
POOL EQPT. RM. LTS & RECEPT.	800		20/1	01 02	20/1 800	
LTS & FAN, M&W POOL SHOWERS		950	20/1	03 04	20/1 800	
LIGHTS, DINING AREA		900	20/1	05 06	20/1 800	
LIGHTS, LOBBY		700	20/1	07 08	20/1 800	
LIGHTS, LOBBY		700	20/1	09 10	20/1 500	
LTS, MENS & WOMENS BATHROOM	600		20/1	11 12	20/1 800	
LIGHTS & RECEPT., MECH. RM.		700	20/1	13 14	20/1 800	
LIGHTS & RECEPT., MECH. RM.		500	20/1	15 16	20/1 500	
CLOCK & RECEPT., DINING AREA	900		20/1	17 18	20/1 900	
REC., LIBRARY, LOBBY, M/W BATH	1080		20/1	19 20	20/1 980	
RECEPT., LIBRARY		900	20/1	21 22	20/1 980	
FIRE SMOKE DAMPER	480		20/1	23 24	20/1 600	
2nd FLR. AC-2, ROOF		2400	40/2	25 26	20/1 800	
AHU-3	960		15/3	27 28	20/1 800	
AHU-2	3000		30/3	29 30	20/1 3000	
		3000	42	31 32	70/3	
		960	33	33 34		
		960	35	35 36		
		3000	37	37 38	50/3	
		3000	39	39 40		
		3000	41	41 42		
① LONG CONTINUOUS LOAD.		CONN. LOAD	13480	16250	15900	TOTAL CONN. LOAD: 45.6 KVA
② ---		L.C.D.	1025	550	925	LONG CONT. LOAD: 2.5 KVA
③ ---		LOAD DEMAND	14505	16800	16825	TOTAL LOAD DEMAND: 48.1 KVA
④ ---		MINIMUM BREAKER A.I.C. RATING:	10,000	MAXIMUM PHASE AMPS:	140.2	

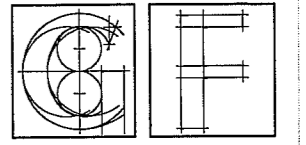


PARTIAL ELECTRICAL PLAN

SCALE: 1" = 10'-0"

1

R. E. Job No. 0810
Rodriguez Engineering
 Consulting Electrical Engineers
 275 Aspen Way • Santa Barbara, CA 93111
 (805) 887-4724



GFBA ARCHITECTS
 architects • planners • engineers
 16573 Ventura Boulevard
 Suite 201
 Encino, California 91438
 TEL: (818) 905-8814
 FAX: (818) 905-8888

**Santa Catalina Towers
 Restroom and Deck
 Renovation**

University of California, Santa Barbara
 Santa Barbara, CA

Issued For: _____ Date: _____ Rev: _____

Addendum No. 2
November 24, 2008

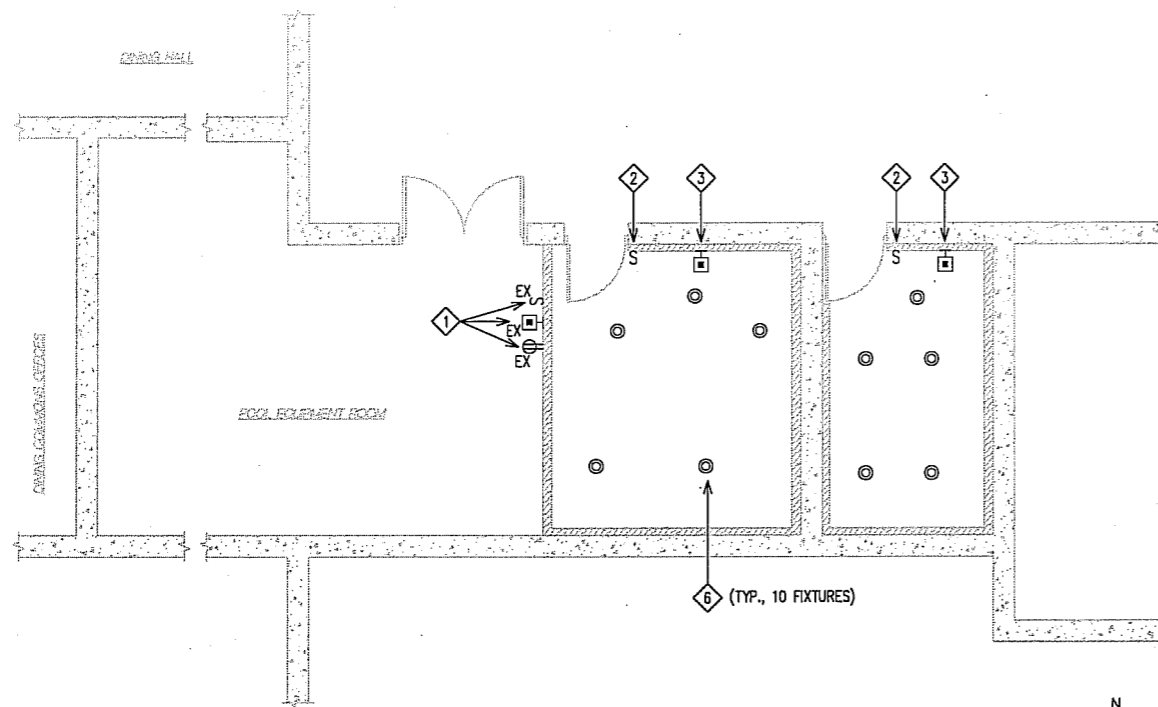
As instruments of service, all designs, issues, and information shown on these drawings are and shall remain the property of the Designer. No part thereof shall be copied, disclosed to others, or used in connection with any work or project other than the specific project for which they have been prepared and developed without the written consent of The Designer. Visual contact with these drawings shall constitute conclusive evidence of acceptance of these restrictions.

Contract #: FM090053S/987711
 Project #: _____
 UCSB Dwg #: 880-203
 Drawn By: RH Checked By: JR
 Date: 09/25/2008
 Scale: As Noted
 Sheet Description:

**SITE ELECT.
 PLAN,
 SCHEDULES**

Sheet Number:

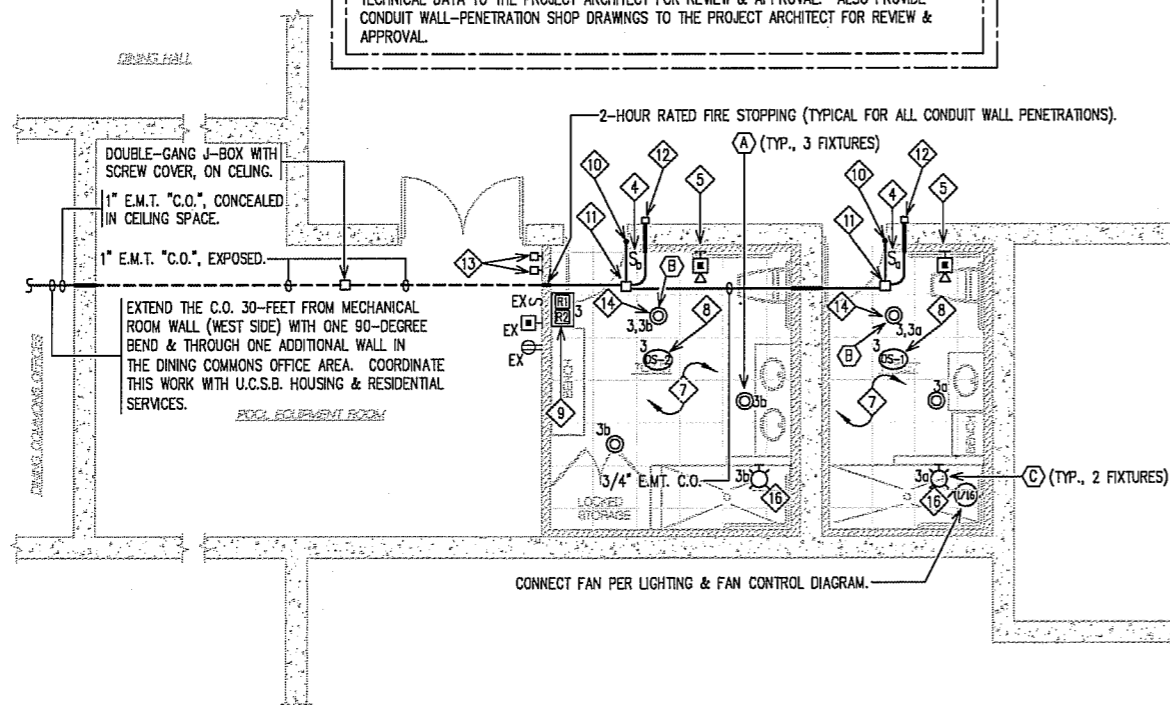
E-2



DEMOLITION PLAN

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

PRIOR TO CORE-DRILLING THROUGH CONCRETE WALLS, VERIFY (USING TEST INSTRUMENTS) THAT NO REBAR WILL BE DAMAGED. PROVIDE CONDUIT SLEEVES AND SEAL ALL CONDUIT WALL PENETRATIONS WITH 2-HOUR, FIRE-RATED SEALANT MATERIAL. SUBMITT SEALANT MATERIAL TECHNICAL DATA TO THE PROJECT ARCHITECT FOR REVIEW & APPROVAL. ALSO PROVIDE CONDUIT WALL-PENETRATION SHOP DRAWINGS TO THE PROJECT ARCHITECT FOR REVIEW & APPROVAL.

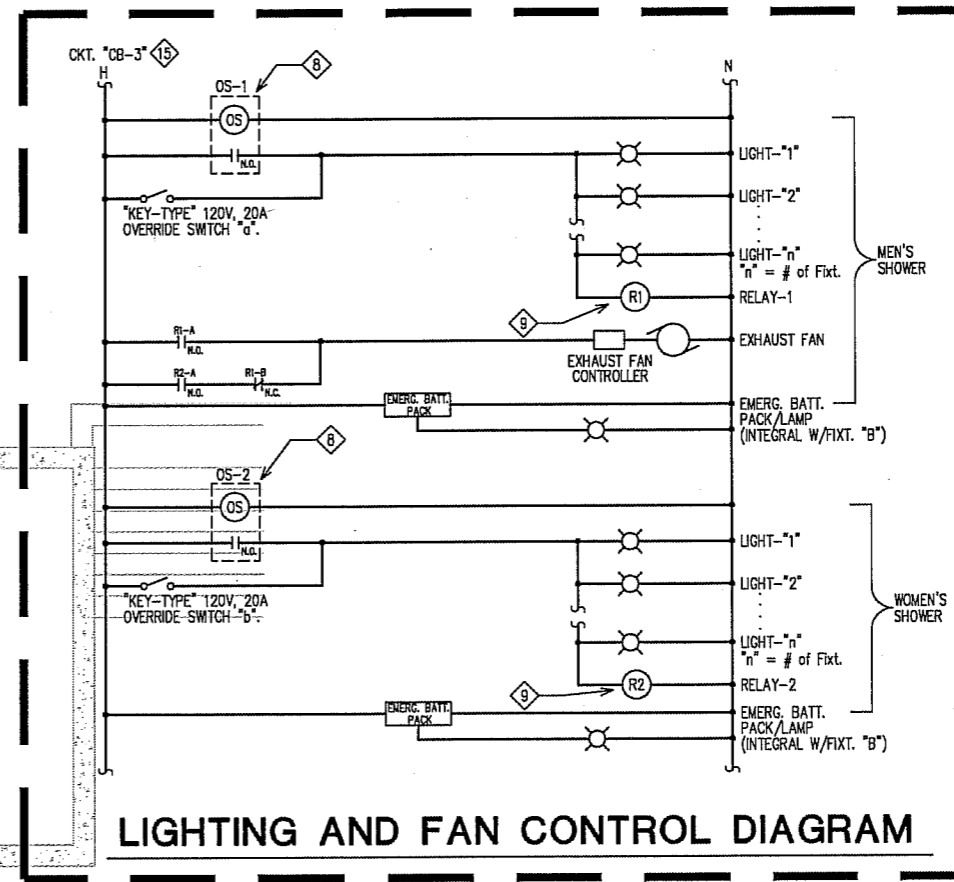


NEW CONSTRUCTION PLAN

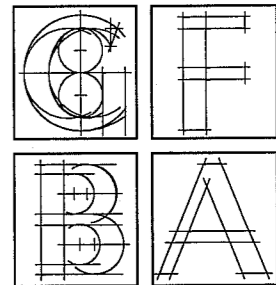
SCALE: 1/4" = 1'-0"

REFERENCE NOTES

- 1 EXISTING LIGHT SWITCH, F. A. STROBE LIGHT, AND RECEPTACLE WERE REMOVED FROM OLD WALL WHEN THE WALL WAS REMOVED. RE-INSTALL THESE DEVICES IN THE SAME RELATIVE LOCATION WHEN THE NEW WALL IS BUILT.
- 2 REMOVE EXISTING SWITCHES. PROVIDE ONE NEW 120 VOLT, 20 AMP "KEY-TYPE" SWITCH. WIRE THE NEW SWITCHES PER LIGHTING CONTROL DIAGRAM.
- 3 REMOVE EXISTING F. A. STROBE LIGHT AND REPLACE WITH NEW COMBINATION HORN & STROBE LIGHT. TYPE OF NEW ANUNCIATION DEVICES SHALL MATCH EXISTING AS MANUFACTURED BY "GENTEX".
- 4 SEE REFERENCE NOTE #2.
- 5 SEE REFERENCE NOTE #3.
- 6 REMOVE EXISTING LIGHTING FIXTURES AND ALL WIRING CONDUCTORS. PROVIDE BLANK COVER PLATES ON ALL THE EXISTING RECESSED-OUTLET-BOXES ON CONCRETE CEILING. USE THE EXISTING BRANCH CIRCUIT "CB-3" TO WIRE THE NEW LIGHTING FIXTURES & EXHAUST FAN PER CONTROL DIAGRAM.
- 7 INTERCEPT EXISTING BRANCH CIRCUIT "CB-3" IN THE SHOWER ROOM. PROVIDE ALL CONDUIT, CONDUCTORS, J-BOXES, ETC., AS REQUIRED TO WIRE ALL LIGHTING FIXTURES AND CONTROL DEVICES PER LIGHTING & FAN CONTROL DIAGRAM. FIELD-VERIFY THE EXISTING BRANCH CIRCUIT NUMBER; IF DIFFERENT, INDICATE THE CORRECT CIRCUIT NUMBER ON RED-LINED AS-BUILT DRAWING.
- 8 PROVIDE COMMERCIAL GRADE, 120 VAC, 1 KW, CEILING-MOUNT "P. I. R." OCCUPANCY SENSOR WITH FULL 360 DEGREE FIELD OF VIEW, AND ADJUSTABLE DELAYED "OFF" TIMER [1 TO 15 MINUTES] WITH PROTECTIVE CAGE. SENSOR SHALL BE SURFACE MOUNTED ON RECESSED OUTLET BOX. SENSOR LEVTON CAT. # ODCOS-1W - - CAGE LEVTON CAT. # ODCCG. (FOLLOW MANUFACTURER'S WIRING DIAGRAMS & DIRECTIONS).
- 9 PROVIDE TWO RELAYS (120 VOLT COIL WITH 10 AMP CONTACTS) COMPLETE WITH RELAY SOCKETS WITH TERMINALS. INSTALL THE RELAYS IN A 6" x 6" x 4" METALLIC ENCLOSURE WITH SCREW-COVER. INSTALL THE METALLIC ENCLOSURE ON WALL, ABOVE THE T-BAR CEILING. REFER TO CONTROL DIAGRAM FOR QUANTITY OF "NORMALLY CLOSED" & "NORMALLY OPEN" RELAY CONTACTS. THE CONTROL RELAYS "R1" & "R2" SHALL BE AS MANUFACTURED BY SQUARE - D, OR EQUAL. ALL CONDUIT WALL-PENETRATIONS SHALL HAVE 2-HOUR RATED FIRE STOPPING.
- 10 3/4 INCH E.M.T. CONDUIT-ONLY, DOWN THROUGH DOOR FRAME TO DOOR OPENING MACHANISM.
- 11 DOUBLE-GANG J-BOX WITH SCREW COVER, ABOVE T-BAR CEILING.
- 12 CAST OUTLET SINGLE-GANG BOX WITH BLANK (WEATHER PROOF) SCREW COVER, INSTALLED AT +42 INCHES ABOVE FINISH FLOOR. CORE DRILL THRU WALL & PROVIDE CONDUIT SLEEVE WITH 3/4 INCH CONDUIT-ONLY FROM J-BOX INSIDE.
- 13 PROVIDE TWO RECESSED 2-GANG BOXES AT +44" A.F.F. INSTALL THE "TEST SWITCHES" FOR EACH OF THE SHOWERS EMERG. LIGHTING FIXTURES IN EACH OF THE BOXES. PROVIDE ALL CONDUIT AND CONDUCTORS (FROM EACH OF TWO EMERG. LTG. FIXTURES) TO EACH "TEST SWITCH". LABEL EACH OUTLET BOX COVER AS "EMERG. FIXT. TEST SWITCH, MEN'S SHOWER", & "EMERG. FIXT. TEST SWITCH, WOMEN'S SHOWER". ALL CONDUIT WALL-PENETRATIONS SHALL HAVE 2-HOUR RATED FIRE STOPPING.
- 14 PROVIDE BOTH A SWITCHED-LEG AND A HOT-LEG (FOR THE EMERG. BATT. PACK).
- 15 FIELD-VERIFY THE EXISTING BRANCH CIRCUIT NUMBER.
- 16 PER REVISION TO ARTICLE 410.4(D) IN THE 2005 EDITION OF THE N. E. C., LIGHTING FIXTURES "TYPE - C" SHALL BE SECURELY FASTENED TO ALLOW FOR THE INSTALLATION OF THESE FIXTURES WITHIN THE "RESTRICTED ZONE" AS DEFINED IN ARTICLE 410.4(D).



LIGHTING AND FAN CONTROL DIAGRAM



GFBA ARCHITECTS
architects . planners . engineers

16573 Ventura Boulevard
Suite 201
Encino, California 91436
TEL. (818) 905-8814
FAX. (818) 905-8998

**Santa Catalina Towers
Restroom and Deck
Renovation**

University of California Santa Barbara
Santa Barbara, CA

Jose S. Rodriguez
ELECTRICAL ENGINEER
No. E13124
Exp. 09/2009
Digitally signed by Jose S. Rodriguez, DN: cn=Jose S. Rodriguez, o=GFBA ARCHITECTS, email=jrodriguez@gfba.com, c=US

Issued For	Date	Rev
Addendum No. 2		
November 24, 2008		

As instruments of service, all designs, ideas, and information shown on these drawings are and shall remain the property of the Designer. No part thereof shall be copied, disclosed to others, or used in connection with any work or project other than the specific project for which they have been prepared and developed without the written consent of The Designer. Visual contact with these drawings shall constitute conclusive evidence of acceptance of these restrictions.

Contract #: FM090053S/887711
Project #: UCSB Dwg #: 880-203
Drawn By: RH Checked By: JR
Date: 09/25/2008
Scale: As Noted
Sheet Description:

**POOL SHOWERS
ELECT. PLANS,
DIAGRAMS**

Sheet Number:

E-3

R. E. Job No. 0810
Rodriguez Engineering
Consulting Electrical Engineers
275 Aspen Way • Santa Barbara, CA 93111
(805) 967-4724

PLUMBING FIXTURES

TAG	TYPE	MINIMUM CONNECTION SIZES				SPECIFICATION
		CW	HW	W	V	
WC 1	WATER CLOSET ADA	3/4"	-	4"	2"	CAROMA "CARAVELLE 270" #2.2.4, ADA, ELONGATED, 1.6/0.8 GPF DUAL FLUSH HIGH EFFICIENCY TOILET, VANDAL RESISTANT CONVERSION KIT, COMMERCIAL OPEN FRONT ELONGATED SEAT; COMMERCIAL GRADE BRASSCRAFT ANGLE STOP, FLUID MASTER NO BURST STAINLESS STEEL HOSE.
LAV 1	LAVATORY ADA	1/2"	1/2"	2"	1-1/2"	AMERICAN STANDARD "LUCERNE" #0355.012; FAUCET: MOEN "CHATEAU" #L4621, 4" CENTERS, MOEN #1225 CARTRIDGE, 2.2 GPM; SYMMONS # 4-10B MIXING VALVE; COMMERCIAL GRADE BRASSCRAFT ANGLE STOPS, FLUID MASTER NO BURST STAINLESS STEEL HOSES, CAST BRASS P-TRAP, TRUBRO #103 OR PLUMBEREX "PRO-2000" TRAP AND SUPPLY COVERS; J.R. SMITH #0700 CARRIER.
HB 1	HOSE VALVE	1/2"	-	-	-	ACORN #8121-CP, CARTRIDGE OPERATED VALVE, REMOVABLE LOOSE KEY WHEEL HANDLE, VANDAL RESISTANT LOCKSHEILD BONNET, NON REMOVABLE VACUUM BREAKER, POLISHED CHROME FINISH.
FD 1	FLOOR DRAIN	-	-	2"	1-1/2"	J.R. SMITH #2005Y-A-P, ROUND TOP, INCLUDE TRAP PRIMER CONNECTION. TRAP PRIMER: MIFAB M-500 OR MI-DU WHERE MULTIPLE TRAPS ARE SERVED. INSTALL TRAP PRIMER ON CW SUPPLY OF FREQUENTLY USED FIXTURE WITH ISOLATION BALL SOV, WITH ACCESS.
SH 1	SHOWER ADA	1/2"	1/2"	2"	1-1/2"	MOEN "CHATEAU POSI-TEMP" #L2352 SINGLE HANDLE, 2.5 GPM PRESSURE BALANCING MIXING VALVE WITH ADJUSTABLE TEMPERATURE LIMIT STOP AND 2.5 GPM SHOWER HEAD.
RD 1	DECK DRAIN	-	-	-	-	J.R. SMITH #2005-A-PB-B, REINFORCED ROUND STRAINER, POLISHED BRONZE WITH SEDIMENT BUCKET.

ABBREVIATIONS

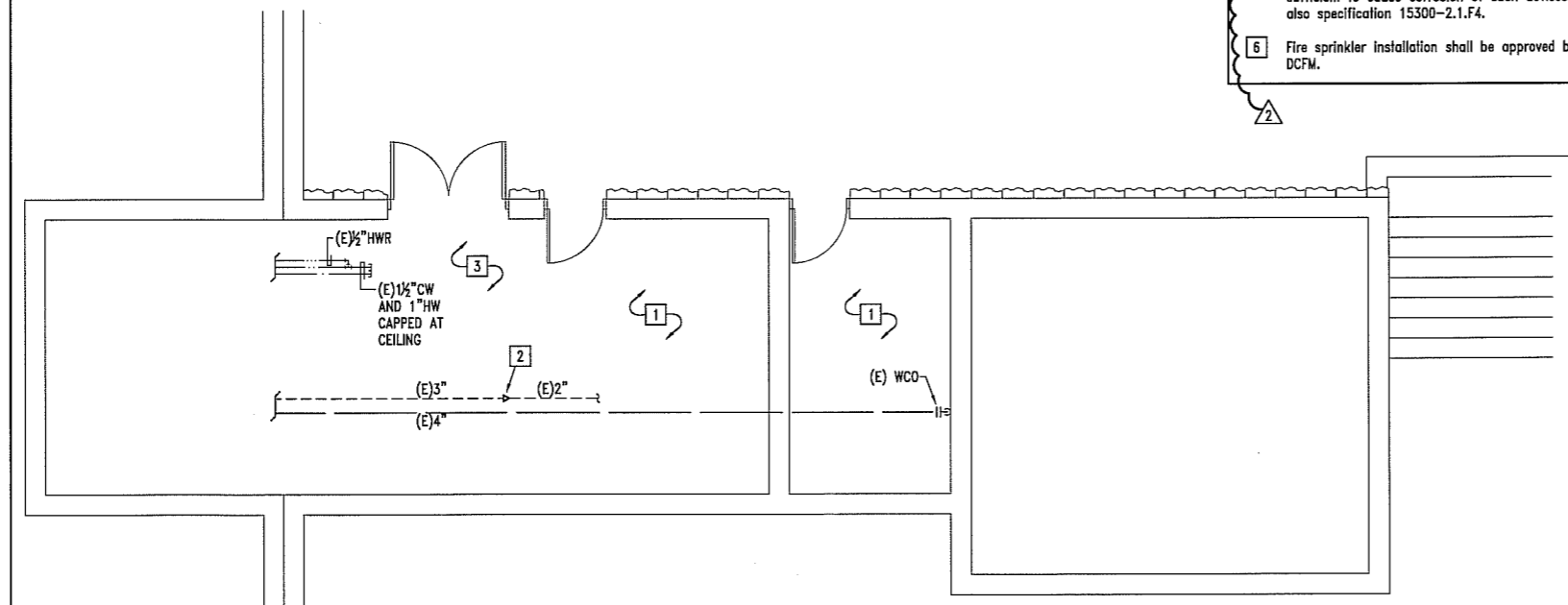
A	COMPRESSED AIR	MTL	METAL
AFF	ABOVE FINISHED FLOOR	(N)	NEW
AFS	AUTOMATIC FIRE SPRINKLER SYSTEM	N/A	NOT APPLICABLE
AP	ACCESS PANEL	NC	NORMALLY CLOSED
ARCH	ARCHITECTURAL DRAWINGS	NIC	NOT IN CONTRACT
BHP	BRAKE HORSEPOWER	NTS	NOT TO SCALE
BS	BIRD SCREEN	OD	OUTSIDE DIAMETER
BTU	BRITISH THERMAL UNIT	OFD	OVERFLOW DRAIN
CA	COMBUSTION AIR	OFL	OVERFLOW RAINWATER LEADER
CFH	CUBIC FEET PER HOUR	OW	OILY WASTE
CLG	CEILING	P&T	PRESSURE & TEMPERATURE RELIEF
CO	CLEANOUT	PH	PHASE
CONT	CONTINUATION	PLCS	PLACES
COTG	CLEAN OUT TO GRADE	POC	POINT OF CONNECTION
CW	COLD WATER DOMESTIC	PPM	PARTS PER MILLION
D	CONDENSATE OR EQUIPMENT DRAIN	PRESS	PRESSURE
DIA	DIAMETER	PRV	PRESSURE REDUCING VALVE
DN	DOWN	PSI	POUNDS PER SQUARE INCH
DWGS	DRAWINGS	(R)	REMOVE
(E)	EXISTING	RD	ROOF DRAIN
ELEC	ELECTRICAL DRAWINGS	REQD	REQUIRED
ELEV	ELEVATION	RLA	RATED LOAD AMPS
EWB	ELECTRIC WATER HEATER	RPM	REVOLUTIONS PER MINUTE
(F)	FUTURE	RWL	RAIN WATER LEADER
FCO	FLOOR CLEAN OUT	SD	STORM DRAIN OR SMOKE DETECTOR
FF	FINISHED FLOOR ELEVATION	SF	SQUARE FEET
FL	FLOOR LINE	SMH	SEWER MAN HOLE
FLD	FLOOR DRAIN	SOV	SHUT OFF VALVE
FLR	FLOOR	SP	STATIC PRESSURE
FPM	FEET PER MINUTE	SPEC	SPECIFICATIONS
FS	FLOOR SINK	STD	STANDARD
FT	FEET	STL	STEEL
G	GAS LINE (FUEL GAS)	STRUCT	STRUCTURAL DRAWINGS
GA	GAUGE	SW	SOFTENED WATER
GAL	GALLONS	TW	TEMPERED WATER
GALV	GALVANIZED	TYP	TYPICAL
GC	GENERAL CONTRACTOR	U	URINAL
GI	GALVANIZED IRON	UL	UNDERWRITERS' LABORATORIES, INC.
GPM	GALLONS PER MINUTE	UTR	UP THROUGH ROOF
HB	HOSE BIBB	V	SANITARY VENT
HP	HORSEPOWER	VAC	HOUSE VACUUM
HW	HOT WATER DOMESTIC	VB	VACUUM BREAKER
HWR	HOT WATER RETURN DOMESTIC	VR	VANDAL RESISTANT
IW	INDIRECT WASTE	VTR	VENT THROUGH ROOF
KW	KILOWATT	W	SANITARY WASTE
LAV	LAVATORY	W.C.	WATER COLUMN
MBH	THOUSAND BTU PER HOUR	WC	WATER CLOSET
MCA	MINIMUM CIRCUIT AMPACITY	WCO	WALL CLEAN OUT
MFR	MANUFACTURER	WH	WATER HEATER
MH	MANHOLE	WHA	WATER HAMMER ARRESTER
MIN	MINIMUM	WM	WATER METER
MTD	MOUNTED	WT	WEIGHT

DEMOLITION NOTES

1. FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF ANY DEMOLITION INDICATED ON DRAWINGS.
2. DEMO DRAWINGS ARE SCHEMATIC, BASED ON CURSORY FIELD OBSERVATION. REPORT ALL DISCREPANCIES TO UNIVERSITY'S REPRESENTATIVE BEFORE DISTURBING EXISTING WORK.
3. SEE DIVISION 1 SPECIFICATIONS FOR CONTRACTOR'S CONDITIONS OF ACCEPTANCE OF EXISTING CONDITIONS.
4. COORDINATE UTILITY OUTAGES WITH ALL AFFECTED PARTIES, INCLUDING THE UTILITY COMPANIES, UNIVERSITY AND OCCUPANTS OF BUILDINGS. VERIFY CONSTRUCTION PHASING WITH UNIVERSITY'S REPRESENTATIVE.
5. REMOVE, RELOCATE AND EXTEND EXISTING WORK TO ACCOMMODATE NEW CONSTRUCTION.
6. ISOLATE FIXTURES AND EQUIPMENT TO BE REMOVED BY SHUTTING OFF MAINS OR PROVIDING NEW ISOLATION VALVES AS REQUIRED. DRAIN ALL WATER PIPING BEFORE REMOVING PIPING. REMOVE ALL UNUSED WATER PIPING AND CAP AT NEAREST ACTIVE BRANCH TEE. DO NOT LEAVE DEAD END RUNS. DISINFECT AND FLUSH ENTIRE POTABLE WATER SYSTEM OF ANY DOMESTIC SYSTEM WHERE CROSS CONNECTION IS SUSPECTED TO HAVE OCCURRED.
7. REMOVE ANY ABANDONED ABOVE GRADE WORK FROM THIS AND PRIOR WORK.
8. PIPING BELOW GRADE MAY BE ABANDONED IN PLACE, PROVIDED IT DOES NOT INTERFERE WITH NEW WORK. CAP WASTE BELOW FLOOR AND REMOVE UNUSED VENT PIPING TO ROOF OR CAP AT NEAREST ACTIVE BRANCH TEE. PATCH AND REPAIR DEMOLISHED AREAS.
9. PROTECT EXISTING STRUCTURE AND WORK FROM DAMAGE DURING DEMOLITION.
10. CLEAN AND REPAIR EXISTING MATERIALS AND EQUIPMENT TO BE RELOCATED OR REUSED.

KEYNOTES

- 1 (E) PLUMBING FIXTURES HAVE BEEN REMOVED FROM (E) RESTROOMS; VERIFY AND COMPLETE DEMOLITION PER DEMOLITION NOTES ON THIS SHEET.
- 2 APPROXIMATE LOCATION OF VENT TRANSITION FROM 3" TO 2".
- 3 CONNECT TO (E) USEABLE FIRE SPRINKLER MAIN IN THIS BUILDING AND PROVIDE A (N) COMPLETE SYSTEM FOR THE PROPOSED REMODEL AREAS.
- 4 Where corrosive conditions are known to exist due to moisture or fumes from corrosive chemicals or both, special type of fittings, pipe, and hangers that resist corrosion shall be used. Or, a protective coating shall be applied to all unprotected exposed surfaces of the sprinkler system.
- 5 Listed corrosive resistant sprinklers shall be installed where chemicals, moisture or other corrosive vapors sufficient to cause corrosion of such devices exist. See also specification 15300-2.1.F.4.
- 6 Fire sprinkler installation shall be approved by the DCFM.



SYMBOLS

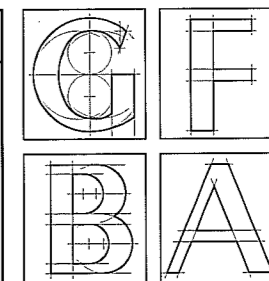
WALL CLEAN OUT	3 WAY CONTROL VALVE
WATER HAMMER ARRESTOR	TRIPLE DUTY VALVE
PIPE DROP	UNION
PIPE RISER	STRAINER
POINT OF CONNECTION	SOV IN RISER
POINT OF DISCONNECTION	AUTOMATIC AIR VENT
WASTE	PRESSURE GAGE
VENT	THERMOMETER
FLOOR DRAIN	AQUASTAT
FLOOR SINK	FLOW SWITCH
PRESSURE & TEMPERATURE RELIEF VALVE	DIFFERENTIAL PRESSURE SWITCH
CHECK VALVE	TEST PORT
BALL VALVE	FLEXIBLE PIPE CONNECTOR
BALL VALVE/MEMORY STOP	FIRE
PRESSURE REDUCING VALVE	COLD WATER
AUTOMATIC BALANCING VALVE	HOT WATER
MANUAL SERVICE/BALANCING VALVE	HOT WATER RETURN
BUTTERFLY VALVE	GAS
2 WAY CONTROL VALVE	

PLUMBING SHEET INDEX

- P-1.0 ABBREVIATIONS, SYMBOLS, SCHEDULES, & PLUMBING DEMO PLAN
- P-2.0 PLUMBING FLOOR & ROOF PLANS



GFBA-801
MECHANICAL
ENGINEERING
CONSULTANTS
INC.
1616 Anacapa Street
Santa Barbara, CA 93101
Tel (805) 957-4632

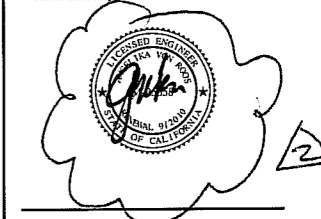


GFBA ARCHITECTS

architects . planners . engineers
16573 Ventura Boulevard
Suite 201
Encino, California 91436
TEL. (818) 905-8814
FAX. (818) 905-8988

Santa Catalina Towers Restroom and Deck Renovation

University of California Santa Barbara
Santa Barbara, CA



Issued For	Date	Rev
ADDENDUM		2
Addendum No. 2		
November 24, 2008		

As instruments of service of design, ideas, and information shown on these drawings are and shall remain the property of the Designer. No part thereof shall be copied, disseminated to others, or used in connection with any work or project other than the specific project for which they have been prepared and developed without the written consent of the Designer. Visual contact with these drawings shall constitute conclusive evidence of acceptance of these restrictions.

Contracts #: FM0900539/987711
Project #:
UCSB Dwg #: 860-203
Drawn By: JS, NV Checked By: PT
Date: 09/25/2008
Scale: As Noted
Sheet Description

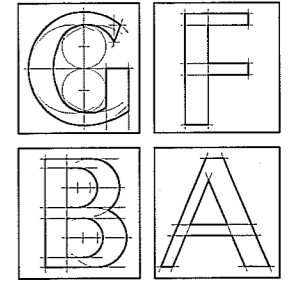
ABBREVIATIONS, SYMBOLS, SCHEDULES, & PLUMBING DEMO PLAN

Sheet Number

P-10

PLUMBING DEMOLITION PLAN

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



GFBA ARCHITECTS
architects . planners . engineers

16573 Ventura Boulevard
Suite 201
Encino, California 91436
TEL: (818) 905-8814
FAX: (818) 905-8988

**Santa Catalina Towers
Restroom and Deck
Renovation**

University of California - Santa Barbara
Santa Barbara, CA



KEYNOTES

- 1 POC TO (E). FIELD VERIFY EXACT LOCATION.
- 2 ISOLATION BALL VALVE(S) WITH ACCESS.
- 3 SEE PLUMBING DEMOLITION PLAN ON SHEET P-1.0 FOR (E) PIPE SIZES.
- 4 3/4" CW DN, 3/4" CW TO WC.
- 5 REPLACE (E) 4" W WITHIN RESTROOMS.
- 6 PROPOSED LOCATION OF THERMOSTATIC MIXING VALVE (TMV), SYMMONS #5-102A-HC. INSTALL PER MANUFACTURER'S INSTRUCTIONS AND APPLICABLE CODES. VERIFY EXACT LOCATION WITH UNIVERSITY'S REPRESENTATIVE.
- 7 NOTCH FOOTINGS TO ACCOMMODATE PIPING WITH UNIVERSITY'S REPRESENTATIVE APPROVAL.
- 8 3" RWL UP. CONNECT TO DECK DRAIN.
- 9 3" RWL AT FACE OF CONCRETE WALL WITH ESCUTCHEON. CORE, SLEEVE, & SEAL PENETRATION WITH ELASTOMERIC SEALANT.
- 10 SPILL +6" ABOVE ADJOINING SLAB.
- 11 SEE ARCH DWGS FOR SLOPE TO DRAIN.
- 12 SEE ARCH DWGS FOR OVERFLOW SCUPPER.
- 13 LOWER (E) CO TO SET BELOW (N) DECK/FRAMING.
- 14 2-HOUR FIRE SEPARATION WALL. (E) AND (N) PENETRATIONS SHALL BE FIRE-STOPPED.
- 15 (E) 1-1/2" PLASTIC PIPING TO REMAIN.

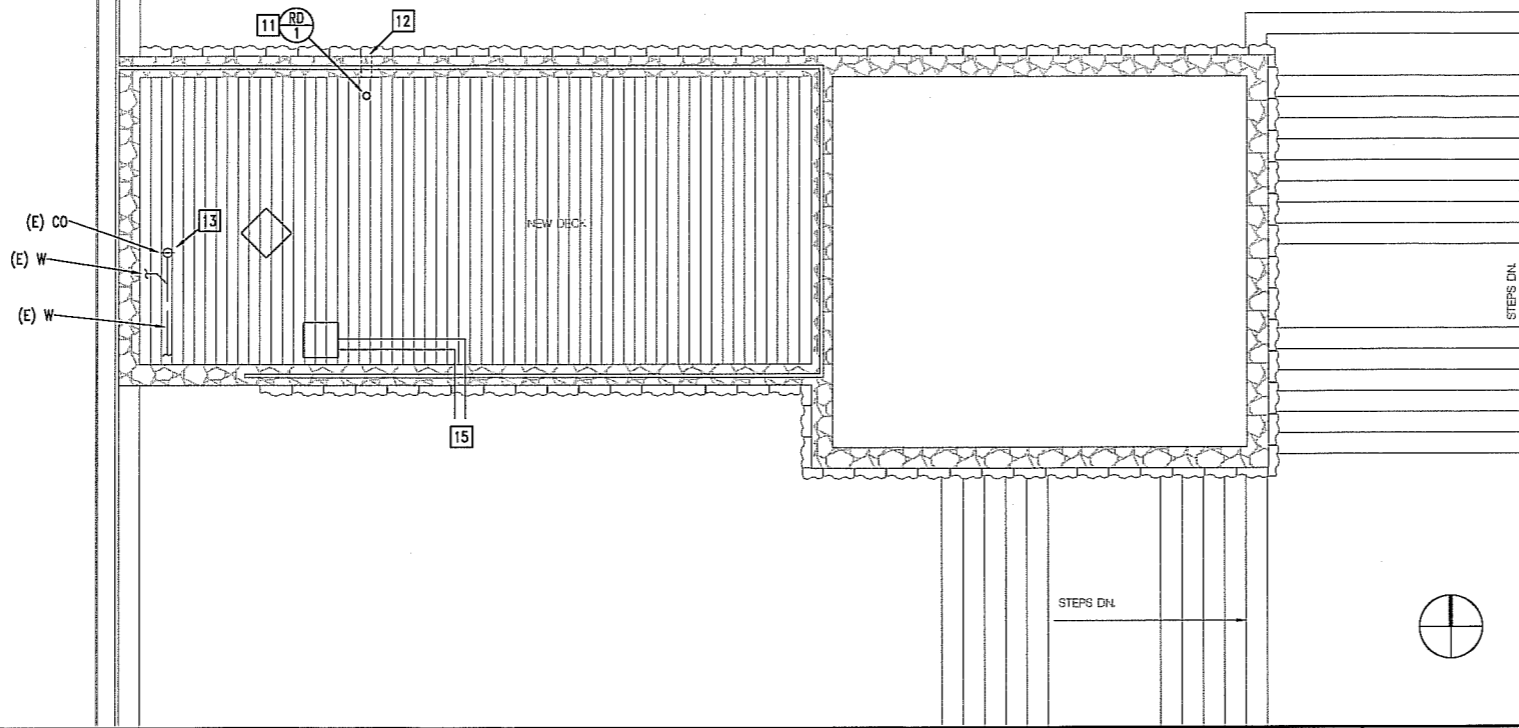
Issued For	Date	Rev
Addendum No. 2		
November 24, 2008		

As instruments of service, all designs, plans, and information shown on these drawings are and shall remain the property of the Designer. No part thereof shall be copied, disclosed to others, or used in connection with any work or project other than the specific project for which they have been prepared and developed without the written consent of the Designer. Usual contact with these drawings shall constitute conclusive evidence of acceptance of these restrictions.

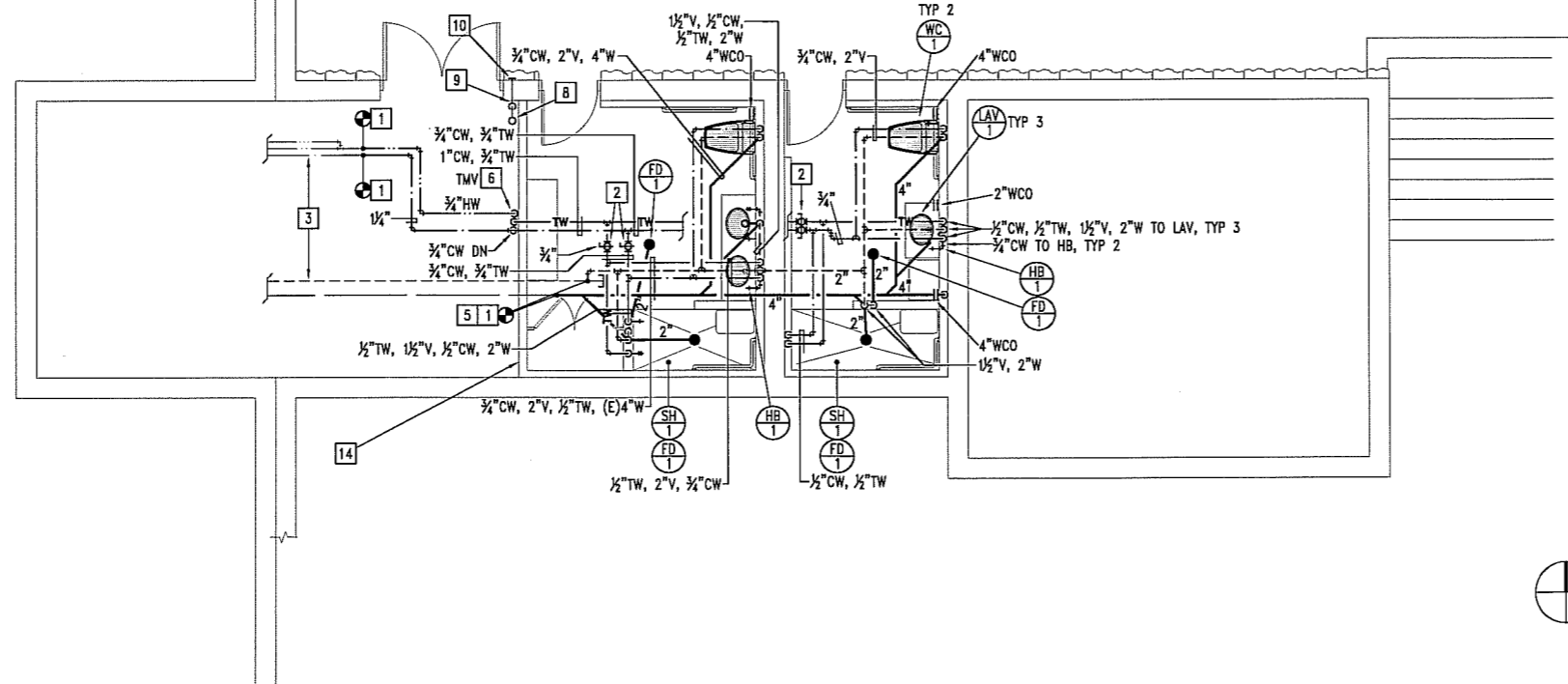
Contracts #: **FM0900533/087711**
Project #:
UCSB Dwg #: **860-203**
Drawn By: **JS, NV** Checked By: **PT**
Date: **09/25/2008**
Scale: **As Noted**
Sheet Description

PLUMBING FLOOR & ROOF PLANS

Sheet Number
P-20



PLUMBING ROOF PLAN SCALE: 1/4" = 1'-0" **2**



PLUMBING FLOOR PLAN SCALE: 1/4" = 1'-0" **1**

FIRE PROTECTION NOTES

1. CONTRACTOR SHALL ENSURE THAT THE EXISTING FIRE PROTECTION PIPING, EQUIPMENT, ALARM INITIATING DEVICES, AND ANY NOTIFICATION APPLIANCES ARE PROTECTED. IF ANY OF THE EXISTING ELEMENTS ARE COMPROMISED OR MODIFIED, CONTRACTOR SHALL NOTIFY THE UNIVERSITY'S REPRESENTATIVE AND THE CAMPUS FIRE MARSHAL.
2. FIRE STOPPING SHALL BE USED TO MAINTAIN INTEGRITY OF RATED ASSEMBLIES. REFER TO UCSB SPECIFICATION SECTION 07840 FOR REQUIREMENTS.
3. SPRINKLER MODIFICATIONS MUST BE PERFORMED BY A LICENSED C-16 CONTRACTOR AND A DRAWING OF FOR THE REQUIRED WORK SHALL BE SUBMITTED TO THE UNIVERSITY'S REPRESENTATIVE AND THE CAMPUS FIRE MARSHAL.

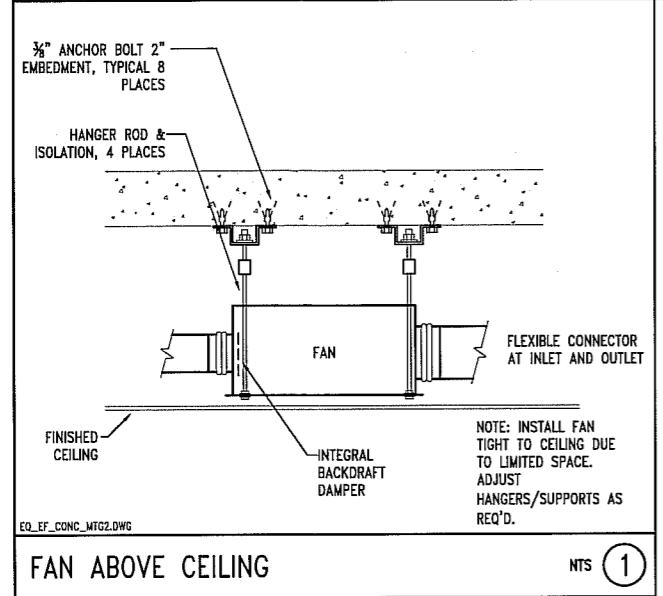
E:\GFBA\GFBA801_UCSBTRRS\GFBA801-P-20.dwg, Layout1, 11/20/2008 3:16:39 PM, paul, laboid LaserJet 5100tn.pcs, 11x17, 1:2.2859, MEC, Inc.

FANS												
TAG	MANUFACTURER	MODEL	CFM	ESP (IWG)	ELECTRICAL			BACKDRAFT DAMPER	SONES	FACTORY CURB	APPROX WEIGHT (LBS)	NOTES
					VOLT-PH-Hz	WATTS	MOTOR HP					
CEP 1	COOK	GN-720	450	0.5	120-1-60	172	-	YES	1.7	N/A	36	①②

AIR TERMINAL SCHEDULE			
TAG	MANUFACTURER	MODEL	NOTES
SIZE A/CFM	METALAIR	RH SERIES	①②③④⑤

① FACTORY SPEED CONTROLLER—MOUNT ON FAN. ② FACTORY IN-SHEAR ISOLATION KIT.

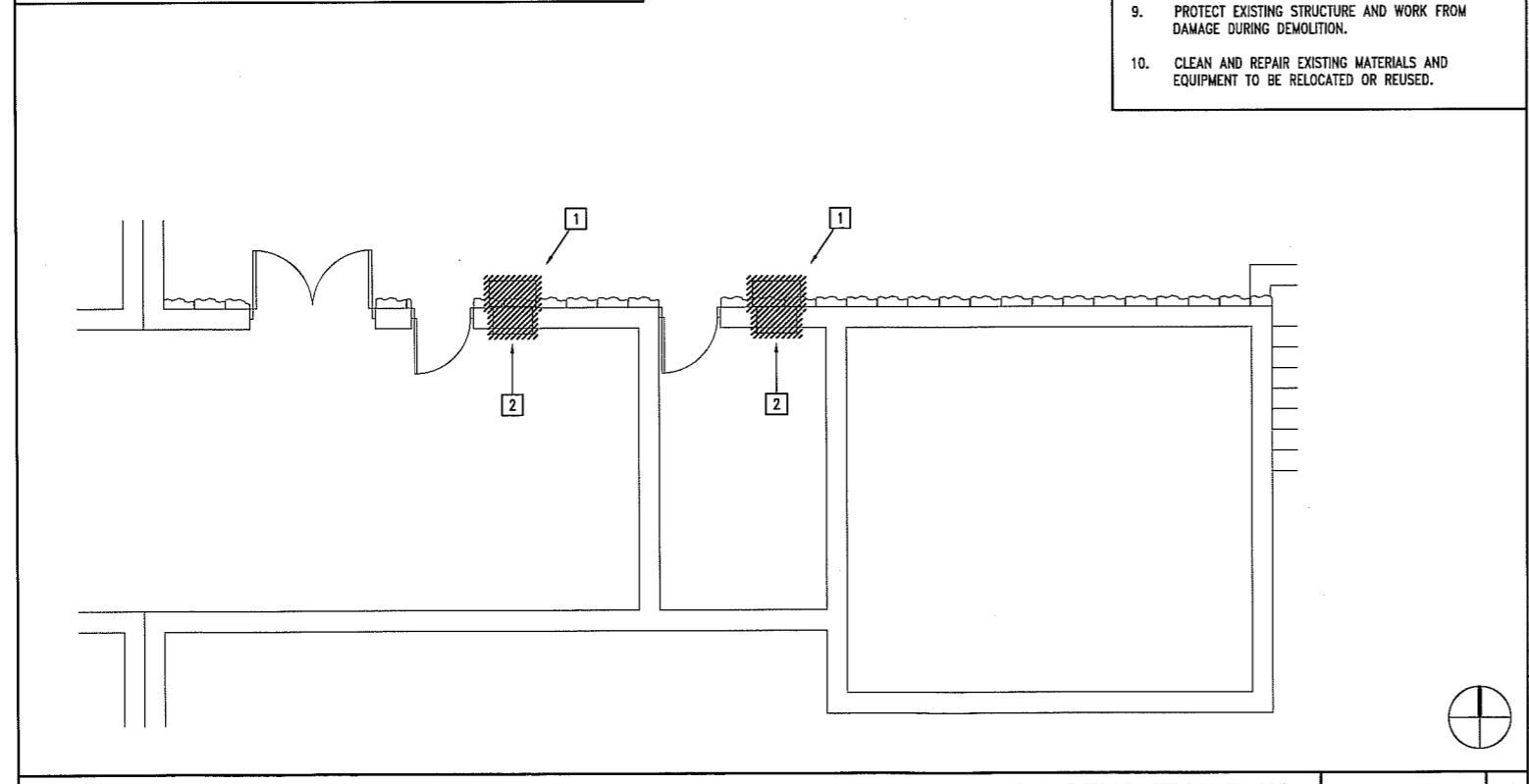
① FRAME TYPES & COLORS TO MATCH CEILING. COORDINATE WITH ARCHITECT.
 ② AIR PATTERN AS SHOWN ON PLANS. ③ PROVIDE OBD FOR EACH AIR TERMINAL.
 ④ ALL ALUMINUM CONSTRUCTION EXCEPT FOR FIRE RATED ASSEMBLIES THAT REQUIRE STEEL CONSTRUCTION. ⑤ FILLER PANEL FOR T-BAR APPLICATIONS.



KEYNOTES

① (E) EXHAUST FAN, ACME MODEL #PW72, SERIAL #AN0294 OR AN0296 TO BE REMOVED. SEE DEMOLITION NOTES.
 ② (E) LOUVER TO BE REMOVED. SEE DEMOLITION NOTES.

- ### DEMOLITION NOTES
- FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO START OF ANY DEMOLITION INDICATED ON DRAWINGS.
 - DEMO DRAWINGS ARE SCHEMATIC, BASED ON CURSORY FIELD OBSERVATION. REPORT ALL DISCREPANCIES BEFORE DISTURBING EXISTING WORK.
 - SEE SPECIFICATIONS FOR CONTRACTOR'S CONDITIONS OF ACCEPTANCE OF EXISTING CONDITIONS.
 - COORDINATE UTILITY OUTAGES WITH ALL AFFECTED PARTIES. VERIFY CONSTRUCTION PHASING.
 - REMOVE, RELOCATE AND EXTEND EXISTING WORK TO ACCOMMODATE NEW CONSTRUCTION.
 - PROVIDE SHUTOFF VALVES TO ISOLATE PIPING DURING CONSTRUCTION. DRAIN ALL WATER PIPING BEFORE REMOVING PIPING. REMOVE ALL UNUSED WATER PIPING AND CAP AT NEAREST ACTIVE BRANCH TEE. DO NOT LEAVE DEAD END RUNS. DISINFECT AND FLUSH ENTIRE POTABLE WATER SYSTEM OF ANY DOMESTIC SYSTEM WHERE CROSS CONNECTION IS SUSPECTED TO HAVE OCCURRED.
 - REMOVE ANY ABANDONED ABOVE GRADE WORK FROM THIS AND PRIOR WORK.
 - PIPING BELOW GRADE MAY BE ABANDONED IN PLACE, PROVIDED IT DOES NOT INTERFERE WITH NEW WORK. CAP WASTE BELOW FLOOR AND REMOVE UNUSED VENT PIPING TO ROOF OR CAP AT NEAREST ACTIVE BRANCH TEE. PATCH AND REPAIR DEMOLISHED AREAS.
 - PROTECT EXISTING STRUCTURE AND WORK FROM DAMAGE DURING DEMOLITION.
 - CLEAN AND REPAIR EXISTING MATERIALS AND EQUIPMENT TO BE RELOCATED OR REUSED.



SYMBOLS

[Symbol]	RETURN DUCT DROP
[Symbol]	SUPPLY DUCT DROP
[Symbol]	EXHAUST DUCT DROP
[Symbol]	SUPPLY DUCT RISER
[Symbol]	RETURN DUCT RISER
[Symbol]	EXHAUST DUCT RISER
[Symbol]	CEILING DIFFUSER
[Symbol]	RETURN REGISTER
[Symbol]	EXHAUST REGISTER
[Symbol]	SIDEWALL SUPPLY DIFFUSER (SWD)
[Symbol]	SIDEWALL RETURN/EXHAUST DIFFUSER (SWR/SWE)
[Symbol]	MANUAL VOLUME DAMPER WITH LOCKING QUADRANT
[Symbol]	DOOR UNDERCUT
[Symbol]	SOUND LINED DUCT
[Symbol]	FIRE DAMPER (FD)
[Symbol]	SMOKE & FIRE DAMPER (SFD)
[Symbol]	DUCT DROP
[Symbol]	SMOKE DETECTOR
[Symbol]	PIPE/DUCT BREAK
[Symbol]	MOTORIZED DAMPER OR DUCT SMOKE DETECTOR
[Symbol]	WALL CLEAN OUT
[Symbol]	WATER HAMMER ARRESTOR
[Symbol]	PIPE DROP
[Symbol]	PIPE RISER
[Symbol]	POINT OF CONNECTION
[Symbol]	POINT OF DISCONNECTION
[Symbol]	WASTE
[Symbol]	VENT
[Symbol]	FLOOR DRAIN
[Symbol]	FLOOR SINK
[Symbol]	PRESSURE & TEMPERATURE RELIEF VALVE
[Symbol]	CHECK VALVE
[Symbol]	BALL VALVE
[Symbol]	BALL VALVE/MEMORY STOP
[Symbol]	PRESSURE REDUCING VALVE
[Symbol]	AUTOMATIC BALANCING VALVE
[Symbol]	MANUAL SERVICE/BALANCING VALVE
[Symbol]	BUTTERFLY VALVE
[Symbol]	2 WAY CONTROL VALVE
[Symbol]	3 WAY CONTROL VALVE
[Symbol]	TRIPLE DUTY VALVE
[Symbol]	UNION
[Symbol]	STRAINER
[Symbol]	SOV IN RISER
[Symbol]	AUTOMATIC AIR VENT
[Symbol]	PRESSURE GAGE
[Symbol]	THERMOMETER
[Symbol]	AQUASTAT
[Symbol]	BY ELECTRICAL
[Symbol]	BY MECHANICAL
[Symbol]	BYPASS TIMER
[Symbol]	RELAY
[Symbol]	THERMOSTAT
[Symbol]	LOW VOLTAGE
[Symbol]	LINE VOLTAGE
[Symbol]	MANUAL SWITCH
[Symbol]	NO CONTACT
[Symbol]	NC CONTACT
[Symbol]	OVERLOAD CONTACT
[Symbol]	MOTOR
[Symbol]	MOTOR STARTER
[Symbol]	TIME SWITCH
[Symbol]	TEMPERATURE SENSOR
[Symbol]	FLOW SWITCH
[Symbol]	DIFFERENTIAL PRESSURE SWITCH
[Symbol]	TEST PORT
[Symbol]	FLEXIBLE PIPE CONNECTOR
[Symbol]	FIRE
[Symbol]	COLD WATER
[Symbol]	HOT WATER
[Symbol]	HOT WATER RETURN
[Symbol]	GAS

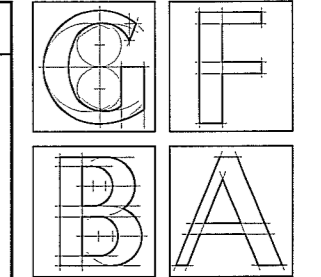
ABBREVIATIONS

A	COMPRESSED AIR	MIN	MINIMUM
AC	AIR CONDITIONER	MTD	MOUNTED
AFF	ABOVE FINISHED FLOOR	MTL	METAL
AFS	AUTOMATIC FIRE SPRINKLER SYSTEM	MVD	MANUAL VOLUME DAMPER
AH	AIR HANDLER	(N)	NEW
AP	ACCESS PANEL	N/A	NOT APPLICABLE
ARCH	ARCHITECTURAL DRAWINGS	NC	NORMALLY CLOSED
AW	ACID WASTE	NIC	NOT IN CONTRACT
BDD	BACK DRAFT DAMPER	NTS	NOT TO SCALE
BHP	BRAKE HORSEPOWER	OBD	OPPOSED BLADE DAMPER
BS	BIRD SCREEN	OD	OUTSIDE DIAMETER
BTU	BRITISH THERMAL UNIT	OFD	OVERFLOW DRAIN
CA	COMBUSTION AIR	OFL	OVERFLOW RAINWATER LEADER
CD	CEILING DIFFUSER	OSA	OUTSIDE AIR
CFH	CUBIC FEET PER HOUR	OSY	OUTSIDE STEM & YOKE
CFM	CUBIC FEET PER MINUTE	OW	OILY WASTE
CHS	CHILLED WATER SUPPLY	P&T	PRESSURE & TEMPERATURE RELIEF
CHR	CHILLED WATER RETURN	PCHR	PROCESS CHILLED WATER RETURN
CLG	CEILING	PCHS	PROCESS CHILLED WATER SUPPLY
CO	CLEANOUT	PH	PHASE
CONT	CONTINUATION	PIV	POST INDICATOR VALVE
COTG	CLEAN OUT TO GRADE	PLCS	PLACES
CW	COLD WATER DOMESTIC	POC	POINT OF CONNECTION
D	CONDENSATE OR EQUIPMENT DRAIN	PPM	PARTS PER MILLION
DB	DRY BULB TEMPERATURE DEGREES F	PRESS	PRESSURE
DIA	DIAMETER	PRV	PRESSURE REDUCING VALVE
DL	DOOR LOUVER	PSI	POUNDS PER SQUARE INCH
DN	DOWN	(R)	REMOVE
DSP	DRY STANDPIPE	RD	ROOF DRAIN
DTR	DUCT THROUGH ROOF	REFRIG	REFRIGERATION
DWGS	DRAWINGS	REQD	REQUIRED
DX	DIRECT EXPANSION	RH	REFRIGERANT HOT GAS LINE
(E)	EXISTING	RL	REFRIGERANT LIQUID LINE
EER	ENERGY EFFICIENCY RATING	RLA	RATED LOAD AMPS
EF	EXHAUST FAN	RPM	REVOLUTIONS PER MINUTE
EFF	EFFICIENCY	RS	REFRIGERANT SUCTION LINE
ELEC	ELECTRICAL DRAWINGS	RWL	RAIN WATER LEADER
ELEV	ELEVATION	SD	STORM DRAIN OR SMOKE DETECTOR
ER	EXHAUST REGISTER	SE	SEASONAL EFFICIENCY
ESP	EXTERNAL STATIC PRESSURE	SEER	SEASONAL ENERGY EFFICIENCY RATING
EPW	ELECTRIC WATER HEATER	SF	SQUARE FEET
(F)	FUTURE	SFD	SMOKE & FIRE DAMPER
FC	FAN COIL	SL	SOUNDLINER
FA	FREE AREA	SMH	SEWER MAN HOLE
FCO	FLOOR CLEAN OUT	SOV	SHUT OFF VALVE
FD	FIRE DAMPER	SP	STATIC PRESSURE
FF	FINISHED FLOOR ELEVATION	SPEC	SPECIFICATIONS
FL	FLOOR LINE	SS	STAINLESS STEEL
FLA	FULL LOAD AMPS	STD	STANDARD
FLD	FLOOR DRAIN	STL	STEEL
FLR	FLOOR	STRUCT	STRUCTURAL DRAWINGS
FPM	FEET PER MINUTE	SW	SOFTENED WATER
FS	FLOOR SINK	SWD	SIDE WALL DIFFUSER
FT	FEET	SWE	SIDE WALL EXHAUST
G	GAS LINE (FUEL GAS)	SWR	SIDE WALL RETURN
GA	GAUGE	TG	TRANSFER GRILLE
GAL	GALLONS	TSTAT	THERMOSTAT
GALV	GALVANIZED	TW	TEMPERED WATER
GC	GENERAL CONTRACTOR	TYP	TYPICAL
GI	GALVANIZED IRON	U	URINAL
GPM	GALLONS PER MINUTE	UC	UNDERCUT
H	HUMIDITY	UH	UNIT HEATER
HB	HOSE BIBB	UL	UNDERWRITERS' LABORATORIES, INC.
HP	HORSEPOWER	UNO	UNLESS NOTED OTHERWISE
HR	HEATING WATER RETURN	UTR	UP THROUGH ROOF
HS	HEATING WATER SUPPLY	V	SANITARY VENT
HSPF	HEATING SEASONAL PERFORMANCE FACTOR	VAC	HOUSE VACUUM
HW	HOT WATER DOMESTIC	VB	VACUUM BREAKER
HWR	HOT WATER RETURN DOMESTIC	VR	VANDAL RESISTANT
HZ	HERTZ	VTR	VENT THROUGH ROOF
IW	INDIRECT WASTE	W	SANITARY WASTE
IWG	INCHES WATER GAUGE	W.C.	WATER COLUMN
KW	KILOWATT	WC	WATER CLOSET
LAV	LAVATORY	WCO	WALL CLEAN OUT
LAT	LEAVING AIR TEMP	WF	WALL FURNACE
LWT	LEAVING WATER TEMP	WH	WATER HEATER
MBH	THOUSAND BTU PER HOUR	WHA	WATER HAMMER ARRESTOR
MCA	MINIMUM CIRCUIT AMPACITY	WM	WATER METER
MFR	MANUFACTURER	WT	WEIGHT
MH	MANHOLE		

MECHANICAL SHEET INDEX

M-1.0	ABBREVIATIONS, SYMBOLS, & SCHEDULES
M-2.0	MECHANICAL FLOOR & ROOF PLANS

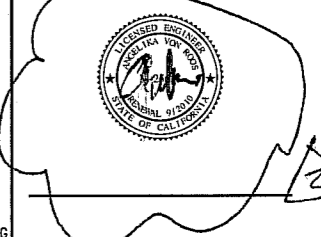
GFBA-801
 MECHANICAL ENGINEERING CONSULTANTS INC.
 1818 Anacapa Street
 Santa Barbara, CA 93101
 Tel: (805) 957-4692



GFBA ARCHITECTS
 architects . planners . engineers
 18573 Ventura Boulevard
 Suite 201
 Encino, California 91436
 TEL: (818) 905-8814
 FAX: (818) 905-8998

Santa Catalina Towers Restroom and Deck Renovation

University of California Santa Barbara
 Santa Barbara, CA



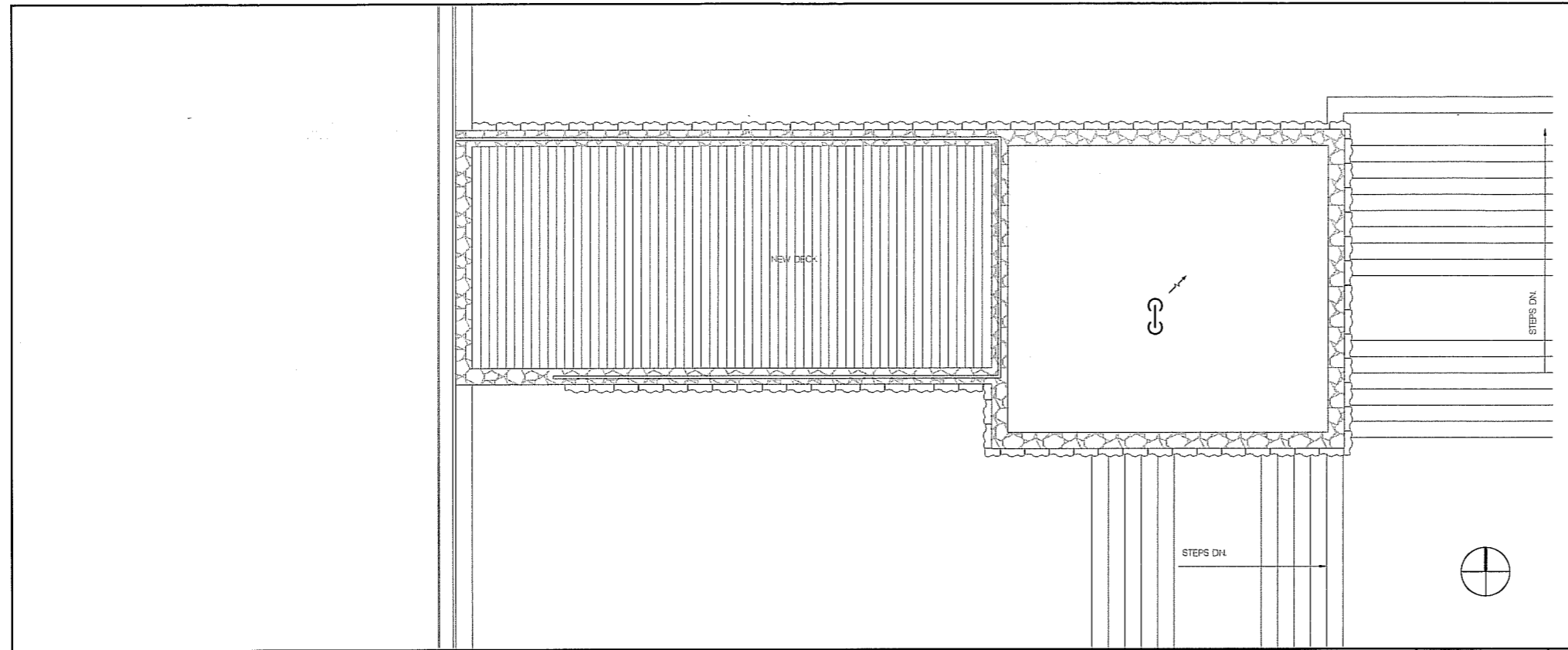
Issued For	Date	Rev
Addendum No. 2		
November 24, 2008		

As instruments of service, all designs, dates, and information shown on these drawings are and shall remain the property of the Designer. No part thereof shall be copied, disclosed to others, or used in connection with any work or project other than the specific project for which they have been prepared and developed without the written consent of the Designer. Visual contact with these drawings shall constitute acceptance of accuracy of these restrictions.

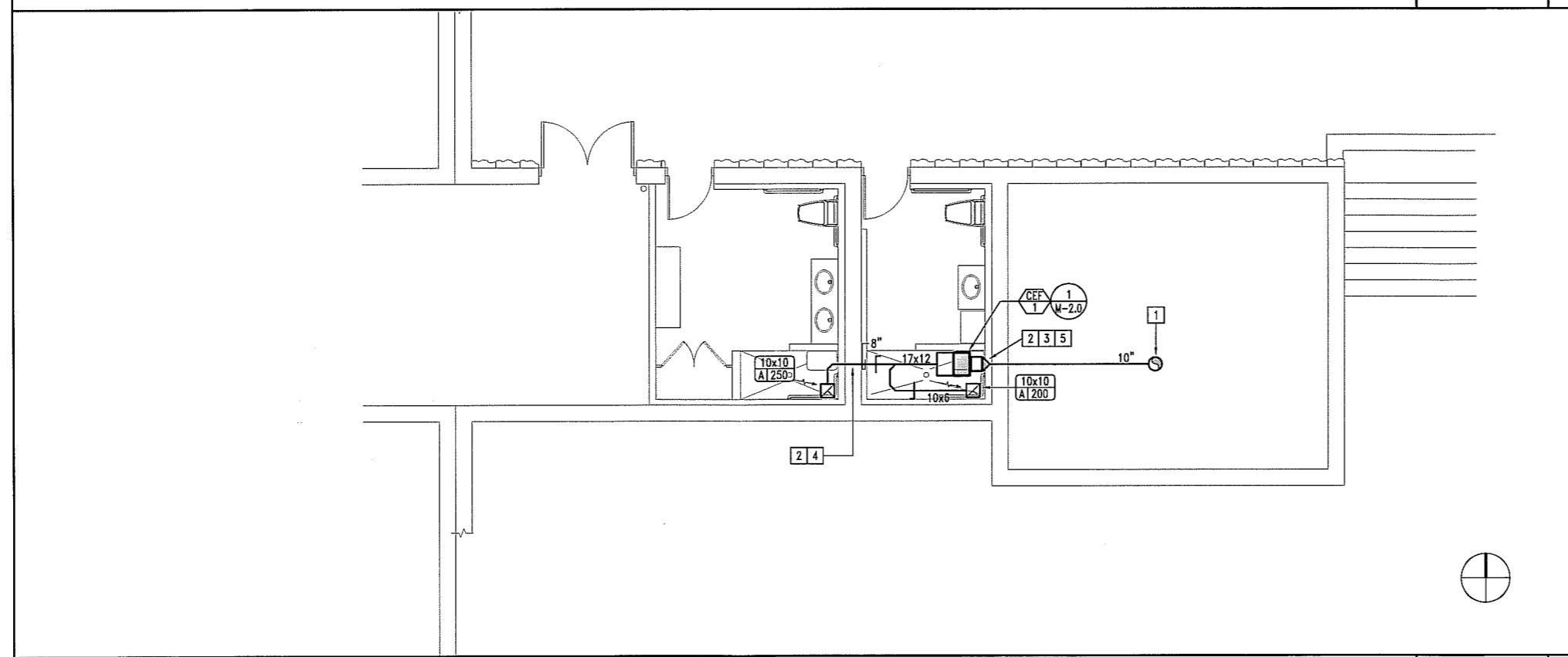
Contracts #: **FM090053S/987711**
 Project #:
 UCSB Dwg #: **860-203**
 Drawn By: **JS, NV** Checked By: **PT**
 Date: **09/25/2008**
 Scale: **As Noted**
 Sheet Description

ABBREVIATIONS, SYMBOLS, SCHEDULES, & MECHANICAL DEMO PLAN

Sheet Number
M-10



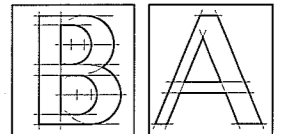
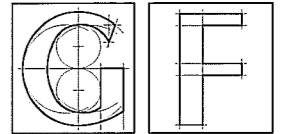
MECHANICAL ROOF PLAN SCALE: 1/4" = 1'-0" **2**



MECHANICAL FLOOR PLAN SCALE: 1/4" = 1'-0" **1**

KEYNOTES

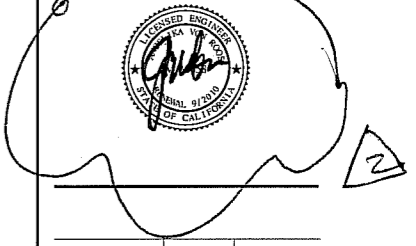
- 1 10" DUCT UP, TERMINATE AT 18" ABOVE ADJOINING GRADE WITH GOOSENECK ELBOW AND OUTLET SCREEN.
- 2 CORE THROUGH (E) CONCRETE WALL.
- 3 TRANSITION FROM FAN OUTLET TO NON-FERROUS PIPE PRIOR TO PENETRATION.
- 4 SLEEVE AND SEAL PENETRATION WITH ELASTOMERIC SEALANT.
- 5 SEAL PENETRATION WITH MECHANICAL "LINK-SEAL" SYSTEM OR EQUAL.



GFBA ARCHITECTS
 architects . planners . engineers
 16573 Ventura Boulevard
 Suite 201 Encino, California 91436
 TEL. (818) 905-8614
 FAX. (818) 905-8998

**Santa Catalina Towers
 Restroom and Deck
 Renovation**

University of California Santa Barbara
 Santa Barbara, CA



Issued For	Date	Rev
Addendum No. 2		
November 24, 2008		

As instruments of service, all designs, plans, and information shown on these drawings are and shall remain the property of the Designer. No part thereof shall be copied, disclosed to others, or used in connection with any work or project other than the specific project for which they have been prepared and developed without the written consent of the Designer. Visual contact with these drawings shall constitute conclusive evidence of acceptance of these restrictions.

Contracts #: FM0900533/987711
 Project #:
 UCSB Dwg #: 860-203
 Drawn By: JS, NV Checked By: PT
 Date: 09/25/2008
 Scale: As Noted
 Sheet Description

**MECHANICAL FLOOR &
 ROOF PLANS**

Sheet Number
M-2.0

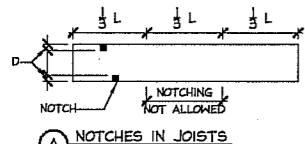
ME
 MECHANICAL
 ENGINEERING
 CONSULTANTS
 INC.
 1816 Anacapa Street
 Santa Barbara, Ca 93101
 Tel (805) 957-4632

WASHER SCHEDULE			
BOLT	MALLEABLE IRON WASHER	HEAVY PLATE WASHER	STANDARD CUT WASHER
1/2" DIAM.	2-1/2" DIAM x 1/4"	2" x 2" x 3/16"	1-3/8" DIAM x 5/32"
5/8" DIAM.	2-3/4" DIAM x 5/16"	3" x 3" x 1/4"	1-3/4" DIAM x 1/8"
3/4" DIAM.	3" DIAM x 7/16"	3" x 3" x 5/16"	2" DIAM x 5/32"
7/8" DIAM.	3 1/2" DIAM. x 7/16"	3" x 3" x 5/16"	2-1/4" DIAM x 11/64"
1" DIAM.	4" DIAM x 1/2"	3 1/2" x 3 1/2" x 3/8"	2-1/2" DIAM x 11/64"

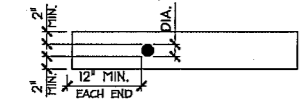
USE UNDER NUT OF ALL ANCHOR BOLTS

WASHER SCHEDULE

SCALE: NONE 10

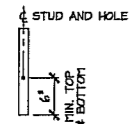


JOIST	MAXIMUM NOTCH DEPTH	MAXIMUM HOLE DIAM.
2x4	1/2"	NONE
2x6	7/8"	1 1/2"
2x8	1 1/8"	2 3/8"
2x10	1 1/2"	3"
2x12	1 7/8"	3 3/4"



HOLES IN JOISTS

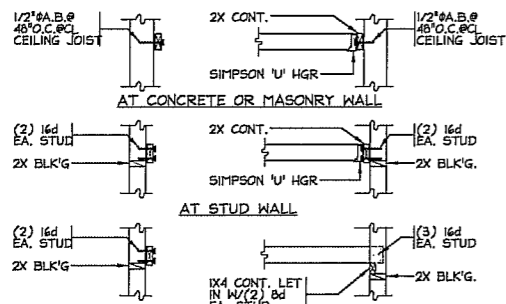
HOLES IN STUDS



HOLES MAY BE DRILLED AT THE CENTER OF STUDS:
 1/2" MAX. IN 2x4
 1 1/8" MAX. IN 2x6
 2 3/8" MAX. IN 2x8

ALLOWABLE NOTCHES/HOLES IN WOOD FRAMING

SCALE: N.T.S. 11



CEILING JOIST SCHEDULE		
JOIST SIZE	MAX SPAN	MAX SPACING
2x6	8	24"
2x8	12	24"
2x10	16	24"
2x12	20	24"

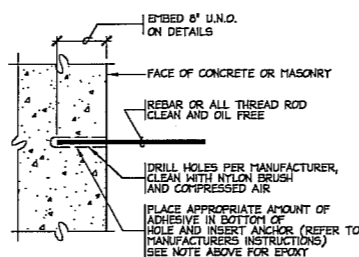
TYPICAL SUPPORT FOR CEILING JOISTS

SCALE: N.T.S. 12

- NOTE:
 1. THIS DETAIL MAY NOT BE USED FOR NEW CONSTRUCTION OR REPAIRS UNLESS APPROVED IN ADVANCE BY THE STRUCTURAL ENGINEER.
 2. HOLE SIZE VARIES BETWEEN MANUFACTURERS. VERIFY HOLE SIZE.

ADHESIVE THAT MAY BE USED ON THIS PROJECT		
MANUFACTURER	PRODUCT	ICBO REPORT NO.
COVERT OPERATIONS INC.	CIA GEL 7000	4846
HILTI	HIT HY50	5193
ITW RAMBET/RED HEAD	EPON CERAMIC 6	4295
POWERS-RAM	POWERFAST	4514
SIMPSON STRONG-TIE	EPOXY-TIE	4945

THE ADHESIVE USED MUST BE CARTRIDGE TYPE. BULK EPOXY IS NOT ALLOWED



ADHESIVE ANCHOR

SCALE: N.T.S. 7

NAILING SCHEDULE

CONNECTION	NAILING
JOIST TO SILL OR GIRDER, TOE NAIL	3-8d
BRIDGING TO JOIST, TOENAIL EACH END	2-8d
1"x6" (25mm x 152mm) SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	2-8d
WIDER THAN 1" X 6" (25mm x 152mm) SUBFLOOR TO EACH JOIST, FACE NAIL	3-8d
2" (51mm) SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	2-16d
SOLE PLATE TO JOIST OR BLOCKING, TYPICAL FACE NAIL	16d AT 16" (406mm) O.C.
SOLE PLATE TO JOIST OR BLOCKING, AT BRACED WALL PANELS	3-16d PER 16" (406mm) O.C.
TOP PLATE TO STUD, END NAIL	2-16d
STUD TO SOLE PLATE	4-8d, TOENAIL OR 2-16d, END NAIL
DOUBLE STUDS, FACE NAIL	16d AT 24" (610mm) O.C.
DOUBLED TOP PLATES, TYPICAL FACE NAIL	16d AT 16" (406mm) O.C.
DOUBLE TOP PLATES, LAP SPlice	8-16d
BLOCKING BETWEEN JOISTS OR RAFTERS TO TOP PLATE, TOENAIL	3-8d
RIM JOIST TO TOP PLATE, TOENAIL	8d AT 6" (152mm) O.C.
TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	2-16d
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	3-16d
CEILING JOISTS TO PLATE, TOENAIL	3-8d
CONTINUOUS HEADER TO STUD, TOENAIL	4-8d
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	3-16d
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	3-16d
RAFTER TO PLATE, TOENAIL	3-8d
1" (25mm) BRACE TO EACH STUD AND PLATE, FACE NAIL	2-8d
1"x8" (25mm x 203mm) SHEATHING OR LESS TO EACH BEARING, FACE NAIL	2-8d
WIDER THAN 1" X 8" (25mm x 203mm) SHEATHING TO EACH BEARING, FACE NAIL	3-8d
BUILT-UP CORNER STUDS	16d AT 24" (610mm) O.C.
BUILT-UP GIRDER AND BEAMS	20d AT 32" (813mm) O.C. AT TOP AND BOTTOM AND STAGGERED 2-20d AT ENDS AND AT EACH SPlice
2" (51mm) PLANKS	2-16d AT EACH BEARING

NAILING SCHEDULE

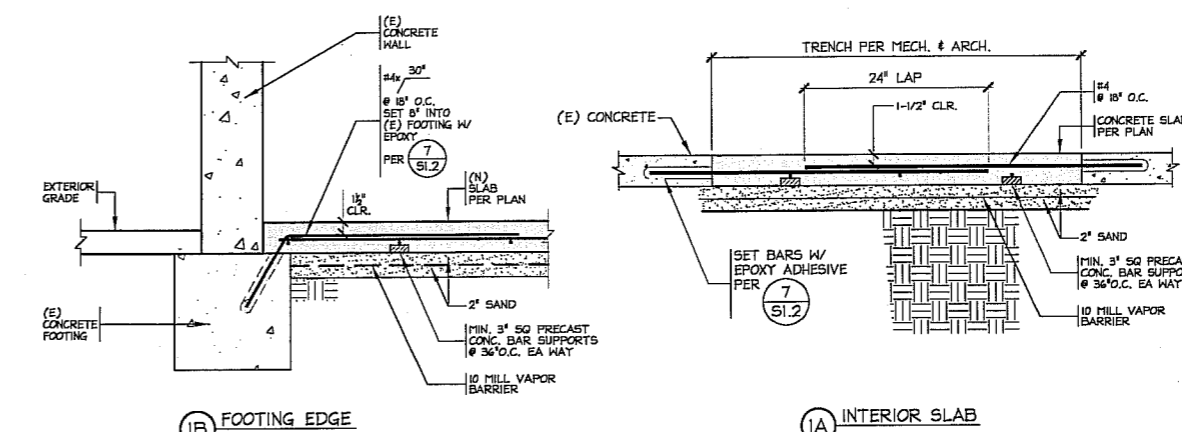
SCALE: NONE 8

LAG SCREW DIAM.	MINIMUM EMBED (U.N.O. ON DETAILS)	LEAD HOLE DIAM.
1/4"	2"	1/8"
5/16"	2 1/2"	1/8"
3/8"	3"	3/16"
7/16"	3 1/2"	1/4"
1/2"	4"	1/4"
5/8"	5"	3/8"
3/4"	6"	3/8"
7/8"	7"	1/2"
1"	8"	5/8"

- THE CLEARANCE HOLE FOR THE SHANK SHALL BE THE SAME DIAMETER AND LENGTH AS THE UNTHREADED SHANK.
- THE LEAD HOLE FOR THE THREADED PORTION SHALL BE THE DIAMETER SHOWN ABOVE AND A LENGTH EQUAL TO AT LEAST THE LENGTH OF THE THREADED PORTION.
- THE THREADED PORTION OF THE LAG SCREW SHALL BE INSERTED IN ITS LEAD HOLE BY TURNING WITH A WRENCH, NOT BY DRIVING WITH A HAMMER.
- SOAP OR OTHER LUBRICANT SHALL BE USED ON THE LAG SCREWS OR IN THE LEAD HOLES TO PREVENT DAMAGE TO THE LAG SCREWS.
- THE MINIMUM EMBED SHOWN ABOVE IS THE DEPTH INTO THE SUPPORTING FRAMING MEMBER.

TYPICAL LAG SCREW INSTALLATION

SCALE: NONE 9



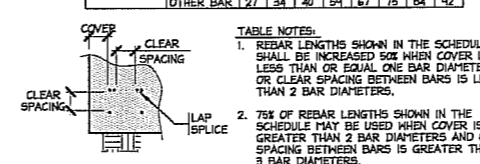
SLAB ON GRADE PATCH DETAIL

REINFORCING BAR SOFT METRIC CONVERSION TABLE		
INCH-POUND BAR SIZE #	APPROXIMATE DIAMETER	SOFT METRIC BAR SIZE
#3	3/8"	#10
#4	1/2"	#13
#5	5/8"	#16
#6	3/4"	#19
#7	7/8"	#22
#8	1"	#25
#9	1 1/8"	#29
#10	1 1/4"	#32
#11	1 3/8"	#36
#14	1 3/4"	#43
#18	2 1/4"	#57

REINFORCING BAR SOFT METRIC CONVERSION TABLE

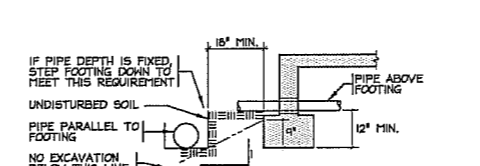
SCALE: NONE 4

REBAR SPLICES IN INCHES											
REBAR SIZE (GRADE 60)	4	5	6	7	8	9	10	11	12	14	18
F _c =2000	27	34	40	47	54	61	68	75	84	92	108
F _c =2500	40	50	60	70	80	90	101	113	126	141	168
F _c =3000	36	45	54	64	74	84	94	105	117	131	156
F _c =3500	22	27	33	40	47	54	61	68	75	84	100
F _c =4000	30	38	46	54	62	71	80	89	100	111	135
F _c =4500	28	35	43	51	60	69	78	88	99	110	134



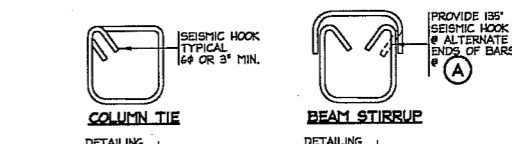
SPLICES (STANDARD LAPS)

SCALE: 1/4"=1'-0" 5



PIPE SLEEVE & TRENCH

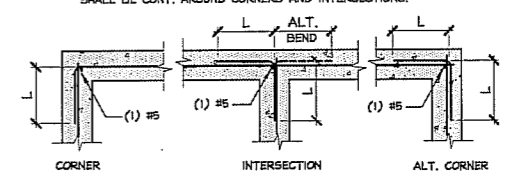
SCALE: N.T.S. 6



STANDARD REINFORCING HOOKS

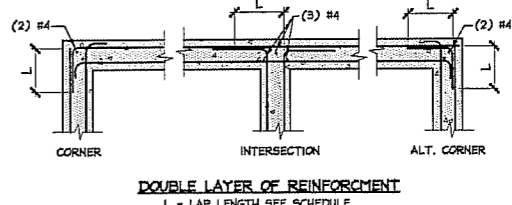
SCALE: N.T.S. 2

NOTE: ALL HORIZONTAL BARS IN FOOTINGS, GRADE BEAM AND BOND BEAMS SHALL BE CONT. AROUND CORNERS AND INTERSECTIONS.



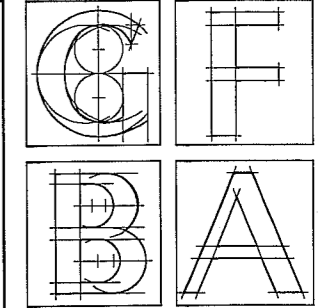
TYPICAL CORNER REINFORCEMENT

SCALE: N.T.S. 3



TYPICAL CORNER REINFORCEMENT

SCALE: N.T.S. 3



GFBA ARCHITECTS
 architects . planners . engineers
 16573 Ventura Boulevard
 Suite 201
 Encino, California 91436
 TEL. (818) 905-8814
 FAX. (818) 905-8998

Santa Catalina Towers
 Restroom & Deck
 Renovation

University of California Santa Barbara
 Santa Barbara, CA

s|e
 inc.
 studio engineers inc.
 structural consultants
 1108 De La Vina Street, Suite A
 Santa Barbara, CA 93101
 P: 805.962.2780
 F: 805.962.2788
 E: jsacca@studioengineersinc.com
 W: www.studioengineersinc.com
 REG. PROFESSIONAL ENGINEER
 No. 191
 EXP. 12/31/2010
 STATE OF CALIFORNIA
 #08-032

Issued For	Date	Rev
Revisions		
Addendum No. 2		
November 24, 2008		

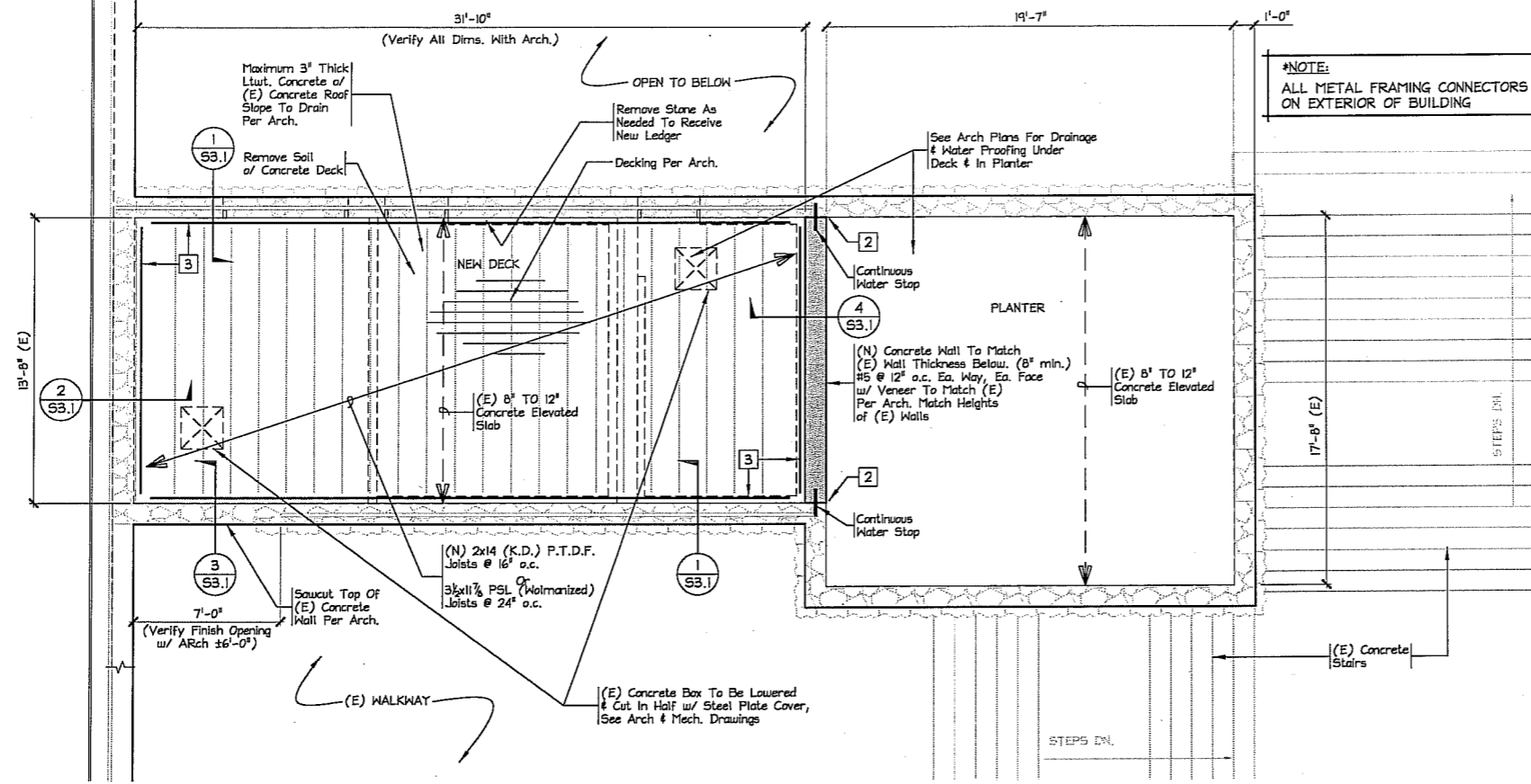
As instruments of service, all designs, ideas, and information shown on these drawings are and shall remain the property of the Designer. No part thereof shall be copied, disclosed to others, or used in connection with any work or project other than the specific project for which they have been prepared and developed without the written consent of the Designer. Visual contact with these drawings shall constitute conclusive evidence of acceptance of these restrictions.

Contracts #: FM090053S/987711
 Project #:
 UCSB Dwg. #: 860-203
 Drawn By: CDS Checked By: BN/JAT
 Date: 11/19/08
 Scale: As Noted
 Sheet Description

Typical Details

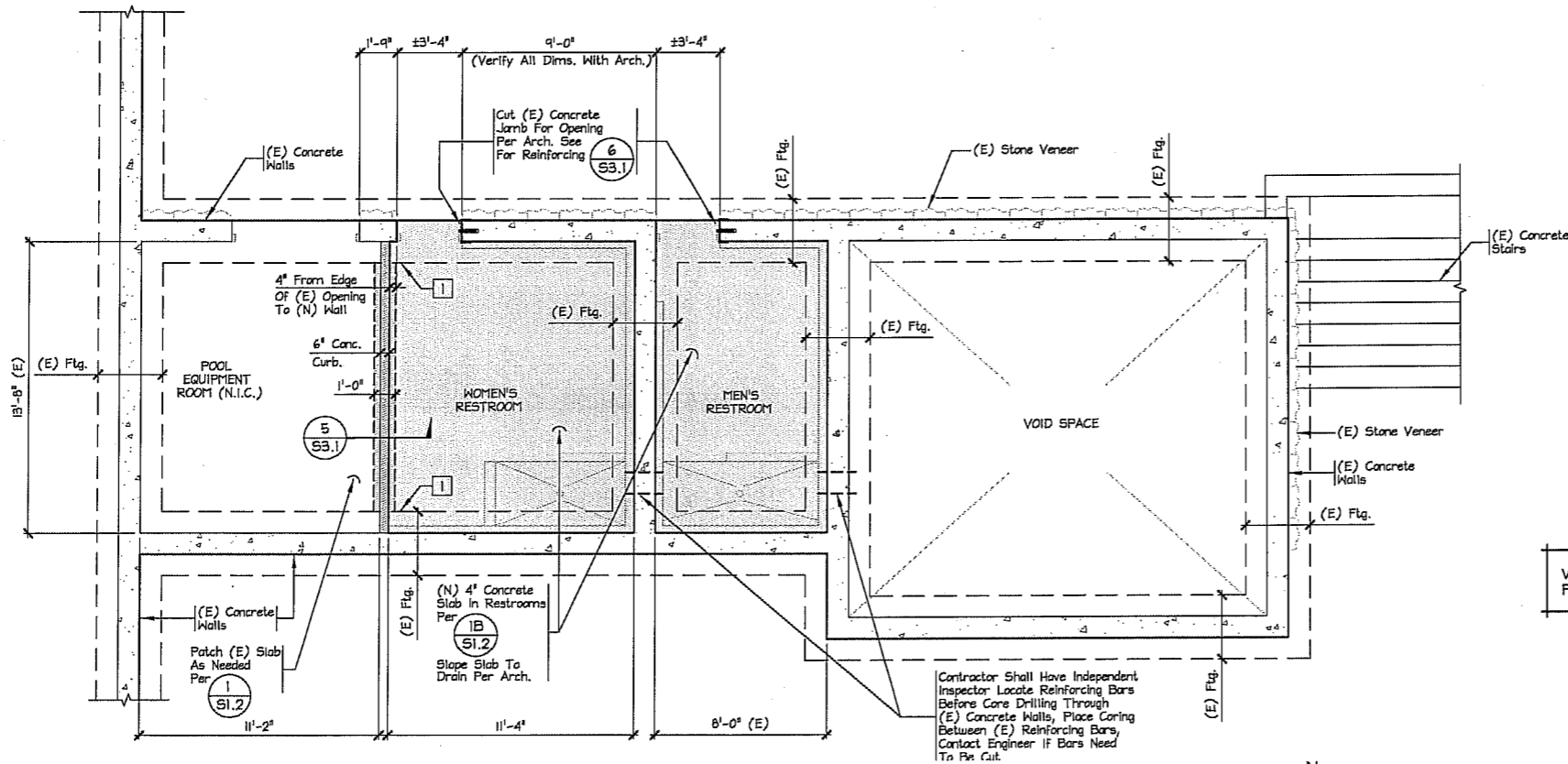
Sheet Number

S1.2



DECK FRAMING PLAN

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



FOUNDATION PLAN

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

PLAN NOTES

1. SEE ARCHITECTURAL DRAWINGS FOR SLAB SLOPES, DEPRESSIONS, CURBS, AND FLOOR DRAINS.
2. NO SLEEVING OF ANY GRADE BEAM OR FOOTING IS ALLOWED UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS.
3. ALL SLEEVES THROUGH FOUNDATION WALLS AND UNDER FOOTINGS SHALL BE INSTALLED PRIOR TO FOUNDATION POUR.
4. DIMENSIONS ARE TO FACE OF CONCRETE (F.O.C.).
5. BACKFILLING OF RETAINING WALLS AND WALL CONSTRUCTION BELOW GRADE MAY BE DONE AFTER WALL HAS BEEN PLACED 14 DAYS MINIMUM.
6. REFER TO ARCHITECTURAL DRAWINGS FOR FLOOR SLOPES, DRAINS, ETC. AND DIMENSIONS NOT SHOWN.
7. REFER TO MECHANICAL DRAWINGS FOR DUCT OPENINGS, EQUIPMENT OPENINGS, EQUIPMENT SIZE AND LOCATION.
8. ALL CONCRETE SHALL HAVE A MINIMUM STRENGTH OF 3000 PSI, CONTINUOUS SPECIAL INSPECTION REQUIRED DURING STEEL AND CONCRETE PLACEMENT.

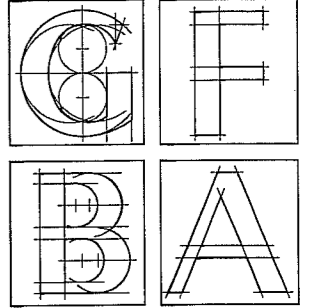
NOTE:
ALL METAL FRAMING CONNECTORS ON EXTERIOR OF BUILDING

NUMBERED NOTES THIS SHEET ONLY

- 1 (2) #5x48" HORIZONTAL DONELS AT BOTTOM OF (N) FOOTING. SET 8" INTO (E) FOOTING WITH EPOXY ADHESIVE PER 7 SI.2
- 2 #5 @ 12" O.C. DONELS SET 6" INTO (E) CONCRETE WALL WITH EPOXY ADHESIVE, LAP 30" WITH HORIZONTAL BARS.
- 3 (N) L 6x8x1/2 GALVANIZED STEEL ANGLE LEDGER WITH 3/8" THREADED RODS @ 24" O.C. SET 6" INTO (E) CONCRETE WITH EPOXY ADHESIVE.

LEGEND

- ☒ WOOD POST, FULL HEIGHT TO TOP R OR BOTTOM OF BEAM.
- 2x WOOD STUD WALLS ABOVE
- WALLS BELOW
- (E) CONCRETE WALL
- ▨ CONC. CURB
- C.J. INDICATES CONTROL JOINT OR CONSTRUCTION JOINT.



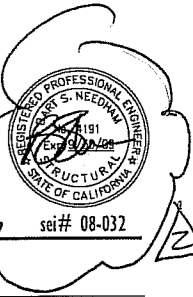
GFBA ARCHITECTS
architects . planners . engineers
16573 Ventura Boulevard
Suite 201
Encino, California 91436
TEL: (818) 905-8814
FAX: (818) 905-8998

Santa Catalina Towers
Restroom & Deck
Renovation

University of California Santa Barbara
Santa Barbara, CA

s|e
inc.
studio engineers inc.
structural consultants

1108 De La Vina Street, Suite A
Santa Barbara, CA 93101
p: 805.962.2180
e: jcauca@studioengineersinc.com
w: www.studioengineersinc.com



Issued For	Date	Rev
Revisions		▲
Addendum No. 2		
November 24, 2008		

As instruments of service, all designs, ideas, and information shown on these drawings are and shall remain the property of the Designer. No part thereof shall be copied, disclosed to others, or used in connection with any work or project other than the specific project for which they have been prepared and developed without the written consent of The Designer. Visual contact with these drawings shall constitute conclusive evidence of acceptance of these restrictions.

Contracts #: FM090053S/987711
Project #:
UCSB Dwg. #: 860-203
Drawn By: CDS Checked By: BN/JAT
Date: 11/19/08
Scale: As Noted
Sheet Description

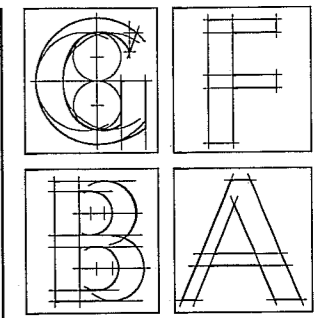
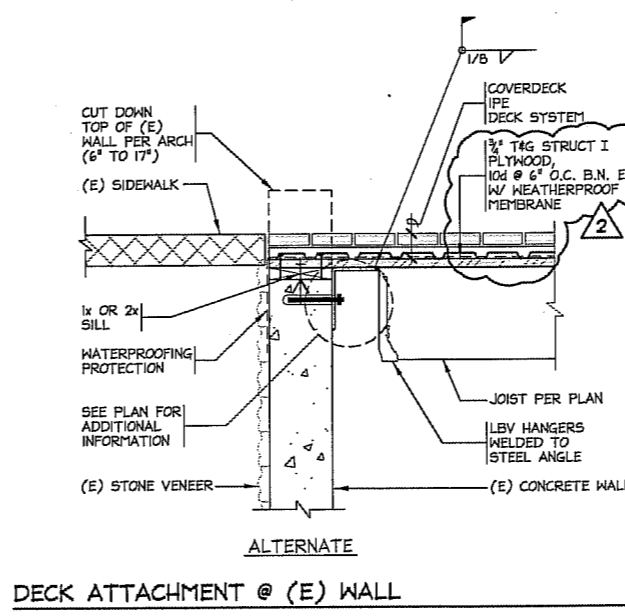
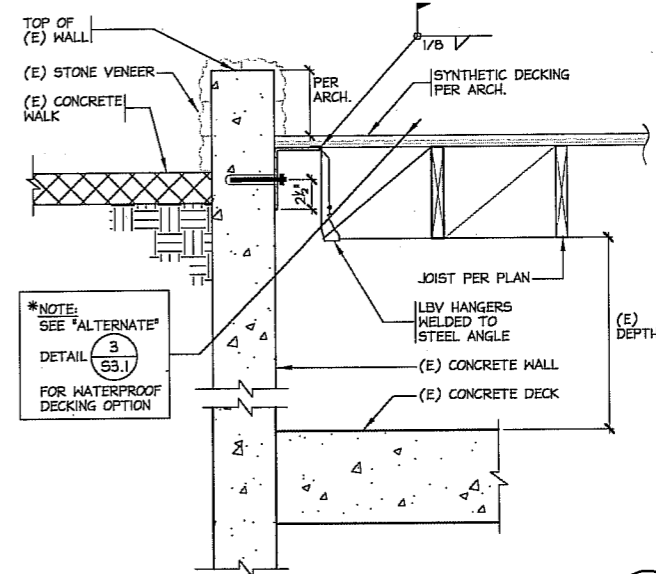
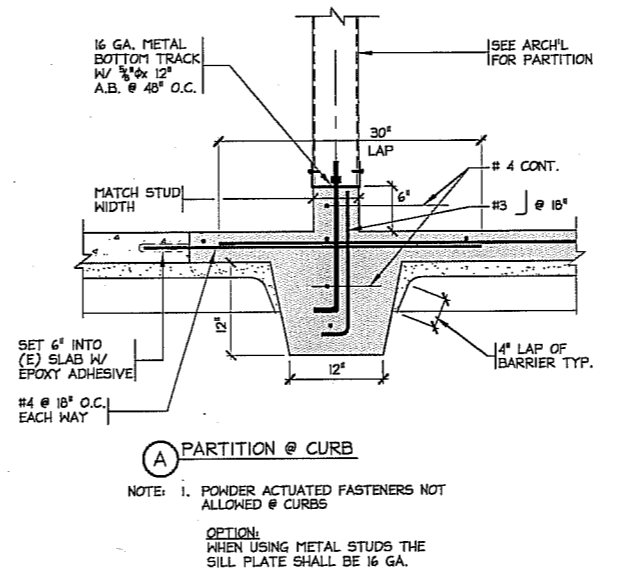
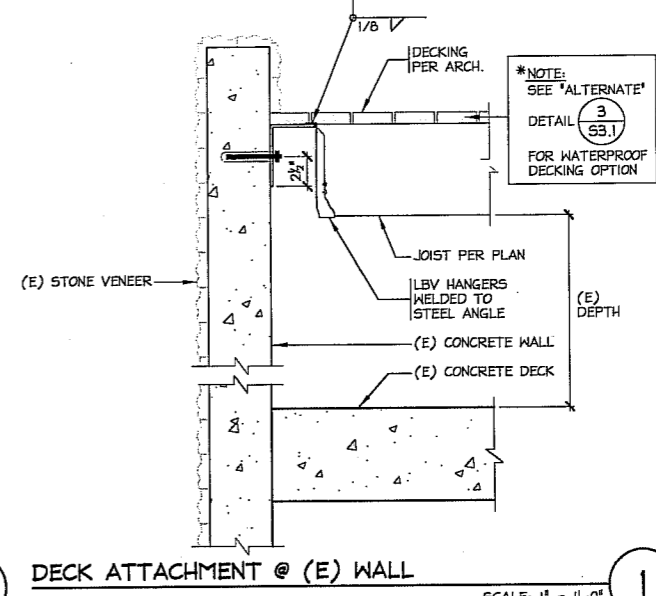
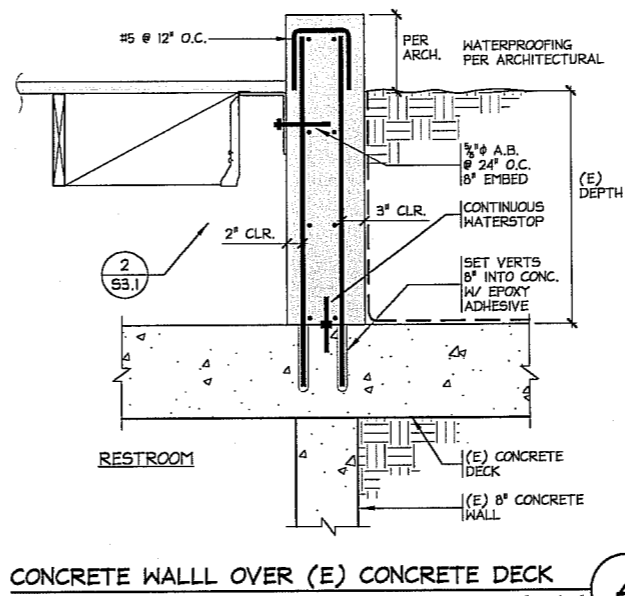
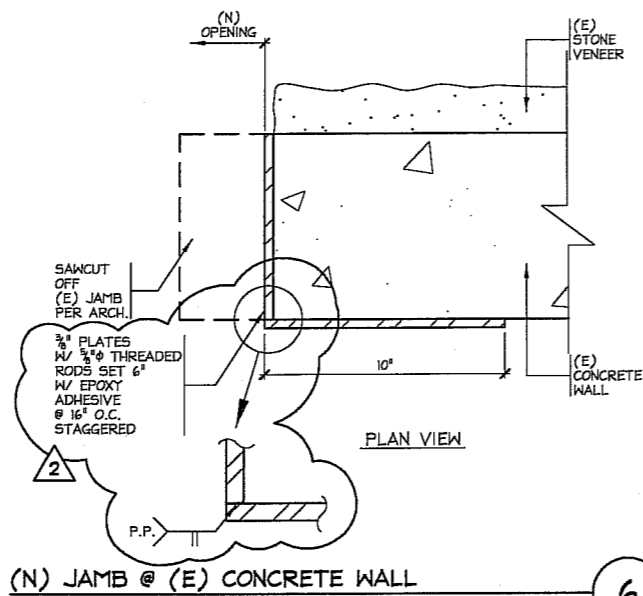
Foundation Plan
Roof Framing Plan

Sheet Number

S2.1

VERIFY ALL DIMENSIONS ON SITE PRIOR TO STARTING CONSTRUCTION.

Contractor Shall Have Independent Inspector Locate Reinforcing Bars Before Core Drilling Through (E) Concrete Walls. Place Coring Between (E) Reinforcing Bars. Contact Engineer If Bars Need To Be Cut.



GFBA ARCHITECTS
 architects . planners . engineers
 16573 Ventura Boulevard
 Suite 201
 Encino, California 91436
 TEL. (818) 905-8814
 FAX. (818) 905-0998

Santa Catalina Towers
 Restroom & Deck
 Renovation
 University of California Santa Barbara
 Santa Barbara, CA

sei inc.
 studio engineers inc.
 structural consultants
 1100 De La Vina Street, Suite A
 Santa Barbara, CA 93101
 p: 805.962.2780
 f: 805.962.2788
 e: jrua@studioengineersinc.com
 www.studioengineersinc.com
 sei# 08-032

Issued For	Date	Rev
Revisions		Δ
Addendum No. 2		
November 24, 2008		

As instruments of service, all designs, ideas, and information shown on these drawings are and shall remain the property of the Designer. No part thereof shall be copied, disclosed to others, or used in connection with any work or project other than the specific project for which they have been prepared and developed without the written consent of The Designer. Visual contact with these drawings shall constitute conclusive evidence of acceptance of these restrictions.

Contracts #: FM090053S/987711
 Project #:
 UCSB Dwg. #: 860-203
 Drawn By: CDS Checked By: BN/JAT
 Date: 11/19/08
 Scale: As Noted
 Sheet Description

Details
 Sheet Number

S3.1