### Discussion with Albert Shelton 7/18/11

The Hydroxyl unit wasn't getting aeration due to a broken belt on the air pump. Al put on two new belts and tightened the hose clamps on the pipe going to the Hydroxyl unit.

Trash in the top part of the Hydroxyl unit is manually flushed out. The PLC used to take care of this periodically.

The liquid exiting the racetrack goes thru the small shredder pump under the south walkway. A filter cannot be used due to frequent clogging. We need another pump there as backup.

The Avalon board must initiate the clean-out of the racetrack. Bowman is not equipped with the equipment needed, which includes a vacuum truck. A mechanical screen (~\$40,000) would keep the trash out of the racetrack. [The "scum" on the surface is thick and substantial.] The racetrack needs three aerators to keep the liquid circulating.

The on-site records are kept at the south end of the Hydroxyl unit on the east side. On each visit, Al records residual chlorine and total gallons of effluent.

The PLC was damaged by surge. It is in two or three pieces atop the south control panel inside the Hydroxyl unit. Al said lightning struck the power pole. When the former operator left, he took with him the (programmer or terminal?) used to interrogate and program the PLC.

The telephone line is no longer used. It used to connect to the PLC so that we could have SCADA capability.

Al did not readily consider relieving the stress on the south clarifier tank. He spoke of replacing them due to the plastic seams leaking and to their small size. See "suggestions" below.

Al's suggestions on meeting effluent standards:

- He says we should replace the two plastic clarifiers with three concrete ones, each having a
  capacity of 1500 gallons. This would improve our readings of TSS. Right now, we could not pass
  a test of fecal matter.
- Check all brick manholes for infiltration when it has come a big rain.
- Do a smoke test of the collection system.

Al adjusts flow rate to the Hydroxyl by tweaking a pinch valve on the north end of the Hydroxyl unit.

If you repair the yard light, you will get lots of bugs into the liquid, and that will raise your BOD.



### Avalon Water Supply and Sewer Service

PO Box 246

President: Patsy Russell

972-627-3284

Itasca, TX 76055

Vice Pres: John Goodwyn 972-627-0185

254-687-2332

Mr. David Bowman BOWMAN H2O 801 S. Files St. Itasca, Texas 76055

SUBJECT: Termination of Contract

Dear Mr. Bowman:

Avalon Water/Sewer hereby gives 30-day notice that we are terminating our contract effective October 15, 2011, 5:00 PM.

We look forward to working constructively with BOWMAN H2O for the remainder of the contract, and in transferring to Avalon Water/Sewer any records related to the sewer plant operation. Of special interest are those records that TCEQ requires to be kept on hand.

Please contact either me or John Goodwyn with any questions you may have.

Sincerely,

Patsy Russell, President

John Goodwyn, Vice President

### **PLANT OPERATION & MAINTENANCE**

- 1. Dean is responsible for taking samples, recording data, and submitting a full DMR by the  $20^{th}$  of each month.
- 2. Who is responsible for giving Gregg direction on plant maintenance?
- 3. Who decides when to turn the Hydroxyl plant back on? It has been off for three weeks (since Oct. 26).
- 4. Who decides what equipment to buy for the present plant? Who gets TCEQ permission to modify the plant?

### **TASK ORDERS**

- #1. Doing rounds
- #2. Make sure TCEQ gets our complete DMRs (with chlorine readings) on time (postmarked by the 20th), and send me a copy.
- #3. Communicate with Karen Smith on her concerns (or your questions) about the operation of the plant: sludge handling, use of the emergency pond, being off-line during repairs, and such.
- #4. Assist Gregg when he needs assistance: plant repairs, plant improvements, his safety.

### **ENFORCEMENT**

- 1. Who is going to track the deadlines and keep on schedule?
- 2. What things remain to be corrected?
- 3. Who will write Progress Reports to tell Enforcement about the violations we are addressing?

### **PERMIT**

- 1. Who will inform Dex Dean as to what we are doing so he will extend the present permit? He hasn't heard from us since our visit three weeks ago (Oct. 26).
- 2. Who else in TCEQ needs to be informed about our plans for a new plant? (Vahora, Herrin, Ibarra?)
- 3. When is the Letter of Intent due and what will we say in it?

### **PLANT EXPANSION**

- 1. Who is going to decide what system to build?
- 2. How much can we afford?
- 3. Which engineering firm are we going to use?

### Various Individuals Involved

Patsy Russell John Goodwyn Dean Carrell

Ben Shanklin

### TCEQ, FORT WORTH

Jorge Ibarra, TCEQ Enforcement......assigned to our Enforcement Case Greg Diehl, TCEQ Inspector.....assigned only to our July violations Karen Smith, TCEQ Inspector.....our regular inspector

### TCEQ, AUSTIN

Dex Dean.....in charge of our permit renewal. Wants a letter of intent Firoj Vahora.....rules specialist Louis Herrin III......professional engineer. He suggested the Land Application

Good afternoon Patsy and John,

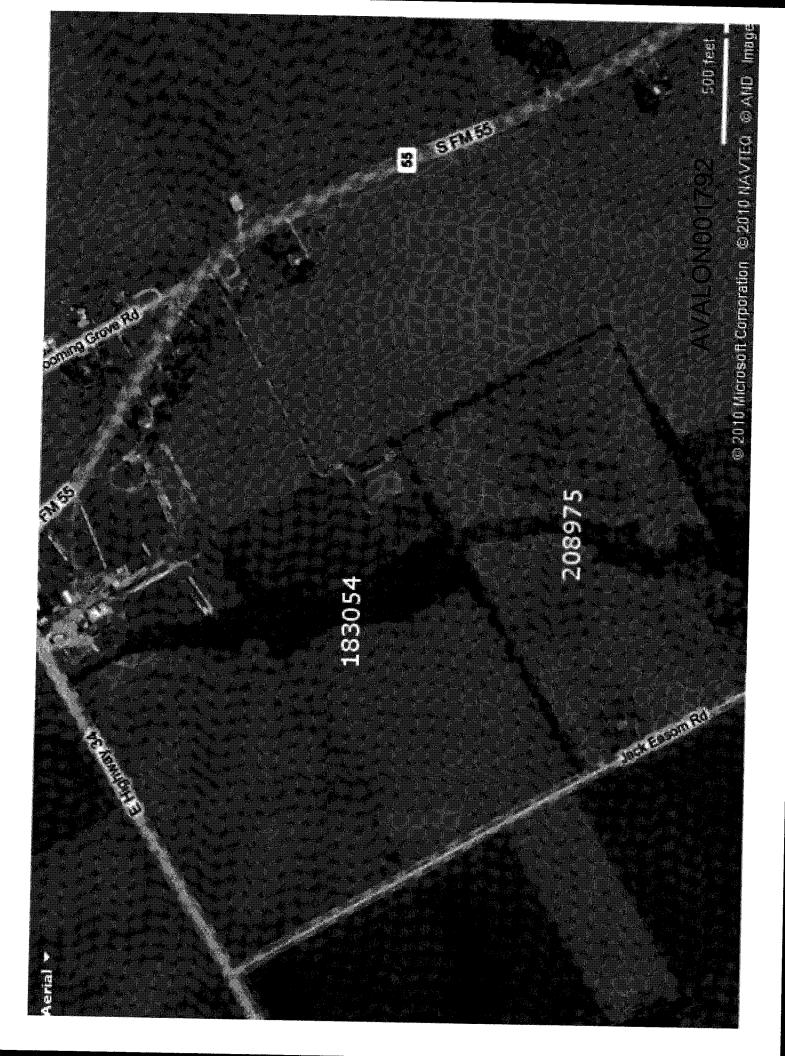
To follow my best judgment I feel I must address a couple issues with the two of you, as part of my Management Duties is to protect the Avalon Board of Directors.

We got word of notice for a special called meeting concerning the sewer system and there are a couple of items on the agenda I would like to address:

- 1. It is my understanding Dean Carrell is a contractor, if my understanding is correct, contractors do NOT have job descriptions or they become employees. There needs to be a signed contract between Mr. Carrell and the board detailing what duties are expected of him. I would hope that the board required certain criteria of Mr. Carrell before entering into an agreement with him, bonding, insurance, etc. You should never supervise a contractor on a day to day basis, he should only be given work orders and then his work inspected. This insures there is always a separation between the WSC and the contractor. Unfortunately if you are performing day to day supervision of his work and something happens then you could be held liable. This is why I am so careful not to supervise the day to day functions of Gregg, as he is an Avalon employee and not a HILCO employee.
- 2. If the Board Members begin handling day to day duties they become employees and are NOT covered under the D&O insurance.
- 3. Avalon has invested a lot of time and money communication with Childress Engineers and while HILCO has no gain one way or the other as to what engineer you use for the project, I do not see any benefit at all for changing engineering firms at this time as you are still going to face the issue of acquiring a buffer zone for the overflow etc.

I am not trying to interfere with your business, but I do feel a responsibility to point out these issues. I wish you a successful meeting.

Debbie Cole



## Avalon Permit (Expires 12/01/2011)

### 1. Flows

25,000 GPD.......daily average flow 51 GPM (73,440 GPD) ....... two-hour peak (New application asks for only 25,000 GPD)

Effluent Characteristic		Discharge Limitations	mitations		Minimum Self-Mo	Minimum Self-Monitoring Requirements
		İ			Report Daily Ave	Report Daily Average and Maximum
	Daily Avg.	7-day Avg.	7-day Avg. Daily Max.	Single Grab	Measure Frequency	Measure Frequency   Single Grab Sample Type
	(mg/L (lbs./day)	(mg/L)	(mg/L)	(mg/L)		
Flow, MGD	Report	N/A	Report	N/A	Five/week	Instantaneous
BOD <sub>5</sub>	20 (4.2)	30	45	65	One/week	Grab
TSS	20 (4.2)	30	45	65	One/week	Grab
Ammonia Nitrogen	Report (Report)	N/A	N/A	Report	One/week	Grab

# For Comparison, The Standard Limits for Stabilization Ponds

Effluent Characteristic Discharge Limitations	Discharge Limita	tions			Minimum Self-Monit	Minimum Self-Monitoring Requirements
					Report Daily Average and Maximum	and Maximum
	Daily Avg.	7-day Avg.	Daily Max.	7-day Avg. Daily Max. Single Grab	Measure	Single Grab Sample
	(mg/L	(mg/L)	(mg/L)	(mg/L)	Frequency	Type
	(lbs./day)					
Flow, MGD	Model		r egypor	3.2	100/1/0/13	maisments.
BODs	30	45	70	100	OnerWeek	225
TSS	06	-	1		OnerwiseR	
Ammonia Nitrogen	Lago.			Report	Dug/week	To G

DO MIN: 4.0

### 2. Disinfection

time of at least 20 minutes (based on peak flow), and shall be monitored five times per week by grab sample. An equivalent method of The effluent shall contain a chlorine residual of at least 1.0 mg/L and shall not exceed a chlorine residual of 4.0 mg/L after a detention disinfection may be substituted only with prior approval of the Executive Director.

### 3. pH

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once per month by grab sample.

## 4. Solids/Foam

There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of visible oil.

## 5. Effluent Sample Source

Effluent monitoring samples shall be taken at the following location: Following the final treatment unit.

## 6. Dissolved Oxygen

The effluent shall contain a minimum dissolved oxygen of 4.0 mg/L and shall be monitored once per week by grab sample.

### 2010-12-07 Avalon's Questions sent email by John G. 12/7/2010 (large type) Answers Sent back by Ben Shacklin on 12/9/2010 (small type)

### LAND

We have a problem with obtaining land.

- The owners of the land north and west of the plant are very much opposed to selling any land, and are not open to negotiation.
- The land east of the plant might be obtainable, but only after all other possibilities have been exhausted. This approach would bring the plant closer to the seller's house.
- The land south of the plant is up for sale. Two board members have asked the seller to sell us about four acres, but he is not interested in selling a fraction. We have told the realtor that we would like to buy from the new owner, time permitting. This land is several feet lower than the plant.
- Q-01. Can we use the land south or east of the plant, if obtainable?
- Q1. North of the plant will work best because of the incoming lines, the grade is slightly higher and we can utilize the same discharge point physically as well as the same coordinates on the permit. We can use the south or east; it will just require a little more work and some additional cost. The south will require some fill while the east will require more cut. The south will require a new discharge point while the east can utilize the same discharge point. In order to utilize the lagoon as an EQ basin for a new plant east, then the lines would have to come to the lagoon with a lift station and then pump back east to the head of the new plant. For property to the south, we would move the lift station over to the south side of the lagoon. Also, we have received the Environmental Report that has been reviewed by the state and federal agencies that shows either the existing site or the new site to the north. If we are considering the south or the east property, then we need the report to be revised on all of the descriptions and all of the exhibits showing the east and south areas and sent back thru the agencies for review prior to submittal to USDA RD.

North best: incoming lines, higher land, same discharge point, same coordinates on permit. South will require some fill. New discharge point. Move lift station.

East: same discharge point. Need lift station to the lagoon. Then pump back east to the new plant.

South or east: Env. Report has been reviewed by state and federal. Would have to resubmit it for approval.

- **Q-02.** Why does each proposed type of plant require 4 acres? For example, the extended aeration plant calls for 4 acres in the cost tabulation, but the physical layout drawing shows the new plant sited on the land we already own.
- Q2. For simplicity, the required area for a new plant on a new site was rounded to 4 acres. The exact required area of a new site will vary depending on which side it is and how the buffer zone fits with it.
- **Q-03.** Can we build over the west lagoon? The influent could come into the east lagoon (equalization basin), flow (or be pumped) to the new plant built over the west lagoon, and then flow to the existing outfall. The existing plant could continue to operate during construction/installation.
- Q3. It is possible to build over the west lagoon. However, you must drain it, clean out all sludge, over-excavate the bottom of it and replace it with a structural fill to build on, or utilize some drilled piers, spread footings or similar foundation to prevent settlement. That will increase the construction cost. How much, I'm not sure at this point. But, I was thinking that the land surrounding the plant was relatively inexpensive; maybe less than \$10,000 per acre?

### **EQUALIZATION BASIN**

Q-04. If we implement a three-day equalization basin (Page 16), can we lower the peak capacity? I cannot decide if all proposed plants would employ a large equalization basin.

Q4. With the large equalization basin, we have already reduced the peak capacity. We are using a 2 times peaking factor for the new plant with equalization in lieu of a 5 to 6 times peaking factor that is what we think the actual is. The actual cannot be accurately determined because during high flows, the headworks basically bypasses unmetered to the old lagoon.

**Q-05.** If we have a three-day equalization basin, can we drop the auxiliary power unit? Paragraph 4 on Page 10 of the Permit states "... by means of alternate power sources, standby generators, and /or retention of inadequately treated wastewater."

Q5. We are required to aerate the equalization basin to keep it from going septic. So, in our opinion, we still need the emergency generator.

### NITROGEN REMOVAL

**Q-06.** If we go with the new oxidation ditch plant, and later are required to add equipment to remove nitrogen, where would the new equipment be inserted in the process: at the end of the process or somewhere in the middle (please state)?

Q6. If we have to remove nitrogen (on a future permit requirement) with a new oxidation ditch plant, we would probably recommend that a space between the ditches and the clarifier was made available to install another ditch that we would keep anoxic to remove nitrogen or add another type of tertiary treatment unit to remove the nitrogen.

### **ON-GOING EXPENSES**

Q-07. The proposed SBR includes a cost of \$55,000 for painting (or coating). When we need to repaint the plant, say in ten years, should we expect to spend that much or more, or is there some special cost associated with the initial painting?

Q7. It appears that the estimate that you are quoting \$55,000 for painting is noted on the Circular Extended Aeration Plant (Appendix I 2.1). In review \$55,000 seems high for painting and it will probably be more on the order of \$30,000 to \$40,000 for onsite blasting and painting. We think the \$55,000 number came from a supplier and is rather high. But, the circular plant is erected onsite, and blasted and coated onsite. It is not shop fabricated and painted at a shop and hauled to the location as the Rectangular Aeration and SBR units are.

Q-08. Can you give us an idea of relative power consumption among the four proposed plants?

Q8. We began to calculate the power consumption for the three (3) different processes (oxidation ditch, extended aeration and SBR). But, then we got hung up on what percentage of the time certain blowers, pumps etc. would be running and we didn't have enough data to know we were comparing apples to apples. The bottom line answer at this stage of the game is that the extended aeration plants will use more electricity than the other two, and the oxidation ditch and the SBR units will be close to one another. If you need a more detailed answer than that, it will take some time and we have to make some assumptions of how your operator will operate the plant.

If you need additional information, please let me know.

Ben

John Goodwyn, VP Avalon Water & Sewer home: 972-627-0185 12/07/2010

### 2011-01-12 Avalon's Questions Regarding Expansion of Wastewater Plan Submitted via email by John Goodwyn, VP Avalon W&S

### Land Purchase and Easements

**Q-09.** On the color drawing titled "Land and Buffer Zone Requirements", there is a label "Proposed 20' effluent line easement". We already have an easement in that area but it is only 10' wide. Are you proposing that we widen the present easement?

Q-10. If we do not build on the north side, I assume that we will still need to obtain an easement there as represented by the cross-hatched rectangle. The length of the rectangle is approximately 285'. If we use the east lagoon as an equalization basin, won't we need to extend the rectangle westward by approximately 62' in order to maintain a 150' buffer zone around the northwest corner of the east lagoon?

### Plant Location

Q-11. The SBR plant should be easier to install since it comes as a package. The Circular Aeration plant would be built on site, yet the layout drawing shows it built over the existing Hydroxyl plant. So, if the Circular Aeration plant can be built there, wouldn't it be easier to put the SBR there?

### Inflow Meter

**Q-12.** None of the schematic diagrams shows a meter on the line bringing in the raw sewage, but I see a "Flume Device" listed in the cost tables. Will the existing Parshall Flume be reworked and used on the chosen plant?

### Lagoon Used as an Equalization Basin

Q-13. The Extended Aeration plant includes a 750,000 gallon capacity equalization basin, which would hold excess inflow until it could be processed. But the proposed Oxidation Ditch plant does not appear to have an equalization basin. Its 100,000 gallon racetrack will typically be partially filled, so it will not provide much room to hold large infiltrations during heavy rains. What provision is there to prevent overflows during such rains?

Q-14. Our main problem is with too much inflow during heavy rains, so most of the proposed WWTPs use one of the existing lagoons as an equalization basin. An experienced wastewater man who has frequent contact with TCEQ tells me that within the next five years TCEQ will mandate the elimination of all lagoons even if they are used as equalization basins. If this is true, our main problem will return despite a large expenditure. What do your sources tell you about this?

### **#1.** my choice. 1104 pages, ©1998

### Small & Decentralized Wastewater Management Systems (Hardcover)

ISBN 0-07-289087-8

by Ron Crites, George Tchobanoglous

\$155 used other used: \$115.

3 new from \$194.97

10 used from \$127.57

### #2.

### Wastewater Treatment Plants: Planning, Design, and Operation, Second Edition [Hardcover]

Syed R. Qasim A bit dated, perhaps.

### #3.

### Upgrading wastewater treatment plants \$159 new. I paid \$46.47 plus \$3.99 s&h

It isn't impressive, so \$46 was about right.

Glen T. Daigger, John A. Buttz.

Lancaster, Pa.: Technomic Pub. Co., c1998.

Edition: 2nd ed.

Subject: Sewage disposal plants -- Upgrading.

Genre/Form: Electronic books.

Description: xvi, 243 p.: ill.; 24 cm.

Series: Water quality management library; v. 2 Bibliography: Includes bibliographical references and index.

Reproduction: Electronic reproduction. Boulder, Colo.: NetLibrary, 2001.

Added Author: Buttz, John A.

NetLibrary, Inc.

Other Form: Original (DLC) 98085379

ISBN: 0585342822 (electronic bk.): \$99.95

1566766443 (v. 2)

Voyager Control No. 833175

### #4.

Books 1988 Instrumentation handbook for water and wastewater treatment plants / Robert G. Skrentner

### #5.

Too big and duplicating??

Wastewater Engineering: Treatment and Reuse - Hardcover (Mar. 26, 2002) watch date

by George Tchobanoglous, Franklin L. Burton, and H. David Stensel

Buy new: \$151.92 29 new from \$146.95 20 used from \$150.18 Other Formats: Paperback

### #6. Both water & sewer. For Operators

Handbook of Water and Wastewater Treatment Plant Operations, Second Edition

[Paperback]

Frank R. Spellman (Author)

©2008, I think. It's for operators – not for designing or building plants. Has a lot of stuff related to electricity, magnetism, refrigeration.

ISB Number-13: 978-1-4200-7530-4 (Softcover)

> Visit Amazon's Frank R. Spellman Page

List Price: \$139.95

Price: \$94.56 & this item ships for FREE with Super Saver Shipping. Details

Ships from and sold by Amazon.com. Gift-wrap available.

11 **new** from \$94.56 6 used from \$122.92

### **#7.** Land Treatment Systems for Municipal and Industrial Wastes

Mcgraw-Hill Professional Engineering) [Hardcover]
Ronald Crites (Author), Sherwood Reed (Author), Robert Bastian (Author)
? Publication Date? Size of book, no. of pages?

Available from these sellers.

3 new from \$53.99, 5 used from \$38.00

### Avalon Wastewater Plant Upgrade

FIRM/PERSON	Source of
Deviania C. Charlin D.E.	Firm/Person
Benjamin S. Shanklin, P.E.	On our project
Childress Engineers (construction expertise)	
Texas Registered Engineering Firm F-702	
211 N. Ridgeway Dr., Cleburne, Texas 76033	
Phone: 817-645-1118 ext. 24	
Fax: 817-645-7235	
Flowers & Leist, Inc. (wastewater expertise)	On our project
Texas Firm No. F-9676	
6737 Brentwood Stair Rd., Ste 224	
Ft. Worth, Texas 76112	
P: 817-496-4341	
F: 817-496-9335	
info@f-linc.com	
Grant Writing	referred by Ray
	Loveless
Glendening & Associates (Tim Glendening)	
5021 Trail Lake Drive	
Plano, Texas 75093	
Phone: 972-398-9424	
Fax: 972-398-9421	
Todd: 972-849-5810	
	referred by Ray
Knowledgeable, experienced wastewater man	Loveless
Dean (?) Carrell	
214-491-9158	
Lives near Greenville, TX	
Runs Italy Public Works	
John Ray, water lawyer	referred by Ray
~ Successor to Jim Pitts	Loveless
Duff Engineering – AVOID!	
Ray Loveless, Manager	
South Ellis County WSC	
109 W. Main St	
PO Box 348	
Italy, TX 76651	
972-483-6885 office 8-11 am; 1-3 pm	
972-897-8215 Ray Loveless cell phone	
secwsc@global.net	
Jeff Rivers	
940.231.8061	

### Time Line

Late August each year.... Make sure the annual sludge report is sent to both Central and Regional offices by September 1.

### **Legal Documents**

Codes:

S sewer W1 well #1

Type: D E deed easement

### **GRANTED TO AVALON**

Code	Vol	Pg	Type	Year	
S	399	290	D		Feaster-Youngblood 17.6 acres
S	345	10	D		Worthy 144 acres east of sewer plant
S	471	70	D		Gillespie 40.5 acres (before the sewer plant was built)
S	545	667	Е		Worthy 20' x 140' easement
W1	545	670	E	1970	Easement to Avalon W&S from Youngblood downtown
S	545	673	D	1970	C R Feaster/Youngblood 1000' road easement
S	545	676	D	1970	Avalon Sewer. 3.564 acres (sewer plant)
?	545	695	E	1970	C R Youngblood 134.32 acres
?	545	697	E	1970	C R Youngblood
S	545	723	E		10' wide effluent on Gillespie
S	545	742	E	1969, 70	F J & Fannie Wakeland 100' x 140'
S	545	768	E	1969, 70	C R & Myrtle Youngblood, ECSL
W1	574	795	D	1973, nov	Well #1 downtown.
?	591	549	Е	1973, 75	Wakeland, BD & Daphne. 84 acres. (524-789)
?	591	550	E	1973, 75	Wakeland, Mrs. FJ. 172 acres. (291-236)
?	591	552	Е	1973, 75	Wakeland, BD & Daphne. 214.18 acres (538-376)
?	591	564	Е	1973, 75	Wakeland, BD & Daphne. 90 acres. (392-488)
?	592	399	E	1973, 75	Wakeland, Mrs. FJ. 1 acre (374-8)
?	592	812	E	1974, 75	Youngblood, CR & Myrtle. 393.79 acres ( )
					<u> </u>

### Legal Documents

Codes:

S sewer W1 well #1

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S sewer W1 well #1

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					**************************************
S	399	290	D		Feaster-Youngblood 17.6 acres
S	345	10	D		Worthy 144 acres east of sewer plant
S	471	70	D		Gillespie 40.5 acres north and west of sewer plant
S	545	667	E		Worthy 20' x 140'
W1	545	670	Е	1970	Easement to Avalon W&S from Youngblood downtown
S	545	673	D	1970	C R Feaster/Youngblood 1000' road easement
S	545	676	D	1970	Avalon Sewer. 3.564 acres (sewer plant)
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?	592	399	Е	1973, 75	Wakeland, Mrs. FJ. 1 acre (374-8)
?	592	812	E	1974, 75	Youngblood, CR & Myrtle. 393.79 acres ( )

### MONTHLY

old rate	new rate	INCREASES	OVER PRES	ENT	
		rate	# conn	yield	
30	99	69	92	6,348	monthly increase
				-	
				-	
				-	
40	240	200	2	400	
30	230	200	2	400	
125	525	400	1	400	
30	230	200	5	1,000	
30	80	50	82	4,100	

6,300 monthly increase

Whole	Daily	Daily	Minimum	Violate
Month	Average	Maximum	last 3 mo.	90% rule
Jan. 2009	0.023	0.050	(daily avg.)	]
Feb. 2009	0.023	0.043		
Mar. 2009	0.013	0.024	13,000	
Apr. 2009	0.021	0.029	13,000	1
May 2009	0.020	0.028	13,000	
June 2009	0.015	0.025	15,000	
July 2009	0.017	0.023	15,000	
Aug 2009	0.011	0.036	11,000	
Sept. 2009	0.029	0.047	11,000	
Oct 2009	0.026	0.039	11,000	
Nov 2009	0.022	0.042	22,000	
Dec 2009	0.029	0,046	22,000	
Jan 2010	0.030	0.048	22,000	
Feb. 2010	0.023	0.049	23,000	yes!
Mar 2010	0.027	0.041	23,000	yes!
April 2010	0.012	0.052	12,000	-

16 mo. Avg: 21,313

Permit:

100% 25,000 75% 18,750 90% 22,500 Tell Dex Dean and others of the new operator

Go to Library and update the copy of the application. Include new operator, include enforcement

Can I do BOD and TSS tests in order to more closely monitor effluent?

Read the Hydroxyl manual and decide which steps, when taken, will give the most payoff for the effort.

- Clean out clarifiers, top and bottom.
- Clean out racetrack.
- Clean out-sludge tank, if needed.
- Inspect diffusers in the MBBR, and verify they are undamaged and in the right location.
- Clean out venturis, clean out FBBR, return missing fixed media, and restore the two big pumps. Remove external air.
- Divert Hydroxyl external air to the racetrack.
- Restore recirculation pump at south end.
- Restore aeration in the first and last chambers; equipment is missing.

Power up the PLC and see what happens

Motorized valve is on the north wall in a prominent location.

When will we know if we should install aerators on the racetrack?

Update my spreadsbeet to compute racetrack volume and to compute how much sewage has flowed in during the past 24 hours.

Go to Corsidana and talk to Clift Nesmith over Junch.

What was Shanklin's estimate of cost for the new approach?

5/9/11 email \$350,000, the sum of \$150K for collection line rehab (after smoke test) and \$225K for WWTP. BUT THE BOTTLENECK REMAINS: THE HYDROXYL UNIT.

What was the new approach?

Smoke test / TV test. Rehab collection lines to reduce peak flow. The actual proposal was not in an email to me; it was in a letter or email to Kent Smith. I heard about it from Kent during a board meeting. The best I remember, it consisted of converting the south end of the east storage pond into an aerated equalization basin, then sending the sewage to our present Hydroxyl plant. This approach was based on the assumption that rehabbing our collection system would eliminate high peak flows and we could then stay under our permitted flow volume. As of August 27, 2011, it appears that our regular

flows during school days are just under 22,000 GPD. More analysis of the flows and equalization volumes will be done to get a better idea of how close we are during dry weather.

What does the application promise in the way of improvements?

- Page 2A: A PE has been retained to evaluate the emerg. pond liner; report due March 31, 2012.
- Page 2A: A PE and a prof. land surveyor have been retained to meet buffer zone requirements prior to March 31, 2012.

What do letters to ICEQ promise in the way of new construction and testing?

- Bowman's letter in 2010 included Childress' schedule showing us finishing a new plant in 2012.
- Albert Shelton's letter promised a smoke test before the end of 2010.

Take a look at the Farresian ponds to see if they remain clean.

### Austin

What is the new e-coli limit for a pond? 164 colonies per 100 ml (??) Not new.

Are ponds still allowed? Yes.

Tell Shanklin what kind of plant we want.

WHAT TO DO ABOUT CERTIFING THE PERMEABILITY OF THE LAGOOMIST

START GETTING BUFFER ZONES, 150 or 500 FEET.

Tommie Faye, 150'. Kennedy, 150' This is predicated on staying 150' south of Gillespie, and not buying any land from Kennedy.

GET MORE QUOTES ON CLEANING OUT THE RACETRACK!

Look in phone book.

Call other plant owners.

If I want to, get a quote on an ultrasonic meter. Take measurements of P. flume first.

### Contact Bardwell and ask about their operation:

J.B. Lowry, home 972-646-5317, cell 972-824-0764

send progress report to George Ibarra(cor Greg) showing the new alarm on the lift station. Also, state that we have a USPA loan <u>application</u> (Rossell Peckham). Take the manual to Waxahachie and copy portions for Dean and Canada.

Goll-Bowmon and ask him when we lost submitted 222 studge seet. Lock for the meterized wall valve between RFM1 and the EBBC. Email Dex Dean and all how much buffer we need around the emergency pend. See the application: it follows the aerated/un-aerated rule.

Give feedback to Headworks in Vancouver.

Mark up the 3-ring binder and take it to Kate French at the Library
Address the complaints of Carol Gillespie as stated in her email to TCFQ.
Write letter to Tommio Fave Worthy.

Copy permit for Dean Carrell Copy 309-13 for four landowners

Work with Childress and compile a list of promises to put into the permit. Send them to

Call Dex and ask about alternatives to easements, see if we can apply for 150' easement, with promise to accose emerg Jagoons. (What about long term use of Jagoons?—always accosed?—Vill they work?)

Ask Firoj about sludge disposal.

Can we change without 180 day notice? Look at rules.

Read the manual and see if there is a description of the diffusers in the MBB. We need to have the air more evenly spread out.

Look for some kind of liquid/air injection in PFM1 and PFM2. All air is supposed to be dissolved, at least while under pressure.

Read permit about sludge.

Call TCEQ and ask about drying sludge. What report when?

Check Forreston compliance report as an example of a stabilization pend operation. No violations.

### Length

# of feet in vara: 2.7916 (for this case only)

Leg	Varas
A	348
В	661
C	344
D	661

### Start at SW corner. Go CW

Due East is z North & East

10.987

### -30 Altering degrees

	Original	Gillespie	)			
	Length		Veer	Veer	Veer	
Leg	Feet	1st Dir	deg	min	sec	2nd Dir
A	971.47	n	30.00	0.00	0.00	w
В	1845.23	n	59.00	0.00	40.00	е
С	960.30	8	30.00	0.00	0.00	е
D	1845.23	S	59.00	0.00	20.00	W

First Dir.	Absolute Degrees	Altered Degrees	Gains to North
90	120	90	971.47
90	30.98889	0.988889	31.85
-90	-60	-90.0000	-960.30
-90	-149.0056	-179.006	-32.02
		_	

								Due east is	zero degre	es
	Sewer P	lant				Altering degrees	-30			North & East
			Veer	Veer	Veer		First Dir.	Absolute	Altered	Gains to
Leg	Length	1st Dir	deg	<u>min</u>	sec	2nd Dir		Degrees	Degrees	North
1	305.8	S	30.00	0.00	0.00	е	-90	-60	***********************	
2	498.3	S	58.00	48.00	0.00	w	-90	-148.8		
3	311.6	n	31.00	43.00	0.00	w	90	121.7167	91.71667	
4	507.5	n	59.00	28.00	0.00	е	90		0.533333	

-0.05

	sewer	orig	
Ε	88.800		89.006
S	89.483		90.994
W	91.1833		89.011
N	90.5333		90.989
	360.000		360.000

Feet 971.466 1845.228 960.300 1845.228

ero degrees are positive

Gains to	1st	2nd
East	polarity	polarity
0.00	1	1
1844.95	1	-1
0.00	-1	-1
-1844.95	-1	1

0.003 10.99 hypot.

are positive

Gains to	1st	2nd
East	polarity	polarity
0.00	-1	-1
<b>-4</b> 98.1 <b>9</b>	-1	1
-9.33	1	1
507.48	1	-1

-0.05 0.07 hypot. Small Business and Local Government Assistance Program (for assistance in identifying potential funding sources)

REGION 4 – DFW John Aquilino, CA, 817-588-5836 Tasha Burns, CA, 817-588-5868 Lynn Owens, CA, 817-588-5927



PO Box 13231, Austra, Texas 78711-3231

### **APPLICATION FOR FINANCIAL ASSISTANCE**

### FOR WATER AND WASTEWATER INFRASTRUCTURE CONSTRUCTION

### NOTICE TO ALL APPLICANTS

In order to make the process of applying for assistance smoother for our customers, this new application is comprehensive, covering all loan and grant assistance for water and wastewater infrastructure financing through the various TWDB programs. The format of the new application is intended to expedite the review process for both the applicant and TWDB staff.

Each applicant must submit **ONE** original with **SEVEN** copies, except where noted differently in the application, and **ONE** electronic copy, via electronic storage media such as CD or flash drive using MS Word, Excel or Adobe Acrobat to:

Texas Water Development Board Project Finance P O Box 13231 1700 N. Congress Avenue, 6<sup>th</sup> Floor Austin, Texas 78711-3231 (78701 for courier deliveries)

Only **COMPLETE APPLICATIONS** for projects will be considered for funding. A **COMPLETE APPLICATION** consists of all of the applicable information and forms requested in this document.

### **IMPORTANT NOTICE**

Applicants <u>MUST</u> use this form for application to ensure all requested information is included for review.

When preparing this application please review the Application and all Guidance and Forms, listed at the end.

TWDB Use Only		
Name of Applicant:		
Date application received:		
Date administratively complete:		

### Contents

Part	A. General Information	1
Part	B. Financial Information	5
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Part	D. Engineering Information	15
Part	E. Environmental Documentation	10
Part	F. Planning and Water Conservation Plan	21
Part	G. Documentation of "Green" Projects and Project Components	22
Part	H. Disadvantaged Business Enterprise Requirements	22
Part	Summary of attachments to application	24
Part	J. Guidance and Forms	27

Please label each attachment with the number of the pertinent application section (i.e. "A5")

**General Information** 

Part	A. General Information	
<b>A</b> 1	Legal name of applicant, street and mailing addresses.	
A2	Brief description of project	
A3	List service area county(ies).	
A4	Population of Applicant's total service area.	
<b>A</b> 5	Name, title, address, phone, fax numbers and email add	resses of official representatives.
A6	Names and titles of principal officers.	
A7	Name, address, phone and fax numbers, e-mail address a) Project Engineer	and contact person for:
	b) Bond Counsel	
	c) Legal Counsel (if other than Bond Counsel)	
	d) Financial Advisor	
	e) Any other consultant representing the applicant befo	re the Board
	f) Applicant's <b>primary contact person</b> for day-to-day	oroject implementation.
A8	Requesting funding from which programs? Check all the	at apply.
	a) Drinking Water State Revolving Fund (DWSRF)	\$
	b) Clean Water State Revolving Fund (CWSRF)	\$
	c) Texas Water Development Fund (DFund)	\$
	d) State Participation	\$
	e) Rural Water Assistance Fund (RWAF)	\$

### Please label each attachment with the number of the pertinent application section (i.e. "A5")

	f) Water Infrastructure Fu	nd (WIF) 🗌	\$
	g) Economically Distresse	d Areas Program (EDAP) 🗌	\$
	h) If other please explain:		\$
A9	Amount of Funding: a) Total amount of Funding	g Requested from TWDB \$	
	b) Total Project Costs (inc	luding all sources) \$	
	c) Any funds requested us	ed for refinancing existing debt	?
	Yes 🗌 No [	\$	
	If yes, provide docu	mentation on existing debt.	
	Item attached	Yes No No	
	d) Does your project include	le Green Components Yes	□ No □
	e) Total Amount of Green	Project Component(s) \$	-
	For further explanation	n see Part G – Green Projects	<b>S</b>
A10	Does the area served qualif	y as disadvantaged?	
	Yes	No 🗆	
	For further explanation	n see Part J – Guidance Part /	A for specific programs

### Please label each attachment with the number of the pertinent application section (i.e. "A5")

A11 If additional funds are necessary to complete the project, or you have applied and/or received a commitment for any other funding agency for this project or any aspect of this project, funds over and above the amount requested in **A9** above, please provide a listing of those sources. Make sure to include: total project costs, financing sources and current status of the funding agreements.

Funding Source	Type of Funds (Loan/Grant)	Amount (\$)	Date Applied for Funding	Funding Secured Date
Total Funding from All Sources		\$		

Total Fundin from All Source		\$		
Comments:	_			
All applicants section.	pplying for funding fro	m the CWSRF and D	WSRF Programs mu	st complete this
required to: 1. Obtain assist http:// 2. Regist	deral Funding Account a DUNS number that wil ance. DUNS numbers ca edgov.dnb.com/webform er with CCR and maintain nent is active or under co	Il represent a universal n be obtained from Du <u>/</u> ; n current registration a	identifier for all feder n and Bradstreet at t all times during whic	al funding th the Board loan
	<del></del>	egistration (CCR) and [	Oata Universal Numbe	er System
	olicant agree to maintain d is active or under cons			which a federal
1. Did ap 2. Did ap	Funds requires the follow plicant receive over 80% plicant receive over \$25 does not have access to	of their revenue from l Yes ☐ million in Federal Awar Yes ☐	No □ rds last year? No □	

Yes 🗌

No 🗌

A15 If applicant checked **YES** to **ALL** three boxes above, applicant is required to disclose the name and compensation of the five most highly compensated officers.

Officer's Name	Officer's Compensation (\$)

Please label each attachment with the number of the pertinent application section (i.e. "Part B5")

### Part B. Financial Information

B1 List top ten customers of the water and wastewater system by revenue and with corresponding usage and percentage of total use, including whether any are in bankruptcy.

Water					
Customer Name	Annual Usage (gal)	Annual Billings (\$)	Percent of Total Water Revenue	Bankruptcy (Y/N)	

Comments:						
Wastewater						
Customer Name	Annual Usage (gal)	Annual Billings (\$)	Percent of Total Water Revenue	Bankruptcy (Y/N)		

Comments:	_
-----------	---

	1 10
Please label each attachment with the number of the pertinent application section (i.	- AD DED
. 1999 is por each attachment with the namber of the bertillent application 26011011 (1)	e.Pan 657

B2	<b>Attach</b> a five year comparative system operating statement (not condensed) including audited prior years and an unaudited year-to-date statement, with number of customers for each year. Unaudited year-to-date statement must reflect the financial status for a period not exceeding the latest 6 months.						
		Item attac	hed Yes [	] No [	]		
В3	Current ave	rage Residential Usage a	and Rate Informa	tion			
Service	3	No. of Connections	Avg. Monthly Usage (gallons)	Avg. Monthly Bill (\$)	Projected Monthly Increase Necessary (\$)		
Water			(general)	υ (Ψ)	recossary (φ)		
Waster	water						
B4	Attach the v	and industrial users)		ing each of the I	ast three years (including		
		Item attach	ned Yes [	] No 🗌			
B5	Describe prodelinquent a	ocedures for collecting moccounts)	onthly customer l	oills (include pro	cedures for collection of		
B6	Attach ONE copy of an annual audit including the management letter for the preceding fiscal year, prepared by a certified public accountant or firm of accountants and, if the last annual audit was more than 6 months ago, then, provide interim financial information.						
		Item attach	ned Yes	] No 🗌			
B7 If financial assistance is in the form of a loan, all bonds are book-entry only. The applicant acknowledges that they are aware of and will abide by the Depository Trust Company participant requirements.							
			Yes [	] No []			
B8	Disclose all issues that may affect the project or the applicant's ability to issue and/or repay debt.						
<b>B</b> 9	Has the appl	icant ever defaulted on a	ny debt? Yes	No 🗔			
	If yes, disclos	se all circumstances surre	ounding prior def	ault(s)			
B10	and present	ng of total outstanding de a consolidated schedule t ut unissued debt).	ebt. Segregate by for each, showing	/ type (General ( g total annual re	Obligation or Revenue) quirements (include any		
		Item attach	ed Yes	] No □			

B11	Attach t	the dire	ect and overla	pping tax rate	table (regardle	ess of pledge);		
			ł	tem attached	l Yes □ N	lo 🗌		
B12	Provide valorem and tax	taxes	levied and cor	data showing responding ta	total taxable a x rate (detailing	ssessed valua g debt service a	tion including i and general pu	net ad urposes),
cal Year Ending	Net Tax Assess Value	sed	Tax Rate	General Fund	Interest & Sinking Fund	Tax Levy \$	Percentage Current Collections	Percenta Total Collection
Comm	ents: Attach ti Commer	– he last	five-years of <sup>-</sup> d Industrial)	Гах Assessed	Values delinea	ated by Classifi	cation (Reside	ential,
	Attach ti	– he last	d Industrial)	Гах Assessed ms attached	_	ated by Classifi	cation (Reside	ential,
	Attach tl Commer	he last cial an	d Industrial) Iter	ns attached	Yes ☐ No	_		ential,
B13 B14 Fisc	Attach tl Commer	ne last cial an	d Industrial) Iter	ns attached on history for the	Yes ☐ No	o 🗌	of pledge). Ad x	
B13 B14 Fise E20	Attach the Commer Provide to cal Year	ne last cial an	d Industrial) Iter es tax collection	ns attached on history for the	Yes ☐ None past five yestage of Ad	ars (regardless  Equivalent of Valorem Ta	of pledge).	
B13 B14 Fise E 20 20	Attach the Commer Provide to cal Year	ne last cial an	d Industrial) Iter es tax collection	ns attached on history for the	Yes ☐ None past five yestage of Ad	ars (regardless  Equivalent of Valorem Ta	of pledge). Ad x	
B13 B14 Fisc E 20 20 20	Attach the Commer Provide to cal Year	ne last cial an	d Industrial) Iter es tax collection	ns attached on history for the	Yes ☐ None past five yestage of Ad	ars (regardless  Equivalent of Valorem Ta	of pledge). Ad x	
B13 B14 Fise E 20 20	Attach the Commer Provide to cal Year	ne last cial an	d Industrial) Iter es tax collection	ns attached on history for the	Yes ☐ None past five yestage of Ad	ars (regardless  Equivalent of Valorem Ta	of pledge). Ad x	

כום	Proforma.
	a) If system revenues are anticipated to be used to repay the propose

- a) If system revenues are anticipated to be used to repay the proposed debt, provide a proforma detailing:
  - 1. projected gross revenues

prospective impacts in comments below.

D15

B16

Droforma

- 2. operating and maintenance expenditures
- 3. outstanding and proposed debt service requirements
- 4. net revenues available for debt service and coverage of current and proposed debt paid from revenues.
- b) If taxes are anticipated to be used to repay the proposed debt, provide a proforma indicating:
  - 1. the tax rate necessary to repay current and proposed debt paid from taxes
  - 2. list the assumed collection rate and tax base used to prepare the schedule
- c) If a combination of system revenues and taxes are anticipated to be used to repay the proposed debt, provide a proforma detailing:
  - 1. projected gross revenues, operating and maintenance expenditures, net revenues available for debt service
  - 2. the tax rate necessary to pay the current and proposed debt

Item(s) attached	l Yes	No		
If you have taxing authority, provide the ownership to total assessed valuation				

Taxpayer Name	Assessed Value	Percent of Total	Bankruptcy (Y/N)

Comments:			

Please	label each att	achment with the number	of the pertinent a	pplication secti	TWDB-014 Prepared 01-05-1 on (i.e. "Part B5")
B17	Provide the	maximum tax rate permit	ted by law per \$1	00 of property	value
B18	Provide any	current bond ratings.			
		Standard & Poor's	Moody's	Fitch	
G.O.					
Reven	ue				
B19	may be four a) Median H b) Unemplo c) Percenta d) Median a e) Populatio	ge of area below poverty ge of work force	<u>sus.gov/</u> 	most carrent c	ensus. Tilis information
	Name			Numl	ber of Employees
-				****	

Comm	ents (example, any anticipated changes to the tax base, employers etc.)
B20	Does the applicant intend to utilize bond insurance for the loan?  Yes No
B21	Does the applicant intend to use surety bonds in lieu of a cash reserve?  Yes No
B22	Does the applicant intend to use any other credit enhancement?  Yes No

Part	C. Legal	
C1	Citation to the specific legal authority in the Texas (applicant is authorized to provide the service for whas is tance.	Constitution and statutes pursuant to which the ich the applicant is requesting financial
C2	Citation to legal authority under which debt is proportion proposed pledge of revenues.	sed to be issued including authority to make
C3	Full legal name of the security for the proposed debuilding pledge being offered and existing rate covenants as requirements, reserve fund requirements or other reother outstanding creditors.	s well as relevant additional bonds
C4	For proposed revenue bonds, attach copies of the authorizing any outstanding parity debt. This is esseare consistent with covenants that might be required tem(s) attached Yes	ential to insure outstanding bond covenants differential to insure outstanding bond covenants
C5	Attach the resolution from the governing body requhttp://www.twdb.state.tx.us/pubs/wrd-201a)	esting Financial Assistance. (WRD-201A -
	Item attached Yes [	□ No □
C6	Attach the Application Affidavit (WRD-201 - http://w	ww.twdb.state.tx.us/pubs/wrd-201)
	Item attached Yes [	☐ No ☐
C7	Attach the Certificate of Secretary (WRD-201B - htt	p://www.twdb.state.tx.us/pubs/wrd-201b)
	Item attached Yes [	□ No □

C8 List and attach copies of all draft and/or executed contracts for consultant services included in the total project costs and if applicable whether those contracts were awarded according to Disadvantaged Business Enterprises (DBE) rules.

For further explanation see Part H - Disadvantaged Business Enterprise Requirements

C	onsultant	Service Provided	Contract Attached (Y/N)	Awarded Using DBE rules (Y/N)	Contract Execution Date	
C9	a) Articles of b) Certificat Articles of c) By-laws of Certificat e) Certificat	Int is a Water Supply Corpor of Incorporation e of Incorporation from the Tof Incorporation are on file with and any amendments e of Status (i.e. Certificate of e of Account Status from the exempt from the franchise ta  Item a) attached Item b) attached Item d) attached Item d) attached Item d) attached Item d) attached	Texas Secretary of the Secretary.  If Existence) from the Texas Comptrol	f State evidencing t the Texas Secretar ler of Public Accour	that the current y of State nts (certifies that the	
C10	new well to s the applicant property righ funds can be  a) Does the	will result in: (a) an increase secure groundwater, or (c) as must demonstrate that it hat its, groundwater permits, and released for construction.  applicant currently own all this needed to operate this p	n increase by the as acquired – by o d/or surface water the property rights roject?	applicant in use of some switch which applies the second s	surface water, then - the necessary ne project before	1
	a. W	Yes	ed, appropriate for te.tx.us/pubs/wrd-2	08a) (Surface Water)		
		Item a. attached Item b. attached	Yes 🗌 Yes 🗍	No □ No □		

b) If all property rights, groundwater permits, and surface water rights, needed for this project have not yet been acquired, identify the rights and/or permits that will need to be acquired and provide the anticipated date by which the applicant expects to have acquired such rights and/or permits.

	······································				
Type of Permit Water Right		Entity from which the permit or right must be acquired	Acquired by lea full ownersh		Permit / Water Right ID No.
C11	Does the service as services?	applicant possess a Cer rea map showing the are	tificate of Conveni as to which it is al	ence and Necessity (0 lowed to provide wate	CCN)? If yes, attach a r or wastewater
		Yes 🗌 No	☐ NA ☐	]	
		If Yes, is item atta	ached Yes	☐ No ☐	1
If No, what is the sta		atus of the CCN?			
	If the area to be served is within the service are of a municipality or other public utility, happlicant obtained an affidavit stating that the utility does not object to the construction operation of the services and facilities in its service area?			oublic utility, has the construction and	
		Yes 🗌 No	□ NA □		
		If Yes, is item atta	ched Yes [	No 🗌	
C12	Has the a	pplicant obtained all nece	essary land and ea	asements for the proje	ct?
		,	Yes 🗌 No		
	If yes, the http://www	applicant must complete v.twdb.state.tx.us/pubs/e	and attach a site d-101)	certificate. (ED-101 -	
		Item attached	Yes □ No		

# TWDB-0148 Prepared 01-05-11 Please label each attachment with the number of the pertinent application section (i.e. "Part C5")

C13	If the applicant is applying for C form WRD 213 ( <u>http://www.twdb</u>	WSRF Tier III o .state.tx.us/pu <u>t</u>	or DWSRF, the applicant <b>must</b> complete <u>os/wrd-213</u> ). (Certification Regarding Lobbying	3)
	Item attached	Yes 🗌	No 🗌 NA 🗌	
C14	receive such service from another	er service provi ct, or other doc	tment service to another service provider, or der? If so, the applicant must provide at miniumentation establishing the service relationsh prior to loan closing.  No	mum າip,
	If yes, the applicant must <b>attach</b> relationship.	the proposed of	or final agreements establishing that service	
	Item attached	Yes 🗌	No 🗌	
C15	Has the applicant been the subject of any enforcement action by the Texas Commission on Environmental Quality, the Environmental Protection Agency, or any other entity within the past three years?			
	unce years:	Yes	No 🗌	
	If yes, attach a brief description of action(s) to address requirements	of every enforces.	ement action within the past three years and	
	Item attached	Yes 🗌	No 🗌	
Applio Subdi extrate adopte	cations for EDAP will <b>not</b> be consided in the consided in the consider of the consideration	lered until the Code 16.343. If t applicant is a r	icants must complete this section.  County has adopted and is enforcing the Mode he proposed project is within a municipality or municipality, the municipality must also have	r its
consid	dered for approval.	3 §363.) the M	SRs must be completed prior to application be	₃ing
C16	Does TWDB have a copy of the n the attached affidavit from the Co MSRs?	nost recent sub unty Judge and	odivision plats and rules and a notarized copy d/or Mayor that certifies compliance with the	of
		Yes	No 🗌	
	If yes, when were the last plats, re	ules and affida	vit submitted?	
	If no, MSRs will need to be adopted or county.	ed and TWDB	will need copies of the rules approved by the	city

C17	If financing is for a wastewater p mandatory hookup policy is requ	project is a copy uired.	of the resolution/ordinance establishing a
	Item attached	Yes 🗌	No 🗌
	If no, please exp	olain:	

Please label each attachment with the number of the pertinent application section (i.e. "Part D5")

## Part D. Engineering Information

Applications for Pre-Design Funding (PDF) require a Preliminary Engineering Feasibility (PEFR) report. During the Planning Phase, a complete Engineering Feasibility Report which complies with TWDB-0555 or TWDB-0556 will be required. EDAP applicants must follow directives from the EDAP Facility Engineering Plan/Scope of Services.

- D1 A complete PEFR must include:
  - a) A description and purpose of the project, including existing facilities.
    - Note: CWSRF and DWSRF must address issues scored in IUP submittal
  - b) A map of the service area and drawings as necessary to locate and describe the project.
  - c) A project schedule including proposed timing of funding needs for phases of the project. Schedule should include:
    - Estimated loan closing date
    - Estimated date to complete planning (environmental & engineering)
    - Estimated Planning and Environmental Design, beginning and ending construction dates.
    - Estimated number of proposed Construction Contracts.
    - Estimated Construction start date for first contract.
    - Estimated Construction end date for last contract.
    - EDAP and DWSRF applicants must complete a Projected Draw Schedule form (TWDB-1202)
  - d) A copy of current and future populations and projected water use or wastewater flows.
    - Include entities to be served
  - e) A description of alternatives the applicant has considered (or to be considered during detailed planning) and reasons for the selection of the project proposed.
  - f) Provide the most current itemized project cost estimate (include all costs and funding sources). Utilize the budget format provided.

	Budget format (TWDB-1201 - <a href="http://www.twdb.state.tx.us/pubs/twdb-1201">http://www.twdb.state.tx.us/pubs/twdb-1201</a> )  Projected Draw Schedule (TWDB-1202 - <a href="http://www.twdb.state.tx.us/pubs/twdb-1202">http://www.twdb.state.tx.us/pubs/twdb-1202</a> )
	A complete PEFR is <b>attached</b> Yes No  No  Must be sealed by a registered engineer.
	<b>EDAP applicants must attach</b> an EDAP Facility Engineering Plan/Scope of Services report that complies with the requirements of WRD-023A ( <a href="http://www.twdb.state.tx.us/pubs/wrd-023a">http://www.twdb.state.tx.us/pubs/wrd-023a</a> ). Item attached Yes \( \bigcap \) No \( \bigcap \) NA \( \bigcap \)
D2	If project is not for Pre-Design Funding, attach an Engineering Feasibility Report that complies with the requirements of:
	Wastewater: TWDB-0555 ( <a href="http://www.twdb.state.tx.us/pubs/twdb-0555">http://www.twdb.state.tx.us/pubs/twdb-0555</a> ) Item attached Yes □ No □ NA □
	Water: TWDB-0556 (http://www.twdb.state.tx.us/pubs/twdb-0556) Item attached Yes  No  NA  NA □

All Wa D3	stewater applicants must complete D3 Attach a completed Wastewater Projection <a href="http://www.twdb.state.tx.us/pubs/wrd-2">http://www.twdb.state.tx.us/pubs/wrd-2</a>	ect Information	Form (WRD-2	53a —
	Item attached	Yes 🗌	No 🗌	
<b>All Wa</b> D4	ter applicants must complete D4. Attach a completed Water Project Info http://www.twdb.state.tx.us/pubs/wrd-2	ormation Form (' 253d)	WRD-253d –	
	Item attached	Yes 🗌	No 🗌	
D5	If applicable (CWSRF Tier III or DWSF (EPA-4700-4 – <a href="http://www.twdb.state.t">http://www.twdb.state.t</a>	RF), <b>attach</b> the I x.us/pubs/epa-4	Preaward Con 1700-4)	npliance Review Report
	Item attached	Yes 🗌	No 🗌	NA 🗌
D6	If applicable (CWSRF Tier III or DWSF Suspension and Other Responsibility (	RF), <b>attach</b> the ( SRF-404 – <u>http</u>	Certification R:://www.twdb.s	egarding Debarment, tate.tx.us/pubs/srf-404)
	Item attached	Yes 🗌	No 🗌	NA 🗌
D7	If complete, attach <b>ONE</b> copy of the Place Complete Plans and Specifications must the appropriate supplemental condition ( <a href="http://www.twdb.state.tx.us/pubs/twdb.0551">http://www.twdb.state.tx.us/pubs/twdb.0551</a> ), 0552 ( <a href="http://www.twdb.state.tx.us/pubs/twdb.bcated">http://www.twdb.state.tx.us/pubs/twdb.bcated</a> at the end of this application in	st conform with ns forms, <i>TWDB</i> - <u>0550</u> ), 0551 ( <u>h</u> us/pubs/twdb-05 -0553). See Sui	and contain a 3 – 0550 <u>ttp://www.twd</u> 552), 0553	Ill documents required in b. state.tx.us/pubs/twdb-
	Item attached	Yes 🗌	No 🗌 N	A 🗌
D8	For wastewater projects that involve the existing plant and/or associated facilities amendment has been filed with the Texterelated to the proposed project. Final proposed project of Commission on Environmental Quality for construction activities.	es, attach evider kas Pollution Dis permit authoriza or any successo	nce that an ap scharge Elimir tion must be c or agency befo	plication for a new permit nation System Permit obtained from the Texas
	Item attached	Yes 🗌	No 🗌	
	Comments:			

D9	st all permits necessary for completion of project and whether the applicant has acquired
	ach permit required.

Permit	Issuing Entity	Permit Acquired (Y/N)

D10	If applicable (CWSRF Tier III or DWSRF), attach the Assurances - Construction Programs (EPA-424D – <a href="http://www.twdb.state.tx.us/pubs/epa-424d">http://www.twdb.state.tx.us/pubs/epa-424d</a> )
	Item attached Yes No No NA
D11	Davis-Bacon Act - Financial assistance from either the Clean Water or Drinking Water State Revolving fund must comply with the Davis-Bacon Act regarding prevailing wage rates. The applicant acknowledges that they are aware of and will abide by the Davis-Bacon Act requirements.
	Yes No
	Further information on the Davis-Bacon requirement is available through the TWDB Guidance document, DB-0156 ( <a href="http://www.twdb.state.tx.us/pubs/db-0156">http://www.twdb.state.tx.us/pubs/db-0156</a> ); on the TWDB web.
D12	If the application is for a wastewater project, the applicant must be a Designated Managemer Agency (DMA) for wastewater collection and treatment. Please complete and attach DMA resolutions. WRD-210 ( <a href="http://www.twdb.state.tx.us/pubs/wrd-210">http://www.twdb.state.tx.us/pubs/wrd-210</a> ) is an example of this type of resolution.
	Item attached Yes ☐ No ☐ NA ☐

dditional requirements for EDAP applicants
D13 Preliminary EDAP Eligibility (31 TAC §363)
Required documentation:  a) Should the project exist within a municipality, documented data for the entire municipality is required.
<ul> <li>Documentation of inadequacy of water and/or wastewater services. (31 TAC §363)</li> <li>Item attached Yes  No  </li> </ul>
<ul> <li>Documentation regarding the financial resources of the residential users in the EDA area. (Census data or documentation regarding median household income should be provided.) (31 TAC §363)         Item attached</li></ul>
<ul> <li>Documentation demonstrating existence of a residence in the project area prior to June 1, 2005. (This could include tax records of residence, dated aerial maps, or other documentation demonstrating existence of a residence.) (31 TAC §363)</li> <li>Item attached Yes  No </li> </ul>
D14 Is the applicant requesting more than 50% grant funding for any component of planning, acquisition, design or construction? Yes \( \Boxed{\square} \) No \( \Boxed{\square} \)
If yes, has the Department of State Health Services issued a determination stating a public health nuisance exists in the project area?  Yes \[ \] No \[ \]
If no determination exists, provide documentation demonstrating a public health nuisane exists in the project area.  Item attached Yes \( \scale= \) No \( \scale= \)
(Photographs may be submitted. They <b>must</b> be labeled with location and date when taken. If the soil types are mentioned in the project area as an issue, include soil profile maps)
D15 Is this project providing new service? Yes \( \square \) No \( \square \)
If yes, plats of the affected subdivisions must be attached.  Items attached Yes \( \scale= \) No \( \scale= \)
Provide the most current planning, acquisition and design (PAD) phases cost estimates (include all costs and funding sources). Utilize the Project Budget format provided.
Project Budget format (TWDB-1201 - http://www.twdb.state.tx.us/pubs/twdb-1201)
A complete PAD budget is attached? Yes No

Please label each attachment with the number of the pertinent application section (i.e. "Part E5")

### Part E. Environmental Documentation

When an applicant seeks approval of a project under the Pre-Design Funding Option, at a minimum, the applicant must provide a discussion of any known permitting, social, or environmental issues that may affect the evaluation of project alternatives or implementation of the proposed project. However, the environmental review of the project may be expedited based on previous determinations or work already completed by the applicant.

<b>E</b> 1		for this project by the TWDB or another authorized years?
	Yes	No 🗌
E2	If yes, <b>attach</b> a complete copy of the CE of (i.e. Environmental Information Document agency consultation correspondence.)	or FONSI and all supporting documents (EID) or Environmental Assessment (EA), with all
	Item(s) attached Yes	No 🗌
E3	Has TWDB already affirmed an environme Yes ☐	
	If yes, attach a copy of the TWDB Resolu	tion affirming this environmental determination.
	Item attached Yes [	No 🗌
E4	Has an Environmental Impact Statement ( with an authorized state or federal agency Yes	• ''
	If yes, attach a complete copy of the EIS.	
	Item attached Yes	No □
E5	If an EIS has been prepared for this project agencies, has a Record of Decision (ROD Yes ☐	·
	If yes, attach a complete copy of the ROD	).
	Item attached Yes	│ No □

Please	label each attachment with the number of the pertinent application section (i.e. "Part E5")
E6	Is the project potentially eligible for a CE because it involves only minor rehabilitation or the functional replacement of existing equipment?  Yes \( \subseteq \text{No } \subseteq \)
	If yes, attach documentation showing that the project may be eligible for a CE.
	Item attached Yes No No
	For further explanation see Section J – Guidance
E7	If the project is not eligible for a CE, has the applicant prepared an EA or EID in accordance with 31 TAC 363 and 31 TAC 375, of the TWDB's rules and TWDB Instructions?
	Yes No No
	If yes, attach a complete copy of the EA or EID.
	Item attached Yes No No
	For further explanation see Section J – Guidance
E8	List additional Environmental Permits, Registrations, Licenses, Authorizations necessary for the project and the status of each. E.g.:  • Endangered species act, Section 10A take permit,  • Clean Water act Section 404-individual permit or Rivers and Harbors Section 10 permit
	Item(s) attached Yes No No
E9	If the project has not met the above requirements, please attach a discussion of any known permitting, social, or environmental issues that may affect the evaluation of project alternatives or implementation of the proposed project.
	Item attached Yes No No

# Part F. Planning and Water Conservation Plan

In order to be eligible for funding, a proposed water project has to be consistent with the Regional and State Water Plans. F1 If the assistance requested is \$500,000 or more, a Water Conservation Plan (WCP) is required. The WCP cannot be more than five years old and must have been adopted by the applicant. Has the applicant adopted a Board-approved WCP? Yes □ If yes, date of applicant's WCP Adoption: Note: An approvable plan must be submitted before a commitment for funding can be received. but an approved plan must be adopted by the applicant before any funds can be released. Attach TWO copies of a Water Conservation Plan and Drought Contingency Plan prepared in accordance with TWDB Guidance [WRD-022 (http://www.twdb.state.tx.us/pubs/wrd-022) and Utility Profile WRD-264 (http://www.twdb.state.tx.us/pubs/wrd-264) Items attached Yes  $\square$ No  $\square$ Note: If the applicant will utilize the project financed by the TWDB to furnish services to another entity that in turn will furnish services to the ultimate consumer, the requirements for the WCP may be met either through contractual agreements between the applicant and the other entity providing for establishment of a water conservation plan. The provision requiring a WCP shall be included in the contract at the earliest of the original execution, renewal or substantial amendment of that contract, or by other appropriate measures. F2 Does the applicant provide retail water services? Yes  $\square$ No 🗌 If yes, complete item F3 and F4. F3 Has the applicant submitted to the TWDB the annual water use survey of groundwater and surface water for the last three years? Yes □ No  $\square$ If No, please download survey forms (http://www.twdb.state.tx.us/pubs/20100610a) and attach a copy of the completed water use surveys to the application. Item attached Yes 🗆 No  $\square$ F4 Has the applicant submitted a water loss audit to the TWDB? Yes 🗀 No 🗔 NA □ If No, please download TWDB Water Audit worksheet (http://www.twdb.state.tx.us/pubs/20100610b) and attach a copy to the application. Item attached Yes No □

Please label each attachment with the number of the pertinent application section (i.e. "Part G5")

# Part G. Documentation of "Green" Projects and Project Components

All Drinking Water and Clean Water applicants must complete this section.

This section is required so that the TWDB can determine whether the project qualifies as "green" as pursuant to Environmental Protection Agency (EPA) Guidance. Complete this portion of the application only if green benefits are all, or a substantial part, of the project (more than an incidental benefit). Project means the entire project or a component of the project.

A project (or project component) is "green" if the primary purpose qualifies under EPA rules as one of the following:

- a. Green Infrastructure,
- b. Water Efficiency-related,
- c. Energy Efficiency-related, or
- d. Environmentally Innovative.

You must use the Green Project Reserve guidance to complete this section. Current guidance can be found at:

	Green Project Reserve: Guidance for determining project eligibility (TWDB-0161 – <a href="http://www.twdb.state.tx.us/pubs/twdb-0161">http://www.twdb.state.tx.us/pubs/twdb-0161</a> )			
G1	Does your project or a component of your project qualify as Green, per EPA guidance?  Yes No			
	If Yes, Please complete the remainder of Section G.			
G2.	Type of Green Project  Water Energy Green Environmentally Efficiency Infrastructure Innovative			
G3	TWDB will determine whether your project (or project component) meets federal criteria as "green". You may be required to submit a <b>business case</b> that thoroughly describes your project in order for the TWDB to make its determination.			
	Green Project Reserve: Guidance for determining project eligibility (TWDB-0161 – <a href="http://www.twdb.state.tx.us/pubs/twdb-0161">http://www.twdb.state.tx.us/pubs/twdb-0161</a> )			
	ltem attached Yes ☐ No ☐			