



WHY BERT?

by Dr Tom Iseley and Saleh Behbahani, TTC at LA Tech

LA Tech's TTC BERT facility will be a resource for the trenchless community, guiding the international industry towards the future in education, collaboration, manufacture, and research and development.

A recent study of the North American trenchless community indicated that construction employment has shown a significant 4 per cent increase, an increase in average salaries and a decrease in unemployment over the past year. The report predicts this is likely to continue throughout 2019.

Most leaders agree that one of the trenchless industry's greatest challenges today is a workforce skilled and knowledgeable in disciplines related to underground infrastructure.

With the construction sector continuing to grow, the challenge of increasing education is expected to increase.

For more than 30 years the Trenchless Technology Center (TTC) at Louisiana Tech University (LA Tech) has led the way in advancing the science and practice of trenchless technology.

This is accomplished through an industry, university and government cooperative centre where the Industry Advisory Board is the driving force to ensure that our efforts result in meeting the needs of the end users (i.e. municipalities, utilities, departments of transportation, industries).

TTC has risen to the forefront, aggressively meeting this challenge through a commitment to construct the first state-of-the-art field training facility. The genesis of this endeavour is the Barbera Education, Research and Training – or BERT – facility, which is committed to meeting the ever-increasing challenges for the global underground infrastructure.

WHY BERT?

Through the creation of BERT, TTC has honoured the past while driving the future. The facility recognises the contributions of the Barbera family – Leo and Jim – to the trenchless industry; it drives

the future through the establishment of a world-class field training and research facility.

BERT will be available for the research, development and training for the entire trenchless technology industry, including TTC specialty schools. To date three five-day Auger Boring Schools and four five-day Utility Investigation Schools have been conducted in collaboration with industry partners, such as the American Society of Civil Engineers' Utility Engineering and Surveying Institute and the National Utility Contractors Association.

BERT will also be available for international equipment and material manufacturers, as well as technology providers for research and development and technology validation.

The facility will be the industry's resource to provide dedicated programs for:

- work force development
- professional development
- undergraduate and graduate students
- professor and instructor training (two- and four-year programs)
- union instructor training.

LEADING THE CHARGE

TTC has retained Aillet, Fenner, Jolly & McClelland's Daniel Thompson with as BERT's design engineer. Not only is Mr Thompson an alumnus of the university, he has also been the lead designer for numerous facilities on LA Tech campus.

With industry support, TTC is embarking on a revolutionary strategy to address the need for more information on trenchless technology to be taught in undergraduate engineering, construction technology and management programs. This will be done through a high level 'Train-the-Professor' program.

This will involve providing a stipend and travel expenses to selected professors across

North America so they can participate in an extensive training program consisting of classroom work and hands-on field training.

The objective is much more than just making them aware of the various trenchless methods. It will be designed to teach them how to go back to their classrooms and teach the materials; they will be provided with modules, which they can plug and teach.

This is a major undertaking and we can get this done, but will require industry leaders to come together. We must realise that if we don't support this initiative, we will still be asking the same question 30 years from now that we have asked for the past 30 years, which is: what can be done so that our colleges and universities produce graduates who understand what trenchless technology is all about and the tremendous opportunities that exist in meeting the challenges of our underground infrastructure?

Currently, the TTC Underground Infrastructure Campus (UIC) consists of the world-class National Trenchless Technology Research Facility (NTTRF), sponsored by industry through the leadership of Dr Ray Sterling, an LA Tech Professor Emeritus, during his tenure as TTC Director. It has been an industry resource since 2009.

In addition, TTC also has a facility used for long-term testing and specialised testing programs. BERT will be the next facility, but that is not the end of the story.

This vision for the TTC UIC, after BERT, will be to expand the NTTRF to at least double the size and then construct a world leading lecture hall with meeting rooms and offices totally dedicated to the trenchless industry.

The TTC is issuing a call to action for the industry to join with us to accomplish a vision that will make our industry prepared to meet future challenges. One option for supporting this vision is becoming a sponsor.

The sponsorship levels are:

- Diamond – US\$100,000 and above
- Platinum – US\$50,000 to US\$99,999
- Gold – US\$25,000 to US\$49,999
- Silver – US\$5,000 to US\$24,999
- Sponsor – US\$500 to US\$4,999.

BAMI-I CTAM WORKSHOP TRAVELS TO ATLANTIC CITY

The Buried Asset Management Institute – International (BAMI-I) Certification of Training in Asset Management (CTAM) workshop recently took place in Atlantic City in New Jersey, US.

In 2002, Mayor Shirley Franklin appointed Jack Ravan as Commissioner of her newly formed Department of Watershed Management for the City of Atlanta. Her vision was to move Atlanta's water program past simply achieving the requirements of the nation's most demanding consent decree to becoming 'First-in-Class' program.

Dr Tom Iseley had the opportunity in February 2003 to join Commissioner Ravan's senior management team as a senior advisor, with the responsibility to establish an asset management program. This initiative resulted in the formation of the Buried Asset Management Institute (BAMI) to assist in achieving Mayor Franklin's vision.

In 2004, the BAMI transitioned to BAMI-I, a non-profit corporation with the main purpose of educating and assisting those who have an interest in applying best buried asset management practices to extend the life and efficiency of their assets.

Dr Iseley continues to serve as Chair of the Board of Directors and was responsible for BAMI-I being selected for a US Environmental Protection Agency (EPA) Cooperative Agreement (CP 83 282901-1) in 2006. The agreement involved Virginia Tech, LA Tech, the University of Texas at Arlington and the Georgia Rural Water Association as subcontractors.

Indiana University – Purdue University Indianapolis (IUPUI) served as the Program Manager for BAMI-I. This EPA project was finalised in 2008. Dr Iseley formed a team to develop a comprehensive certification program for water asset managers.

The CTAM program consists of four online courses as well as a two-level certification program: Associate Water Asset



The CTAM workshop taking place in New Jersey.

Manager (AWAM) and Professional Water Asset Manager. So far, participants from 16 countries have enrolled in the CTAM program.

In August 2015, the North Carolina Department of Environment and Natural Resources Division of Water Infrastructure (DWI) asked BAMI-I to conduct a four-day course to teach the CTAM program in Raleigh. The Rural Community Assistance Partnership also requested that BAMI-I conduct the CTAM course in Columbus, Ohio in May 2017.

By November 2018, BAMI-I had teamed up with the Underground Construction Technology Association North Texas Chapter to hold a third edition of the CTAM workshop. The workshop was an offering in an exclusive four-part series in asset management coursework for water infrastructure and certification.

Each CTAM workshop covered one course

level per day and the program proved a great success. The event was sold out, with a waiting list. To become AWAM certified, 47 professionals passed more than 20 exams – an exciting and significant achievement.

The attendees comprised approximately 50 per cent municipal representatives and 50 per cent consultants, including an attendee who had travelled from Colombia in South America.

This year, on May 6, BAMI-I teamed up with the New Jersey Water Environment Association to hold a 1-day workshop offering CTAM 100 – Overview of Asset Management as an exclusive part of a series on asset management coursework for water infrastructure and certification. As with the 2018 edition, there was a great turnout with 43 professionals attending the workshop and receiving Continuing Education Units or Professional Development Hours certificates on completion of the course.

ANOTHER WORKSHOP ON THE HORIZON

In the second quarter of 2019, City of Atlanta Department of Watershed Management Commissioner Kishia Powel requested that BAMI-I conduct a four-day workshop to teach CTAM 100–400 in Atlanta. This fourth CTAM workshop will be held on 9–12 September 2019 in the birthplace of BAMI.

For more information visit www.bami-i.com or contact Dr Iseley at dtiseley@latech.edu