



**RANCHO SANTA FE FIRE PROTECTION DISTRICT  
BOARD OF DIRECTORS MEETING  
AGENDA**

Rancho Santa Fe FPD  
Board Room – 18027 Calle Ambiente  
Rancho Santa Fe, California 92067

August 8, 2018  
1:00 pm PT  
Regular Meeting

**RULES FOR ADDRESSING BOARD OF DIRECTORS**

Members of the audience who wish to address the Board of Directors are requested to complete a form near the entrance of the meeting room and submit it to the Board Clerk.

Any person may address the Board on any item of Board business or Board concern. The Board cannot take action on any matter presented during Public Comment, but can refer it to the Administrative Officer for review and possible discussion at a future meeting. As permitted by State Law, the Board may take action on matters of an urgent nature or which require immediate attention. The maximum time allotted for each presentation is FIVE (5) MINUTES.

Pledge of Allegiance

1. Roll Call
2. Motion waiving reading in full of all Resolutions/Ordinances
3. Public Comment

All items listed on the Consent Calendar are considered routine and will be enacted by one motion without discussion unless Board Members, Staff or the public requests removal of an item for separate discussion and action. The Board of Directors has the option of considering items removed from the Consent Calendar immediately or under Unfinished Business.

4. Consent Calendar

a. Board of Directors Minutes

Board of Directors minutes of July 11, 2018

Board of Directors minutes of July 17, 2018

ACTION REQUESTED: **Approve**

b. Receive and File

i. Monthly/Quarterly Reports

(1) List of Demands Check 30317 thru 30450, Electronic File Transfers (EFT), and Wire Transfer(s) for the period July 1 – 31, 2018 totaling: \$ 478,998.03

(2) Wire Transfer(s) period July 1 – 31, 2018 \$ 595,107.47

Payroll for the period July 1 – 31, 2018 \$ 739,958.33

TOTAL DISTRIBUTION \$1,814,063.83

(3) Cash Statement (Unaudited) – June 30, 2018

*In compliance with the Americans with Disabilities Act, if you need special assistance to participate in a meeting, please contact the Secretary at 858-756-5971. Notification 48 hours prior to the meeting will enable the District to make reasonable arrangements to assure accessibility to the meeting.*

(4) Quarterly Investment Review

(5) Activity Reports – July 2018

i. Operations

ii. Training

iii. Fire Prevention

iv. Correspondence - letters/cards were received from the following members of the public:

ACTION REQUESTED: [Information](#)

5. Closed Session

With respect to every item of business to be discussed in closed session pursuant to Section 54957:

PUBLIC EMPLOYMENT

Title: Fire Chief

6. Resolution/Ordinance

a. Resolution No. 2018-10

To discuss and/or adopt a resolution *entitled* A Resolution of the Board of Directors of the Rancho Santa Fe Fire Protection District for Exception to the 180-day Wait Period GC section 7522.56 & 21224

ACTION REQUESTED: **Adopt**

7. Old Business

a. None

8. New Business

a. RFP – RSF6 SEPTIC SYSTEM REPLACEMENT

To discuss and/or authorize staff to seek request for proposals for a replacement septic system for RSF6 Fire Station (RFP 02-2018). [Staff Report 2018-20](#)

ACTION REQUESTED: **Authorize distribution of RFP 02-2018**

9. Oral Report

a. Fire Chief – Michel

b. Operations – Deputy Chief

c. Volunteer – Volunteer Recruitment/Retention Coordinator

d. Training – Battalion Chief

e. Fire Prevention – Fire Marshal

f. Administrative Manager

g. Board of Directors

i. North County Dispatch JPA – Update

ii. County Service Area – 17 – Update

iii. Comments

10. Adjournment

The next special meeting (*in lieu of regular*), meeting Board of Directors meeting to be September 26, 2018 in the Board Room located at 18027 Calle Ambiente, Rancho Santa Fe, California. The business meeting will commence at 1:00 p.m.



RANCHO SANTA FE FIRE PROTECTION DISTRICT  
Board of Directors Regular  
Meeting Agenda  
Wednesday, August 8, 2018  
1:00 pm PT

### CERTIFICATION OF POSTING

I certify that on August 3, 2018 a copy of the foregoing agenda was posted on the District's website and near the meeting place of the Board of Directors of Rancho Santa Fe Fire Protection District, said time being at least 72 hours in advance of the meeting of the Board of Directors (Government Code Section 54954.2)

Executed at Rancho Santa Fe, California on August 3, 2018

  
\_\_\_\_\_  
Karlana Rannals  
Board Clerk



## RANCHO SANTA FE FIRE PROTECTION DISTRICT

### Regular Board of Directors Meeting Minutes – July 11, 2018

*These minutes reflect the order in which items appeared on the meeting agenda and do not necessarily reflect the order in which items were actually considered.*

President Ashcraft called to order the regular session of the Rancho Santa Fe Fire Protection District Board of Directors at 1:00 pm.

#### *Pledge of Allegiance*

Battalion Chief Slattery led the assembly in the *Pledge of Allegiance*.

#### 1. Roll Call

Directors Present: Ashcraft, Hillgren, Malin, Stine, Tanner

Directors Absent: None

Staff Present: Tony Michel, Fire Chief; Fred Cox, Deputy Chief; Brian Slattery, Battalion Chief; Marlene Donner, Fire Marshal; Frank Twohy, Volunteer Recruitment & Retention Coordinator; and Karlana Rannals, Board Clerk.

#### 2. Special Presentation

##### a. *Burn Institute*

Tiffany Wong, Burn Institute, presented a trophy to the Rancho Santa Fe Fire Protection District as the top fund-raising agency in north San Diego County for the Annual Boot Drive, totaling in excess of \$15,000. Chief Tony Michel accepted on behalf of the Rancho Santa Fe Professional Firefighters, Local 4349.

##### b. *Certificate of Recognition*

Chief Cox recognized Captain Cole Thompson with a *Certificate of Recognition* for his off duty efforts in initiating CPR resulting in a life saved. President Ashcraft on behalf of the Board of Directors expressed their appreciation for his willingness to assist a citizen in need.

#### 3. Public Comment

No one requested to speak to the Board.

#### 4. Consent Calendar

MOTION BY DIRECTOR MALIN, SECOND BY DIRECTOR HILLGREN, CARRIED 5 AYES; 0 NOES; 0 ABSENT; 0 ABSTAIN to approve the consent calendar as submitted.

##### a. *Board of Directors Minutes*

i) Board of Directors minutes of June 20, 2018

##### b. *Receive and File*

i) Monthly/Quarterly Reports

1. List of Demands Check 30183 thru 30316, Electronic Fire Transfers (EFT), and ACH Transfer(s) for the period June 1 – 30, 2018 totaling:	\$ 426,948.77
Wire Transfer(s) period June 1 – 30, 2018	\$ 799,528.52
Payroll for the period June 1 – 30, 2018	\$ <u>707,215.28</u>
TOTAL DISTRIBUTION	\$1,933,692.57

2. Activity Reports – June 2018

- a) Operations
- b) Training
- c) Correspondence – letters/cards were received from the following members of the public:
  - 1) None

5. Old Business

- a. None

6. New Business

- a. None

7. Oral Report

- a. Fire Chief – Michel
  - i) Fire Activity – The “West” Fire that occurred in East San Diego County grew to 505 acres with 34 structures destroyed, in addition to 20+ out buildings. On that same date, there were two fires at Camp Pendleton that the district sent resources to assist.
  - ii) RSF5 – the building permit was submitted to the County of San Diego. He is hoping that the permit will be issued by November.
  - iii) He reported that the District will need to assess the need for enhanced security for personnel. This is necessary because of the City of Long Beach Captain who was shot and killed while on an emergency incident.
  - iv) CAL Fire Firefighter/Paramedic Dan Geary, assigned to the Deer Springs Fire Protection District succumbed to cancer on July 5. Many of our personnel knew him through the Palomar Fire Academy. He was 38 years old.
- b. Operations – Deputy Chief  
Chief Cox summarized the previous month’s activity noting 301 calls, and he reported that there were no significant incidents to report on from the previous month. Personnel were deployed to the “Pawnee” Fire in Lake County Fire. He also reported on the significant drop in fuel moistures.
- c. Volunteer – Volunteer Recruitment Retention Coordinator  
VRRRC Twohy reported that the volunteers donated 816 hours last month. On July 16, five volunteers will begin a two-week academy. He also complimented all District personnel who have assisted with providing training and mentorship to the volunteers.
- d. Training – Battalion Chief  
Chief Slattery reported there will also be one new hire starting the two-week academy on July 16<sup>th</sup>. He is working with Palomar College to establish a Scholarship program, funded by the Volunteer Recruitment & Retention Coordinator Grant. This will help the volunteers who qualify to get funding for the Fire Academy and Paramedic school. Personnel have also been participating in technical rescue training at Carlsbad and EMS continuing education.
- e. Fire Prevention – Fire Marshal  
FM Donner distributed the report on the previous month’s activity that continues to be busy. In excess of 1 million square feet of new construction was added to the District. The 4<sup>th</sup> of July activities went very well.

- f. Administrative Manager
  - i) Ms. Rannals reminded the Board that the candidate application period for the November 6<sup>th</sup> general election starts July 16. There are two seats open for election this cycle.
  - ii) She informed the board that the additional CalPERS UAL payment of \$500,000 for the 3% @ 50 plan was sent prior to the June 30 date.
- g. Board of Directors
  - i) North County Dispatch JPA – Update: Ashcraft – a special meeting is planned for August 1<sup>st</sup> or 2<sup>nd</sup> to select an Administrator and approve a contract.
  - ii) County Service Area – 17 – Update: Hillgren – no report
  - iii) Comments
    - 1. None

*Ten-minute recess*

8. Closed Session

- a. Pursuant to section 54957, the board met in closed session from 1:45 – 2:26 to discuss the following:  
Public Employee Performance Evaluation  
Title: Fire Chief  
*All board members listed and Chief Tony Michel attended the closed session. .*

Upon reconvening, President Ashcraft reported that direction was provided to staff and there was no action taken by the board.

9. Adjournment

Meeting adjourned at 2:28 pm.

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Karlana Rannals  
Secretary

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James H Ashcraft  
President



**RANCHO SANTA FE FIRE PROTECTION DISTRICT  
SPECIAL BOARD OF DIRECTORS MEETING  
MINUTES – July 17, 2018**

*These minutes reflect the order in which items appeared on the meeting agenda and do not necessarily reflect the order in which items were actually considered.*

President Ashcraft called to order the special meeting of the Rancho Santa Fe Fire Protection District Board of Directors at 11:00 am.

*Pledge of Allegiance*

Chief Michel led the assembly in the *Pledge of Allegiance*.

1. Roll Call

Directors Present: Ashcraft, Malin, Stine, Tanner

Directors Absent: Hillgren

Staff Present: Tony Michel, Fire Chief; and Karlana Rannals, Board Clerk.

2. Public Comment

No one requested to speak to the Board.

3. New Business

a. *Acceptance of Grant*

Chief Michel reported that he was notified Friday, July 13 that the District was awarded a \$10,000 grant from the California Fire Foundation to support on evacuation routes brush removal efforts. He plans to prioritize areas that need brush removal from the evacuation routes. He responded to questions from the Board.

MOTION BY DIRECTOR MALIN, SECOND BY DIRECTOR TANNER, CARRIED 4 AYES; 0 NOES; 1 ABSENT; 0 ABSTAIN to accept a \$10,000 grant from California Fire Foundation, and authorize the Fire Chief to execute the Grant Agreement.

b. *Fire Chief – Appointment*

1) Ms. Rannals informed the Board that after the July regular meeting, she received a letter from Chief Michel giving his notice of intent to retire November 16, 2018. He has 35 years of District service, serving the last eight years as Fire Chief. The Board of Directors acknowledged receipt and congratulated him on his service to the District.

2) The Board discussed options available to recruit and/or appoint a successor. The Board concluded to appoint a subcommittee to determine a process to select and/or appoint a successor Fire Chief. President Ashcraft appointed Director Tanner and himself to the subcommittee, with the assistance of Chief Michel.

4. Adjournment

Meeting adjourned at 11:38 am.

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Karlana Rannals  
Secretary

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James H Ashcraft  
President

<i>Check No.</i>	<i>Amount</i>	<i>Vendor</i>	<i>Purpose</i>
30317	\$380.00	APCD	Permit: County/City
30318	\$105,157.00	Business Owner's Ins Agency	Commercial - Liability - Auto Coverage
30319	\$1,372.00	C.A.P.F.	Disability Ins Short & Long
30320	\$750.00	CFCA	Association Dues
30321	\$2,010.00	Cielo Village Partners LP	Cielo HOA Fees
30322	\$126,540.00	City of San Marcos	Workers' Compensation/Wellness
30323	\$1,094.00	County of San Diego, DEH	Permit: County/City
30324	\$150.00	CSDA	Association Dues
30325	\$550.00	Fire Dist. Association of CA	Association Dues
30326	\$4,166.09	Guardian Life Insurance Co	Medical Insurance
30327	\$841.66	Lincoln National Life Ins Co	Life Insurance/EAP
30328	\$132.95	Orion Broadband	Telephone RSF1
30329	\$150.00	SDCFCA - FPO Section	Association Dues
30330	\$50.00	SDCTOA	Association Dues
30331	\$750.00	Accme Janitorial Service Inc	Building ADMIN
30332	\$2,409.08	Accountemps	Temporary Labor
30333	\$120.00	AFSS -Southern Division	Association Dues
30334	\$103.44	Allstar Water Systems Inc	Building RSF6
30335	\$339.73	AT&T Calnet 2/3	Telephone RSF & ADMIN
30336	\$14,505.14	CDCE Incorporated	Repair - ID 1062, Unit 1811 Equipment
30337	\$608.91	Complete Office of California Inc	Office Supplies
30338	\$301.17	Cox Communications	Telephone RSF
30339	\$329.83	EDCO Waste & Recycling Inc	Trash RSF5 & RSF6
30340	\$248.80	Flyers Energy, LLC	Fuel: Gasoline & Diesel
30341	\$70.39	Johnson Equipment Co	Radio Equipment Replacement
30343	\$1,186.13	NCDJPA	Dispatching
30344	\$5,000.00	Pun Group	Accounting-Audit Services
30345	\$25,000.00	Rancho Santa Fe Fire Protection Dist	Interfund Transfer
30346	\$187.37	Rincon Del Diablo Municipal Water Di	Water RSF5
30347	\$1,182.66	SDG&E	Elec/Gas/Propane RSF6
30348	\$40.00	State Fire Training	Permit: Certification
30349	\$40.00	State Fire Training	Permit: Certification
30350	\$66.00	Terminix International	Building RSF2

30351	\$544.99	Time Warner Cable	Telephone ADMIN
30352	\$31.52	U P S	Shipping Service
30353	\$16,130.22	U S Bank Corporate Payment System	Cal-Card./IMPAC program
30354	\$428.37	Uniforms Plus	Uniforms: Safety Personnel
30355	\$51.35	Vista Paint Corp.	Hydrant Maintenance
30356	\$2,273.34	Waste Management Inc	Trash RSF, RSF Assn - Patrol & NCDJPA Rebill
30357	\$6,560.00	WinTech Computer Services	Consulting Services
30358	\$126.00	AAA Live Scan	Background Investigation
30359	\$382.89	Advanced Communication Systems Inc	Radio (Mobile Repair)
30360	\$95.00	AFSS -Southern Division	Association Dues
30361	\$1,886.51	AT&T Calnet 2/3	Telephone RSF & ADMIN
30362	\$1,947.68	Bay City Electric Works Inc	Generator RSF - Maintenance & Service
30363	\$221.52	California Health & Safety Inc	SCBA Maint & Repair/ Flow Test/ Hydro Te
30364	\$1,028.13	Callback Staffing Solutions	Scheduling (Crewsense) Maintenance
30365	\$900.00	Fitch Law Firm Inc	Legal Services
30366	\$200.00	Fritchle, Nathan	CSA-17 Contract
30367	\$3,053.99	Geiger	Public Education Material
30368	\$44.36	Griffin Hardware Co.	Station Maintenance - RSF2
30369	\$455.00	K & K Coatings	Station Maintenance - RSF4
30370	\$614.49	Konica Minolta Business Inc	Copier Maintenance Contract
30371	\$3,895.50	Liebert Cassidy Whitmore	LCW Training Consulting
30372	\$415.00	NCDJPA	Dispatching
30373	\$21,121.25	North County EVS Inc	Repairs & Scheduled
30374	\$3,138.12	Olivenhain Municipal Water District	Water RSF & Training Facility
30375	\$345.00	Rancho Santa Fe Rotary	Association Dues
30376	\$150.00	SDCFCA	Association Dues
30377	\$1,096.77	Smith, Tyler	SAFER VRRRC-Tuition Costs
30378	\$2,212.97	SoCo Group Inc	Fuel: Gasoline & Diesel
30379	\$192.00	State of CA Dept of Justice	Background Investigation
30380	\$66.00	Terminix International	Building RSF6
30381	\$110.33	Time Warner Cable	Cable RSF4 & Admin
30382	\$41.40	U P S	Shipping Service
30383	\$912.13	Waste Management Inc	Trash RSF2
30384	\$13.99	4S Ranch Gasoline & Carwash LP	Apparatus: Car Wash

30385	\$952.43	Accountemps	Temporary Labor
30386	\$123.40	Airgas Inc	Safety: Breathing Air
30387	\$245.46	AT&T	Telephone & Cable RSF5
30388	\$9,168.40	Auditor and Controller	LAFCO
30391	\$127.10	Complete Office of California Inc	Office Supplies
30392	\$717.00	County of San Diego, DEH	Permit: County/City
30393	\$183.09	Cox Communications	Telephone & Cable RSF2
30394	\$9,091.00	Engineered Mechanical Services Inc	Building RSF1 & Admin
30395	\$349.68	Flyers Energy, LLC	Fuel: Gasoline & Diesel
30396	\$4,273.60	Guardian Life Insurance Co	Medical Insurance, Med/Dental - Retiree-Former Employees Station Maintenance, Fuel: Propane (Cooking), Radio Batteries, Safety Equipment & Hydrant Maintenance
30397	\$1,483.19	Home Depot, Inc	Life Insurance/EAP
30398	\$411.84	Lincoln National Life Ins Co	Apparatus: Parts & Supplies
30400	\$85.58	Napa Auto Parts Inc	Telephone RSF1
30401	\$132.95	Orion Broadband	SAFER VRRRC-Tuition Costs
30402	\$15,423.00	Palomar College	Equipment Rental
30403	\$269.46	Pitney Bowes Inc	Elec/Gas/Propane RSF5
30404	\$730.00	Power Plus!	Alarm System Monitoring - Admin
30405	\$624.00	RSF Security Inc	Consulting Services
30406	\$262.50	S2Technology, Inc.	Advertising
30407	\$63.28	San Diego Union-Tribune, LLC	Association Dues
30409	\$200.00	SDCFCA	Association Dues
30410	\$90.00	SDCFCA - Admin Section	Elec/Gas/Propane RSF & Admin
30411	\$12,291.03	SDG&E	Fuel: Gasoline & Diesel
30412	\$5,145.82	SoCo Group Inc	T.I.P. Program
30413	\$3,156.00	TIP of San Diego County	Telephone ADMIN
30414	\$439.13	TPx	Safety Clothing (Protective)
30415	\$19.00	Turnout Maintenance Company LLC	Shipping Service
30416	\$15.45	U P S	Uniforms: Safety Personnel & Safety: Boots
30417	\$565.35	Uniforms Plus	MDT Broadband + ATN Line
30418	\$245.97	Verizon Wireless	Hydrant Maintenance
30419	\$102.71	Vista Paint Corp.	Apparatus: Car Wash
30420	\$13.99	4S Ranch Gasoline & Carwash LP	Repair - ID 0384
30421	\$411.79	About Service Inc	

30422	\$4,195.20	Accountemps	Temporary Labor
30423	\$272.34	Advanced Communication Systems Inc	Radio (Mobile Repair)
30424	\$165.64	AT&T	Telephone RSF
30425	\$95.00	B & B Appliance Service Dept	Station Maintenance - RSF2
30426	\$1,754.74	California Health & Safety Inc	Fit Testing & Supplies and Parts
30427	\$172.80	CDW Government Inc.	Computer Equipment/Parts
30428	\$582.00	City of Encinitas - Fire	CSA-17 Contract
30429	\$24.56	Complete Office of California Inc	Office Supplies
30430	\$79.99	Cox Communications	Telephone RSF3
30431	\$360.00	Dependable Alarm Systems Inc	Alarm System Monitoring RSF4
30432	\$1,596.35	Direct Energy Business-Dallas	Elec/Gas/Propane RSF1
30433	\$376.00	Engineered Mechanical Services Inc	Building RSF2
30434	\$722.05	Griffin Hardware Co.	Station Maintenance - RSF2
30435	\$666.90	Jobs Available Inc.	Advertising
30436	\$200.00	K & K Coatings	Station Maintenance - RSF1
30437	\$828.66	Lincoln National Life Ins Co	Life Insurance/EAP
30438	\$271.55	Metro Fire & Safety Inc	Safety: Extinguishers (Service & Purchas
30439	\$70.00	RSF Mail Delivery Solutions	Mail Delivery Service
30440	\$75.00	S2Technology, Inc.	Consulting Services
30441	\$460.00	Schmidt Fire Protection	Station Maintenance - RSF2
30442	\$1,213.27	SDCPA / 911 Responder	CSA-17 Contract
30443	\$2,119.69	SoCo Group Inc	Fuel: Gasoline & Diesel
30444	\$6,240.00	TargetSolutionsLearning LLC	TargetSolutions - License
30445	\$308.00	Terminix International	Building RSF & Admin
30446	\$15.45	U P S	Shipping Service
30447	\$1,871.02	United Site Services	Sewer RSF5 & RSF6
30448	\$200.00	Weeks, Michael	CSA-17 Contract
30449	\$203.65	Willis, Erwin L.	Computer Equipment/Parts
30450	\$263.98	Young, Scott	Education/Training Reimbursement
EFT000000000423	\$434.00	Trottier, Alex	Education/Training Reimbursement
EFT000000000424	\$25.08	Rannals, Karlena	Meetings/Meal Expenses & Janitorial Supplies
EFT000000000428	\$251.35	Sivba, Matt	Education/Training Reimbursement
MISC	\$18,952.39	Various	Medical Reimbursment
	<u>\$478,998.03</u>		

## Rancho Santa Fe Fire Protection District

## List of Demands - July 2018

ACH Transfer	\$65,683.93	CalPERS
ACH Transfer	\$462,582.00	CalPERS
ACH Transfer	<u>\$66,841.54</u>	CalPERS
	\$595,107.47	

7/15/2018	\$265,030.25	RSFFPD
7/30/2018	56,210.30	RSFFPD
7/31/2018	<u>418,717.78</u>	RSFFPD

**Subtotal** \$739,958.33

**Total** \$1,814,063.83

July 2018 Health  
July 2018 Annual Payment Unfunded Accrued Liability  
Aug 2018 Health

Payroll  
Payroll- MGMT  
Payroll

## Statement of Cash Assets

Rancho Santa Fe Fire Protection District  
FY2018

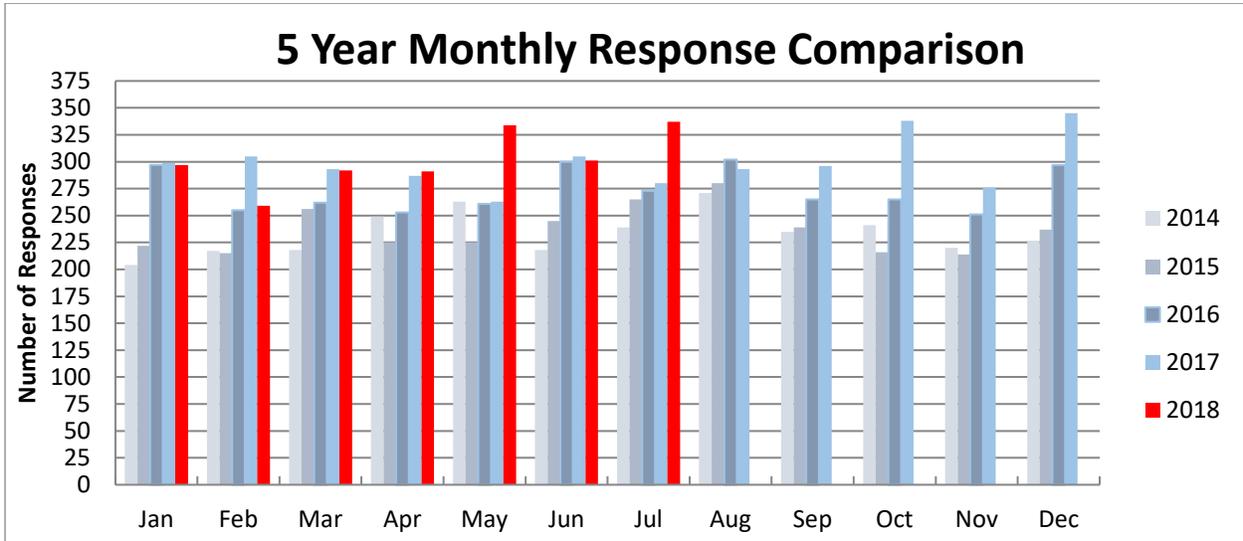
	30-Jun-17	30-Sep-17	31-Dec-17	31-Mar-18	30-Jun-18
<b>Assets</b>					
Current Cash & Investments	15,856,506	12,692,038	13,730,346	13,807,564	16,307,480
Accounts Receivable	<u>730,760</u>	<u>377,219</u>	<u>278,639</u>	<u>307,234</u>	<u>200,056</u>
Current Assets Total	16,587,266	13,069,258	14,008,986	14,422,032	16,707,592
 <b>Fixed &amp; Restricted Assets (Excluded)</b>					
Intangible Assets (DIR - Pension Excluded)	-	-			
Reserved Funds with Restrictions	5,229,108	5,262,519	5,262,815	5,314,506	5,254,420
Accumulated Depreciation (Excluded)	-	-			
Current Cash Assets Total	<u>21,816,374</u>	<u>18,331,776</u>	<u>19,271,801</u>	<u>19,736,538</u>	<u>21,962,011</u>
 <b>Liabilities</b>					
Current & Accrued Liabilities					
Current Liabilities	2,473,842	1,881,106	1,881,106	1,962,641	1,856,134
Accrued Liability Payable	1,143,390	1,179,232	981,612	1,115,950	1,156,319
Other Liabilities					
Net Pension Liabilities (GASB 68)	<u>10,865,029</u>	<u>10,865,029</u>	<u>10,865,029</u>	<u>10,865,029</u>	<u>10,865,029</u>
Total Current Liabilities	<u>14,482,261</u>	<u>13,925,367</u>	<u>13,727,747</u>	<u>13,943,620</u>	<u>13,877,482</u>
Long-Term Debt					
ESTIMATED Cash Available	<u>7,334,113</u>	<u>4,406,409</u>	<u>5,544,054</u>	<u>5,792,918</u>	<u>8,084,530</u>
 <b>Additional Information - Reserve Allocation</b>					
Reserve - Specified					
Total Reserve - Specified	5,224,648	5,253,150	5,253,446	5,312,848	5,047,322
Reserve - Unspecified					
Total Reserve - Unspecified	20,258,452	17,487,618	16,708,039	16,767,441	17,642,380
Cash Reserves (Deficit) Subtotal	(12,924,339)	(13,081,209)	(11,163,986)	(10,974,523)	(9,557,851)
Cash Reserves (Deficit) - Total	(12,924,339)	(16,207,146)	(13,282,623)	(10,974,523)	(9,557,851)
Net Pension Liability - added back in	<u>10,865,029</u>	<u>10,865,029</u>	<u>10,865,029</u>	<u>10,865,029</u>	<u>10,865,029</u>
Cash Reserves (Deficit)	(2,059,310)	(5,342,117)	(2,417,594)	(109,494)	1,307,178

UNAUDITED

Rancho Santa Fe Fire Protection District  
Investment Portfolio - Listing

Date	County of San Diego			Local Agency Investment Fund			Bank of America			CalTrust Investment		
	Average Daily Cash Balance	Interest Rate - %	Qtrly Earnings	Account Balance	Interest Rate - %	Qtrly Earnings	Account Balance	Interest Rate - %	Qtrly Earnings	Account Balance	Share Value	Qtrly Earnings
<b>FY16</b>												
9/30/2015	9,116,014	0.1207499	11,007.58	2,507,708	0.3200	2,019.12	68,654.93	0.000200	3.47			
12/31/2015	7,972,012	0.1723940	13,743.27	2,509,727	0.3700	2,322.84	68,654.40	0.000200	3.47			
3/31/2016	10,342,559	0.1391914	14,395.95	2,512,050	0.4600	2,899.70	68,661.81	0.000200	3.41			
6/30/2016	11,809,274	0.1433726	16,931.26	2,514,950	0.5500	3,421.54	68,665.23	0.000200	3.42			
	Annual Rate	0.5757079	\$ 56,078.06	Annual Rate	0.4250	\$ 10,663.20	Annual Rate	0.000200	\$ 13.77	Avg Share Value	0.000000	\$ -
<b>FY17</b>												
9/30/2016	9,720,648.93	0.2181028	21,201.01	2,518,371.32	0.6000	3,826.52	68,668.68	0.000200	3.45	4,531,619.73	10.100000	124.73
12/31/2016	10,718,806.24	0.2148859	23,033.20	2,522,197.84	0.6800	4,296.15	68,672.13	0.000200	3.42	4,512,312.82	10.090000	12,123.83
3/31/2017	11,627,772.17	0.2929174	34,059.77	2,526,493.99	0.7800	4,833.54	68,675.52	0.000200	3.39	4,557,077.20	10.090000	13,333.64
6/30/2017	13,078,710.09	0.2982185	40,097.61	2,531,327.53	0.9200	5,829.30	68,678.95	0.000200	3.43	4,566,555.96	10.090000	14,268.88
	Annual Rate	1.0241246	\$ 118,391.59	Annual Rate	0.7450	\$ 18,785.51	Annual Rate	0.000200	\$ 13.69	Avg Share Value	10.092500	\$ 39,851.08
<b>FY18</b>												
9/30/2017	11,283,998.32	0.3140160	35,433.56	2,537,156.83	1.0700	6,866.96	68,682.42	0.000200	3.47	4,556,287.68	10.030000	16,430.89
12/31/2017	9,782,917.36	0.3508629	34,324.63	2,544,023.79	1.2000	7,723.56	68,685.89	0.000200	3.47	4,551,076.71	9.980000	17,526.03
3/31/2018	11,988,098.75	0.3893358	46,673.95	2,551,747.35	1.5100	9,494.04	68,689.28	0.000200	3.39	4,543,365.65	9.920000	19,663.36
6/30/2018	13,338,491.10	0.4591755	61,247.09	2,561,241.39	1.9000	12,153.28	68,692.71	0.000200	3.43	4,555,774.12	9.900000	21,576.09
	Annual Rate	1.5133902	\$ 177,679.23	Annual Rate	1.4200	\$ 36,237.84	Annual Rate	0.000200	\$ 13.76	Avg Share Value	9.957500	\$ 75,196.37

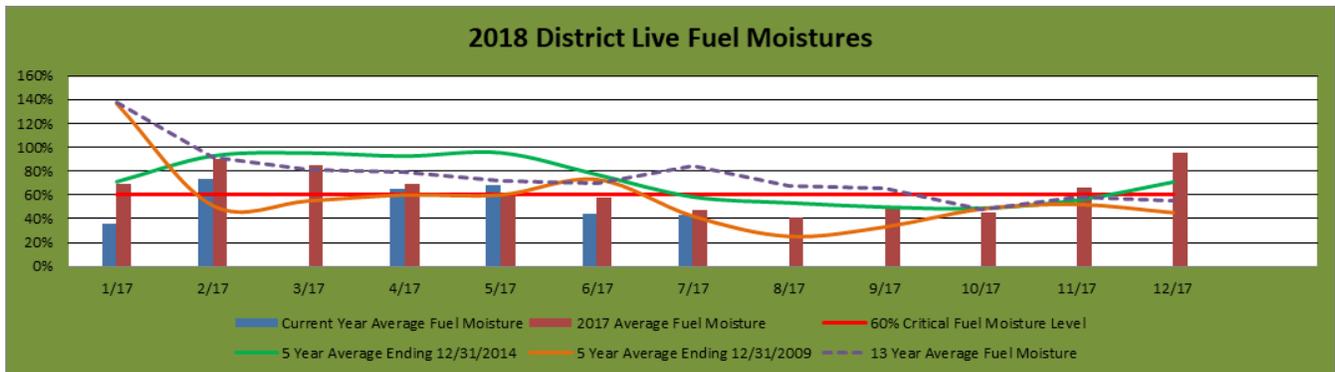
### July Incident Count Stations 1 - 6



2018	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Responses
Responses	297	259	292	291	334	301	337						2081
YTD	297	556	848	1,139	1,473	1,774	2,081						2.4%
2017	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Responses
Responses	299	305	293	287	263	305	280	293	296	338	276	345	3,580
YTD	299	604	897	1,184	1,447	1,752	2,032	2,325	2,621	2,959	3,235	3,580	8.2%
2016	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Responses
Responses	297	255	262	253	261	300	273	302	265	265	251	297	3,281
YTD	297	552	814	1,067	1,328	1,628	1,901	2,203	2,468	2,733	2,984	3,281	15.6%
2015	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Responses
Responses	222	215	256	225	225	245	265	280	239	216	214	237	2,839
YTD	222	437	693	918	1,143	1,388	1,653	1,933	2,172	2,388	2,602	2,839	1.3%
2014	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD Responses
Responses	204	217	218	249	263	218	239	271	235	241	220	226	2,801
YTD	204	421	639	888	1,151	1,369	1,608	1,879	2,114	2,355	2,575	2,801	2%

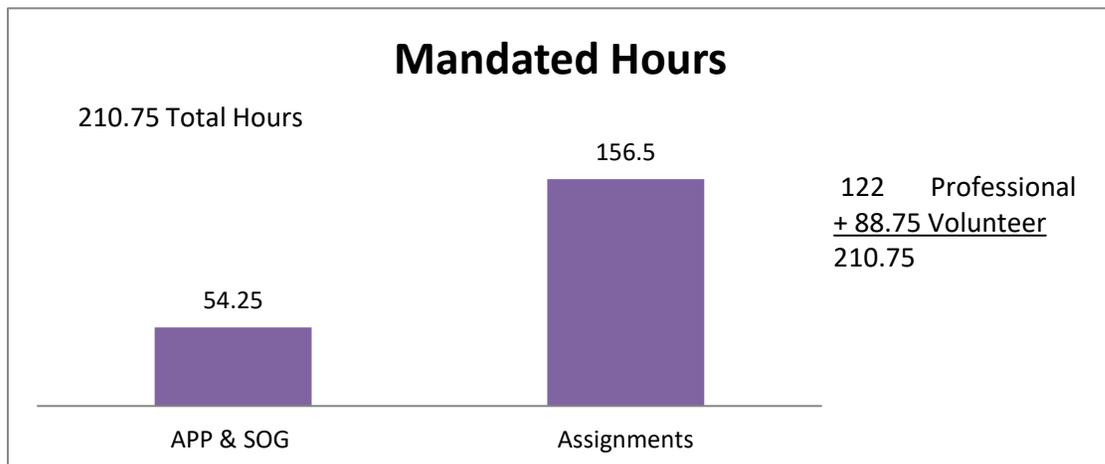
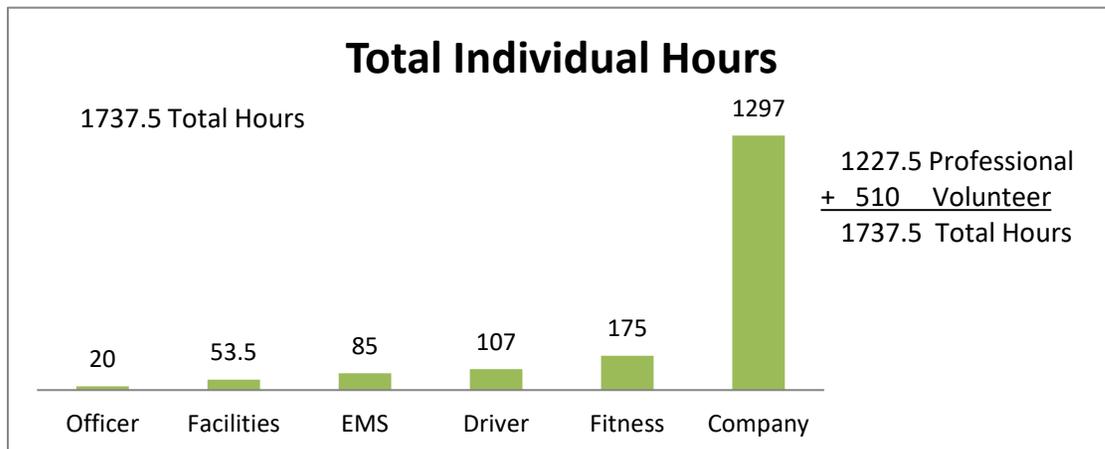
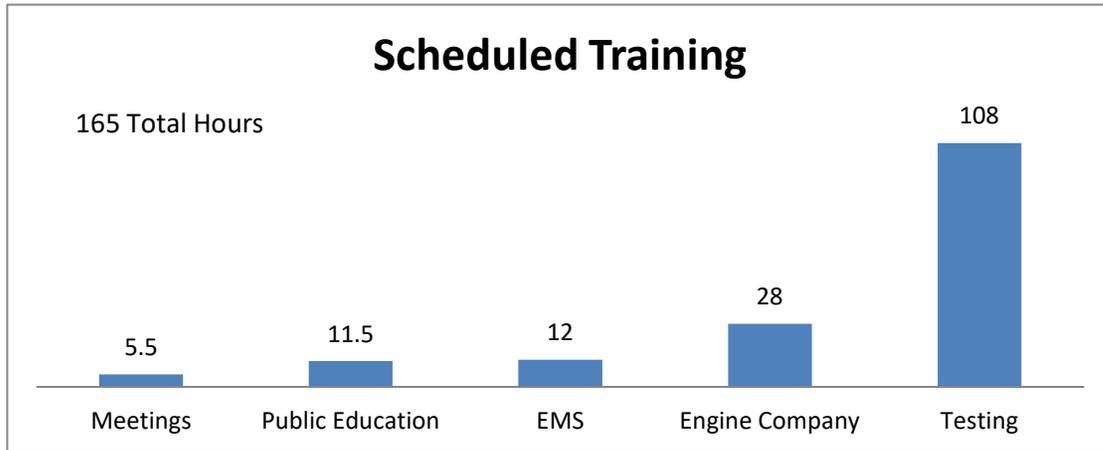
Incident Response Summary by Station	
Date Range: From 07/01/2018 To 07/31/2018	
Station: RSF 1	67
Station: RSF 2	111
Station: RSF 3	68
Station: RSF 4	44
Station: RSF 5	21
Station: RSF 6	26
<b>Total Incident Count:</b>	<b>337</b>

Incident Summary by Incident Type	
Date Range: From 07/1/2018 To 07/31/2018	
Incident Type	Incident Count
Fire	15
EMS/Rescue	148
Hazardous Condition	4
Service Call	50
Good Intent	75
False Call	35
Other	10
<b>Total</b>	<b>337</b>



Significant Incidents/Overhead Assignments				
DATE	INCIDENT/ LOCATION	TYPE	UNIT/PERSON	MISC.
7/1	Pawnee Fire - Lake County	Wildland	BR262	Strike Team Assignment
7/10	Georges Fire - Inyo County	Wildland	Single Resource	Fire Line Paramedic
7/15	Ferguson Fire - Mariposa County	Wildland	WT266	Water Tender - Single resource
7/15	Ferguson Fire - Mariposa County	Wildland	Single Resource	Fire Line Paramedic
7/19	Skyline Fire - Riverside County	Wildland	STEN	Strike Team Leader - Engine
7/19	Skyline Fire - Riverside County	Wildland	OES 336	Strike Team Assignment
7/25	Cranston Fire - Riverside County	Wildland	OES 336	Strike Team Assignment
7/25	Cranston Fire - Riverside County	Wildland	Single Resource	Fire Line Paramedic
7/25	July Move-up - Riverside County	Wildland	OES336	Station Cover Assignment
7/27	Pasqual Fire - San Diego County	Wildland	BR261	Strike Team Assignment
7/27	Pasqual Fire - San Diego County	Wildland	WT266R	Water Tender - Single resource
7/27	Rock Fire - San Diego County	Wildland	OES336	Strike Team Assignment
7/29	July Move Up - San Diego County	Wildland	BR261	Operational Area Cover Assignment
7/30	Mendocino Complex - Mendocino County	Wildland	OES336	Strike Team Assignment

# Training Division July 2018



See next page for description.

## Training Division - Descriptions

<b>Scheduled Training</b>		
Training hours are planned annually. This is to maintain a well organized year and to help the firefighters be successful with the hours required by Federal, State, Local.		
<b>Total Individual Hours - 6 Subjects</b>		
<b>Subject</b>	<b>Definition</b>	<b>Examples</b>
<b>Company</b>	Documentation of all Company Training that is not Driver, Officer, Haz-Mat, or Facility Training.	Aerial Ladder, Hose, Ladders, Physical Fitness, SCBA, Technical Rescue, Ventilation, etc.
<b>Driver</b>	This is for documenting Driver Training hours. Per ISO standards employees considered a "Driver" will be required to complete 12 hours of Driver Training annually. You can use this same form to record Driver Training hours for Non-Drivers and it will be counted towards Company Training.	Apparatus Inspections & Maintenance, Basic Hydraulics, Defensive Driving, Maps, Driving Heavy Vehicles, Etc.
<b>Facility</b>	This is live training conducted at an approved site. For the location to be approved it must have at least two acres on the property, a three story tower, and a burn facility. It is also important to note that the training must not just occur on the approved site, but the facility itself must be used. If your users are just sitting in a classroom at an approved site, this cannot count towards facility hours and the completion would need to be applied elsewhere. However, if the classroom portion was followed by utilization of the facility, the entire time could count towards Facility Training.	Company Evolutions, NFPA 1410 Driver/Operator, NFPA 1002 Fire Officer, NFPA 1021 Firefighter Skills, NFPA 1001 Hazardous Materials, NFPA 472 Live Fire, NFPA 1403 Other NFPA Fire Based Training
<b>HazMat</b>	This is for documenting Hazardous Materials Training hours. Per ISO standards all firefighters are required to complete 6 hours of Hazardous Materials Training annually.	DOT Guidebook Review, Decontamination Procedures, First Responder Operations, Etc.
<b>Officer</b>	Per ISO standards employees considered a "Officer" will be required to complete 12 hours of Officer Training annually. You can use this same form to record Officer Training hours for Non-Officers and it will be counted towards Company Training.	Dispatch, General Education, Meetings, Orientation, Exam, Management Principles, Personnel, Promotional, Public Relations, Etc.
<b>EMS</b>	EMS is not tracked or required by Insurance service Organization for Rating. EMS Continuing Education is tracked for recertification of Paramedics (48/2yrs) and EMT (24/2yrs). Through Emergency Service Medical Administration (EMSA).	Continuing Education and SIMS
<b>Mandated Hours</b>		
Hours completed through an assignment on an online database (Target Solutions). Mandated assignments are required by either Federal, State, Local.		

**Rancho Santa Fe Fire Protection District**  
**Fire Prevention Bureau Monthly Activity Summary**  
**July 2018**

**PLAN REVIEW**

<b>RESIDENTIAL PLAN REVIEWS</b>		<b>Number of Structures</b>	<b>Sq Footage</b>
Fire Marshal		91	278,606
Fire Inspector		6	50,903
Fire Inspector/Forester		3	4,068
<b>TOTAL</b>		<b>100</b>	<b>333,577</b>
<b>RESIDENTIAL ADDITIONS</b>		<b>Original Sq Footage</b>	<b>Added Sq Footage</b>
Fire Marshal		8,618	1,297
Fire Inspector		0	178
Fire Inspector/Forester		967	0
<b>TOTAL</b>		<b>9,585</b>	<b>1,475</b>
<b>COMMERCIAL PLAN REVIEWS</b>		<b>Number of Structures</b>	<b>Sq Footage</b>
Fire Marshal		2	9,627
Fire Inspector		0	0
Fire Inspector/Forester		0	0
<b>TOTAL</b>		<b>2</b>	<b>9,627</b>
<b>TOTAL NEW CONSTRUCTION</b>		<b>Sq Footage</b>	
<b>Based on permitted Sq footage</b>		<b>Total Added</b>	<b>344,679</b>
<b>FIRE SPRINKLER REVIEWS</b>		<b>Commercial</b>	<b>Residential</b>
Fire Marshal		3	8
Fire Inspector		0	1
Fire Inspector/Forester		1	0
<b>TOTAL</b>		<b>4</b>	<b>9</b>
<b>TENANT IMPROVEMENTS</b>		<b>Number of Structures</b>	<b>Sq Footage</b>
Fire Marshal		4	3,790
Fire Inspector		0	0
Fire Inspector/Forester		1	478
<b>TOTAL</b>		<b>5</b>	<b>4,268</b>
<b>LANDSCAPE REVIEWS</b>		<b>Number of Reviews</b>	<b>Staff Hours</b>
Fire Marshal		0	0.00
Fire Inspector		10	10.00
Fire Inspector/Forester		33	30.25
<b>TOTAL</b>		<b>43</b>	<b>40.25</b>

**Rancho Santa Fe Fire Protection District**  
**Fire Prevention Bureau Monthly Activity Summary**  
**July 2018**

**SERVICES PROVIDED- FIRE PREVENTION**

<b>DPLU -All Staff</b>	<b>Number</b>	<b>Staff Hours</b>
Project Availability Forms	0	0.00
Use Permits	0	0.00
Zaps	0	0.00
Administrative Review	0	0.00
Habit Plans	0	0.00
Approval Letters	0	0.00
CWPP/FPP	0	0.00
<b>TOTAL</b>	<b>0</b>	<b>0.00</b>

<b>INSPECTION SERVICES- All Staff</b>	<b>Number of Inspections</b>	<b>Staff Hours</b>
Undergrounds	0	0.00
Hydros (Fire Sprinklers)	26	16.00
Finals (Structures)	35	46.00
Landscape	8	2.50
Reinspections	29	3.50
Tents/Canopy	6	13.50
Burn Permits	0	0.00
Department of Social Service Licensing	0	0.00
Knox/Strobe	4	3.00
Code Enforcement	0	0.00
Engine Company Follow Up	1	3.00
Misc.	6	6.00
<b>TOTAL</b>	<b>115</b>	<b>93.50</b>

<b>HAZARD INSPECTIONS - All Staff</b>	<b>Number of Inspections</b>	<b>Staff Hours</b>
Weed Abatement Inspection	343	31.24
Weed Abatement Reinspection	224	27.40
1st Notice	129	31.25
2nd Notice	77	25.25
Final Notice	28	7.00
Forced Abatement	2	2.00
Postings	6	6.00
Annual Mailers	1	2.50
Homeowner Meeting	23	16.00
WUI	0	0.00
<b>TOTAL</b>	<b>833</b>	<b>148.64</b>

<b>GRADING -All Staff</b>	<b>Number of Reviews</b>	<b>Staff Hours</b>
Plan Review	6	7.00
<b>TOTAL</b>	<b>6</b>	<b>7.00</b>

**Rancho Santa Fe Fire Protection District**  
**Fire Prevention Bureau Monthly Activity Summary**  
**July 2018**

**ADMINISTRATIVE SERVICES- FIRE PREVENTION**

<b>SPECIAL ACTIVITIES/EDUCATION-All Staff</b>	<b>Number</b>	<b>Staff Hours</b>
GIS Mapping	0	0.00
CalFire Crew Projects	0	0.00
Hazmat	0	0.00
Emergency Response/Support	0	0.00
Training Classes	7	53.00
Conferences	0	0.00
Meetings	46	77.0
Other	0	0.00
Supervision	0	0.00
Fuels Reduction	0	0.00
<b>TOTAL</b>	<b>53</b>	<b>130.00</b>

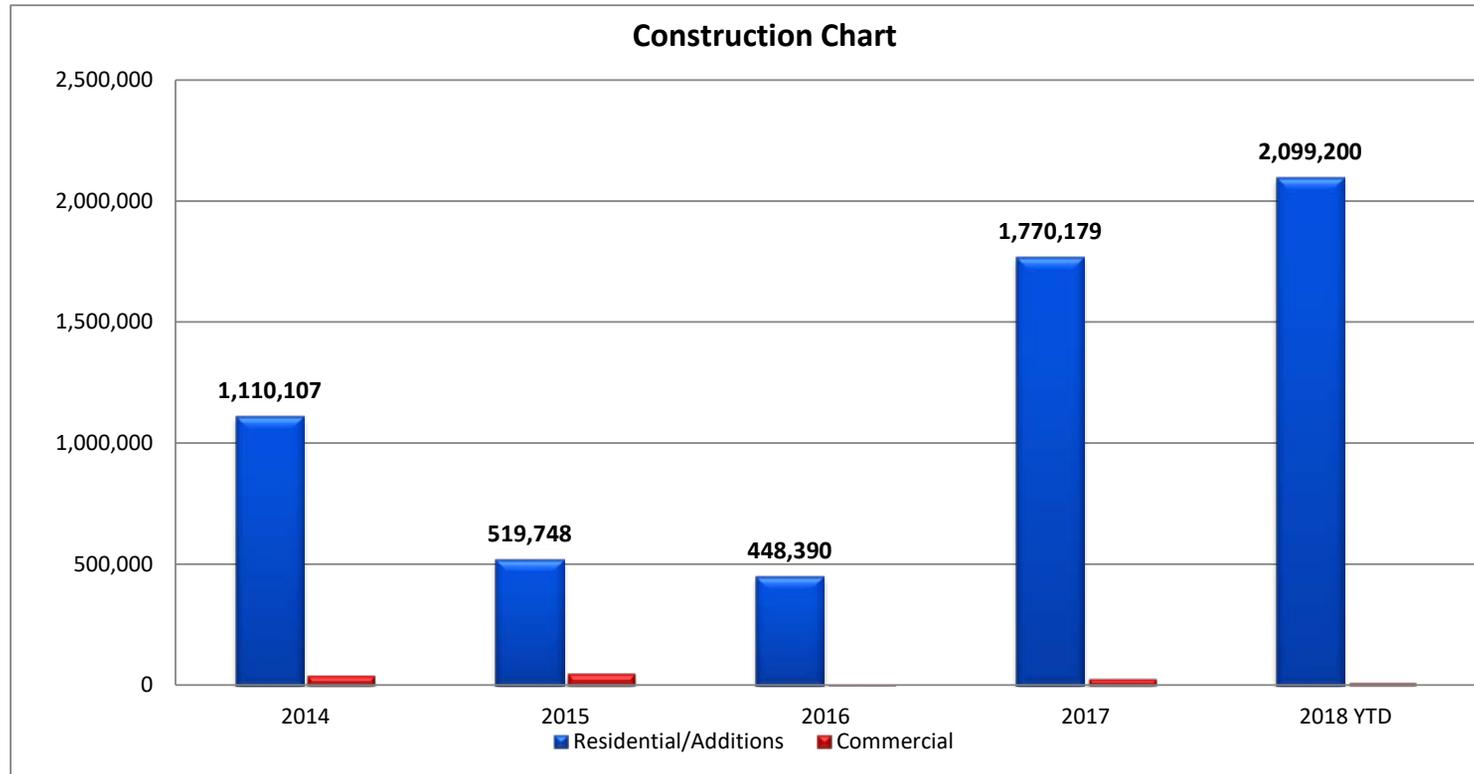
  

<b>FIRE PREVENTION -All Staff</b>	<b>Number</b>	<b>Staff Hours</b>
Incoming Phone Calls	471	129.75
Correspondence	420	105.00
Consultations	45	45.00
Plan Review	124	145.00
Scanning	200	50.00
General Office	355	355.00
<b>TOTAL</b>	<b>1,615</b>	<b>829.75</b>

**ADMINISTRATIVE SERVICES- OFFICE SUPPORT**

<b>OFFICE COORDINATOR-PREVENTION</b>	<b>Number</b>	<b>Staff Hours</b>
Phone Calls (All Administrative Staff) Internal & External	729	36.45
Correspondence	296	74.00
Walk in/Counter (All Administrative Staff)	384	32.00
Knox Application Request	4	1.00
Burn Permits	1	1.00
UPS Outgoing Shipments	3	0.25
Plan Accepted/Routed	124	145.00
Special Projects	5	5.00
Scanning Documents/Electronic Files	500	125.00
Meetings: Admin/Prevention/Admin Shift	10	5.00
Post Office Runs	1	0.50
Deposit runs and preparations	25	12.50
<b>TOTAL</b>	<b>2,082</b>	<b>437.70</b>

**Rancho Santa Fe Fire Protection District  
Fire Prevention Bureau Monthly Activity Summary  
July 2018**

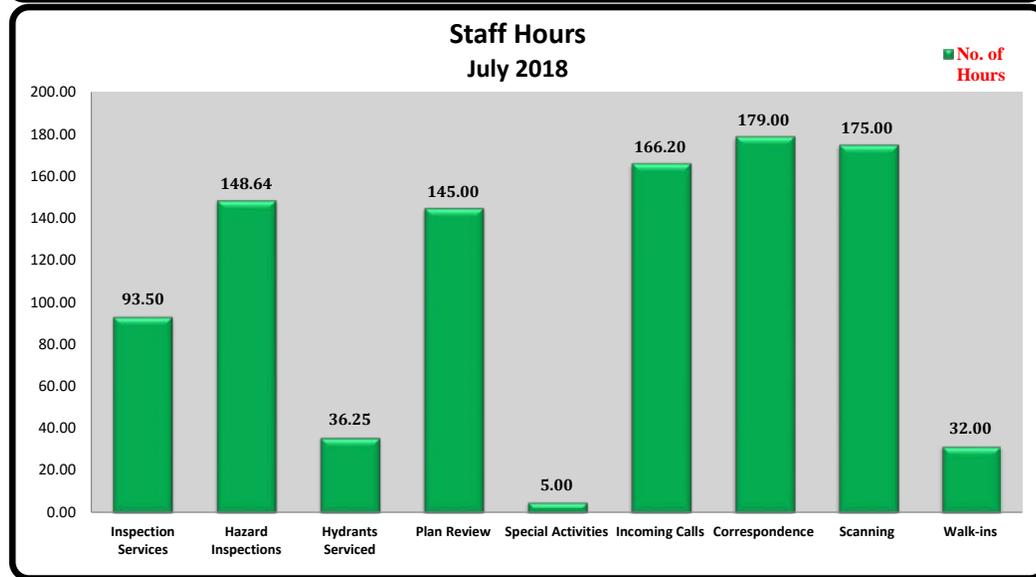
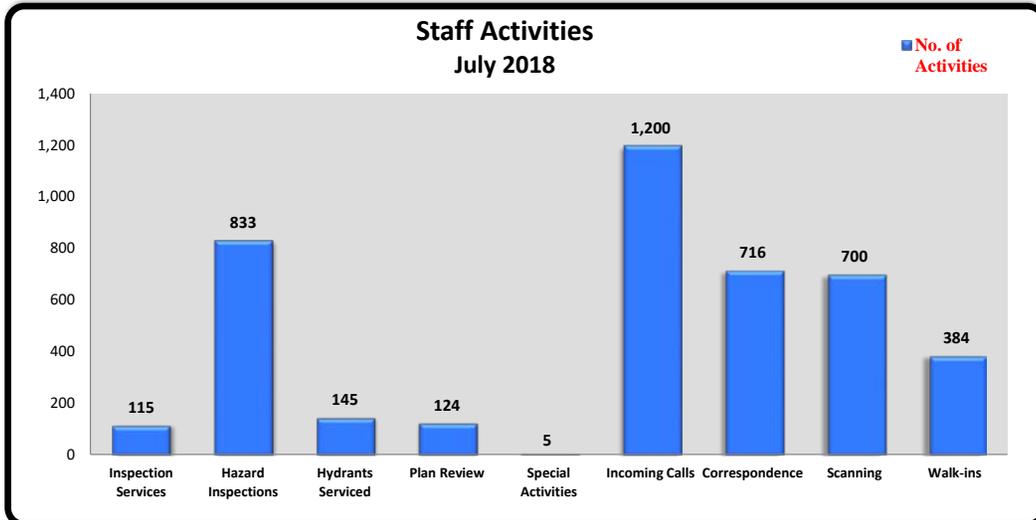


Year	Res/Add	Comm	Total
2014	1,110,107	36,156	1,146,263
2015	519,748	43,042	562,790
2016	448,390	2,047	450,437
2017	1,770,179	23,757	1,793,936
2017 YTD	1,036,029	23,422	1,059,451
2018 YTD	2,099,200	10,227	2,109,427

Comparison 2017/2018 Total Square Footage

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>2017</b>	48,435	40,807	23,518	61,889	78,701	220,963	585,112	58,173	43,534	69,405	313,889	249,484
<b>2018</b>	186,961	62,170	46,643	37,448	69,972	1,361,554	344,679					

**Rancho Santa Fe Fire Protection District**  
**Fire Prevention Bureau Monthly Activity Summary**  
**July 2018**



**Comparison 2016/2017 Total Monthly Hours/Activities**

2017	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Activities</b>	2187	2019	2614	2384	3137	3617	3300	3938	3537	3897	3462	3169
<b>Hours</b>	482.62	494.10	578.82	567.50	676.43	745.76	713.5	844.47	850.08	795.81	781.95	696.27

2018	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
<b>Activities</b>	2714	2970	2985	3331	4091	4349	4222					
<b>Hours</b>	600.70	723.62	736.32	858.15	955.05	997.91	980.59					

NOTE: This summary report is not intended to capture all staff hours worked but only to illustrate activity.

**Rancho Santa Fe Fire Protection District**  
**Public Education Coordinator Monthly Activity Summary**  
**July 2018**

<b>WEBSITE/INTERNET</b>		<b>Staff Hours</b>
<b>Update existing info &amp; documents:</b> <i>Updated home page, news, photos, etc</i>	<b>3.0</b>	
	3.0	
<b>Compile &amp; write new information:</b>	<b>2.0</b>	
	1.0	
<b>Social Media</b> <i>Facebook "Followers" - 1,246</i>  <i>Instagram "Followers" - 1,103</i>  <i>Twitter "Followers" - 3,424</i>	<b>11.0</b>	
	3.0	
	4.0	
	4.0	
<b>TOTAL</b>		<b>16.0</b>
<b>PUBLICATIONS</b>		<b>Staff Hours</b>
<b>Design/write brochures, flyers, etc:</b> <i>Handouts for upcoming events</i>	<b>3.0</b>	
	3.0	
<b>TOTAL</b>		<b>3.0</b>

**Rancho Santa Fe Fire Protection District**  
**Public Education Coordinator Monthly Activity Summary**  
**July 2018**

<b>MEDIA RELATIONS</b>		<b>Staff Hours</b>
<b>On-scene Public Information Officer:</b>		<b>3.0</b>
<i>Ciuchta Dog Rescue</i>		3.0
<b>Press Releases:</b>		<b>1.0</b>
<i>Del Dios Traffic Collision</i>		1.0
<b>Other Articles/Stories/Interviews:</b>		<b>0.0</b>
<b>TOTAL</b>		<b>4.0</b>

<b>EDUCATIONAL PROGRAMS/PRESENTATIONS</b>		<b>Staff Hours</b>
<b>Children's Programs</b>		<b>5.0</b>
<i>Fire Safe Kids Prep</i>		1.0
<i>Station Tours</i>		3.0
<i>Fire Engine Visit at Horizon VBS</i>		1.0
<b>Adult Programs:</b>		<b>10.0</b>
<i>Preparing for Wildfire at Cielo HOA</i>		2.0
<i>Hands-only CPR at Grifols</i>		6.0
<i>Fire Extinguisherr Training at Jerome's</i>		2.0
<b>TOTAL</b>		<b>15.0</b>

**Rancho Santa Fe Fire Protection District**  
**Public Education Coordinator Monthly Activity Summary**  
**July 2018**

<b>EVENTS</b>		Staff Hours
<b>External/Community Events:</b>		<b>12.0</b>
<i>EFHG 4th of July Parade/Picnic</i>		5.0
<i>4S Ranch 4th of July Party</i>		5.0
<i>RSF 4th of July Parade</i>		1.0
<i>Fairbanks Ranch BBQ</i>		1.0
<b>Internal Events:</b>		<b>0.0</b>
<b>TOTAL</b>		<b>12.0</b>
<b>CONTINUING EDUCATION</b>		Staff Hours
<b>Training Classes:</b>		<b>0.0</b>
<b>Conferences:</b>		<b>0.0</b>
<b>Meetings:</b>		<b>3.0</b>
<i>Staff meetings</i>		1.0
<i>Shift Meetings</i>		0.0
<i>CSA17 Meeting</i>		1.0
<i>San Diego County PIOs</i>		0.0
<i>So Cal Pub Ed</i>		0.0
<i>Target Solutions</i>		1.0
<b>TOTAL</b>		<b>3.0</b>
<b>CLERICAL</b>		Staff Hours
<b>Prevention-related:</b>		<b>42.0</b>
<i>Mailbox, email inbox, phone calls, news clips, etc.</i>		38.0
<i>Phone Calls</i>		4.0
<b>Non-prevention/non-minute related:</b>		<b>26.0</b>
<b>TOTAL</b>		<b>68.0</b>
<b>TOTAL HOURS</b>		<b>121.0</b>

## RESOLUTION No. 2018-10

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE RANCHO SANTA FE  
FIRE PROTECTION DISTRICT FOR EXCEPTION TO THE 180-DAY WAIT PERIOD  
GC sections 7522.56 & 21224

**WHEREAS**, in compliance with Government Code section 7522.56 the Board of Directors of the Rancho Santa Fe Fire Protection District must provide CalPERS this certification resolution when hiring a retiree before 180 days has passed since his or her retirement date; and

**WHEREAS**, Karlana Rannals will retire from Rancho Santa Fe Fire Protection District in the position of Administrative Manager, effective August 16, 2018; and

**WHEREAS**, section 7522.56 requires that post-retirement employment commence no earlier than 180 days after the retirement date, which is February 12, 2019 without this certification resolution; and

**WHEREAS**, section 7522.56 provides that this exception to the 180 day wait period shall not apply if the retiree accepts any retirement-related incentive; and

**WHEREAS**, the Board of Directors of the Rancho Santa Fe Fire Protection District, the Rancho Santa Fe Fire Protection District and Karlana Rannals certify that Karlana Rannals has not and will not receive a Golden Handshake or any other retirement-related incentive; and

**WHEREAS**, the Board of Directors of Rancho Santa Fe Fire Protection District finds that Karlana Rannals has certain specialized skills obtained over her years of service to District which are of critical need to District on a temporary basis immediately following her retirement; and

**WHEREAS**, the Board of Directors of the Rancho Santa Fe Fire Protection District hereby appoints Karlana Rannals Moore as an extra help retired annuitant to perform the duties of the Administrative Manager for the Rancho Santa Fe Fire Protection District under Government Code section 21224, effective August 20, 2018; and

**WHEREAS**, the entire employment agreement, contract or appointment document between Karlana Rannals and the Rancho Santa Fe Fire Protection District has been reviewed by this body and is attached herein; and

**WHEREAS**, the employment shall be limited to 960 hours per fiscal year; and

**WHEREAS**, no matters, issues, terms or conditions related to this employment and appointment have been or will be placed on a consent calendar; and

**WHEREAS**, the compensation paid to retirees cannot be less than the minimum nor exceed the maximum monthly base salary paid to other employees performing comparable duties, divided by 173.333 to equal the hourly rate; and

**WHEREAS**, the maximum monthly base salary for this position is \$10,861 and the hourly equivalent is \$62.66, and the minimum monthly base salary for this position is \$8,518 and the hourly equivalent is \$49.14; and

**WHEREAS**, the hourly rate paid to Karlena Rannals will be \$62.66; and

**WHEREAS**, Karlena Rannals has not and will not receive any other benefit, incentive, compensation in lieu of benefit or other form of compensation in addition to this hourly pay rate; and

**THEREFORE, BE IT RESOLVED THAT** the Board of Directors of the Rancho Santa Fe Fire Protection District hereby certifies the nature of the appointment of Karlena Rannals as described herein and detailed in the attached employment agreement/contract/appointment document and that this appointment is necessary to fill the critically needed position of Administrative Manager for the Rancho Santa Fe Fire Protection District by August 20, 2018 because Karlena Rannals has specialized skills needed in performing work of a limited duration that are required to oversee and train the incoming replacement(s) for this critical position.

PASSED AND ADOPTED at a regular meeting of the Board of Directors of the Rancho Santa Fe Fire Protection District on August 8, 2018 by the following vote:

- AYES:
- NOES:
- ABSENT:
- ABSTAIN:

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James H. Ashcraft  
President

ATTEST:

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Karlana Rannals  
Secretary

**AT-WILL POSITION  
EMPLOYMENT AGREEMENT**

This AT-WILL EMPLOYMENT AGREEMENT (“**Agreement**”) is dated as of \_\_\_\_\_, 2018 and is made by and between the RANCHO SANTA FE FIRE PROTECTION DISTRICT (“**District**”), and KARLENA RANNALS (“**Employee**”). The District and Employee may be referred to individually as “Party” or collectively as “the Parties.”

**RECITALS**

WHEREAS, The Board of Directors of District desires to hire Employee for a limited duration as an at-will extra help retired annuitant under Government Code section 21224 to facilitate the training of the incoming ADMINISTRATIVE/HUMAN RESOURCE MANAGER AND FINANCE MANAGER for the District, which are positions that requires specialized skills and expert professional or technical services, and Employee desires to perform and assume responsibility for the provisions of professional services to the District in this capacity.

WHEREAS, Employee desires to be employed by and render services to District upon and subject to the terms, conditions and other provisions set forth herein.

WHEREAS, District desires to employ Employee on the terms and conditions contained herein as of August 20, 2018 (“**Effective Date**”); and

NOW THEREFORE, in consideration of the above recitals and of the mutual promises and conditions set forth in this Agreement, it is agreed as follows:

1. Employment. Subject to the terms and conditions set forth in this Agreement, District hereby employs Employee, and Employee hereby accepts employment with District.
2. Duties and Responsibilities. Employee is employed by District, Employee will competently perform as an employee in training the incoming Administrative/Human Resource Manager and Finance Manager for the District, assist in the closing of the books for the just ending fiscal year and to answer any questions that the Auditors may have regarding the prior fiscal year.
3. At-Will Employment. EMPLOYEE UNDERSTANDS, ACKNOWLEDGES AND AGREES THAT HER EMPLOYMENT WITH DISTRICT IS FOR AN UNSPECIFIED DURATION AND CONSTITUTES "AT-WILL" EMPLOYMENT. EMPLOYEE ALSO UNDERSTANDS THAT ANY REPRESENTATION TO THE CONTRARY IS UNAUTHORIZED AND NOT VALID. EMPLOYEE ACKNOWLEDGES THAT THIS EMPLOYMENT RELATIONSHIP MAY BE TERMINATED AT ANY TIME, WITH OR WITHOUT GOOD CAUSE OR FOR ANY OR NO CAUSE, AT THE OPTION EITHER OF THE DISTRICT OR OF EMPLOYEE, WITH OR WITHOUT NOTICE.

**AT-WILL POSITION  
EMPLOYMENT AGREEMENT**

4. Compensation. As full compensation for all services rendered under this Agreement, Employee shall receive the salary described as follows:
  - a. Compensation for the services rendered pursuant to this Agreement, shall be \$62.66 per hour, which is in conformance with the requirements of Government Code Section 7522.56. This hourly rate does not exceed the maximum monthly base salary as published in the current salary schedule for the position of ADMINISTRATIVE MANAGER. Employee shall not receive any benefits, incentives, compensation in lieu of benefits, or any other forms of compensation in addition to the hourly rate of \$62.66 per hour.
5. Benefits. Employee shall not receive any benefits, incentives, compensation in lieu of benefits, or other form of compensation other than the hourly rate set forth in Section 4.a above. This specific includes any retirement, health, or vacation benefits in any form.
6. Reimbursement. Employee shall not be entitled to reimbursement for any costs or expenses incurred in the performance of the Employee's duties under this Agreement, unless said costs have received prior approval by the Fire Chief, and are supported by written documentation in accordance with the established policies and customary practices of the District.
7. Limitation on Hours. Without waiving, modifying or changing in any manner the "at-will" status of employment set forth in Section 3, Employee and District specifically agree that the maximum hours of employment under this Agreement shall not exceed **nine hundred and sixty (960) hours** per year and is temporary by nature, the parties understand that additional service is subject to approval by CalPERS per Government Code section 21224.
8. Indemnification. For the purposes of indemnification and defense of legal actions, Employee shall be considered an employee of the District and entitled to the same rights and subject to the same obligations as are provided for all other employees of the District.
9. Governing Law; Consent to Personal Jurisdiction. This Agreement will be governed by the laws of the State of California. Employee hereby expressly consents to the personal jurisdiction of the state and federal courts located in California for any lawsuit filed there against Employee by District arising from or relating to this Agreement.
10. Supersedes Prior agreements. This Agreement supersedes any and all other agreements either oral or written or implied between the Parties. Each party acknowledges that no representation, inducements, policies, or agreements have been made by any party or anyone acting on behalf of any party, which are not embodied herein, and that no other agreements, statement, or promise not contained in this contract shall be valid or binding on either party except as provided herein.
11. Entire Agreement. This Agreement sets forth the entire agreement and understanding

**AT-WILL POSITION  
EMPLOYMENT AGREEMENT**

between the District and Employee relating to the subject matter herein and supersedes all prior discussions or representations between us including, but not limited to, any representations, whether written or oral. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in writing signed by the President of the District and Employee. Any subsequent change or changes in my duties, salary, or compensation will not affect the validity or scope of this Agreement.

12. Time of Essence. Time is expressly of essence with respect to this Agreement.
13. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. This Agreement shall not be effective until the execution and delivery between each of the parties of at least one set of counterparts. The parties authorize each other to detach and combine original signature pages and consolidate them into a single identical original. Any one of such completely executed counterparts shall be sufficient proof of this Agreement.
14. Modifications in Writing. No amendment or modification of the terms or conditions of this Agreement shall be valid unless in writing and signed by the parties hereto.
15. Unenforceable. If any term or provision of this Agreement is determined to be illegal, unenforceable, or invalid in whole or in part for any reason, such illegal, unenforceable, or invalid provisions or part thereof shall be stricken from this Agreement and such provision shall not affect the legality, enforceability, or validity of the remainder of this Agreement. If any provision or part thereof of this Agreement is stricken in accordance with the provisions of this section, then this stricken provision shall be replaced, to the extent possible, with a legal, enforceable, and valid provision that is as similar in tenor to the stricken provision as is legally possible.
16. Mutual Intent. The parties have negotiated the terms of this Agreement hereto and the language used in this Agreement shall be deemed the language chosen by the parties hereto to express their mutual intent. This Agreement shall be construed without regard to any presumption or rule requiring construction against the party causing such instrument or any portion thereof to be drafted, or in favor of the party receiving a particular benefit under the Agreement. No rule of strict construction will be applied against any person.
17. Execution. This Agreement was executed voluntarily without any duress or undue influence on the part of or on behalf of the parties hereto. The parties acknowledge that they have read and understood this Agreement and its legal effect. Each party acknowledges that it has had a reasonable opportunity to obtain independent legal counsel for advice and representation in connection with this Agreement.

**AT-WILL POSITION  
EMPLOYMENT AGREEMENT**

- 18. Legal Capacity. Each person signing this Agreement represents and warrants that he or she is duly authorized and has legal capacity to execute and deliver this Agreement.
  
- 19. Binding Effect. This Agreement shall be binding upon and shall inure to the benefit of the successors and assigns of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

**District**

RANCHO SANTA FE FIRE PROTECTION DISTRICT

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Its: \_\_\_\_\_

**Employee**

\_\_\_\_\_  
KARLENA RANNALS

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## STAFF REPORT

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2018-20

TO: BOARD OF DIRECTORS  
TONY MICHEL, FIRE CHIEF

FROM: FRED COX, DEPUTY CHIEF

SUBJECT: RFP – RSF6 SEPTIC SYSTEM REPLACEMENT

DATE: AUGUST 3, 2018

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### RECOMMENDATION:

Staff recommends approval to seek proposals for RFP 02-2018 Septic System Replacement for RSF6 Fire Station.

### BACKGROUND:

Prior to the Rancho Santa Fe Fire District/CSA 107 reorganization, the Elfin Forest/Harmony Grove Fire Department was seeking tentative site approval for a newly designed septic system. Shortly after the reorganization, the new septic system site plan received approval, and was bundled as part of RFP 01-2018 Modular Crew Quarters. Due to the complexity and scope of the modular project, no bids were received.

To move forward, staff's decision was to unbundle the Modular Crew Quarters RFP and to separate them into a more manageable project for bidders. The first step will be to install the new septic system. Other factors for replacement is the current septic system at RSF6 is inadequate, and the design layout approval expires in late November.

Once bids are received, the selected contractor and final contract will be brought back before the Board of Directors for approval. District legal counsel has reviewed the RFP.

Costs for the septic replacement are estimated at \$80,000 and grant funding will come from the Rancho Santa Fe Fire District Fire Foundation.



# **RANCHO SANTA FE FIRE PROTECTION DISTRICT**

## **REQUEST FOR PROPOSAL**

**Septic System Replacement  
RFP #002-2018**

**Proposals Due:  
Sept \_\_\_\_\_, 2018, 4:00 PM PDT**

**Contact: Fred Cox  
Phone: 858-756-6002  
Email: [cox@rsf-fire.org](mailto:cox@rsf-fire.org)**



## Rancho Santa Fe Fire District REQUEST FOR PROPOSAL

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### **PURPOSE:**

Rancho Santa Fe Fire District (District) is seeking the service of an experienced and qualified Septic System Contractor with proven expertise in the installation of underground septic tank systems and leach fields.

### **PROJECT:**

The services requested shall include all equipment, material, supplies, and labor to remove existing septic tank and to install a new septic system and drainage field per the Scope of Service (Attachment "D"). The Scope of Service - Exhibit "D" will become part of the executed agreement.

### **REQUEST FOR PROPOSAL (RFP) AND CONTRACT AWARD TIMELINE**

Distributed RFP	
Deadline to for Submittal questions Regarding	4:00 p.m.
Response to Questions	
Submission Deadline for Proposals	<b>4:00 p.m.</b>
Contractor Start	11/20/2018 Estimated
Contractor Completion Date	11/15/2018

### **REQUIREMENTS AND DETAILS**

Contractors participating in the RFP process must meet the following minimum qualifications to be considered:

1. The Contractor will be a financially sound company primarily engaged in professional replacement/installation of Septic Systems in the State of California.
2. Have successfully completed a minimum of five (5) projects of comparable size and scope to this project, within the past five (5) years with references provided in proposal.
3. The Contractor shall be able to provide personnel who have been fully trained in all phases of septic tank system installation. Contractor's personnel should also have familiarity with all types of components including abandoning in-place, installation of new septic tanks, plus installation of drip line drainage fields.
4. Contractor shall hold a valid State of California Contractors license plus any additional licenses required to complete the Scope of Work. Preference Contractors licenses will

have a C42 (Sanitation System) California Contractor's License and meet all current licensing and registration requirements, as may be required by the State of California Contractor State License Board (CSLB), the California Department of Industrial Relations (DIR) without any official unresolved record of complaints registered or filed with the California Department of Consumer Affairs

5. Able to provide proof of current insurance coverage in accordance with the District's insurance requirements as described in the sample Agreement shown in the TERMS AND CONDITIONS.
6. Able to sign the completed Agreement shown in the TERMS AND CONDITIONS, and Exhibit "C" "Price Form". District will not accept any requests for revisions to the Agreement terms.

## **SUBMISSION REQUIREMENTS**

For the proposal to be considered responsive, the contractor must submit all information requested in this RFP in the proposal. Failure to submit all required information, forms and documents in the proposal may result in disqualification. Proposals must be submitted on or before the closing date and time. Proposals received after the closing date and time will be considered non-responsive. It is the contractor's responsibility to ensure that their proposal has been received by the District.

The following information, forms and documents are to be submitted with the Proposal:

1. **Services Detail Statement:** A scope of services that describes the Septic System Replacement as proposed by Contractor. This statement may be based on, but is not limited to, the information provided in the SCOPE OF SERVICES, Exhibit "D" of this RFP. The Services Detail Statement should be on company letterhead.
2. Contractor's Business Statement and References, Exhibit B: Provide details of contractor's company, references of relevant projects (minimum of 5) including comprehensive project/contract description, valid project contact information, qualifications and current pre-qualified vendor status. If necessary, extra pages may be attached to the provided form to expand on contractor's profile or references. Include copies of any required licenses or certifications, as separate attachments.
3. Two (2) copies of the contractors proposal must be mailed or hand-delivered to the following address in a sealed envelope in hardcopy on or prior to the Submission Deadline: Attention: Fred Cox.

**Physical Address:** Rancho Santa Fe Fire Protection District  
18027 Calle Ambiente  
Rancho Santa Fe, CA 92067

**Mail address:** Rancho Santa Fe Fire Protection District  
P.O. Box 410  
Rancho Santa Fe, CA 92067

4. Prices shall be valid for the term of the proposal contract and include all labor, equipment, materials, fees, traffic control, tools and equipment, transportation, overhead, travel, profit, insurance, sales and other taxes, license, incidentals, and all other related costs necessary to meet the work requirements described in “Exhibit D”. Permit Fee cost will be paid for by the District.
5. **PROPOSERS:** Please show RFP 02-2018 RSF 6 Fire Station 6, ATTN: Fred Cox on the envelope containing your proposal.

It is the contractor’s responsibility to confirm that the District is in receipt of proposal. Late proposals will not be accepted. **Emailed or Faxed proposals will not be accepted.**

### **EVALUATION PROCESS AND SELECTION CRITERIA**

Selection of the Contractor will be based upon a competitive selection process. All elements of the pricing proposal will be considered include responsiveness of proposal and price. Criteria to be evaluated shall include the following:

1. Experience, references and past performance under a similar scope of Services.
2. Cost to perform the required services stated in the SCOPE OF SERVICES, Exhibit “D” and identified in the contractor provided Fee Schedule.
3. Contractor capabilities and references as related to the requirements in the Scope of Services.

### **PREVAILING WAGES**

Certain labor categories under this project are subject to prevailing wages as identified in the State of California Labor Code Sections 1720 et seq and 1770 et seq. which require the payment of prevailing wage rates and the performance on certain “public works” and “maintenance” project, as defined by the Prevailing Wage Laws, and if the total compensation is \$1,000 or more, contractor agrees, to fully comply with such Prevailing Wage Laws, if applicable.

The contractor to whom a contract for the work is awarded shall comply with the provision of the California Labor Code. A copy of these prevailing wage rates are on file with the Department of Industrial Relations and can be found online with the State of California at <http://www.dir.ca.gov/dlsr/pwd>. A copy of such prevailing wage rates shall be posted on the jobsite by contractor.

## CONTRACTOR REGISTRATION

Contractors submitting proposals on this project must be registered with the Department of Industrial Relations pursuant to the requirements of Sections 1725.5 and 1771.1 of the California Labor Code. Contractor registration information can be found at <http://www.dir.ca.gov/Public-Works/PublicWorks.html>. Contracts entered into with any contractor in violation of Section 1771.1(a), shall be subject to cancellation by the District at the sole discretion of the District consistent with Section 1771.1(e).

Contractors submitting proposals on this project must be registered with the Department of Industrial Relations pursuant to the requirements of Sections 1725.5 and 1771.1 of the California Labor Code prior to submitting a Proposal.

DIR Registration numbers shall be provided by Contractor on **Contractor's Business Statement and References, Exhibit B**, when submitting Proposal.

Contractors submitting proposals on this project acknowledge that this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

## GENERAL

1. District is not committed to any course of action as a result of its issuance of this RFP and/or its receipt of a proposal from any contractor in response to it. In particular, contractors shall note that District may:
  - a) Reject any proposal that does not conform to instructions and specifications, which are issued herein.
  - b) Not accept proposals after the stated submission deadline.
  - c) Waive any informality, irregularity, immaterial defects or technicalities in any proposals or other responses received.
  - d) Reject all proposals.
  - e) Cancel the RFP at any time.
  - f) Award a contract in connection with this RFP at any time.
  - g) Make no award of contract.
  - h) Negotiate agreement terms with the awarded contractor at the District's discretion.
  
2. District will not reimburse any organization for proposal preparation costs or other work performed in connection with this RFP, whether or not the contractor is awarded a contract. Proposals (including accompanying materials) will become the property of the District. Proposals will be held in confidence to the extent permitted by law. After award of a contract or after rejection of all proposals, the proposals will be public record subject to disclosure under the California Public Records Act (Government Code Section 6250 et seq.). District reserves the right to request additional information from prospective contractors prior to final selection and to consider information about a firm other than that submitted in the proposal.

3. All Proposals shall remain valid offers open for the District acceptance for a minimum of 120 days following the RFP due date.
4. Any changes, additions, or deletions to the RFP will be in the form of a written addendum issued by District’s Purchasing Department and forwarded to all contractors. Except as stated in this provision, no person is authorized to amend or revise any part of this RFP, in any respect, either in writing or by oral statement.

**QUESTIONS**

Contractors are responsible for reading carefully and understanding fully the terms and conditions of this RFP. Requests for clarification or additional information must be made to the proper contact below before the deadline:

**Fred Cox: (858) 756-6002**  
**Email Question to [cox@rsf-fire.org](mailto:cox@rsf-fire.org) in the Subject line of email type “Septic Tank Replacement Service Question(s)”**

Only written communications relative to this RFP shall be considered. It is incumbent upon contractors to verify District is in receipt of their questions. Misinterpretation of the contract documents by the contractor shall not relieve an awarded contractor of responsibility to perform the contract.

To the extent that a question causes a change to any part of this RFP, an addendum shall be issued addressing such.

<b>Deadline to for Submittal questions</b>	<b>09/08/2018, 4:00 p.m.</b>
Response to Questions	09/11/2018

**TERMS AND CONDITIONS**  
**CONTRACT FOR SEPTIC TANK REPLACEMENT SERVICE BETWEEN**  
**RANCHO SANTA FE FIRE DISTRICT**  
**AND**  
**[CONTRACTOR]**

**THIS CONTRACT FOR SEPTIC TANK REPLACEMENT** (“Contract”) is entered into as of the day of \_\_\_\_\_ in the year \_\_\_\_\_, by and between Rancho Santa Fe District, an independent special district of the State of California hereinafter called “District,” and \_\_\_\_\_ hereinafter referred to as “Contractor”. District and Contractor are sometimes individually referred to herein as a “Party” and collectively as the “Parties.”

**RECITALS**

- A. District is a public agency of the State of California with the power to contract for services necessary to achieve its purpose. District owns certain property (“Property”) described as; Fire Station 6 20223 Elfin Forest Road, Elfin Forest, CA 92029.
- B. Contractor desires to perform and assume responsibility for the provision of certain Septic System Replacement Services for the Property on the terms and conditions set forth in this Contract pursuant to this Contract and executed by the District and Contractor.
- C. Contractor represents that it is a professional Contractor, experienced in providing Septic Tank Replacement Services to public clients, and is familiar with the plans of the District.
- D. The work includes the abandonment of existing system and replacement with a new septic treatment system, disposal field, including all materials, supplies, labor and permit processing. Work will be consider complete after District inspection and final signoff of permit from the county of San Diego.

NOW, THEREFORE, the Parties agree as follows:

**TERMS**

**1. GENERAL SCOPE OF SERVICES.** Contractor promises and agrees to furnish to District all labor materials, tools, equipment, services, and incidental and customary work, as necessary, to fully and adequately provide the Septic System Replacement services for the Property as set forth in Exhibit “D”. All Services shall be subject to, and performed in accordance with this Contract, the exhibits attached hereto and incorporated herein by reference, and all applicable local, state and federal laws, rules and regulations.

**2. TERM.** The term of this Contract shall be four (4) months commencing on the date first set forth above, unless earlier terminated as provided herein. The District shall have the right, in its sole discretion, to extend the term for additional four (4) month period. Contractor shall complete the Services within the

term of this Contract and shall meet any other established schedules and deadlines set forth. All applicable indemnification provisions of this Contract shall remain in effect following the termination of this Contract.

**3. SCHEDULE OF SERVICES.** Contractor shall perform the Septic System Replacement Expeditiously, within the term of this Contract, and in accordance with the schedule set forth in Exhibit “D” attached hereto and incorporated herein by reference.

**4. INDEPENDENT CONTRACTOR; CONTROL AND PAYMENT OF SUBORDINATES.** The Services shall be performed by Contractor under its supervision. Contractor will determine the means, method and details of performing the Services subject to the requirements of this Contract. District retains Contractor on an independent contractor basis and Contractor is not an employee, agent or representative of District. Contractor retains the right to perform similar or different services for others during the term of this Contract. Any additional personnel performing the Services under this Contract on behalf of Contractor shall not be employees of District and shall at all times be under Contractor's exclusive direction and control. Contractor shall pay all wages, salaries, and other amounts due such personnel in connection with their performance of Services under this Contract and as required by law. Contractor shall be responsible for all reports and obligations respecting such additional personnel, including, but not limited to: social security taxes, income tax withholding, unemployment insurance, and workers' compensation insurance.

**5. DISTRICT’S REPRESENTATIVE.** District hereby designates \_\_\_\_\_, or his or her designee, to act as its representative for the performance of this Contract (“District’s Representative”). District's Representative shall have the power to act on behalf of District for all purposes under this Contract. District’s Representative shall also review and give approval, as needed, to the details of Contractor’s work as it progresses. Contractor shall not accept direction from any person other than District's Representative or his or her designee.

**6. CONTRACTOR’S REPRESENTATIVE.** Contractor hereby designates \_\_\_\_\_, or his or her designee, to act as its representative for the performance of this Contract (“Contractor’s Representative”). Contractor’s Representative shall have full authority to represent and act on behalf of the Contractor for all purposes under this Contract. The Contractor’s Representative shall supervise and direct the Services, using his best skill and attention, and shall be responsible for all means, methods, techniques, sequences and procedures and for the satisfactory coordination of all portions of the Services under this Contract and as described in scope of services.

**7. COORDINATION OF SERVICES.** Contractor agrees to work closely with District staff in the performance of Services and shall be available to District's staff, consultants and other staff at all reasonable times.

**8. STANDARD OF CARE; LICENSES.** Contractor shall perform the Services under this Contract in a skillful and competent manner, consistent with the standard generally recognized as being employed by professionals in the same discipline in the State of California. Contractor warrants that all employees and subcontractors shall have sufficient skill and experience to perform the Services assigned to them. Contractor represents that it, its employees and subcontractors have all licenses, permits, qualifications and approvals of whatever nature that are legally required to perform the Services and that such licenses and approvals shall be maintained throughout the term of this Contract. Contractor shall perform, at its own cost and expense and without reimbursement from District, any Services necessary to correct errors or omissions which are caused by the Contractor’s failure to comply with the standard of care provided for herein, and shall be fully responsible to the District for all damages and other liabilities provided for in the indemnification provisions of this Contract arising from the Contractor’s errors and omissions. Any

employee of Contractor or its subcontractors who is determined by the District to be uncooperative, incompetent, a threat to the adequate or timely completion of the Project, a threat to the safety of persons or property, or any employee who fails or refuses to perform the Services in a manner acceptable to the District, shall be promptly removed from the Project by the Contractor and shall not be re-employed to perform any of the Services or to work on the Project.

**9. LAWS AND REGULATIONS.** Contractor shall keep itself fully informed of and in compliance with all local, state and federal laws, rules and regulations in any manner affecting the performance of the Project or the Services, including all Cal/OSHA requirements, and shall give all notices required by law. Contractor shall be liable for all violations of such laws and regulations in connection with Services. If the Contractor performs any work knowing it to be contrary to such laws, rules and regulations and without giving written notice to District, Contractor shall be solely responsible for all costs arising therefrom. Contractor shall defend, indemnify and hold District, its officials, directors, officers, employees and agents free and harmless, pursuant to the indemnification provisions of this Contract, from any claim or liability arising out of any failure or alleged failure to comply with such laws, rules or regulations.

## **10. INSURANCE.**

**10.1 Time for Compliance.** Contractor shall not commence work under this Contract until it has provided evidence satisfactory to the District that it has secured all insurance required under this Section. In addition, Contractor shall not allow any subcontractor to commence work on any subcontract until it has secured all insurance required under this Section, except as otherwise agreed by District in writing. Failure to provide and maintain all required insurance shall be grounds for the District to terminate this Contract for cause.

**10.2 Minimum Requirements.** Contractor shall, at its expense, procure and maintain for the duration of the Contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Contract by the Contractor, its agents, representatives, employees or subcontractors. Contractor shall also require all of its subcontractors to procure and maintain the same insurance for the duration of the Contract. Such insurance shall meet at least the following minimum levels of coverage:

**10.2.1. Insurance Limits:** Contractor shall maintain minimum limits of insurance of no less than:

- (1) *General Liability:* \$2,000,000 per occurrence for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with general aggregate limit is used, either the general aggregate limit shall apply separately to this Contract/location or the general aggregate limit shall be twice the required occurrence limit. Defense costs shall be paid in addition to the limit;
- (2) *Automobile Liability:* \$1,000,000 per accident for bodily injury and property damage; and;
- (3) *If Contractor has any employees, Workers Compensation and Employer's Liability:* Workers' Compensation limits as required by the Labor Code of the State of California. Employer's Practices Liability limits of \$1,000,000 per accident.

**10.3 Insurance Endorsements.** The insurance policies shall contain the following provisions, or Contractor shall provide endorsements on forms approved by the District to add the following provisions to the insurance policies:

**10.3.1 General Liability.** The general liability policy shall be endorsed to state that: (1) the District, its governing board, directors, officials, officers, employees and agents shall be covered as additional insureds with respect to the Services or operations performed by or on behalf of the Contractor, including materials, parts or equipment furnished in connection with such work; and (2) the insurance coverage shall be primary insurance as respects the District, its governing board, directors, officials, officers, employees and agents, or if excess, shall stand in an unbroken chain of coverage excess of the Contractor's scheduled

underlying coverage. Any insurance or self-insurance maintained by the District, its governing board, directors, officials, officers, employees and agents shall be excess of the Contractor's insurance and shall not be called upon to contribute with it in any way.

**10.3.2 Automobile Liability.** The automobile liability policy shall be endorsed to state that: (1) the District, its governing board, directors, officials, officers, employees and agents shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Contractor or for which the Contractor is responsible; and (2) the insurance coverage shall be primary insurance as respects the District, its governing board, directors, officials, officers, employees and agents, or if excess, shall stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the District, its governing board, directors, officials, officers, employees and agents shall be excess of the Contractor's insurance and shall not be called upon to contribute with it in any way.

**10.3.3 Workers' Compensation and Employers Liability Coverage.** The insurer shall agree to waive all rights of subrogation against the District, its governing board, directors, officials, officers, employees and agents for losses paid under the terms of the insurance policy which arise from work performed by the Contractor.

**10.3.4 All Coverages.** Each insurance policy required by this Contract shall be endorsed to state that: (A) coverage shall not be suspended, voided or canceled except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the District; and, (B) any failure to comply with reporting or other provisions of the policies, including breaches of warranties, shall not affect coverage provided to the District, its governing board, directors, officials, officers, employees and agents.

**10.3.5 Separation of Insureds; No Special Limitations.** All insurance required by this Section shall contain standard separation of insureds provisions. In addition, such insurance shall not contain any special limitations on the scope of protection afforded to the District, its governing board, directors, officials, officers, employees, agents and volunteers.

**10.4 Deductibles and Self-Insurance Retentions.** Any deductibles or self-insured retentions must be declared to and approved by the District. If the District does not approve the deductibles or self-insured retentions as presented, Contractor shall guarantee that, at the option of the District, either: (1) the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the District, its governing board, directors, officials, officers, employees and agents; or, (2) the Contractor shall procure a bond guaranteeing payment of losses and related investigation costs, claims and administrative and defense expenses.

**10.5 Acceptability of Insurers.** Insurance is to be placed with insurers with a current A.M. Best's rating no less than A-:VIII, licensed to do business in California, and satisfactory to the District.

**10.6 Verification of Coverage.** Contractor shall furnish District with original certificates of insurance and endorsements effecting coverage required by this Contract on forms satisfactory to the District. The certificates and endorsements for each insurance policy shall be signed by a person authorized by that insurer to bind coverage on its behalf. All certificates and endorsements must be received and approved by the District before work commences. The District reserves the right to require complete, certified copies of all required insurance policies, at any time.

**10.7 Subcontractors.** All subcontractors shall meet the requirements of this Section before commencing Work, except as otherwise approved by the District in writing. In addition, Contractor shall furnish

separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein, except as otherwise approved by the District in writing.

**10.8 Reporting of Claims.** Contractor shall report to the District, in addition to Contractor's insurer, any and all insurance claims submitted by Contractor in connection with the Work under this Contract.

**11. SAFETY.** Contractor shall execute and maintain its work so as to avoid injury or damage to any person or property. In carrying out its Services, the Contractor shall at all times be in compliance with all applicable local, state and federal laws, rules and regulations, including State of California, Department of Industrial Relations (Cal/ OSHA) regulations, Cal/EPA and U.S./EPA, and shall exercise all necessary precautions for the safety of employees appropriate to the nature of the work and the conditions under which the work is to be performed. Safety precautions as applicable shall include, but shall not be limited to: (A) adequate life protection and lifesaving equipment and procedures; (B) instructions in accident prevention for all employees and subcontractors, such as safe walkways, scaffolds, fall protection ladders, bridges, gang planks, confined space procedures, trenching and shoring, equipment and other safety devices, equipment and wearing apparel as are necessary or lawfully required to prevent accidents or injuries; and (C) adequate facilities for the proper inspection and maintenance of all safety measures.

## **12. FEES AND PAYMENT.**

**12.1 Compensation.** Contractor shall receive compensation, including authorized reimbursements, for all Services rendered under this Contract at the rates set forth in Exhibit "C" attached hereto and incorporated herein by reference. The total compensation to be provided under this Contract, pursuant to this Contract shall not exceed \_\_\_\_\_ The total compensation shall not exceed said amount without the written approval of the District's Representative.

**12.2 Payment of Compensation.** Contractor shall submit to District a statement which indicates work completed and hours of Services rendered by Contractor. The statement shall describe the amount of Services and supplies provided since the initial commencement date, or since the start of the subsequent billing periods, as appropriate, through the date of the statement. District shall, within thirty (30) days of receiving such statement, review the statement and pay all approved charges thereon.

**12.3 Reimbursement for Expenses.** Contractor shall not be reimbursed for any expenses unless authorized in writing by District.

**13. ACCOUNTING RECORDS.** Contractor shall maintain complete and accurate records with respect to all costs and expenses incurred and fees charged under this Contract. All such records shall be clearly identifiable. Contractor shall allow a representative of District during normal business hours to examine, audit, and make transcripts or copies of such records and any other documents created pursuant to this Contract. Contractor shall allow inspection of all work, data, documents, proceedings, and activities related to the Contract for a period of four (4) years from the date of final payment under this Contract. **14.**

## **14. TERMINATION OF AGREEMENT.**

**14.1 Grounds for Termination.** District may, by written notice to Contractor, terminate the whole or any part of this Contract at any time and without cause by giving written notice to Contractor of such termination, and specifying the effective date thereof. Contractor may not terminate this Contract except for cause.

**14.2 Effect of Termination.** Upon termination, Contractor shall be compensated only for those services which have been fully and adequately rendered to District through the effective date of the termination, and Contractor shall be entitled to no further compensation.

**14.3 Additional Services.** In the event this Contract is terminated in whole or in part as provided herein, District may procure, upon such terms and in such manner as it may determine appropriate, services similar to those terminated.

## **15. INDEMNIFICATION.**

**15.1** To the fullest extent permitted by law, Contractor shall defend, indemnify and hold the District, its Board, members of the Board, employees, and authorized volunteers free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury of any kind, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or incident to any alleged acts, errors or omissions, or willful misconduct of Contractor, its officials, officers, employees, subcontractors, Contractors or agents in connection with the performance of the Contractor's services, the Project or this Contract, including without limitation the payment of all consequential damages, expert witness fees and attorney's fees and other related costs and expenses. If this Contract is subject to Civil Code section 2782, the only limit to Contractor's indemnification obligation shall be that required by Civil Code section 2782 exempting Contractor from indemnifying District against District's sole or active negligence or willful misconduct.

**15.2** In addition, Contractor shall defend, with counsel of District's choosing and at Contractor's own cost, expense and risk, any and all claims, suits, actions or other proceedings of every kind covered by this Section that may be brought or instituted against District or its Board, members of the Board, employees, and authorized volunteers. Contractor shall pay and satisfy any judgment, award or decree that may be rendered against District or its Board, members of the Board, employees, and authorized volunteers as part of any such claim, suit, action or other proceeding. Contractor shall also reimburse District for the cost of any settlement paid by District or its Board, members of the Board, employees, or authorized volunteers as part of any such claim, suit, action or other proceeding. Such reimbursement shall include payment for District's attorney's fees and costs, including expert witness fees. Contractor shall reimburse District and its Board, members of the Board, employees, and/or authorized volunteers, for any and all legal expenses and costs incurred by each of them in connection therewith or in enforcing the indemnity herein provided. Contractor's obligation to indemnify shall not be restricted to insurance proceeds, if any, received by the District, its Board, members of the Board, employees, or authorized volunteers.

**16. PREVAILING WAGES.** Contractor is aware of the requirements of California Labor Code Section 1720, et seq., and 1770, et seq., as well as California Code of Regulations, Title 8, Section 1600, et seq., ("Prevailing Wage Laws"), which require the payment of prevailing wage rates and the performance of other requirements on "public works" and "maintenance" projects. Since the Services are being performed as part of an applicable "public works" or "maintenance" project, as defined by the Prevailing Wage Laws, and if the total compensation is \$1,000 or more, Contractor agrees to fully comply with such Prevailing Wage Laws. District shall provide Contractor with a copy of the prevailing rates of per diem wages in effect at the commencement of this Contract. Contractor shall make copies of the prevailing rates of per diem wages for each craft, classification or type of worker needed to execute the Services available to interested parties upon request, and shall post copies at the Contractor's principal place of business and at the Project site. Contractor shall defend, indemnify and hold the District, its elected officials, officers, employees and agents free and harmless from any claim or liability arising out of any failure or alleged failure to comply with the Prevailing Wage Laws. The Contractor and each subcontractor shall forfeit as a penalty to the District not more than two hundred dollars (\$200.00) for each calendar day, or portion thereof, for each worker paid less than the stipulated prevailing wage rate for any work done by him, or by any subcontract under him, in violation of the provisions of the Labor Code. The difference between such stipulated prevailing wage rate and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor.

**17. PAYROLL RECORDS.** In accordance with the requirements of California Labor Code Section 1776, Contractor shall keep accurate payroll records which are either on forms provided by the Division of Labor Standards Enforcement or which contain the same information required by such forms. Responsibility for compliance with California Labor Code Section 1776 shall rest solely with Contractor, and Contractor shall make all such records available for inspection at all reasonable hours. In the event of noncompliance with the requirements of this Section, Contractor shall have 10 days in which to comply subsequent to receipt of written notice specifying in what respects such Contractor must comply with this Section. Should noncompliance still be evident after such 10-day period, Contractor shall, as a penalty to District, forfeit not more than one hundred dollars (\$100.00) for each calendar day or portion thereof, for each worker, until strict compliance is effectuated. The amount of the forfeiture is to be determined by the Labor Commissioner. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from progress payments then due. The responsibility for compliance with this Section is on Contractor.

**18. EMPLOYMENT OF APPRENTICES.** This Contract shall not prevent the employment of properly indentured apprentices in accordance with the California Labor Code, and no employer or labor union shall refuse to accept otherwise qualified employees as indentured apprentices on this project.

**18.1** If California Labor Code Section 1777.5 applies to the Services, Contractor and any subcontractor hereunder who employs workers in any apprenticeable craft or trade shall apply to the joint apprenticeship council administering applicable standards for a certificate approving Contractor or any subcontractor for the employment and training of apprentices. Upon issuance of this certificate, Contractor and any subcontractor shall employ the number of apprentices provided for therein, as well as contribute to the fund to administer the apprenticeship program in each craft or trade in the area of the work hereunder.

**18.2** The parties expressly understand that the responsibility for compliance with provisions of this Section and with Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code in regard to all apprenticeable occupations lies with Contractor.

**19. HOURS OF WORK.** Pursuant to the provisions of the California Labor Code, eight hours of labor shall constitute a legal day's work, and the time of service of any worker employed on the work shall be limited and restricted to eight hours during any one calendar day, and forty hours in any one calendar week, except when payment for overtime is made at not less than one and one-half the basic rate for all hours worked in excess of eight hours per day ("Eight-Hour Law"), unless Contractor or the Services are not subject to the Eight-Hour Law. Pursuant to Section 1813 of the California Labor Code, Contractor shall forfeit a penalty of \$25.00 per worker for each day that each worker is permitted to work more than eight (8) hours in any one calendar day and forty (40) hours in any one calendar week, except when payment for overtime is made at not less than one and one-half (1-1/2) times the basic rate for that worker.

**20. GENERAL.**

**20.1 Waivers.** The waiver by either Party of any breach or violation of any term, covenant, or condition of this Contract or of any provisions of any ordinance or law shall not be deemed to be a waiver of such term, covenant, condition, ordinance or law or of any subsequent breach or violation of same or of any other term, covenant, condition, ordinance or law or of any subsequent breach or violation of the same or of any other term, condition, ordinance, or law. The subsequent acceptance by either Party of any fee or other money which may become due hereunder shall not be deemed to be a waiver of any preceding breach or violation by the other Party of any term, covenant, or condition of this Contract of any applicable law or ordinance.

**20.2 Integration and Counterparts.**

20.2.1 This document represents the entire and integrated agreement between District and Contractor and

supersedes all prior negotiations, representations, and agreements, either written or oral.

20.2.2 This Contract may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original; and all such counterparts, or as many of them as the Parties shall preserve undestroyed, shall together constitute one and the same instrument.

20.2.3 This document may be amended only by written instrument signed by both District and Contractor.

20.2.4 Contractor understands that this is not an exclusive Contract and that District shall have the right to negotiate with and enter into contracts with others providing the same or similar services as those provided by Contractor as the District desires.

**20.3 Laws, Venue, and Attorneys' Fees.** This Contract shall be interpreted in accordance with the laws of the State of California. If any action is brought to interpret or enforce any term of this Contract, the action shall be brought in a state or federal court situated in the County of Riverside, State of California. In the event of any such litigation between the Parties, the prevailing Party shall be entitled to recover all reasonable costs incurred, including reasonable attorney's fees, as determined by the court.

**20.4 Binding On Successors.** All representations, covenants and warranties set forth in this Contract, by or on behalf of, or for the benefit of any or all of the Parties hereto, shall be binding upon and inure to the benefit of such Party, its successors and assigns.

**20.5 Delivery of Notices.** All notices required hereunder and communications regarding interpretation of the terms of the Contract or changes thereto shall be provided by the mailing thereof as follows:

DISTRICT:  
Rancho Santa Fe Fire District  
P.O. Box 410  
Rancho Santa Fe, CA 92026  
Attn: Fred Cox

CONTRACTOR:

Any notice so given shall be considered served on the other Party three (3) days after deposit in the U.S. mail, first class postage prepaid, return receipt requested, and addressed to the Party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred regardless of the method of service.

**20.6 Cooperation; Further Acts.** The Parties shall fully cooperate with one another, and shall take any additional acts or sign any additional documents as may be necessary, appropriate or convenient to attain the purposes of this Contract.

**20.7 Time of Essence.** Time is of the essence for each and every provision of this Contract.

**20.8 Construction; References; Captions.** Since the Parties or their agents have participated fully in the preparation of this Contract, the language of this Contract shall be construed simply, according to its fair meaning, and not strictly for or against any Party. Any term referencing time, days or period for performance shall be deemed calendar days and not work days. All references to Contractor include all

personnel, employees, agents, and subcontractors of Contractor, except as otherwise specified in this Contract. All references to District include its elected officials, officers, employees, agents, and volunteers except as otherwise specified in this Contract. The captions of the various articles and paragraphs are for convenience and ease of reference only, and do not define, limit, augment, or describe the scope, content, or intent of this Contract.

**20.9 Prohibited Interests.** Contractor warrants that it has not employed nor retained any company or person, other than a bona fide employee working solely for Contractor, to solicit or secure this Contract. Further, Contractor warrants that it has not paid nor has it agreed to pay any company or person, other than a bona fide employee working solely for Contractor, any fee, commission, percentage, brokerage fee, gift or other consideration contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, District shall have the right to rescind this Contract without liability. For the term of this Contract, no member, officer or employee of District, during the term of his or her service with District, shall have any direct interest in this Contract, or obtain any present or anticipated material benefit arising therefrom.

**20.10 Equal Opportunity Employment.** Contractor represents that it is an equal opportunity employer and it shall not discriminate against any subcontractor, employee or applicant for employment because of race, religion, color, national origin, handicap, ancestry, sex or age. Such non-discrimination shall include, but not be limited to, all activities related to initial employment, upgrading, demotion, transfer, recruitment or recruitment advertising, layoff or termination.

**20.11 Labor Certification.** By its signature hereunder, Contractor certifies that it is aware of the provisions of Section 3700 of the California Labor Code which require every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of that Code, and agrees to comply with such provisions before commencing the performance of the Services.

**20.12 Authority to Enter Agreement.** Contractor has all requisite power and

**SIGNATURES NEXT PAGE**

**CONTRACT FOR SEPTIC TANK REPLACEMENT SERVICE  
BETWEEN  
RANCHO SANTA FE FIRE DISTRICT AND [CONTRACTOR]**

IN WITNESS WHEREOF,  
District and Contractor have executed  
this Contract on the day and year first above written.

**RANCHO SANTA FE FIRE DISTRICT:**

AUTHORIZED SIGNATURE:

\_\_\_\_\_

\_\_\_\_\_

Date

**CONTRACTOR:**

AUTHORIZED SIGNATURE:

\_\_\_\_\_

\_\_\_\_\_

Date

**EXHIBIT "A"**  
**PHOTOS OF SITE**

Photo #1 – General Aerial Overview



Photo #2 – Drainage Field and Barrier Rocks - Rocks Moved to Leading Edge of Drainage Field



Photo #3 – Existing Septic Tank Location



Photo #3 – Approximate Location of New Tank and Treatment System



**EXHIBIT "B"**

**BUSINESS STATEMENT AND REFERENCES**

***This form must be completed and signed by the Contractor proposed to participate in this award. Attach additional copies of this form as required.***

Company Name: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Telephone No.: \_\_\_\_\_ Fax No.: \_\_\_\_\_

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Contact Person's Name: \_\_\_\_\_

Telephone No.: \_\_\_\_\_ Fax No.: \_\_\_\_\_

Email Address: \_\_\_\_\_

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Business License No.: \_\_\_\_\_ City: \_\_\_\_\_

State: \_\_\_\_\_ Expiration Date: \_\_\_\_\_

Federal ID No. or Social Security No.: \_\_\_\_\_

DIR Registration Number: \_\_\_\_\_

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**Company representative authorized to sign contracts.**

<u>Name</u>	<u>Official Capacity</u>	<u>Telephone</u>

---

Signature \_\_\_\_\_ Date \_\_\_\_\_

## REFERENCES

*A minimum of four (4) references of similar size contracts.*

	<b>REFERENCE NO. 1</b>
<b>NAME OF FIRM</b>	
<b>ADDRESS</b>	
<b>CITY, STATE, ZIP</b>	
<b>TELEPHONE NO.</b>	
<b>CONTACT</b>	
<b>PROJECT NAME</b>	
<b>COMPLETION DATE</b>	
	<b>REFERENCE NO. 2</b>
<b>NAME OF FIRM</b>	
<b>ADDRESS</b>	
<b>CITY, STATE, ZIP</b>	
<b>TELEPHONE NO.</b>	
<b>CONTACT</b>	
<b>PROJECT NAME</b>	
<b>COMPLETION DATE</b>	
	<b>REFERENCE NO. 3</b>
<b>NAME OF FIRM</b>	
<b>ADDRESS</b>	
<b>CITY, STATE, ZIP</b>	
<b>TELEPHONE NO.</b>	
<b>CONTACT</b>	
<b>PROJECT NAME</b>	
<b>COMPLETION DATE</b>	
	<b>REFERENCE NO. 4</b>
<b>NAME OF FIRM</b>	
<b>ADDRESS</b>	
<b>CITY, STATE, ZIP</b>	
<b>TELEPHONE NO.</b>	
<b>CONTACT</b>	
<b>PROJECT NAME</b>	
<b>COMPLETION DATE</b>	

**EXHIBIT "C"**  
**PRICE FORM**

All associated costs with this RFP shall be submitted on this Bid Form. The prices quoted shall include all fees including design, permitting, labor, profit, sales tax, and any or all other fees to provide a finished Septic System to the District.

No alterations or changes of any kind to the Bid Form(s) are permitted. RFP responses that do not comply may be subject to rejection in total. The cost quoted below shall be the cost the District will pay for the term of any contract that is a result of this RFP process.

ITEM	DESCRIPTION	COST
1.	MATERIALS COSTS	\$
2.	LABOR COSTS	\$
3.	ESTIMATED PERMIT COSTS	\$
<b>TOTAL PROJECT COST</b>		\$

PAYMENT SCHEDULE	
1.	50 percent of project cost after delivery of all materials to job site.
2.	Remaining balance of project cost upon meeting terms of RFP.
3.	Permits: Cost of permit fees ONLY paid by Districts upon submission of receipt.

1. How soon after the award can you start the project?

2. How many days to complete the project?

**SIGNATURE NEXT PAGE**

The undersigned as Proposer, declares that the only persons or parties interested in this proposal is made without collusion with any person, firm or corporation. Your signature on this document, should you be awarded the contract as defined in this RFP, signifies that you have fully read and understood this proposal and will comply with all specifications, conditions, unit prices, terms, and delivery of the proposal unless otherwise noted in the “exceptions” portion of the proposal.

NAME ANN ADDRESS OF FIRM:

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---

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AUTHORIZED SIGNATURE:

---

Date

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**EXHIBIT “D”  
SCOPE OF SERVICES**

The scope of services includes all work and associated costs to abandon and remove existing septic tank and install a new 1500 gallon septic tank, Advantex AX20 (or latest model) processing unit, pumps, controllers and drip line disposal field, as specified. Contractor shall provide and install all materials needed for a fully function septic system per attached design requirements.

1. Remove existing concrete septic tank and replace it with a new 1000 gallon traffic rated pump chamber, sewage ejection pump and materials and affect a proper installation to existing building. Install 4” tight line or force main to new septic tank and treatment unit. Install sewer cleanouts every 100 feet.
2. Provide sewer stub out for proposed new building.
3. Installation of a new septic tank, controllers, connection lines, per approved design drawings.
4. Installation of disposal field per approved design drawings. Provide barrier protection to restrict vehicle traffic over disposal field - provided by moving existing on site rock (photo 2) to the leading edge of disposal field.
5. Contractor shall run all electrical service for sewage pumps and telecommunication lines required and for system monitoring as required.
6. Backfill and finish grade.
7. Restoration and re-vegetation: Restoration shall consist of restoring the grade to match the pre-construction grade. All excess fill generated is to be spread throughout the job site unless specified otherwise. Landscape is to be graded to rough finish.
8. Asphalt patch repair as required for existing tank removal and installation of tight line.
9. The Contractor will identify the cost to provide remote monitoring and annual maintenance for a period of (2) years.
10. Contractor shall be responsible for obtaining locations for all underground utilities in the construction areas. The Contractor shall make such investigations as he deems necessary to verify the actual field conditions. The Contractor shall take sole responsibility for damage to any utility line encountered whether or not located on the drawings, as well as paying for the cost of fines and/or revenue lost by a utility company resulting from outages.
11. Work will be considered complete after final District inspection and a final inspection and sign off approval from the County of San Diego Department of Environmental Health.

12. The Septic System replacement will be a prevailing wage job.
13. Contractor shall be responsible for all permit submittals, obtaining all required permits, and scheduling all inspections with the County of San Diego.

**The District is looking for work to be performed between the estimated start date of \_\_\_\_\_ 2018 and complete the project by Nov 1, 2018, if possible.**

### **ADDITIONAL RESPONSIBILITIES OF THE CONTRACTOR**

Contractor shall provide all labor, equipment, tools, chemicals, and supervision required to perform all work including, but not limited to:

1. Protective clothing and equipment required per the type of work.
2. All necessary County, and State permits and/or licenses for equipment and personnel.
3. Contractor shall be responsible for the acquiring all necessary permits for completing the scope of work to be performed. Prior to commencing work, contractor shall provide the District evidence of all applicable permits, including permits issued by the State, County and City having jurisdiction over the work. **Fees for County of San Diego County Permits will be paid for by the Fire District separate from the costs as identified in the RFP.**
4. Contractor shall comply with District insurance requirements.
5. Contractor shall warranty all work for a minimum period of two (2) years.
6. Contractor work crews shall perform work in a safe, orderly, and professional manner.
7. Contractor shall have work crew wearing garment that identifies worker as an employee of contractor.
8. Contractor is responsible for site safety and security for employees and any materials equipment.
9. Post notice stating this worksite is a nonsmoking and drug free workplace.
10. Exclusion of costs such as “Rock” or “Unknown” additional costs shall be identified in the Contractors proposal.
11. Work shall not be considered complete until final sign off by the County of San Diego and final inspection by a Fire District representative to ensure work is completed per the terms of this RFP.
12. Contractor shall provide training orientation as to any maintenance or operational procedures/conditions of the newly installed system.

# SEPTIC LAYOUT FOR: ELFIN FOREST/HARMONY GROVE VOLUNTEER FIRE DEPT.

**NOTES:**  
 \*\*\* THE LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES IS APPROXIMATE. LIKEWISE, STRUCTURE AND PAVEMENT LOCATIONS ARE APPROXIMATE. THE ACTUAL LOCATION OF UTILITIES, DRIVEWAYS AND STRUCTURES SHOULD BE FIELD VERIFIED PRIOR TO THE INSTALLATION OF THE PROPOSED SEPTIC SYSTEM. ANY REVISIONS TO THE SYSTEM SHOULD BE APPROVED BY THE DESIGN ENGINEER PRIOR TO IMPLEMENTING.

I CERTIFY THAT THE LAYOUT DRAWING SHOWS THE LOCATION OF ALL KNOWN EASEMENTS ON THE LOT AND PUBLIC WATER LINES ON OR WITHIN 20 FEET OF THE LOT BOUNDARIES.

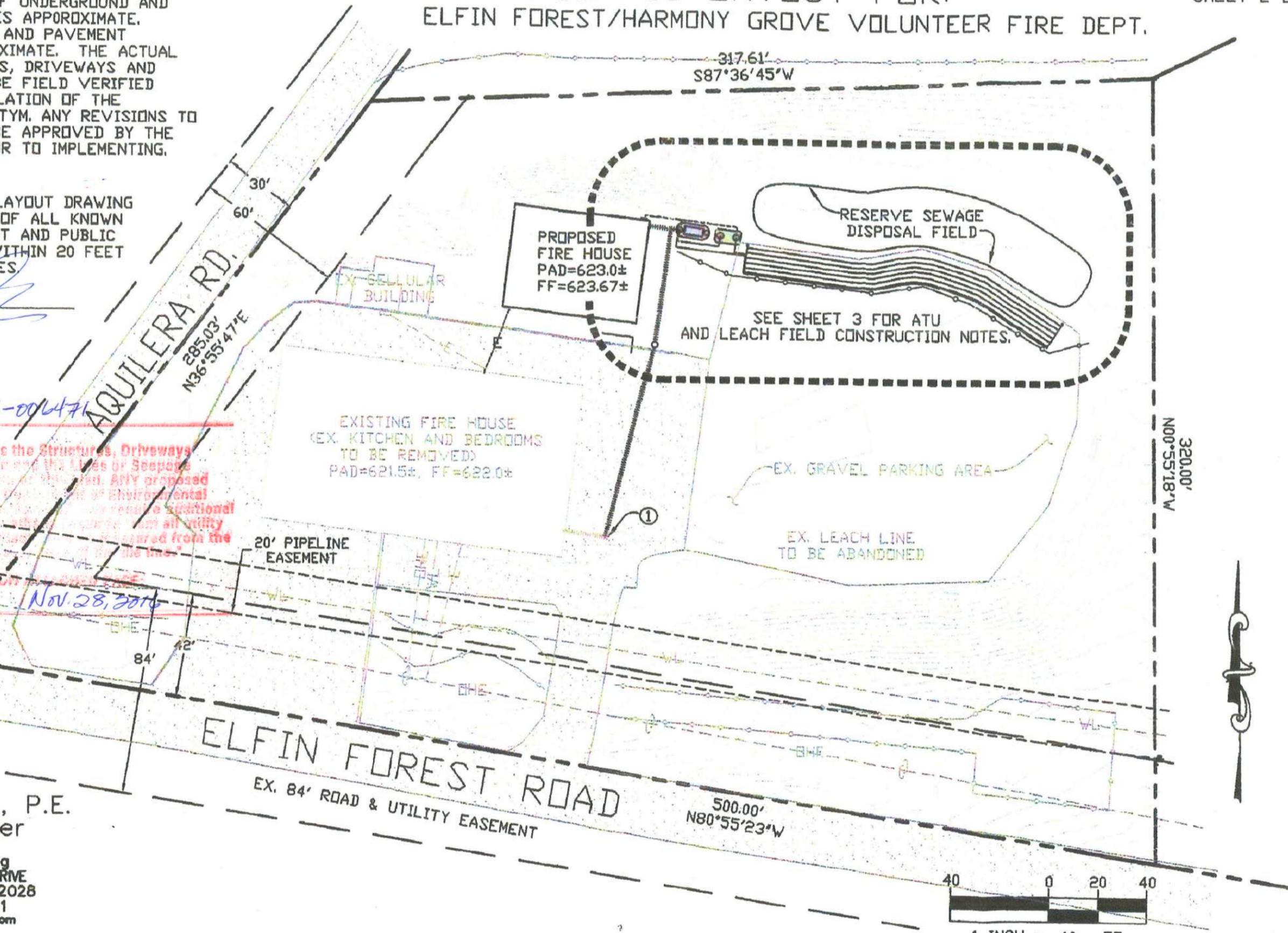
*Kevin Bresnahan*  
 KEVIN BRESNAHAN, P.E.

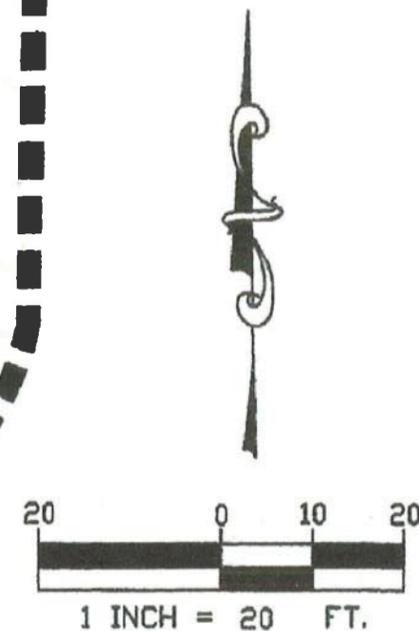
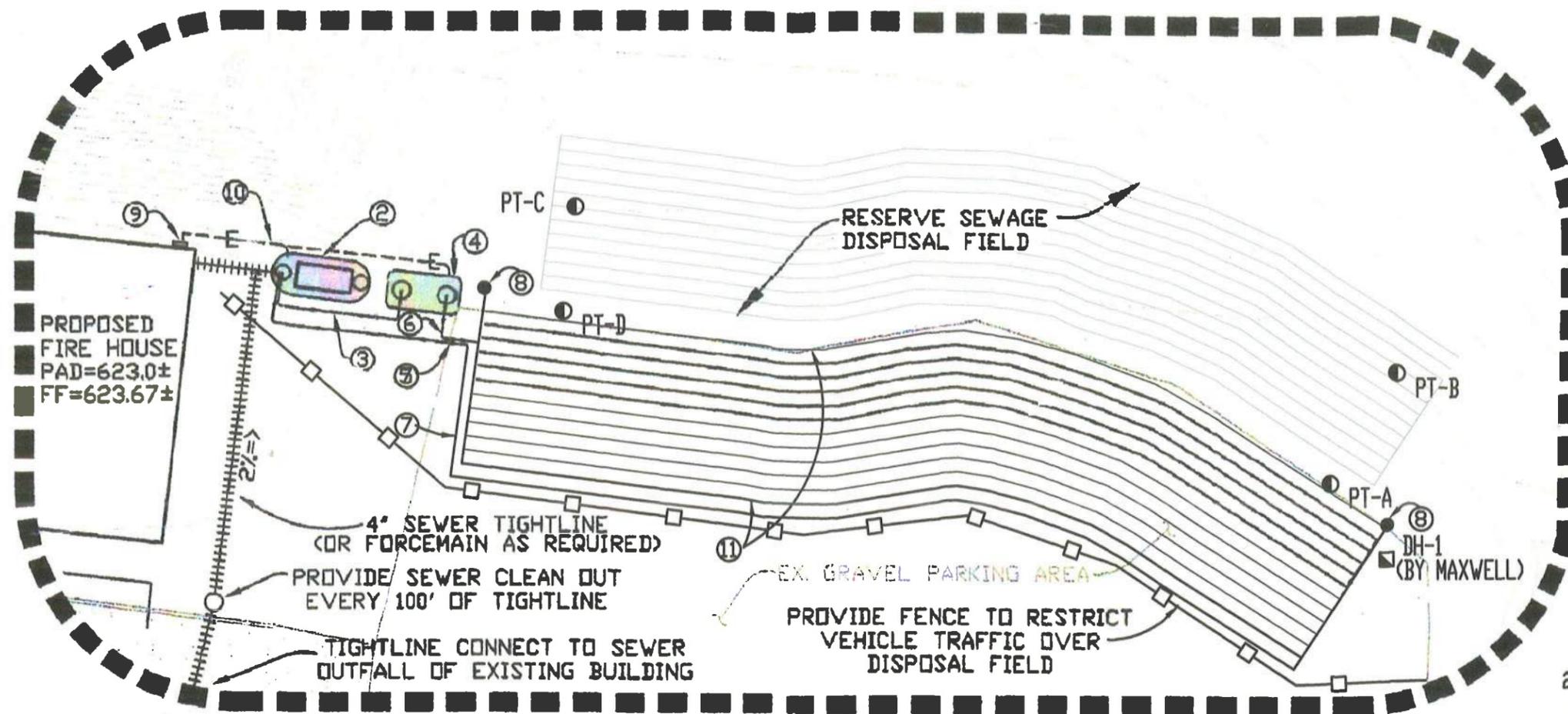
DEH Control Number: LOWTS-00471

This approval will be VOID unless the Structures, Driveways and Grading are located as shown and the Lines or Seepage pits are located exactly as shown on this plan. ANY proposed change shall be approved by the Department of Environmental Health prior to beginning construction. The contractor shall be responsible for all utility trenching to 4' depth. The contractor shall be responsible for the top of the utility trench to the ground surface.

SEE CONDITIONS OF APPROVAL ON ALL EASEMENTS.  
*Respectfully,* Nov. 28, 2016  
 SPECIALIST

Kevin Bresnahan, P.E.  
 Civil Engineer  
 Land Development  
 Design & Consulting  
 3031 RIDGE CREEK DRIVE  
 FALLBROOK CA 92028  
 (951) 532-6371  
 KBFallbrook@yahoo.com





**CONSTRUCTION NOTES:**

- ① REMOVE EXISTING CONCRETE SEPTIC TANK, OR UTILIZE AS CHAMBER FOR ANCILARY PUMP AS ELEVATION REQUIRES FOR FALL TO ATU (SEE SHEET 2)
- ② INSTALL ADVANTEX AX20 MODE 3B W/ 1500 GAL. FIBERGLASS TANK & ORENCO MODEL NO. P300511 PUMP VAULT 57' HIGH VAULT W/ 24' FILTER CARTRIDGE). ELEVATIONS PER DETAIL ON SHEET 2. PROVIDE FOR ANTI-BOUYANCY MEASURE ON ADVANTEX TANK AND AX-20 POD PER MANUFACTUER RECCOMENDATIONS.
- ③ INSTALL 24 L.F. 2" SCHEDULE 40 PVC OUTFLOW LINE (2% MIN. SLOPE TO PUMP CHAMBER)
- ④ INSTALL ROTH (RMT1250 GAL) SINGLE COMPARTMENT SEPTIC TANK (AS PUMP CHAMBER) WITH ORENCO 1/2 HP ORENCO (PF3005-1-1-20) EFFLUENT PUMP. ELEVATIONS PER DETAIL ON SHEET 4. NOTE: PROVIDE ANTI-BOUYANCY MEASURES.
- ⑤ INSTALL ORENCO (WHW-1.0-AUT) 1" AUTOMATIC FIELD FLUSH VALVE
- ⑥ INSTALL 12 L.F. 1-1/4" SCHEDULE 40 PVC SUPPLY LINE
- ⑦ INSTALL 185 L.F. 1-1/4" SCHEDULE 40 PVC RETURN LINE
- ⑧ INSTALL ADVANTEX (AX-VENT) AIR VENT AT HIGH POINTS AS NOTED.
- ⑨ INSTALL CONTROL PANEL ON FREE STANDING 4'X4' REDWOOD POST
- ⑩ INSTALL ELECTRICAL SUPPLY LINE AS REQUIRED PER ELECTRICIAN
- ⑪ INSTALL 1500 L.F. WASTEFLOW PC-1 GPH GEOWFLOW PIPE 2' D.C. W/OMITTEERS AT 1' DC. 6" BURIAL DEPTH (12 LINES AT 125 L.F. EACH)

NOTE: DRIPFIELD SHALL BE LAWN OR OTHER LANDSCAPE AS APPROVED BY DESIGN ENGINEER

Kevin Bresnahan, P.E.  
Civil Engineer  
Land Development  
Design & Consulting  
3031 RIDGE CREEK DRIVE  
FALLBROOK CA 92028  
(951) 532-6371  
KEFallbrook@yahoo.com



# County of San Diego

## Department of Environmental Health

Land and Water Quality  
5500 Overland Ave., Suite 210, San Diego, CA 92123 / (858) 565-5173  
[www.sdcdeh.org](http://www.sdcdeh.org)

ELFIN FOREST / HARMONY GROVE

**Owner:** County Of San Diego FIRE DEPT.      **Site:** 20223 ELFIN FOREST RD, ESCONDIDO  
**Address:** 20223 Elfin Forest      **Parcel:** 264-042-12-00  
 Escondido, CA 92029      **Certification:** GRANT DEED  
**Phone:**      **Record ID:** DEH2016-LOWTS-006471  
**Professional:** Kevin Bresnahan; DEH Engineer #59954

This project is **APPROVED** for the following:

*Commercial / Residential:* Commercial      *Gallons / Day:* 600

*Number of Bedrooms:* SEE CALCS. ON ATTACHED PAGE.

**THIS IS NOT A SEPTIC PERMIT**

You have until 11/28/2017 to obtain a septic permit. However, a site recheck may be required at any time to determine if site conditions have changed. Refer to the County of San Diego, Department of Environmental Health Local Agency Management Program for Onsite Wastewater Treatment Systems for all applicable setbacks and standard conditions of approval.

**ONSITE WASTEWATER SYSTEM REQUIREMENTS**

*Primary Septic Tank (in gallons):* 1500  
*Pump Tank (in gallons):* 1250  
*Supplemental Treatment:* See Below \*  
 \* *Supplemental Treatment Type:* AdvanTex AX Pod

*Soil Disposal System:*

**CONDITIONS TO BE COMPLETED PRIOR TO THE ISSUANCE OF A SEPTIC PERMIT**

1. VERIFICATION OF POTABLE WATER SOURCE
2. REVIEW OF GRADING BY **DEH STAFF** (CALL THE INSPECTION LINE AT (858) 694-2553 AFTER GRADING IS COMPLETED IF NOT SIGNED OFF BELOW)
3. REVIEW OF STAMPED BUILDING PLANS

*Potable Water Source:* Public Water Supply      *Water District:* Olivehain Municipal Water District  
*DEH Grading Inspection:*      *DEH Building Plan Review:*  
*DEH Pump System Review:*

**COMMENTS:** PROPOSED VOLUNTEER FIRE STATION, 5 permanent firefighters, 1 office staff, 10 trainees twice a week. See calculations attached.

Advantex AX20 Mode 3B ATU w/ 1500 gal fiberglass tank and mounted Orenco Pump Vault w/ 24" Filter Cartridge. Roth 1250 gallon pump chamber, both tanks require manufacturer- recommended anti-buoyancy straps.

Fencing or barrier required to prohibit vehicular traffic over drip field and treatment tanks.

1500 linear feet of GeoFlow drip tubing, 2' on center, 6" deep, emitters 1' on center.

100% reserve in area of Water Wise Garden. Revision of this area may be required to accommodate installation of reserve area.

**Approved By:** Desiree Hogervorst Desiree Hogervorst      **Date:** 11/28/2016

# **APPENDIX A**

## **PERCOLATION CERTIFICATION & APPLICATION CALCULATIONS**

COUNTY OF SAN DIEGO  
DEPARTMENT OF ENVIRONMENTAL HEALTH  
PERCOLATION TEST REPORT

DEH Control #: LAWS006471  
Date: Nov. 28, 2016  
Activity Code: E12

Assessor's Parcel #: APN 264-042-12 Map #: BY DEED Lot #: --  
Site Address: 20223 ELFIN FOREST ROAD Town: ELFIN FOREST Zip Code: 92029  
Owner: ELFIN FOREST/HARMONY GROVE FIRE DEPARTMENT Phone: \_\_\_\_\_  
Mailing Address: 20223 ELFIN FOREST ROAD, ELFIN FOREST CA 92029

Test Hole	Test Depth	Stabilized Rate	Test Hole	Test Depth	Stabilized Rate	Test Hole	Test Depth	Stabilized Rate	Average Perc Rate
A	12'	52							USE 60 MPI USE 0.200 GAL/SF/DAY
B	12'	40	NOTE: YOU HAVE ONE YEAR TO OBTAIN A SEPTIC TANK PERMIT. HOWEVER, A SITE RECHECK MAY BE REQUIRED ANY TIME TO DETERMINE IF SITE CONDITIONS HAVE CHANGED.						
C	12'	55							
D	12'	39							

TYPE OF SOIL: (clay, silt, sand, decomposed granite, etc.)  
Surface DESC. PER MAXWELL PERC IN COUNTY FILE  
1-3' ft. below surface SILTY SAND WITH CLAY TO DECOMPOSED GRANITE  
3-5' ft. below surface DECOMPOSED GRANITE WITH VARIABLE CALY  
5-8' ft. below surface DECOMPOSED GRANITE WITH VARIABLE CALY  
8-20' ft. below surface DECOMPOSED GRANITE WITH VARIABLE CALY  
Depth to Refusal: RANDOM ROCK Depth to Groundwater: OBSERVED AT 11'

RECOMMENDATIONS:

Septic Tank: \_\_\_\_\_ gal. Pump Chamber: \_\_\_\_\_ gal. Surge Tank: \_\_\_\_\_ gal.  
Leach Line Length: \_\_\_\_\_ ft. Seepage Pit Type: \_\_\_\_\_ Number of Pits: \_\_\_\_\_  
Trench Depth: \_\_\_\_\_ ft. Length: \_\_\_\_\_ ft. Width: \_\_\_\_\_ ft.  
Rock Below Pipe: \_\_\_\_\_ in. Total Depth: \_\_\_\_\_ ft. Cap Depth: \_\_\_\_\_ ft.  
Other: ADVANTECH AX20 ATU W 1250 GAL PUMP TANK AND 3000 SQFT DRIP DISPOSAL (6' DEPTH)  
Proposed Structure: PROPOSED FIRE STATION ADDITION ~ SEE CALCS FOR SIZING



WATER SUPPLY:

Source of Potable Water: OLIVENHAIN Well Permit Number: N/A

Registered CE, PE, Geologist, REHS: KEVIN BRESNAHAN RCE 59954  
Address: 3031 RIDGE CREEK DRIVE ~ FALLBROOK CA 92028 Phone: 951-532-6371 Date: 10/2016

FOR DEPARTMENTAL USE ONLY

APPROVED YES  NO  DATE 11/28/16 FINAL MAP REQUIREMENTS  NO   
Specialist: Asier Hagerwast  
Bldg. Plan Review: \_\_\_\_\_ DATE: \_\_\_\_\_  
Grading Review: \_\_\_\_\_ DATE: \_\_\_\_\_  
Water Analysis Results: \_\_\_\_\_ DATE: \_\_\_\_\_

## Septic System Design:

- Calculate Daily Flow (DF):

Given an anticipated usage the daily flow is calculated as

Typical Usage:                    5 Firefighters w/ 24 Hour Shift Daily    (75 GPD per F.F.)

1 Regular Office Staff 8 hours Daily    (20 GPD per Staff)

Training Twice Weekly additional 10 F.F.

For 8 hrs (total of 15 including on call F.F.) (20 GPD per Staff)

Flow values established per the UPC Private On-site Sewage "Appendix K."

Typical Daily Flow (TDF)            = 5 Fire Fighters. x 75gallons/per./day

Plus

1 Office Staff. x 20 gallons/person/day

**TDF = 395 Gallons Per Day**

Peak Daily Flow (PDF)            = 15 Fire Fighters. x 75 gallons/person/day

Plus

1 Office Staff. x 20gallons/person/day

Plus

10 Trainees x 20 gallons/person/day

**PDF = 595 Gallons Per Day**

Average Daily Flow (ADF)

= Typ. Daily Flow x (5 days/7days) +Peak Daily Flow (2days/7days) ADF = 452.14 Gallons Per Day

**Design ATU and Drip Disposal system for 600 GPD.**

- **Determine Soil Application**

Given observed perc rate of 55 mpi, conservatively utilize a 60 minute per inch percolation rate which corresponds to a rate of 0.20 gal./sq.ft./day for a design hydraulic loading rate requiring a total area of 500-sq.ft./100 gallons/day of disposal area. This conservative percolation rate allows for manipulation of the manufactures spreadsheet to provide a design that utilizes all the available area in the front yard. It is felt the additional drip line expense is minimal and will provide for a long term maintenance free distribution system.

Total square feet of disposal area= (daily flow)/(design hydraulic loading rate) Total square feet of disposal area= (600)/(0.200 gal./sq.ft./day)=3000 sq.ft. Use 3000 s.f. as a minimum allowing for calculated use.

- **Wasteflow Dripline Parameters**

Utilize 1500 l.f. Wasteflow PC 1 gph Dripline, Place 24" on center,  
Place emitters 12" on center along length of tubing,  
Bury dripline 6" below ground,

**TABLE K-2**  
Capacity of Septic Tanks\*

Single-Family Dwellings – Number of Bedrooms	Multiple Dwelling Units or Apartments – One Bedroom Each	Other Uses: Maximum Fixture Units Served per Table 7-3	Minimum Septic Tank Capacity in	
			Gallons	(Liters)
1 or 2		15	750	(2,838)
3		20	1,000	(3,785)
4	2 units	25	1,200	(4,542)
5 or 6	3	33	1,500	(5,678)
	4	45	2,000	(7,570)
	5	55	2,250	(8,516)
	6	60	2,500	(9,463)
	7	70	2,750	(10,409)
	8	80	3,000	(11,355)
	9	90	3,250	(12,301)
	10	100	3,500	(13,248)

\*Note:

Extra bedroom, 150 gallons (568 liters) each.  
 Extra dwelling units over 10,250 gallons (946 liters) each.  
 Extra fixture units over 100,25 gallons (95 liters) per fixture unit.

Septic tank sizes in this table include sludge storage capacity and the connection of domestic food waste disposal units without further volume increase.

**TABLE K-3**  
Estimated Waste/Sewage Flow Rates

Because of the many variables encountered, it is not possible to set absolute values for waste/sewage flow rates for all situations. The designer should evaluate each situation and, if figures in this table need modification, they should be made with the concurrence of the Authority Having Jurisdiction.

Type of Occupancy	Gallons (liters) Per Day
1. Airports	15 (56.8) per employee 5 (18.9) per passenger
2. Auto washers .....	Check with equipment manufacturer
3. Bowling alleys (snack bar only) .....	75 (283.9) per lane
4. Camps:	
Campground with central comfort station.....	35 (132.5) per person
Campground with flush toilets, no showers.....	25 (94.6) per person
Day camps (no meals served) .....	15 (56.8) per person
Summer and seasonal .....	50 (189.3) per person
5. Churches (Sanctuary) .....	5 (18.9) per seat
with kitchen waste .....	7 (26.5) per seat
6. Dance halls .....	5 (18.9) per person
7. Factories	
No showers.....	25 (94.6) per employee
With showers.....	35 (132.5) per employee
Cafeteria, add .....	5 (18.9) per employee
8. Hospitals .....	250 (946.3) per bed
Kitchen waste only .....	25 (94.6) per bed
Laundry waste only .....	40 (151.4) per bed
9. Hotels (no kitchen waste) .....	60 (227.1) per bed (2 person)

TABLE K-3 (Continued)

Type of Occupancy	Gallons (liters) Per Day
10. Institutions (Resident) .....	.75 (283.9) per person
Nursing home .....	125 (473.1) per person
Rest home .....	125 (473.1) per person
11. Laundries, self-service	
(minimum 10 hours per day) .....	50 (189.3) per wash cycle
Commercial .....	Per manufacturer's specifications
12. Motel .....	50 (189.3) per bed space
with kitchen .....	60 (227.1) per bed space
13. Offices .....	.20 (75.7) per employee
14. Parks, mobile homes .....	.250 (946.3) per space
picnic parks (toilets only) .....	.20 (75.7) per parking space
recreational vehicles –	
without water hook-up .....	.75 (283.9) per space
with water and sewer hook-up .....	100 (378.5) per space
15. Restaurants – cafeterias .....	.20 (75.7) per employee
toilet .....	.7 (26.5) per customer
kitchen waste .....	.6 (22.7) per meal
add for garbage disposal .....	.1 (3.8) per meal
add for cocktail lounge .....	.2 (7.6) per customer
kitchen waste – Disposable service .....	.2 (7.6) per meal
16. Schools – Staff and office .....	.20 (75.7) per person
Elementary students .....	.15 (56.8) per person
Intermediate and high .....	.20 (75.7) per student
with gym and showers, add .....	.5 (18.9) per student
with cafeteria, add .....	.3 (11.4) per student
Boarding, total waste .....	100 (378.5) per person
17. Service station, toilets .....	1000 (3785) for 1st bay
	500 (1892.5) for each additional bay
18. Stores .....	.20 (75.7) per employee
public restrooms, add .....	.1 per 10 sq. ft. (4.1/m <sup>2</sup> ) of floor space
19. Swimming pools, public .....	10 (37.9) per person
20. Theaters, auditoriums .....	.5 (18.9) per seat
drive-in .....	10 (37.9) per space

(a) **Recommended Design Criteria.** Sewage disposal systems sized using the estimated waste/sewage flow rates should be calculated as follows:

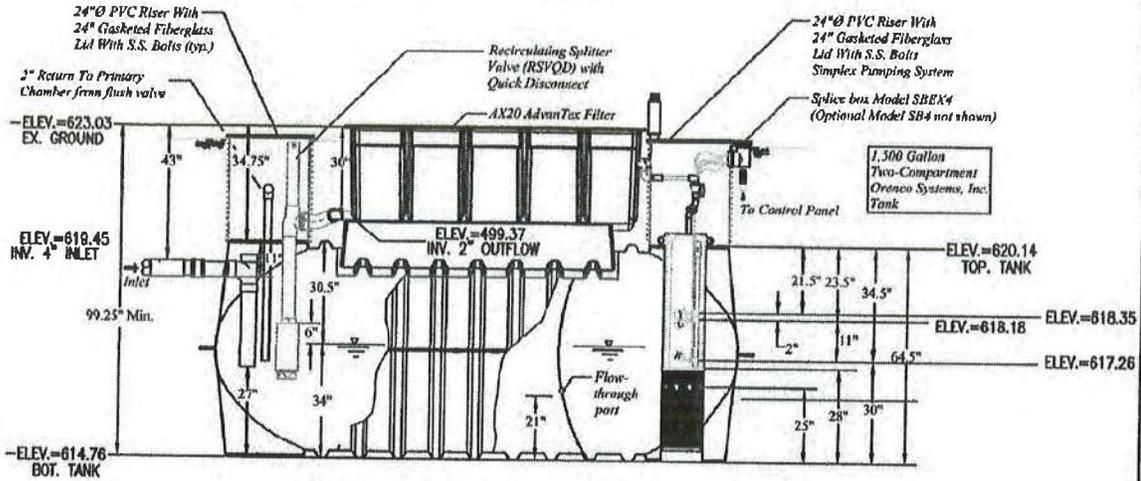
- (1) Waste/sewage flow, up to 1,500 gallons/day (5,677.5 L/day)  
Flow x 1.5 = septic tank size
- (2) Waste/sewage flow, over 1,500 gallons/day (5,677.5 L/day)  
Flow x 0.75 + 1,125 = septic tank size
- (3) Secondary system shall be sized for total flow per 24 hours.

(b) Also see Section K 2 of this appendix.

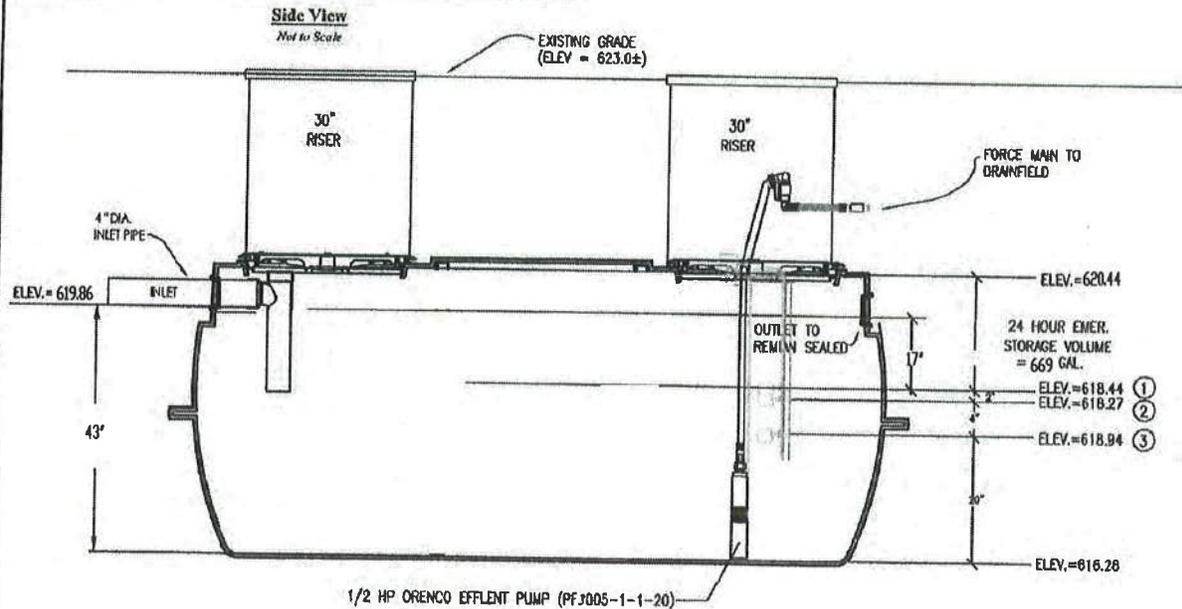
# AdvanTex AX20 Mode 3B w/Fiberglass Tank (Modified)

SPECIFICATIONS FOR A 3 BEDROOM HOME UTILIZING A 1500 GALLON TANK			
FLOAT SETTINGS			
FLOAT	DISTANCE FROM TOP OF TANK (IN.)	LIQUID DEPTH (IN.)	GALLONS IN TANK
HIGH LEVEL ALARM (Y)	21.5"	43"	1305
OVERRIDE TIMER ON/OFF (G)	23.5"	41"	1234
LOW LEVEL ALARM/O (W)	34.5"	30"	823
INTERVAL VOLUMES			
INTERVAL	DISTANCE FROM TOP OF TANK (IN.)	LIQUID DEPTH (IN.)	GALLONS IN TANK
NORMAL LOW LIQUID LEVEL	30.5"	34"	977
SURGE VOLUME	30.5-23.5"	34"-41"	257
EMERGENCY STORAGE	0.5"-21.5"	43"-64"	493

Float Functions	
Y	High Level Alarm
G	Override Timer ON/OFF
W	LA/O
B	Pump On
R	Pump Off



## Pump Basin w/ Tank



Dosing Calc:  
 dose volume = (600 gal/day) / (12 dose/day) = 50 gal/dose  
 Tank Capacity = 1343 gal/43" = 31 gal/inch  
 1 dose = approximately 2.0 inches

- ① HIGH LEVEL ALARM
- ② REDUNDANT ON/OFF
- ③ LOW LEVEL ALARM

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Received

NOV 07

County of San Diego  
Dept. of Environmental Health  
Land & Water Quality Div.

# SEPTIC LAYOUT FOR: ELFIN FOREST/HARMONY GROVE VOLUNTEER FIRE DEPT.

SHEET 2

DEP 2016-1015-006471

APPLICANT:  
ELFIN FOREST/HARMONY GROVE  
VOLUNTEER FIRE DEPT.  
20223 ELFIN FOREST ROAD  
ELFIN FOREST CA 92029  
PH: 760-744-2186

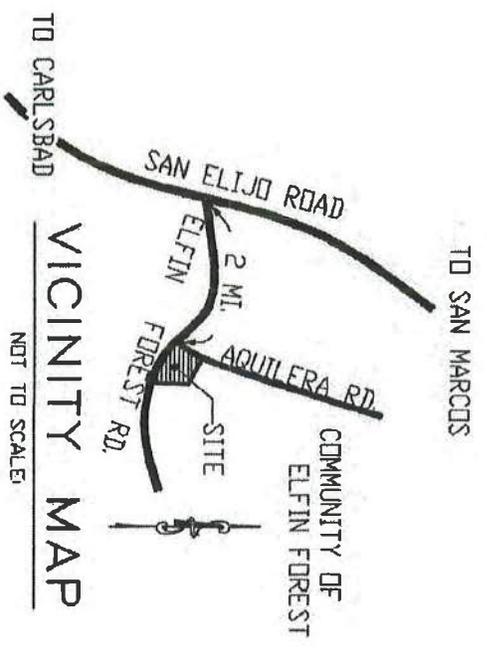
OWNER:  
COUNTY OF SAN DIEGO  
20223 ELFIN FOREST ROAD  
ELFIN FOREST CA 92029

SITE DESC.  
2.01 ACRES BY GRANT DEED D0C223849REC69 IN NW/4 OF NE/4 SEC 3-13-3W.  
20223 ELFIN FOREST ROAD, ELFIN FOREST CA 92029  
APN 264-042-12-00

PROPOSED USE:  
VOLUNTEER FIRE STATION  
-EXISTING FACILITY TO BE REMODELED TO A NON-HABITABLE SPACE WITH BATHROOM TO REMAIN.  
-NEW 5 MAN FIRE STATION W/ 1 ADMIN STAFF. STATION  
-SEWAGE DISPOSAL PER ADVANTEX AX-20 ALTERNATIVE TREATMENT UNIT WITH PRESSURE FLOW GEORGRID DISPOSAL FIELD.  
SOURCE OF DRINKING WATER:  
OLIVENHAIN MUNICIPAL WATER DISTRICT

INDEX:

COVER SHEET	SHEET 1
OVERALL PLAN VIEW	SHEET 2
DESIGN DETAIL	SHEET 3
TANK/PUMP CROSS SECTIONS	SHEET 4
PERCOLATION RATES	APPENDIX A
& APPLICATION CALCULATIONS	APPENDIX B
DISPOSAL FIELD PUMP HEAD & PUMP TANK SIZING CALCULATIONS	APPENDIX C
PARTS SPECIFICATIONS	APPENDIX D
NOTES	



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# **APPENDIX B**

## **DISPOSAL FIELD PUMP HEAD CALCULATIONS**

## FIELD FLOW

Job Description:	ELFIN FOREST FIRE
Contact:	ELFIN FOREST FIRE
Prepared by:	KEVIN BRESNAHAN PE
Date:	1-Nov-16

Please fill in the shaded areas and drop down menus:  
This spreadsheet is a guide for small systems with residential waste & is not a complete

### Worksheet 1- Field Flow

#### Total field

Total Quantity of effluent to be disposed per day	Total	600	gallons / day
Hydraulic loading rate	Hydraulic loading rate	0.2	gallons / sq.ft. / day
Minimum Dispersal Field Area		3,000	square ft.
Total Dispersal Field Area	Total Dispersal Field Area	1,500	square ft.

#### Flow per zone

Number of Zones		1	zone(s)
Dispersal area per zone	Dispersal area per zone	1,500	square ft.
Choose line spacing between WASTEFLOW lines	Choose line spacing between WASTEFLOW lines	2	ft.
Choose emitter spacing between WASTEFLOW emitters	Choose emitter spacing between WASTEFLOW emitters	2	ft.
Total linear ft. per zone (minimum required)	Total linear ft. per zone (minimum required)	750	ft. per zone
Total number of emitters per zone	Total number of emitters per zone	375	emitters per zone
Select Wasteflow dripline (16mm)	Select Wasteflow dripline (16mm)	Wasteflow PC - 1 gph	dripline
Pressure at the beginning of the dripfield	Pressure at the beginning of the dripfield	30	psi
Feet of Head at the beginning of the dripfield	Feet of Head at the beginning of the dripfield	69.3	ft.
What is the flow rate per emitter in gph?	What is the flow rate per emitter in gph?	1.02	gph
Dose flow per zone	Dose flow per zone	6.38	gpm

Note: A few States or Counties require additional flow for flushing. Please check your local regulations.  
Flush velocity calculation below is for PC dripline. Classic dripline requires less flow to flush than PC.

Please refer to Geoflow's spreadsheet "Design Flow and Flush Curves" at [www.geoflow.com](http://www.geoflow.com) or call 800-645-6456

If required, choose flush velocity	If required, choose flush velocity	2	ft/sec
How many lines of WASTEFLOW per zone?	How many lines of WASTEFLOW per zone?	12	lines
Fill in the actual length of longest dripline lateral	Fill in the actual length of longest dripline lateral	125	ft.
Flush flow required at the end of each dripline	Flush flow required at the end of each dripline	1.48	gpm
Total Flow required to achieve flushing velocity	Total Flow required to achieve flushing velocity	17.76	gpm
Total Flow per zone- worst case scenario	Total Flow per zone- worst case scenario	24.14	gpm

#### Select Filters and zone valves

Select Filter Type	BioDisc Filter	
Recommended Filter (item no.)	BioDisc Filter-150	1.5in < 30 gpm
Select Zone Valve Type	Electric Solenoid	
Recommended Zone Valve (item no.)	0	0

#### Dosing

Number of doses per day / zone:	Number of doses per day / zone:	12	doses
Timer ON. Pump run time per dose/zone:	Timer ON. Pump run time per dose/zone:	7.51	mins:secs
Timer OFF. Pump off time between doses	Timer OFF. Pump off time between doses	1:52	hrs:mins
Per Zone - Pump run time per day/zone:	Per Zone - Pump run time per day/zone:	1:34	hrs:mins
All Zones - Number of doses per day / all zones	All Zones - Number of doses per day / all zones	12	doses / day

## PUMP SIZING

Job Description:	ELFIN FOREST FIRE
Contact:	ELFIN FOREST FIRE
Prepared by:	KEVIN BRESNAHAN PE
Date:	11/1/2016

Please fill in the shaded areas and drop down menus:

This spreadsheet is a guide for small systems with residential waste & is not a complete design. Pressure losses may be grossly overstated, particularly if designing with WASTEFLOW. The letters on the diagram(right) match the letters in section 2 below.

### Worksheet - Pump Sizing

#### Section 1 - Summary from Worksheet 1

Flow required to dose field	6.38	gpm
Flow required to flush field	17.76	gpm
Flow required to dose & flush field	24.14	gpm
Filter	BioDisc Filter-150	
No. of Zones	1	zones
Zone valve	-	
Dripline	Wasteflow PC - 1 gph	
Dripline longest lateral	125.00	ft.

Section 2	Ft of head	Pressure
<b>A. Flush line - Losses through return lineA. Flush</b>		
Select Pipe from dropdown menu	PVC schedule 40	
Select Flush Line Diameter	1-1/4" inch	
Length of return line	185 ft.	
Equivalent length of fittings	46 ft.	
Elevation change. (if downhill enter 0)	0 ft.	
Pressure loss in 100 ft of pipe	4.80 ft.	2.08 psi
<b>Total pressure loss from end of dripline to return tank</b>	<b>11.1 ft.</b>	<b>4.80 psi</b>
<b>B. Dripline - Losses through Wasteflow driplineB. Dripline - Losses through Wasteflow dripline</b>		
Length of longest dripline lateral	23 ft.	
Minimum dosing pressure required at end of dripline	23.10 ft.	10.00 psi
Loss through dripline during flushing	4.13 ft.	1.79 psi
<b>Total minimum required dripline pressure</b>	<b>27.23 ft.</b>	<b>11.79 psi</b>
<b>A+B. Minimum Pressure required at beginning of dripfieldA+B. Minimum Pressure required at beginning of dripfield</b>		
<b>CALCULATED</b> pressure required at beginning of dripfield	<b>38.33 ft.</b>	<b>16.59 psi</b>
<b>SPECIFIED</b> pressure at beginning of dripfield (from worksheet)	<b>69.3 ft.</b>	<b>30.00 psi</b>
Great! SPECIFIED Pressure is greater than CALCULATED Pressure requirement. Go to next step		
<b>C. Drip components - Losses through headworks</b>		
Filter	11.6 ft.	5.00 psi
Zone valve pressure loss (not in diagram)	- ft.	- psi
Flow meter pressure loss (not in diagram)	- ft.	- psi
Other pressure losses	- ft.	- psi
<b>Total loss through drip components</b>	<b>11.55 ft.</b>	<b>5.00 psi</b>
<b>D. Supply line - Minimum Pressure head required to get from pump tank to top of dripfield</b>		
Select Pipe from dropdown menu	PVC schedule 40	
Select Supply line diameter	1-1/4" inch	
Length of supply line	12 ft.	
Equivalent length of fittings	3 ft.	
Height from pump to tank outlet	5 ft.	
Elevation change. (if downhill enter 0)	0 ft.	
Pressure loss/gain in 100 ft. of pipe	8.48 ft.	3.67 psi
<b>Total gain or loss from pump to field</b>	<b>6.3 ft.</b>	<b>2.71 psi</b>
<b>Total dynamic head</b>	<b>87.1 ft.</b>	<b>37.71 psi</b>
<b>Pump capacity *</b>		
- Field Flush Flow	24.1 gpm	37.71 psi
- Field Dose Flow	6.4 gpm	
- Filter Flush Flow	- gpm	- psi
<b>Pump Model Number</b>		
<b>Voltz / Hp / phase</b>	plot	

\* Note: Pump capacity flow assumes flow in dripline does not change during a dose cycle. With Wasteflow ClearFlow, the flow in the dripline will change during a dose cycle. For more accurate flows please see Geoflow's Flushing worksheet.

If you need assistance designing for this additional flow, please

- See Geoflow flushing worksheet or
- Contact Geoflow at 800-828-3388.

**AX20 Timer Settings Calculations:**  
 (see attached sheet for manufacturers notes on timer settings)

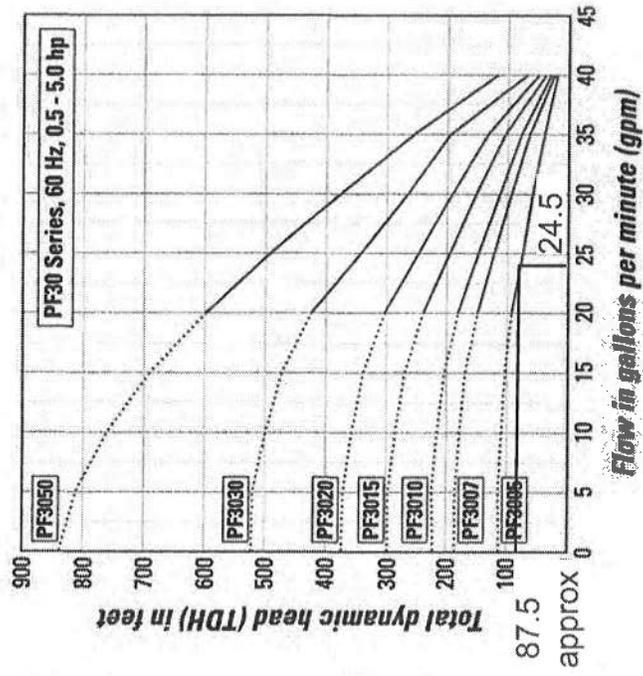
**Design for 600 GPD**

Parameters:	Values:	Notes:
$Q_i$ Actual Daily Flow	600 gpd	
$R_b$ Return Circulation Ratio	3:1	$600 \times (3+1) = 2400 < 3000$
$R_f$ Filter Recirculation Ratio	4:1	
$Q_d$ Actual Pump Dose Rate	30 gpm	Nominal 30gpm for specified high head pump model no. P300511
$T_d$ Pump On Cycle Time	0.50 minutes	----
$T_r$ Pump Off Cycle Time	11.5 minutes	----

$$T_r = \left[ \frac{1440 \times T_d \times Q_d}{(R_b + 1) \times Q_i} \right] - T_d = \left[ \frac{1440 \times 0.50 \times 30}{(3+1) \times 600} \right] - .50 = 8.5 \text{ minutes}$$

Cycle Time	9.0 minutes	less than 20 minutes, OK
Pumps cycles per day	160 cycles	less than 300 minutes, OK
Gallons per Cycle	15 gallons	0.22 gallons per orifice

Note: These parameters assume a specific daily usage and pump performance. Based on actual usage, the cycle times may need to be reevaluated to achieve optimal performance. The installer and/or maintenance provider shall contact the engineer to discuss any changes to the timer settings.



# **APPENDIX C**

## **PARTS SPECIFICATIONS**

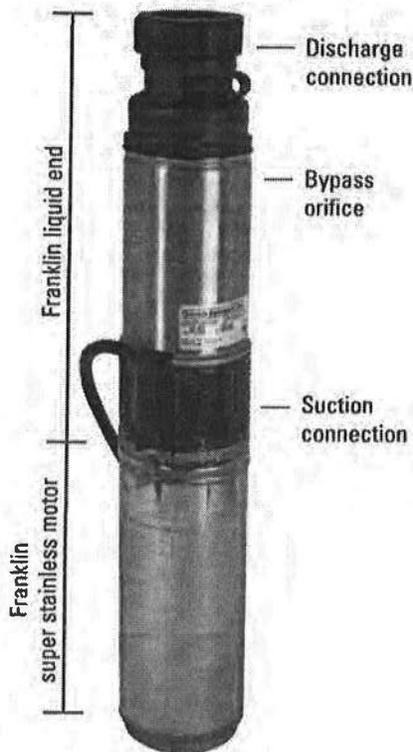
# PF Series 4" (100 mm) Submersible Effluent Pumps



## Applications

Our 4" (100 mm) Submersible Effluent Pumps are designed to transport screened effluent (with low TSS counts) from septic tanks or separate dosing tanks. All our pumps are constructed of lightweight, corrosion-resistant stainless steel and engineered plastics; all are field-serviceable and repairable with common tools; and all 60-Hz PF Series models are CSA certified to the U.S. and Canadian safety standards for effluent pumps, meeting UL requirements.

Oreco's Effluent Pumps are used in a variety of applications, including pressurized drainfields, packed bed filters, mounds, aerobic units, effluent irrigation, effluent sewers, wetlands, lagoons, and more. These pumps are designed to be used with a Biotube® pump vault or after a secondary treatment system.



## Features/Specifications

To specify this pump for your installation, require the following:

- Minimum 24-hour run-dry capability with no deterioration in pump life or performance\*
- 1/8-inch (3-mm) bypass orifice (patent pending) to ensure flow recirculation for motor cooling and to prevent air bind
- Liquid end repair kits available for better long-term cost of ownership
- TRI-SEAL™ floating impeller design on 10, 15, 20, and 30 gpm (0.6, 1.3, and 1.9 L/sec) models; floating stack design on 50 and 75 gpm (3.2 and 4.7 L/sec) models
- Super stainless Franklin Electric motor, rated for continuous use and frequent cycling
- Type SOOW 600-V motor cable (suitable for Class I, Division 1 and Division 2 applications)
- Five-year warranty on pump or retrofit liquid end from date of manufacture against defects in materials or workmanship  
\* Not applicable for 5-hp (3.73 kW) models

## Standard Models

See specifications chart, pages 2-3, for a list of standard pumps. For a complete list of available pumps, call Oreco.

## Nomenclature

PF					
					Cord length, ft (m): Blank = 10 (3)    20 <sup>1</sup> = 20 (6) 30 = 30 (9)    50 = 50 (15)
					Voltage, nameplate: 1 = 115 <sup>2</sup> 200 = 200 2 = 230 <sup>2</sup> 4 = 460
					Frequency: 1 = single-phase 60 Hz    3 = three-phase 60 Hz 5 = single-phase 50 Hz
					Horsepower (kW): 03 = 1/4 hp (0.25)    05 = 1/2 hp (0.37) 07 = 3/4 hp (0.56)    10 = 1 hp (0.75) 15 = 1-1/2 hp (1.11)    20 = 2 hp (1.50) 30 = 3 hp (2.24)    50 = 5 hp (3.73)
					Nominal flow, gpm (L/sec): 10 = 10 (0.6)    15 = 15 (1.0) 20 = 20 (1.3)    30 = 30 (1.9) 50 = 50 (3.2)    75 = 75 (4.7)

Pump (PF Series)

<sup>1</sup> Note: 20-foot cords are available only for single-phase pumps through 1-1/2 hp

<sup>2</sup> 1/2-hp (0.37kW) only

<sup>3</sup> 220 volts for 50 Hz pumps