



Falls City Engineer

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On the cover: USACE Commanding General of the Great Lakes and Ohio River Division Maj. Gen. Robert Whittle, Louisville District Commander Col. Antoinette Gant and Louisville District Deputy Engineer Linda Murphy exit the new Ireland Army Health Clinic following the ribbon cutting ceremony Jan 21, 2020. (USACE photo by Abby Korfhage)

Please conserve: Think before you print.

Commander's Comments

Team Louisville,

As with every New Year, change is always in our midst and 2020 is no different. 2020 is here and in full effect! There is, however, one constant, and that is YOU! Your dedication and drive for excellence can always be counted on day after day, year after year. The resilience of our district collectively makes us who we are. It gets me excited about what is to be, and we have certainly started the year off in great strides.

Over the past few weeks we have experienced heavy rainfalls in our area resulting in an activation of the Emergency Operations Center to provide flood fight assistance to state and local partners. Staff from multiple district offices gathered to respond via daily coordination calls and provided support through the deployment of flood fight teams. All of our deployed teammates have now returned home and, I want to extend my sincere thanks to all involved in the response effort for these flood events.

We recently held our Louisville District Open House, and what an exciting event it turned out to be with more than 400 attendees. I spoke with many of our previous and current contractors, and several made a point to tell me how much they enjoy working with the Louisville District. This is a testament to the professionalism and dedication of all of you, something to definitely hang your hat on!

This month's issue is packed with outstanding stories to spotlight our continued success delivering the program, as well as recognizing the extraordinary contributions of others throughout the district. From the ribbon cutting at the new Ireland Army Health Clinic at Fort Knox, to our team helping design the new lock at the Soo, to our environmental team receiving wonderful feedback from the Reserve Headquarters, and much more. This district continues to be at the forefront of excellence!



Col. Antoinette Gant
Commander and District Engineer
Louisville District
U.S. Army Corps of Engineers

Remember, February 16-22 is National Engineers Week. It's a time to celebrate how engineers make a difference in our world, and I hope everyone will join us in the celebration. Be on the lookout as we spotlight some of our own on the district's social media sites.

Thanks again for all you do!

Army Strong! Building Strong! We are LOUISVILLE PROUD!

Col. G

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Civil Works

Louisville supports regional effort to design New Lock at the Soo



The Louisville District Soo Locks Project Delivery Team aboard the Paul R. Tregurtha locking through the Poe Lock in Sault Ste. Marie, Mich., during a site visit in June 2019.

Katie Newton, public affairs

The U.S. Army Corps of Engineers Louisville District is playing a key role in a regional effort to design the New Lock at the Soo in Sault Ste. Marie, Michigan.

Louisville District engineers, along with engineers from Detroit, Huntington, Nashville, and Pittsburgh districts and the Inland Navigation Design Center (INDC), are joining together to design the megaproject for the Detroit District, which operates and maintains the Soo Locks Facility.

"We have a team of more than 20 high performing engineers, geologists, architects and technicians in the Louisville District working on this mega-project. Those folks have the technical expertise and many years of experience designing similar inland navigation projects. The Soo locks are a critical component in our nation's infrastructure, and we are honored to play a role in this regional effort to ensure that the Great Lakes Navigation System is reliable for years to come," said Jeremy Nichols, Louisville District Navigation Design Section chief. "We are thankful for the opportunity to serve the Detroit District, the Soo Area Office and the INDC."

The project will construct one larger 1,200-foot long x 110-foot wide lock chamber on the site of the existing Davis and Sabin Locks. Construction of the New Lock at the Soo, with dimensions equal to the existing Poe Lock, will provide much needed resiliency in the Great Lakes Navigation System.

According to the Detroit District, approximately 80 million tons of commercial commodities pass through the Soo Locks annually, with almost 90 percent of that tonnage restricted to the Poe Lock. Having full redundancy at the Soo Locks safeguards the nation's economy.

"Nearly all domestically produced high-strength steel used to manufacture products like automobiles and appliances is made with iron ore that transits through the Poe Lock," said Mollie Mahoney, Detroit District senior project manager. "The New Lock at the Soo would eliminate the single point of failure in our nation's iron ore supply chain."

Phase 3 of the approximately \$922 million project involves construction of the new lock chamber and is currently scheduled for contract award in summer 2021 with construction work to begin as early as 2022.

"We are on an accelerated schedule to submit the 70 percent design package by April 2020," said Jeremy Nichols. "This is a very aggressive design schedule. In order to meet that schedule, the design team has

been using various 3D modeling packages such as Revit and Inventor. Physical scaled models produced by a 3D printer have also been used. By designing this mega-project in a 3D virtual environment, it allows continuous communication and collaboration as well as exceptional teamwork with other districts and the end users at the Soo Area Office."

The Louisville District team has the lead for geotechnical, geology, civil engineering, architecture and CADD/BIM modeling of the project. Additionally, the Louisville District is providing structural engineering support to the Nashville District for design of the cofferdam, wide wall monoliths, dewatering, chamber floor and buildings.

"This is truly a team effort both in-house and across various districts and offices," Nichols said. "Louisville District's engineers, geologists, architects and technicians are supporting many facets of this project, which has to work in conjunction with the designs from our counterparts in other districts. The level of collaboration to pull off this massive undertaking, and to do it all under an accelerated schedule, is unprecedented."

The multi-district design requires lots of close coordination/communication. "The INDC has assembled an awesome team from districts and offices across LRD and MVD. The benefit of the INDC is that they pull together subject matter experts and team members with recent experience designing navigation locks to create a truly world class design team," Mahoney said.

For more information on the New Lock at the Soo project visit: https://www. lre.usace.army.mil/About/Highlighted-Projects/New Soo Lock/



Engineers from across the region gathered in Louisville, Ky., Dec. 11-13, 2019, as part of a multi-district effort to plan the design of the New Lock at the Soo in Sault Ste. Marie, Mich. Construction of a new lock chamber will provide much needed resiliency in the Great Lakes Navigation System.

Military

Fort Knox's Ireland Army Health Clinic is officially open for business

Abby Korfhage, public affairs

The U. S. Army Corps of Engineers Louisville District celebrated alongside the Fort Knox community as the new Ireland Army Health Clinic held its ribbon cutting ceremony Jan. 21, 2020, in Fort Knox, Kentucky.

The state-of-the-art facility replaces the existing 63-year old Ireland Army Community Hospital, which is scheduled for demolition later this year with completion expected in May 2021. The Louisville District oversaw the construction and project management of the new \$50 million facility.

Several community members, staff and Army personnel attended the ceremony. USACE Commanding General of the Great Lakes and Ohio River Division Maj. Gen. Robert Whittle, Louisville District Commander Col. Antoinette Gant and other Louisville District representatives were among those in attendance. Congressman Brett Guthrie and Stephen Black, Robley Rex VA Medical Center director, were also present for the ceremonial ribbon cutting.

"This ribbon cutting ceremony not only acknowledges the combination of the great effort and collaboration of numerous agencies and individuals, but we also celebrate the commitment and unwavering



Commanding General of the Great Lakes and Ohio River Division Maj. Gen. Robert Whittle speaks with Lt. Gen. Ronald Place, Director of Defense Health Agency following the ceremony.



Louisville District Commander Col. Antoinette Gant attended the ribbon cutting ceremony.



The new Ireland Army Health Clinic at Fort Knox held its ribbon cutting ceremony Jan. 21, 2020. The Louisville District oversaw the construction and project management of the new facility.

support to our community," Chaplain Col. James Boulware said as the ceremony began.

Maj. Gen. John Evans Jr., commanding general of U.S. Army Cadet Command at Fort Knox was one of several keynote speakers.

"It (the new facility) will give the opportunity to administer all active-duty service members, to include national guardsmen, reservists, all civilians and families on post, with quality medical services and care," Evans said.

Construction of the 101,737 sq. ft. facility began in November 2017. The Louisville District team worked closely with the project's contractor, M. A. Mortenson Construction Company, to ensure the building was completed and delivered on schedule, and the first patient date remained on target for Jan. 22, 2020.

The two-story building houses primary care exam rooms, provider offices, reception areas, waiting rooms, physical therapy, a behavioral health suite, specialty clinic services including optometry, allergy and hearing, as well as radiology, pharmacy, labs and other support services. The facility is also the first LEED Gold building at Fort Knox. LEED, or Leadership in Energy and Environmental Design, is an internationally recognized certification providing third-party verification that a building has been designed and built using strategies that improve energy, water efficiency, indoor environment quality and resource conservation.

"We are really proud of the facility that we were able to deliver," said Louisville District project manager Capt. Diana Bojorquez. "It is a true testament to the teamwork and dedication of the whole project delivery team."

The Louisville District construction project team included Bojorquez, Area Engineer Miller Moore, Resident Engineer Nick Bibelhauser, Project Engineer Casey Huber, and Quality Assurance Construction Representative Ken Jaggers.



The new Ireland Army Health Clinic at Fort Knox, Ky., officially opened for business Jan 22, 2020.

Environmental

Louisville District shares proposed plan for Raco Army Airfield project



During the field investigation at the Raco Army Airfield and Missile site in 2016, a partially demolished settling tank filled with TCE (trichloroethene) contaminated sludge, 18 feet in depth, was discovered. Prior to the completion of the Non-Time Critical Removal Action to remove the tank, approximately 61 tons of concrete and 104 tons of soil/sludge remained in Vault 4.

Abby Korfhage, public affairs

The U. S. Army Corps of Engineers Louisville District held a public meeting Feb. 4, to give the community and other stakeholders an opportunity to review and comment on the Proposed Plan for the Former Raco Army Airfield and Missile Site, located near Raco, Michigan.

"The Corps has been conducting environmental investigations at the Former Raco Army Airfield since the 1980s, so it is always nice to give the public an update on the progress of where we are in the process and allow them to comment on the proposed plan," said Aaron Steele, Louisville District environmental engineer.

The Raco Army Airfield and Missile Base site occupies approximately one square mile and is located southwest of Sault Ste. Marie, Michigan, in the Hiawatha National Forest. The Department of Defense used the site as an airfield for 21 years and as a missile base for approximately 13 years, ending in 1972. After its use, the U.S. Air Force released the property to the U.S. Forest Service.

USACE Louisville District is currently conducting an investigation of a trichloroethene, also known as TCE, groundwater plume at the site under the Defense Environmental Restoration Program-Formerly Used Defense Sites Program. Louisville District's investigation in 2009 specifically focused on the TCE groundwater plume and included the installation of five new monitoring wells. In 2014 and 2015 over 400 groundwater samples were collected to better delineate

the extent of the plume, and additional monitoring wells were installed.

During the Remedial Investigation, TCE was detected in groundwater from depths of 287 to 344 feet in the borehole where the most down-gradient well was installed in the TCE plume. The TCE plume was found to be more than ½ mile away from the nearest residential wells, which also take in water from much shallower depths (less than 100 feet deep).

"Fortunately these wells are not likely to be affected by the plume based on available data," said Nicole Toth, project manager. "But the proposed plan does include routine well sampling for private lands located downgradient of the Raco site."

Pure TCE is a volatile chemical that is a colorless or blue non-flammable liquid with a sweet odor. It was historically used as a metal parts degreaser and industrial solvent/cleaner. The Environmental Protection Agency classifies TCE as carcinogenic (cancer-causing) to humans if they are exposed to high enough levels over a long period of time.

"Members of the public expressed appreciation of the work that has been done to date to delineate the TCE (trichloroethene) plume, as well as the proposed plan," Toth said.

During the field investigation in 2016, a partially demolished tank filled with TCE contaminated sludge, 18 feet in depth, was discovered. Since the tank was too large to be removed using the equipment available on site at the time, the removal of this vault and its contents was later accomplished in October 2019 as a Non-Time Critical Removal Action, also known as NTCRA.

"The NTCRA was well-planned and well-executed," Toth said. "This was attributable to an exceptional team, and superior communication between USACE, the contractor and their sub-contractor. The work was accomplished on time with no issues or surprises in the field, and no TCE contamination was detected in the underlying soil above Michigan clean up levels for protecting groundwater or above U.S. Environmental Protection Agency regional screening levels."

USACE is proposing long term groundwater monitoring (monitored natural attenuation) for the site.

A 30-day public review period for the proposed plan is underway, and the review period ends Feb. 26, 2020.

U.S. Army Reserve praises district environmental program

Abby Korfhage, public affairs

The U.S. Army Corps of Engineers Louisville District environmental team recently received positive feedback from the U.S. Army Reserve Headquarters for their continued successful execution of USAR's environmental program.

"The entire team does a superb job of providing flow-through continuity for a multi-million dollar high profile environmental execution program, the largest of its kind amongst the four main DoD agencies," said James Knowles, Army Reserve Headquarters, Fort Bragg, North Carolina. "Their success is a shining example of how to do things right each and every time."

The Louisville District and its environmental team are heavily involved with USAR's facilities and projects across the nation.

"The Louisville District 'completes the circle' by supporting their facilities in the beginning, middle and end of their useful lives," said Rhiannon Ryan, Environmental scientist. "When an Army Reserve Center is completed and turned over, they frequently pop up on the radar again in the future. After the ARC is no longer needed by USAR, we complete the environmental requirements to dispose of it or transfer it to other government entities."

One current example of how the Louisville District team provides project support throughout each phase is at the Equipment Concentration Site, or also known as ECS, in Gainesville, Florida. There, the team offers support for 1) Site Selection: choosing the site and assessing whether there is contamination on site or nearby, then assessing the



The U.S. Army Reserve Center in Bellefonte, Penn., was originally constructed by the Louisville District. The District's environmental team is currently working on a new project, which will be an addition to the existing facility. Louisville District's Cindy Esterle and Rhiannon Ryan visited the site Feb. 4, 2020, to conduct the foundation for an Environmental Condition of Property report, which provides facts about whether or not contamination may be on site or if any would be encountered when they start construction.

environmental impacts of constructing the ECS. 2) Design: ensuring environmental documents are technically sufficient and influencing the ECS design to ensure it meets environmental requirements. 3) Construction: The Louisville District will award the construction contract, and if environmental support is needed during construction, the environmental team will provide it. 4) Disposal: In more than 50 years, or if USAR's needs change before then, the Louisville District will provide environmental support for the disposal action.

According to Ryan, one of the sites originally considered for the Gainesville ECS project was right across the street from a household hazardous waste collection facility, and by involving the environmental

team early, the project was able to avoid that site.

"There is real risk out there associated with the history of how people have treated their property, including, and especially, the military," Ryan said. "Taking smart steps early on can mitigate the personal safety hazard, expense and delay associated with discovering underground contamination in the construction phase of any military construction project. And it's not just a good idea; it's required by Army Regulation 200-1."

In Knowles' email to Environmental Project Management chief, Dave Dierken, he praises many members of the Louisville District team, including Ryan and Program Manager Daniel Allgeier. Other members of the team Knowles mentioned included Evan Willet, Joan Cullen, Rachel Williams, Bryan Parker, Cindy Esterle and Gracie Miller.

"We are so proud of our Louisville team for their commitment to deliver quality projects for USAR on time and within budget," said Chris Karem, Environmental Engineering chief.

"The team's ability to adjust to changing requirements while remaining both efficient and effective without a drop in production, regardless of the many and varied issues we face every day, is a testament to the leadership and esprit de corps I have come to know and respect out of the Corps of Engineers and in particular the Louisville District," Knowles said. "My sincerest thanks and appreciation to you and your entire team."



An Environmental Condition of Property report is currently underway at the U.S. Army Reserve Center in Suffolk, Va., to determine if contamination is present on site. The Louisville District environmental team is preparing the report.

BUILDING STRONG®

Louisville District hosts annual open house



Approximately 400 businesspeople attended the Louisville District Open House at the Marriott Hotel in Louisville, Ky., Jan. 30, 2020.

Abby Korfhage, public affairs

The U.S. Army Corps of Engineers Louisville District held its annual open house Jan. 30 at the Marriott Hotel, in Louisville, Kentucky.

The event included presentations by district leaders followed by an open networking session where attendees could speak individually to the district's contracting officials and senior staff.

Louisville District Commander Col. Antoinette Gant welcomed attendees, which included contractors who could potentially do work to support the Louisville District missions and discussed the importance of partnerships.

There can be power in a successful partnership, and partnerships are key and essential in all that we do," Gant said. "When we collaborate with other organizations, we share ideas, get inspiration, and achieve independent and collective goals. We grow in our competencies and succeed, which can lead to a mutual passion that helps create truly revolutionary work."

Following Gant's presentation, several senior leaders briefed on their respective

programs. One of those district leaders was Cristie Mitchell, Reserve Project Management chief, who gave an overview of the district's Army and Air Force Reserve program, project statuses and upcoming opportunities.

"We deliver, not only in a five state area, but across the nation, so I really like this opportunity to get this information out," Mitchell said. "Delivering on our commitment – that is our goal."

Other presentations included military programs, civil works, veteran affairs and architect-engineering opportunities.

Acting Deputy for Small Business Jesse Scharlow and other presenters emphasized the importance of partnerships and the effect it has on doing successful business with the Corps.

"The Louisville District Open House is my favorite networking event of the year," Scharlow said. "The event provides face-to-face engagement between district leaders and both small and large businesses. Meaningful partnerships were formed during this event, and we discussed the importance of our common goal of Partnership, Collaboration, Communication and Delivering the Program. I really would like to thank our district leadership for making this event a top priority, and for their participation in both the SAME Small Business Conference and our Louisville District Open House."

Approximately 400 businesspeople attended the event.



Louisville District Commander Col. Antoinette Gant talks about the importance of partnership.



Louisville District's Todd Crutchfield and Todd Jennings meet with contractors during Louisville District's open house to discuss upcoming contracting opportunities within Operation Division.

District employees share their overseas experiences

Trish Oakes, contracting division

A career with the Corps of Engineers offers limitless opportunities, including deployments abroad. Civilian employees serve a vital role in supporting the Army mission. They provide the skills that are not readily available in the military, but crucial to support military operations. The Army integrates the talents and skills of its military and civilian members to form a Total Army. Some essential occupations include, but are not limited to: civil engineering, mechanical engineering, electrical engineering, contract specialists, construction control and program management.

Overseas deployment opportunities come in many forms, such as natural disaster deployments or taking temporary assignments in other districts around the globe such as the Transatlantic Division, the Far East District and the Europe District.

When natural disasters occur, the U.S. Army Corps of Engineers partners with the Federal Emergency Management Agency and other government organizations to support response and recovery efforts. These deployments are available when USACE support is requested following a natural disaster. Types of positions include quality assurance specialist, mission specialist, contract specialist, quality assurance lead, action officer and mission manager. There are teams that provide temporary roofing, temporary emergency power, temporary housing, debris removal and flood management.

Over the last year the Louisville District's emergency operations center

assisted and supported seven different missions and deployed 61 personnel during Fiscal Year 19. Louisville District employees find the deployments deeply fulfilling.

Quyet La, Louisville District value officer, served as the resident engineer for the debris team as part of the USACE disaster relief effort for Hurricane Irma and Maria in the U.S. Virgin Islands in 2018

"I have always been proud to work for the Corps, but more so during these events," Mr. La said.

Likewise, employees who have taken temporary developmental assignments with other district's abroad are thankful for new experiences.

Former Louisville District employee, Chris Brackett has taken a temporary position with the Corps' Europe District as the branch chief in Contracting and is currently living in Wiesbaden, Germany.

"The benefits of doing developmental assignments are learning new things, meeting new people and growth," Brackett said. "Getting out of your comfort zone is critical to personal and professional growth."

Europe District offers projects in more than 45 different countries throughout Europe and Asia. Brackett says working on those projects is exciting. One such project he is proud to have worked on is a project in Powidz, Poland. This Long-Term Equipment Storage and Maintenance project was part of an approved North Atlantic Treaty Organization capability package.

In the past six months, Brackett has traveled on weekends and holidays to



Louisville District Contract Specialist Trish Oakes deployed to Puerto Rico in 2018 through the district's emergency operations center in support of Hurricane Maria.



Former Louisville District employee, Chris Brackett is currently on a temporary assignment with USACE Europe and recently visited Tyrol, Austria, with his family.

Portugal, Belgium, Austria, Switzerland, France, Czech-Republic and several places throughout Europe. Additionally, Brackett has traveled to Bulgaria and Italy for job assignments.

"This is the best part about living in Wiesbaden," Brackett said.

Bjorn Hale, Louisville District contracting officer, took a three year assignment to Germany in May 2016; however, he cut it short by six months to deploy to Afghanistan for 10 months.

"I recommend both assignments, Europe District for the opportunity to cheaply travel Europe and the Afghanistan District for the financial benefit," Hale said.

During Hale's time abroad, he was able to visit 22 countries such as Morocco, Israel, Iceland, Norway, Ethiopia, Greece, Romania and Slovenia.

Similarly, Mr. La, also decided to serve a stint overseas as the project manager and contracting officer representative for the congressionally mandated Task Force Protect Our Warfighters and Electrical Resources (TF POWER) in Afghanistan for a year. As the electrical safety surveillance arm for the military, TF POWER's mission is to ensure that all Department of Defense occupied facilities in Afghanistan are electrically safe for more than 12,000 U.S. Soldiers and over 20,000 civilian personnel.

"It isn't an easy job being in leadership, especially in Afghanistan," Mr. La said. "Afghanistan military deployment ... an experience like no other."