



Robertson Construction's crew led by Doug Becker receives the Quality Bridge Contractor Award for the 2nd Quarter for their work on Bridge B0493 in Cape Girardeau.

Quality Contractor of 2nd Quarter named

As the weather heated up this summer, so did competition for the Quality Bridge Contractor Award. With several worthy contractors making significant contributions to the project in the 2nd Quarter, KTU and Safe and Sound Project Management selected Robertson Construction to receive the recognition for their work this quarter.

Working in Southeast Missouri, Robertson's crew led by Doug Becker quickly identified quality issues and worked with KTU and MoDOT staff in developing recommended solutions. As a result, the crew was able to achieve significant schedule accomplishments on the B0493 Bridge in Cape Girardeau. This 130-foot, single span Route 61 Bridge was completed in just 22 days.

KTU and Safe and Sound Project Management also recognize the following contractors for their significant accomplishments in the 2nd Quarter:

- Schneiders Construction, under the supervision of Danny Procter, completed Bridge B0171, a three-span concrete deck, in 27 days. This is the fastest this type of bridge has been built on

the MoDOT 554 Project. "The level of communication and coordination on this job was outstanding. Danny communicated and coordinated well with MoDOT and KTU staff and maintained outstanding supervision of a large influx of additional crew members during the accelerated schedule," said Ken Warbritton, Safe and Sound Project Director.

- The Kiewit Infrastructure crew in the Southwest Region replaced the single span bridge B0460 in just 12 days. Due to the long detour route, MoDOT was concerned with the impacts to the surrounding communities with this bridge closure. Kiewit Infrastructure was able to remove and replace this structure in only 12 days setting the bar high for the quickest bridge to be built to date.

The Quality Bridge Contractor Award was started to recognize high quality performance on the 554 program. Each award recipient is chosen by KTU and Safe and Sound Project Management representatives involved in the work.

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schedule

Scheduled Completion

Bridges currently scheduled for completion in the next month as part of the design-build project include:

Northwest Region

B0091 -- Buchanan County

Northeast Region

B0200 -- Monroe County

Kansas City Region

B0254 -- Jackson County

Southwest Region

B0417 -- Lawrence County

Southeast Region

B0530 -- Scott County

Upcoming Construction

Reconstruction of the following bridges is currently scheduled to begin within the next month as part of the design-build component of the Safe & Sound Bridge Improvement Program:

Northwest Region

B0088 -- Holt County

Northeast Region

B0198 -- Marion County

Kansas City Region

B0259 -- Jackson County

Southwest Region

B0432 -- Dallas County

Southeast Region

B0546 -- Stoddard County



At the peak of the design process, there were about 120 designers working for the KTU team, designing bridges at the rate of two bridges every three working days.

KTU delivers innovation, speed and volume for MoDOT

As MoDOT staff worked on the rehabilitation of 248 of Missouri’s bridges, KTU was working on plans and innovative approaches for designing and rebuilding the balance of the 554 bridges in the Safe & Sound Program. As the owner says, “This is the nation’s first design-build project that is delivering a system-wide improvement. You can’t sit in this project office and look out over the job site ... there are 802 of them; at least one in every county in Missouri.”

The KTU design team created a special design approach to meet the owner’s expectations for innovation, speed and volume in the program, designing bridges at the rate of roughly two bridges every three working days for a little over a year. At the peak of the design process, there were approximately 120 designers at work creating and checking bridge designs.

The KTU team, made up of Kiewit, Traylor and United as the construction Joint Venture, and HNTB and LPA Group as the designers, began by collecting data and reviewing the factors that would truly be unique to each site: the hydrology and geotechnical requirements for each bridge. Within days of signing the contract with the client, a team of surveyors started developing a survey manual and requirements. In the fall of 2009, multiple teams of surveyors visited each bridge site to collect data and produce information for the design team to use for hydraulic and roadway designs. While the surveyors were at work, drilling teams also went to each site and obtained site-specific geotechnical data according to proposed foundation types.

For the early bridges in the schedule, once the survey data was transmitted to the team, the information was verified for completeness relative to design needs. For later bridges, the survey was verified and then shelved for use when the team got to that bridge. Early in the process, bridges were being designed almost as quickly as the survey data was provided; within several months, however, survey work was completed, ready and waiting for bridge designers.

The first process in any individual bridge design was the hydraulic models. Those models checked natural and existing conditions for multiple return intervals (e.g. 25-year, 100-year event). With existing conditions complete, a multi-disciplinary team gathered to review the size of the bridge and associated number of spans, with an eye towards how that bridge would affect proposed hydraulic conditions. That multi-disciplinary team included multiple bridge designers, hydrologists and contractor representatives who were joined by MoDOT representatives.

“This is the nation’s first design-build project that is delivering a system-wide improvement. You can’t sit in the project office and look out over the job site... there are 802 of them; at least one in every county in Missouri.”

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Kiewit Infrastructure named Safety Contractor of Quarter



Kiewit Infrastructure Co. (KIC) has been selected by KTU as the Safety Contractor of the quarter. Working on as many as six bridges at a time, the crews have focused on good access, recognizing changing conditions and associated hazards, crane safety, fall protection, and speaking up when they see something that presents a hazard to themselves or their coworkers.

KIC has completed nine bridges and currently has four more under construction. Their crews have worked almost 26,000 manhours without a single hurt and are focused on completing the project incident free. Their crews' attention to detail and passion for safety have made the project's goal of "Nobody Gets Hurt" an attainable one.

KIC's Safety Program is not a program that exists just on paper, but it's a

Kiewit Infrastructure Safety

- KIC crews have worked almost 26,000 manhours without a single hurt.
- Both on-site and off-site KIC management are engaged.
- The crews rely on the phrases "Never walk by an unsafe act/condition" and "Watch out for the other person."

program that involves commitment from each and every individual working on the project. KIC has a top-down commitment, and both off-site and on-site management are engaged. The crews rely on the phrases: "Never walk by an unsafe act/condition" and "Watch out for the other person." They are a team, and a team that strives for Safety Excellence.

Congratulations to KIC – Northwest Missouri Bridges, led by Project Superintendent Trevor Fitch; Project Engineer Brian Larson; Engineers Matt Trostel and Kyle Mogck; Foremen Les Matthews, Brett Winkler, Lindsay Heitman, Stan Collins, Shon Wallis and Larry Eurek; and Maintenance Staff Mike Davenport, Mike Ramsey and Isaac Farrar.



Take safety personally to beat heat illness

Why is it significant to us when a friend or family member is injured or falls ill? Why is it that we're angry or depressed when something goes wrong for someone we care about? It's because we take their health and safety personally. If we could do or say something that could keep someone we love safe, we would do it in a heartbeat. Don't our craft workers and subcontractors deserve the same consideration? Nothing should stop us from halting an unsafe act or removing an unsafe condition if we care for our employees. When we take their safety personally, we move one step closer to our goal of Nobody Gets Hurt.

Is it hot out here, or is it just me? Did you know Missouri had 17 heat-related deaths last year? This year, thousands of workers will be affected by heat-related illness, and it could have been preventable. Right now, some regions are seeing temperatures above 95 degrees with humidity around 80 percent. As seen on the heat index chart, the combination of heat, humidity, and physical labor makes sunstroke, heat cramps, or heat exhaustion likely. Someone taking anti-histamines for their allergies would be particularly susceptible because these medications interfere with sweat production.

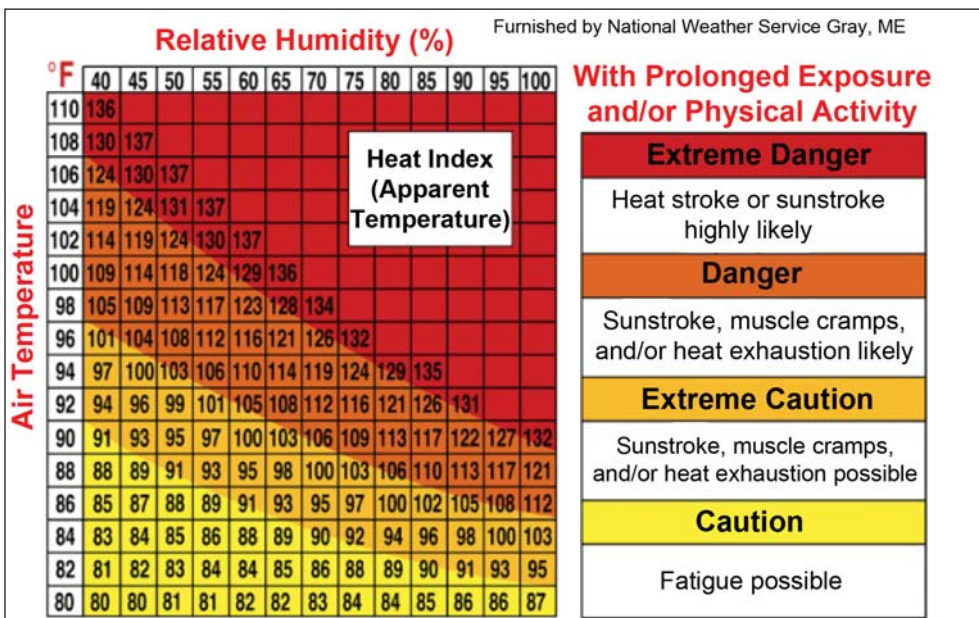
Think about our craft workers on these extremely hot and uncomfortable summer days. Are we taking their safety personally? It's not enough to have a jug of water and expect your employees or coworkers will drink when they should. A worker engaged in moderate activity should drink a cup of water every 15-20 minutes in moderately hot weather. That means when it's 85 degrees, you should drink 40 cups, or 320 ounces, of water to stay hydrated.

A word of caution, as with every beverage, it's possible to drink too much water. Stay under 48 cups of water a day to avoid flushing all the salts and minerals out of your body. Alternating water with an electrolyte beverage (like Gatorade) will also help avoid water intoxication.

Safety is a team effort, why not partner up with a buddy and agree to monitor each other for heat illness? Introduce yourself to someone new in the crew and ask how they're feeling. Make a plan to schedule your breaks together and commit to good hydration. This hot Missouri summer is the perfect time to develop work relationships and make safety personal.



| Region | Total Hurts | Recordable | First Aid |
|-------------|-------------|------------|-----------|
| Northwest | 0 | 0 | 0 |
| Southwest | 1 | 0 | 1 |
| Northeast | 4 | 3 | 1 |
| Kansas City | 1 | 0 | 1 |
| Southeast | 4 | 2 | 2 |



Firms fined for safety violations WHY WE DO IT!

Toledo, OH — Eagle Bridge Company of Sidney, Ohio, was charged with three serious violations and one repeat violation and fined \$30,360 after Occupational Safety and Health Administration inspectors visited a construction site in Lima, Ohio, in late March. The violations included problems with scaffolding and workers being exposed to fall hazards.

A Fulton County steel processor was also cited for two penalties and fined \$24,893. In the first citation it was found to have committed four serious violations and in the second citation the firm was charged with five serious violations.

When it comes to quality it's all in the details

The details in all the work we do are often the difference between being successful and not so successful. After passing the halfway milestone point, many of the aspects of our work have become repetitive. The steps involved in construction and the documentation required to complete a structure are well known. However, overlooking the smallest details or taking for granted the most obvious details can sometimes lead to undesirable results. The following three topics outline some issues that have happened on the Safe & Sound project and the end results that should have been avoided.

1. Damage to completed work. Many builders have stepped up their efforts and put plans in place to avoid damage to completed work. However, overlooking some key details has still resulted in damage such as sawing through a barrier wall

with a circular saw not catching the “high point in the middle of the barrier wall” detail. Placing a 2x4 between beams to protect from spalling but driving the board under pressure too close to the end of the beam causing a spill. Loading a beam in a manner different than stated in shop drawings causing beam failure resulting in loss of the beam.

2. Layout review of work in progress. Implementing a system of double checks for layout could avoid issues that have been



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Construction halfway point reached July 11

At 4 p.m. on July 11, APAC-MO and the Southwest Region opened Bridge B0420 to traffic, marking the completion of the program's 277th bridge and bringing construction to the halfway completion point.

After 46 days of hard work and some lucky timing, APAC-MO led KTU to the halfway milestone and set the pace for the second half of the project by scoring a perfect 9 on the National Bridge Inspection (NBI) rating.

Construction Halfway Point

- The 277th bridge in the design-build portion of the Safe & Sound Project was completed on July 11.
- Bridge B0420 was finished in 46 days.
- The APAC-MO crew scored a perfect 9 on the NBI rating.

To date, APAC-MO has completed 23 KTU bridges and has 10 more under contract. On Nov. 13, 2009, APAC-MO completed their first KTU Bridge, B0354, which was the second bridge that the project opened to traffic.

APAC-MO continues to be a solid performer by producing high-quality bridges while keeping safety as a top priority.



APAC-MO helped KTU Constructors reach the construction halfway point with the completion of Bridge B0420 on July 11. Pictured from left are Darrell Hall, Florounol Gloxho, Mike Ridgeway, Ed Kempker, Paul Schwarzer, Charles Havens and Douglas Hughes (KTU). Crew members not pictured are Terry Maher, Willy Komrska, Larry Komrska, Carl McArthur, Dereck Reed, Rereglico Castro and Ron Thomas.

KTU would like to thank APAC-MO for all of their hard work and accomplishments to date and looks forward to maintaining our positive relationship for the remainder of the project.



Commercial Manager Stacia Pagenkopf (left) and Environmental Manager Jeremy Goings congratulate Brittany McLemore on completing her on-the-job-training with KTU Constructors.

KTU develops tomorrow's workforce

KTU Constructors is proud to congratulate Brittany McLemore on completing her OJT Program. The professional On the Job Training curriculum for Environmental Technician at the MoDOT 554 Project was developed by KTU Constructors and approved by Missouri Manpower through the FHWA and MoDOT. The curriculum for Environmental Technician includes approximately 2,000 hours of training in

various areas of the design/build process with respect to environmental management.

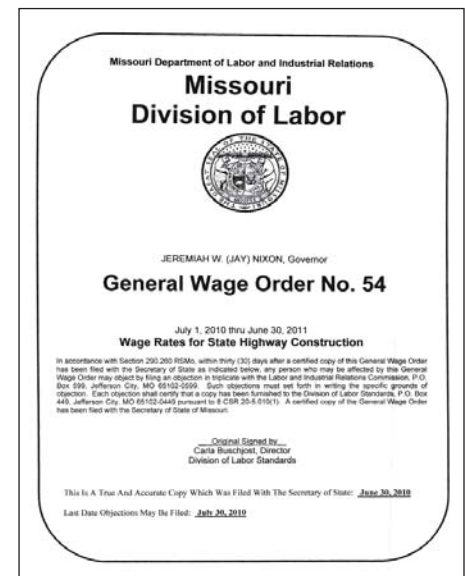
Brittany started with KTU on June 21, 2010, and completed all the training required in just under a year. We appreciate her dedication to the program and hard work that she's put in. We wish Brittany well in her continued employment.

KTU Constructors' Family Day Picnic at Worlds of Fun



Wage decisions

This is just a reminder that both the State GWO and the Federal Davis-Bacon wage Decision decisions changed as of July 1, 2011. The following will be utilized on the MoDOT 554 project until June 30, 2012:



General Decision Number: MO100001 06/03/2011 MO1
 Superseded General Decision Number: MO20080001

State: Missouri
 Construction Types: Heavy and Highway
 Counties: Missouri Statewide
 HEAVY AND HIGHWAY CONSTRUCTION PROJECTS

| Modification Number | Publication date |
|---------------------|------------------|
| 0 | 07/17/2010 |
| 1 | 04/09/2010 |
| 2 | 02/07/2010 |
| 3 | 02/07/2010 |
| 4 | 02/07/2010 |
| 5 | 02/07/2010 |
| 6 | 02/07/2010 |
| 7 | 02/07/2010 |
| 8 | 02/07/2010 |
| 9 | 02/07/2010 |
| 10 | 02/07/2010 |
| 11 | 02/07/2010 |
| 12 | 02/07/2010 |
| 13 | 02/07/2010 |
| 14 | 02/07/2010 |
| 15 | 02/07/2010 |
| 16 | 02/07/2010 |
| 17 | 02/07/2010 |
| 18 | 02/07/2010 |
| 19 | 02/07/2010 |
| 20 | 02/07/2010 |
| 21 | 02/07/2010 |

CARD0005-020 04/01/2008
 CARD1 (Richards-Gebauer AFB ONLY), CLAY, JACKSON, PLATTE AND RAY COUNTIES

| Rate | Fringe |
|-------|--------|
| 33.00 | 12.03 |
| 33.00 | 12.03 |

ST. LOUIS COUNTY AND CITY

| Rate | Fringe |
|-------|--------|
| 32.76 | 12.25 |

* CARD0011-001 05/01/2011

| Rate | Fringe |
|-------|--------|
| 28.57 | 11.00 |
| 27.67 | 10.55 |
| 28.83 | 13.05 |

Safe & Sound construction and the Clean Water Act



With the summer sun blazing down, we are all eager to throw on our swim trunks and jump in the nearest puddle of water we can find to cool off. Many of us would never even think twice about the cleanliness of the water we are splashing through and luckily, since 1948 we have not had to. This was the year the Environmental Protection Agency established the Clean Water Act, and since then we have been able to swim in any lake or fish in any river we choose without concern of harmful pollutants ruining our fun.

What exactly does the Clean Water Act (CWA) entail for our Safe and Sound Bridge Project? Well, the CWA regulates not only the quality standards of surface water, but also the release of pollutants into the various waterways we encounter such as wetlands, lakes, rivers, streams, etc.

Construction activities increase pollutant loads into these water bodies in three main ways. First, the volume and rate of water runoff are typically increased during construction, providing larger capacity to transport pollutants to rivers and lakes. Second, clearing and grubbing leaves bare soil that is much more vulnerable to erosion, resulting in sediment moving into receiving waters. Third, some pollutants (i.e. petroleum products, chemicals from construction materials, metals, debris), can be added to the site during construction.

So why do we need water permits to build all 554 bridges? Section 402 within the CWA titled National Pollutant Discharge Elimination System, or NPDES, provides for permit coverage to be obtained for the discharge of storm water by industrial activities. While our project may not fall under the classification of industrial activities, in 1992, the NPDES program was modified to include land disturbance through construction as an industrial activity to regulate the discharge of

sediments and other pollutants during construction.

Section 404 of the CWA further regulates various activities from infrastructure development to the discharge of dredged, excavated, or fill material into U.S. waters, including wetlands, without a permit.

For most cases that have only minimal adverse effects to the land, a general permit will suffice and may be issued by the state. State permit coverage is required for all land-disturbing construction activities that disturb one or more acres over the life of the project or that are part of a larger common plan of development that will disturb one or more acres over the life of the development. This permit is referred to as a Nationwide Permit requiring "no pre-construction notification." For more extreme cases with much larger impacts, a Nationwide "404" Permit is required and can be obtained through the U.S. Army Corps of Engineers.

By following these five simple guidelines we can all do our part to keep our bridge projects safe and sound, and our water bodies swimmable and fishable!



Bridge B0431 in Christian County along Route MO 125 S over Finley Creek.

5 guidelines to following Clean Water Act rules

1. Implement an erosion control plan that complies with MoDOT's NPDES permit.
2. Integrate design practices to avoid/minimize potential work impacts to wetlands and waters.
3. Maintain the low-flow characteristics of all stream crossings.
4. Notify the Missouri Department of Natural Resources 10 days before the demolition of any bridge and follow measures to protect the waters during bridge removal.
5. Locate solid waste storage at least 50 feet from drainage and water courses and concrete washout sites at least 100 feet.

If you have any environmental concerns, contact Jeremy Goings, KTU Environmental Manager

Attention to detail ensures higher quality work (continued from Page 5)

encountered. KTU has also sent out a Quality Alert to our regions detailing proper construction staking methods and the correct markings to be put on stakes. This helped avoid the mistakes that come with not looking at the details in the plans and assuming the layout would be the same as the last bridge. A couple of items to note would be verifying if work is to “fill face” or “centerline of bent” for abutment and piling layout. Review the degree of skew and lengths with a double check method that uses two different sets of data for verifying layout.

3. Verification of “as built requirements of work in progress.” The most important item to note here is to know the hold points in the scope of work being performed. This helps avoid issues that have no quality product end result with real re-workable or repairable solutions. Three areas of work that have resulted in this are: not verifying the minimum pile tip elevation was achieved before cap construction, not verifying minimum pre-bore elevations were achieved prior to setting pile, and not verifying that pipe pile with concrete in it was going to be below the scour elevation on the plans in accordance with special provisions.

KTU Constructors sent out a Quality Alert to all of the regions detailing proper construction staking methods and the correct markings to be put on the stakes.

Many of these items and others should be reviewed each day to ensure we are building quality work that meets the requirements and that we are building the work right the first time.

Precise survey layout critical to keep project on schedule

The MoDOT 554 project is a very fast-paced construction project, therefore precise survey layout and measurement the first time around is crucial!

Currently on the KTU survey team are; Anthony Gothard(Project Survey Manager), Karl Pearson(East Survey Manager), Abby Thorne(Survey Technician), Daniel Rokser (Crew Chief), and David Toepper(Crew Chief).

One of this team’s responsibilities is to check the contractors’ survey layout. In the 178 bridge layouts our team has reviewed this season, we have found errors in a very small number of the layouts. Your first thought might be “what is an error?” An error to us is anything that could cause construction delays or result in someone building something in the wrong location or at the wrong elevation.

Some of the items that we have caught before construction include horizontal and vertical errors of one foot or greater. Can you imagine what would happen if you built a bridge one foot too low in a flood plain? This would lead to very costly fixes. This is just one of the reasons why

Key Factors in Safe & Sound Project Survey Efforts

- Of the 178 bridge layouts the KTU survey team has reviewed this season, we have found errors in a very small number of the layouts.
- Some of the items the survey team has caught before construction include horizontal and vertical errors of one foot or greater.
- An error is anything that could cause construction delays or result in someone building something in the wrong location or at the wrong elevation.

we review. It’s a complicated task that always deserves a second check, but the KTU survey team is here to assist with this process.

What does it take to avoid errors? Below are some key questions to address to ensure success with survey layout:

1. Are you using the most current set of plans? Is your subcontracted surveyor using the most current set of plans?
2. Have you received the current control? KTU is constantly monitoring the control due to unforeseen disturbances (mowers, snow plows, etc.)
3. Has your surveyor provided their recorded layout and control checks

to the KTU Field Manager/KTU Surveyor before construction?

4. Is your provided bent layout to fill face or centerline of bent? Is it labeled on the lath?
5. Has there been a check to two or more control points?
6. Did you or the inspector complete a walk thru of the survey layout, pulled a tape, or sighted down a line of laths? If your gut is telling you something doesn’t look right, it probably isn’t!

These items should be applied to every bridge, no matter the size, to ensure we minimize any errors. Build it right the first time! Please don’t hesitate to contact our team with any questions.

Missouri River flooding prompts NW Region to re-sequence work

The Northwest Region has completed 26 of its 66 bridges for 2011. Currently there are eight bridges under construction across eight counties with one more bridge being completed in July. Over the next two months, the NW Region is schedule to start construction on another 21 bridges.

The contractors currently working in the Northwest Region are Clarkson Construction Company, Boone Construction Co, Phillips Grading & Construction Co. and Kiewit Infrastructure Co. Based on our current schedule, we will have between seven and 13 bridges under construction at any given time until November.

Major flooding from The Missouri River has impacted the construction schedule. As a result, KTU is working with MoDOT and

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Crews from Clarkson Construction Co. perform the deck pour on Bridge B0057 in the Norwest Region.

Southwest Region nearly halfway through 64 bridges for the year

The Southwest Region has completed 26 of its 64 bridges for 2011. Currently there are 10 bridges under construction across eight counties with two additional bridges completed in late July. Over the next two months, an additional 18 bridges are scheduled to start construction.

Through July, L. Krupp Construction has completed four bridges, Burk Bridge Company two bridges, APAC-Missouri three bridges, Don Schnieders Excavating two bridges, Pace Construction Company two bridges, and Kiewit Infrastructure 13 bridges in 2011.

The Southwest Region will average 12 bridges under construction through September. In the coming months, Pace Construction will start work on Package 14.4 and Burk Bridge Company will start on Package 15.3.



When the Southwest Region completed Bridge B0420 in Jasper County on July 11, construction of the 554 bridges in the design-build program officially reached the halfway point.

Northeast Region builds three span girder bridge in record time

The Northeast Region has completed 31 of its 56 bridges for 2011. Currently there are 12 bridges under construction across nine counties with three additional bridges completed in July. Over the next two months, an additional 12 bridges are scheduled to start construction.

One of the most challenging bridges to be constructed so far this season was B0171 located on US 54 between Mexico and Laddonia. Bridge B0171 is a three span, 140 foot long and 42 foot wide spread girder bridge with a concrete deck. The contract allowed for 39 calendar days of construction time; however, construction was completed in just 27 days, 12 days ahead of schedule.

Don Schnieders Excavating now holds the record for building a three span, spread girder bridge in the shortest perion of time -- 27 days. On behalf of MoDOT and the stakeholders of B0171, KTU would like to thank all those who worked on this bridge. This is a great example of what can be achieved through planning, preparation, teamwork, and execution. The crew worked long hours for several weeks to complete this bridge ahead of schedule. The bridge was opened July 2 to accommodate the holiday weekend traffic.

We welcome our newcomers to the Northeast region: Rick LaMarche joins KTU as a Field Manager working in the Kirksville office, Kyle Mogck joins KTU in the Columbia office and Terry O'Brien was promoted to NE Region Project Engineer.

Kansas City Region about to start challenging bridges

The Kansas City Region has completed 33 of its 62 bridges for 2011. Currently there are 11 bridges under construction across six counties with four additional bridges recently completed. Over the next two months an additional nine bridges are scheduled to start construction.

Through July, Clarkson Construction Co. has completed four bridges, APAC-Kansas, Inc. 11 bridges, Leath & Sons' three bridges, Phillips Grading & Construction 11 bridges, Don Schnieders Excavating two bridges and Kissick Construction two bridges.

The 33 bridges re-opened to traffic this season were completed in a combined 265 days ahead of schedule. The average construction duration for the first 33 bridges is 37 days; seven days faster than the 2010 season.



Construction of Bridge B0254, 67th Street over MO Route 350 in Jackson County, is one of the Kansas City Region's more challenging bridges. This bridge spans a heavily traveled route in Raytown and requires full closures of Route 350 during demolition and girder setting activities.

--Continued on Page 11--

Flooding affects NW Region's construction sequence [\(continued from Page 9\)](#)

bridge contractors to re-sequence the affected bridges.

Phillips Grading has completed three bridges in the NW Region this year including Bridge B0058 in Gentry County on July 19. The company is currently working on Bridges B0076, B0041 and B0037. Clarkson Construction is currently working on Bridge B0097 (MO 113 over the Nodaway River) and is scheduled to work on two more bridges, B0055 and B0088, concurrently through August. The start of Bridge B0088 is on hold, however, until the Missouri River recedes enough for I-29 to reopen because the bridge is located along a detour route for this interstate closure.

Boone Construction is working on Bridge B0006 and Bridge B0105; both are expected to be completed by mid-August. Boone will also be starting on Bridges B0100, B0111, and B0059 in August.

Kiewit Infrastructure is currently working on four bridges and is scheduled to work on four to six bridges concurrently throughout the remainder of this season.

Because Bridge B0088 is located along a detour route for the closure of I-29, reconstruction of this bridge is on hold until the water in the Missouri River recedes enough for the interstate to reopen.

The final two bridge packages in the Northwest Region, 12.1 and 13.1, have been awarded to Clarkson Construction and Phillips Grading respectively. Construction is expected to start on these two packages in mid-August.

New members of the Northwest Region are Ryan Carlin, Office Engineer; Jason Barton, Field Manager; and Steve Bosela, Intern. Kevin Hier, Field Manager, will be joining the Northwest Region in August. We look forward to having them as members of our team.

KC Region works on challenging bridges (continued from Page 10)

The Kansas City Region will begin two of its more challenging bridges this season with Bridge B0254 beginning construction near the end of July and Bridge B0259 at the start of September. Bridge B0254, 67th Street over MO Route 350 in Jackson County, is an intersecting bridge over a heavily traveled

route in Raytown. Full closures of Route 350 will only take place when the existing 67th Street bridge is under demolition and when new concrete girders are ready to be set.

Bridge B0259, US Highway 24 over Rock Creek in Jackson County, will be staged

construction of a 120 foot long, single-span by 83 foot wide bridge near Independence.

KTU Constructors has recently awarded package 14.2 to Phillips Grading & Construction. Work on this package began in July and is scheduled to finish in 2012.

Southeast Region racks up success despite flooded river

The Southeast Region has completed 17 of its 47 bridges for 2011. Currently there are 12 bridges under construction across seven counties with two additional bridges completed in July. Over the next two months an additional 12 bridges are scheduled to start construction.

The Southeast Region got off to a delayed start this spring when 25 inches of rain fell over a seven day period in late April. With all of the rain, the Mississippi River in Cape Girardeau rose to 14 feet above flood stage. Bridge work in this region was suspended for three weeks due to severe flooding.

Despite this setback, the Southeast Region was able to open four bridges in May, five bridges in June, and was scheduled to open five more bridges in July and another 10 bridges in August.

Robertson will finish the high profile work on the last three bridges in package 10.5 this fall. Joe's Bridge & Grading will start three bridges in August and three bridges in September on packages 5.5 and 9.6. Penzel will start construction on the final bridge of package 6.6 in August. Krupp will start one bridge in August and two bridges in September on packages 11.5, 11.6, and 12.6.

Although a challenging start to this year's season, the Southeast Region has already had numerous successes. The 2011 construction season has been very



The demolition of Bridge B0526 required a 24-hour shutdown of Interstate 55 so the four, 90-foot spans could be removed. Robertson Construction was able to complete the removals in 15 hours, reopening the interstate nine hours ahead of schedule.

successful for Robertson Contractors. On bridge B0493, a 130 foot single span, Form T bridge, they were able to complete construction 40 days ahead of schedule.

On Bridge B0526 a 24-hour shutdown was scheduled for Interstate 55 to complete the demolition. Robertson was able to complete demolition and removal of the four, 90-foot spans in 15 hours, reopening Interstate 55 to traffic nine hours ahead of schedule.

On Bridge B0519, the local residents were so pleased with the progress of construction that they treated the Robertson crew to a barbeque to celebrate their milestone of setting the beams.

On package 5.5 and 9.6, Joe's Bridge & Grading was the most impacted by the early flooding this spring; however, they are still on track to complete 15 bridges this season.

Work on Magruder's Bridge B0489 was also suspended due to the flooding this spring, but was completed within the contract duration. Magruder was also able to complete the last two bridges of their package by July.

With all of these successes MoDOT has challenged KTU to construct Bridge B0472 in 15 days to accommodate local residents in Iron County. MoDOT, KTU, and L. Krupp are partnering to redesign the bridge and meet the 15-day goal.

JakeFest Tournament raises \$40,000 for cancer research

It was a beautiful Saturday and the sun was shining brightly all day. A few trials and a few triumphs were made on the golf course by all who participated. However the real magic began when everyone gathered for lunch and placed

their bids, encouraged by one another, during the auction.

KTU would like to take this opportunity to give a special and heartfelt thank you to all participants in this year's Kansas City 2011 JakeFest. This year we raised

almost \$40,000 in support of CureSearch, specializing in research to find a cure for all children's cancers.

Thank you again for your support and generous contributions to CureSearch.

Thank you to the following 2011 JakeFest Tournament contributors

Gifts of \$2,000 & up

HNTB Corporation
The Heckmaster Family
United Infrastructure Group

Gifts of \$1,000 & up

Phillips Grading & Construction Inc.
Herzog
Leath & Sons Inc.
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Kiewit NW Missouri Bridges Project
Kiewit SW Missouri Bridges Project
The Sanman Family
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Gifts of \$100 & up

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Raffle Prize Donations/Volunteers

The Kansas City Chiefs
The Kansas City Royals
Buffalo Wild Wings
Minsky's Pizza
Yankee Candle
Portrait Innovations
Buca Di Beppo
Paradise Park
The T-Bones
54th Street Restaurant
Blue Springs Ford
LamylAvis Photography
Linda Olvera
Brandi Edon
Tina Heckmaster
Anne Marie Vanecek
Misty Gothard
Tracy Smith
Terri Loughry
Hunter Taormina
Abby McInerney
Gloria Frieberg
And last but not least, Doug Grimes!



554 bridges designed in less than 400 days (continued from Page 2)

After a bridge size was determined, proposed hydraulics were run and compared with the design parameters allowed. If proposed hydraulics were in line with parameters, the design team moved forward with that bridge. If the parameters were not met, the team had one of two choices: request a design exception or re-size the bridge.

A key point in the speedy delivery of actual bridge designs – and their construction – rested in the development of standardized beam and substructure components. The KTU team created guidelines and standards for key bridge components. Beam standards were set

in five-foot increments for bridges 30 to 90 feet and in 10-foot increments for bridges of 100 to 120 feet.

Side-by-side and spread box configurations were optimized for configurations less than 90 feet and side-by-side for longer bridge spans. Likewise, standards for the substructures were developed, allowing designers a quick turnaround no matter the span configuration determined by hydraulics. Standardization allowed the designers to select bridge components that were ready for immediate incorporation into the design. It also allowed fabricators and suppliers to mass produce beams

and deck panels, reducing costs and time leading up to their use in construction, and making construction easier and more standardized as well. Roughly 90 percent of the KTU bridges designed for Safe & Sound utilized these pre-determined components.

Now, as KTU focuses on finishing construction work through 2012, the concentrated efforts of 120 designers are being brought to reality in bridges across the state of Missouri. With a one-of-a-kind effort to date, the innovation and collaboration of the design team has provided KTU with a model to use in future projects.

KTU Constructors contributes to Joplin recovery efforts

At the right is a copy of a letter sent to the American Red Cross on behalf of KTU Constructors following this spring’s devastating tornado in Joplin, MO.



An aerial view of Joplin before the tornado



An aerial view of Joplin after the May 22, 2011 tornado



June 14, 2011

Joann Moore, Public Relations/Fundraising
American Red Cross
1545 North West Bypass
Springfield, Missouri 65803

Regarding: Donation for Joplin Relief

Dear Ms. Moore,

Since the fall of 2009, KTU Constructors has been working with the Missouri Department of Transportation to replace 554 bridges across the State of Missouri.

Although we are still fairly new residents of the State, we have friends, family and colleagues spread throughout southwestern Missouri and even in Joplin itself. While we consider ourselves blessed to have come through the storms intact, we know that many were not as fortunate.

On behalf of the KTU team, I am proud to present this donation of \$30,000 to aid in the relief effort in Joplin. Our thoughts and prayers continue to be with those affected by this tragedy, and we hope that this donation can help to lift some of their burden.

Sincerely,
KTU Constructors

Troy L. Heckmaster
Project Director

Safe and Sound Project on display at State Fair



Blake and Toby Featherston, children of KTU Constructors' Quality Manager Jeff Featherston, visit the Highway Gardens at the 2011 Missouri State Fair where they got an up-close look at an actual section of precast box beam on display.



Bridge Construction 101

Visitors to this year's Missouri State Fair in Sedalia got the chance to learn a little bit about three different types of bridges being built as part of the Safe and Sound Project. MoDOT's display in the Highway Gardens included information on KTU Bridge B0171 built in Audrain County, B0493 built in Cape Girardeau County and B0460 built in Taney County.

B0171 (constructed along US Route 54 over the Cuivre River) is a 140-foot long, three-span bridge with precast core slab girders and

a concrete deck. This bridge was built by Schnieders in 27 days – 12 days ahead of schedule.

B0493 (built along US Route 61 over Ramsey Creek) is a 130-foot long, single-span bridge with concrete I-girders and concrete deck. Robertson built this bridge in 22 days – 40 days ahead of schedule.

B0460 (built along MO Route 125 over Brush Creek) is a 75-foot long, single-span bridge with precast core slab and asphalt overlay. Kiewit Infrastructure built this bridge in 12 days – nine days ahead of schedule.

State Fair display features look at Bridge B0493



Reconstruction of the US Route 61 Bridge over Ramsey Creek (upper left) began May 10. Milestones included demolition of the original structure on Day 2 (upper right), pouring of end bents and caps on

Day 7 (middle left), placing and finishing of the concrete deck on Day 18 (middle right), slipforming the barrier on Day 19 (lower left) and bridge completion on Day 22 – 40 days ahead of schedule.

Bridges B0171, B0460 featured at State Fair



Reconstruction of the US Route 54 Bridge over the Cuivre River (top left) began June 6. Reconstruction milestones included demolition of the original structure on Day 2 (top middle), installation of piling on Day 7 (top right), pouring of end bents

and caps on Day 14 (lower left), setting of precast core slabs and deck panels on Day 16 (lower middle) and bridge completion on Day 27 – 12 days ahead of schedule.



Reconstruction of the MO Route 125 Bridge over Brush Creek began May 16. Milestones included demolition of the original structure on Day 1 (top left), installation of piling on Day 2 (top middle), setting of pre-

cast beams on Day 8 (top right), slipforming the barrier on Day 8 (lower left), installation of deck waterproofing on Day 10 (lower middle) and bridge completion on Day 12 – nine days ahead of schedule.