



**River Pines Public Utility District**



**REGULAR MINUTES**

**Wednesday, May 15, 2019**

**ACTION MINUTES**

**1. CALL TO ORDER:** The meeting was called to order by Chairman Raymond at 6:00 p.m.

**2. ROLL CALL:**

Director Roscoe Raymond  
Director Anita Ebbinghausen  
Director Patrick Henry  
Director Richard Miller  
Director Karla Christensen

Candi Bingham, General Manager  
Gisele Wurzbarger, Board Clerk -Via Phone

**3. PLEDGE OF ALLEGIANCE:** Chairman Raymond led the Pledge of Allegiance.

**4. AGENDA:**

**Motion by Board Member Henry, seconded by Board Member Miller, and carried by a 5 to 0 vote to approve the Regular Agenda dated May 15, 2019 as provided. Motion passed by the following vote:**

**AYES: Christensen, Ebbinghausen, Henry, Miller, Raymond**  
**NOES: None**  
**ABSTAIN: None**  
**ABSENT: None**

**5. PUBLIC COMMENT FOR MATTERS NOT ON THE AGENDA:**

None.

**6. MINUTES: Discussion / Approval.**

A. April 17, 2019 Regular Meeting.

**Motion by Board Member Miller, seconded by Board Member Christensen, and carried by a 5 to 0 vote to approve the Minutes dated April 17, 2019 as presented. Motion passed by the following vote:**

**AYES: Christensen, Ebbinghausen, Henry, Miller, Raymond**  
**NOES: None**  
**ABSTAIN: None**  
**ABSENT: None**

**7. CONSENT ITEMS:**

- a. Monthly Financial Statements - Period Ending April 30, 2019.
- b. Expenditure Report - Submitted Check Approval through April 30, 2019.

Chairman Raymond opened the public discussion. Hearing no comments from the public, Chairman Raymond closed the public discussion.

**Motion by Board Member Miller, seconded by Chairman Raymond, and carried by a 5 to 0 vote to approve the Consent Items - Period Ending April 30, 2019. Motion passed by the following vote:**

**AYES: Christensen, Ebbinghausen, Henry, Miller, Raymond**  
**NOES: None**  
**ABSTAIN: None**  
**ABSENT: None**

**8. MONTHLY OPERATIONS REPORT: Discussion.** Any matter requiring action will be placed on an upcoming agenda for consideration.

**A. Monthly Operations Report.**

The report included updates from AWA staff, construction, wastewater and water – see report for complete details for Regulatory Compliance Specialist, Wastewater, Water, Distribution and Electrical.

April 1 thru April 30, 2019 Water Production/Sold Information:  
Well 2 - 545,700 gallons Total Produced - 1,000,958 gallons  
Well 3R - 420,500 gallons Total Sold - 602,672 gallons  
Well 6R - 34,758 gallons Unaccounted Loss - 40%

April 1 thru April 30, 2019 Wastewater Production:  
Influent flow: 1,235,100 gallons Effluent 866,100 gallons

Chairman Raymond opened the public discussion. Hearing no comments from the public, Chairman Raymond closed the public discussion.

**B. Monthly General Manager Report.**

The Monthly General Manager Report included updates from the General Manager – see report for complete details.

General Manager Bingham provided the written recap on the Prevailing Wage Workshop she attended April 16. The recap outlines the pertinent information discussed with regarding to State and Federal prevailing wage penalties as it applies to the District’s contracts and future projects.

General Manager Bingham reported she would be at the office May 15 through May 30 for District business. The 28 through 30 she will be in Sacramento for District business completing deposition with legal counsel.

Chairman Raymond opened the public discussion. Hearing no comments from the public, Chairman Raymond closed the public discussion.

**9. BOARD MATTERS: Discussion / Action / Direction to Staff.**



a. **Emergency Phone Tree – to Notify Customer of Water Issues and Emergencies.** Discussion/Action. General Manager Bingham reported at the last meeting the Board requested staff research an emergency automated call tree notification services for sending messages to the District’s customers regarding emergency alerts, water and wastewater issues, customer reminders, and general District announcements. These messages could be sent on land lines, mobile phones and emails. She provided information from two companies: Call-Center-Tech and CallFire.

Board Clerk Wurzburger reported did not heard back from Liberty Utilities regarding the program they use to notify their customers regarding a serious power outage using this type of system.

Chairman Raymond opened the public discussion. Hearing no comments from the public, Chairman Raymond closed the public discussion.

**Motion by Chairman Raymond, seconded by Board Member Miller, and carried by a 5 to 0 vote to approve the CallFire Voice Broadcast Lite in the amount \$99.00 per month. Motion passed by the following vote:**

<b>AYES:</b>	<b>Christensen, Ebbinghausen, Henry, Miller, Raymond</b>
<b>NOES:</b>	<b>None</b>
<b>ABSTAIN:</b>	<b>None</b>
<b>ABSENT:</b>	<b>None</b>

b. **Graveling Monitoring Well Access Update.** Discussion/Action. For the record no written report was submitted. General Manager Bingham reported drillers confirmed they could access the Well Monitoring site through the sewer ponds The District does not need to access adjacent property therefor there would be no gravel expense.

Chairman Raymond opened the public discussion. Hearing no comments from the public, Chairman Raymond closed the public discussion.

No action taken.

c. **Award Bid for Monitoring Wells.** Discussion/Action. For the record no written report was submitted. General Manager Bingham reported five bid packets were mailed out for the Monitoring Wells for no later than June 30, 2019 installation. The pre-bid walkthrough was May 1 and the bid packets are due May 15. Pat Dunn, NV5 met with three drillers for the required “pre-bid” meeting. The District only received one bid from Cascade Drilling in the amount of \$114,450.

It was noted no other bids were received due to the Emigrant Trail access to the Monitoring Well site and there was not enough time left before the June 30<sup>th</sup> deadline to go back out to bid.

Chairman Raymond opened the public discussion. Member of the Public voice his concern the driller’s access and that only one bid was received. Hearing no further comments from the public, Chairman Raymond closed the public discussion.

Board Clerk Wurzburger noted for the record the Award of Bid must be approved by Resolution.

**Motion by Chairman Raymond, seconded by Board Member Miller, and carried by a 5 to 0 vote to approve Resolution 2019-02 to Adopting:**



1. **Award of Bid to Cascade Drilling for the Installation of Three Monitoring Wells in the amount of \$114,450.**
2. **Authorize Transfer of LAIF Sewer Funds in the amount of \$114,450 to cover Monitoring Wells project.**

**Motion passed by the following vote:**

**AYES: Christensen, Ebbinghausen, Henry, Miller, Raymond**  
**NOES: None**  
**ABSTAIN: None**  
**ABSENT: None**

**d. Reimburse General Manager Travel Cost for District Business. Discussion/Action.**

General Manger Bingham reported due to the legal case with the District, she is required to meet with legal counsel May 28 through 30 to complete deposition with legal counsel. She and legal counsel tried to get the meeting scheduled during her monthly schedule but opposing counsel could not meet on those dates. To accommodate the District and opposing counsel staff had to change the flight, book longer hotel stay and a rental car which were provided for approval.

General Manager Bingham stated because this matter was related to a legal case and cannot be discussed in open session, she would like to schedule a closed session on June 19 at 5:30 p.m. prior to the regular meeting to provide the Board with an update on the item.

Chairman Raymond opened the public discussion. Hearing no comments from the public, Chairman Raymond closed the public discussion.

**Motion by Board Member Henry, seconded by Vice-Chairman Ebbinghausen, and carried by a 4 to 1 vote to approve Total Cost for General Manager's Extra Expenses with Regards to District Business in the amount of \$708.89. Motion passed by the following vote:**

**AYES: Christensen, Ebbinghausen, Henry, Miller**  
**NOES: None**  
**ABSTAIN: Raymond**  
**ABSENT: None**

**e. Approve Resolution After-Hour Reconnection Fee Following Lock-Off. Discussion/Action.**

For the record no written report was submitted. General Manager Bingham reported at the April 17 meeting staff was directed to draft a Resolution for consideration and adoption approving an "after hour" service fee on the District's Rate Schedule in the amount of \$180.00 and note the reconnection fee of \$60.00 would be applied to the afterhours service fee.

Chairman Raymond opened the public discussion. Hearing no comments from the public, Chairman Raymond closed the public discussion.

**Motion by Chairman Raymond, seconded by Board Member Miller, and carried by a 5 to 0 vote to approve Resolution 2019-01 Adopting an After-Hour Reconnection fee to the River Pines Utility District Rate and Fee Schedule. Motion passed by the following vote:**

**AYES: Christensen, Ebbinghausen, Henry, Miller, Raymond**



**NOES:** None  
**ABSTAIN:** None  
**ABSENT:** None

f. **RPR and ACRA Request Use of Town Hall Kids Summer Camp.** Discussion/Action.  
General Manager Bingham reported Tracy Roll has submitted a request from RPR and ACRA for the use of the Town Hall July 1 through 12 (except for July 4), Monday through Friday 10:00 a.m. to 2:00 p.m. for the kid's summer camp.

Chairman Raymond opened the public discussion. Hearing no comments from the public, Chairman Raymond closed the public discussion.

**Motion by Board Member Henry, seconded by Board Member Miller, and carried by a 5 to 0 vote to approve RPR and ACRA's Request Use of Town Hall Kids Summer Camp July 1 through July 12. Motion passed by the following vote:**

**AYES:** Christensen, Ebbinghausen, Henry, Miller, Raymond  
**NOES:** None  
**ABSTAIN:** None  
**ABSENT:** None

**10. BOARD OF DIRECTORS COMMENTS/REPORTS:** Discussion Only.

A. Capital Improvements and general repairs necessary at the District. Continued Item.

Board Member Miller inquired if the Firehouse Electricity was still a pending Capital Improvement. Chairman Raymond stated this project was on hold at this time.

No action taken.

**11. COMMITTEE COMMENTS/REPORTS:** Continued Item.

- a. Solar Panel Committee. Discussion/Possible Action.
- b. Water Rights Committee. Discussion/Possible Action.

No action taken.

**12. FUTURE AGENDA TOPICS:**

- a. Closed Session at 5:30 p.m. prior to the regular meeting to provide the Board with an update on the legal case.
- b. Monitoring Well Drilling Update.
- c. Eco-Green Program Presentation.

**13. ADJOURNMENT:** The meeting adjourned at 7:02 p.m.

Respectively submitted,  
Gisele Wurzburger, Board Clerk



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**River Pines Public Utility District**  
**Profit & Loss by Class**  
 May 2019

	Sewer	Water	TOTAL
<b>Ordinary Income/Expense</b>			
<b>Income</b>			
<b>Base Fee Income</b>			
Maintenance Fees	437.08	437.07	874.15
Sewer	15,030.77	0.00	15,030.77
Voluntary Lock-Off	-92.50	-92.50	-185.00
Water	0.00	11,597.25	11,597.25
<b>Total Base Fee Income</b>	15,375.35	11,941.82	27,317.17
Town Hall Rental	10.00	10.00	20.00
<b>Variable Income</b>			
Late Fees	353.80	353.80	707.60
Reconnection Fee	0.00	180.00	180.00
Returned Check Fee	14.50	14.50	29.00
Service Connection Fee	32.86	32.89	65.75
Water - Usage	0.00	2,832.71	2,832.71
<b>Total Variable Income</b>	401.16	3,413.90	3,815.06
<b>Total Income</b>	15,786.51	15,365.72	31,152.23
<b>Gross Profit</b>	15,786.51	15,365.72	31,152.23
<b>Expense</b>			
<b>Bank Charges</b>			
60400 - Bank Service Charges	17.00	5.00	22.00
<b>Total Bank Charges</b>	17.00	5.00	22.00
<b>Board Members</b>			
Stipends	187.50	187.50	375.00
<b>Total Board Members</b>	187.50	187.50	375.00
<b>Contracted Expenses</b>			
Board Clerk	150.00	150.00	300.00
Manager	2,416.66	2,416.68	4,833.34
<b>Total Contracted Expenses</b>	2,566.66	2,566.68	5,133.34
<b>Sewer Expenses</b>			
Alarm Monitoring	700.00	0.00	700.00
Amador Water - After Hour Cover	247.00	0.00	247.00
Amador Water - Routine Service	1,901.57	0.00	1,901.57
Amador Water Agency-State Repor	44.31	0.00	44.31
Electricity - Sewer	2,395.07	0.00	2,395.07
Telephone - Sewer	114.76	0.00	114.76
<b>Total Sewer Expenses</b>	5,402.71	0.00	5,402.71
<b>Town Hall Expenses</b>			
Janitorial	60.00	60.00	120.00
<b>Total Town Hall Expenses</b>	60.00	60.00	120.00
<b>Water Expenses</b>			
Alarm Monitoring	0.00	300.00	300.00
Amador Water - After Hour Cover	0.00	494.00	494.00
Amador Water Agency-Electrical	0.00	207.44	207.44
Amador Water Agency-Equip. Use	0.00	227.50	227.50
Amador Water Agency-Meter Read	0.00	292.60	292.60
Amador Water Agency-Prev. Maint	0.00	927.63	927.63
Amador Water Agency - Customers	0.00	146.41	146.41
Amador Water Agency - Repairs	0.00	1,396.90	1,396.90
Electricity - Water	0.00	1,157.71	1,157.71
Parts/Supplies	0.00	56.81	56.81
Telephone - Water	0.00	131.50	131.50
Water Expenses - Other	0.00	1,111.28	1,111.28



**River Pines Public Utility District**  
**Profit & Loss by Class**  
**May 2019**

	<u>Sewer</u>	<u>Water</u>	<u>TOTAL</u>
Total Water Expenses	0.00	6,449.78	6,449.78
<b>64900 · Office Expenses</b>			
Postage/Shipping	82.50	82.50	165.00
Printing	57.11	57.11	114.22
Software	25.39	25.40	50.79
Supplies	118.50	118.50	237.00
Website Service	25.00	25.00	50.00
<b>Total 64900 · Office Expenses</b>	<u>308.50</u>	<u>308.51</u>	<u>617.01</u>
<b>66700 · Professional Fees</b>			
Legal Expenses	440.09	440.10	880.19
Security Service/Maintenance	140.00	140.00	280.00
<b>Total 66700 · Professional Fees</b>	<u>580.09</u>	<u>580.10</u>	<u>1,160.19</u>
<b>68600 · Utilities</b>			
Disposal	46.31	46.32	92.63
Electricity - Office	0.00	25.26	25.26
Electricity - Town Hall	25.26	0.00	25.26
68100 · Telephone - Office	30.45	30.46	60.91
<b>Total 68600 · Utilities</b>	<u>102.02</u>	<u>102.04</u>	<u>204.06</u>
<b>Total Expense</b>	<u>9,224.48</u>	<u>10,259.61</u>	<u>19,484.09</u>
<b>Net Ordinary Income</b>	6,562.03	5,106.11	11,668.14
<b>Other Income/Expense</b>			
Other Income			
Wireless Site Lease	250.00	250.00	500.00
<b>Total Other Income</b>	<u>250.00</u>	<u>250.00</u>	<u>500.00</u>
<b>Net Other Income</b>	<u>250.00</u>	<u>250.00</u>	<u>500.00</u>
<b>Net Income</b>	<u><u>6,812.03</u></u>	<u><u>5,356.11</u></u>	<u><u>12,168.14</u></u>



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# River Pines Public Utility District

## Account QuickReport-Board Meetings

As of May 31, 2019

Type	Date	Num	Name	Memo	Amount	Balance
<b>Bank Accounts</b>						
<b>EI Dorado Checking</b>						
Deposit	05/01/2019			Deposit	160.76	25,313.27
Deposit	05/01/2019			Deposit	206.50	25,313.27
Deposit	05/01/2019			Deposit	308.16	25,474.03
Deposit	05/02/2019			Deposit	309.90	25,988.69
Deposit	05/02/2019			Deposit	263.92	26,298.59
Check	05/02/2019	debit	Digital Deployment	Website Hosting	-50.00	26,562.51
Check	05/02/2019	eft	Google Services	District Emails	-35.80	26,512.51
Deposit	05/03/2019			Deposit	323.83	26,476.71
Deposit	05/07/2019			Deposit	794.06	26,800.54
Check	05/07/2019	eft	Adobe PDF	Software Subscription	-14.99	27,579.61
Check	05/07/2019	debit	Candi Bingham		-2,416.67	25,162.94
Deposit	05/08/2019			Deposit	450.38	25,613.32
Deposit	05/08/2019			Deposit	329.27	25,942.59
Deposit	05/08/2019			Deposit	150.00	26,092.59
Deposit	05/09/2019			Deposit	480.17	26,572.76
Deposit	05/10/2019			Deposit	316.95	26,889.71
Deposit	05/13/2019			Deposit	3,715.71	30,605.42
Deposit	05/13/2019			Deposit	181.27	30,786.69
Check	05/13/2019	debit	Delta Airlines	Legal Expense	-170.30	30,616.39
Deposit	05/14/2019			Deposit	584.13	31,200.52
Deposit	05/15/2019			Deposit	1,395.31	32,595.83
Check	05/15/2019	debit	PG&E - Officer/Town Hall	6898952032-2	-50.52	32,545.31
Check	05/15/2019	debit	PG&E - Sewer	8721806002-5	-2,395.07	30,150.24
Check	05/15/2019	debit	PG&E - Water 2	2458584137-2	-795.06	29,355.18
Check	05/15/2019	debit	PG&E - Water	3357284549-4	-362.65	28,992.53
Deposit	05/15/2019			Deposit	469.88	29,462.41
Deposit	05/15/2019			Deposit	241.12	29,703.53
Check	05/15/2019	eft	AT&T - Sewer	209 245-3984 701 9	-114.76	29,588.77
Deposit	05/15/2019			Deposit	4,779.50	34,368.27
Bill Pmt -Check	05/15/2019	13250	Aces Waste Services, Inc.	1175	-92.63	34,275.64
Bill Pmt -Check	05/15/2019	13251	Amador Water Agency	30018	-7,053.45	27,222.19
Bill Pmt -Check	05/15/2019	13252	Angelica Hernandez	Town Hall Cleaning - April 2019	-120.00	27,102.19
Bill Pmt -Check	05/15/2019	13253	Anita Ebbinghausen	Stipend - May 2019	-75.00	27,027.19
Bill Pmt -Check	05/15/2019	13254	AT&T - Water	209 245-4011 722 0	-131.50	26,895.69
Bill Pmt -Check	05/15/2019	13255	Brent Stewart, P.E.	SCADA	-1,000.00	25,895.69
Bill Pmt -Check	05/15/2019	13256	California Bank & Trust	1030264749	-890.00	25,005.69
Bill Pmt -Check	05/15/2019	13257	Gisele L. Wurzbarger	May 2019 Board Clerk	-300.00	24,705.69
Bill Pmt -Check	05/15/2019	13258	Karla Christensen	Stipend - May 2019	-75.00	24,630.69
Bill Pmt -Check	05/15/2019	13259	Mission IT Solutions	Camera Maintenance	-280.00	24,350.69
Bill Pmt -Check	05/15/2019	13260	Patrick Henry	Stipend - May 2019	-75.00	24,275.69
Bill Pmt -Check	05/15/2019	13261	Richard Miller	Stipend - May 2019	-75.00	24,200.69
Bill Pmt -Check	05/15/2019	13262	Rocky Raymond	Stipend - May 2019	-75.00	24,125.69
Bill Pmt -Check	05/15/2019	13263	Staples	Office Printer Drum Replacement	-237.00	23,888.69
Check	05/15/2019	debit	Candi Bingham		-2,416.67	21,472.02
Check	05/16/2019	1	Eldorado Savings Bank	Monitoring Well Project	115,000.00	136,472.02
Check	05/17/2019	eft	UPrinting.com	Wire Transfer Fee	-12.00	136,460.02
Check	05/17/2019	debit		Customer Magnets/Door Tags	-114.22	136,345.80



**River Pines Public Utility District**  
**Account QuickReport-Board Meetings**  
 As of May 31, 2019

Type	Date	Num	Name	Memo	Amount	Balance
Check	05/17/2019			District Legal Expenses - Reimburs...	-709.89	135,635.91
Deposit	05/17/2019	debit	Candi Bingham	Deposit	146.21	135,782.12
Transfer	05/17/2019			Funds Transfer - Monitoring Wells ...	-115,000.00	20,782.12
Check	05/20/2019			Stamp Rolls	-165.00	20,617.12
Deposit	05/20/2019	debit	USPS	Deposit	135.00	20,752.12
Deposit	05/21/2019			Deposit	7,052.03	27,804.15
Deposit	05/21/2019			Deposit	492.86	28,297.01
Deposit	05/22/2019			Deposit	314.59	28,611.60
Deposit	05/22/2019			Deposit	3,055.64	31,667.24
Check	05/23/2019	debit	Eldorado Savings Bank	Returned Check	-10.00	31,657.24
Invoice	05/23/2019	74407	Howard, Charles	Returned Check	-60.38	31,596.86
Invoice	05/23/2019	74407	Howard, Charles	Returned Check	-82.75	31,514.11
Invoice	05/23/2019	74407	Howard, Charles	Returned Check	-67.59	31,446.52
Check	05/28/2019	eft	RingCentral	Office Phone	-60.91	31,385.61
Deposit	05/28/2019			Deposit	492.94	31,878.55
Deposit	05/29/2019			Deposit	140.00	32,018.55
Deposit	05/31/2019			Deposit	171.07	32,189.62
Total EI Dorado Checking					6,876.35	32,189.62
Total Bank Accounts					6,876.35	32,189.62
<b>TOTAL</b>					<b>6,876.35</b>	<b>32,189.62</b>

## River Pines Dept. Report

May 1 - May 30, 2019

### **Water Production/Sold**

Well 2: 570,400 gallons

Total Produced: 945,445 gallons

Well 3R: 364,000 gallons

Total Sold: 729,283 gallons

Well 6R: 11,045 gallons

Unaccounted Loss: 23%

### **Regulatory Compliance Specialist-**

- Completed monthly reporting for water and wastewater. Including No Spill Report to CIWQS
- Completed Consumer Confidence Report and sent to General Manager to mail out and post.

### **Wastewater-**

- Influent flow 1,221,300 gallons. Effluent Discharged 605,700 gallons.
- Continue to maintain pond level and irrigate whenever possible.
- Continue to monitor collection system.
- Weed-eating and mowing in all areas of system

### **Water-**

- Completed all regulatory sampling.
- Staff continues to operate Wells 2 / 3R and 6R facilities
- Back Pressure valve was recalled. Replaced valve. New skid back online.

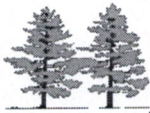
### **Distribution-**

- Routine flushing

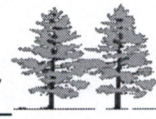
Prepared by: Andrea Hinton, Regulatory Specialist

Reviewed by: Rick Ferriera, Operations Manager





# RIVER PINES PUBLIC UTILITY DISTRICT



22900 Canyon Ave., PO BOX 70, River Pines, CA 95675  
Phone: (209) 245-6723 Fax: (209) 245-5710 Email: RPPUD@RPPUD.org

## AGENDA ITEM – 8B

### GENERAL MANAGER'S REPORT

**For the Month of: May/June 2019**

1. Cascade Drilling began work on Monitoring Wells on June 10<sup>th</sup>. Began with Well #3. Drilled 20 ft. and hit bedrock and rig broke down. Drilling resumed June 17<sup>th</sup>. NV5 Pat Dunn has been overseeing operations per Bid Packet specification requirements for Monitoring Wells. (See enclosed bid packet)
2. Property on Shenandoah Rd. had non-payment. Asked AWA to lock off. They could not lock off because meter was under 150lb steel plate. Asked them to fix so that meter could be locked off. AWA removed steel plate, put in meter box and filled. Asked previous operator to do complete this task in 2016. Never finished.
3. Had all Fire Extinguishers serviced.
4. New part came for Chlorine Analyzer. Back up and running with no issues to date.
5. GM will not be in office on the 20<sup>th</sup> or 21<sup>st</sup>. Will be in Sacramento on continued District legal business.
6. Ordered new customer information magnets and sent with May invoices along with River Pines cleanup flyer which were provided by the county
7. Mailed emergency notification permission forms with May invoices.
8. Went to Assessors Office and obtained updated parcel list. This allowed me to verify all properties correct owners and bill any new owners. New owners were discovered and billed. (Standby accounts).
9. Received information for Special District Election in November. There are two Board positions up for election. Anita Ebbinghausen and Rick Miller.
10. Weekly Bank Deposits
11. Monthly Service Billing
12. Monthly Late Notices
13. Monthly 48 Hour Notices
14. Updated Website
15. Agenda & Packets

Will be in the River Pines Office – July 17<sup>th</sup> through July 19<sup>th</sup>.

9a



May 17, 2019

Ms. Candi Bingham  
General Manager  
River Pines Public Utility District  
PO Box 70  
River Pines, CA 95675

Via Email

Re: Proposal for Hydrogeological and Drilling Services related to the installation of three wells per the Monitoring Well Installation and Sampling Plan (MWISP) and County permit

Dear Candi:

NV5 appreciates the opportunity to present this Proposal to River Pines Public Utility District (RPPUD) for professional services at your facility in Amador County, California. This proposal is based on the conditional approval of the MWISP by the RWQCB to install up to three monitoring wells (MWs) near the land application area and potentially one near the ponds. Extreme restrictions with regard to drilling access was referenced in the plan and in correspondence with the driller Regional Water Quality Control Board (RWQCB) correspondence.

This proposal is provided to you for the plan approval and acquire permits for the MWISP, per the following Scope of Services

**SCOPE OF SERVICES**

**Task 1 – Coordinate with RPPUD/AWA, Driller and County Permits**

As per the MWISP, NV5 will coordinate and assist in the first and second draft RFB, driller contracting and initiate work and finalize permit to construct three monitoring wells. Permitting assistance will be provided. Driller and owner need to sign.

**Task 2 – Oversight during Drilling and Monitoring Well Installation**

Under this task and as per the approved Monitoring Well Installation and Sampling Plan (MWISP), the three monitoring wells will be completed. NV5 staff will be on site to observe the hydrogeology and installation details for three monitoring wells to a



Ms. Candi Bingham

May 17, 2019

Page 2 of 3

depth ranging from 60 to 130 feet each, for a total of up to 390 feet in drilling footage. Refer to the MWISP for well construction details. We will coordinate with the County. County staff inspection will be requested. Additional details are provided in the MWISP, the attached driller RFB and driller response.

Deliverable for Task 2:

Construction details and boring logs of three monitoring wells with above ground completions.

**Task 3 – Well Development and Initial Monitoring Well Groundwater Sampling**

Per the MWISP, NV5, in conjunction with the drilling will develop the completed monitoring wells using a combination of air lifting, bailing, surge blocks and a submersible pump. The development process will be continued until a low turbidity (goal of 10 NTUs) is achieved and field parameters have reached stabilization. Once development is completed, a groundwater sample will be taken and analyzed for the monitoring parameters listed in Section 6 of the MWISP.

**Task 4 (Optional) – Monitoring Well Abandonment**

Based on the encountered geology or other factors, a test hole may not be considered suitable for monitoring well completion. These unsuitable test holes will be abandoned by pumping bentonite grout or cement slurry grout down hole using tremie pipe.

**Task 5 – Monitoring Well Installation and Completion Report (MWICR)**

After the monitoring well installation effort under Tasks 1 through 3 (with potential Task 4), the characterization and reporting effort will be completed.

Deliverable for Task 5:

One (1) draft and final copy of the Monitoring Well Installation and Completion Report containing all installation records and groundwater characterization for RPPUD and RWQCB review and approval.

**SCHEDULE**

Services described in Tasks 1 through 5 will be completed by July 2019, pending weather, access and drillers schedule.

**COMPENSATION**

NV5 proposes to furnish the services in Tasks 1 through 5 for an Estimated Professional Fee of \$15K based on 125 hours of staff labor. Permit and laboratory analytical cost are

Ms. Candi Bingham

May 17, 2019

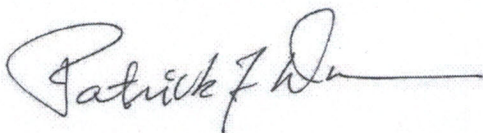
Page 3 of 3

not included. The professional fee is based on hourly billing rates and direct expenses. Direct costs and drilling sub-contractor will be charged at cost plus 10%. The hourly rates are as follows: Project Manager - \$155 hr, Senior Hydrogeologist - \$135 hr, Staff Scientist - \$100 hr, Field Technician - \$90 hr.

If this proposal meets your satisfaction, we will assist in developing a purchase order as in the past. We appreciate the opportunity to serve your environmental needs and look forward to working with you on this project. Please contact us if you have any questions or require clarification on any item.

Respectfully submitted,

**N|V|5**

A handwritten signature in black ink, appearing to read "Patrick F. Dunn", with a long horizontal line extending to the right.

Patrick F. Dunn, MS, PG, CHg  
Group Director  
PFD/



# Request for Bid

**From:** River Pines Public Utility District  
**Request for Bid:** River Pines Wastewater Treatment Plant, Amador County,  
California  
**Date:** April 16, 2019

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This Request for Bid (RFB) is for planned drilling activities at the River Pines Wastewater Treatment Plant (WWTP) located 0.5 miles west of the unincorporated community of River Pines (refer to Figure 1), which is approximately 9 miles northeast of the City of Plymouth in Amador County. Drilling activities are required by the Regional Water Quality Control Board (RWQCB) for ground water quality monitoring. NV5 prepared a Ground Water Monitoring Well Installation and Sampling Workplan, Revision 0 dated November 2017 (Work Plan), and a copy of the Work Plan is available electronically and attached.

The primary data objective and purpose of this planning and phased investigation effort is to design and complete a borehole investigation/monitoring well installation program that supports a monitoring network. This network will reflect water levels and water quality in background and downgradient directions. The project goal is an early ground water detection monitoring network with sufficient monitoring points to evaluate ground water flow direction and ground water quality.

The geology beneath the River Pines WWTP is comprised of granitic bedrock. Based on the Geologic Map of the Sacramento Quadrangle, 1981, the near surface geology is dominated by the granitic intrusive deposits alongside thin sequences of Mehrten and Valley Springs Formation to the southeast. Placer alluvium, approximately 35 feet in thickness, is present along the drainage located at the middle of the property. DWR boring logs in the vicinity are limited; however, for depth determinations, water well logs nearby confirmed the granitic bedrock setting to depth.

The drilling effort includes the drilling effort for three monitoring wells (MW-1 through MW-3) to build area wide coverage with upgradient or background wells as well as downgradient wells. Testhole depth will depend on the depth of first encountered ground water within a continuous monitorable unit plus 20 feet. Anticipated borehole depths range from 70 to 125 feet below ground surface (bgs). The site location is shown on Figure 1. Monitoring well locations are shown on Figure 2.

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Drilling will be completed in a phased approach, monitoring wells MW-1 and MW-3 will be drilled first and developed. Once these two wells are developed, the ground water flow direction will be confirmed and field parameters will be used to assess preliminary background ground water quality. This information will be used to place the remaining one monitoring well appropriately, as information warrants. Careful consideration of background water quality, not influenced by the present day WWTP, is a major data objective for the project.

### **Bid Item No. 1 – Mobilization and demobilization**

Mobilization and demobilization costs should be quoted as a **lump sum**.

NV5 will work with the driller to obtain the required County well drilling/destruction permits which will be paid for by the well owner. The mobilization fee should include costs for relocating between test hole sites and restoring each drilling site to pre-drilling conditions.

Materials must be approved by the Project Manager before mobilization.

### **Bid Item No. 2 – Test hole drilling**

A total of three test holes and a minimum of three monitoring wells are planned. Drilling depths will likely range from 70 to 125 feet bgs. For bidding purposes, total test hole drilling is estimated at a maximum of **370 feet**. The Work Plan requires that soil samples are collected a minimum of every 5 feet during test hole drilling. NV5 has determined that an air rotary drilling using an All-Terrain Access drilling rig is the preferred technique to achieve the project goals. The drilling contractor may suggest alternative drilling techniques including direct push techniques through alluvial sediment and weathered bedrock. Site visit can be completed if requested. However, alternatives must be able to achieve the project goals and must be approved by the NV5 Project Manager prior to mobilization. The anticipated test hole diameter is a minimum of eight inches; except if a direct push technique is being proposed. Down hole equipment shall be decontaminated between borings. Decontamination will be high pressure wash at a minimum between test holes.

The bid should be provided on a **per foot** basis. During test hole drilling, soil samples should be collected every 5 feet using and presented to the on-site geologist for logging. Soil samples should be set aside, stored securely and depth intervals clearly labeled. Drill cuttings are not expected to be contaminated but should be removed from the site for the wells drilled on the River Pines WWTP property. All cuttings will be disposed of onsite, as directed by the property owner.



### **Bid Item No. 3 – Monitoring Well Construction**

#### *Well Casing and Screen*

Once a boring has been advanced to final depth, screen placement will be based upon observed ground water levels and lithology. Monitoring wells will be constructed using 2-inch nominal diameter Schedule 40 PVC casing preferred. Well casing and screen shall meet the ASTM Standard D-1785 and thermoplastic casing and screen shall meet ASTM Standard D-480. Casing will be manufactured by Monoflex™, Certainteed™ or approved equivalent for small diameter direct push equipment. Refer to the Attachment for typical well casing specifications. The riser pipe and screen casings will be flush thread joints with O-rings. The bottom cap will be flush-thread jointed or slip cap secured with stainless steel screws. PVC glue will not be used to secure casing joints. The proposed well screen design is 0.010-inch or 0.020 inch machine slotted screen. Anticipated screen length is 10 to 15 feet based on encountered geology for each well.

Monitoring well centralizers, if deemed necessary, will be stainless steel and will be attached to the casing using stainless steel wraps. The pipe casing will be placed downhole in maximum 20 foot sections that will be screwed together to the determined depth. The top of the casing will be outfitted with a 'j'-plug or slip top that allows stabilization with atmospheric conditions within the well and to prevent well contamination. Refer to Figure 3 for Proposed Monitoring Well Detail.

#### *Filter Pack*

A sand pack envelope consisting of 10 x 20 or 2 x12 Silica Sand (or approved equivalent) will be placed opposite the screen section from the bottom to a minimum of two feet above the screen interval for 0.010 inch slot screen. Sand pack material will be placed via tremie pipe through the saturated portion of the borehole. Please refer to the attachment for filter pack requirements. Alternative filter pack may be used if approved by the NV5 Project Manager.

#### *Bentonite Seal*

At least three feet of bentonite chips will be used for well seals between the sand pack and cement grout. Bentonite seal will consist of sodium bentonite graded chips. Bentonite shall be a Bariod HolePlug™ 3/8" or approved equivalent. Refer to the Attachment for bentonite seal requirements. Bentonite seals are expected to be above the water table and seal will be hydrated using 5 gallons of water for every 50 pound bag of bentonite. Sand pack and bentonite material will be placed via tremie pipe



through the saturated portions of the borehole; however, once the installation is above the water table a free-fall method can be used; as long as accurate measurement is confirmed.

#### *Cement Grout*

A neat cement grout will be installed in the borehole from above the bentonite seal to ground surface. Cement grout will be mixed using 5 to 7 gallons of water for every 94 pound bag of Portland cement. Cement grout placed deeper than 30 feet bgs will be placed using a tremie pipe. Once the cement grout is allowed to settle, more will be added until it is brought to the surface. An Amador County Environmental Health Representative must be present for seal placement unless directed otherwise by the County.

Refer to the Bid Table for an estimate of materials needed. The bid should be provided on a **per foot** basis for well building materials (well casing, screen, filter pack, bentonite, grout seal) and as **each** for centralizers.

#### **Bid Item No. 4 – Monitoring Well Development**

Once monitoring well construction is complete, monitoring wells will be developed. Full well development will not be performed until at least 12 hours after well seal placement. Development will consist of surging the well with a swab, then bailing the well to remove sediments brought into the well. The procedure will be repeated until coarse sediment is removed. After surging and bailing activities, a variable speed pump or airlift may be used to further develop the well, if possible, to obtain the lowest turbidity attainable. Development will continue until other development criteria are achieved: (1) an adequate purge volume must be removed, usually consisting at least ten monitoring well volumes, (2) the turbidity must be reduced to the turbidity goal of 10 NTUs, (3) field parameters of pH, specific conductivity, temperature, and turbidity must stabilize to within 10 percent of the previous measured pore volume readings. Once these criteria are achieved, development will cease.

An anticipated maximum of **10 hours** of development time is anticipated. Estimate should be provided on a **per hour** basis.

#### **Bid Item No. 5 – Above Ground Completion**

Once below grade construction is complete, monitoring wells will be protected above grade using a lockable steel security casing. Security casing should extend approximately three feet above and three feet below grade surface. A 3' x 3' x 6" concrete pad shall be constructed around each security casing. The concrete will be



sloped to flow away from the well. Security casings shall be protected using four 3-inch diameter steel bollards. Refer to Figure 3 for a depiction of the anticipated well design. Above ground completions must be quoted on a **per well** basis.

### **Bid Item No. 6 – Test hole and Monitoring Well Abandonment**

Based on the encountered geology or other factors, a test hole may not be considered suitable for monitoring well completion. Test holes will be abandoned by pumping bentonite grout or cement slurry grout down hole using a tremie pipe. Abandonment cost must be quoted on a **per foot** basis.

### **Schedule**

Pursuant to RWQCB requirements, monitoring wells have to be constructed and developed in the summer of 2019. Per the Workplan schedule, up to three monitoring wells should be installed and developed over a one month period. Please indicate equipment to be used and availability to complete the required work effort.

Please submit your estimates NV5 no later than May 15, 2019. Pre-bid site visit has been scheduled for May 1, 2019 at 10 am. Please contact Pat Dunn at 916-221-0012 or [Pat.Dunn@NV5.com](mailto:Pat.Dunn@NV5.com) or [rppud@riverpinespod.org](mailto:rppud@riverpinespod.org) for additional information and whether you plan to attend the site visit..

### **Attachments**

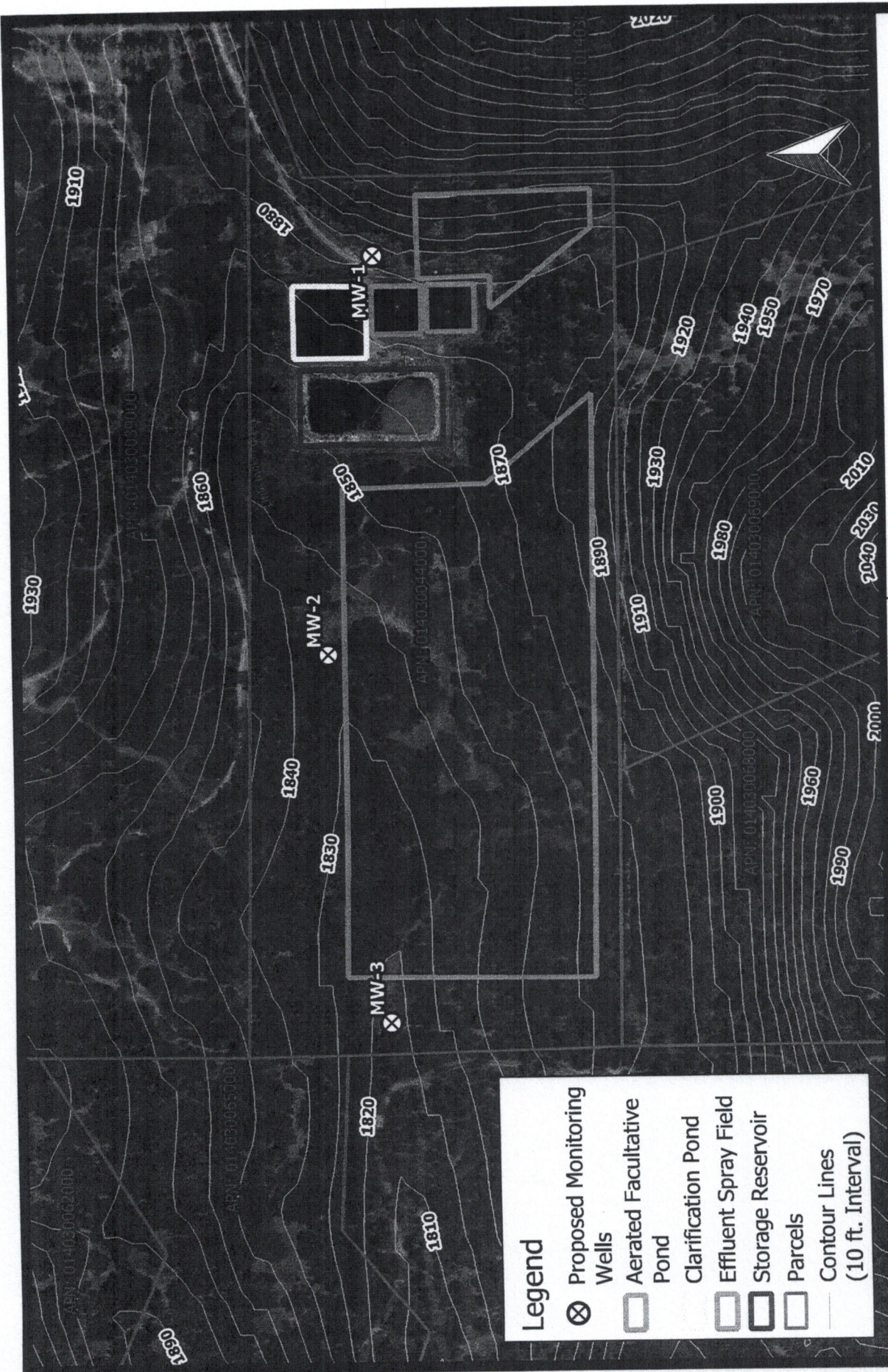
- Figure 1 - Location Map
- Figure 2 - Well Location Map
- Figure 3 - Proposed Monitoring Well Detail
- Bid Table
- Well Casing Specification
- Filter Pack Specification
- Bentonite Specification

**Bid Tab Sheet**  
**Monitoring Well Drilling**  
**River Pines WTPP**  
**Project No. 226217-0000055 April 16, 2019**

Bid Item No.	Item Description	Unit*	Estimated Quantity	Unit Price (\$)	Item Price (\$)
1	Mobilization for Test Well Drilling and Construction	LS	1	\$0.00	\$0.00
2	Test hole drilling	LF	420	\$0.00	\$0.00
3	Monitoring Well Construction				
	3/4 to 2 Inch diameter Sch 40 PVC C	LF	339	\$0.00	\$0.00
	3/4 to 2 Inch diameter Sch 40 PVC 0.020 Screen	LF	90	\$0.00	\$0.00
	Filter Pack	LF	120	\$0.00	\$0.00
	Bentonite Seal	LF	60	\$0.00	\$0.00
	Cement Grout	LF	240	\$0.00	\$0.00
	Centralizers	EA	36	\$0.00	\$0.00
4	Well Development	HR	36	\$0.00	\$0.00
5	Above Ground Completion	EA	5	\$0.00	\$0.00
6	Flush Grade Completion	EA	1	\$0.00	\$0.00
7	Testhole or well abandonment	LF	460	\$0.00	\$0.00
	<b>Total Bid</b>				\$0.00

\*EA: Each, HR: Hourly Rate, LF: Lineal Feet, LS: Lump Sum.

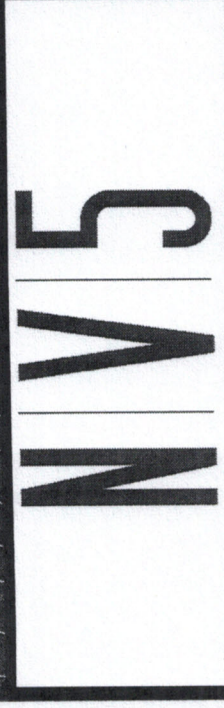




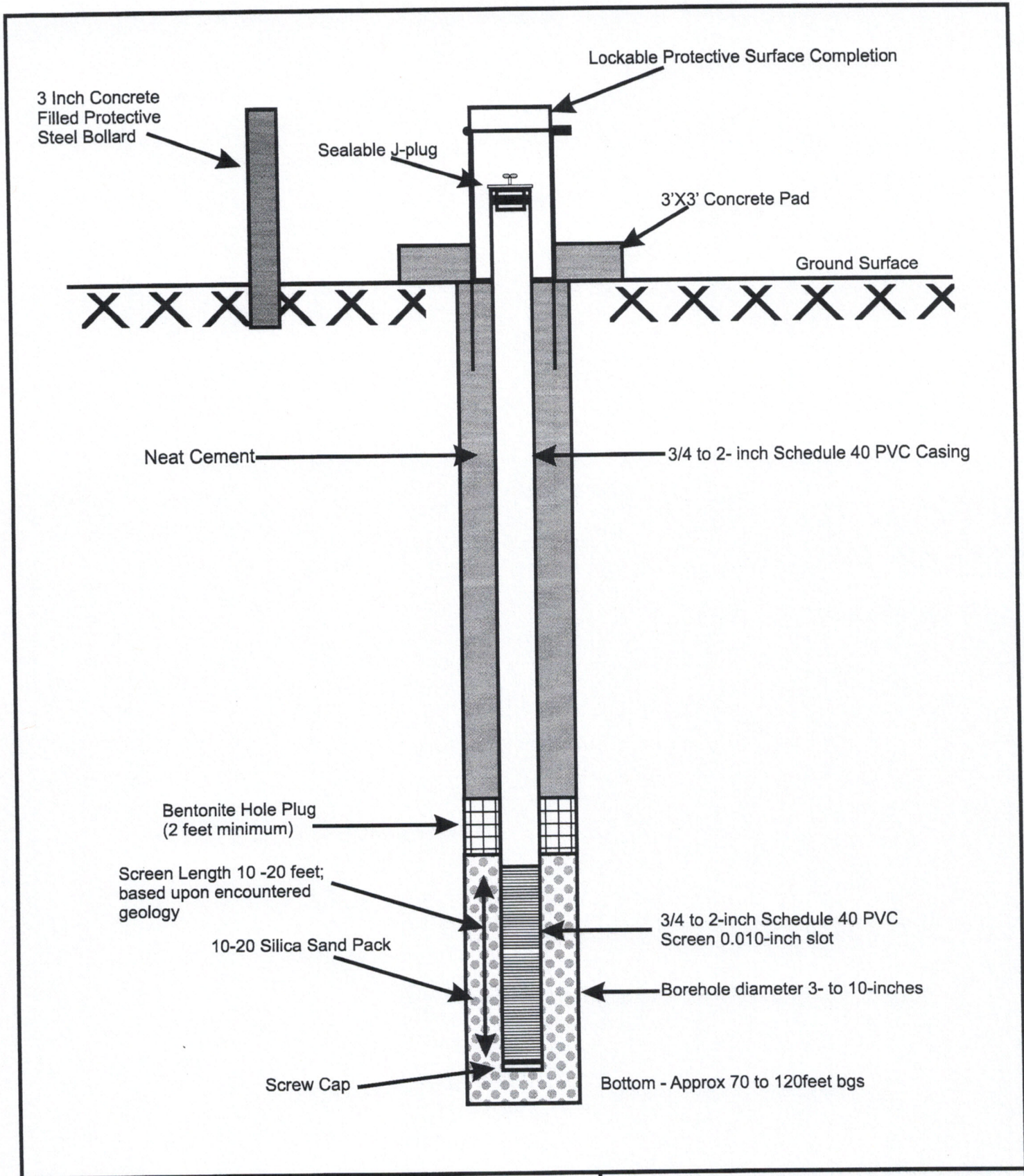
**Legend**

- ⊗ Proposed Monitoring Wells
- ▭ Aerated Facultative Pond
- ▭ Clarification Pond
- ▭ Effluent Spray Field
- ▭ Storage Reservoir
- ▭ Parcels
- Contour Lines (10 ft. Interval)

<p><b>SITE MAP WITH PROPOSED MONITORING WELL LOCATIONS, RIVER PINES WWTP AMADOR COUNTY, CA</b></p>		
		DATE: 1/29/2019
		SCALE: 1:3600
		PROJECT NO: 226217-0000071.00
		DRAWN BY: MR
CHECKED: PFD		
FIGURE: 2		







N V 5	DATE: 4/16/2019
	SCALE: NOT TO SCALE
	PROJECT NO: 55
	DRAWN:
	CHECKED: PFD
	FIGURE: 3

PROPOSED  
 MONITORING WELL DETAIL  
 RIVER PINES WWTP  
 AMADOR COUNTY, CA



PVC PIPE SPECIFICATIONS

**PVC Schedule 40**

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.	Max. W.P. PSI*
1/8	.405	.261	.068	.045	810
1/4	.540	.354	.088	.081	780
3/8	.675	.483	.091	.109	620
1/2	.840	.608	.109	.161	600
3/4	1.050	.810	.113	.214	480
1	1.315	1.033	.133	.315	450
1-1/4	1.660	1.364	.140	.426	370
1-1/2	1.900	1.592	.145	.509	330
2	2.375	2.049	.154	.682	280
2-1/2	2.875	2.445	.203	1.076	300
3	3.500	3.042	.216	1.409	260
3-1/2	4.000	3.520	.226	1.697	240
4	4.500	3.998	.237	2.006	220
5	5.563	5.017	.258	2.726	190
6	6.625	6.031	.280	3.535	180
8	8.625	7.943	.322	5.305	160
10	10.750	9.976	.365	7.532	140
12	12.750	11.890	.406	9.949	130
14	14.000	13.072	.437	11.810	130
16	16.000	14.940	.500	15.416	130
18	18.000	16.809	.562	20.112	130
20	20.000	18.743	.593	23.624	120
24	24.000	22.544	.687	32.873	120

**PVC Schedule 80**

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.	Max. W.P. PSI*
1/8	.405	.203	.095	.058	1230
1/4	.540	.288	.119	.100	1130
3/8	.675	.407	.126	.138	920
1/2	.840	.528	.147	.202	850
3/4	1.050	.724	.154	.273	690
1	1.315	.935	.179	.402	630
1-1/4	1.660	1.256	.191	.554	520
1-1/2	1.900	1.476	.200	.673	470
2	2.375	1.913	.218	.932	400
2-1/2	2.875	2.289	.276	1.419	420
3	3.500	2.864	.300	1.903	370
3-1/2	4.000	3.326	.318	2.322	350
4	4.500	3.786	.337	2.782	320
5	5.563	4.767	.375	3.867	290
6	6.625	5.709	.432	5.313	280
8	8.625	7.565	.500	8.058	250
10	10.750	9.492	.593	11.956	230
12	12.750	11.294	.687	16.437	230
14	14.000	12.410	.750	19.790	220
16	16.000	14.214	.843	25.430	220
18	18.000	16.014	.937	31.830	220
20	20.000	17.814	1.031	40.091	220
24	24.000	21.418	1.218	56.882	210

**PVC Schedule 120**

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.	Max. W.P. PSI*
1/2	.84	.480	.170	.223	1010
3/4	1.050	.690	.170	.295	770
1	1.315	.891	.200	.440	720
1-1/4	1.660	1.204	.215	.614	600
1-1/2	1.900	1.423	.225	.744	540
2	2.375	1.845	.250	1.052	470
2-1/2	2.875	2.239	.300	1.529	470
3	3.500	2.758	.350	2.184	440
4	4.500	3.572	.437	3.516	430
6	6.625	5.434	.562	6.759	370

**SDR 21 - W.P. 200 PSI (Water @ 73.4 F.)**

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.
3/4	1.050	.910	.060	.129
1	1.315	1.169	.063	.170
1-1/4	1.660	1.482	.079	.263
1-1/2	1.900	1.700	.090	.339
2	2.375	2.129	.113	.521
2-1/2	2.875	2.581	.137	.754
3	3.500	3.146	.167	1.106
3-1/2	4.000	3.596	.190	1.443
4	4.500	4.046	.214	1.825
5	5.563	5.001	.265	2.792
6	6.625	5.955	.316	3.964
8	8.625	7.755	.410	6.679

**SDR 26 - W.P. 160 PSI (Water @ 73.4 F.)**

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.
1	1.315	1.175	.060	.164
1-1/4	1.660	1.512	.064	.221
1-1/2	1.900	1.734	.073	.284
2	2.375	2.173	.091	.432
2-1/2	2.875	2.635	.110	.622
3	3.500	3.210	.135	.915
3-1/2	4.000	3.672	.154	1.183
4	4.500	4.134	.173	1.494
5	5.563	5.109	.214	2.288
6	6.625	6.085	.255	3.228
8	8.625	7.921	.332	5.468
10	10.750	9.874	.413	8.492
12	12.750	11.710	.490	11.956
14	14.000	12.860	.538	14.430
16	16.000	14.696	.615	18.810
18	18.000	16.534	.692	23.860
20	20.000	18.370	.769	29.470
24	24.000	22.043	.923	42.520

**CLEAR**

**PVC Schedule 40**

Nominal Pipe Size (in.)	O.D.	Average I.D.	Min. Wall	Nominal Wt./ft.	Max. W.P. PSI*
1/4	.540	.354	.088	.081	390
3/8	.675	.483	.091	.109	310
1/2	.840	.608	.109	.161	300
3/4	1.050	.810	.113	.214	240
1	1.315	1.033	.133	.315	220
1-1/4	1.660	1.364	.140	.429	180
1-1/2	1.900	1.592	.145	.509	170
2	2.375	2.049	.154	.682	140
2-1/2	2.875	2.445	.203	1.076	150
3	3.500	3.042	.216	1.409	130
3-1/2	4.000	3.520	.226	1.697	120
4	4.500	3.998	.237	2.006	110
6	6.625	6.031	.280	3.535	90
6 x 1/8	6.625	6.355	.125	1.647	45
8	8.625	7.943	.322	5.305	80

**Note:** Clear PVC Schedule 80 is available in 1/4" through 4" pipe diameters.

Bell and Gasket PVC Pipe is available in Schedules 40, 80, 120 and SDR's 21, 26, 35, 41 and C-900. Compounds used in the manufacture of PVC and CPVC Pipe meet ASTM Standard D-1784. Schedules 40, 80 and 120 PVC Pipe meet ASTM Standard D-1785. Pressure Rated (SDR Series) PVC Pipe meets ASTM Standard D-2241. ASTM Standard D-1784 classification equivalents:

PVC Normal Impact = Type I Grade I = PVC 1120 = Cell Classification 12454-B  
For more complete information, request "Condensed Catalog HPB-103-A&B"

**\* Note:** All pressure ratings are for water at 73.4° F with solvent cemented joints.



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# Monoflex Product Catalog

Monoflex Flush Thread Screens and Casings are used for groundwater monitoring, leak detection, recovery systems, water wells, etc. CNC computerized lathes are used to machine the threads to 2 TPI, 4 TPI, and 8 TPI (ASTM F-480) recommendations. Monoflex-designed automated slotting machines maintain continuous slot spacing and accuracy. Flush thread PVC is "Enviro-wrapped" as a standard procedure. **In addition to the many popular screens and casings listed in this catalog, Monoflex offers a full range of other product combinations, (see charts below). Chart Key: (S) Standard, (O) Optional.**

DIAMETERS	STANDARD LENGTHS				SCH 40 THREADS PER INCH			SLOT WIDTHS	INTEGRATED ENDS AVAILABLE		SPACING OF SLOTS		
	2.5'	5'	10'	20'	2TPI	4TPI	8TPI		PLUG	POINT	1/8"	1/4"	3/16"
1/2"	S	S	S	N/A			S	.006 - .500*	O	N/A	S	O	O
3/4"	S	S	S	N/A			S	.006 - .500*	O	N/A	S	O	O
1"	S	S	S	S			S	.006 - .500*	O	O	S	O	O
1-1/4"	S	S	S	S			S	.006 - .500*	O	O	S	O	O
1-1/2"	S	S	S	S		O	S	.006 - .500*	O	O	S	O	O
2"	S	S	S	S	S	O	O	.006 - .500*	O	O	S	O	O
2-1/2"	S	S	S	S	S	O	O	.006 - .500*	O	N/A	S	O	O
3"	S	S	S	S	S	O	O	.006 - .500*	O	O	S	O	O
4"	S	S	S	S	S	O	O	.006 - .500*	O	N/A	S	O	O
5"	S	S	S	S	S	O	O	.006 - .500*	O	N/A	O	S	O
6"	S	S	S	S	S	O	O	.015 - .500*	O	N/A	N/A	S	N/A
8"	S	S	S	S	S			.020 - .500*	O	N/A	N/A	S	N/A
10"	S	S	S	S	S			.020 - .500*	O	N/A	N/A	S	N/A
12"	S	S	S	S	S			.050 - .500*	O	N/A	N/A	S	N/A
14"	S	S	S	S	S			.060 - .500*	O	N/A	N/A	S	N/A
16"	S	S	S	S	S								

DIAMETERS	STANDARD LENGTHS				SCH 80 THREADS PER INCH			SLOT WIDTHS	INTEGRATED ENDS AVAILABLE		SPACING OF SLOTS		
	2.5'	5'	10'	20'	2TPI	4TPI	8TPI		PLUG	POINT	1/8"	1/4"	3/16"
1/2"	S	S	S	N/A			S	.006 - .500*	O	N/A	S	O	O
3/4"	S	S	S	N/A		S	O	.006 - .500*	O	N/A	S	O	O
1"	S	S	S	S		S	O	.006 - .500*	O	O	S	O	O
1-1/4"	S	S	S	S	S		O	.006 - .500*	O	O	S	O	O
1-1/2"	S	S	S	S	S	O	O	.006 - .500*	O	O	S	O	O
2"	S	S	S	S	S	O	O	.006 - .500*	O	O	S	O	O
2-1/2"	S	S	S	S	S	O	O	.010 - .500*	O	N/A	S	O	O
3"	S	S	S	S	S	O	O	.010 - .500*	O	O	S	O	O
4"	S	S	S	S	S	O	O	.010 - .500*	O	O	S	O	O
5"	S	S	S	S	S	O	O	.015 - .500*	O	N/A	S	O	O
6"	S	S	S	S	S	O	O	.020 - .500*	O	N/A	O	S	O
8"	S	S	S	S	S			.020 - .500*	O	N/A	N/A	S	N/A
10"	S	S	S	S	S			.020 - .500*	O	N/A	N/A	S	N/A
12"	S	S	S	S	S			.030 - .500*	O	N/A	N/A	S	N/A
14"	S	S	S	S	S			.050 - .500*	O	N/A	N/A	S	N/A
16"	S	S	S	S	S			.060 - .500*	O	N/A	N/A	S	N/A

Lengths are measured as "laying length", (not including male thread length), in 2" and 4" diameters, Sch. 40 and Sch. 80 and 6" Sch. 80. All other diameters and schedules are measured end to end. Standard slot widths are .010, .012, .015, .020, .030 and .040 inch. Standard slot spacing is 1/8", 3/16" and 1/4". \* Slot sizes .040 to .100 are manufactured at a minimum of 1/4" slot spacing. Slot sizes larger than .100 are manufactured at a minimum of 1/2" to 1" slot spacing. Many custom slot widths and patterns are available upon request, (please call regarding setup charges). Standard flush thread PVC screens and casings are male x female. National Pipe Taper thread (NPT) is also available.

Not all slot sizes and pipe diameters may be available from all plants.

Monoflex is a Registered Trademark of Campbell Mfg., Inc.

800-523-0224  
www.campbellmfg.com







**LAPIS LUSTRE SAND GRADING PARAMETERS**  
 Cumulative percent passing US Sieves

**Summary of Test Results**

PRODUCT	Special Blend	Coarse Aquarium	Medium Aquarium	4 x 16 6 Mesh	8 Mesh	#3	#2/12
Nominal Sieve Size	3/8" x #6	4 x 12	6 x 16	4 x 16	8 x 16	8 x 20	12 x 20
US mm							
3/8"	9.52	100 ± 0					
#3	6.70	77 ± 24					
1/4"	6.35	65 ± 33	100 ± 0	100 ± 0	100 ± 0		
#4	4.75	21 ± 20	97 ± 3	98 ± 2	99 ± 1		
#6	3.35	4 ± 4	78 ± 10	87 ± 14	79 ± 7	100 ± 0	
#8	2.36	2 ± 1	31 ± 7	37 ± 18	39 ± 17	99 ± 1	100 ± 0
#12	1.70		1 ± 1	9 ± 5	6 ± 5	40 ± 15	59 ± 12
#16	1.18			2 ± 1	2 ± 2	4 ± 3	9 ± 5
#20	0.850			1 ± 1	1 ± 1	2 ± 2	2 ± 1
#30	0.600					1 ± 1	1 ± 1

PRODUCT	#2/16	#1C	#1/20	#0/30	30 Mesh	#60	All Purpose
Nominal Sieve Size	16 x 30	16 x 40	20 x 40	30 x 50	30 x 70	40 x 70	4 x 50
US mm							
#4	4.75						100 ± 0
#8	2.36						99 ± 1
#12	1.70	100 ± 0	100 ± 0				
#16	1.18	94 ± 5	95 ± 3	100 ± 0			76 ± 21
#20	0.850	22 ± 16	55 ± 9	88 ± 8	100 ± 0	100 ± 0	
#30	0.600	3 ± 3	10 ± 6	18 ± 11	77 ± 5	95 ± 5	99 ± 1
#40	0.425		1 ± 1	1 ± 1	12 ± 6	73 ± 23	80 ± 12
#50	0.300				2 ± 2	25 ± 11	30 ± 11
#70	0.212				0.5 ± 0.5	3 ± 2	5 ± 4
#100	0.150					1 ± 1	1 ± 1

THESE ARE GENERAL GRADINGS ONLY. FOR CURRENT INDIVIDUAL GRADING DATA A CERTIFICATE OF COMPLIANCE IS AVAILABLE ON REQUEST FROM THE TECHNICAL SERVICES LABORATORY. FOR PRICING OR AVAILABILITY INFORMATION CONTACT THE INDUSTRIAL SAND SALES DESK AT 925-200-6207.

**Cemex's Lapis Lustre Plant is located on Lapis Road, 2 miles south of Marina, CA.**  
 PO Box 337  
 Marina, CA  
 93933





# HOLEPLUG<sup>®</sup>

Graded Sodium Bentonite

**Description** HOLEPLUG<sup>®</sup> naturally occurring Wyoming sodium bentonite clay is a sized and graded chip material used to seal and plug earthen boreholes.

HOLEPLUG bentonite is available in two particle size grades:

- HOLEPLUG<sup>®</sup> 3/4" bentonite (minimum 95% graded between 3/8" to 3/4 " )
- HOLEPLUG<sup>®</sup> 3/8" bentonite (minimum 85% graded to within 1/8")

**Applications  
/Functions**

The use of HOLEPLUG sodium bentonite assists or promotes the following:

- Grouting annulus in all types of wells, particularly environmental monitoring well applications
- Sealing above gravel packs
- Plugging decommissioned boreholes
- Stemming shotholes
- Sealing around conductor pipe
- Sealing lost circulation zones
- Shutting off artesian flow

**Advantages**

- Helps prevent entry of surface water into boreholes
- High swelling potential
- In situ swelling to provide a superior seal with excellent casing stabilization
- Easier to apply than pellets
- Cost effective
- Simple to apply, mixing not required
- Helps prevent vertical movement of fluids in the hole between porous zones
- Helps form a permanent, flexible downhole seal
- Helps allow hole re-entry
- Rehydratable
- NSF/ANSI Standard 60 certified

**Typical  
Properties**

Volume of 50-lb (22.7 kg) sack

HOLEPLUG 3/4" bentonite	0.73 ft <sup>3</sup> or 0.027 yd <sup>3</sup> or 0.021 m <sup>3</sup>
HOLEPLUG 3/8" bentonite	0.70 ft <sup>3</sup> or 0.026 yd <sup>3</sup> or 0.020 m <sup>3</sup>
Permeability	1.5 x 10 <sup>-9</sup> cm/sec (in fresh water)
Appearance	Beige to tan chips



**Recommended  
Treatment**

---

***Plugging and Stemming Drill Holes***

Due to shipping and handling, a small amount of fine bentonite particles may be present. For optimum results, HOLEPLUG® should be poured over a mesh or screen with ¼" (6.4 mm) openings to "sift out" the smaller particles. The screen should be large enough (approx. 1 yd<sup>2</sup> or 1m<sup>2</sup>) to be folded into a "V" shape to allow sifting while the product is being poured into the hole. Also, HOLEPLUG bentonite should be poured slowly. Allow approximately two minutes to pour a 50-lb (22.7 kg) bag.

1. Position the screen with the lower end placed over the borehole
2. Slowly pour HOLEPLUG bentonite down the "V" so that fine particles fall through the screen before the larger particles fall into the borehole
3. Fill hole as required (above static water level or to ground level)
4. Observe all regulatory specifications

***Stopping loss of circulation and stabilizing unconsolidated formations***

1. Pull drill pipe out of hole
2. Pour HOLEPLUG bentonite into hole to fill above problem zone
3. Drill ahead slowly with reduced pump pressure

***Plugging flowing wells***

Pour HOLEPLUG bentonite into hole until water flow subsides or hole is filled to surface.

**Treatment  
Considerations**

- 
- Adequate annular space, at least two inches on either side of the outside dimension of the casing, should be present to facilitate placement of HOLEPLUG bentonite into the desired area without bridging. The use of a tremie line may be necessary to ensure proper placement and is recommended for placement in deep hole applications.
  - The grouting material and method selected will depend upon the specific subsurface environment including all prevailing geological and hydrological factors and any existing regulatory requirements.
  - The use of bentonite may not be appropriate in environments where the formation water chemistry has a total hardness greater than 500 parts per million and/or a chloride content of greater than 1500 parts per million.
  - If questions arise regarding subsurface environments it is always best to consult your local Baroid IDP representative to determine if the Baroid product of choice is appropriate for the given conditions.
-

**Application  
Amounts**

<b>Amounts of HOLEPLUG® bentonite Required for Plugging Applications</b>				
Hole Diameter (inches)	Hole Volume (ft <sup>3</sup> /ft)	Pounds HOLEPLUG bentonite Needed to Fill One Foot	Feet Filled by One Bag HOLEPLUG bentonite	Bags HOLEPLUG bentonite Needed to Fill 100 ft
2	0.022	1.6	32.6	3.2
2.5	0.034	2.4	20.5	5.0
3	0.049	3.5	14.3	7.0
3.5	0.067	4.8	10.4	9.6
4	0.087	6.3	7.9	12.6
4.5	0.110	7.9	6.3	15.8
5	0.136	9.8	5.1	19.6
5.5	0.165	11.9	4.2	23.8
6	0.196	14.1	3.5	28.2
6.5	0.230	16.6	3.0	33.2
7	0.267	19.2	2.6	38.4
7.5	0.307	22.1	2.3	44.2
8	0.349	25.1	2.0	50.2
8.5	0.394	28.4	1.8	56.8
9	0.442	31.8	1.6	63.6
9.5	0.492	35.4	1.4	70.8
10	0.545	39.2	1.3	78.4
11	0.660	47.5	1.1	95.0
12	0.785	56.5	0.89	113.0
15	1.227	88.3	0.57	176.6
18	1.767	127.2	0.39	254.4
20	2.182	157.1	0.32	314.2
25	3.409	245.4	0.20	490.8
30	4.909	353.4	0.14	706.8



**Application  
Amounts  
(metric  
equivalents)**

<b>Amounts of HOLEPLUG® bentonite Required for Plugging Applications</b>				
Hole Diameter (mm)	Hole Volume (m <sup>3</sup> /m)	Kilograms HOLEPLUG bentonite Needed to Fill One Meter	Meters Filled by One Bag HOLEPLUG bentonite	Bags HOLEPLUG bentonite Needed to Fill 10 meters
51	0.002	2.3	9.87	1.0
64	0.003	3.6	6.31	1.6
76	0.005	5.2	4.38	2.3
89	0.006	7.0	3.22	3.1
102	0.008	9.2	2.47	4.1
114	0.010	11.6	1.95	5.1
127	0.013	14.4	1.58	6.3
140	0.015	17.4	1.30	7.7
152	0.018	20.7	1.10	9.1
165	0.021	24.3	0.93	10.7
178	0.025	28.2	0.81	12.4
191	0.029	32.4	0.70	14.3
203	0.032	36.8	0.62	16.2
216	0.037	41.6	0.55	18.2
229	0.041	46.6	0.49	20.5
241	0.046	51.9	0.44	22.9
254	0.051	57.5	0.39	25.3
279	0.061	69.6	0.33	30.7
305	0.073	82.8	0.27	36.5
381	0.114	129.4	0.18	57.0
457	0.164	186.4	0.12	82.1
508	0.203	230.1	0.10	101.4
635	0.317	359.5	0.06	158.4
762	0.456	517.7	0.04	228.1

**Packaging** HOLEPLUG graded sodium bentonite is packaged in 50-lb (22.7 kg) multiwall paper bags.

**Availability** HOLEPLUG graded sodium bentonite can be purchased through any Baroid Industrial Drilling Products Retailer. To locate the Baroid IDP retailer nearest you contact the Customer Service Department in Houston or your area IDP Sales Representative.

**Baroid Industrial Drilling Products  
Product Service Line, Halliburton  
3000 N. Sam Houston Pkwy E.  
Houston, TX 77032**

**Customer Service** (800) 735-6075 Toll Free (281) 871-4612  
**Technical Service** (877) 379-7412 Toll Free (281) 871-4613

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HOLEPLUG is a registered trademark of Halliburton

Rev. 06/2012

Because the conditions of use of this product are beyond the seller's control, the product is sold without warranty either express or implied and upon condition that purchaser make its own test to determine the suitability for purchaser's application. Purchaser assumes all risk of use and handling of this product. This product will be replaced if defective in manufacture or packaging or if damaged. Except for such replacement, seller is not liable for any damages caused by this product or its use. The statements and recommendations made herein are believed to be accurate. No guarantee of their accuracy is made, however.



**Resolution No. 2019-03**

***A Resolution of the Board of Directors of the  
River Pines Public Utility District  
To Approve Bid from NV5 for the Hydrogeological and Drilling  
Services related to the Installation of Three Monitoring Wells***

**Whereas**, the District is being required by the State to install three (3) Monitoring Wells no later than June 30<sup>th</sup>, 2019; and

**Whereas**, the District received extreme restrictions regarding drill access and plan from Regional Water Quality Control Board (RWQCB); and

**Whereas**, NV5 submitted an estimate in the amount of \$15,000 for hydrogeological and drilling service required in the plan with RWQCV of the three (3) Monitoring Wells; and

**Now, Therefore, Be It Resolved**, that the Board of Directors of the River Pines Public Utility District does hereby accept the estimate from NV5 in the amount of \$15,000.

The foregoing resolution was duly passed adopted by the Board of Directors of the River Pines Public Utility District as a regular meeting on the 19<sup>th</sup> day of June 2019, by the following vote:

**AYES:**

**NOES:**

**ABSENT:**

**ABSTAIN:**

River Pines Public Utility District

\_\_\_\_\_  
Roscoe Raymond, Chairman

ATTEST:

\_\_\_\_\_  
Gisele Wurzbarger, Board Clerk



9c

River Pines Public Utility District  
Direct Charges (Assessments) Secured Tax Roll 2019/2020

014-073-002-000	2587	66500	RPDW
014-073-003-000	392	66500	RPDW
014-043-026-000	2165	66500	RPDW
014-061-008-000	1734	66500	RPDW
014-042-016-000	2821	66500	RPDW
014-043-027-000	2817	66500	RPDW
014-086-011-000	1302	66500	RPDW



**RESOLUTION NO. 2019-04**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE  
RIVER PINES PUBLIC UTILITY DISTRICT APPROVING AND CONFIRMING  
THE FINAL ASSESSMENT SECURED TAX ROLL FOR 2019-2020 FOR  
RIVER PINES PUBLIC UTILITY DISTRICT LOCATED IN RIVER PINES, CALIFORNIA**

**WHEREAS**, a final Assessment Secured Tax Roll for 2019-2020 (Tax Roll) listing defaulted accounts for properties located within the River Pines Public Utility District (the District), Amador County, California is presented to the River Pines Public Utility District Board of Directors (the Board) pursuant to Public Utilities Code §16472; and

**WHEREAS**, a genized notice of the date, time and place of presentation to the Board of the Tax Roll was posted as June 19, 2019 at 6:00 p.m. at the River Pines Town Hall at a Regular Meeting of the Board and written notice was mailed to all defaulted accounts; and

**WHEREAS**, at the date, time and place designated in said notice, the said Tax Roll with each property identified by Assessor's Parcel Number (APN) and each property account's default amount was presented for approval to the Board; and

**NOW THEREORE, BE IT RESOLVED**, by the Board of Directors of the River Pines Public Utility District as follows:

1. The Board does hereby approve the final Assessment Secured Tax Roll for 2019-2020 in the total amount \$13,818.
2. A copy of said Tax Roll is attached hereto, identified as the document Final Assessment Secured Tax Roll for 2019-2020 and incorporated herein by reference.
3. If any section, subsection, sentence, clause or phrase in this Resolution or the application thereof to any person or circumstances is for any reason held invalid, the validity of the remainder of this Resolution or the application of such provisions to other persons or circumstances shall not be affected thereby. The Board of Directors hereby declares that it would have passed this Resolution and each section, subsection, sentence, clause or phrase thereof, irrespective of the fact that one or more sections, subsections, sentences, clauses, or phrases of the application thereof to any person or circumstance by held invalid.

**NOW THEREORE BE IT ACTED**, that the Board directs the District General Manager to submit to the Amador County Auditor-Controller the final Assessment Secured Tax Roll for 2019-2020 along with the signed Direct Charge Certification Letter pursuant to Government Code §26911.

The foregoing resolution was duly passed and adopted by the Board of Directors of the River Pines Public Utility District at a Regular Meeting on the 19th of June 2019, by the following vote:

**AYES:**

River Pines Public Utility District

**NOES:**

**ABSENT:**

**ABSTAIN:**

\_\_\_\_\_  
Roscoe Raymond, Board Chair

**ATTEST:**

\_\_\_\_\_  
Gisele Wurzburger, Board Clerk





## **\$0 Out-of-Pocket LED, HVAC, Pump Upgrades**

We've helped 1000's of companies **save energy and cut costs** by converting their lighting to LED **for \$0 out of pocket** utilizing the utility companies' energy efficiency programs.

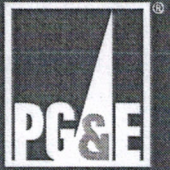
EcoGreen Solutions is an Energy Services company and Trade Professional & Authorized Agent with PGE, SCE, SDGE specializing in helping companies leverage the utility company programs and take advantage of all the rebates and incentives available.

Below are highlights of some of the benefits of the programs & converting to LED:

- Dramatically reduced energy bills with 60%-90% energy savings on lighting portion of your bill
- LED lights produce little to no heat (compared to other bulbs), so you will save on cooling costs/AC
- Eliminates high cost of light bulb replacement & maintenance
- Increased safety due to improved light levels & quality of light
- Enhanced value of your property and curbside appeal
- **No money out-of-pocket / Free Energy Survey & Demos**
- Several substantial tax incentives available for upgrading lights
- All paperwork taken care of by EcoGreen Solutions
- Helping to save the environment
- Separate funds than Prop 39 (schools/districts)

We can retrofit everything from large area lights and wall packs to individual screw-in lamps, troffers, etc... We have worked with dozens of cities, school districts, private schools, restaurants & hotel chains, medical facilities, resorts, apartment complexes, & large businesses throughout the State of California. We are currently working with the State of California to Retrofit every State Building and Park. Our Company is Fully Vetted with the California Dept. of General Services and Dept. Of Sustainability. The US Government is now using this program as we are retrofitting all US Post Offices. References available upon request.





Pacific Gas and Electric Company

## On-Bill Financing for Energy Efficiency Upgrades



### Zero-interest financing for business customers

Energy efficiency upgrades are a great way for businesses to lower their energy use and reduce monthly bills. PG&E can help you make facility improvements without high interest costs.

#### Program benefits for business customers:

- Financing from \$5,000 to \$100,000 of the project cost, after incentives
- Loan terms up to five years
- Zero interest
- No minimum credit requirements
- Loan repayment is based on projected energy savings

#### What is On-Bill Financing?

- The Energy Efficiency Retrofit Loan Program, also known as On-Bill Financing, helps eligible customers pay for energy efficiency retrofit projects with zero interest, zero penalty loans.
- The program works in conjunction with PG&E's energy efficiency rebate and incentive programs by eliminating up-front costs.
- After project completion, PG&E will lend the money for the retrofit, and the customer will pay the loan—interest free—through their monthly utility bills.

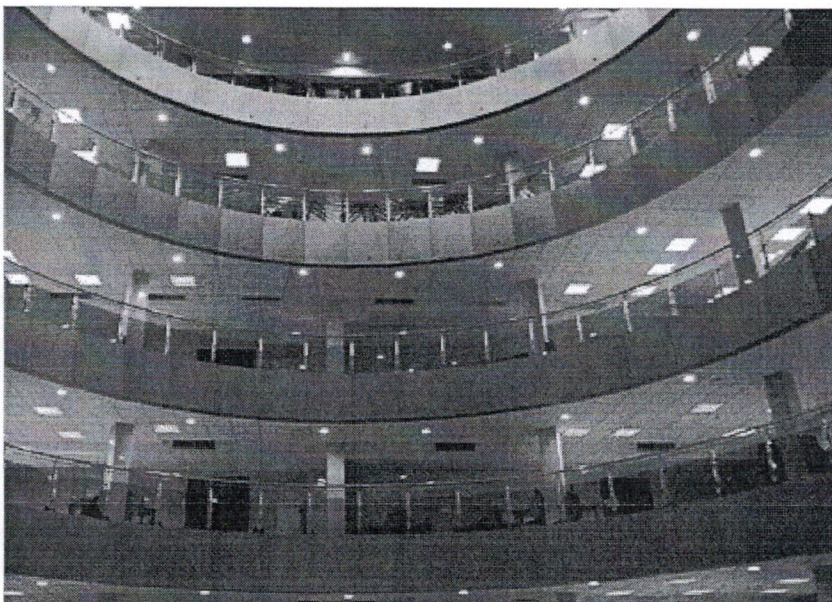
#### How much can businesses and agencies borrow?

- Business customers may qualify for loans between \$5,000 and \$100,000 per service address, with loan periods of up to 60 months.
- Government agencies may qualify for loans between \$5,000 and \$250,000 per service address, with loan periods of up to 120 months.
- Loan funds must be used to purchase and install qualifying energy efficient equipment.

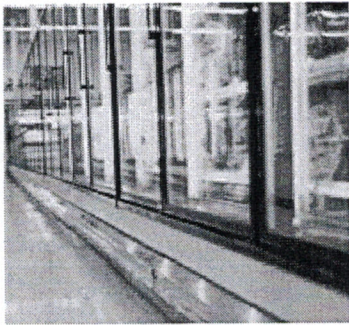
#### What kinds of projects are eligible?

Financing is available to fund many energy efficient technology upgrades, including LED lighting, refrigeration, HVAC, food service and LED streetlight projects. To qualify, a project's total cost savings must be sufficient to repay the loan within the maximum loan term limits, and the project must qualify for a rebate or incentive through a PG&E program.

Customers may install the equipment themselves or hire a contractor to perform the work. PG&E may need to inspect the site before the old equipment is removed and may perform another inspection upon project completion.







## How is the loan term calculated?

To qualify for financing through the On-Bill Financing Program, a project's estimated energy savings must be sufficient to repay the loan during the maximum allowable payment term. The monthly payment is calculated based on estimated monthly energy savings.

### For example:

Project cost	\$10,000
Energy efficiency rebates and/or incentives	(\$2,500)
Loan amount (remaining costs to be funded)	\$7,500
Estimated monthly energy savings from retrofit	\$300
Monthly loan installment billed on PG&E utility bill	\$300
Simple payback period (loan amount divided by monthly payment amount)	25 months

The loan terms for the customer in this example would be \$300 per month for 25 months.

If a business customer closes a PG&E account before the loan term ends—for example if a business closes or moves to a new location—the business must pay off its loan balance when the final bill is settled.

## Does your business or agency qualify?

Before beginning your retrofit project, contact PG&E to make sure your energy efficiency upgrades qualify for On-Bill Financing. To be eligible, customers must have a PG&E account that has been continuously active for the past 24 months and has been in good standing for the past 12 months. Business customers are also subject to a payment history screening.

### Next Steps

To find out more information about the On-Bill Financing Program and to check your eligibility, contact your PG&E Account Manager through the Business Customer Service Center at 1-800-468-4743, or visit [pge.com/obf](http://pge.com/obf).







# ENERGY AUDIT

**30th Dist Agricultural Assoc.**  
 30th Dist Agricultural Assoc.  
 670 Antelope Blvd  
 Red Bluff, Ca. 96080  
 Customer# 7882822009\_SA# 7882822058

EcoGreen Sales Rep: Jay Langer  
 Customer Contact: Mandy Staley  
 Title of Contact: CEO  
 Customer Phone: (530) 527-5920  
 Customer Email: mandy@tehamadistrictfair.com.

Approx Building Size: SF  
 Energy Rate: 0.21 KWh

In Reference to Quote # 600935

Suggested Replacements & Savings		Watts/Fix	# of Fixtures	Watts/Bulbs Saved	Usage Saved	KWh Saved	Annual Savings
Existing Bulb	Watts/Fix	W	W	W	W	W	\$
Totals	935	249295	973	159696.32	73.7%	360,440	\$75,692.33
159,696	Watts Saved						\$6,307.69
360,440	Annual KWh Saved						\$75,692.33
43.6	Avg Annual Res Powered by Savings						\$462,706.07
268	Annual CO2 Savings (MT)						\$1,069,727.81
73.7%	Average Electrical Savings						\$0.00
18.9%	ROI During Payback						\$0.00
5.30	Payback Period Yrs - Out of Pocket - No Rebates/Program						\$0.00
4.84	Payback Period Yrs W/ Rebates & Yearly Bulb Replacement Savings						\$0.00
5.30	Payback Period Yrs W/ Rebates & Federal Tax Savings						\$0.00
4.84	Payback Period Yrs Fully Comprehensive*						\$0.00

**Total Project Cost After Rebate**  
 \$401,415.68  
 \*\*\*\*\*Payback Period Yrs 5.30

Approximate Energy Savings Per Month  
 Energy Savings Per Year  
 \*\*Total Savings Over 5 Years  
 \*\*Total Savings After 10 Years  
 Estimated Energy Rebate  
 IRS Tax Deduction 179D Available  
 \*\*\*Estimated Federal Tax Savings  
 Btu Savings Per Month  
 Bulb Replacement Savings Per Year  
 Bulb Replacement Savings Per Avg. Est. Life of LED  
 \*Loan Payment  
 \$6,307.69  
 \$75,692.33  
 \$462,706.07  
 \$1,069,727.81  
 \$0.00  
 \$0.00  
 \$0.00  
 83,047,260,176  
 \$7,204.27  
 #VALUE!  
 \$6,307.69

NOTE: Attached calculations do not include depreciation deduction for project cost.  
 \*Payment is based on a 5.30 year loan at 0% interest OAC, actual may vary  
 \*\* Reflects 6% per year cost of energy increase + Bulb Replacement  
 \*\*\* Based on IRS 179D Deduction @ 35% Federal tax rate  
 \*\*\*\*Payback Period Yrs = (Total Project Cost - Rebate) / (Estimated Savings per Year  
 \*\*\*\*\*Payback Period Yrs = (Total Project Cost - Rebate - Tax Deduction - Tax Savings) / (Estimated Savings Per Year + Bulb Replacement Savings Per Yr)

Year	Potential Write-Off Amount		Total
	Capital	Interest	
Year 1	80,283	0	80,283
Year 2	80,283	0	80,283
Year 3	80,283	0	80,283
Year 4	80,283	0	80,283
Year 5	80,283	0	80,283
<b>Totals</b>	<b>\$401,415.68</b>	<b>\$0</b>	<b>\$401,415.68</b>



# ENERGY AUDIT



In Reference to Quote # 600935

**30th Dist Agricultural Assoc.**  
 30th Dist Agricultural Assoc.  
 670 Antelope Blvd  
 Red Bluff, Ca. 96080  
 Customer# 7862822009, SA# 7862822058

Approx Building Size SF  
 Energy Rate 0.21 KWh

Existing Bulb	Watts/Ft <sup>2</sup> x	# of Fixtur	Operating Hours-Day / Yr	Location	Replacement Bulb	Watts/Fix	# of Fixtures	Watts/bulbs Saved	Usage Saved	KWh Saved	Annual Savings
Cans	26 w	3	8 / 7 / 2920	Freestanding RRs outside Livestock Arenas	LED 6" Eco Downlight w/Housing	10 w	3	48 w	61.5%	140	\$29.43
CFL WP	26 w	2	8 / 7 / 2920	Freestanding RRs outside Livestock Arenas	LED A19 dimmable	9 w	2	34 w	65.4%	99	\$20.85
CFL CPY w2	45 w	1	9 / 5 / 2346	Fair Office	LED Lowbay Deco 12" Round Fixture - Glass	18 w	2	54 w	60.0%	127	\$26.61
CFL CPY w2	45 w	1	9 / 5 / 2346	Fair Office	LED Lowbay Deco 12" Round Fixture - Glass	18 w	1	27 w	60.0%	63	\$13.30
Ch Canopy	24 w	3	10 / 5 / 2807	Floriculture Patio outside red poles	LED BR30	9 w	3	45 w	62.5%	117	\$24.64
CFL CPys	24 w	1	4 / 5 / 1043	Bob Kerstiens Ent Ctr Stage	LED BR30	9 w	1	15 w	62.5%	16	\$3.29
CFL CPYs	24 w	2	4 / 5 / 1043	Floriculture	LED BR30	9 w	2	30 w	62.5%	31	\$6.57
CLF CPYs	24 w	61	4 / 5 / 1043	Floriculture	LED BR30	9 w	61	915 w	62.5%	954	\$200.39
Screw-in cans	24 w	11	10 / 7 / 3650	Fair Office Ext Eves Front & Rear	LED 6" Eco Downlight w/Housing	10 w	11	154 w	58.3%	562	\$118.04
CPY w2	49 w	6	4 / 5 / 1043	Bob Kerstiens Ent Ctr Main Seating	LED BR30	9 w	12	186 w	63.3%	194	\$40.73
CFL CPYs w3	72 w	9	10 / 5 / 2607	Floriculture Ent Ctr Behind Stage	LED BR30	17 w	3	42 w	45.2%	110	\$23.00
CPys 2 bulbs	31 w	3	10 / 5 / 2607	Tyler Jelly Bldg At Doors 2 slides	LED BR30	9 w	22	814 w	80.4%	173	\$267.40
CFL CPY	46 w	22	6 / 5 / 1564	Don Smith Bull Sale Rear Area	LED BR30	9 w	42	1554 w	80.4%	1621	\$340.33
CFL CPY	46 w	42	4 / 5 / 1043	Covered Area Don Smith Bull Sale	LED BR30	9 w	42	1554 w	80.4%	1621	\$340.33
CFL CPY	46 w	42	4 / 5 / 1043	2nd Covered Area Don Smith Bull Arena	LED BR30	9 w	70	2590 w	80.4%	3,376	\$709.01
CFL CPys	46 w	70	5 / 5 / 1304	Livestock #1 & Cov Bldg left of Facing	LED Area Light	24.28 w	7	60.97 w	26.4%	95	\$20.23
2 ft linears w2	33 w	7	6 / 5 / 1564	Arena Grandstands 1-8	LED 4" Linear Vapor Tight Fixture	16.7 w	1	14.3 w	46.1%	30	\$6.26
4ft linears w1	31 w	1	8 / 5 / 2086	Freestanding RRs outside Livestock Arenas	LED 4" Linear Vapor Tight Fixture	16.7 w	1	14.3 w	46.1%	30	\$6.26
4ft linears w1	31 w	8	10 / 7 / 3650	Freestanding RRs outside Livestock Arenas	LED 4" Linear Fixture	16.23 w	8	118.16 w	47.6%	431	\$90.57
4ft linears w1	31 w	2	3 / 5 / 782	Fair Office Tehama room	LED 4" Linear Fixture	16.23 w	2	29.54 w	47.6%	23	\$4.85
4ft linears w2	31 w	1	3 / 5 / 782	fair Office Tehama room	LED 4" Linear Fixture	16.23 w	1	14.77 w	47.6%	12	\$2.43
4ft linears w1	31 w	1	3 / 5 / 782	fair Office Tehama room	LED 4" Linear Fixture	16.23 w	1	14.77 w	47.6%	12	\$2.43
1x4 w2	59 w	6	9 / 5 / 2346	Fair Office	LED 4" Linear Fixture	16.23 w	6	256.62 w	72.5%	602	\$126.46
1x4 w2	59 w	2	9 / 5 / 2346	Fair Office	LED 4" Linear Fixture	16.23 w	2	85.54 w	72.5%	201	\$42.15
1x4 w2	59 w	2	9 / 5 / 2346	Fair Office	LED 4" Linear Fixture	16.23 w	2	85.54 w	72.5%	201	\$42.15
1x4 w2	59 w	2	9 / 5 / 2346	Fair Office	LED 4" Linear Fixture	16.23 w	2	85.54 w	72.5%	201	\$42.15
2in pole Mount	59 w	2	9 / 5 / 2346	Fair Office	LED 4" Linear Fixture	16.23 w	2	85.54 w	72.5%	201	\$42.15
2x4 w2	59 w	8	6 / 5 / 1564	Arena Grandstands 9,10	LED Area Light	24.28 w	2	69.42 w	68.8%	109	\$22.80
2x4 w2	59 w	8	6 / 5 / 1564	Don Smith Bull Sale Entry & Office	LED 4" Linear Fixture	16.23 w	8	342.16 w	72.5%	535	\$112.40
2x4 w2	59 w	1	4 / 5 / 1043	Tyler Jelly Bldg	LED Troffer 2x4	217.2 w	6	217.2 w	61.4%	340	\$71.35
2x4 w2	59 w	6	6 / 5 / 1564	Pauline Davis Pavilion	LED Troffer 2x4	22.8 w	5	181 w	61.4%	283	\$59.46
2x4 w2	59 w	5	6 / 5 / 1564	Pauline Davis Pavilion	LED Troffer 2x4	22.8 w	3	108.6 w	61.4%	170	\$35.68
2x4 w2	59 w	3	6 / 5 / 1564	Pauline Davis Pavilion	LED Troffer 2x4	22.8 w	3	108.6 w	61.4%	170	\$35.68
2x4 w2	59 w	6	6 / 5 / 1564	Pauline Davis Pavilion	LED Troffer 2x4	22.8 w	6	217.2 w	61.4%	340	\$71.35
4ft linears w2	59 w	6	5 / 5 / 1304	Auditorium	LED 4" Linear Vapor Tight Fixture	16.7 w	6	253.8 w	71.7%	331	\$69.46
4ft linears w2	59 w	4	4 / 5 / 1043	Tyler Jelly Bldg	LED 4" Linear Fixture	16.23 w	1	42.77 w	72.5%	45	\$9.37
4ft linears w2	59 w	1	4 / 5 / 1043	Tyler Jelly Bldg	LED 4" Linear Fixture	16.23 w	1	171.08 w	72.5%	268	\$56.20
4ft linears w2	59 w	4	6 / 5 / 1564	Arena Serving area Bar Area	LED 4" Linear Fixture	16.23 w	4	85.54 w	72.5%	156	\$32.76
4ft linears w2	59 w	2	7 / 5 / 1825	Arena Behind Grandstands 12-15	LED 4" Linear Fixture	16.23 w	2	85.54 w	72.5%	156	\$32.76
4ft linears w2	59 w	2	7 / 5 / 1825	Arena	LED 4" Linear Fixture	16.23 w	2	85.54 w	72.5%	156	\$32.76
4ft linears w2	59 w	2	6 / 5 / 1564	Arena Upstairs RRs	LED 4" Linear Fixture	16.23 w	2	85.54 w	72.5%	134	\$28.10
4ft linears w2	59 w	2	6 / 5 / 1564	Tyler Jelly Bldg Mens & Womens RRs	LED 4" Linear Vapor Tight Fixture	16.7 w	2	126.9 w	71.7%	88	\$18.53
4ft linears w2	59 w	3	8 / 7 / 2920	Freestanding RRs outside Livestock Arenas	LED 4" Linear Vapor Tight Fixture	16.7 w	3	126.9 w	71.7%	371	\$77.82
4ft linears w2	59 w	2	7 / 5 / 1825	Freestanding RRs outside Livestock Arenas	LED 4" Linear Vapor Tight Fixture	16.7 w	2	84.6 w	71.7%	265	\$55.56
4ft linears w2	59 w	3	8 / 5 / 2086	Freestanding RRs outside Livestock Arenas	LED 4" Linear Vapor Tight Fixture	16.7 w	3	126.9 w	71.7%	371	\$77.82
4ft linears w2	59 w	2	7 / 5 / 1825	Arena RR across from Main Grandstands	LED 4" Linear Vapor Tight Fixture	16.7 w	2	84.6 w	71.7%	154	\$32.42
4ft linears w2	59 w	2	7 / 5 / 1825	Arena ***	LED 4" Linear Vapor Tight Fixture	16.7 w	2	84.6 w	71.7%	154	\$32.42
4ft linears w2	59 w	6	10 / 7 / 3650	Fair Office Covered Patio	LED 4" Linear Vapor Tight Fixture	16.7 w	6	253.8 w	71.7%	926	\$194.54
4ft linears w2	59 w	2	4 / 5 / 1043	Tyler Jelly Bldg Halls & Side Entry	LED 4" Linear Fixture	16.23 w	2	85.54 w	72.5%	89	\$18.73
4ft linears w2	59 w	2	4 / 5 / 1043	Tyler Jelly Bldg	LED 4" Linear Fixture	16.23 w	2	85.54 w	72.5%	89	\$18.73
4ft linears w2	59 w	3	4 / 5 / 1043	Tyler Jelly Bldg	LED 4" Linear Fixture	16.23 w	3	128.31 w	72.5%	134	\$28.10
4ft linears w2	59 w	3	4 / 5 / 1043	Tyler Jelly Bldg	LED 4" Linear Fixture	16.23 w	3	128.31 w	72.5%	134	\$28.10
4ft linears w2	59 w	2	7 / 5 / 1825	Arena Just inside gate 8	LED 4" Linear Fixture	16.23 w	2	85.54 w	72.5%	156	\$32.76
4ft linears w2	59 w	3	7 / 5 / 1825	Arena ***	LED 4" Linear Fixture	16.23 w	3	128.31 w	72.5%	234	\$49.17
4ft linears w2	59 w	4	4 / 5 / 1043	Bob Kerstiens Ent Ctr Stage	LED 4" Linear Fixture	16.23 w	4	171.08 w	72.5%	178	\$37.47
4ft linears w2	59 w	2	4 / 5 / 1043	Bob Kerstiens Ent Ctr Behind Stage	LED 4" Linear Fixture	16.23 w	2	85.54 w	72.5%	89	\$18.73
4ft linears w2	59 w	9	6 / 5 / 1564	Arena Main Grandstands & box next to	LED 4" Linear Vapor Tight Fixture	16.7 w	9	380.7 w	71.7%	596	\$125.06
4ft linears w2	59 w	8	5 / 5 / 1304	Auditorium	LED 4" Linear Fixture	16.23 w	8	342.16 w	72.5%	446	\$93.67
2x4 w 4	112 w	2	5 / 5 / 1304	Auditorium	LED Troffer 2x4	22.8 w	2	178.4 w	79.6%	233	\$48.84
2x4 w4	112 w	2	5 / 5 / 1304	Auditorium	LED Troffer 2x4	22.8 w	2	178.4 w	79.6%	233	\$48.84
2x4 w4	112 w	6	5 / 5 / 1304	Auditorium	LED Troffer 2x4	22.8 w	6	535.2 w	79.6%	698	\$146.51
2x4 w4	112 w	21	4 / 5 / 1043	Fair Office Tehama Room & Storage	LED Troffer 2x4	22.8 w	21	1873.2 w	79.6%	1,953	\$410.23
2x4 w4	112 w	3	5 / 5 / 1304	Auditorium	LED Troffer 2x4	22.8 w	3	267.6 w	79.6%	349	\$73.26
2x4 w4	112 w	3	5 / 5 / 1304	Auditorium	LED Troffer 2x4	22.8 w	3	267.6 w	79.6%	349	\$73.26
2x4 w4	112 w	6	5 / 5 / 1304	Auditorium	LED Troffer 2x4	22.8 w	6	535.2 w	79.6%	698	\$146.51
2x4 w4	112 w	6	5 / 5 / 1304	Auditorium 6 emergency lights	LED Troffer 2x4	22.8 w	6	535.2 w	79.6%	698	\$146.51

EXISTING



# ENERGY AUDIT



In Reference to Quote # 600935

**30th Dist Agricultural Assoc.**  
 30th Dist Agricultural Assoc.  
 670 Antelope Blvd  
 Red Bluff, Ca. 96080  
 Customer# 7682822009 - SA# 7882822058

EcoGreen Sales Rep: Jay Langner  
 Customer Contact: Mandy Staley  
 Title of Contact: CEO  
 Customer Phone: (530) 527-5920  
 Customer Email: mandy@tehamadistrictfair.com

Approx Building Size SF  
 Energy Rate 0.21 KWh

Existing Bulb	Watts/Ft x	# of Fixture	Operating Hours-Day / Yr	Location	Replacement Bulb	Watts/Fix	# of Fixtures	Watts/bulbs Saved	Usage Saved	KWh Saved	Annual Savings
4ft linears w4	112 w	20	4 5 / 1043	Tyler Jelly Bldg Main Awd.	LED 4' Linear Fixture	33.3 w	20	1574 w	70.3%	1.641	\$344.71
4ft linears w4	112 w	4	8 7 / 2920	Pauline Davis Pavilion Rear Overhang	LED 4' Linear Fixture	33.3 w	4	314.8 w	70.3%	919	\$193.04
8ft linears w1	58 w	3	4 5 / 1043	Bob Kerselens Ent Ctr Main Seating	LED 4' Linear Fixture	16.23 w	6	76.62 w	44.0%	80	\$16.78
8ft linears w1	58 w	10	4 5 / 1043	Floriculture	LED 4' Linear Fixture	16.23 w	20	255.4 w	44.0%	266	\$55.93
8ft linears w1	58 w	27	4 5 / 1043	Best of Show Bldg w Murals on side	LED Linear 8ft	32 w	27	702 w	44.8%	732	\$153.74
8 ft linears W2	109 w	1	10 5 / 2607	Floriculture	LED 4' Linear Fixture	16.23 w	2	76.54 w	70.2%	200	\$41.91
Flood WP	300 w	3	10 7 / 3650	Horse Stables A, B, C Exterior	LED Area Light w/ ARM2	82.9 w	3	651.3 w	72.4%	2,377	\$499.22
Flood WP	300 w	2	8 5 / 1825	Arena VIP Viewing R Side	LED Area Light w/ Slip Filter	82.9 w	2	434.2 w	72.4%	792	\$166.41
Flood WP	300 w	4	8 5 / 1825	Livestock #1	LED Wallpack	40 w	4	868.4 w	72.4%	1,811	\$380.36
FLOOD	465 w	3	7 5 / 1825	Pauline Davis Pavilion	LED Wallpack	120 w	12	3,060 w	86.4%	8,935	\$1,876.39
AL Wld Pole Mt	95 w	2	7 5 / 1825	Arena Grandstands 4-6 & Small Box next door	LED Area Light w/ Trunnion	120 w	3	1,035 w	74.2%	1,889	\$396.66
WPs	95 w	2	10 5 / 2607	Tyler Jelly Bldg Outside Both RRs	LED Area Light	24.29 w	2	141.42 w	74.4%	258	\$54.20
WPs	95 w	5	10 5 / 2607	Floriculture	LED Wallpack	24 w	2	142 w	74.7%	370	\$77.75
Inc Cans	100 w	4	5 5 / 1304	Auditorium	LED Wallpack	24 w	5	355 w	74.7%	926	\$194.36
INC WP	150 w	4	5 5 / 1564	Don Smith Each End of Arena	LED A19	15 w	4	340 w	85.0%	443	\$93.08
WP	150 w	4	8 5 / 2086	Livestock #1	LED Wallpack	24 w	4	504 w	84.0%	788	\$165.56
INC CPYS	60 w	8	6 5 / 1564	Don Smith Bull Sale Each End of Arena	LED Wallpack	24 w	4	504 w	84.0%	788	\$165.56
Inc Cyps	60 w	10	5 5 / 1304	Don Smith Bull Sale Front of Bldg & Restrooms	LED BR30	9 w	8	408 w	85.0%	638	\$134.03
Inc Cyps	60 w	2	5 5 / 1304	Ben Knight Youth Center	LED BR30	9 w	2	102 w	85.0%	665	\$139.61
WP	60 w	2	7 5 / 1825	Best of Show Bldg w Murals on Side	LED Wallpack	12 w	2	96 w	80.0%	175	\$27.92
Cyps	75 w	16	6 5 / 1564	Arena ***	LED BR30	9 w	16	1056 w	86.0%	1,652	\$346.90
WP Inc Canopy	75 w	6	5 5 / 1304	Horse Stables A, B, C Exterior	LED Flood Light	28.2 w	6	280.8 w	62.4%	366	\$76.87
AL	1080 w	2	11 7 / 4015	Main Entry Gate & Parking Lot	LED Area Light	267.7 w	2	1624.6 w	75.2%	6,523	\$1,369.78
AL	458 w	3	10 7 / 3650	Arena at gate 8	LED Area Light w/ Slip Filter	120 w	3	1,014 w	73.8%	3,701	\$777.23
Canopy	190 w	8	8 7 / 2920	Auditorium	LED Canopy Light	40.21 w	8	1,198.32 w	76.8%	1,734.81	\$361.51
Flood WP	150 w	4	10 5 / 2607	Best of Show Bldg w Murals on Side & Gazebo	LED Flood	47.94 w	4	408.24 w	66.0%	1,064	\$223.51
Flood Roof Mt	190 w	1	6 5 / 1564	Mounted on Roof Facing up on Sign	LED Flood	47.94 w	1	142.06 w	74.8%	222	\$46.67
WPs	190 w	4	8 7 / 2920	Auditorium	LED Wallpack	40 w	4	600 w	78.9%	1,752	\$387.92
AL	1610 w	20	6 5 / 1564	Arena Main Poles	LED Area Light	420 w	20	2,3800 w	73.9%	37,230	\$7,818.30
AL	1610 w	18	6 5 / 1564	Arena Main Grandstands	LED Area Light	420 w	18	21,420 w	73.9%	33,507	\$7,036.47
POT LIGHT	458 w	4	11 7 / 3650	Fair Office Outside office wood pole #3B4	LED Area Light w/ ARM2	120 w	1	338 w	73.8%	1,234	\$259.08
AL	458 w	4	10 7 / 3650	Ext Floriculture, Tyler Jelly & Cafeteria/Aud	LED Area Light w/ Slip Filter	120 w	4	1,352 w	73.8%	5,428	\$1,139.94
AL	458 w	1	10 7 / 3650	fair Office Pole outside office red base w cobrahead	LED Area Light w/ Slip Filter	120 w	1	338 w	73.8%	1,234	\$259.08
FLOOD	458 w	3	8 5 / 2086	Livestock #1	LED Area Light w/ Trunnion	120 w	3	1,014 w	73.8%	2,115	\$444.13
FLOOD	458 w	8	10 7 / 3650	Horse Stables A, B, C Exterior	LED Area Light w/ Trunnion	120 w	8	2,704 w	73.8%	9,870	\$2,072.62
FLOOD	458 w	4	10 7 / 3650	Fair Office Pole behind bldg Tapered Metal	LED Area Light w/ Trunnion	120 w	4	1,352 w	73.8%	4,935	\$1,036.31
FLOOD	458 w	25	10 7 / 3650	Front & Rear Pauline Davis Pavilion	LED Area Light w/ Trunnion	120 w	25	8,450 w	73.8%	30,843	\$6,476.93
FLOOD	458 w	1	10 7 / 3650	Front & Rear Pauline Davis Pavilion	LED Area Light w/ Trunnion	120 w	1	338 w	73.8%	1,234	\$259.08
AL	458 w	3	8 5 / 2086	Tehama Co Peace Officers Mem. W Gazebo	LED Area Light w/ Slip Filter	120 w	3	1,014 w	73.8%	2,115	\$444.13
AL	458 w	6	10 5 / 2607	Best of Show Bldg w Murals on Side & Gazebo	LED Area Light w/ Slip Filter	120 w	6	2,028 w	73.8%	5,287	\$1,110.33
AL	458 w	8	10 5 / 2607	Best of Show Bldg w Murals on Side & Gazebo	LED Area Light w/ Slip Filter	120 w	8	2,704 w	73.8%	7,050	\$1,480.44
AL	458 w	5	10 7 / 3650	Don Smith Bull Arena Front	LED Area Light w/ Slip Filter	120 w	5	1,698 w	73.8%	6,169	\$1,295.39
AL	458 w	6	10 5 / 2607	Best of Show Bldg w Murals on Side & Gazebo	LED Area Light w/ Trunnion	120 w	6	2,028 w	73.8%	5,287	\$1,110.33
AL	458 w	8	10 7 / 3650	Front & Rear Pauline Davis Pavilion	LED Area Light w/ Slip Filter	120 w	8	2,704 w	73.8%	9,870	\$2,072.62
AL	458 w	3	8 7 / 2920	Outside Freestanding Restrooms Livestock areas	LED Area Light w/ Slip Filter	120 w	3	1,014 w	73.8%	2,961	\$621.78
AL	458 w	60	11 7 / 4015	Main Entry Gate & Parking Lot & Round up Museum	LED Area Light w/ Slip Filter	120 w	60	20,280 w	73.8%	81,424	\$17,099.08
AL	458 w	2	6 5 / 1564	Arena	LED Area Light w/ Slip Filter	120 w	2	676 w	73.8%	1,057	\$222.07
Highbays Cyps	458 w	40	6 5 / 1564	Pauline Davis Pavilion	LED Round Highbay	149.3 w	40	12,348 w	67.4%	19,316	\$4,056.32
Highbays Cyps	458 w	5	5 5 / 1304	Livestock #1 Cov Bldg Left of Facing	LED Round Highbay	149.3 w	5	15,435 w	67.4%	2,012	\$422.53
High Bay Cyps	458 w	10	5 5 / 1304	Ben Knight Youth Center	LED Round Highbay	149.3 w	10	3,087 w	67.4%	4,024	\$845.07
High Bay Cyps	458 w	6	6 5 / 1564	Don Smith Bull Sale Main Arena	LED Round Highbay	149.3 w	6	1,852.2 w	67.4%	2,897	\$608.45
Highbays Cyps	458 w	18	5 5 / 1304	Auditorium	LED Round Highbay	149.3 w	18	5,556.6 w	67.4%	7,243	\$1,521.12
FLOOD	458 w	5	6 5 / 1564	Arena Announcers booth, all 4 main 1500w poles	LED Area Light w/ Slip Filter	120 w	5	1,690 w	73.8%	2,844	\$555.17
AL	95 w	2	10 7 / 3650	Horse Stables A, B, C Exterior	LED Area Light	24.29 w	2	141.42 w	74.4%	516	\$108.40
SQ Cans	95 w	2	10 7 / 3650	Fair Office Ex Evers	LED 8" Can Downlight 120-277V	20.5 w	2	149 w	74.4%	544	\$114.21
Wall Mt WPs	95 w	2	11 7 / 4015	Main Entry Gate & Parking Lot	LED Wallpack	24 w	2	142 w	74.7%	570	\$119.73
WP	95 w	2	8 5 / 2086	Livestock #1	LED Wallpack	24 w	2	142 w	74.7%	296	\$62.20
	w		/			w		w		w	
	w		/			w		w		w	
	w		/			w		w		w	
	w		/			w		w		w	



# ENERGY AUDIT



In Reference to Quote # 600927

EcoGreen Sales Rep: Jay Langner  
 Customer Contact: Stephen Hales  
 Title of Contact: CEO  
 Customer Phone: 707-551-2001  
 Customer Email: shales@scfair.org

**Solano Co. Fair Assoc.**  
 Solano Co. Fair Assoc.  
 900 Fairgrounds Drive  
 Vallejo, CA. 94589  
 Customer# 9272602864-Z. SA# 9.272602170561033

Approx Building Size  
 Energy Rate                      SF  
 0.21 KWh

Existing Bulb	Watts/Ft x	# of Fixture	Operating Hours-Day / Yr	Location	Replacement Bulb	Watts/Fix	# of Fixtures	Usage Saved	Watts/bulbs Saved	KWh Saved	Annual Savings
Highbays	290 w	126	5 / 5 / 1304	McCormack 1 Bulb clear 1 bulb frosted	LED Round Highbay	198.5 w	63	66.6%	24034.5 w	31,331	\$6,579.44
AL-POLE	458 w	2	10 / 7 / 3650	McCormack REAR PARKING Next to Freeway	LED Area Light	120 w	2	73.8%	676 w	2,467	\$518.15
AL-POLE	458 w	1	10 / 7 / 3650	McCormack REAR PARKING Next to Freeway	LED Area Light	120 w	1	73.8%	338 w	1,234	\$259.08
AL-POLE	458 w	1	10 / 7 / 3650	McCormack Rear Parking next to Freeway	LED Area Light	120 w	1	73.8%	338 w	1,234	\$259.08
Flood-WP	458 w	1	10 / 7 / 3650	McCormack REAR OF BUILDING FREEWAY SIDE	LED Area Light w/ Truneeh Bracket	120 w	1	73.8%	338 w	1,234	\$259.08
Flood-WP	458 w	1	10 / 7 / 3650	McCormack FRONT ENTRY	LED Area Light w/ Truneeh Bracket	120 w	1	73.8%	338 w	1,234	\$259.08
High Bay-susp CPY	458 w	25	4 / 5 / 1043	EXPOSITION HALL	LED Round Highbay	149.3 w	25	67.4%	7717.5 w	8,048	\$1,090.13
Flood-WP	295 w	1	10 / 7 / 3650	Exposition Hall OVER SIDE ROLL UP DOOR	LED Area Light	82.9 w	1	71.9%	212.1 w	774	\$162.57
Flood-WP	295 w	3	10 / 7 / 3650	McCormack MAIN ENTRY SIDE	LED Area Light	82.9 w	3	71.9%	636.3 w	2,322	\$487.72
Flood-WP	295 w	1	10 / 7 / 3650	McCormack REAR OF BUILDING FREEWAY SIDE	LED Area Light	82.9 w	1	71.9%	212.1 w	774	\$162.57
WP	215 w	1	10 / 7 / 3650	Exposition Hall left SIDE FRONT OVER BLUE DOOR	LED Wallpack	40 w	1	81.4%	175 w	639	\$134.14
CANS	190 w	8	10 / 7 / 3650	Exposition Hall FRONT ENTRY	LED 8" Can Downlight 120-277v	15 w	8	92.1%	1400 w	5,110	\$1,073.10
CANS	190 w	14	10 / 7 / 3650	McCormack Side Ent by School & opp. Side 2 sides	LED 8" Can Downlight 120-277v	15 w	14	92.1%	2450 w	8,943	\$1,877.93
WP	190 w	2	4 / 5 / 1043	Restroom in Between McCormack Hall & Race Place	LED Wallpack	40 w	2	78.9%	300 w	313	\$66.70
WP	190 w	3	10 / 7 / 3650	McCormack REAR OF BUILDING FREEWAY SIDE	LED Wallpack	40 w	3	78.9%	450 w	1,643	\$344.93
WPS	190 w	8	11 / 7 / 4015	Race Place FRONT & 2 SIDES OF BUILDING	LED Wallpack	40 w	8	78.9%	1200 w	4,818	\$1,011.78
Wall Packs w2	75 w	4	8 / 7 / 2920	Sheep Barn End of Structure	LED PAR38	14.4 w	4	80.8%	242.4 w	708	\$148.64
FLOOD 16-17 same	300 w	1	5 / 5 / 1304	McCormack 1 Bulb clear 1 bulb frosted	Skip	300 w	1				
FLOOD-INC w2	200 w	1	11 / 7 / 4015	LEFT SIDE OF TICKETING GATE #10	Skip	200 w	1				
FLOOD	465 w	3	11 / 7 / 4015	EACH SIDE OF TICKETING GATE #10	Skip	200 w	3				
FLOOD	465 w	1	5 / 5 / 1304	Arena MAIN GROUNDSTANDS	LED Area Light w/ Slip Filler	120 w	1	74.2%	1035 w	4,156	\$872.66
Flood-TELE POLE	465 w	25	11 / 7 / 4015	Parking Lots off Main Entry Fairgrounds Dr	LED Area Light w/ Truneeh Bracket	120 w	25	74.2%	345 w	450	\$94.44
AL-TELE POLE	1100 w	12	11 / 7 / 4015	PREFERRED PARKING LOT R Side Entry off Fairgrounds Dr	LED Area Light w/ Truneeh Bracket	120 w	12	74.2%	8625 w	34,629	\$7,272.17
FLOOD	1100 w	24	11 / 7 / 4015	PREFERRED PARKING LOT Left Side	LED Area Light	267.7 w	24	75.7%	9987.6 w	40,100	\$8,421.05
FLOOD	1100 w	7	5 / 5 / 1304	Arena MAIN GROUNDSTANDS	LED Area Light	267.7 w	7	75.7%	19975.2 w	80,200	\$16,942.09
TELEPHONE POLE	1100 w	2	5 / 5 / 1304	Arena GRASS AREA	LED Area Light	267.7 w	2	75.7%	5626.1 w	7,595	\$1,594.89
Flood-WP	300 w	1	8 / 7 / 2920	Sheep Barn Left End	LED Flood	47.94 w	1	84.0%	252.06 w	2,170	\$455.68
4' LINEARS W/3 T8	89 w	4	4 / 5 / 1043	Race Place BOX W/ MULTIPLE 4' LINEARS	LED 4' Linear Fixture	33.3 w	4	52.8%	188 w	736	\$154.56
4' LINEARS W/2 T8	89 w	15	5 / 5 / 1304	McCORMACK KITCHEN	LED 4' Linear Fixture	33.3 w	15	62.6%	835.5 w	3,117	\$611.77
2'x4 W/2 T12	59 w	2	4 / 5 / 1043	Race Place BREAKROOM BEHIND COUNTERS	LED Troffer 2x4	22.8 w	2	61.4%	72.4 w	1,089	\$228.72
2'x4 W/2 T12	59 w	2	4 / 5 / 1043	Race Place ROOM NEXT TO BREAK ROOM	LED Troffer 2x4	22.8 w	2	61.4%	72.4 w	76	\$15.86
4' LINEAR W/2 T8	59 w	1	4 / 5 / 1043	Race Place 2ND ROOM NEXT TO BREAK ROOM	LED Troffer 2x4	22.8 w	1	61.4%	72.4 w	76	\$15.86
4' LINEAR W/2 T8	59 w	1	4 / 5 / 1043	Race Place BOX OFFICE TICKETING AREA IN FRONT	LED 4' Linear Fixture	16.23 w	1	72.5%	42.77 w	45	\$9.37
4' LINEARS w/2	59 w	6	11 / 7 / 4015	Main Entrance Gates at Ticket Booths	LED 4' Linear Fixture	16.23 w	6	72.5%	42.77 w	45	\$9.37
4' LINEARS W/2 T12	59 w	2	5 / 5 / 1304	Small Grandstands On each side of main Grandstands	LED 4' Linear Fixture	16.23 w	2	72.5%	256.62 w	1,030	\$216.37
4' LINEARS W/2 T12	59 w	5	5 / 5 / 1304	Arena MAIN GROUNDSTANDS	LED 4' Linear Vapor Tight Fixture	16.7 w	5	71.7%	84.6 w	110	\$23.16
4' LINEARS W/2 T8	59 w	3	4 / 5 / 1043	McCormack STORAGE BEHIND KITCHEN	LED 4' Linear Vapor Tight Fixture	16.7 w	3	71.7%	211.5 w	276	\$57.90
4' LINEARS W/2 T8	59 w	8	4 / 5 / 1043	Race Place WOMAN'S RESTROOM	LED 4' Linear Fixture	16.23 w	8	72.5%	342.16 w	446	\$93.67
4' LINEARS W/2 T8	59 w	6	4 / 5 / 1043	Race Place BAR AREA SANDWICHES	LED Troffer 1x4	31 w	3	47.5%	84 w	88	\$18.40
4' LINEARS W/2 T8	59 w	2	4 / 5 / 1043	Restroom in Between McCormack Hall & Race Place	LED 4' Linear Fixture	16.23 w	2	72.5%	168 w	175	\$36.79
4' LINEARS W/2 T8	59 w	2	4 / 5 / 1043	Restroom in Between McCormack Hall & Race Place	LED 4' Linear Fixture	16.23 w	2	72.5%	85.54 w	89	\$18.73
4' LINEARS W/2 T8	59 w	3	4 / 5 / 1043	Race Place MENS RESTROOM	LED 4' Linear Fixture	16.23 w	3	72.5%	85.54 w	89	\$18.73
4' LINEARS W/2 T8	59 w	40	4 / 5 / 1043	N FLOOR W/ TVS TABLES & CHAIRS NOTE: 4 are emergency fix	LED Troffer 1x4	31 w	3	47.5%	84 w	88	\$18.40
4' LINEARS W/2 T8	59 w	3	10 / 7 / 3650	McCormack FRONT ENTRY	LED 4' Linear Fixture	16.23 w	3	72.5%	1710.8 w	1,784	\$374.67
4' LINEARS W/2 T8	59 w	3	5 / 5 / 1304	McCormack MENS RESTROOM	LED 4' Linear Vapor Tight Fixture	16.7 w	3	71.7%	126.9 w	463	\$97.27
4' LINEARS W/2 T8	59 w	3	5 / 5 / 1304	McCormack WOMEN'S RESTROOM	LED 4' Linear Fixture	16.23 w	3	72.5%	128.31 w	167	\$35.12
4' LINEARS W/2 T8	59 w	5	4 / 5 / 1043	Race Place Inside Counters & BETTING AREA	LED 4' Linear Fixture	16.23 w	5	72.5%	128.31 w	167	\$35.12
4' LINEARS W/2 T8	59 w	3	4 / 5 / 1043	Exp. Hall MENS RESTROOM	LED Troffer 1x4	31 w	3	47.5%	140 w	146	\$30.66
4' LINEARS W/2 T8	59 w	3	4 / 5 / 1043	Exp. Hall ENTRY DOORS FRONT HALLWAYS	LED 4' Linear Fixture	16.23 w	3	72.5%	128.31 w	134	\$28.10
4' LINEARS W/2 T8	59 w	3	4 / 5 / 1043	Exp. Hall KITCHEN SERVING AREA	LED 4' Linear Fixture	16.23 w	3	72.5%	128.31 w	134	\$28.10
4' LINEARS W/2 T8	59 w	1	4 / 5 / 1043	Exp. Hall STORAGE & RESTROOM	LED 4' Linear Fixture	16.23 w	1	72.5%	128.31 w	134	\$28.10
4' LINEARS W/2 T8	59 w	2	4 / 5 / 1043	Race Place CENTER OF BUILDING UNDER TVS	LED 4' Linear Fixture	16.23 w	2	72.5%	85.54 w	45	\$9.37
4' LINEARS W/2 T8	59 w	3	4 / 5 / 1043	Exp. Hall WOMEN'S RESTROOM	LED 4' Linear Fixture	16.23 w	3	72.5%	85.54 w	89	\$18.73
4' LINEAR W/1 T8	32 w	1	5 / 5 / 1304	McCormack MENS RESTROOM	LED 4' Linear Fixture	16.23 w	1	72.5%	128.31 w	134	\$28.10
8' LINEAR W/1 T8	32 w	2	2 / 2 / 209	SHEEP BARN Daisy Chained	Skip	32 w	2	49.3%	15.77 w	21	\$4.32
4' LINEARS W/2 T8	59 w	4	4 / 5 / 1043	N FLOOR W/ TVS TABLES & CHAIRS NOTE: 4 are emergency fix	LED 4' Linear Fixture	16.23 w	4	72.5%	171.08 w	178	\$37.47
W											
W											
W											
W											
Totals		488				94559.38 w	433	74.7%		250,448	\$52,594.13



# ENERGY AUDIT

## Solano Co. Fair Assoc.

Solano Co. Fair Assoc.  
 900 Fairgrounds Drive  
 Vallejo, CA. 94589  
 Customer# 9272602864-7, SA# 9.272602170561031  
 EcoGreen Sales Rep: Jay Langner  
 Customer Contact: Stephen Hales  
 Title of Contact: CEO  
 Customer Phone: 707-551-2001  
 Customer Email: shales@scfair.org



In Reference to Quote # 600927

Approx Building Size SF  
 Energy Rate 0.21 KWh

Existing Bulb		Watts/Fix x # of Fixtur		Operating Hours-Day / Yr		Location		Suggested Replacements & Savings		Annual Savings	
Watts/Fix	# of Fixtur	Watts/Fix	# of Fixtur	Hours-Day / Yr	Location	Replacement Bulb	Watts/Fix	# of Fixtures	Watts/bulbs Saved	Usage Saved	KWh Saved
94,559						\$256,307.65					\$4,382.84
250,448						4.87					\$52,594.13
30.3											\$355,529.04
186											\$811,334.52
74.7%											\$0.00
20.5%											\$0.00
4.87											\$0.00
3.98											\$0.00
4.87											\$0.00
3.98											\$0.00

Total Project Cost After Rebate  
 \*\*\*\*\*Payback Period Yrs

Avg Annual Res Powered by Savings  
 Annual CO2 Savings (MT)  
 Average Electrical Savings  
 ROI During Payback  
 Payback Period Yrs - Out of Pocket - No Rebates/Program  
 Payback Period Yrs W/ Rebates & Yearly Bulb Replacement Savings  
 Payback Period Yrs W/Rebates & Federal Tax Savings  
 Payback Period Yrs Fully Comprehensive\*

Year	Potential Write-Off Amount		Total
	Capital	Interest	
Year 1	51,262	0	51,262
Year 2	51,262	0	51,262
Year 3	51,262	0	51,262
Year 4	51,262	0	51,262
Year 5	51,262	#NUM!	#NUM!
Totals	\$256,307.65	#NUM!	#NUM!

\*Payment is based on a 4.87 year loan at 0% interest. OAC, actual may vary.  
 \*\* Reflects 6% per year cost of energy increase + Bulb Replacement  
 \*\*\* Based on IRS 179D Deduction @ 35% federal tax rate  
 \*\*\*\* Payback Period Yrs = (Total Project Cost - Rebate) / Estimated Savings per Year  
 \*Payback Period Yrs = (Total Project Cost - Rebate - Tax Savings) / (Estimated Savings Per Year + Bulb Replacement Savings Per Yr)

NOTE: Attached calculations do not include depreciation deduction for project cost.  
 \*Loan Payment  
 Bulb Replacement Savings Per Year  
 \$11,810.20  
 \$666,466.22  
 \$4,382.84