



McNEIL ENGINEERING™

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A Change at McNeil Engineering

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We would like to thank Ted Didas for volunteering to lead our ship this past decade as President of McNeil Engineering. Ted will now be able to spend all of his time on Civil Engineering projects as he passes the torch to Michael Hoffman in our Land Surveying Department.

Ted is a natural leader with immense business and Civil Engineering experience that has helped take McNeil Engineering to the next level. He has helped guide our group through challenging obstacles and his ability to understand processes from beginning to end is like no other person. We have appreciated his leadership over the last 10 years and definitely look forward to his managing assistance in the years to come. Thank you, Ted!!

Michael Hoffman has been with McNeil Engineering since 1995, he started out as an Instrument person on a survey crew and soon moved into the role of a survey crew chief. Mike has been a licensed land surveyor in Utah since 1995 and has since obtained licenses in Idaho, Colorado, and Nevada. He also went back to school in 2002 and received his Bachelors in Civil Engineering at the University of Utah in 2006. Mike has been managing the survey department for the past 20 years and has overseen numerous projects of all aspects.

"I am excited to have been chosen to lead McNeil Engineering over the years to come. We have been in business for over 38 years and we plan to keep McNeil Engineering going indefinitely. We pride ourselves in quality and we strive to meet our client's demands to make their projects cost-effective and successful. We have outstanding employees that can complete any type of project that comes our direction.

Working with Ted over the years, I have always looked up to him and have listened to the advice and life experience that he has shared with me. I will definitely need to lean on him for his guidance and advice to keep everything running as smoothly as he has. I look forward to what the future has for McNeil Engineering."

Thank you Ted!



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Generational Bridges

As an engineering firm working on hundreds of projects every year, it is easy to view each one that comes across our desks as just another project. Each project is taken very seriously and is important to our team, but every now and then a project seems to mean just a little bit more.

Structural Engineer and department Manager Matt Roblez had one of those extra special projects come across his desk a few years ago that really meant a lot. He recounted his experience below.

“In June of 1969 shortly after I was born, my dad was the structural engineer who designed the precast concrete girders

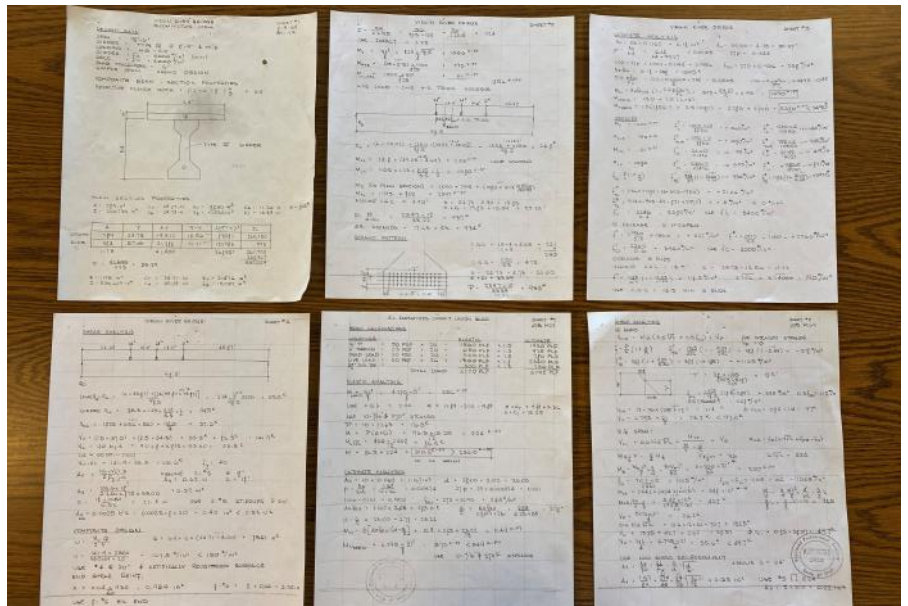
for the Gunsight Bridge in St George. Around 1999 I was contacted by St George. They wanted to widen the bridge and needed someone to analyze the existing structure to see if they could remove the existing deck and widen it. As part of my due diligence, I asked if they had existing plans. They did. When I got them (hard copies, no .pdf in those days) I recognized the handwriting. It was my dad’s. I asked him if he remembered the project and he said he did and he still had the calculations. He had a HUGE library of all the projects he had worked on and pulled out the calculations. I used those to analyze the bridge. It was so odd and coincidental to me that I analyzed work that my dad did a few months after I was born. Not only that, but in my hands I had the original drawings and calculations. I was always VERY proud to follow in my father’s footsteps. My father passed away on December 21, 2019.”

We wanted to share this story as an example of the amazing work that Victor Roblez did! It is incredible that by hand the calculations he did (shared below) still hold up and were used to evaluate the expansion of the bridge some 30 years later! Victor was an incredible engineer and a great example to us that we are engineering structures that are meant to last for our children and our communities! Below is an excerpt from Victor’s obituary that we wanted to share with you showing some of his incredible achievements!

“As a precast concrete engineer he innovated the use of precast concrete across the Wasatch Front and eventually the western United States. As an active member of the Precast Concrete Institute he lectured on the many aspects of the design and use of precast concrete. In addition to serving on many code committees, he innovated the use and design of Glass Fiber Reinforced Concrete (GFRC) and was a co-author of the GFRC Design Manual. He was recently recognized by The American Society of Civil Engineers - Utah Section by being named a Landmark Engineer.”



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An Increase in Freestanding Pads

Trends come and go in every aspect of life and engineering is no different! As society has adapted to the Covid-19 pandemic we have seen a massive swing in how people live their lives! From masks, to the boom of food delivery services such as Door Dash, to the increase in drive-through and pickup business for restaurants and shops of all kinds!

One big change we have seen is the increase in freestanding pads. This is something we are seeing for structures housing restaurants and coffee shops to name just a few. The freestanding pad is a versatile footing for any retail space looking to enable customers to have a smooth and efficient drive through/pickup experience!



A couple great examples of this that our team has worked on are the new Slim Chicken's in Herriman and Lehi and the Shake Shack in Murray. Slim Chicken's features wonderful Landscape Architecture also done by our team at McNeil and is focused on great parking while offering a smooth and intuitive drive-through experience. This helps manage the long lines of hungry customers each evening and makes visiting the location even easier.

The business model for Shake Shack is slightly different and changes the way they utilize the space and utility of their freestanding pad. Shake Shack offers no drive-through service, but rather focuses on dine-in and pick-up orders. This allows them to offer a large area for parking and instead of implementing the drive-through service on one whole side of the restaurant, they are able to expand their outdoor dining patio with a wrap-around design around the entire south side of the establishment on two full sides. This takes advantage of the freestanding pad in another way as well because customers aren't surrounded by other buildings or closely packed parking, creating a great space to feel the breeze and enjoy the open air seating with your friends and family.

Although this increase has been brought on mostly by the pandemic, we are noticing more and more utility, practicality and creativity in utilizing these freestanding pad areas and that is making us ask the serious question,. Will things ever go back to the way they were? We're not sure that they will!



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LiDAR Scanning in Texas

When he received the call from Savage Sulfur in Galveston, Texas for a 3D LiDAR Scan of a facility, Survey Manager Mike Hoffman was on a weekend flight down to the Lone Star State. But why exactly would a factory like that need a laser scan of the facility and what is LiDAR anyways?

LiDAR is a remote sensing technology that utilizes the pulse from an infrared laser to collect incredibly accurate measurements. These small measurements and scans are pieced together and used to create 3D models and maps of objects and environments. Our Survey team at McNeil Engineering offers these services to a variety of clients that work in various fields, from mining operations to factories



and processing plants, LiDAR scanning can help identify quantity, help in measuring for repairs and replacement parts are custom fabricated pieces.

In this case we helped accurately measure the existing pipelines and overall structure of the sulfur processing plant to give them a clear and exact idea of what they have as they plan expansion to process more and more sulfur. Located right on the Gulf of Mexico it is about as beautiful of a place to have a plant as we have ever seen!

A big thank you to Savage Sulfur for having us down to the facility, we're so glad we could help!



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What Does a Landscape Architect Do?

Every now and then, our team is asked the following question.. “What is a Landscape Architect/what does one do?” Well the answer to that question is multi-faceted and the definition and focus of landscape architecture has changed over time and with that change the role of a landscape architect and the focuses of said architect have changed and evolved as well.

Simply put, Landscape architecture involves the planning, design, management, and nurturing of the built and natural environments. The landscape architect will plan and design parks, campuses, streetscapes, trails, plazas, residences, and other projects that strengthen communities and the connection between the natural and the built world.

Now as we mentioned previously, with the passing of time the focuses and emphasis of the landscape architect have changed. One example of this change is the focus on sustainability as we move into a future with a need for energy-efficient resources. Leading the cutting edge of sustainable design is the landscape architect. Trained with a wide range of skills that combine art and science, the opportunities are endless for landscape architects.

It is with this in mind that we celebrate our landscape architecture team and encourage our communities to do the same regarding all landscape architects. It is often said that the true value of the landscape architect can be found between the buildings. Creating life and enabling a cohesive and aesthetic living experience that connects us to the natural world while we live with the comforts of modern society. It is so much more the just gardening or landscaping. It is truly the art form that beautifies the framework of our world.



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The Central Utah Correctional Facility Roof Restoration

The Central Utah Correctional Facility in Gunnison opened in 1989. It houses up to 1,800 male inmates and is split in three housing facilities: Henry, opened in 1989, Boulder, opened in 1998-2003, and Monroe, opened in 2016.

The purpose of the staggered expansion according to the state is to provide facilities for the growing inmate population. These facilities not only house over 1,000 inmates at any given time, they offer a myriad of services, courses and activities to those housed at the CUCF.

One of the challenges facing the facility and it's management team is that just as new housing facilities are constructed, the older units need maintenance and renovation to maintain the same standard of quality across the complex. It was with this goal of quality and durability that our roofing consulting team was contacted to help facilitate and manage the roof restoration of the areas of the roof needing repair.

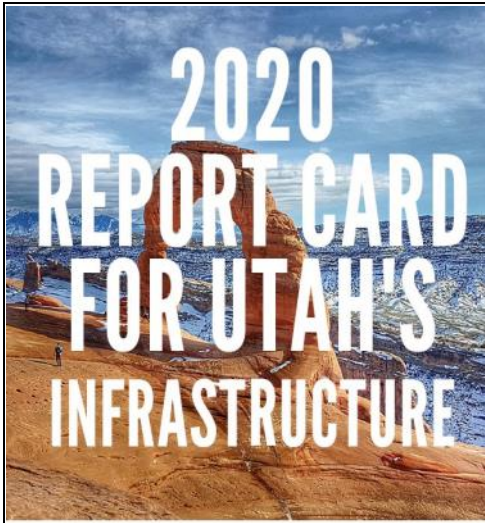
Consulting Manager Carl Greene is leading the ongoing project and with over 15 years of experience in roof restoration and facility maintenance we are confident that the CUCF will get a roof that is the lasting and reliable solution they're looking for!



Photo source: Utah Department of Corrections



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Utah Section of the American Society of Civil Engineers



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Spring Employee Anniversaries

Name	Anniversary	Years of Service
David Draper	05/22/00	21
Kent Withers	04/26/01	20
Walter Travis IV	04/26/06	15
Jake Felshaw	04/07/08	13
Elizabeth McReynolds	06/07/10	11
Tevi Lawson-Avla	05/07/12	9
Noel Enriquez	06/04/14	7
Greg Ostermiller	05/01/17	4
M. Shey Bailey	04/10/19	2
Kaylee Casarez	01/06/20	1

Thank you to each of our wonderful employees! We're so glad to have you and thank you for all of your hard work and your dedication to make McNeil great!





Tevi Lawson - Structural Engineer



How long have you worked at McNeil Engineering?

Since 2012

What do you find the most challenging working at McNeil Engineering?

Working at Mcneil is amazing. I cannot really think of anything I find challenging .

What do you like most about working at McNeil Engineering?

I like the colleagues the most. They make coming to work fun..

What has been your favorite project at McNeil Engineering?

I like has to be designing townhomes and apartments for Brighton Homes.

Where were you born and raised?

I grew up all over the world but most of my childhood was spent in Togo(West Africa) where I was born.

Motto or personal mantra?

Slow is accurate, accurate is fast

Scared money doesn't make money

What are three career lessons you've learned thus far?

- 1. Don't be scare to tell the client no*
- 2. Hard work and honesty always pays off*
- 3. Treat everyone with respect*

What is something you've always wanted to try and never have?

Skying and snowboarding.

What do you like to do in your spare time?

I play soccer.

What are your top 5 bucket list items you want to accomplish?

- 1. Visit every continent*
- 2. Design a building in Togo*
- 3. Design a building in France*
- 4. Own a soccer team*
Go swimming with the sharks in south Africa

What is your hidden talent?

I am a really great cook..