



FROM TOP: As a civil engineer, Bryan Ziegler's job is one of the more critical and requires an enormous amount of dialogue and coordination across myriad agencies. From left, John and Amy Holland and project engineers R.J. Brey and Benjamin Linyard all enjoy solving unique building and architectural challenges to imbue a structure with integrity.

Theirs is a **Well-Civilized** and **Structured World**

The design of Wood County Electric Cooperative's new building is much more than just a pretty face, or façade, as they call it in "building-speak." Sure, the building needs to look good, as it will act as a welcoming point to Quitman, but beyond aesthetics, it must meet all federal, state and city codes for safety and operations. That's why there are two firms working with Fitzpatrick Architects to ensure expert compliance: Brannon Corp. of Tyler and Holland Engineering, LLC, of Lindale.

Brannon Corp.

Bryan Ziegler, PE, is the project manager for the civil engineering portion of WCEC's design and construction project for Brannon Corp. In that role, Ziegler must use his physics and mathematics training, but his is just as much a role of project management and coordination. His job is to make it possible for WCEC to be able to use the building and grounds in the ways needed and also to see that it is built in a way that government entities will allow.

He says the WCEC job will be especially rewarding for him because he is a Quitman native and takes pride in helping build such a significant structure in his own hometown. Adding to that joy is the fact that he is helping to accomplish the architectural vision of a former classmate and former co-worker, as well as the woman who is now his wife, Brandy.

Bryan Ziegler met Brandy at Texas Tech as they each studied architecture. After gaining his master's in architecture and a bachelor's in civil engineering, he went to work as an engineer-in-training near Dallas. He and Brandy married and adventurously applied for positions with a firm in Evergreen, Colorado, where they both worked. After a year as coworkers, they came back to East Texas for a vacation and realized they wanted to

be closer to family. That's how Bryan Ziegler came to work at Brannon Corp., while Brandy Ziegler went to work at Fitzpatrick Associates.

Now that they are with different firms, Bryan Ziegler says it's not all that often that they get to team on projects. But, while Brandy Ziegler's job may be the more artistic one, without the attention of civil engineers, the project would likely never be built.

Bryan Ziegler says his role on this job is to design the paving and drive-ways, as well as planning and design-ing for all of the water, sewer and other utilities.

"My role is to plan for all of the necessary aspects of the building," he said. "I look at the function and then work with the governing agencies to determine how to accomplish that under the regulations."

Most of his work, he says, is done during the production of the construction drawings. Then he periodically performs construction administration to ensure a smooth building process, inspecting as milestone events happen that affect his designs. While acting as the project manager for his area of responsibilities, Ziegler has a cadre of resources available to him from Brannon Corp., and he works with a team that consists of another engineer and usually two on-staff computer-aided drafting technicians. In all, Brannon Corp. has 18 employees with a wealth of knowledge in construction engineering, so Ziegler is also supported by others as needed.

In explaining more about his role with the WCEC building, Ziegler begins the civil engineering portion of the job on paper and then segues into working with myriad agencies and people. For example, on WCEC's job, the Texas Department of Transportation needed to be consulted since WCEC is along a state highway. The

proximity means there are building restrictions at different distances depending on speeds, intersections and many other factors. There are also federal building requirements to meet the Americans with Disabilities Act guidelines and the International Building Code. Then, there are specific city building codes and utilities and sewer requirements. At every step of the way there are permits to secure.

"My design pretty much ends about three to four feet from the walls of the building," Ziegler said.

He also said that in many cases, he's involved in a project until the ribbon cutting, and he expects it to be that way with WCEC's new headquarters.

"We want to see the last bit of asphalt poured and the last of the piping laid," he said.

Beyond working with his wife on the team that will see her vision come to life, Ziegler says, "The neatest thing for me personally is that I grew up in Quitman. I get to be a part of one of the biggest construction projects in the city, and it will be a very welcoming building.

"I hope people really enjoy the building and the artistic effort," he continued. "But, I also hope they never really notice my work. My best compliment is when my work goes unnoticed, because that means it's all working properly!"

Holland Engineering, LLC

More unsung heroes who likely also will want to go unnoticed after the building is complete are the team members at Holland Engineering, LLC, in Lindale.

Another husband-and-wife team, John and Amy Holland, are the owners of the engineering firm, and they, too, are civil engineers who have specialized in structural engineering. John Holland attained his bachelor's

in civil engineering from Louisiana Tech and his master's from the University of Houston. As a licensed professional engineer, he is the president of the firm. Amy Holland, who earned her bachelor's in civil engineering from Louisiana State University, acts as the vice president and also a project engineer. While Brannon Corp.'s

assistant and a drafting technician. Engineers R.J. Brey and Benjamin Linyard have been assigned as co-project managers of the WCEC project.

"We design the structure from the top down," John Holland says of his firm's role. "We design with many factors such as environmental loads, occupancy loads and perform-

roof planes on the public side of the building, coupled with a more conventional rear portion, have allowed them to use a mix of approaches to solve the various design challenges. Holland says that their goal is to meet all of the unique design aspects while maintaining the architectural intent and the owner's expectations.

To do this, Holland says they use the team approach, relying on the strengths of each. Brey is accomplished in the use of Building Information Modeling (BIM) software that is specific to design and analysis. He explains that BIM serves to improve coordination of structural designs across several entities to increase collaboration between all aspects of the engineering and construction teams, and also allows the owner increased visibility into the final product.

"The idea is to discover as many issues as we can on paper and not while a project is being constructed, because it saves money and time," Brey said. "Modeling in three dimensions assures there are minimal conflicts. Also, we can easily make a change on a model to see how it will affect everything else."

Linyard is adept in the use of modeling software, such as RISA, that focuses on structural analysis and can be integrated with Brey's model. Together, these two powerful programs offer an in-depth look at all aspects of a building plan to ensure that all systems mesh.

"This overall sense is extremely efficient. We want to keep the project affordable," Linyard said.

While keeping the project affordable and functional are the some of the top priorities of WCEC management, so is channeling the work and the economic impact so that it remains local.

"We feel so very blessed to work on this project, and also to be fortunate enough to employ the great talents of Ben and R.J.," Amy Holland said.

At WCEC we've found that capable talent among our locals, our members, and our natives has not been hard to find.



Holland Engineering, LLC, developed this structural rendering of the new WCEC building.

responsibility for WCEC's building is concerned mostly with the perimeter of the building and coding, the Hollands' job is to ensure that the project is structurally sound.

"Civil engineering is a very broad field with many avenues of study," John Holland said. "An aspiring engineer should select a specific discipline within the civil engineering spectrum." He chose structural engineering.

In describing his interest, Holland said his father was in construction, and he had been around it his whole life. "I knew when I went to college I wanted to understand why we were doing the specific things we were doing," he said.

Since the Hollands founded Holland Engineering, LLC, in 2005, they have been successful in working on an array of projects, from signage welcoming folks to the City of Tyler to major medical facilities, churches, schools, retail spaces, retaining walls and many other structures. These structures make use of various building materials such as steel, concrete, aluminum and wood. As their project numbers have grown, so has their business.

They employ two other structural engineers as well as an administrative

ance requirements. We then use this information to design the structural system including roof joists, beams and columns. We must distribute and deliver the loads safely to the foundation."

One facet of their responsibility is to design the structure in such a way that building movement is properly controlled. If a building deflects excessively, the finishes can be damaged. Additionally, in multistory applications, occupants can perceive excessive building movements, which may cause discomfort.

"Above all, we are held accountable to gravity," Brey said.

Holland says building codes are very strict, but not always well defined. The job of the structural engineer is to take the architect's vision and provide a constructible solution meeting all strength and safety criteria. Many factors must be considered in their analysis, from the materials used to the geotechnical properties of the soil upon which a structure stands.

Holland, Linyard and Brey all say that WCEC's building has been particularly enjoyable to work on because it employs an array of low-profile cantilevered roof elements. The multiple



SAVE ENERGY • SAVE MONEY

Don't keep your refrigerator or freezer too cold. Recommended temperatures are 37 to 40 degrees for the main refrigerator compartment and 5 degrees for the freezer. If you have a stand-alone freezer, it should be kept at zero degrees. Appliance settings may vary, so an easy way to check the temperature is to use a meat thermometer.

Source: U.S. Department of Energy

ATTENTION, STUDENTS!

TEXAS CO-OP POWER

CO-OP TEENS POWER TEXAS

One 30-second TV ad can win you \$1500!



Deadline: April 1

STUDENTS, GRADES 6-12: Make your own TV ad for your co-op and post it on YouTube. You could win a cash prize!

TEACHERS: You could win \$1000 for your school by sponsoring the grand prizewinner.

For full details, go to TexasCoopPower.com

LEGAL NOTICE



The Elections Committee of Wood County Electric Cooperative, Inc., will meet at the cooperative office at 501 S. Main St., Quitman, Texas, at least 40 days prior to the annual meeting. The committee is composed of the following members:

GLENN E. MORRIS
268 FM 900 E.
Mount Vernon, TX 75457

CLARENCE MEISKE
1547 FM 2659
Hawkins, TX 75765

CAROLYN BRYANT
201 E. Oak
Yantis, TX 75497

BEVERLY WADDLETON
P.O. Box 996
Quitman, TX 75783

JUDY PEOPLES
1646 VZ CR 1222
Grand Saline, TX 75140-4628

WILLIE CICERO
1010 State Highway 64
Ben Wheeler, TX 75754-4331

MIKE GILES
690 PR 8571
Winnsboro, TX 75494

This committee shall arrange for a notice to be prepared and posted at the cooperative office at least 30 days before the annual meeting that will include a list of nominations of directors. Any 100 or more members may make other nominations by official petition, but not before January 1 of this year and not less than 60 days prior to the meeting; and the secretary shall post the same at the same place where the list of nominations made by the committee is posted.

The committee shall cause to be mailed ballots listing all qualified candidates and a notice of the meeting, at least 21 days and not more than 30 days prior to the meeting. This shall include a statement of the number of directors to be elected and will show separately the nominations made by the committee and the nominations made by petition, if any.

The Elections Committee shall make nominations for directors for Districts 1 and 4. Directors whose terms are expiring are: Pat Lindley, District 1; and Brent Glenn, District 4.

The Annual Meeting of Wood County Electric Cooperative, Inc., will be held at 2 p.m. October 5, 2012, at Governor Jim Hogg City Park in Quitman.

LEARNING TO BECOME A LEADER

Calling all applicants for an all-expense-paid camp!

For more than 20 years, nine East Texas electric cooperatives have worked together to sponsor the East Texas Rural Electric Youth Seminar (ETREYS). The mission of ETREYS, which was established in 1988, is to foster positive ideas and values among young people and to enhance skills in leadership, problem solving and interpersonal relationships.

Each year, these cooperatives offer this all-expense-paid seminar to about 125 East Texas high school sophomores and juniors. Each cooperative selects its own delegates based on overall excellence and involvement in extracurricular activities. Each delegate's participation is 100 percent underwritten by the sponsoring cooperative.

Students travel with their cooperative to Lon Morris College in Jacksonville, where they live for one week in a college atmosphere and participate in workshops, seminars and peer-group activities that range from leadership development to pure entertainment.

Nationally known personalities, professional sport figures, community leaders and college professors offer messages of perseverance, motivation and inspiration. Additionally, each student has a chance to compete for thousands of dollars in college scholarships awarded at the end of the seminar.

Participants leave ETREYS much better equipped to take leadership roles in their schools and communities. Today, many of the first participants, now successful professional business leaders, still credit ETREYS with giving them the confidence to pursue their dreams. High school sophomores and juniors interested in attending this weeklong camp June 25-29 should download and complete an application from the Community Programs page on our website: www.wcec.org. Winners will be notified by mid-May.



Fifth-grade teacher,
baseball mom and
**owner of a
highly successful
energy business**



Her energy company is Wood County Electric Cooperative. The customers of Wood County EC are also members, which means they actually own the business. Every local co-op is run by the people it serves. When you speak, your co-op listens.

Co-ops are local businesses run by local people.

It's a little something we call
The Home Team Advantage.

WOOD COUNTY
ELECTRIC COOPERATIVE 



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Before you head out for a little break this spring, take the time to prepare your home so that your electric meter gets a break, too.

SPRING BREAK

It's Not Just for Students

Breaking away this spring? Give your electric bill a break, too!

If you're planning an excursion with the coming of warmer weather, heed this advice to help use your electricity efficiently and safely while you are away. These tips will not only lower your energy bill, but will also help keep your house safe in your absence.

1. Unplug some of your household appliances. Your house has many items that always use electricity when they're plugged in, even when turned off. Unplugging these items not only saves energy, but in some cases, also can prevent possible fire hazards. Some of the more common items include television sets, DVD players, microwave ovens and toasters.

2. Adjust the refrigerator control to a warmer setting. The fridge can be as high as 40 degrees without spoiling food; the freezer can reach 5 degrees. On these settings, you can save up to 40 percent of the refrigerator's electric usage. If you are going on an extended trip, consider emptying the fridge and turning it off (remember to leave the door open to prevent mildew).

3. Set the thermostat higher or lower than the typical comfort level. In cold weather consider lowering your thermostat, but to no lower than 55 degrees. Typically, by doing this, you can save 10 to 30 percent on your heating costs. If the weather's warm, you can shut the air conditioner off during your absence, or at least use a higher-than-normal temperature setting. A programmable thermostat can make these adjustments automatically.

4. Turn down the water heater. A large percentage of the cost of running a water heater comes from just keeping the water at the selected temperature. If you are going on a lengthy trip, turn the water heater's temperature to the lowest setting. This can save you up to \$10 a month.

Barbecue Bacon Meatloaf

Don't be fooled by the title. This delicious meatloaf is the perfect recipe to kick off March as National Nutrition Month.

- 2 pounds lean ground turkey**
- 12 slices turkey bacon, diced**
- 1 cup quick-cooking oats, uncooked**
- 1 medium onion, finely chopped**
- 1/2 cup barbecue sauce**
- 2 large egg whites**
- 1 tablespoon Worcestershire sauce**

Mix all ingredients in a large bowl. Press mixture into ungreased 9 x 5-inch loaf pan. Top with additional barbecue sauce, if desired. Bake at 275 degrees for 1 hour and 15 minutes. Allow to stand for 10 minutes before slicing.

Note: Meatloaf ingredients may be combined one day ahead and refrigerated. If cold, bake at 375 degrees for 1 1/2 hours.

Servings: 8. Serving size: 1 slice.
Per serving: 280 calories, 26.7 g protein, 11.8 g fat, 14.6 g carbohydrates, 1.3 g dietary fiber, 479 mg sodium, 5.1 g sugars, 93 mg cholesterol

For more delicious recipes, visit TexasCoopPower.com.

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TICK TOCK

Daylight Saving Time begins Sunday, March 11. Set clocks forward one hour and remember to check the batteries in your smoke detectors.