



# McNEIL ENGINEERING™

Economic and Sustainable Designs, Professionals You Know and Trust

EPICENTER

SPRING 2026



## SPRING INTO 2026

As we move into the spring season, activity continues to build across many of the communities we serve. At McNeil Engineering, we remain focused on supporting clients with dependable expertise, thoughtful solutions, and the collaboration that drives successful projects forward.

Our team is committed to delivering high-quality work while helping our clients navigate complex challenges with confidence. I would also like to recognize and congratulate our Structural Engineering team for their leadership in facilitating our recent merger with Hedman Engineering—an exciting step that strengthens our capabilities and expands our presence in Southern Utah and throughout the region.

We are grateful for the trust our clients and partners place in us. Thank you for the opportunity to work together, and we look forward to a productive spring season.

Sincerely,

Michael D. Hoffman  
President, McNeil Engineering

MCNEIL ENGINEERING  
SPRING 2026  
NEWSLETTER

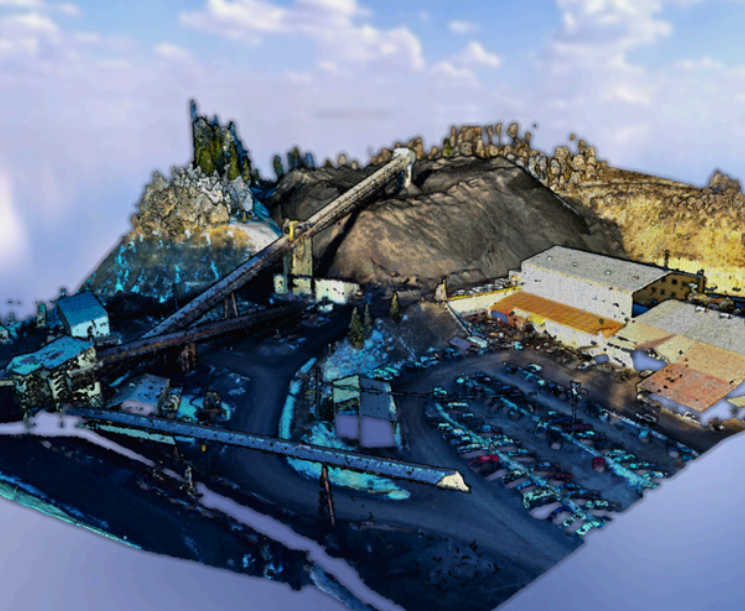
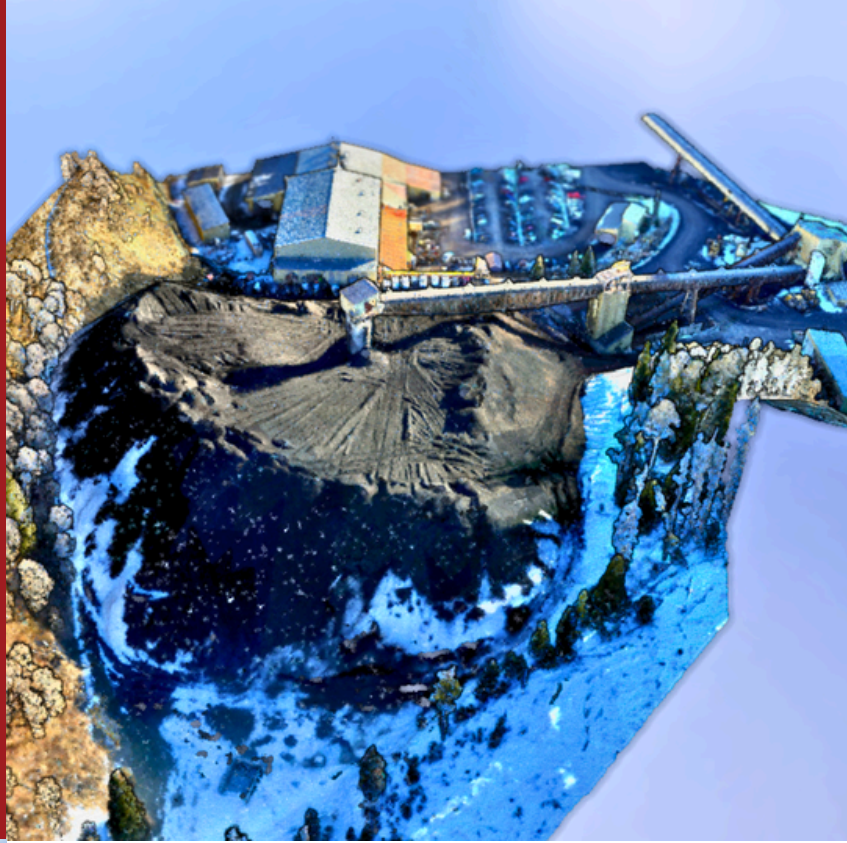
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President's Message

Department Highlights

Technical Article

# MINE SCANNING



## MINE SCANNING – DRONE LIDAR SURVEY & STOCKPILE ANALYSIS

Accurate surface data is essential for monitoring material volumes and supporting operational planning in mining environments. At the Skyline Mine site, McNeil Engineering's Survey team utilized drone-based LiDAR technology to capture detailed existing conditions across the stockpile area and generate a precise surface model for volume calculations.

Using an RTK-enabled drone equipped with LiDAR sensors, our team was able to rapidly collect dense point cloud data across the site without requiring survey crews to physically access the stockpile. This aerial approach significantly improved field safety while still delivering the high-resolution elevation data needed for reliable volumetric analysis.

The resulting dataset provides mine operators with a clear digital representation of the site's existing surface conditions, enabling more accurate tracking of material quantities and supporting informed operational decision-making.

By integrating advanced drone technology into the survey process, McNeil Engineering delivered precise results efficiently while minimizing risk and disruption in a challenging field environment.



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# WASATCH SURF CLUB



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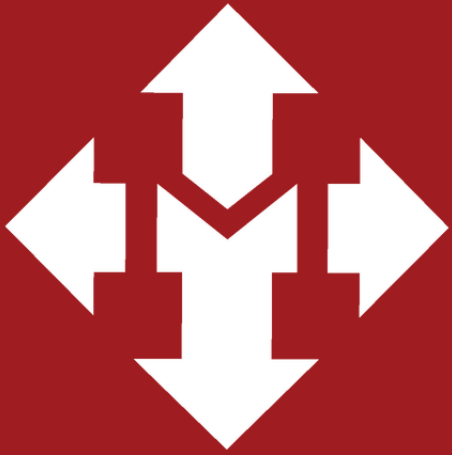
## DESIGNING ONE OF THE THE WORLD'S LARGEST INDOOR SURFING WAVE POOLS!

Designing the Wasatch Surf Club for our client, Kamaka Responsible Housing, requires a comprehensive civil site engineering approach with a strong emphasis on grading and drainage. Located in Draper just off Bangerter Highway on the west side of I-15, the site must be carefully shaped to accommodate large wave-generating basins, perimeter decks, and supporting infrastructure while maintaining balanced earthwork to control costs. Grading design focuses on creating smooth transitions, maintaining ADA-compliant access, and ensuring that finished floor elevations align with the hydraulic requirements of the surf basin. Subgrade preparation and slope stability are also critical, particularly around deep pool excavations and embankments.

Drainage design plays a central role in protecting the facility from flooding and maintaining water quality. Surface runoff must be directed away from the surf basin and adjacent structures using a combination of swales, inlets, and underground storm systems. Engineers must also evaluate groundwater conditions, hydrostatic pressures, and the potential need for underdrain systems beneath pool structures. Water quality treatment, including sediment and pollutant control, is typically integrated into the stormwater system to meet local regulatory requirements and prevent contamination of the basin. In addition, coordination with the Jordan Basin Improvement District is required to properly design and permit sewer discharge associated with the facility.

Successful delivery of the Wasatch Surf Club requires close coordination with pool designers, architects, and structural engineers to ensure all elements function cohesively. The civil engineer must align grading and utility layouts with the basin geometry, mechanical systems, and structural supports for wave-generating equipment. Collaboration with architects ensures that buildings, walkways, and spectator areas are seamlessly integrated into the terrain, while coordination with structural engineers is essential for foundations, retaining walls, and load-bearing elements that interact with the site design. The site will also be master planned for utilities and infrastructure to accommodate a future adjacent apartment complex, ensuring that backbone systems such as water, sewer, storm drainage, and access are sized and configured for long-term expansion. This multidisciplinary effort ensures a constructible, efficient, and forward-looking project for Kamaka Responsible Housing.

# UTAH DEVELOPMENTAL CENTER



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## MCNEIL CONSULTING

Over the course of several years, McNeil Engineering's Consulting team has been proud to support the Utah State Developmental Center through a variety of site improvement projects designed to enhance safety, access, and overall pavement conditions across the campus. Working closely with the Center and its stakeholders, our team has helped plan and implement practical improvements that make it easier for staff, visitors, service providers, and residents to move throughout the facility safely and efficiently.

Our work has included a range of asphalt and paving-related improvements, including parking lot additions, speed humps, asphalt patching, and new asphalt installation. These efforts have helped improve site circulation, extend the life of existing paved areas, and address wear and tear in high-use portions of the campus. By focusing on long-term functionality as well as immediate repair needs, our team has helped the facility maintain and improve critical access routes and parking areas that support day-to-day operations.

One of the more notable projects included the design of a fire truck access road serving the Center's new state-of-the-art therapy building. This improvement was an important part of supporting emergency access while also complementing the continued growth and modernization of the campus. In addition to that work, our team has also contributed to ongoing concrete and asphalt improvements tied to broader site upgrades, helping create smoother, safer, and more reliable access throughout the property.

What makes this relationship especially meaningful is the consistency of the partnership. Over several years and multiple project phases, McNeil has worked collaboratively with the Utah State Developmental Center to understand its evolving needs and deliver thoughtful, responsive solutions. We are proud to continue supporting the important work being done at the Center by helping create a campus that is safer, more functional, and easier to access for everyone who attends, visits, and works there.

# NORTH UNION



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## MCNEIL STRUCTURAL ENGINEERING

Located in the heart of Midvale, North Union Apartments is a modern multifamily residential development designed to bring high-density urban living to the growing Salt Lake Valley corridor. The project features a mix of studio, one-, two-, and three-bedroom apartments alongside townhome-style units, supported by structured parking, shared amenity spaces, and resort-style community features. Positioned near major transportation routes and commercial centers, the development contributes to Midvale's continued evolution as a connected and walkable residential hub.

From a structural engineering standpoint, developments like North Union Apartments require extensive coordination between architectural vision, resident livability, and long-term structural performance. McNeil Engineering's Structural team provided engineering solutions for a multi-story, high-density residential environment that included complex framing systems, vertical and lateral load transfer analysis, and detailed coordination around parking structures, amenity areas, and mixed unit layouts. The design process involved careful consideration of seismic loading requirements along the Wasatch Front, efficient shear wall and diaphragm placement, and structural systems that balanced construction efficiency with durability and occupant comfort. By coordinating closely with the broader design and construction teams, McNeil helped deliver a structure capable of supporting modern urban living while maintaining safety, functionality, and long-term resilience.

# UTAH DEVELOPMENTAL CENTER



## MCNEIL LANDSCAPE ARCHITECTURE

McNeil Engineering's Landscape Architecture team, led by Scott Schoonover, has been proud to support the Utah State Developmental Center through ongoing campus improvement efforts focused on landscape renewal, site functionality, and overall user experience. As part of a long-standing working relationship, our team has collaborated on projects that help improve the appearance, usability, and accessibility of the campus while supporting the important services the Center provides every day.

A key component of this work has involved replacing aging irrigation systems and improving landscaped areas throughout the site. These upgrades are intended to support healthier, more sustainable landscape performance while also improving the visual quality and long-term maintainability of the campus. Thoughtful site improvements like these play an important role in creating an environment that feels welcoming, organized, and well cared for for residents, staff, and visitors alike.

These landscape improvements have also been coordinated alongside broader site upgrades, including parking lot additions and concrete and asphalt improvements. By working in close coordination with other disciplines and project stakeholders, our Landscape Architecture team has helped ensure that site improvements function well together and contribute to a more seamless overall experience across the campus. This integrated approach supports both the practical needs of the facility and the comfort and accessibility of those who use it.

McNeil is grateful for the opportunity to continue working with the Utah State Developmental Center and to support the great work being done there. Through collaborative planning and long-term partnership, Scott Schoonover and our Landscape Architecture team have helped contribute to campus improvements that enhance both function and appearance, making access to the facility smoother and the environment more supportive for all who attend.



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# **BUILDING QUALITY RELATIONSHIPS**



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## **ENGINEERING IS BUILT ON RELATIONSHIPS**

In marketing and business development within the AEC industry, it's easy to assume success comes down to technical capability, past projects, or price. Those things matter, but in practice, the deciding factor on most projects is something simpler: relationships.

Engineering work is inherently collaborative. A typical project brings together owners, engineers, surveyors, architects, contractors, and city officials. Each group has different priorities, constraints, and timelines. When communication is weak or trust hasn't been established, even well-designed projects run into delays and friction.

When relationships are strong, the dynamic changes. Conversations are faster, decisions are clearer, and problem-solving becomes collaborative instead of adversarial. Teams are more willing to pick up the phone early, address issues directly, and work through solutions before they become bigger problems.

This is especially true in fast-growing markets like Salt Lake City and across Utah, where multiple large-scale developments are happening at once and stakeholders are often working across several projects simultaneously. In that environment, reputation and familiarity carry real weight.

From a marketing perspective, that shifts how you think about business development. It's not just about pursuing new work—it's about maintaining consistent, long-term relationships. That means showing up, communicating clearly, following through, and making yourself easy to work with.

Over time, those habits build trust. And in this industry, trust is often what determines who gets called first on the next project.

Technical skill gets attention. Relationships create repeat work. It matters how you treat those around you!