READY MIX & CONCRETE PRODUCTS ASSOC.

EXCELLENCE

IN CONCRETE

JANUARY 8-9, 2025

FARGO, NORTH DAKOTA

BUILD WITH STRENGTH
NORTH DAKOTA

EXCELLENCE IN CONCRETE

Welcome to the 2024 Excellence in Concrete Gold Star Award program. This year marks the 59th Anniversary of our wonderful association. We come together with this annual award ceremony to recognize our industry partners who demonstrate a commitment to concrete. Congratulations to the following promoters, designers, owners, suppliers, contractors and all who had a hand in earning our association's highest honor.

In total, more than 20 projects from across the state were submitted for consideration. An independent judging panel was selected to review all applications and to narrow down the winning entries. Thank you to all who submitted applications. The competition this year among the projects nominated made for lively debates among our judging panel as they chose the 13 award winning projects that exemplify what it means to be a truly great concrete project.

The Gold Star Award winning projects highlighted in this magazine truly demonstrate the advantages of concrete – safety, resiliency, durability, environmental stewardship and aesthetics – to name a few. Your efforts and contributions to the concrete industry are worthy of recognition and appreciation.

Sincerely,

Brian J. Zuroff, PE
Executive Director

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AIRFIELD CATEGORY

BUILD WITH STRENGTH NORTH DAKOTA

GOLD STAR WINNER

Location:
Grand Forks, ND

Owner:
Grand Forks Regional Airport Authority

Engineer:
Mead & Hunt

Contractor:
Strata Corporation Construction

Concrete Supplier:
Strata Corporation

RECONSTRUCTION OF RUNWAY 27 R TAXIWAY B & RUNWAY 9L

The Grand Forks Airport had four projects to reconstruct its crosswind runway. Two years ago, a concrete reconstruction project occurred at the intersection of the two runways. In 2023, the underground, dirt work, and base material were completed for the west portion of the runway. The east project included removal of the existing concrete and underground; placement of new underdrain; embankment work; and laying the gravel base materials. East and West runways included placements of 6-inch-thick P-306 lean concrete pavement topped with the placement of 12-inch-thick P-501 concrete pavement.

The west half of the runway had most of the P-306 completed in 2023. On April 17th of 2024, the first slip-form pave placement of P-501 started as the east project was being prepared. As the west project was completed, the east half of the runway began with placement of P-306 and P-501. A portion of the runway and Taxiway B were to be completed in a 2-week period. This included removals and placement of the underground, leaving only 5 days for the completion of the section. The construction crews, plant operators, powder truck drivers, concrete truck drivers, and quality control team worked 24 hours a day to successfully complete the work!

The concrete was delivered from a concrete plant on a section of land just off site, provided by the Grand Forks Airport and a concrete plant located in Grand Forks at Strata Park. The coordination needed to run two plants several miles away took focus and determination. Strata Corporation had a team of 3-5 people every placement monitoring the plastic concrete test results, watching for edge slump, straight edging the pavement, and conducting thousands of checks and tests to ensure the concrete met specifications. The project required 21,000 cubic yards of P-306 and 44,000 cubic yards of P-501 totaling over 65,000 yards of concrete in this project.

The mix design targeted a 3-day flexural strength of 450 psi and a 28-day flexural strength of 650 psi. The contractors were able to start drilling for dowels and access the newly placed pavement in a timely manner, expediting the tight schedule.

The project was focused on long-term durability. The design life was listed as 30 years. However, the folks at the GF Airport are looking for 50-plus years of service. Any concrete product would meet and exceed sustainability goals when considering life cycle costs on 50 years of runway service. However, with a 25% fly ash replacement, we decrease permeability, increase durability, and mitigate the possibility of chemical and physical attacks on the concrete pavement. By designing and building a durable concrete pavement, the airport can support larger or longer aircraft, as well as accommodate an increased volume of planes.

BRIDGE
CATEGORY

GOLD STAR WINNER

Location:
Fargo, ND

Owner:
City of Fargo

Engineer:
Houston Engineering, Inc.

Contractor:
Northern Improvement Company, Inc.

Industrial Builders, Inc.

Superior Contracting, Inc.

Concrete Supplier:
Strata Corporation

BUILD WITH STRENGTH NORTH DAKOTA

52ND AVENUE BRIDGE AND HYDRAULIC CONTROL STRUCTURE OVER THE SHEYENNE RIVER

To better serve a growing population, the City of Fargo has been working to widen 52nd Avenue South to a four-lane section with turn lanes from Sheyenne Street to I-29. The final segment in this corridor is from west of 63rd Street South to Sheyenne Street where there was a rural two-lane section. Due to the roadway widening and the deteriorated condition of the existing bridge, reconstruction of the bridge spanning the Sheyenne River was required. The new bridge provides two lanes of traffic in each direction separated by a raised concrete median, as well as shared-use paths on each side of the bridge for safe pedestrian and bicycle use.

The existing gated water control structure which was an integral part of the south portion of the bridge was also replaced to maintain water levels and maintain use of the City of Fargo's water intake structure upstream. To improve fish passage and aquatic organism habitat throughout the Sheyenne River, a fish passage rock arch rapids structure was incorporated into the bridge design to meet environmental needs.

The replacement of the existing bridge required an innovative design approach due to the complexities of the site, river behavior, unsuitable and unstable channel slope conditions, the bridge being in a FEMA flood zone, and the need to control upstream river levels. The bridge was designed using AAHSTO LRFD Bridge Design Specifications, North Dakota Department of Transportation (NDDOT) Bridge Design Manual, and City of Fargo guidance. A unique aspect of the design process was designing a weir and water control structure integral with the substructure in accordance with current US Army Corps of Engineers (USACE), ASCE 7, and ACI-218 design requirements. This included not only designing the bridge superstructure and substructure for appropriate traffic live loads and earth loads, but designing the substructure of the bridge for ice loading at the piers, weir walls, and slide gates. Due to FEMA requirements, the bridge layout was subject to stringent hydraulic requirements which required a "no-rise" condition of the proposed structure for 100-year flood events. Additionally, the bridge opening under the bridge was designed to allow for adequate fish passage in through the end spans while the slide gates are in operation using rock rapids fish ramps to allow fish to navigate upstream through the barrier.

The project team chose concrete for its strength and durability benefits as well as its ability to fit any shape that was formed for the substructure. The updating of the bridge on 52nd Avenue was the key for this project to connect West Fargo to Fargo in the south sector of both cities, and the use of concrete for the structure allows for low maintenance costs throughout the lifespan of the bridge.

Updating the bridge on 52nd Avenue was key to this project on connecting West Fargo to Fargo in the south sector of both cities and using concrete allows for the low maintenance cost throughout the life of the bridge.

The bridge design implemented several mix types of cast-in-place concrete, precast concrete, and even light-weight-cellular concrete to serve the intended needs of the bridge design. Cast-in-place concrete was used on all bridge substructure components including tall parapet abutments and piers. Additional cast-in-place concrete was utilized to incorporate the water control structure into the substructure of the bridge. Concrete weir walls were poured between the abutments and piers in the end spans at the river skew as well as sill walls and a concrete gate column in the center span to support two 24-foot-wide steel slide gates to control upstream river levels. The superstructure consisted of prestressed concrete box beams and a cast-in-place concrete deck. Additionally, concrete pilasters were poured at all corners of the substructures and on the gate column to not only provide an attractive aesthetic appearance, but also provide support for the slide gates when they are lifted in the open position. Single slope concrete barriers were poured on the bridge deck along with a stamped concrete raised median. Finally, light-weight cellular concrete was utilized as backfill behind the abutments as a lightweight fill alternative due to undesirable soil and river slope conditions. Concrete form-liners and surface coatings were used to provide the bridge with an attractive aesthetic appearance.

The bridge is located on the Sheyenne River which is known to have very rapid changes in water levels. Additionally, upstream river levels needed to be maintained for the existing water intake structure. This required extensive shoring, cofferdams, water control, and multiple channel diversion phases to ensure all substructure concrete work within the channel could be performed in suitable conditions. Additionally, a substantial amount of the substructure was poured during the winter months, which meant proper temperature control and monitoring was important to ensure a quality product. The use of both heated water and heated aggregate allowed winter concrete pouring to continue and be successful. During the hot summer months, Delvo was used to maintain our concrete temperatures during the deck pour and substructure pieces.

Due to the multiple lanes, median, and shared-use paths, the bridge is much wider than a typical bridge deck at 99 feet wide. The deck was poured in two phases which required separate pours for each half of the bridge. The contractor and engineers worked closely together throughout the deck pour process. Extra attention was given while setting the deck finishing machine rail and performing the dry run to account for the deflections of the prestressed beams during each deck pour.

The bridge required exceptional craftsmanship and detail during construction to ensure that all bridge components and water control structure components, including the large, prefabricated steel slide gates would be installed and function correction. Industrial Builders gave extra attention to the gate components while building the substructure. Due to the 15-degree skew of the substructure, additional attention and effort was required while constructing the substructure formwork for the gates to fit and function properly.

Industrial Builders, Inc. (IBI) handled this project with superb organization and professionalism when being accurate with their orders through communication and a clean jobsite whenever the trucks arrived on site. Instilling in all project team members the importance of being on the same sheet of music allowed everyone to know what task next and what task needed to be completed in the upcoming weeks.

The critical path of this project was dictated by the bridge. The contract included closing 52nd Avenue for 365 days, which meant structural work continuing through the winter months.Innovation

IBI gave extra thought to the sequencing of pours for this structure. Because of the width of the bridge, several pours and strategic placement of construction joints were required for many units of the bridge. There were multiple times they combined what were expected to be separate pours (weir wall, abutment stem, and wing walls). This was more difficult because of the extra bracing needed for formwork, and the size and complexity of some pours. This eliminated some construction joints and saved days that would have been spent waiting for the concrete to cure.

The bridge design and construction ensures the City of Fargo will have a bridge that will fit the needs of the community for many decades to come. Because of the construction techniques used, durable concrete mix designs, and overall quality of construction, the bridge will function as intended for the full design life of the structure, minimizing future maintenance liability to the owner.

The choice of concrete on this bridge was key to low upkeep cost throughout the life of the concrete. The durability of the concrete will help this main artery in Fargo to connect West Fargo to its south sector for both residential and commercial traffic.

COMMERCIAL
CATEGORY

GOLD STAR WINNER

Location:
Casselton, ND

Owner:
Maple River Grain & Agronomy, LLC

General Contractor:
Marcus Construction

Concrete Contractor:
Marcus Construction

Concrete Supplier:
Strata Corporation

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MAPLE RIVER GRAIN – CASSELTON TERMINAL

Maple River Grain in Casselton was adding onto their existing fertilizer storage building they awarded Marcus Construction as the design-build contractor. Marcus Construction requested a concrete mix design that would shorten their construction window and allow consolidation of their 30-to-40-foot columns without losing vibrators within the column. Self-Consolidating Concrete would make the columns aesthetically pleasing and due to the amount of rebar and the heights consolidation was a difficult task. Square columns at 35 feet high including rounded columns at 44 feet high. Concrete having the ability to be as fluid as SCC and keep the strength of 5000 PSI is what made this project a success.

The SCC mix was hauled 20 miles from Strata Corporation West Fargo to Casselton with a hydration stabilizer and was met on site with admixtures to create the SCC. The advantage that Marcus had with using SCC eliminated the use of long stinger vibrators that will typically get stuck within the columns on rebar. Another benefit was being able to place 3 – 4 columns during one placement, this created an aesthetically pleasing exterior landscape with no construction joints within the columns. The mix was placed at a 26-inch spread with air ranging from 5.5%-6.0% and temperature ranging from 72-76 degrees. These results gave Marcus an average strength at only 7 days of 5000 PSI and expedited the project timeline immensely.

The project started in the middle of September in 2024 and was completed in October in 2024. Marcus was able to order exact quantities of concrete which was placed in the afternoons and allowed them to tear down and set up formwork in the mornings.

BUILD WITH STRENGTH NORTH DAKOTA

DECORATIVE CATEGORY

GOLD STAR WINNER

Location:
Moorhead, MN

Owner:
Hausauer Family

Contractor:
Kaufman Construction, Inc.

Concrete Supplier:
Holcim

HAUSAUER RESIDENCE

Kaufman Construction was contacted to quote a patio for potential customers after a referral from a mutual friend. The customers stated that previous contractors told them that they would have to fill in a very large amount of dirt in order to be able to have a patio due to significant grade changes and the homeowners did not like that. So, Kaufman Construction came up with a plan to place a decorative patio without the need for a retaining wall or large amounts of dirt and grading to be done. The project is an 800 square foot stamped concrete patio with steps around the entire perimeter to compensate for grade changes. They also incorporated a dual purpose fire pit that will be used initially to burn wood and can be easily converted later to use gas.

The professionals at Kaufman looked at the project and suggested doing wrap around step and leaving the yard grade where it was. Using cantilevered form liners, the entire patio was wrapped with an extra step so it is really easy to walk right off the patio anywhere. The grade was a challenge because it wasn't significant enough to pour a raised wall and set of steps like Kaufmans' crews have have done in the past, yet enough that large amounts of backfill would have been necessary. The firepit was cast in place and then a vertical cementitious stamping mix was applied the next day and stamped. The mix used for the patio was Holcim's "Picasso" mix with Scofield Mesa Beige color. The border was colored with Deep Charcoal Color hardener.

EDUCATIONAL
CATEGORY

GOLD STAR WINNER

Location:
Williston, ND

Owner:
Williston School District #7

Design Firm:
EAPC Architects/Engineers

General Contractor:
JE Dunn

Concrete Contractor:
Winn Construction

Concrete Supplier:
Strata Corporation

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WILLISTON BASIN CTE CENTER

In response to the shortage of young people entering the trades in recent years, educational focus has shifted to include more career and technical education or CTE. This new focus has led to a need for new facilities at a number of campuses across North Dakota. Williston High School's new CTE facility is a shining example of one such facility. From funding grants and matching donations starting back in 2021 to a fully functioning facility opening in August of 2024 the CTE building project managed by JE Dunn with concrete placed by Winn Construction.

The project consisted of 300 cubic yards for foundations, 600 cy for interior floors, of which 360 cy used a Moisture Vapor Reduction Admixture and High Range Water Reducer, and 400 cy for exterior flatwork. The foundations went in the fall of 2023 with floors being completed mid-winter after the building was enclosed. Exterior concrete was completed summer of 2024 for a fall opening in August 2024.

The CTE building allows WHS to offer programs in: automotive and diesel technology, agriculture, aviation technology, construction and building systems, energy and petroleum, and health science to name a few.

Concrete was chosen as a building material over alternatives due to its versatility, durability, and low maintenance cost. For the interior floors Winn Construction used CM-4025NA then for all footings, walls, and exterior placements they used the CM4025AE.

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GOVERNMENTAL CATEGORY

GOLD STAR WINNER

Location:
Watford City, ND

Owners:
McKenzie County

Design Firm:
Icon Architectural Group

General Contractor:
FCI, Inc.

Concrete Contractor:
Winn Construction

Concrete Supplier:
Strata Corporation

MCKENZIE COUNTY AG EXPO

When McKenzie County decided to relocate their fairgrounds due to Community Growth and expansion, they wanted a facility that would serve the community for years to come. The primary reason for such a place is to have an area for the community to come together, whether that's for concerts, car shows, or rodeos. The brand-new Ag Expo building can do it all. The area for their brand-new facility sits on 212 acres of land with a 112,000 sq ft building which includes 3 exhibit halls, meeting rooms, a 53,000sq ft Indoor arena, as well as a kitchen, bar, and concession area. The facility also includes an outdoor arena with Grandstands, and multiple parking lots with 103 RV spots.

In September of 2021 the McKenzie County Commission and Fair Board held the groundbreaking celebration commemorating the beginning of the new Ag Expo. Construction began soon after groundbreaking, footings and walls were the first to be put in place. Floors started spring of 2022 and exterior concrete was poured throughout 2022. The finishing touches were completed in the spring of 2023 and the facility opened just in time to host its first County fair in June of 2023. Since then, many different events have been hosted and the Ag Expo will continue to bring together the surrounding community.

Concrete was chosen due to low maintenance cost and durability. In total this project used 5 different mix designs and 6,100 cy of concrete, of which 790 cy was polished floor, and another 1,200 cy was interior floor. As for the exterior concrete was used for the high traffic loops and the RV lot due to its ability to withstand both static and live loads better than competing materials. For most of the project, various 4000 psi mixes were used, most with 20% fly ash, but for the elevated slabs a 3000 psi mix was used with micro fiber. Some exterior mixes had a viscosity modifier added to help slow the evaporation rate and reduce shrinkage cracking.

The brand new Ag Expo has temperature-controlled indoor arenas, where at the past fairgrounds the heat has been a problem for the animals. It also has a covered grandstand area seating up to 2300 people. The parking lot has nearly 900 spots whereas the old fairground had 100. In the beginning of the project Ag Expo Director Chris Kubal said "We can do just about anything with this much concrete and the land we have". Giving McKenzie County the chance to build this wonderful place for people to share with the community for years to come.

GOLD STAR WINNER

Location:
Parshall, ND

Project Owner:
City of Parshall

Design Firm:
AE2S

Contractor:
Strata Corporation Construction

Concrete Supplier:
Strata Corporation

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2023 STREET IMPROVEMENTS – PARSHALL, ND

The city roadway of 7th Ave NW in Parshall, North Dakota was paved with 7" concrete containing macro-fibers. The City of Parshall leadership, with the guidance of Advanced Engineering & Environmental Services selected the concrete option based on the value concrete offers through the life cycle analysis of the pavement. This roadway will be a critical part of Parshall's infrastructure for future decades. The traffic load has a significant percentage of trucks, including agricultural "farm to market" traffic. The engineers and city leadership prudently focused on longevity, durability, and which construction materials offered the best value for the long-term pavement. The project was built in two phases to maintain access to the daycare and home builders.

Macrosynthetic fibers are engineered to provide equivalent, or better, reinforcement that is achieved by using conventional steel reinforcement bar. Unlike traditional rebar which reinforces on a single horizontal plane, macrofibers offer isotropic reinforcement. Isotropic reinforcement has the same reinforcing properties in all directions. Essentially a three-dimensional reinforcement through-out the full depth of the pavement. Isotropic reinforcement increases flexural toughness, impact, and shatter resistance of the pavement. The increase in flexural strength offers economies by allowing a decrease in thickness of pavement for any given traffic load.

A dosage rate of four pounds of MasterFiber MAC Matrix per cubic yard of concrete was used in this placement. This offers the equivalent reinforcement of placing #4 rebar, 18 inches on center in the concrete. The challenge is getting this much fiber mixed homogeneously in a low slump concrete. This was accomplished by optimizing the paste volume of the concrete mix design and adjusting proportioning of the constituent materials. The sequence of the addition of the constituent materials and mixing time is also critical. This is the first practical application of macrofibers in a low slump, machine slip-form paving in North Dakota.

The subgrade was scarified and re-compacted. An 8" layer of Class 5 base material was placed and compacted in lifts. The mainline roadway is 24' wide, placed with a slip-form paver. Ready-mix trucks delivered the concrete into a belt placer that evenly distributed the concrete in front of the paver. Behind the paver, the concrete finishers pushed a 16-foot straight edge to verify the surface smoothness. The pavement was given a broom finish and cured. The transverse joints were doweled contraction joints with 1" x 18" dowels spaced 1' on center. The tied longitudinal joint was at the centerline on the crown. The joints were cleaned with a slurry recovery system, sandblasted, and sealed with hot pour joint sealant. The roadway was profiled for smoothness and ride. The profile index for the project was 1.59" per mile without any areas that required grinding.

The fill-ins, driveways and street returns were macro-fiber reinforced concrete and were placed with a vibratory screed at a 3" slump. These pavements were also broom textured, cured, sawed, and sealed.

The 5' sidewalk was non-reinforced concrete and ran adjacent to the roadway for 2/3 of the project.

PARKING LOT
CATEGORY

GOLD STAR WINNER

Location:
Grand Forks, ND

Owner:
Spectra Health

Design Firm:
AE2S

Contractor:
Opp Construction, Inc.
ICS, Inc.
Gowan Construction
Molstad Construction

Concrete Supplier:
Holcim MWR
Strata Corporation

SPECTRA HEALTH PARKING LOT UPGRADES

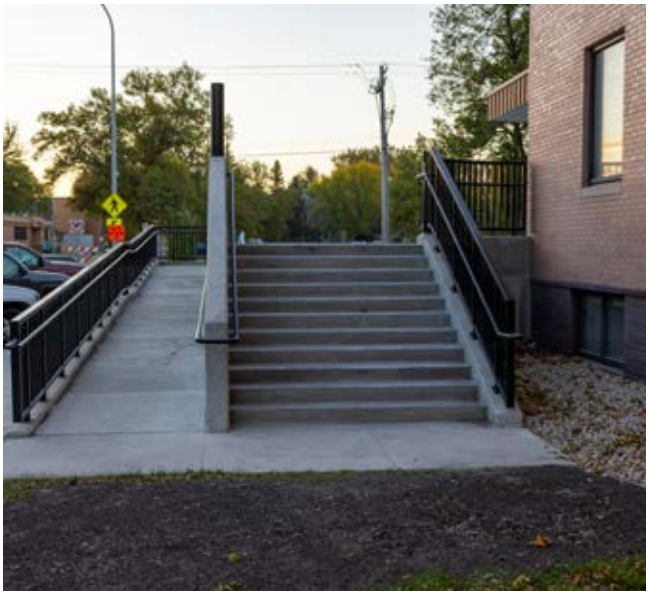
The Spectra Health Parking Lot project exemplifies excellence in concrete design and construction, blending innovative engineering with practical solutions to address a variety of site challenges. Located on a historically significant site that once housed a 1930s hospital, the project was developed to enhance accessibility and functionality while maintaining sustainability and cost efficiency. AE2S' expertise in civil and structural engineering played a crucial role in transforming this downtown site into a modern, durable, and aesthetically pleasing parking area that meets current needs and anticipates future growth.

One of the project's most unique aspects was the decision to build on the existing rubble from the old hospital. During geotechnical exploration, the design team discovered that the site was filled with structurally sound debris, including brick and concrete remnants. Instead of removing this material, which would have significantly increased the project cost, we decided to use it as a stable base for the new parking lot. This choice saved the client approximately $400,000 and demonstrated an innovative approach to sustainable construction practices.

To ensure the concrete structure's stability over the unconventional base, we designed a reinforced, thicker-than-usual concrete section, incorporating specific techniques to accommodate the rubble's variability. This innovative use of concrete allowed us to deliver a robust and reliable parking surface, showcasing the adaptability and strength of concrete as a construction material.

The project's emphasis on concrete excellence is seen in several key design decisions:

- Structural Integrity Over Existing Rubble: The decision to retain and build on the existing rubble base required precise engineering and careful planning. The design included a thicker concrete section, reinforced to handle the irregularities and variability of the underlying materials. This approach ensured that the parking lot would remain structurally sound and durable, even over time, without the need for costly and disruptive base material replacement.



- Aesthetic Enhancements Using Concrete Finishes: While function was a priority, aesthetics were not overlooked. We included a form liner finish on the public-facing concrete walls, transforming what could have been a plain, utilitarian feature into an attractive visual element. The randomly spaced vertical rib pattern added texture and depth, enhancing the visual appeal of the space. This design choice provided a cost-effective yet impactful way to elevate the overall look of the parking area, demonstrating concrete's versatility beyond just structural applications.
- Reinforcement for Future Growth: The project was designed with future expansion in mind. Structural elements were embedded into the concrete to allow for a future canopy installation without requiring demolition or additional concrete work. By incorporating anchorage points within the initial design, we ensured that future structures could be added seamlessly, showcasing concrete's ability to support long-term development through careful planning and durable execution.
- Cost-Effective and Sustainable Practices: By building on the existing rubble and using reinforced concrete, we minimized the need for new materials and reduced waste. The choice to work with the existing site conditions also lessened the environmental impact, aligning with sustainable construction practices. This approach illustrates the adaptability of concrete solutions to complex engineering challenges, providing strength, durability, and environmental efficiency.

During construction, the project encountered several unexpected conditions, including buried infrastructure like a 100-year-old steam line. The design engineering team adapted the concrete design to address these challenges, performing selective removals and adjustments to maintain structural integrity without delaying the project.

The project team's dedication to excellence in concrete extended beyond the initial design. We made several unplanned site visits to address contractor questions and ensure that the concrete was installed correctly and according to specifications. By maintaining close communication throughout the process, we ensured that the final product met the high standards of quality and durability expected by the client.

The Spectra Health Parking Lot redevelopment stands as a testament to the potential of innovative concrete design. By choosing to build on existing rubble, we saved costs and demonstrated a sustainable approach to construction, while the carefully planned reinforcement and aesthetic finishes showcased concrete's versatility and strength. The project successfully balanced function, cost-efficiency, and visual appeal, providing Spectra Health with a modern and reliable parking lot that will serve the community for years to come.

This project sets a new standard for how concrete can be used creatively and effectively in urban redevelopment, proving that the right engineering solutions can overcome site challenges and deliver lasting value.

RECREATIONAL CATEGORY

GOLD STAR WINNER

Location:
Medora, ND

Owner:
Theodore Roosevelt Medora Foundation

Contractor:
Winn Construction

Concrete Supplier:
Dickinson Ready Mix

BULLY PULPIT CART PATHS

Since the opening of the course in 2004, Bully Pulpit Golf course has been one of the premier public golf courses not only in the state but nationwide. However the asphalt originally used for the cart paths deteriorated, and the Theodore Roosevelt Medora Foundation decide that when the flood mitigation project began in 2020, that a 4-year plan to improve the cart paths to concrete would start.

Since starting to replace the cart paths in Fall of 2020 to the completion of the paths in Fall 2024, more than 30,000 lineal feet of cart path has been placed resulting in nearly 4,000 CY of concrete being placed. The concrete used on this project was a 4,000 psi, air-entrained mix, the mix also utilized 3 lbs. of macro fiber per CY. The width of the path changes throughout the course and ranges from 8’ to 12’.

One unique aspect was that nearly all the concrete was placed with power buggy and via chute. The use of larger equipment was restricted so as not to damage the course, disturbing the natural landscape of the badlands. Another unique aspect of these paths is that some of the paths were placed utilized a bonded overlay with the existing asphalt.

After the completion of the improved paths, the result is a bright, beautiful, durable, and aesthetically pleasing cart path system that will be utilized for many years to come.

SITE CAST/ TILT UP CATEGORY

GOLD STAR WINNER

Location:
South Prairie, ND

Owner:
North Dakota State Water Commission

Design Firm:
Houston Engineering, Inc.

Preload, LLC

Contractor:
Rice Lake West

Concrete Supplier:
Strata Corporation

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NAWS SOUTH PRAIRIE RESERVOIR AND CONTROL STRUCTURE

The South Prairie Reservoir project was a significant part of the Northwest Area Water Supply (NAWS) system in northwest North Dakota. The project aimed to enhance water storage and control infrastructure to meet the region's water demands. The scope of the project included the following key tasks. 1) Construction Contract Administration: This involved preliminary construction phase services, office engineering services, and progress meetings. 2) Field Engineering Services: This included resident project representative (RPR) services, assistant RPR services, and construction management services. 3) Programming Integration: This task focused on control system integration and software training services. 4) Project Closeout: This included closing the construction contract, final inspection, and record drawings.

Prestressed concrete tanks utilize a unique concrete floor system which can accommodate substantial settlement while remaining watertight. For typical shallow foundation applications, a concrete membrane floor is utilized. The membrane floor is highly reinforced concrete and constructed with an integral, monolithic footing that serves to transfer the loads from the tank wall and roof to the subgrade. Likewise, the floor transfers the liquid load directly to the subgrade and contains the liquid within the tank. The flexibility of the membrane floor allows it to accommodate differential settlement without being subjected to high secondary-bending stresses.

The tank wall is constructed using precast wall panel fabrication and erection techniques as specified in ACI 372R and further delineated as Type III in AWWA D110. Precasting methods for Preload wall panels provide an unequaled level of quality control and represent the most advanced innovation in tank wall construction methods. Tank wall panels are precast on-site around the perimeter of the tank. Panels are constructed through an efficient stack-casting process in casting beds shaped to the curvature of the tank wall. Prior to casting panels, a layout is prepared to show the panel bed locations relative to the tank structure. Once all wall panels are cast, the individual panels are rotated vertically and erected along the perimeter tank footing. The panels are then temporarily braced as the wall construction continues to help ensure safe construction in nearly any weather condition.

The water tank was designed and constructed to meet or exceed applicable industry requirements as contained by American Water Works Association (AWWA), American Concrete Institute (ACI), and National Fire Protection Authority (NFPA).

Trihalomethanes (THMs) and other disinfection by-product have recently become increasingly regulated. Strict monitoring and treatment have been required in systems prone to THM generation. Preload tanks are highly flexible and uniquely adaptable to nearly all types of THM monitoring and removal systems. THM removal is often

achieved utilizing mixing systems in conjunction with surface aeration, agitation and forced draft ventilation. This equipment is easily supported and accommodated by the concrete tank wall and roof. Interior aerators can be attached to the tank wall with no long-term impact to the durability and serviceability of the tank. The concrete roof is fully capable of supporting the weight of mechanical blower and ventilation equipment.

Quality tank construction always begins with a solid foundation. Various foundation considerations must be addressed to ensure long-term tank reliability and efficient construction. Preload engineers perform a geotechnical review on each project to assist in evaluating subsurface conditions. They collaborated with the design team to select an appropriate foundation based on tank loads, site soil conditions and hydrology. A tank floor design is prepared based on site-specific geotechnical considerations. A minimum six-inch thick leveling course of granular material is placed on top of the subgrade to create a free-draining work area and foundation that ensures the construction tolerance is met in the thickness of the finished floor. That layer is then covered with a polyethylene liner that maintains subgrade consistency and allows any drainage to consolidate.

Preload's design results in uniform compression throughout the dome shell. This allows for the use of an economical concrete section to span large tank diameters without the need for interior column supports. The dome shape provides a low-profile, aesthetically pleasing structure. Rise-to-diameter ratios of 1:8 to 1:12 are standard.

Standard domes include venting to minimize internal air-pressure variations, an access hatch for future entrance and penetrations to incorporate tank level gauges. Penetrations for other accessories including roof inlet pipes, wash-down systems, odor-control sleeves, aerators, and gas collection systems can also be easily incorporated.

After the construction of the tank is complete, accessories are added to complement the tank structure based on specific project requirements. Accessories are fabricated from premium materials to assure durability and virtually no maintenance, reducing or eliminating costly service interruptions for the life of the tank structure. Like the tanks themselves, accessories are designed to comply with all applicable local, state, and federal regulations. Accessories include personnel and equipment hatches, washdown systems, odor control sleeves and tank mixing systems.

Shotcrete was used to cover the steel diaphragm and each individual prestressing wire. During this process, concrete is applied or "shot" onto the wire and wall with air pressure, typically in layers. The cover coat of cement-rich, dense shotcrete serves to protect the prestressed reinforcement from corrosion and mechanical damage. The shotcrete used in the construction of the tank is an important final step in ensuring a durable tank structure. The cover coat and shotcrete were applied by skilled nozzlemen who are certified in accordance with the ACI C660 Shotcrete Nozzleman Certification Program to ensure the highest quality tank construction.

Constructing a wire-wound storage tank involves several intricate steps and challenges. The process requires precise planning and execution, starting with the design and analysis to ensure structural integrity under various loads, including water pressure, wind, and seismic forces. The construction involves heavy equipment for lifting and positioning large concrete panels, which must be accurately aligned and securely fastened. Once the panels that were cast on site are in place, the applications of the single-wire circumferential prestressing is critical as it places the entire tank wall into a state of permanent compression, preventing cracks and leaks. Additionally, the shotcrete cover coat must be meticulously applied to protect the prestressed reinforcement from corrosion and mechanical damage. Overall, the complexity of constructing a wire-wound water storage tank requires a high level of expertise and precision at every stage.

Preload tanks include no routine maintenance or scheduled downtime. Preload delivers the highest-quality and most cost-effective water storage solutions. They lead the wire-wound prestressed concrete tank industry in a proven, low-maintenance 60–80-year life cycle; flexible, customized dimensions to accommodate any pressure head or site location; high-efficiency baffle designs for disinfection requirements; the durability of concrete combined with a watertight embedded diaphragm; customized security features and accessories; and reliability for minimal service interruptions and maintenance expenditures.

Preload has unmatched experience in the design and construction of internal baffle wall configurations to help our clients meet the Safe Drinking Water Act regulations for disinfection. Our team is experienced in configuring the baffles to direct the water and efficiently achieve the required chlorine contact time. Baffle Walls were used to kill or inactivate such harmful organisms, such as Giardia cysts and bacteria, and disinfectants were added to the water systems. The effectiveness of the disinfectant depends on several factors, an important one being the amount of time the water stays in contact with the disinfectant or hydraulic residence time. The addition of properly configured baffle walls to a tank can result in a more efficient hydraulic residence time.

STREET PAVING
CATEGORY

GOLD STAR WINNER

Location:
Fargo, ND

Owner:
City of Fargo

Design Firm:
Houston Engineering, Inc.

Contractor:
Northern Improvement Company, Inc.

Industrial Builders, Inc.

Superior Contracting, Inc.

Concrete Supplier:
Strata Corporation

BUILD WITH STRENGTH NORTH DAKOTA

52ND AVENUE SOUTH ROADWAY

To better serve a growing population, the City of Fargo has been working to widen 52nd Avenue South to a four-lane section with turn lanes from Sheyenne Street to I-29. The final segment in this corridor is from west of 63rd Street South to Sheyenne Street where was a rural two-lane section. Due to the roadway widening, modifications to the existing roundabout at Sheyenne Street were required.

Additionally, the designs for a roundabout on 52nd Avenue and Sheyenne Street needed to be evaluated. Due to recent growth projections, the roundabout was expected to fail in 2025.

Conversion of the existing rural, asphalt roadway section to a concrete urban section required consideration for local drainage, stability of the widened roadway as well as environmental and social impacts. The geometry of the roadway was developed to provide positive drainage and utilize a curb and gutter with the storm sewer system which will also enhance the rideability of the roadway. Widening of the roadway also required significant grading. Compaction methods were utilized to ensure a uniform subgrade prior to paving. Alternative alignments were also developed for the roadway and shared-use paths to limit impacts to wetlands, trees, and the Sheyenne River. Overall construction was sequenced in to maintain constructability while also minimizing impacts to the public by setting duration limits of when areas could be closed to traffic.

Concrete pavement provides a roadway that will handle the increasing traffic loads in south Fargo for years to come. Concrete was also the best choice for safety considerations because its brightness will help to clearly show where vehicle and pedestrian traffic is on the roadway and sidewalks when driving later in the day. Constructing the medians out of concrete helps to clearly and safely show the divide between the two directions of oncoming traffic.

Through the design, jointing locations were carefully evaluated to help enhance the limits of machine paving. Northern Improvement Company (NIC) phased the roadway pavement to maximize the amount of machine paving and limit the amount of hand pours. Expansion joints were also incorporated near the bridge to allow for movement and minimize risk of pavement failures due to the fixed structure.

Construction was staged and sequenced to minimize impacts to traffic. The roadway was worked on during the summer months so Delvo was used to maintain concrete

temperatures throughout placements. Watering piles of aggregates helped keep concrete temperatures cool throughout the summer.

Superior Contracting, Inc (Superior) demonstrated attention to detail in enhancing the quality of the multi-use path and the pigmented imprinted concrete. By employing a roller screed, Superior ensured consistent cross slope throughout the path. Timing was crucial for imprinting the concrete to achieve a consistent pattern with crisp lines, avoiding any pulling or tearing of the surface. Due to varying temperatures and wind, Superior had to meticulously monitor the timing.

NIC and Superior demonstrated their professionalism through effective communication and workmanship, resulting in an outstanding final product. The coordination of multiple trucks arriving simultaneously at the jobsite required accurate ordering and clear directions, which were key to the project's success.

The existing roundabout was expanded to add additional lanes for improved traffic flow. The existing pavement had abnormalities in slope. NIC and HEI worked closely together to adjust grades to smoothly transition between existing pavement and the adjacent new pavement.

Adding additional lanes onto the existing roundabout provided improvement to the intersection, in a more cost effective and shorter timeframe. Shutting down all four directions of the Sheyenne Street/52nd Avenue South intersection impacted traffic. The contract provided a 45-day window to complete this work.

The team's construction experience and design approach allowed for efficient construction, reducing noise and emission impacts from onsite equipment. The cement used in concrete is made of natural materials (not manmade synthetic) such as limestone and clay. Concrete materials use byproducts such as fly ash and blast furnace slag as part of their manufacturing process that would otherwise find their way into a landfill. The choice of concrete on this roadway was key to lowering upkeep cost throughout the life of the concrete. Durability of the concrete will help increase the longevity of this main artery in south Fargo for both residential and commercial traffic.

SUSTAINABLE DESIGN CATEGORY

GOLD STAR WINNER

Location:
Glen Ullin, ND

Owner:
North Dakota Department of Transportation

Design Firm:
Civil Science, Inc.

Contractor:
Swingen Construction Company

Concrete Supplier:
Dickinson Ready Mix

BUILD WITH STRENGTH NORTH DAKOTA

I-94 EAGLES NEST INTERCHANGE BRIDGES

The structures on I-94 at Exit 102 were built in 1963 when the interstate system in North Dakota was constructed as part of President Eisenhower's National Interstate and Defense Highway System, the greatest public works project in the history of the United States.

The original Eagles Nest Interchange structures were still in use after more than 60 years, even though traffic volumes and load sizes far exceeded what they were designed to carry when originally constructed. Consequently, the structures were beginning to show their age with some deterioration of concrete supports for the bridge structure and fatigue cracks in the structural steel beams, resulting in load restrictions being placed on the structures. In addition, the clearance height over the BNSF railroad tracks did not meet current BNSF Railroad standards.

To address structural deterioration, to bring the structures into compliance with current standards, and to provide flexibility for future railroad improvements, the North Dakota Department of Transportation (NDDOT) determined the structures should be replaced. The final project design included replacement of both eastbound and westbound I-94 bridges, raising and modifying I-94 to enable the new structures to meet current railroad clearance standards and realigning County Road 139 further west to accommodate a future BNSF track expansion.

Project plans called for the bridges to be replaced one structure at a time to allow for continuous 2-way traffic flow on I-94 during construction. The project got underway in May 2022 with the construction of median cross overs and shoulder work to prepare for the upcoming bridge replacements. The Eastbound bridge was replaced in 2023 and the westbound in 2024.

The original structures, both east and westbound, were 5-span steel girder bridges, 345-ft long with a clear roadway width of 46-feet, supported by concrete substructures. The substructures were supported on steel encased concrete piling.

The new structures are 5-span pre-stressed concrete spread box beam bridges with an overall bridge length of 397-feet, a clear roadway width of 48-feet, and a clearance height over the BNSF railroad tracks of 23-feet 10-inches

that meets current BNSF standards. County Road 139 was moved 20-feet west to allow for future construction of a second track adjacent to and west of the existing track. To accommodate future track expansion the new bridge structures were designed to span the proposed double track as well as the area of County Road 139.

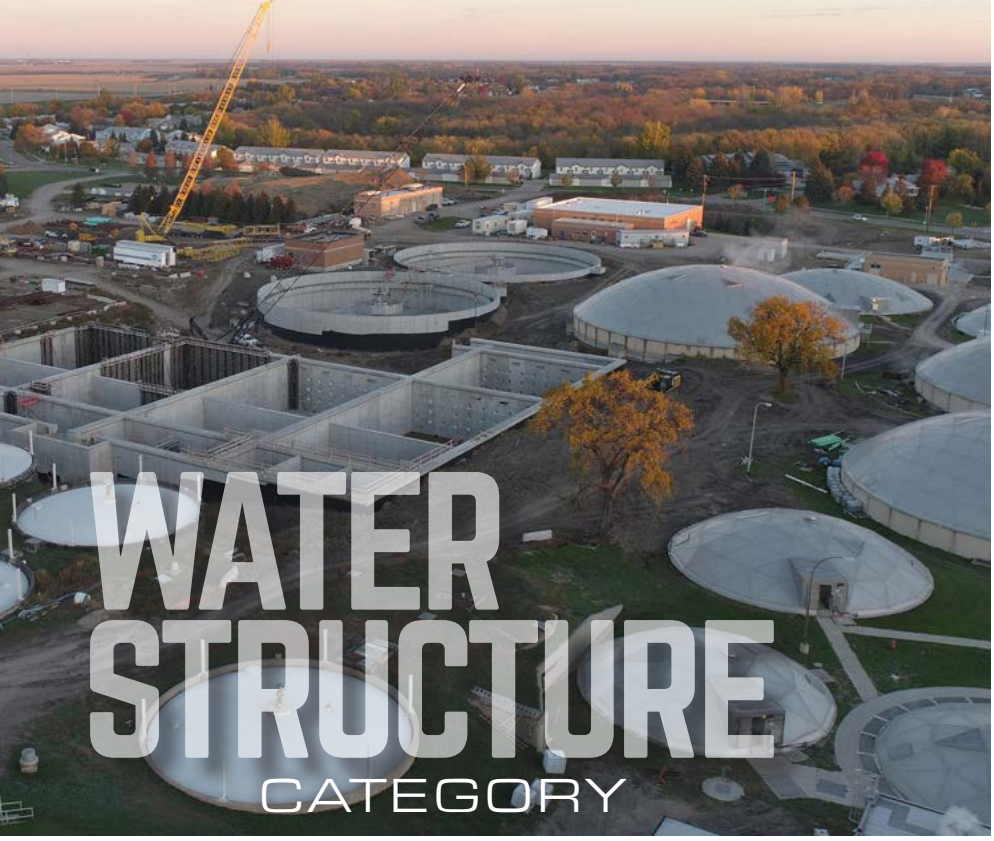
Because the life expectancy of bridges is more than 50 years, it makes sense to incorporate elements that make them aesthetically appealing and environmentally sustainable. How a bridge looks and how it fits into the surrounding environment is always an important consideration for NDDOT bridge designers. The Eagles Nest Interchange bridges include rustications in the guard rail barriers and the piers to enhance their appearance. The barriers utilized an Ashlar Astone form liner and stained concrete, applying natural stone colors within a 2-foot recessed area on the back face of the barriers to achieve a natural stone wall look.

The piers are colored light brown with a surface finish color matching the lightest shade of brown in the guardrail barrier colors. There is an architectural detail displayed on the piers as well. A pattern was handcrafted onto the piers y building rustication / reveal strips into the forms to imprint the concrete and create a design that resembles dual Y-shaped piers. The rustic colors and natural stone patterns help the bridges blend in with their prairie environment.

There was 1,650 cubic yards of NDDOT Class AE-3 and AAE-3 concrete utilized in each of the structures for a total of 3,300 cubic yards of concrete supplied for this project. This included 665 cubic yards of AAE-3 concrete in each of the bridge decks as well as concrete abutments, piers, diaphragms, approach slabs, sleeper slabs, guard rail barriers, and curb & gutter. In addition, the bridges were constructed using 33-inch prestressed concrete box beams as horizontal structural elements supporting the bridge deck.

In line with the US Department of Transportation's green transportation construction materials initiative, mix designs on this project utilized aggregate optimization and sustainable materials to produce low carbon concrete. AE-3 and AAE-3 mix designs on this project utilized Type IL cement, which up to 15% of the clinker is replaced by limestone, thus reducing its carbon footprint. In addition, much of the concrete provided for this project contained 15% flyash, a waste product from coal-fired power plants, which also contributed to the overall carbon footprint reduction. Concrete's carbon footprint on this project was reduced by an estimate 20% through the use of sustainable materials to rebuild these structures.

It was important to design a project that would meet the needs identified when evaluating the original structures. The Eagles Nest Interchange Bridge Replacement project addressed the substandard bridge conditions of the existing structures, brought the new structures to current standards, provided flexibility for future rail improvement, and provided visual enhancements to make these structures unique, aesthetically appealing, and environmentally sustainable. These durable concrete structures will be carrying traffic across the North Dakota prairie for another 60 years or more.



WATER STRUCTURE CATEGORY

GOLD STAR WINNER

Location:
Fargo, ND

Owner:
City of Fargo, ND

Design Firm:
Apex Engineering Group

Contractor:
PKG Contracting, Inc.

Concrete Supplier:
Strata Corporation

BUILD WITH STRENGTH NORTH DAKOTA

FARGO WASTE WATER TREATMENT PLANT

Phase IIA of the wastewater treatment facility is just the beginning to a three-year project that is going to almost double its capacity and allow the facility to exceed the clean water standards. As Karla Olson comments in an article with the Inforum with the new technology going into this facility the City of Fargo will see a 30% reduction in ammonia-nitrogen and 80% drop in phosphorus levels in the wastewater discharge into the Red River. These two numbers may not make sense to the public but are important to the Red River Valley because of the agricultural industry and will also benefit the downstream users of the river water. From Jim Hausauer the Wastewater Utility Director stated in 2020 Fargo has already been taking about 1 million gallons a day of wastewater from West Fargo since October, but with the expansion it will take the full flow of up to an estimated 3 million gallons. The growing community of Horace has been sending a small flow from the northern part of the city since April but will also expand their capacity in the coming years.

The Phase of IIA was just the beginning of this 3-year project and it involved many different aspects of the facility. The Fargo Wastewater Treatment Facility Phase IIA Expansion included influent pump station improvements, garage and administration building improvements, trickling filter rehabilitation, intermediate and final clarifier rehabilitation, UV disinfection basin retrofit of an existing chlorine disinfection basin, new UV disinfection control building, collection system maintenance building improvements, secondary digester rehabilitation, biosolids transfer station improvements, digester gallery improvements, process piping, site utilities, site work and paving.

The mix designs used on this project were both 5000 & 4500 PSI well graded air and non-air mixes. Well graded mix designs were used to help with consolidation, durability, and longevity. Everything besides the paving aspects of this project were used with MasterGlenium 7500 to allow for the workability to increase without adjusting the water cement ratio in all walls, footings, and foundations for the project. PKG Contracting also utilized the Thermal Monitoring System Con X Edge when pouring any mass elements. This system records an update every 5 minutes connecting to the nearest cell towers allowing for alerts to be sent out when any differential or maximum parameters are met. This was a huge success for PKG to be able to check on their placements in real time or to notify them when something out of the ordinary was being recorded. The pavements for the facility were designed to meet the City of Fargo Paving Specification.

This project had placements in the heart of summer with heat being a huge factor in placements all the way to placements in the middle of winter where heated concrete and the use of blankets were a key to the success. PKG Contracting used extreme professionalism and efficiency when ordering concrete with exact amounts and exact directions to the placement. When sometimes having multiple placements within the week or even within the hour, knowing where and how many yards were required helped this project move smooth throughout the project time.

2024 NDRM&CPA MIXER TRUCK DRIVER OF THE YEAR

The North Dakota Ready Mix & Concrete Products Association's Ready Mixed Concrete Delivery Professional Driver of the Year Award acknowledges the significant contribution of ready-mixed concrete truck drivers to the growth and success of individual companies and the ready mixed concrete industry. As a salute to these key members of the concrete production and delivery team, the award recognizes the driver's career achievement, safety, professionalism, competence, and customer service skills in a manner that will enhance the industry and public image of the career Ready Mixed Concrete Delivery Professional.

RUNNER-UP: Josh Ridl of Dickinson Ready Mix

Josh Ridl of Dickinson Ready Mix is based out of DRM's Bowman, ND plant. Josh has served the industry for 23 years officially, but has been a part of the ready-mixed concrete industry his whole life. The Ridl family formerly owned and operated Bowman Ready Mix as a small town, family operation for more than 60 years. Throughout his career, Josh has averaged hauling more than 2,600 yards of concrete per year. In addition to his service of delivery, Mr. Ridl acts as batch plant operator, loads bins, and performs every duty necessary to ensure the successful operation of the Bowman facility. Dave Grinsteinner, Operations Manager of Dickinson Ready Mix, says of Josh: *"Josh has a no-nonsense, honest and forthcoming attitude concerning work, relationships, and abilities. He will always be the first to chip in and help out to get the job done with precision and accuracy to reduce down time and get everyone home quickly and safely."*

WINNER: Jim Linder of the Holcim Fargo RMX Plant

Jim Linder of the Holcim Fargo RMX Plant was chosen by an unbiased panel of Associate Members as the NDRM&CPA 2023 Mixer Truck Driver of the Year. Mr. Linder has served the industry for more than 25 years, providing no lost-time due to injury. Mr. Linder has averaged more than 7,000 yards of concrete delivered year-over-year, with-zero-rejected loads. Prior to his career as a ready-mix concrete delivery professional, he spent many years as a local concrete contractor. It's this prior experience that has led Jim to fully understanding what the customer's needs are. Mr. Linder has dedicated himself to not only the profession of concrete delivery, but training the next generation of delivery professionals as well. Holcim has zeroed in on Jim's abilities, patience, and dedication and have made him their internal trainer for all new delivery professionals and official driver for Holcim's specially painted Direct App and NDSU Football trucks..

Chad Fossen, Ready Mix Area Manager for Holcim says of Jim: "Since the beginning of Jim's employment, he liked and requested to take last loads of the day or at least one of them. He always leads the way in hours worked, loads hauled, and truck cleanliness." Christopher Kallhoff of Rohrich Custom Concrete LLC says of Jim: "Jim knows the ins and outs of the industry very well whether he has the right slump or the intuition to know how his truck placement to make our jobs less labor intensive. He always shows up with a smile on his face and asks our guys how the weekend or previous night was. Jim truly cares not just about his job, but about everyone around him."

All of us extend our most heartfelt congratulations to Jim Linder in his awarding of the North Dakota Ready Mix & Concrete Products Association 2024 Mixer Truck Driver of the Year. In addition to Jim winning the North Dakota award, his credentials and application have been sent to the National Ready Mix Concrete Association (NRMCA) for consideration in the 2025 National Mixer Truck Driver of the Year.

We want to thank all companies and drivers who submitted their applications. Without the dedication of our industry drivers, the material we work so hard to produce would never make it to the project!

2025 NDRM&CPA SCHOLARSHIP RECIPIENTS

BUILD WITH STRENGTH NORTH DAKOTA

Congratulations to the following students who earned scholarships from the NDRM&CPA Scholarship Program. These students have shown a commitment to educational excellence and the recognition of the importance of concrete in their professional future. 3 students were awarded a General Scholarship, in which students within the North Dakota University System are eligible. 1 Student was awarded a CIM Scholarship, in which students must be currently enrolled at South Dakota State University in the Concrete Industry Management program. Each scholarship recipient will receive $2,000 to use toward their continued education.

Jace Dew is a Senior at North Dakota State University in Fargo pursuing his Bachelor of Science Degree in Civil Engineering. Dew holds a 3.46 GPA having spent time at BSC, Ottawa University, and NDSU. Jace has spent the last 2 years as an intern for Apex Engineering, and most recently oversaw the reconstruction of 32nd Avenue in South Fargo. As stated in his application, Mr. Dew is interested in the concrete industry because as a Civil Engineer in Transportation, it will incorporate in most all of the projects he will be working on. Jace also stated that he will always be an advocate for concrete to be used for pavements due to its durability, low need for maintenance, and ability to be recycled.

Joshua Bowser is a Senior at North Dakota State University, pursuing his Bachelor of Science degree in Civil Engineering. Bowser, a Fargo, North Dakota native spent the last summer as an intern for Terracon, receiving his ACI Concrete Field Testing – Grade I certification. He has previously held an internship with the City of Fargo as an inspector for residential concrete sidewalks and driveway approaches. Joshua is interested in the utilization of concrete because of its dynamic character and constant developments in material technology. Mr. Bowser is interested in furthering his education in the role of chemistry in regard to concrete and how it can be adjusted for a variety of uses, allowing him to approach civil engineering in new and significant ways.

Seth Wolf of Wishek, ND is a Junior at NDSU pursuing his Bachelor of Science degree in Civil Engineering. Mr. Wolf currently holds a 3.96 GPA in his undergraduate coursework, making the Deans List every semester of his collegiate career. During the pursuit of his degree, Seth is extremely active in the NDSU community being involved with Farmhouse Fraternity, the AGC of ND (Student), National Association of Home Builders, and ASCE ND Student Chapter. In his application, Mr. Wolf stated that he finds concrete appealing for streets and parking lots due to its strength, which allows it to withstand heavy loads while providing an exceedingly long lifespan.

Katherine Connor is this year's recipient of the NDRM&CPA CIM Scholarship. A sophomore at SDSU, Ms. Connor currently has a 4.0 GPA with 51 total credits (an average of 17 credits per semester). Hailing from Winfred, South Dakota, Katherine spent the summer of 2024 working across the United States with Vector Construction, spending a month in North Dakota. In her scholarship application, she focused on her lifelong use of concrete growing up on her family farm. Regarding the switch from agriculture to the concrete industry, Connor stated in her application *"What interests me the most about the concrete industry is the vastness of and the constant advancements in the industry. I like being able to learn something new every day rather than remaining comfortable and complacent."*

The NDRM&CPA Scholarship Program was established in 1993. Applicants for the NDRM&CPA General Scholarship must be junior, senior or graduate students in civil engineering, construction engineering, construction management, architecture, or landscape architecture. Applicants for the CIM Scholarship must be actively enrolled in the CIM program at SDSU. They are awarded points on work or internship experience; grade-point-average; campus or industry involvement; and a four-part, written essay regarding the benefits of concrete. With the 2024 Scholarship Awards, the program has given out $140,000 to 105 students.

We want to thank all students who applied for a scholarship and for the time and effort that went into their applications. Also, a special thanks to the scholarship committee and to our industry partners who diligently help with fundraising efforts to make this scholarship program a continued success.

NORTH DAKOTA READY MIX & CONCRETE PRODUCTS ASSOC
P.O. BOX 1076 • BISMARCK, ND 58502

MEMBERSHIP

The North Dakota Ready Mix and Concrete Products Association, along with the North Dakota Chapter of the American Concrete Pavement Association, value the support from our members. If you or your firm are interested in becoming members, we offer a variety of membership levels.

Our membership benefits include:

- Educational Trainings
- Promotional Materials
- Technical Support
- Government Relations
- Certification Programs
- Networking Events
- Project Recognition
- Awards Programs

For membership consideration, please contact Brian Zuroff, Executive Director, or Savannah Schmidt, Executive Assistant. You can also download and complete the Membership Application at **https://www.ndconcrete.com/membership.html.**

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