

B

Type



Plans

BLD 14-2923

Permit Number

9143

Street Number

GREEN VALLEY RD

Street Name

GRA

Community Code

130-090-020

APN

**COUNTY OF SONOMA - PERMIT AND RESOURCE MANAGEMENT DEPARTMENT**

2550 Ventura Avenue, Santa Rosa, CA 95403 (707) 565-1900 FAX (707) 565-1103

Please Print Your Name: **MARC MATULLICH** Date Applied: **6/26/2014**

**INFORMATION WITHIN HEAVY LINE TO BE COMPLETED BY APPLICANT**

**SITE LOCATION INFORMATION - PRINT CLEARLY**

Site Address: **914B GREEN VALLEY RD** City: **SEBASTOPOL** ZIP: \_\_\_\_\_  
 Cross-Street: **ROSS RD** APN: **130-090-020** Project Phone #: **823 5313** Project Fax #: **823 5218**  
 Directions: \_\_\_\_\_ Email address: \_\_\_\_\_ Unit #: \_\_\_\_\_ Lot #: \_\_\_\_\_  
 Describe Project: **NEW OFFICE BLDG "B"** Living Area: **300** Contract Price: \_\_\_\_\_  
 Garage: \_\_\_\_\_ Decks: \_\_\_\_\_

**OWNER NAME AND ADDRESS**

**APPLICANT NAME AND ADDRESS**

Name: **MANZANA PRODUCTS**  
 Mailing Address: **PO BOX 209**  
 City: **SEBASTOPOL** State: **CA** ZIP: **95473**  
 Day Ph: **823 5313** Fax: **823 5218**

Name: **MARC MATULLICH**  
 Mailing Address: **1518 JEWELL DR**  
 City: **SANTA ROSA** State: **CA** ZIP: **95404**  
 Day Ph: **523 4681** Fax: **523 1437**

**CONTRACTOR INFORMATION**

**OTHER PERSONS (ARCHITECT) ENGINEER, ETC.)**

Company Name: **CORP & ASSO. BUILDERS**  
 Address: **112 PINE BREEZE LN**  
 City: **SEB** State: **CA** ZIP: **95472**  
 Day Ph: \_\_\_\_\_ Fax: \_\_\_\_\_

Name: **NONE**  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ ZIP: \_\_\_\_\_  
 Day Ph: \_\_\_\_\_ Fax: \_\_\_\_\_

**WORKER'S COMPENSATION DECLARATION**

I hereby affirm under penalty of perjury one of the following declarations:  
 I have and will maintain a certificate of consent to self-insure for worker's compensation, as provided for by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued.  
 I have and will maintain worker's compensation insurance, as required by Section 3700 of the Labor Code, for the performance of the work for which this permit is issued. My worker's compensation insurance carrier and policy number are:

Carrier \_\_\_\_\_ Policy No. \_\_\_\_\_

(This section need not be completed if the permit is for one hundred dollars (\$100) or less).  
 I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the worker's compensation laws of California, and agree that if I should become subject to the worker's compensation provisions of Section 3700 of the Labor Code, I shall forthwith comply with those provisions.

Exp. Date: \_\_\_\_\_ Applicant: \_\_\_\_\_

**WARNING: FAILURE TO SECURE WORKER'S COMPENSATION COVERAGE IS UNLAWFUL, AND SHALL SUBJECT AN EMPLOYER TO CRIMINAL PENALTIES AND CIVIL FINES UP TO ONE HUNDRED THOUSAND DOLLARS (\$100,000), IN ADDITION TO THE COST OF COMPENSATION, DAMAGES AS PROVIDED FOR IN SECTION 3708 OF THE LABOR CODE, INTEREST, AND ATTORNEY'S FEES.**

**OWNER-BUILDER DECLARATION**

I hereby affirm under penalty of perjury that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5, Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he or she is licensed pursuant to the provisions of the Contractor's License Law (Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code) or that he or she is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than five hundred dollars (\$500).):

I, as owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044 Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or herself or through his or her own employees, provided that such improvements are not intended or offered for sale. If, however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he or she did not build or improve for the purpose of sale.)

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project (Sec. 7044, Business and Professions Code: The Contractors License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractors License Law.)

I am exempt under Sec. \_\_\_\_\_ B & P.C. for this reason **C12701**

By my signature below I acknowledge that, except for my personal residence in which I must have resided for at least one year prior to completion of the improvements covered by this permit, I cannot legally sell a structure that I have built as an owner-builder if it has not been constructed in its entirety by licensed contractors. I understand that a copy of the applicable law, Section 7044 of the Business and Professions Code, is available upon request when this application is submitted or at the following website: <http://www.leginfo.ca.gov/calaw.html>.

Date: **12/17/14** Signature of Property Owner or Authorized Agent: **Marc Matullich**

**LICENSED CONTRACTOR'S DECLARATION**

I hereby affirm under penalty of perjury that I am licensed under provisions of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code, and my license is in full force and effect.

Lic. Class \_\_\_\_\_ Lic. No. \_\_\_\_\_

Exp. Date \_\_\_\_\_ Contractor \_\_\_\_\_

**ASBESTOS DECLARATION**

Written asbestos notification pursuant to Part 61 of Title 40 of the Code of Federal Regulations is required when asbestos exists in buildings, or portions thereof, undergoing demolition. I hereby declare that demolition authorized by this permit is from construction that ( ) does ( ) does not contain asbestos, or that  no demolition is authorized by this permit.

I certify that I have read this application and affirm under penalty of perjury that the above information is correct. I agree to comply with all local Ordinances and State laws relating to building construction. I hereby authorize representatives of the County of Sonoma to enter upon the above-mentioned property for inspection purposes. If, after making the Certificate of Exemption for the Worker's Compensation provision of the Labor Code I should become subject to such provisions, I will forthwith comply. In the event I do not comply with the Workman's Compensation law, this permit shall be deemed revoked.

PERMITTEE SIGNATURE: **Marc Matullich**  
 ADDRESS: **1518 JEWELL DR SR 95404** CITY: \_\_\_\_\_ ZIP: \_\_\_\_\_

Contractor  Owner  Other Licensed Professional

**CONSTRUCTION LENDING DECLARATION**

I hereby affirm under penalty of perjury that there is a construction lending agency for the performance of the work for which this permit is issued. (Sec. 3097, Civ. C.)

Lenders Name \_\_\_\_\_ Lenders Address \_\_\_\_\_

**FOR DEPARTMENT USE**

Zoning: **DA B6-20 M3 BFEZ** Plot No: **APR13-0062** Acres: **12.51**  
 Existing Use/Structures: **DA B6-20A M3 BFEZ 2.52**  
 Proposed Use/Structures: **OFFICE BLDG**

Zoning Min. Yard Requirements: Front **15'** Left **15'** Right **15'** Back **15'**  
 NOTE: Fire Safe Standards require all parcels greater than 1 Acre to have a min. 30' setback unless mitigated.  Mitigation Required  Address subject to change

Approval for Permit Issuance: \_\_\_\_\_ Approval for Occupancy: \_\_\_\_\_

By: **Cynthia Dem** By: \_\_\_\_\_

Date: **12-9-15** Date: \_\_\_\_\_

Conditions: **NEEDS SIGN OFF BY CYNTHIA**  
**OFF. HOUSING FEES ASSESSED \$7,560**

Sewer Connection:  Available  Fees Paid

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Road Encroachment:  Fees Paid

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Septic System Permit/Clearance: **Sept 14-0161**

Approved by: **Jon Tracy** Date: **12/9/14**

Flood Zone:  Yes  No 100 Year Flood Elevation: \_\_\_\_\_

Site Review \_\_\_\_\_

Drainage Review \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Fire: \_\_\_\_\_

Approved by: \_\_\_\_\_ Date: \_\_\_\_\_

Code Enforcement Violation  Yes  No Violation # \_\_\_\_\_

This permit is limited to \_\_\_\_\_ days.

Work Authorized: **Office Building**

<input checked="" type="checkbox"/> Plans Approved	<input type="checkbox"/> Post FIRM	<input type="checkbox"/> Alquist Priolo Report Available
<input type="checkbox"/> No Plans Subject to Field Inspection	<input type="checkbox"/> Pre FIRM	<input type="checkbox"/> Geotechnical report Available
Permit Check Closed By: <b>B. Lillis</b> Date: <b>10/20/14</b>	Type of Construction: <b>TB</b>	Occupancy: <b>B</b>
Permit Closed for Issuance By: <b>10/17/14</b>	Auto. Fire Sprinkler Req'd: <b>Yes</b>	No. of Units: <b>20</b>
		Certificate of Occupancy: _____

Machine Stamp for Permit Fee  
**PAYMENT REC'D**  
 \$ \_\_\_\_\_  
**DEC 17 2014**  
 PERMIT AND RESOURCE MANAGEMENT DEPARTMENT  
 COUNTY OF SONOMA

Distribution: White - Applicant, Blue - Inspector, Green - Inspector

JOB ADDRESS: **914B Green Valley Rd.**  
 PERMIT NUMBER: **RD04-2023**  
 INSPECTION AREA: \_\_\_\_\_

**THIS PERMIT SHALL EXPIRE IN THREE(3) YEARS FROM DATE FEES ARE PAID UNLESS OTHERWISE NOTED BY CODE ENFORCEMENT**

SPECIAL INSPECTION REQUIRED		YES	NO	IF YES, SEE ADDITIONAL SHEET
INSPECTION RECORD	DATE	NAME		REMARKS
104) ROUGH GRADING				(103) Footings for ramp and stairs and landings
103) FOUNDATION	2/18/15	RM		O.K. to pour 1-29-15 RM
FORMS/SETBACK				(109) footing for retain wall on east side
FOOTING				of stairs O.K. 1-29-15 RM
WALLS				(140) flat work O.K. prior for ramps, stairs 3/11/15 RM
106) UFER GROUND #	2/17/15	William Kelly		
104) CAISSONS/PIERS	2-25-15	RM		(143) exterior glass mat fiber board
105) SLAB	2-24-15	RM		on south wall O.K. 4-17-15 RM
107) UNDERGROUND UTILITIES				(143) 5-4-15 1st interior layer @ stair wall
110) MASONRY				(132) OK to cover 2nd interior wall RFP
109) RETAINING WALLS	2/18/15	RM		
113) FIREPLACE				(140) column footings for stair (ext) O.K.
FOOTING				to pour see (31) 6-9-15 RM
HEARTH/PROTECTION				(140) column steel O.K. 6-15-15 RM
THROAT				(140) site meeting about placement of
114) CHIMNEY				truncated domes at the bottom of the
120) UNDERFLOOR/UNDERSLAB				rear stairs 10-27-15 RM
115) HYDRONICS				
116) U/F ELECTRICAL				
117) U/F MECHANICAL				
118) U/F PLUMBING	4/7/15	William Kelly	RM	
119) U/F FRAMING				
139) U/F INSULATION				
126) SHEAR WALLS				
<input type="checkbox"/> INTERIOR				<input type="checkbox"/> EXTERIOR
127) DIAPHRAGMS				
<input type="checkbox"/> ROOF				<input type="checkbox"/> FLOOR
134) SIDING/SHEATHING				
125) HOLD DOWNS				
132) CLOSE-IN	5/21/15	RM		
122) ROUGH ELECTRICAL				
123) ROUGH MECHANICAL *	7-16-15	RM		* 123 - Check @ grid RM
124) ROUGH PLUMBING	5-12-15	RM		
128) ROUGH FRAME				
160) SMOKE DETECTORS				
139) INSULATION				
142) WALLBOARD	6/27/15	RM		
143) FIREWALLS				
135) STUCCO/PLASTER				
<input type="checkbox"/> LATH				<input type="checkbox"/> SCRATCH
137) ROOFING				
130) TUB/SHOWER PAN				
162) FIRE DAMPERS/DOORS				
164) SUSPENDED CEILING	7-16-15	RM		
<input checked="" type="checkbox"/> ROUGH ELEC.				<input checked="" type="checkbox"/> ROUGH MECH.
165) EXITING - RAMPS/STAIRS				
163) HANDRAILS/GUARDRAILS				
CORRIDORS/DOORS				
166) ACCESSIBILITY COMPLIANCE				650) SUSUMP INSPECTION
144) WATER TANKS				651) NPDES EROSION COMPLIANCE
<input type="checkbox"/> SLAB				<input type="checkbox"/> WALLS
170) TEMPORARY OCCUPANCY				652) NPDES SEDIMENT COMPLIANCE
171) TEMPORARY ELECTRICAL				653) NPDES DOCS/SWPPP
172) TEMPORARY GAS				FIRE INSPECTION REQUIRED
174) ELECTRIC METER AUTHORIZATION				<input type="checkbox"/> Yes <input type="checkbox"/> No
152) PANEL BOARDS/SERVICE				759) KNOX BOX
189) SEPTIC ELECTRIC FINAL	9-9-15	RM		760) PROPANE TANK HOLD DOWNS
175) GAS METER AUTHORIZATION				770) SPRINKLER FINAL
153) GAS PRESSURE TEST				771) ABOVEGROUND HYDROSTATIC
HOUSE				772) UNDERGROUND HYDROSTATIC
YARD				773) UNDERGROUND FLUSH
190) MANUF. HOME FOUNDATION				774) THRUST BLOCKS
191) MANUF. HOME INSTALLATION				775) PIPE WELD
CONTINUITY				776) HYDRANTS/APPLIANCES
STAIRS/SKIRTS				777) PUMP ACCEPTANCE
RIDGE BOLTING				778) WATER SUPPLY/TANK
193) MANUF. HOME COND. FINAL				779) ALARM SYSTEM
SWIMMING POOLS				780) HOOD & DUCT SYSTEM
194) PRE-GUNITE				781) ABOVEGROUND TANK/DISPENSER
195) PRE-DECK				198) FIRE FINAL
196) PRE-PLASTER/FENCE				CLEARANCES:
197) VINYL/FIBERGLASS POOL EXCAVATION				FIRE <input type="checkbox"/> Local <input type="checkbox"/> County
102) GRADING FINAL				HEALTH DEPARTMENT
176) ELECTRICAL FINAL	12-3-15	RM		ZONING
177) MECHANICAL FINAL	12-3-15	RM		SANITATION
178) PLUMBING FINAL	12-3-15	RM		
199) FINAL	12-3-15	RM		
OCCUPANCY (OK TO OCCUPY)				PLAN RETENTION REQUIRED?
				<input type="checkbox"/> Yes <input type="checkbox"/> No

PERMIT # BDD14-2023

# Grading Permit Questionnaire

GRD - 002

**Purpose:** To assist applicants in determining if a grading permit is required for a proposed project.

**Background:** Grading is the removal and/or the deposition of earth material by artificial means. Earth material is defined as any rock or natural soil or combination thereof. Grading is generally a combination of excavation (cuts) and placement (fill) of soil. Common examples of grading include constructing a driveway, creating a building pad for further development, or stabilizing a slope. A grading permit is required prior to commencing any grading or related work, including preparatory site clearing and soil disturbance, except where exempted from permit requirements by Section 11.04.020 of the Sonoma County Code.

To determine if a project requires a grading permit, please answer the following questions. If any questions cannot be answered, contact a design professional for assistance and/or consult with the Permit and Resource Management (PRMD) Grading & Storm Water staff. **Incorrect answers may cause delays processing and/or issuing the permit(s) for the project.**

- Yes  No  Unknown 1. Does the project include cuts or fills exceeding 50 cubic yards of soil?\*
- Yes  No  Unknown 2. Does the project include a cut greater than 2 feet in depth?\*
- Yes  No  Unknown 3. Does the project create a cut slope greater than 5 feet in height and steeper than 2:1 (H:V)?\*
- Yes  No  Unknown 4. Does the project include a fill greater than 3 feet in depth?
- Yes  No  Unknown 5. Does the project include fill between 1 foot and 3 feet in depth, and not intended to support a structure or surcharge, and placed on terrain with a natural slope steeper than 15%?
- Yes  No  Unknown 6. Does the project include fill greater than 1 foot in depth and intended to support a structure or surcharge?
- Yes  No  Unknown 7. Does the project include any fill within the Flood Prone Urban Area (FPUA)? See map on reverse side of this form for the location of the FPUA.
- Yes  No  Unknown 8. Does the project include any fill within a Special Flood Hazard Area designated by FEMA as subject to flooding by the 1% annual chance flood (100-year flood)?

\* A "No" answer may be selected for excavations below finished grade for basements, tanks, vaults, swimming pools, and footings of a building, retaining wall, or other structure, where authorized by a valid building permit.

### Acknowledgment:

I, as the applicant, understand that a "Yes" answer to any of the above questions means that a grading permit is required for my proposed project. Furthermore, the grading permit must be approved before a building permit can be approved for the site. If any answers are "Unknown" to me, I should contact my design professional immediately to determine if a grading permit is required.

MARC MASTROGI  
Applicant Printed Name  
Marc Mastroggi  
Applicant Signature  
6/26/2014  
Date

9141 GREEN VALLEY RD  
Property Address  
130-090-020  
Assessor's Parcel Number(s)  
BD14-2923  
Building Permit Number(s)



# PJC & Associates, Inc.

Consulting Engineers & Geologists

August 31, 2015

Job No. 3445.04

Manzana Products Co.  
Attention: Mark Fitzgerald  
9141 Green Valley Road  
Graton, CA 95472  
[mfitzgerald@manzanaproductsco.com](mailto:mfitzgerald@manzanaproductsco.com)

Subject: Final Report  
Results of Special Inspection and Testing Services  
New Office Building  
Manzana Products Company  
9141 Green Valley Road  
Graton, California  
BLD14-2923

References: Report titled, "Geotechnical Investigation, Proposed Office Building, Manzana Products Company, 9141 Green Valley Road, Graton, California," prepared by PJC & Associates, Inc., dated May 12, 2014.

Structural Engineering Plans titled, "Office Building, Manzana Products Company", Sheet S1, prepared by Ty Fiscus, P.E., dated August 19, 2014.

Structural Engineering Plans, Detail 9 of Foundation Plan, "Concrete Stair Column Footing", prepared by Ty Fiscus, P.E., undated.

Dear Mark:

PJC & Associates, Inc. (PJC) is pleased to submit this final report presenting the results of our geotechnical observations and special inspection and testing services provided during construction of the proposed office building located at 9141 Green Valley Road in Graton, California. Our services were completed in accordance with our agreement for geotechnical and special inspection services and your authorization to proceed with the work.

## 1. PROJECT DESCRIPTION

The project consisted of constructing a 3,000 square foot office building and new asphalt concrete driveway and parking areas. The building consists of a two-story steel frame structure with a concrete slab-on-grade floor. The project is serviced by above and underground municipal utilities and an underground on-site septic sewer system.

**RETAIN**

## 2. SCOPE OF WORK

PJC was intermittently on site between January 23, 2015 and August 13, 2015 to provide the following scope of services for the project:

- a. Observation of spread footing excavations.
- b. Observation of the placement of reinforcement steel used in the ADA ramp, spread footings, concrete slab-on-grade and columns.
- c. Observation of the placement of concrete in the footings, ADA ramp and concrete slab-on-grade. Samples were cast. Compression results are attached.
- d. Special inspection of field welding.
- e. Special inspection of A325 ¾ inch and 1 inch high strength bolting.
- f. Special inspection of 1 inch and ¾ inch skidmore high strength bolts.
- g. Special and visual inspection of revised field welding connections at the stair landing according to detail 3A.
- h. Preparation of this final report.

## 3. DISCUSSION

Based on the results of our special inspection and testing services, we judge that the requiring geotechnical observations and special inspections and testing were constructed in general conformance with the approved project plans, the approved geotechnical report, and the minimal workmanship provisions of the 2013 edition of the California Building Code (CBC).

We trust that this is the information that you require at this time. If you have any questions concerning the content of this letter, please call.

Sincerely,

PJC & ASSOCIATES, INC.

Patrick J. Conway  
Civil Engineer  
C 44507, California



**RETAIN**

PJC/bc

cc: Jim Hakel (jim@carybuilders.com)

**TY FISCUS  
PROFESSIONAL ENGINEER  
CIVIL AND STRUCTURAL ENGINEERING  
P O BOX 393, GRATON, CA. 95444  
PHONE & FAX 707-829-5005**

**Jan. 26, 2015**

**Sonoma County Building Inspection**

**BLD 14-2923 Correction Notice 1-23-15**

**Manzana Products**

**9143 Green Valley Road**

**This letter is to inform you that I have reviewed the details of the concrete wall construction at the ADA ramp and stairs. The walls are not cantilevered retaining walls and when completed will be tied together by the ramp and landings. The wall thickness and reinforcing is adequate for this condition.**

**The 4 inch domestic sewer pipe can be left in place below the stair and ramp concrete pour. This pipe should be wrapped with foam insulation so it is not "locked" into the concrete pour. The larger storm drain pipe is O.K. but should be covered with gravel backfill material and wrapped at the top where it is in contact with the concrete pour.**

**If you have questions regarding this matter please call my office or have the Architect contact me.**

**Sincerely,**

**Ty Fiscus P.E.**

**C-24690**

**cc Matulich Architect**

**Cary Construction**

**RETAIN**

# HUFFMAN ENGINEERING & SURVEYING

537 College Avenue, Suite A, Santa Rosa, CA 95404

707-542-6559 [www.huffmanengineering.net](http://www.huffmanengineering.net)

August 26, 2015

John Rainwater  
County of Sonoma PRMD  
2550 Ventura Ave.  
Santa Rosa, CA 95403

RE: Final septic inspection at 9143 Green Valley Road, Graton, GRD14-0164

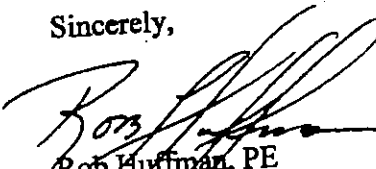
Dear John,

A site inspection was conducted on 8/25/15 to observe the work done relating to the grading and drainage improvements at the above-mentioned project. In general, the work was in substantial compliance with the revised plans prepared by our office and submitted to the county on 3/30/15 with the following exceptions:

Sheet C4 – The area between the proposed office building and the existing warehouse was modified to include a new landscape planter. Concrete flatwork grades were revised to accommodate the new planter. The cover on DI#4 was revised from a standard galvanized grate to a solid diamond plate cover.

If you have any questions please call us at 542-6559.

Sincerely,

  
Rob Huffman, PE  
Professional Engineer  
RH:fv  
12-40



**RETAIN**

**HEATING  
AIR CONDITIONING**

\*

**VENTILATION**

\*

**Air Balance Report**

Project

**Manzana Office Building**

9141 Green Valley Road  
Sebastopol, CA

by

**Simpson Sheet Metal**

2833 Dowd Drive Suite C  
Santa Rosa, CA  
707-576-1500

**RETAIN**

ABBREVIATIONS

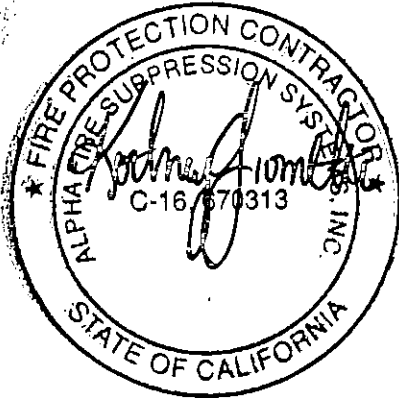
BHP	BRAKE HORSEPOWER
CER	CEILING EXHAUST REGISTER
CR	CEILING RETURN REGISTER
CD	CEILING SUPPLY DIFFUSER
DD	DIRECT DRIVE
DFH	DIGITAL FLOW HOOD
DNA	DATA NOT AVAILABLE
DNL	DATA NOT LISTED
DNT	DATA NOT TAKEN
ESP	EXTERNAL STATIC PRESSURE
EG	EXHAUST GRILL
FH	FLOW HOOD
FLA	FULL LOAD AMPERAGE
HP	HORSEPOWER
L/S	LITERS PER SECOND
NA	NOT APPLICABLE
NI	NOT INSTALLED
NIC	NOT IN CONTRACT
NT	NOT TAKEN
NVL	NO VALID LOCATION
OSA	OUTSIDE AIR
Pa	PASCALS
RA	RETURN AIR
RG	RETURN GRILL
RPM	REVOLUTIONS PER MINUTE
SAG	SUPPLY AIR GRILL
SP	STATIC PRESSURE
TSP	TOTAL STATIC PRESSURE
WE	WALL EXHAUST REGISTER
WG	WATER GAUGE
WSG	WALL SUPPLY GRILL
WRR	WALL RETURN REGISTER
WSR	WALL SUPPLY REGISTER

**RETAIL**









ALPHA FIRE SUPPRESSION SYSTEMS, INC.  
2391 CIRCADIAN WAY  
SANTA ROSA, CA 95407

HYDRAULIC CALCULATIONS  
FOR

MANZANA PRODUCTS NEW OFFICE  
9041 GREEN VALLEY ROAD  
SEBASTOPOL, CA

FILE NUMBER: 15-2349  
DATE: FEB 25, 2015

-DESIGN DATA-

OCCUPANCY CLASSIFICATION:	LIGHT HAZARD
DENSITY:	.10 gpm/sq. ft.
AREA OF APPLICATION:	900 sq. ft.
COVERAGE PER SPRINKLER:	160 sq. ft.
NUMBER OF SPRINKLERS CALCULATED:	14 sprinklers
TOTAL SPRINKLER WATER FLOW REQUIRED:	279.8 gpm
TOTAL WATER REQUIRED (including hose):	379.8 gpm
FLOW AND PRESSURE (@ BOR):	279.8 gpm @ 52.9 psi
SPRINKLER ORIFICE SIZE:	1/2 inch
NAME OF CONTRACTOR:	CARY & ASSOCIATE BUILDERS
DESIGN/LAYOUT BY:	K. GIOMETTI-BOLLOCK
AUTHORITY HAVING JURISDICTION:	COUNTY OF SONOMA
CONTRACTOR CERTIFICATION NUMBER:	670313

CALCULATIONS BY HASS COMPUTER PROGRAM (LICENSE # 27011210 )  
HRS SYSTEMS, INC.