ASCENT INNOVATION CAMPUS

Fit-Up Qualifications October 4, 2020



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TSP

Architecture Engineering Planning



600 Kansas City Street

Rapid City, SD 57701

(605) 343-6102 TeamTSP.com October 4, 2020

Mitch Nachtigall, Director of Innovation and Entrepreneurship Elevate Rapid City 525 University Loop, Suite 100 Rapid City, SD 57701

RE: Ascent Innovation Campus Fit-Up

Dear Mr. Nachtigall and Selection Committee Members:

Architecture Engineering Planning

The Ascent Innovation Campus brings together some of the most exciting aspects of STEM-centered opportunities and focuses them toward a singular goal. Nurturing the entrepreneurial mindset and providing tangible support uplifts our area's brightest ideas—and in turn, our region as a whole. These emerging or homegrown small businesses can be the spark that ignites our economic engine for decades to come.

The TSP team wants to be part of this important work. What's more, we have the individual expertise and firmwide background in similar building types to guide your tenants' decision-making.

We're a legacy company 90 years in the making, and we've been a proud part of the Rapid City business community since 1973. We've been successful for so long because we're always looking ahead. Like the dreamers at your partner startups, we learn from every iteration and embed new learning in each project that follows. We fully integrate our in-house architecture, planning, engineering, estimating, and interior-design specialists to offer seamless coordination and communication.

Our firm designed the Zeal Center for Entrepreneurship in Sioux Falls, working with city officials, development visionaries, and the local chamber of commerce to launch the public/private venture. Known then as the South Dakota Technology Business Center, Zeal has grown with multiple TSP-designed additions that further advance the incubator's biotech capabilities and foster collaboration among tenants.

We've also designed flexible, forward-thinking facilities for Concrete Materials, Southeast Tech, and Daktronics. We're currently at work with industry leaders including Raven Engineered Films and Tech Ord. And together with our frequent lab-specialty consultants from SmithGroup, we're designing the first built project for the USD Discovery District and its anchor tenant, SAb Biotherapeutics.

We'll bring that same exceptional design and value to your campus' projects. We know they'll be as unique as the minds behind them, and we're more than up to the task. We look forward to continuing the conversation.

Sincerely, TSP, Inc.

Mark Averett, AIA Principal-in-Charge | Project Manager



Proposal for Elevate Rapid City Qualifications to Provide Architectural, Engineering, & Specialty Services for Ascent Innovation Campus Fit-Up

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SECTION 1 | QUALIFICATIONS

TSP COMMITMENT & INTEGRITY

TSP, Inc. 600 Kansas City Street Rapid City, SD 57701 (605) 343-6102 Main Contact Mark Averett, AIA Principal-in-Charge Direct: (605) 791-6924 **Established:** 1930 **Office Locations:** Rapid City, Sioux Falls, & Watertown, SD; Omaha, NE; and Rochester, MN

ABOUT TSP: INTEGRATED ARCHITECTURE, ENGINEERING, & INTERIORS

As a company, we're built around a few beliefs that resonate with team members in communities across the Upper Midwest including your project's core team in our Rapid City office. The heart of this philosophy stretches back to 1930 and founder Harold Spitznagel's credo to design it like we own it.

Comprehensive services

Our full-service team ensures that spaces, systems, layouts, finishes, furniture, and technology function as a whole. Your strategic priorities are incorporated in each option we offer.

We'll develop concepts that get the most out of your square footage and what you can do within it. Often, that means drawing on the resources of additional in-house specialists. For your project, that's mostly likely to include—

- Structural engineering, to vet any interior fit-up work that potentially could be affected by the building's existing skeleton and supports.
- Cost estimating, to provide a doublecheck of the overall picture and attach realistic figures to any evolving design changes.



Your 'why'

Through teamwork, service, and passion, our people listen and develop a deep understanding of your "why." We collaborate with you to build trust-based relationships and discover solutions that combine form, function, and economy. Our architects, engineers, planners, and interior designers create legacy buildings that fit needs today and are flexible to serve you well into the future.

IDIQ expertise

Indefinite Delivery/Indefinite Quantity-type agreements require planners and designers to be nimble, knowledgeable, and proactive as projects emerge on various timelines. As illustrated throughout this proposal, our firm and its people bring backgrounds in the right project types for your upcoming work series. We've also earned real-world experience managing and coordinating phased efforts. We'll create well-thought-out concepts and provide the information you and your tenants need to make timely decisions. TSP successfully has fulfilled our IDIQ and/or Architect of Record contract role for clients such as—

- Department of Veterans Affairs (VISN 23)
- Department of Defense Ellsworth Air Force Base
- United States Postal Service
- National Guard Bureau
- Black Hills Corporation
- Sioux Falls Regional Airport
- City of Watertown
- Nebraska Medicine/University of Nebraska Medical Center
- Campbell County School District No. 1
- Marshalltown Community School District

APPROACH & METHODOLOGY PROVEN STRATEGIES

FRAMEWORK & DEFINED SCOPE

The TSP team groups the study and design processes into several major stages: **Understand**, **Create**, **Refine**, and **Deliver**. We then create a detailed work plan that breaks each process stage and design phase into tasks that tactically address specific items. The graphic below illustrates our clear approach: Early-phase work supports later direction-setting and full development of your vision's tangible details.

Throughout every stage, we apply comprehensive project-management techniques to customize, document, communicate, and continuously update our tools and tactics. This enables us to provide high-quality professional services and deliver your project within the established budget and schedule.



OBJECTIVES BY PHASE

PRE-DESIGN / CONCEPTUAL DESIGN (Understand)

Gain a clear understanding of the complex set of diverse "things" to be solved so we can judge our work within the appropriate context and eliminate any flawed solutions quickly and early. Then we can focus more time on making the good stuff even better.

SCHEMATIC DESIGN (Create)

Illuminate the issues, working through multiple iterations as we collaborate with you and your stakeholders to establish a unified expectation of what the design will be.

DESIGN DEVELOPMENT (Refine)

Optimize the design solution and ensure a balanced approach to the project that allows us to meet the collective goals, objectives, and key results.

CONSTRUCTION DOCUMENTS, BIDDING, & CONSTRUCTION (Deliver)

Stop designing and start producing clear drawings and specifications that convey to your construction partners the design's intent—in actionable form that supports your vision.

TSP ZEAL CENTER FOR ENTREPRENEURSHIP BUSINESS INCUABATOR FACILITY DESIGN & MULTIPLE ADDITION/REMODEL PROJECTS

Sioux Falls' new-business incubator exists to provide resources and guidance for anyone with a great business concept and the work ethic to make it happen. The group launched in 2002 as the South Dakota Technology Business Center. The offshoot of Forward Sioux Falls (a partnership between the Greater Sioux Falls Chamber of Commerce and the Sioux Falls Development Foundation) initially served companies with a tech focus.

TSP has been there every step of the way, with architects, engineers, and interior designers whose own creativity supports the center's growth: the initial 38,000 sf facility, early biotech upgrades, a 2009 addition, and a remodeling/ rebranding effort to create 2,000 sf of collaboration and team space on the first floor.

Today, leaders have an expanded mission and fresh look to go with it. The Zeal Center for Entrepreneurship is helping redefine what it means to evolve start-up companies and services. Then- Vice President Tom Stengrim called the renovation and organization relaunch a "game-changer."

Zeal fosters and develops new ideas, but those who keep offices there understandably are protective of their methods. As a result, they tended to keep to their own areas—and the silo effect closed them off from sparks of inspiration that might come from hearing a fresh perspective. TSP's interior designers developed color palettes and wayfinding elements that worked with flooring and lighting selections to help define the space program. From the moment visitors and potential clients walk in the door, they feel the energy that drives Zeal. Vibrant colors and open interior sightlines give a glimpse of what Zeal aspires to be and what it's like to be a part of what happens there.

The changes include a re-located reception desk that creates a focal point to welcome visitors. A series of flatscreen TVs displays the various start-ups within the building to elevate name recognition and show Zeal's reach. An enlarged and updated break room flows into a lounge with soft seating, counter-height tables, and booths. Breakout rooms provide ideal places for a smaller group of great minds to hammer out details—complete with a nearby workroom that has ample cabinet storage for office supplies and equipment.

The remodel represents the first phase of Zeal's planned facelift, which reworked the entire 45,000 sf building to embody the new look. The community space quickly become the most popular in the building—prompting leaders to update certain finishes sooner than anticipated in its timeline to refresh the full facility.







Location Sioux Falls, SD

Original Facility Size | 38,000 sf Construction Cost | \$4,900,000 Completed | 2003

Biotech Upgrades Size | 4,000 sf Completed | March 2005

Building Expansion Size | 7,300 sf Construction Cost | \$900,000 Completed | 2009 **Rebranding Addition/ Remodel** Size | 2,000 sf Construction Cost | \$373,110 Completed | 2016

Contact

Rich Naser, Former President (605) 375-8010 richn@rusddiscovery.com

TSP RAVEN INDUSTRIES ENGINEERED FILMS DIVISION EXPANSION/RENOVATION

This ongoing project builds on our relationship with an industry leader, for whom TSP previously designed an Aerostat Hangar and Precision Training Center with largeformat technical-equipment area and observation room.

Raven leaders initially planned a small break-room addition to the 1950s metal building that houses the Engineered Films division. Inside, employees manufacture multi-ply materials for use as custom packaging, barrier film and sheeting, high-strength construction films, and puncture-resistant geomembrane liners.

The first floor will include extra warehouse space along with an array of employee-centered functions: a large break room, restrooms and lockers for workers, a clinic, and personal-health rooms. On the second floor, team members will gain a mix of private and open offices plus conference rooms for collaborative projects.

Executives wanted a "wow" first impression and true visitor entry. The two-story addition is taller than the existing roofline, providing a focal point against the "blank canvas" of the long, rectangular structure. The company's color and logo emphasize the entrance. We clad the exterior of both existing and new structure in linear patterns that represent the striations as layers of film are compressed to manufacture the tensile sheets.



Location Sioux Falls, SD **Construction Cost** \$3,500,000 (estimated)

Status

In Construction

Size 16,000 sf (estimated)

Contact

Tim Audus, Corporate Facilities Manager tim.audus@ravenind.com (605) 370-7837

USD DISCOVERY DISTRICT MULTI-TENANT BIOMED LAB, OFFICE, & MANUFACTURING FACILITY



Location Sioux Falls, SD **Size** TBD In collaboration with specialty-lab consultants from SmithGroup, TSP is designing the first built project that will take shape in the new Discovery District—the state's original live/work/play innovation community. The corporate and academic research park is a public/private partnership that includes the South Dakota Board of Regents, the University of South Dakota, the South Dakota Governor's Office of Economic Development, Forward Sioux Falls, and the City of Sioux Falls. This first structure, a multi-tenant building, will include shared spaces, offices, laboratories, and an adjoining manufacturing facility. The project is paused while anchor tenants from SAb Biotherapeutics focus their full efforts on developing an antibody therapy for COVID-19.

Construction Cost TBD

Status In Design

SECTION 1 | QUALIFICATIONS

TSP MIDCO TECHNICAL OPERATIONS CENTER & WAREHOUSE

The new Midco structure in northwest Sioux Falls serves a dual purpose for the company, which provides high-speed internet, cable television, home phone service, and home automation and security options. Midco team members are the building's only user group, as the facility is home to offices and workspaces for technical operations team members across the region. On-site meeting/training spaces will host internal gatherings of employees from many Midco facilities throughout the area.

TSP's architects and engineers collaborated with end-users and administration to design the new facility's spaces around their goals—resulting in a more effective way to work. That's especially important to technicians preparing equipment for installation or other service calls.

The operations provides efficient interface between office and warehouse functions. The office portion of the building is traditional construction with a steel structure, masonry exterior, and metal accent panels. The warehouse is a pre-engineered metal building whose surface treatments echo those of the office space. This ties different components together, creating a unified whole. A kitchen/ break room and adjacent patio space with built-in grill feature and landscaping offer additional areas for informal team-building activities.



Completed

August 2018

Location Sioux Falls, SD

Size 33,553 sf

Construction Cost \$4,726,000 **Contact** Richard Mell, Facilities Manager (605) 357-5898

TSP SOUTHEAST TECH LARGE-FORMAT LEARNING LAB FACILITY



Location Sioux Falls, SD **Size** 90,750 sf **Construction Cost** \$21,276,149* **Completed** December 2016

Contact

Nicknamed "The Hub," this center for student and staff activity establishes a STEM/CTEC connecting point for Southeast Tech, employers, and business leaders in the larger workforce-development community. The Hub provides two, large-format laboratory environments in the heavy/diesel equipment and automotive technology programs. The new facility also houses breakout rooms and student lounges, three traditional classrooms, a theater-style auditorium, the school's administrative and business offices, and its Foundation. The building's glass front faces the adjacent interstate to showcase activities within. Windows from a second-floor lounge and other common areas provide even more opportunities to see students and faculty at work.

> Jeff Kreiter, Operational Services Jeffrey.Kreiter@k12.sd.us (605) 367-7965

*Contract also included nearly 27,500 sf of additions/renovations at another campus building

SECTION 1 | QUALIFICATIONS



TSP DAKTRONICS MULTIPLE EXPANSION PROJECTS

TSP's work for Daktronics has included safety studies, concept options, and full design work for expansions at multiple sites across the company's footprint. Most recently, our team created design concepts for a two-level Entry/Workspace Addition to the Sioux Falls location. The concept includes new spaces and entries for visitors as well as staff, providing a clear separation between public and more private, restricted functions. Extra rooms for small breakout sessions support collaboration, while a new central stairway improves vertical circulation to the second floor. Daktronics' signature products are embedded in the concept, with a video screen mounted behind curtainwall glazing on the building's south side. First-floor enhancements include new toilet rooms and a coffee bar.

Entry/Workspace Addition Location | Sioux Falls, SD

Size | TBD Construction Cost | TBD Status | Concepts Completed October 2018

Plant/Warehouse Expansion

Location | Redwood Falls, MN Size | 30,000 sf Construction Cost | \$2,611,097 Completed | December 2014

TSP TECH ORD NEW OFFICE FOR MANUFACTURING COMPLEX

Construction just got underway for a new office building to expand facilities at the Tech Ord complex, which sits on a 640-acre campus near Clear Lake. The company, a division of National Defense Corporation/AMTEC, engineers and manufactures technical-ordinance components including time-delay devices, ammunition pellets, squibs, and electric igniters.

The single-level structure will house private offices, conference rooms, and open-concept work areas with room for about 40 workstations in all. Separate entry vestibules for staff and visitors offer heightened security. Pops of the company's brand colors add visual interest as does the sloping roof, which creates the impression of a taller building as guests approach from a long, main drive leading to the campus.

Workers will gain several new amenities from the existing office building. Increased daylighting in workspaces, a break room, and a lactation room will help create a more professional office environment in keeping with the growing firm's sophisticated technical capabilities. Completion is anticipated in Spring 2021.



Location Clear Lake, SD

Size 10,152 sf

Status In Construction **Construction Cost** Confidential to Owner

Contact Matt Baer, Director of Operations mbaer@techord.net (605) 874-2631



MARK AVERETT, AIA

Principal-in-Charge | Project Manager

Registered SD, WY, MT, ND, NE

Education Master of Architecture, University of Idaho Bachelor of Science, Architecture, University of Idaho



Mark's "whatever it takes" mentality is the hallmark of his client service philosophy. He'll focus on addressing tenant experience and facilities-staff efficiency during planning. Mark keeps end-users at the heart of the process and calls upon

their expertise when formulating design decisions. Mark's streamlined project management includes day-to-day communication, defining tasks and timelines for the team, and evaluating cost projections. His responsibilities include the full scope of project management and delivery, from programming and schematic design through construction documents and code review.

Mark also performs periodic construction administration duties and is available as a resource to both owners and contractors. His track record of delivering successful projects is evident by repeat work from loyal clients. He has been with TSP since 2003 and relocated to TSP's Rapid City office in 2017.

Selected Experience:

- City of Rapid City, SD
 - » City Hall Space Study
 - » Phased Interior Renovations



South Dakota School of Mines & Technology Foundation Pearson Alumni Center, Rapid City, SD

- South Dakota Department of Transportation I-90 Point of Entry Facilty, Tilford, SD
- Harbin Hall Creek Drive Apartment Complex, Rapid City, SD
- Whisper Rock II Apartments Construction Administration Services, Rapid City, SD
- ONEOK Spearfish Field Office, Spearfish, SD
- Sturgis Brewing Company New Brewery, Sturgis, SD
- South Dakota School of Mines & Technology Foundation Pearson Alumni Center, Rapid City, SD
- Monument Health, Rapid City, SD—Numerous projects, including:
 - » Urgent Care West
 - » Flormann Clinic 1st Floor Renovation
 - » Flormann Clinic 4th Floor Medical Lifestyle Clinic Remodel
- City of Douglas Manufacturing and Assembly Building, Douglas, WY
- Omaha Economic Development Corporation Ville De Sante Senior Living, Omaha, NE
- Washakie County, Worland, WY
 - » Repurpose/Remodel of Existing Facility to Create New Community Library
- » Community Library Study & Design-Option Concepts
- Sanford Health Acute Care/Orthopedic Fast-Track Clinic & Summit League Headquarters, Sioux Falls, SD
- Sheridan Memorial Hospital, Sheridan, WY—Numerous projects, including:
 - » Campus Master Plan
 - » Outpatient Center Phases I & II
 - » Emergency Department Addition/Renovation
 - » ICU Expansion/Renovation
 - » Urgent Care
- Sheridan County School District No. 2, Sheridan, WY— Numerous projects, including:
 - » Four New Elementary Schools
 - » High School Security Entrance & Administration Addition
- Campbell County School District No. 1, Gillette, WY– Numerous projects, including:
 - » New Stocktrail Elementary School
 - » Twin Spruce Jr. High Science & Math Wing Phased Renovations
- Sweetwater County School District No. 1, Rock Springs, WY
 » Campus Master Plan
 - » Three New Elementary/Intermediate Schools



GREG SCHOER, AIA Project Architect



An architect who strongly values client relationships, Greg applies his connection to the community to all his projects to create visually pleasing and long-lasting design solutions. Greg works to create energizing environments that support

innovation and learning—and that are a source of pride for tenants and owners. He is involved in all phases of a project's design, from planning and conceptual design through design development and construction.

Registered Architect: SD, MN

Education: Master of Architecture, Southern California Institute of Architecture; Bachelor of Arts, Art History & Studio Arts, Augsburg University

Selected Experience:

- Raven Industries Aerostat Hangar, Baltic, SD
- CCL Label Warehouse Expansion/Renovation, Sioux Falls, SD
- SDN Communications Backup Site Concept, SIoux Falls, SD



BRENNA WIERTZEMA, NCIDQ

Interior Designer



Brenna is drawn to projects that offer an opportunity to create uplifting, comfortable environments. She believes design affects everyone's lives on a daily basis, and she wants her work to provide surroundings where people can thrive in a well-thought-

out, stimulating environment. Brenna's projects incorporate colors, materials, and finishes in an overall scheme that also provides clear wayfinding guidance and cues to building visitors.

Certification: National Council for Interior Design Qualifications

Education: Bachelor of Science, Education & Human Sciences with an emphasis in Interior Design, South Dakota State University

- Daktronics
 - » Entrance & Workspaces Addition Design Concepts, Sioux Falls, SD
 - » Plant/Warehouse Expansion, Redwood Falls, MN
- Department of Veterans Affairs Medical Center Women's Health Improvements, Sioux Falls, SD (Part of VISN 23 IDIQ)
- Department of Veterans Affairs Michael J. Fitzmaurice State Veterans Home, Hot Springs, SD
- City of Rapid City, SD
 - » City Hall Space Study
 - » Phased Interior Renovations
- Northern State University Jewett Regional Science Education Center, Aberdeen, SD
- Southeast Tech, Sioux Falls, SD
 - » Ed Wood Industry & Building Trades Auto Body/Collision Repair Addition & Remodel,
 - » Learning Lab & Student Services "Hub" Facility
- Minnesota West Community & Technical College Tech/ Automotive Building, Canby, MN
- University of Minnesota Southwest Research & Outreach Center Lab Building Remodel, Lamberton, MN
- South Dakota State University Foundation Alumni Center, Brookings, SD
- Sioux Falls Regional Airport Baggage-Claim Expansion + Baggage-Handling System Redevelopment, Sioux Falls, SD

Selected Experience:

- Zeal Center for Entrepreneurship Rebranding & Interior Remodel, Sioux Falls, SD
- Tech Ord Complex Office Addition, Clear Lake, SD
- Midco Technical Operations Center & Warehouse, Sioux Falls, SD
- North Star Mutual Insurance Company Corporate Office Addition, Cottonwood, MN
- Capital Services New Facility, Sioux Falls, SD
- Dakota State University Beacom Institute of Technology, Madison, SD
- Southeast Tech Learning Lab & Student Services "Hub" Facility, Sioux Falls, SD
- Sioux Falls Regional Airport Baggage-Claim Expansion + Baggage-Handling System Redevelopment, Sioux Falls, SD
- Augustana University Froiland Science Complex & Gilbert Science Center Renovation, Sioux Falls, SD
- Department of Veterans Affairs Michael J. Fitzmaurice State Veterans Home, Hot Springs, SD



KELLI OSTERLOO, PE, LC



Kelli is a talented problemsolver with specialized experience in lighting design, rendering, and calculations. Her education in architectural engineering puts her on the forefront of industry best practices and promising technology trends, in the

space where disciplines overlap to make places come to life. She specializes in Electrical & Computer Power Engineering and is the only professional engineer in South Dakota who is Lighting Certified.

Professional Engineer: SD, WY, NE

Certification: National Council on Qualifications for the Lighting Professions

Education: Master of Architectural Engineering, University of Nebraska–Lincoln; Bachelor of Science, Architectural Engineering, University of Nebraska-Lincoln



CHRISTOPHER MAKS, PE MECHANICAL ENGINEER



As a Mechanical Engineer, Chris is involved with highly technical work including the Long-Baseline Neutrino Experiment Facility—part of the Sanford Underground Research Laboratory in Lead, SD. Chris has hands-on experience in HVAC design

and installation, as well as engineering development. He's keenly interested in sustainable energy systems and cost-effective ways to incorporate environmentally sound practices. His training and creative solutions help reduce his clients' long-term operational costs and power needs.

Professional Engineer: SD, WY, NE, ND

Education: Bachelor of Science, Mechanical Engineering, South Dakota State University

Selected Experience:

- South Dakota School of Mines & Technology, Rapid City, SD
 » SD Mines Foundation Person Alumni Center
 - » Civil/Mechanical Dyno Lab HVAC Upgrade
- Northern State University Jewett Regional Science Education Center, Aberdeen, SD
- Sheridan Memorial Hospital Outpatient Center Phase II, Sheridan, WY
- Department of Veterans Affairs Black Hills Health System
 » Electrical Deficiencies Correction Design, Hot Springs, SD
 - » Computer Building AC Unit Replacement, Hot Springs, SD
- Monument Health, Rapid City, SD—Numerous projects, including:

 - » Flormann Clinic Physician Remodel
- Sanford Underground Research Laboratory Long-Baseline Neutrino Facility Surface Engineering, Lead, SD
- City of Rapid City, SD
 - » City Hall Space Study
 - » Phased Interior Renovations
- Sioux Falls Regional Airport Baggage-Claim Expansion + Baggage-Handling System Redevelopment, Sioux Falls, SD

Selected Experience:

- South Dakota School of Mines & Technology, Rapid City, SD
 - » SD Mines Foundation Pearson Alumni Center
 - » Civil/Mechanical Dyno Lab HVAC Upgrade
- Tech Ord New Administration Building, Clear Lake, SD
- Capital Services New Offices, Sioux Falls, SD
- Monument Health, Rapid City, SD—Numerous projects, including:
 - » Patient Financial Services, Human Resources, & IT Offices
 - » Western Hills Professional Building Physician Remodel
 - » Flormann Clinic Physician Remodel
- Sanford Underground Research Laboratory, Lead, SD
 - » Long-Baseline Neutrino Facility Surface Engineering
 - » South Dakota Science & Technology Authority Administration & Foundry Building Re-Roof
 » Ross & Hates Hoist Building Projects
- Sioux Falls Regional Airport Baggage-Claim Expansion + Baggage-Handling System Redevelopment, Sioux Falls, SD

OUR RECORD RESULTS & REALIZATIONS

CASE STUDY: SWEETMAN CONSTRUCTION/CONCRETE MATERIALS



This three-generation family business in Sioux Falls, SD, wanted a modern facility to consolidate its multi-site operations and provide future flexibility for its divisions—including Concrete Materials. The movable wall system's glass walls, doors, and transom panels allow private offices to maintain a sense of openness. Daylight and exterior views extend into central offices. Concrete Materials' products surface in surprising ways throughout the building. A gabion wall feature in the main lobby surrounds a flat-panel display with pink quartzite. The reception desk is cast-inplace concrete. And concrete blocks in a variety of sizes, textures, and colors dot the exterior walls in an offbeat pattern. Industrial and polished looks combine in support spaces such as the employee break room, fitness center, and state-of-the-art training facility.

CASE STUDY: WATERTOWN DEVELOPMENT CORP./DAKOTA TUBE

TSP is providing architecture and engineering services for a series of projects in partnership with the Watertown Development Company (WDC) in Watertown, SD.

This WDC tenant, Dakota Tube, engineers and manufactures pipes, fittings, brackets, couplings, and related supplies for various industries. TSP initially developed cost estimates and conceptual narratives for architecture and S|M|E Engineering to assist WDC with documentation needed for financing. Now, we're working on the full design project for a 42,000 sf expansion of the facility in the Lake Air Industrial Park. The effort will double the size of that building and include space on a main floor as well as in a mezzanine area.

This work represents Phase 2 of Dakota Tube's multi-year strategic-expansion plan. The company anticipates its total investment will be at least \$10 million when Phase 3 is completed in the next two years.





QUALITY OF WORK we're not satisfied until you are

TSP team members pride ourselves in finding the absolute maximum value while carefully considering initial cost, value analysis, life-cycle cost, and your tenants' satisfaction. Creative, thoughtful design adds performance—not cost.

Embedded in all we do

Building Information Modeling (BIM) has changed how buildings are designed. But the benefits of our team's BIM processes extend well into the built project. TSP creates all drawings in Revit. The software suite allows easy visibility, with plans and models on shared servers to maximize seamless integration across design disciplines. TSP coordinates 3D BIM imagery with a related software program, Navisworks, to run a series of "clash tests." Our goal in this phase of design review is to detect any potential overlaps where two or more objects within building systems approach the same space. This identifies which areas require redesign and which simply will need close supervision during construction and installation to avoid change orders.

Logical and forward-moving

As the project moves through each phase of development, the impacts of earlier decisions often become more clear. Our end-of-phase project meetings allow us to review the design and documents completed so far. We'll break down the most up-to-date cost estimate and discuss systems designs, specifications, operations, and maintenance while getting buy-in from your team. Our QA/QC matrix dedicates time during Schematic, Design Development, and Construction Documentation for peer markup of drawings. Each phase also includes a specification review to make certain the design intent and budget scope is carried through to the small details that make up every material and product selected. This helps us keep change orders low and the project on schedule and budget.

Continuously improving

We're proud of our work, and we strive to continually improve. That can't happen if we simply sit in the office, waiting for the phone to ring so manufacturers can tell us about their latest-and-greatest component or system. We revisit our projects multiple times after they are occupied to see what is and isn't working. When necessary we become students to best understand a client's unique needs. Simply put, we're not satisfied until you are.





Exterior (top) imagery and interior clash-detection feedback from the same project allows design-team members to pinpoint potential problem areas and collaboratively suggest effective course corrections or other resolutions in the virtual world.

COST & SCHEDULE CONTROLS HITTING ALL OUR MARKS

Analyzing cost to match scope and budget

Our experience tells us that continual communication among Owner, design team, and construction-partner team is the surest way to hit budget targets. Meetings with your lead construction professional throughout the design process provide a two-way sounding board. The topics change as the project evolves, but the need for shared information remains constant. A construction partner who is part of the discussion can provide real-time feedback on whether those options are feasible within budget.

Guiding your quick, timely decisions

The TSP team's early, ongoing estimates and constructability reviews all are based on our evolving design decisions. We test the estimate against the budget at each phase to make sure we maintain your priorities.

Our full-time, in-house cost estimator follows constructionindustry trends to assure that your project can be built as planned and on time. We can draw on him as a resource to develop our early figures and constructability reviews.

Adhering to budget

Holding to quality results and budget during construction is at the center of the architect's role. The TSP team will visit regularly as your project is built to observe progress toward the design intent and hold your construction professionals accountable to deliver on those expectations.

Tracking the project schedule

Tracking the schedule during construction falls primarily on the construction professionals, as they are to manage their own efforts. Milestones in each timeline affect those in the other, every step of the way. Our TSP team members will create a realistic design timeline within that larger context. The TSP team's standard is to demand a "critical path" schedule, which has proved the best predictor of potential delays. Our cost estimator stays in touch with constructionindustry contacts to keep an eye on work peaks and valleys. He can advise when we might strike the best bidding climate for a particular project type or primary materials selection. That knowledge helps us establish due dates for bidding documents that make the most of the right timing.

CONTRACT ADMINISTRATION

FULL SERVICE FROM START TO FINISH

Contracts refer to one of the architect's roles as "the interpreter of the contract documents." First and foremost, we are your advocates from multiple perspectives. As your representative in the construction process, the TSP team will uphold your reputation as a preferred partner and your expectations around the quality you define through the design process, related budgets, and schedule.

QUALITY BID DOCUMENTS

Our team will provide design documentation and specifications that work to prevent design oversights, coordination errors, and construction problems. Quality documents are at the heart of efficient bidding and construction practices. The hallmarks of TSP's practice are design that exceeds expectations, technical documents that ensure constructability, and long-term durability.

ON SITE & IN THE TRENCHES

When our TSP team members visit the site, we're there for a reason—to safeguard your investment. That can mean shimmying in crawlspaces and working alongside contractors and subcontractors to better understand their concerns and processes. Much of our on-site role is defined in part by your chosen delivery method. During this phase, we typically spend time in field observation to review conditions and meet with contractors. We work to ensure that—once concealed—transitional details will present no issues that are likely to cause problems for your tenants and maintenance staff.

SOLID CLOSEOUT PROCEDURES

We respect the needs of your construction partner and chosen contractors. All are part of our businessto-business relationship. We work hard to make sure the entire team finishes strong, with proactive communication and timely follow-up.

TOOLS TO STAY ON TRACK INTERACTIVE AND EFFECTIVE

Guiding principles

The TSP team always begins by listening as we work with you to establish needs and expectations. You set the direction and the pace of change. We help you keep all parties engaged and informed. Many variables impact decisionmaking and priorities, but understanding your needs now and in the future is needed to achieve long-term success and build consensus. As we share information and identify opportunities, we'll periodically revisit our assumptions to ensure continued support.

Project Manager Mark Averett will proactively coordinate all project details to achieve budgets, meet schedules, and provide high-quality, constructable design solutions.

A cohesive, defined plan

The Project Manager has primary responsibility to lead team members as we create a shared plan that articulates the project vision, determines trigger points for decisions and actions, and best positions the project for success. As a whole, the plan includes:

- Contacts and communication protocols.
- Scope of work.
- Goals and objectives.
- Schedules and milestone dates/deliverables.
- Current budget and construction estimates.
- Standards.
- Meeting agendas and minutes.
- Any potential project challenges and recommendations for surpassing them.

Our team's toolkit

Chase will document and disseminate the plan and maintain information in a central location. Our team's common electronic document formats further facilitate communication and enable quality control. We use the following tools to develop, monitor, and make adjustments to the plan:

- Zoom and/or Microsoft Teams for virtual meetings.
- Microsoft Project, for scheduling.
- WinEstimator, for cost estimating.
- Blue-Beam Electronic Stick Set Protocol, for amending and revising designs.
- Submittal Exchange, a Web-based program for contract administration.

TSP 'ROAD MAP'

Our comprehensive Project Road Map serves two purposes. First, it lays out all the design-related tasks necessary to coordinate the multidisciplinary effort from visioning and programming through construction. Second, it establishes the correct sequence for this work, assigning dates for milestones we must reach before taking the project forward. This not only keeps team members on track but also informs the District and other stakeholders of progress and crucial dates that may require input or approval.

QUESTIONING ASSUMPTIONS

It can be difficult to keep so many pieces in their proper order once a project gains momentum. Initiating key conversations at critical points uncovers layers of information about you, your operations, and your project needs. Our goal is to discover each detail at the exact moment it can be incorporated most effectively into your design. We'll use our skills and experience to minimize backtracking and do-overs. It costs time and money to make changes after certain elements are in place.

MOVING FORWARD

The Road Map also helps us maintain a sense of urgency in the communication process. The early stages of Conceptual Design can feel a bit like a roundabout at an intersection. Every choice seems to depend on everything else. That's enough to send us around the circle again. But at several points in each project, we must decide which direction we'll take. If we put off those decisions, we push back other deadlines and jeopardize the schedule.

KEEPING YOU INFORMED

The Road Map holds team members accountable within TSP and across our consultant firms. The tool also sets clear expectations for Owner involvement. It outlines a schedule for regular check-ins to share updates and gather input from all stakeholders. Because you stay informed on progress, you know in advance when you'll need to direct the team to explore one option over another.

AVAILABILITY NEARBY & READY TO HELP

TSP has demonstrated our commitment to Rapid City and Black Hills Region clients through day-to-day actions and project results. We remain dedicated to providing quality and responsive services to clients and partners. The TSP team's project leadership, architecture, and engineering specialists all are downtown, in the renovated Carnegie Library on Kansas City Street. We're there when you need us, and even when you don't. We live, work, and play in the same backyard. We're neighbors, and we'll treat you like one. Availability is partly about proximity. But it also is about setting priorities, allocating resources, and delivering on our promises. We've selected TSP team members for your project based on the needed skills and experience, as well as current workloads. Your dream team does you no good if they are wrapped up in other projects. We assure you that from design leaders to sound-system experts, we are ready and eager to commit ourselves to your success.

FAMILIARITY

TSP has maintained and operated a Rapid City office since 1973. Our people draw inspiration from many sources, solving increasingly complex operational challenges with designs that complement the Black Hills' natural beauty. We've developed several signature buildings for SD Mines, including the Pearson Alumni Center, Student Recreation & Wellness Center, and the home of the Chemical & Biological Engineering + Chemistry programs. We're now entering the last stages of City Hall Renovations. Other ongoing work includes the South Dakota Department of Transportation Tilford Point-of-Entry Replacement and a series of projects for Monument Health in Rapid City and Sturgis.





Clockwise from top: South Dakota School of Mines & Technology Student Recreation & Wellness Center, Department of Veterans Affairs Michael J. Fitzmaurice State Veterans Home, City Hall Phased Renovations



Architecture Engineering Planning

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