

Town of West Yellowstone

Town Council Work Session

Tuesday, January 15, 2019

West Yellowstone Town Hall, 440 Yellowstone Avenue

West Yellowstone, Montana

6:00 PM

Agenda

Public Comment Period/Council Comments

6:00 PM – Engineering Services Proposals Presentations

- Stahly Engineering
- Forsgren Associates

7:00 PM – 80 Acres Conceptual Plan, ThinkTank Design Group

The public is invited to attend.





November 7, 2018

Town of West Yellowstone
Dan Sabolsky, Town Manager
West Yellowstone, MT

Subject: Stahly Engineering & Associates' response to Request for Qualification for Engineering Services

Dear Mr. Sabolsky:

It has been a pleasure to work with the Town of West Yellowstone on various projects in recent years, including development of the Town's GIS System and structural and civil engineering for the Learning Center. Working on these projects has helped us gain insight into the needs of your Town. Not unlike the many other small to mid-sized communities we are currently working with, aging infrastructure, maintenance issues, building requirements, and a long list of Town department needs all require careful planning and solutions that fit your community. As the City's on-call engineer we can help you tackle those pressing needs with a team that is knowledgeable and experienced in the areas of focus that are most likely to need professional engineering services: streets, parks, sidewalks, waste management, buildings, water supply and distribution, and sewer collection.

Stahly Engineering's priority and focus on smaller communities uniquely qualifies our firm to understand your needs and provide engineering services that are appropriate for your community. Our staff enjoys the personal relationships they build within these small cities and towns. We appreciate the variety of projects we can be involved with working with local government to build safe and vibrant communities.

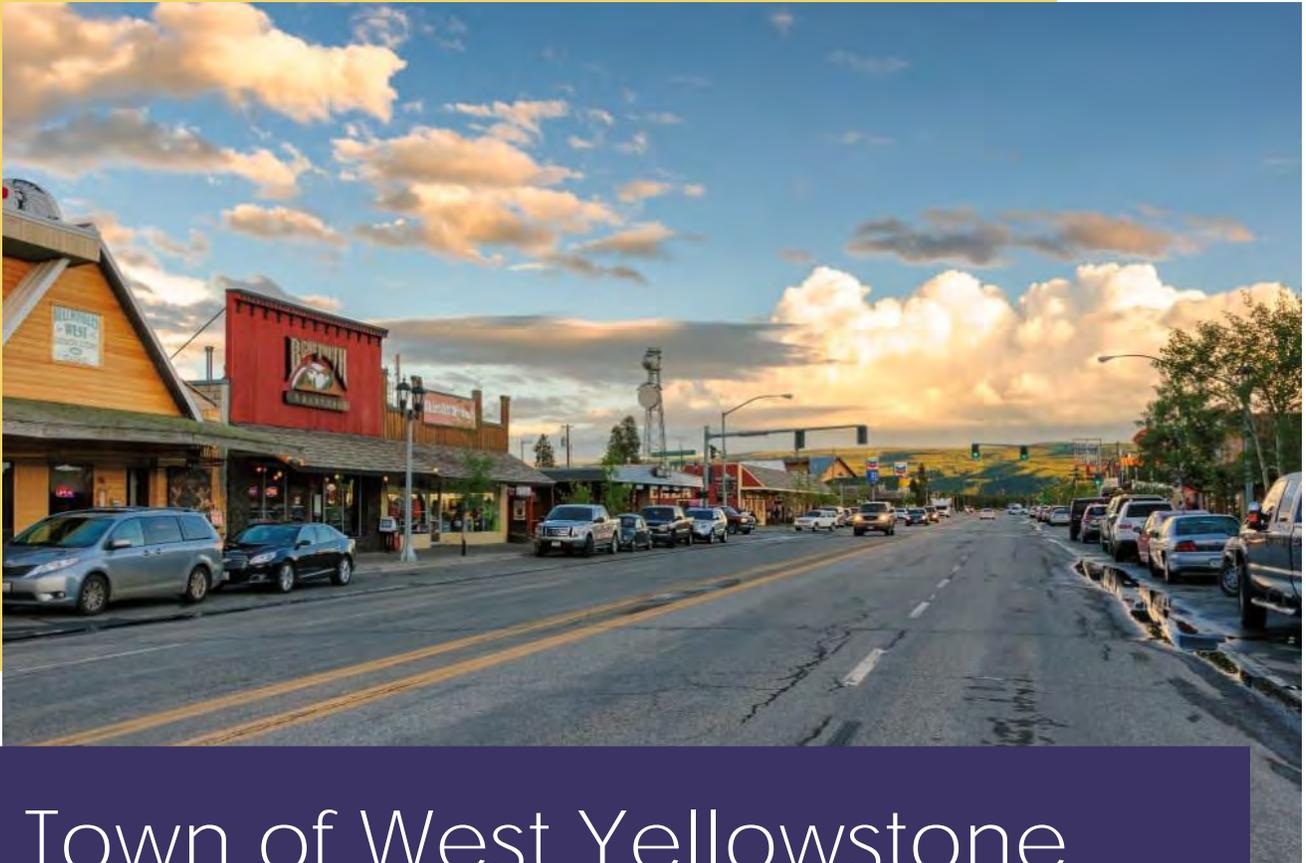
We will check in within the next week or so to see if you have additional questions for us. We are excited to be part of the West Yellowstone team.

Sincerely,

Stahly Engineering & Associates

A handwritten signature in blue ink, appearing to read "Theron Thompson", written over a light blue horizontal line.

Theron Thompson, P.E.
Bozeman Office M



Town of West Yellowstone Statement of Qualifications 2018



Stahly Engineering & Associates

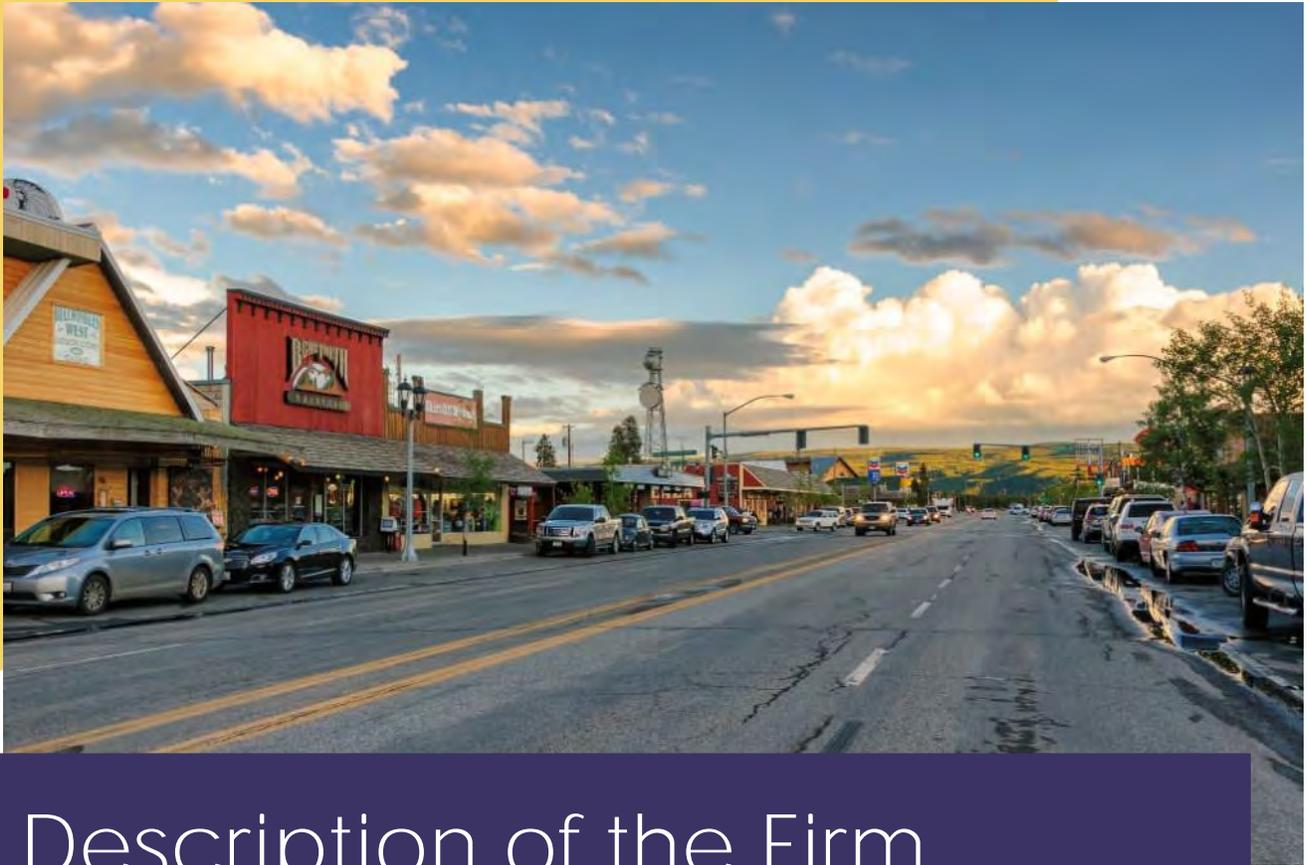
851 Bridger Dr., Ste. 1

Bozeman, MT 59715

406.522.8594

TABLE OF CONTENTS

Stahly Engineering & Associates _____	3
Description of Our Firm _____	3
Firm Principals _____	4
Primary Representative/Client Liaison _____	4
Understanding of Needs _____	5
Organizational Chart _____	8
Staff Qualifications _____	9
Civil Core Team _____	9
Structural Core Team _____	10
Transportation Core Team _____	11
Grant Assistance Core Team _____	12
Survey/GIS Core Team _____	12
Construction Administration Core Team _____	14
Current and Relevant Projects _____	15
Experience _____	15
Working with the Town of West Yellowstone _____	15
Similar Project Experience _____	16
Current Municipal and Related Clients _____	30
Current and Projected Workload _____	31
References _____	32
Unsatisfactory performance or legal proceedings _____	37



Description of the Firm



STAHLY ENGINEERING & ASSOCIATES

Description of Our Firm

Stahly Engineering has been serving rural Montana communities with professional services since 1970. We are a full-service civil engineering firm, employing 50 employees, and offering services including water, wastewater, site development, transportation, and structural engineering consultation. We also employ professional surveyors and GIS professionals, with crews in our Helena, Bozeman, and Billings offices. Assisting our clients from initial planning and funding to final construction is achieved through employment of grant writers, planners, and construction inspectors.

At Stahly, we are focused on providing “exceptional professional services to communities and clients”, as stated in our Mission Statement. We pride ourselves in being an organization that prioritizes professional services before business; rather than a business that provides professional services. We feel this is a very specific mindset that sets us apart from our competitors in the industry, especially larger firms.

Serving the Town of West Yellowstone as your on-call engineer will be a familiar role for our firm. We hold a number of on-call contracts with small to mid-sized towns, cities and counties and find that this is a great fit for our staff and the expertise and personal service they can provide. We place each term client at the top of our priority list. As with all of Stahly’s term clients, our goals for serving the Town of West Yellowstone are to be there when you need us, find solutions that fit the Town, and provide lasting value in the services we provide. We achieve these goals with responsive service, staff that can provide all of the assistance the Town may need, a practical approach to planning and budgeting projects, and utilization of the Town’s financial resources in a responsible manner.

Stahly Engineering & Associates is committed to sustainable growth driven by exceptional professional services to communities and clients. Our company will deliver services through efficient, innovative, and practical methods to meet specific goals and objectives using technically based solutions. We value our employees, provide opportunities, and match team strengths to project needs.



Firm Principals

Greg Benjamin, P.E., C.E.O., President, Project Principal

Greg has been practicing engineering in Montana for over 23 years. He is experienced in project funding, design, and management. Greg's technical expertise is structural and civil design and construction. His civil experience includes site development, roads, trails/sidewalks and water distribution and sewer collection systems. Greg also has planning and grant experience, which helps him assist Montana communities in successfully funding infrastructure needs.

Dan Stahly, P.L.S., Vice President

In addition to his role as Vice President of Stahly Engineering's Board of Directors, Dan also serves as the Survey Department Manager with his focus on land surveying, mapping, and planning. He has over 25 years' experience in the land surveying and civil engineering arenas. He also leads staff in assisting Montana communities with Subdivision Administration, Technical Review, and Examining Land Surveyor services and consulting. Dan develops and presents seminars across the state on topics such as professional land surveying, record research, land use planning, and the Montana Subdivision and Platting Act.

Byron Stahly, P.E., Past President, Quality Manager

Byron is the Quality Manager for Stahly Engineering. In this role, he mentors staff, provides quality assurance/quality control reviews on plans and engineering reports, and participates in business development and client relations activities. He is uniquely qualified for his role, having served as the president of the firm for the past 16 years and as the Transportation Department Manager. Byron's experience includes many facets of civil engineering with specific areas of expertise including transportation engineering, site development engineering, and storm water management.

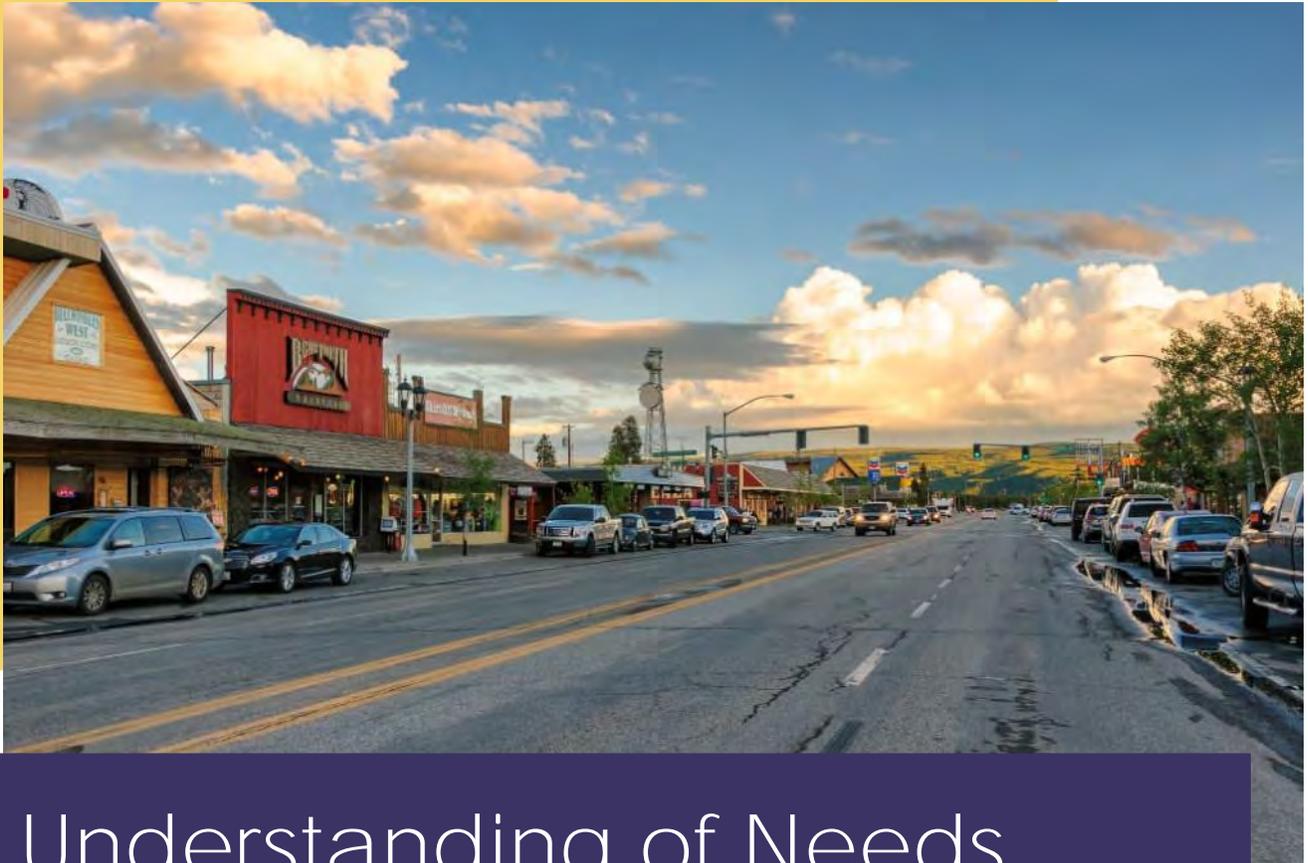
In 2013 and 2016, Stahly Engineering & Associates expanded ownership to include the following Associate Principals: Robie Culver, Clint Smith, C.E.T., Ryan Rittal, P.E., Cordell Pool, P.E., Kurt Thomson, P.E., Nick Fish, P.L.S./E.I., Dave Gates, P.E., Amy Strainer, Phil Bachofner, P.E., Theron Thompson, P.E.

Primary Representative/Client Liaison

Theron Thompson, P.E.

Theron is the Office Manager of Stahly's Bozeman office. He also serves as the Structural Department Technical Lead. Theron has 15 years of experience in project management and designing buildings structures. His project management experience includes directing multi-disciplined teams in successful residential, commercial, industrial and nuclear projects. His structural experience ranges from designing bridges to detailed plans for single and multi-family residences, office buildings, retail buildings, industrial structures, hospital renovations and schools. Theron's designs have used a variety of materials including reinforced concrete, tilt-up concrete, structural steel, light gauge steel, masonry, timber and log. Theron is familiar with the engineering needs of the Town of West Yellowstone and will use his knowledge of Town government to build relationships and produce quality projects.





Understanding of Needs



UNDERSTANDING OF NEEDS

The Town of West Yellowstone is unique among municipalities in Montana. It's character ranges from a sleepy little village to a bustling metropolis during times of the year when visitors arrive to take advantage of the splendor of the area. Stahly Engineering understands the challenges this fluctuation in "residents" creates for Town government.

Our team has worked in and for West Yellowstone and knows that in serving as the Town's engineer we can meet the high expectations of Town staff, leaders, and residents. The staff at Stahly Engineering want to be part of helping West Yellowstone meet its goals for being a great place to live, work and play. We have experience working toward those goals in other communities where economic development, recreational opportunities, and public health and safety must all be considered when setting priorities for the infrastructure and other responsibilities that fall on the municipal government.

The *Current and Relevant Projects* section of this Statement of Qualifications (SOQ) describes projects Stahly Engineering has completed in and for the Town. This project work, including assisting the implementation of a Geographic Information System (GIS) for Town infrastructure, gives our team institutional knowledge of Town systems, standards, and desire for improvements.

In preparation for submitting our qualifications to the Town of West Yellowstone Town Engineer, our team reviewed the most recent Capital Improvements Plan and discussed priorities with the Town Manager. The projects that have been identified as priorities include water and sewer upgrades, sidewalk maintenance, street maintenance and improvements, and a variety of public facilities upgrades. Stahly Engineering has staff with expertise that can assist with each of these priorities from initial planning to funding to design and construction. Our team is fully available to work with Town staff to define solutions that are the "right fit" for the budget and the overall goals of the Town.

Stahly Engineering has staff with expertise that can assist with each of West Yellowstone's priorities from initial planning to funding to design and construction. Our team is fully available to work with Town staff to define solutions that are the "right fit" for the budget and the overall goals of the Town.

Stahly Engineering has a proven method of serving municipalities through an "on-call" term contract. We have found this model to serve communities well as we utilize our variety of survey, planning, grant writing/administration, engineering, and construction administration resources for the benefit of our client. Our process starts with assigning a client liaison who serves as the initial point of contact for any project requests. Theron Thompson, P.E. has been assigned that role for West Yellowstone. Theron identifies the Stahly Engineering project manager who best fits the needs of the project and facilitates the scoping process with Town staff. The size of the project and the overall scope determines the next steps in completing an assigned project.

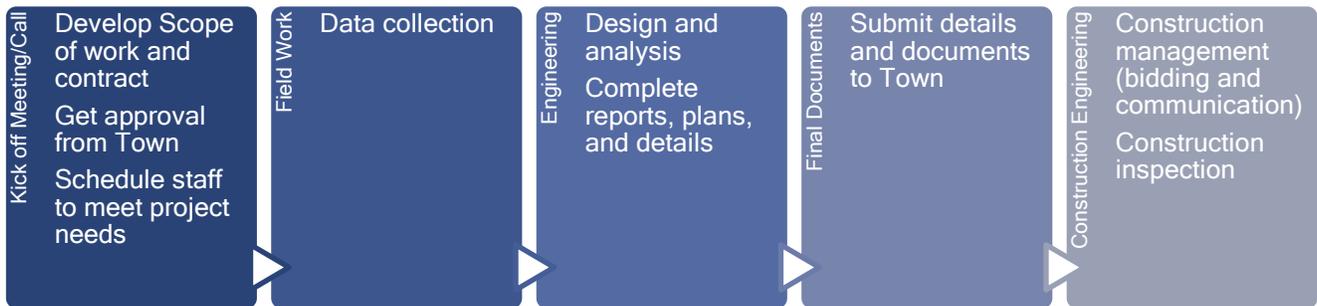


No two projects are exactly alike but, in general, the projects we manage are small projects, under \$10,000 in total cost or large projects, over \$10,000. For small projects, our goal is to efficiently provide the level of service needed to ensure a quality product with reasonable engineering design fees and get the project completed in a timely manner. These are the day to day projects where our commitment to serving as an extension of your staff is obvious. As the on-call engineer, we want to be available to the Town with just a phone call or email.

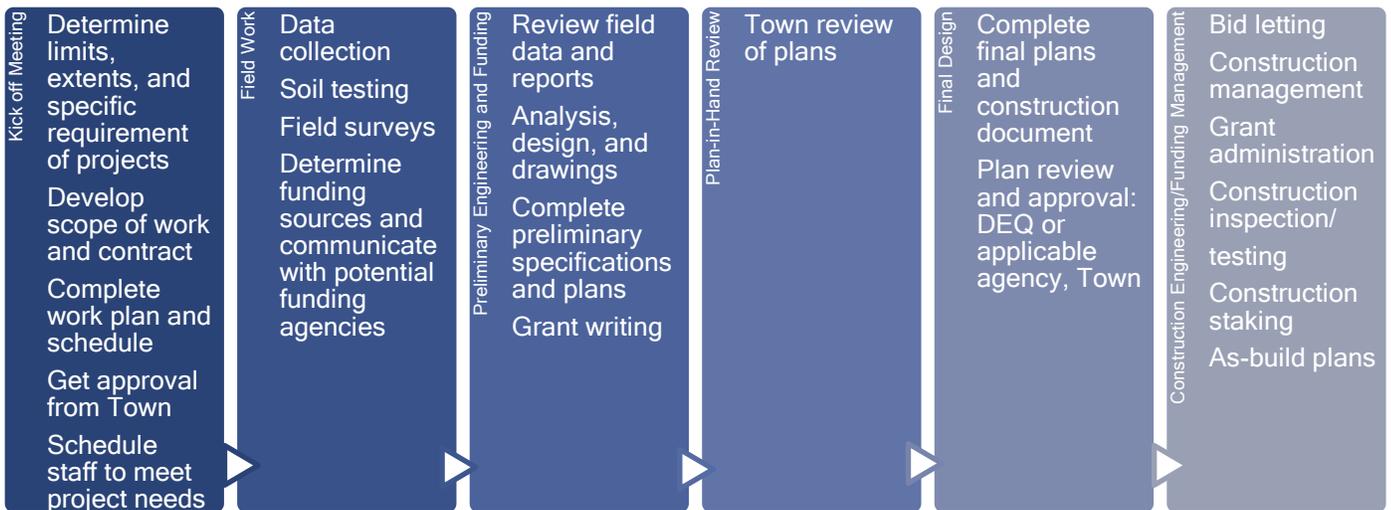
Likewise, for projects over \$10,000 we seek to provide value while ensuring that all appropriate approvals and details are carefully considered throughout project development. While these projects require a bit more formality of scoping and contracting, we are committed to careful planning to avoid surprises in budget or schedule.



SMALL PROJECTS



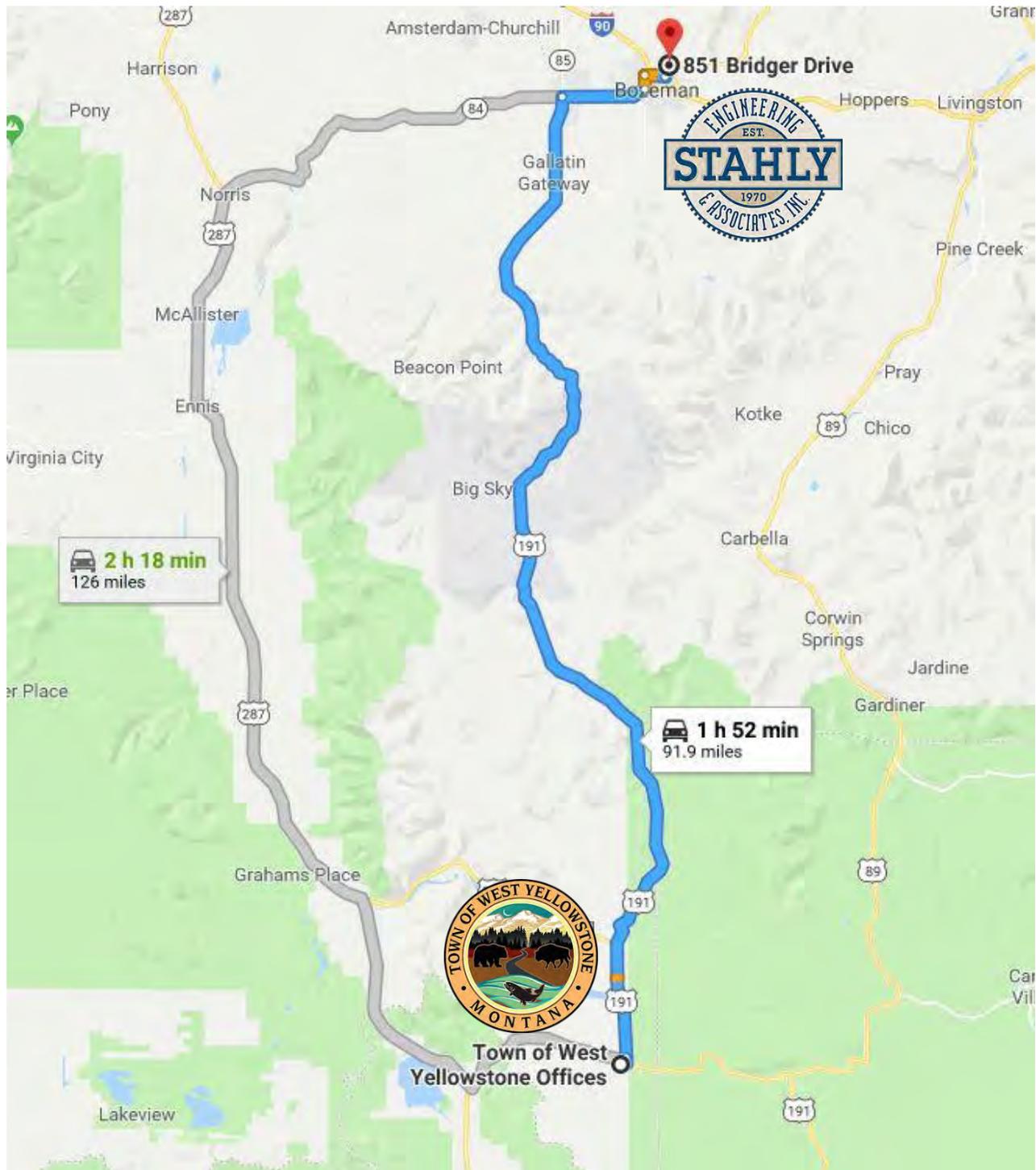
PROJECT CONCEPTION



LARGE PROJECTS



Serving West Yellowstone primarily from Bozeman means we are immediately available as needed to provide day to day engineering services. We consider the Town our “local” service area and commit to being responsive to all requests for services. Similar relationships have been built with communities throughout the state as we serve as their municipal engineer. We encourage you to contact our clients listed in the *Current Municipal and Related Clients* section of this SOQ. They will tell you that we are a valuable extension of their limited public works staff. Our intention is to do the same for West Yellowstone.





Organizational Chart



The Stahly Engineering & Associates Team Directly Serving the Town of West Yellowstone

Key team members assigned to West Yellowstone Anticipated Areas of Need



Theron Thompson, P.E.
 Primary Representative/Client Liaison
Primary Point of Contact

Greg Benjamin, P.E.
 Project Principal

CIVIL CORE TEAM

Kurt Thomson, P.E.
 Site Development Project Manager
Ryan Rittal, P.E.
 Water/Wastewater Project Manager
Cordell Pool P.E.
 Technical Lead
Greg Steckler, P.E.
 Technical Lead
Zach Lowe, P.E.
 Project Engineer
Mark Juras, P.E.
 Staff Engineer
Paul Herbst, E.I.,
 Staff Engineer

STRUCTURAL CORE TEAM

Theron Thompson, P.E.
 Structural Project Manager
Phil Bachofner, P.E.
 Project Engineer
John Nicholas, E.I.
 Staff Engineer
Rick Snidarich, E.I.
 Staff Engineer
Erin Olson
 Designer

TRANSPORTATION CORE TEAM

Dave Gates, P.E.
 Transportation Project Manager
Jerry Gray, P.E.
 Technical Lead
Steve Jenkins, P.E.
 Project Engineer
Jim Nallick, P.E.
 Project Engineer
Arne Wiebe
 Lead Designer

SURVEY/GIS CORE TEAM

Dan Stahly, P.L.S.
 Survey Project Manager
John Pugh, P.L.S.
 Survey Crew Chief
Brian Kray, L.S.I.
 Survey Crew Chief
Nate Bolton
 Survey Technician
Ryan Harbach
 Survey Technician
Maxim Shchemelinin
 GIS/Survey Technician

Project Support Services

Construction Administration

Clint Smith, C.E.T.
 Construction Administration Manager
Nate Peressini, P.E
 Construction Administrator

Grant Assistance Core Team

Robie Culver
 Grant Writing/Administration Project Manager
 CCIP/Growth Policy Coordinator



Staff Qualifications



STAFF QUALIFICATIONS

On the following pages, you will find information about the core team for the Town of West Yellowstone. This team is primarily based in our Bozeman office. Theron Thompson, P.E. will serve as the client liaison and single point of contact for the Town. This means, once a project arises, West Yellowstone staff will contact Theron. Theron will analyze the scope and decide which team is best fit to serve the town. Once the team is chosen, the specific Project Manager will take over as the liaison for that project. Theron will stay involved as necessary to ensure all of the resources at Stahly Engineering are available for the Town. You can find an organizational chart of our entire company, as well as detailed resumes for the core team, in Appendix A.

Civil Core Team

Kurt Thomson, P.E., Site Development Project Manager

Kurt has over 20 years of civil engineering experience and is Stahly's Site Development Department manager. Kurt has managed projects for municipal and private clients. His experience in a wide range of projects gives him the ability to manage engineering tasks from planning to construction. Kurt graduated from MSU with a civil engineering degree and is licensed to practice engineering in Montana and Wyoming.



Ryan Rittal, P.E., Water/Wastewater Project Manager

Ryan is Stahly Engineering's Water and Wastewater Department Manager. He has been very successful providing local government clients with planning, funding, design, and construction administration of upgrades to their systems. He and his team of infrastructure experts will help the Town of West Yellowstone determine solutions to manage water, wastewater, and storm water issues. Ryan has a bachelor's degree in civil engineering from MSU and is a licensed professional engineer in Montana and North Dakota.



Cordell Pool, P.E. Technical Lead

Cordell has 22 years of engineering and project management experience, with work emphasis on site development for both public and private entities. Cordell takes a multi-faceted approach to land development by incorporating land constraints in planning, water supply and distribution, wastewater collection and treatment, storm drainage, and street design concepts into his designs. Cordell is an MSU graduate and is a licensed P.E. in Montana



Greg Steckler, P.E.

Greg has been a project engineer for Stahly for five years. He provides a wealth of knowledge in site development engineering and water and wastewater design. Greg has experience in creating submittals and overseeing construction of water and wastewater facilities. Greg has been an integral part of project planning, design, and construction administration for very recent public and private infrastructure projects, including a large upgrade to the City of Hardin wastewater treatment facility.



Zach Lowe, P.E., Project Engineer

Zach has over 22 years of civil engineering and project management experience. He specializes in site-civil design, land development, and utility design. Zach will assist with site development projects in West Yellowstone as a project engineer. He has extensive experience working on these types of projects throughout the City of Bozeman, as well as other Montana communities.

**Mark Juras, P.E., Staff Engineer**

Mark is a second-generation Montana Civil Engineer. His higher education includes a Masters of Science in Civil Engineering from Montana State University, Bozeman. Mark has worked in full time private civil engineering consulting for 5 years, and has been with Stahly Engineering & Associates since 2017. Mark brings knowledge and proficiency in the fields of construction engineering, subdivision design, and site development. Mark is experienced in working with large design teams, clients, and contractors to design, build, and close out civil projects successfully.

**Paul Herbst, E.I., Staff Engineer**

Paul graduated from Montana State University with a Civil and Mechanical Engineering degree and has four years of experience in civil design. He assists with design and construction administration with site civil, water, and wastewater projects. He also provides site design, construction inspection, and site inspection for various clients.

**Structural Core Team****Theron Thompson, P.E., Structural Project Manager**

Theron will serve as West Yellowstone's client liaison and project manager on any structural projects that may arise. Theron has 15 years of experience in project management and designing buildings structures. His project management experience includes directing multi-disciplined teams in successful residential, commercial, industrial and nuclear projects. His structural experience ranges from designing bridges to detailed plans for single and multi-family residences, office buildings, retail buildings, industrial structures, hospital renovations and schools. Theron's designs have used a variety of materials including reinforced concrete, tilt-up concrete, structural steel, light gauge steel, masonry, timber and log.

**Phil Bachofner, P.E., Project Engineer**

Phil is Stahly's Structural Department manager and will serve as project engineer and quality reviewer on West Yellowstone structural projects. Phil has more than 12 years of experience in the field of structural engineering in Montana. His diverse experience includes numerous building types and building systems: structural, steel, reinforced concrete, masonry, cold formed steel and complex timber and log systems. Phil is skilled in all aspects of project management, including initial project scoping and setup, team coordination, time allocation, scheduling, construction administration, and shop drawing review. Phil has experience with working in numerous different states and jurisdictions.



John Nicholas, E.I., Staff Engineer

John has three years of experience in structural engineering. He provides structural design for residential and commercial construction of new projects and renovations. He is skilled in the use of Revit and AutoCAD software, along with structural analysis software.

**Rick Snidarich, E.I., Staff Engineer**

Rick Snidarich earned a Master of Science in Civil Engineering (Structural Option) from Montana State University in 2016, where his research focused on the development of Ultra High-Performance Concrete for the Montana Department of Transportation. His technical knowledge of engineering mechanics and material design, as well as structural analysis software has proved to be an asset to the structural team. Since joining Stahly Engineering, he has had extensive responsibility as a structural project engineer for the East Helena Prickly Pear Elementary, Judith Basin County Library renovation and elevator installation, and the HRDC Head Start building in Belgrade projects.

Erin Olson, Drafter

Erin has over 15 years of experience in the construction field, serving the past 8 years primarily as a Draftsman. He is highly experienced in providing detailed drafting of civil and structural engineering projects and estimating and providing project management for preengineered metal building. He is skilled in the use of Revit, Acad, Civil 3D, Sds, Mbs & Fab-Suite. Since being at Stahly, he has been the lead Revit modeler for various large-scale projects such as the Dick Anderson Construction Office Building, East Helena Elementary School, the St. Peter's Radiology and Oncology Renovation, and Central Montana Head Start.

**Transportation Core Team****Dave Gates, P.E., Transportation Project Manager**

Dave has over 12 years of experience in transportation engineering. His background in transportation engineering comes from expertise in the construction field and five years of transportation project management at Stahly. He has recently worked on large MDT rehabilitation projects in Butte and Westby. He has also been instrumental in funding and planning Transportation Alternative (TA) projects (trail and ADA sidewalks) in Deer Lodge and Livingston. He was part of the team that designed the first ADA sidewalk upgrades that utilized TA funding. That project was on 7th Avenue in Lewistown. Dave also has expertise in environmental documentation and reporting. He is an MSU graduate and is a licensed P.E. in Montana and North Dakota.

**Steve Jenkins, P.E., Project Engineer**

Steve assists with transportation projects and conducts PASER evaluations for Stahly Engineering client, like he did for the Town of West Yellowstone. He has been practicing engineering in Montana for over 23 years. Steve has established long-term relationships with town, city, and county professionals by prioritizing client's training needs and assisting them with project development. Steve graduated with civil engineering bachelors and masters degrees from Utah State University. He is a licensed P.E. in Montana and Utah.



Jerry Gray, P.E., Project Engineer

Jerry serves as a technical lead for the Stahly transportation team. His experience includes numerous MDT projects as well as private civil engineering projects throughout Montana. Jerry has been involved in project management, construction engineering, street, highway, and interchange design, hydraulic analysis, culvert design, and storm drain design over the past 30 years. Jerry received his civil engineering degree from the University of Washington and is licensed to practice engineering in Montana, Wyoming, and Washington.

**Jim Nallick, P.E., Project Engineer**

Jim has almost 20 years of transportation engineering experience. He spent 13 years working for MDT, with a special emphasis on hydraulics and roadway design. Jim has designed all hydraulic elements on a rehabilitation in Westby and provided design of updated inlets, ADA curb ramp conceptual design, roadway reconstruction design, and oversight of road plans preparations in Butte. Jim graduated from MSU with his bachelor's degree in civil engineering and is a licensed professional engineer in Montana.

**Arne Wiebe, P.E., Lead Designer**

Arne will serve as the lead designer for the West Yellowstone Transportation Team and other teams as needed. His extensive experience in Computer Aided Design (CAD) includes projects in site civil engineering, structural detailing, and overall transportation facility design utilizing a variety of software packages. Arne is a master at road design with extensive MDT and local road design experience. His knowledge of roadway design includes adherence to ADA design standards, safety elements, and right-of-way. Arne attended Oregon Poly Technical Institute to study AutoCAD.



Grant Assistance Core Team

Robie Culver, Grant Writing/Administration Project Manager

Robie will assist the Town of West Yellowstone with determining opportunities for grant funding. Her experience with a variety of grant types ranging from wastewater systems to bridges to public facilities gives the Town a valuable resource for acquiring funding as necessary. She also serves as grant administrator and project coordinator on grant funded projects. Robie has been instrumental in assisting many Montana communities with long-term planning activities. She received a bachelor's in social work from the University of Wyoming and has been working in the engineering field for almost 20 years.



Survey/GIS Core Team

Dan Stahly, P.L.S., Survey Project Manager

Dan serves as a principal and Survey Department Manager for Stahly Engineering. His focus is on land surveying, mapping, and planning. He has over 25 years of experience in performing and overseeing "field to finish" land surveying and design projects. He also leads staff in assisting Montana communities with subdivision administration, technical review, and examining land surveyor services and consulting. Dan's clients and staff appreciate the positive working relationships he develops and the expertise he brings to the field of land surveying.



John Pugh, P.L.S., Survey Crew Chief

John is a Professional Land Surveyor and a Senior Staff Project Manager for Stahly's Bozeman office. John has over 30 years of experience and is well versed in all aspects of the land surveying profession. The majority of his work involves boundary and topographic surveys, but he also has significant experience in construction and floodplain surveys. John has extensive background and knowledge in local, state and federal guidelines and policies. He is also responsible for conducting office to field coordination, management and land surveying on a large variety of projects

**Brian Kray, L.S.I., Survey Crew Chief**

Brian has 14 years of surveying experience. He also provides drafting support and technical assistance to our CADD department. Brian's strengths in surveying, Auto CAD and construction methods make him an asset to any project team. Brian's surveying experience has utilized GPS, conventional and Robotic total station work, and geomatics software to perform a variety of surveys including, boundary surveys, topographic surveys, utility and as-built surveys as well as underground mine mapping and development surveys.

**Nate Bolton, Survey Technician**

Nate has one year of experience in land surveying at Stahly Engineering, where he has gained considerable knowledge of survey practices and equipment. He completed a number of engineering surveys for projects within Bozeman. His education has been instrumental in the use of GPS and data processing methods.

Ryan Harbach, Survey Technician

Ryan is a 2017 graduate of Montana State University with a minor in Land Surveying, pursuing licensure as an LSI. Ryan's duties include survey, GIS, CADD and subdivision reviews and submittals. His experience includes topographic surveys of road corridors and bridges, ALTA surveys, construction staking, control networks, and aerial surveys, using both conventional and UAV (drone) methods. Ryan is a FAA certified drone pilot expert and has utilized this tool to create 3D digital images and drawings for numerous projects throughout the state of Montana.

**Maxim Shchemelinin, GIS/Survey Technician**

Max obtained a B.S. in Physics from the University of California, Davis and a B.S. in Snow Science with emphasis on Statistics from Montana State University. Max is a survey technician with duties in GIS field and programming involving city and town infrastructure data including work for the Town of West Yellowstone.



Construction Administration Core Team

Clint Smith, C.E.T., Construction Administration Manager

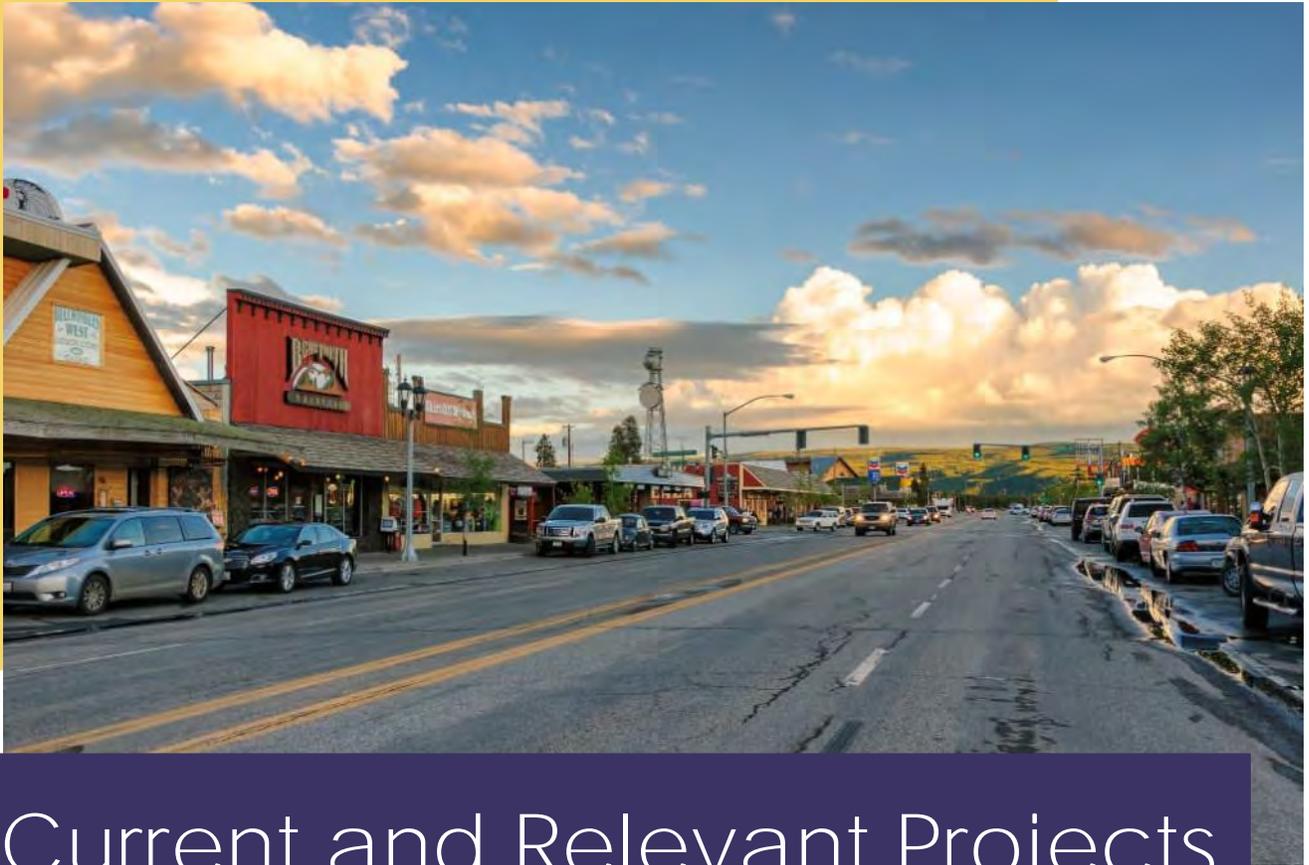
Clint will serve as the construction administrator for West Yellowstone projects. He is a hands-on veteran inspector at Stahly with over 20 years of experience in the field. His strength is in his ability to communicate with contractors and provide owners with quality projects that meet the requirements of the Contract Documents. Clint is also an experienced survey crew chief. Clint has a bachelors of science in construction engineering technology from MSU and is a certified survey technician.



Nate Peressini, P.E., Construction Administrator

Nate has 7 years of experience in construction management and design of engineering projects. At Stahly Engineering, Nate has successfully worked in various departments including inspection, bridge, site development, and transportation. This wide range of experience has translated into comprehensive designs for bridge, culverts, trails, water mains, storm drain systems, and hydraulics.





Current and Relevant Projects



CURRENT AND RELEVANT PROJECTS

Experience

Client specific approach to projects has enabled Stahly Engineering to gain and retain municipal and county clients throughout Montana. We are proud of the number of long-term relationships we have built that help us maintain a consistent workload for our valuable project teams. Our public clients save money and administration time by entrusting a wide variety of services to our staff. Services we provide include:

- Site development - waste and sewer services, parking, grading plans, ADA access, subdivision, coordination of utilities, and permitting.
- Structures - condition analysis, design, and architect led multi-disciplinary projects.
- Construction administration and inspection - bid document preparation, assistance with bid process and award, on-site management of contract services, owner/contractor relationships and communication, construction testing, and certified payroll review.
- Survey - General survey, examining land surveyor reviews, construction staking.
- GIS- Mapping, data collection, database development and management.
- Transportation - roads, streets, rural highways, sidewalks, trails, and bridges.
- Water - source development, treatment, storage, and distribution.
- Wastewater - collection, treatment, and disposal.
- Storm water management - collection, retention, and treatment.
- Planning - Comprehensive Capital Improvements Planning (CCIP), Growth Policy development, Subdivision Administration, and Development Review.
- Grant Writing/Administration - particular experience with Montana Department of Commerce TSEP, CDBG Housing, CDBG Public Facilities, and HOME. Also, infrastructure projects utilizing RRGL, WRDA, and Rural Development. MDT and Federal Highways managed funding - CTEP, TA, and FLAP.
- Project management, technical assistance and consulting.

Stahly Engineering maintains strong working relationships with architectural and engineering subconsultants who supplement our services with expertise in fields outside of the services we offer. These relationships allow our firm to provide an expanded array of services while maintaining management of projects in a manner consistent with our term client's needs. Our project leaders manage subconsultants' cost and quality of work in order to serve the best interest of our term client.

Working with the Town of West Yellowstone

Stahly Engineering has vast experience working with cities and towns like West Yellowstone, as well as recent experience working directly with the town. Projects that Stahly has assisted the Town with include the Learning Center structural and civil design, parking lot snow storage planning, the Town's GIS system, PASER Evaluation, the Frontier Trail TA Application, and the Gallatin County CTEP project that included updating the visitor information sign in West Yellowstone. Stahly Engineering provided design and coordination for a new sign and support landscaping, as well as coordination with MDT for the CTEP grant.



You can see projects we've competed for similar entities below.

Similar Project Experience

Plan Review/Planning Services

Stahly Engineering serves as Subdivision Administrator for 11 Montana counties and towns. This service includes completing land development review, exemption review, preliminary plat application element and sufficiency review, writing staff reports including draft findings of fact, and final plat application review. Included in each review is an examining land surveyor review on all certificates of survey and plats completed by a registered land surveyor. Our staff has streamlined the subdivision review process by creating customized informational sheets for each County and Town to distribute to the public. Below is a comprehensive list of clients currently served:

- Toole County 2010-present
- Pondera County 2010-present
- Prairie County 2013-present
- Butte-Silver Bow County 2013-present
- Carter County 2014-present
- Custer County 2014-present
- Petroleum County 2015-present
- Powder River County 2015-present
- Golden Valley County 2015-present
- Liberty County 2015-present
- Town of Ekalaka 2015-present
- Treasure County 2015-present
- Richland County 2015-present
- Rosebud County September 2018-present

Experience in assisting communities with planning activities including subdivision administration, Capital Improvement Plan preparation, and Growth Policies will benefit West Yellowstone as they continue to emphasize planning activities that deal with their unique community dynamic.

Well planned communities reap the benefits of greater public understanding of infrastructure needs and the role of government in providing for those needs, budgeting tools that help local government stick to a plan, identification and prioritization of long-term goals, and better access to funding. Recognizing our client's desire to do long term planning, Stahly Engineering has been assisting with developing customized Growth Policies and Comprehensive Capital Improvements Plans that have proven to be very enlightening to the communities we serve.

Structural and Site Civil Engineering

Glacier County EMS Facility

Stahly Engineering served as the structural and civil engineer for the construction of a new EMS building in Glacier County. The building, sited on two city lots in Cut Bank with direct access to Highway 2, includes a large shop for multiple emergency vehicles as well as a large wood framed office building. Stahly was involved in the parking lot design, utilities design and storm water management for the building. Permitting with the Department of Transportation



Systems Impact Department for a new access approach and the City of Cut Bank and Glacier County for access, utility easement, and alley closure was also required.

Fergus County Roy Shop

Fergus County provided a new Road and Bridge Department shop for their Roy field location. Stahly Engineering was responsible for structural engineering design, contract documents, assistance in bidding the project and awarding the contract, and construction administration. The new facility is an approximately 2,000 square foot light wood framed building with metal siding and roofing. Amenities include office space and parts storage along with large equipment bays. Teaming with County crews, Stahly Engineering facilitated cost savings by assisting in planning parts of the project as in-kind labor supplied by the County.

Lewis and Clark County Search and Rescue

Stahly Engineering was the structural engineer for this multi-use building for Lewis and Clark Search and Rescue. Structural Engineers detailed drawing and calculations for structural elements that include:

- Foundation design
- Slab and Control joint design and layout
- Framing design
- Roof design
- Cupola/Climbing Wall design and detailing
- Lateral Analysis



We provided all specifications for structural elements and assisted with preparation of contract/bid documents. We were on call during construction to ensure the structural plans are being followed.

Judith Basin County Courthouse/Elevator

Judith Basin County's Courthouse is a historic three-story structure, built in 1920. The building was mostly inaccessible to those with mobility challenges other than a make-shift entrance at the back of the building to the lower floor. Stahly Engineering, as the County's on-call engineer was tasked with putting together a team to renovate the building to make all floors accessible. With a limited budget and a client that appreciated practical approaches to County infrastructure improvement, Stahly Engineering worked closely with an architect to replace interior finishes throughout the courthouse and construct an elevator addition.



Structural engineering tasks included design of an elevator shaft and verification that the existing building would not be structurally compromised by the renovation. The elevator shaft and foundation were coordinated and designed around the specifications of the elevator manufacturer and the architect. The existing building was analyzed to ensure the proposed openings in the interior and exterior walls would not affect the existing lateral or gravity resisting systems. The final solution was construction of the shaft along the outside of

the building, lending to its affordability and least disruption to the limited space and historic features within the building.

Big Horn County Fairgrounds

The team of Stahly Engineering and DSA Architects assisted Big Horn County in long-range planning of facility requirements. The process will ensure the investment they make toward short-term projects fit long-range needs. The planning generally involved:

- Survey/site mapping
- Building placement
- Site grading/drainage
- Infrastructure/utility layout
- Phasing and cost estimating

Phases 1-3 included water and sewer main extensions to the City of Hardin., survey, design, and permitting through DEQ, new 8-inch sewer main throughout the 62+ acre property to accommodate new and relocated buildings, and new 8-inch water main to accommodate existing and future flows and maintain water pressure for the on-site fire hydrant. The new main is routed through the south side of the property and collects from two existing 6-inch mains.

The project required a challenging as-build process due to lack of historic information. Stahly organized several public meetings and took public input during the Big Horn County fair.

Having structural engineers on staff to assist West Yellowstone with building projects sets Stahly Engineering apart from other firms of similar size to ours. The Town will benefit from that expertise as projects, such as an elevator addition to Town Hall or event centers, are considered.

Iron Horse Splash Park

Fallon County hired Stahly Engineering in 2014 to provide civil design and bidding assistance for a 3,500 square foot splash pad and associated changing/mechanical room structure. The project involved verification of proposed pumping, filtration, and disinfection systems. Stahly Engineering provided construction plans and specifications for feature supply piping, recirculation piping, an underground recirculation reservoir, a concrete splash pad and apron, a structure containing two changing rooms and a mechanical room, and site grading. The project included incorporation of splash pad feature information from the vendor into the overall design. Stahly Engineering created bid documents and project manuals for procurement of both the splash park features and the overall project general contractor. Stahly Engineering was then contracted by Fallon County for construction administration and full-time construction inspection on the project.



Roads/Streets/Trails/Sidewalks

Lincoln Street Improvements

Stahly Engineering provided engineering for reconstruction of major streets in Lincoln, Montana, a town with similar climate and use challenges to those faced by West Yellowstone. The streets in Lincoln were in very poor shape with extensive pot holes in most locations. The poor condition was contributed to by a lack of crown and maintenance. The newly formed RID provided for ongoing maintenance as well as reconstruction. The existing chip seal surface was pulverized, shaped to a 3% crown, and compacted. Two inches of crushed base course was placed over the shaped subgrade prior to application of a double shot chip seal.



Bel Air RID Street Improvements

Major repairs were provided for this subdivision adjacent to the City of Helena. Repairs included chip seal resurfacing, crack sealing, asphalt pavement patching (full depth and skin patch), pulverizing, grading, shaping, and paving. Existing curb and gutter was replaced and storm drainage was updated.

Mitchell Avenue, Hardin, Montana

Stahly Engineering surveyed, designed, and provided construction administration and inspection for improvements to Mitchell Avenue through Hardin, Montana. The project entailed widening the driving surface and adding curb and gutter on the west side; dig outs and replacement of failed areas, striping and signing.



Lewistown 7th Avenue ADA Upgrades

Stahly designed 47 new sidewalk corners to ADA standards along a 12-block section of city street in Lewistown. The project provided ADA compliant sidewalk ramps in a residential area connecting Highland Park Elementary School, Kiwanis Park, and downtown Lewistown. The project included new curb and gutter, sidewalk, ADA ramps, signing, and crosswalk striping.

Uptown ADA Ramps, Butte, Montana

This project consisted of replacing sidewalk corridors at ten alley intersection crossings on Park Street and Excelsior Avenue to current ADA/PROWAG Design standards in the central business district of uptown butte. The Stahly Team was involved with multiple stakeholder meetings, technical design review meetings, and prepared a variety of options, alternatives and cost benefit scenarios. We designed 47 ADA ramps at street corners and 21 alley intersection crossings as part of this project. This project was tied to another MDT project in Uptown Butte for design demonstrates our ability responding to changing project priorities and finding solutions for budget driven projects.

Stahly Engineering's work in communities of similar size and climate benefits West Yellowstone as we assist in determining appropriate street and trail specifications and tailor bid schedules to meet budget, shortened construction season schedules, and durability requirements.



11th Avenue Sidewalks, Helena, Montana

The 11th Avenue Sidewalks project consisted of constructing a concrete sidewalk and storm drainage improvements along the south side of 11th Avenue between Hannaford and Fee Street in Helena. The work included site clearing, embankment-in-place, storm drain pipe, manholes and storm drain inlets, crushed base course, concrete sidewalk, ADA ramps, truncated domes, block retaining wall, remove and replace curb and gutter, remove and reset signs, pavement markings, topsoil, and seeding.



Additionally, the contract included work for the Lewis and Clark County Cooperative Health Center (CHC) Parking Lot Expansion and the Valley Bank Parking Lot Expansion. The parking lot expansion work included, embankment-in-place crushed base course, curb and gutter, storm drain pipe and drop inlets, asphalt concrete pavement, pavement markings and landscaping.

Gallatin County West Side Path

Stahly Engineering provided survey, engineering design, and construction and grant administration and inspection for this trail project. Construction of this 8-foot wide asphalt bicycle and pedestrian path was completed using CTEP funds. The path connects the town of Three Forks to the Headwaters Legacy Trail system along the Jefferson River to the Drouillard Fishing Access.



Gallatin County Yadon Road Path

Construction of this asphalt pedestrian trail, concrete sidewalk, and the implementation of a new irrigation crossing to facilitate safe crossing was completed using CTEP funds. This project is located adjacent to Manhattan School in the west right-of-way of the intersection of Dry Creek Road and 5th Street North in Manhattan. Stahly provided survey, engineering design, and construction and grant administration and inspection for this project.



Manhattan Bike and Pedestrian Trail

Stahly provided survey, engineering design, and construction and grant administration and inspection for the construction of approximately two miles of an eight-foot wide pedestrian and bicycle path. This trail connects Altenbrand Park within the Town of Manhattan to the Four Corners fishing access on the east bank of the Gallatin River.



Anna Jeffries School Path, Cut Bank, Montana

An ADA pedestrian trail located behind Anna Jefferies School was constructed in 2016. The path is approximately 1500 feet in length and is 8 feet wide. It connects Highway 213 and 1st Ave NW as well as connecting to the school's sidewalks. The path was constructed of a structural asphalt milling base course and topped with a rejuvenated asphalt milling top course. The materials were part of the cost sharing as required for the project by Glacier County. This allowed for the project to move forward with a limited budget.

Anaconda Historic Street Lighting

This project consisted of design of the old town lighting system for the restoration of city street lights then re-install them on new bases and new underground wire network to all bases. Approximately 300 newly reconditioned boles with new bases reconditioned by a factory in Anaconda were installed. The project also involved trenching and installation of the underground wiring networks for all the lights, and paving of all trenches.

Water/Sewer/Stormwater

Plevna Water Storage and Distribution

The Town of Plevna completed a two-phase water storage and distribution system replacement. Stahly Engineering designed and provided construction administration services for Phase 1 which included the installation of a 204,000-gallon water storage tank, construction of a new pump house with pressure boosting system, replacement of 8,600 lineal feet of water main, and new service connections. Phase 2 completed the replacement of the remaining water mains and services in town with an additional 12,000 LF of mains replaced.

Lewis and Clark County Fairgrounds, Dunbar Area Water and Sewer Connection to the City of Helena

Stahly Engineering provided Preliminary Engineering Reports and assisted with grant applications for a two-phase infrastructure improvement project. The area served included the Lewis and Clark Fairgrounds, a mixed-use area that is comprised of approximately 51 residential and commercial properties, and a training facility for laborer's managed by the Associated General Contractors (AGC).

The improvements to the wastewater system (Phase 1) involved abandoning aging septic systems and a lift station, upgrading collection lines, and providing connection to the City of Helena's wastewater system.

This upgrade to the water system provided a safe source of drinking water to the Woodlawn Addition and the AGC facility that was served by individual wells. The wells were potentially contaminated by the aging septic tanks and drain fields in the area that were abandoned during the Phase I wastewater project. In addition, fire flows were improved to the Fairgrounds and larger distribution lines were provided to serve the new Exhibit Building.



Helena West Side PER and 2016 Grant Applications

An area immediately west of the City of Helena limits has need for centralized sewer service. The area is comprised mostly of medium to high density residential uses with some commercial establishments. The existing infrastructure consists of individual water supply wells and onsite wastewater treatment and disposal systems. The onsite wastewater systems are aging and increasingly failing without viable options for replacement and the possibility of causing environmental and public health and safety issues. Stahly Engineering assisted the City in preparing a PER for the project and provided grant writing to secure the funding to complete it.

Moonlight Basin Infrastructure

Stahly Engineering assisted with the development of Moonlight Basin Ski Area, a community that includes a 200+ lot subdivision. Members of our project team were responsible for general surveying, designing and placing chair lift routes and ski tunnels and bridges, road design, master planning, water and sewer system design, control for aerial photography, and construction staking for all facets of the development.



Stahly Engineering created comprehensive land development planning and engineering for water and wastewater infrastructure for existing and future development. Stahly Engineering's team also explored, developed and permitted a groundwater supply, including water rights along with design of a water distribution system consisting of 32,000 feet of water main. The project also included design of 30,000 feet of pressure and gravity sewer collection system and a 100,000 gpd extended aeration wastewater treatment system with sprinkler irrigation.

Fallon County Wastewater Collection System

The Fallon County WSD application to TSEP for funding by the 2015 Legislature ranked #1 out of 40 applications. Stahly Engineering prepared the Preliminary Engineering Report (PER) that allowed the District to secure both TSEP and RRGL funding for upgrades to their failing sewer system. The PER followed the Uniform Application guidelines required by TSEP and included alternatives analysis, cost estimates, public input, and an environmental assessment.

The District is an unincorporated area of about 110 residents located just east of Baker, Montana. Many of the individual onsite septic systems pre-dated the establishment of MDEQ regulations. As a result, many of these systems do not comply with current regulations. Many of these systems are cesspools, seepage pits, or metal septic tanks with drain fields that have either failed, or have a high potential of failing in the near future.



The solution that Stahly Engineering designed for final construction was a gravity sewer collection system that is connected to the City of Baker's wastewater system. Our construction administration team also served as the on-site inspector.



Gallatin Gateway Wastewater System Upgrades

Stahly Engineering was hired to work with this small gateway community to put in a new wastewater collection and treatment system. This project entails design, permitting, and construction administration for a new wastewater collection system to replace failing on-site septic systems and drainfields. Leachate from the existing drainfields threatens the health of the Gallatin River, which flows along the western boundary of the community. A new gravity collection system along with a new lift station and force main will connect the residents, a school, and businesses within the Gallatin Gateway County Water and Sewer District to an existing wastewater treatment facility owned by the Four Corners Water and Sewer District. Construction is underway with expected completion in Fall 2018.

Terry Wastewater Treatment

The Town of Terry received TSEP and RRGL grant funding from the 2015 Legislature in order to upgrade their wastewater treatment system. Stahly Engineering was responsible for the Preliminary Engineering Report submitted with grant applications. Their funding package also includes a loan from the State Revolving Fund (SRF) and a WRDA grant.



During final design Infiltration and Inflow (I&I) issues were identified that were affecting the efficacy of the existing treatment system as well as the planned expanded system. Several main replacement projects have delayed final design and construction but will greatly enhance the function of the final installed treatment system.

Bridger Pines Wastewater Treatment Facility

The Bridger Pines County Water & Sewer District provides water and sewer service to a community of 60 homes located adjacent to the Bridger Bowl ski area and the Gallatin National Forest near Bozeman Montana. Efforts to replace the community's wastewater system were ongoing for many years when during construction of the original system, springs and rock formations encountered during construction caused an almost immediate failure. The District faced non-compliance orders and a building moratorium until their wastewater issues could be solved. Stahly Engineering helped the District prepare and implement a compliance plan that included preparation of a Preliminary Engineering Report that included analysis of alternatives to solve the issue.

The final chosen alternative was a new zero discharge wastewater system. Meeting all site constraints, the system includes primary and secondary biological treatment followed by disinfection, storage, and spray irrigation on grass hay. In addition to removing conventional pollutants, the system also removes ammonia through nitrification and converts the resulting nitrate to nitrogen gas in a process called denitrification. By doing this, the size of the land application system was reduced to a point where the land cost was economically feasible. The highly treated effluent is applied to a 7.3-acre hay field at agronomic rates, preventing the release of water to the subsurface, local streams, and watersheds.



Infrastructure specialists at Stahly Engineering are currently working with the District to find and treat an adequate water supply well. This will result in a newly developed treated water supply for the subdivision.

Manhattan Wastewater Treatment Facility

The Town of Manhattan, faced with an aging wastewater collection and treatment system and a non-compliance order for the Montana Department of Environmental Quality, retained Stahly Engineering to assist them with preparing and implementing a compliance plan. The plan included extensive inspection of existing collection lines, upgrading those lines, and a final implementation of a state-of-the-art wastewater treatment plant, suitable for a growing community. Stahly Engineering designed and assisted in the implementation of a biological wastewater treatment system that utilizes three separate bacterial communities to accomplish specific wastewater treatment objectives.



City of Hardin Stormwater Study

Stahly Engineering & Associates assisted the City of Hardin Public Works Department with creating a strategy to deal with stormwater issues after a severe flood event. The flood event was estimated at a 500-year storm. The City of Hardin has few conventional (inlets and piping) storm drain systems throughout town. Most of the town is drained by a series of irrigation ditches. These ditches had grown over with grasses, weeds, trees and had accumulated silt which contributed to flooding. After reviewing the situation, Stahly Engineering and the City of Hardin Public Works Department came up with a scheduled maintenance program to clean out and maximize the capacity of the ditches that are used to improve drainage during storm events.

Water, sewer, and stormwater upgrades are EXPENSIVE and highly technical. The funding and infrastructure specialists at Stahly Engineering can assist West Yellowstone in navigating the regulatory requirements involved in those types of projects. Our success with planning and funding will be a benefit to the Town.

Yellowstone County Stormwater Mitigation Report

Dax Simek, the office manager in Stahly's Billings office, conducted a large stormwater mitigation report for a 140-acre residential area north of the Billings Logan Airport. This area in Billings experiences somewhat frequent flooding. Although the client for the project was Yellowstone County, it involved participation from City staff as well. The main road in the area (Alkali Creek Road) falls under the jurisdiction of both entities. The report was followed up by a culvert analysis and design along Alkali Creek Road to mitigate stormwater runoff through the area.

Cambridge Avenue Outlet

Stahly Engineering upgraded a storm sewer outfall that was a surface discharge to Fleshman Creek in Livingston. During major events like severe erosion of both private and public property, the sediment was being discharged into the creek. Engineers at Stahly utilized a semi-mechanical inlet/manhole to treat the storm water prior to discharge into the creek. They also extended the outfall closer to the creek to minimize erosion.

Grant Writing & Administration

Funding assistance for local government infrastructure projects is not only important for communities like West Yellowstone, it is absolutely essential to the future of small-town Montana. It matters not if a community has a healthy tax base or struggles to balance their bare bones budget, infrastructure projects to upgrade out of date and aging facilities is expensive! It is rarely feasible or recommended for a community to pay outright without assistance for infrastructure improvements.

Robie Culver manages grant writing and administration tasks for Stahly Engineering. Commitment to a thorough planning process and building relationships within the community has paid off for our grant writing/administration staff as they have acquired millions of dollars for infrastructure and public facility projects for our clients.

Planning Grants for Infrastructure and Public Facilities

Large capital projects require feasibility study, alternatives analysis, and preliminary architectural or engineering plans to educate the public that may be affected by increased rates or taxes and to satisfy potential funding agencies that the community has done their due diligence in planning for the project. Stahly Engineering has assisted in acquisition of planning funds for a variety of projects from a number of sources:

Planning Grants		
Community	Type of Planning Grant	Funding Agency
City of Hardin	PER for wastewater treatment	RRGL, TSEP
Town of Winifred	PER for water storage and distribution	RRGL
Town of Wibaux	PER for wastewater treatment	RRGL, TSEP
Bridger Pines County WSD	PER for wastewater	RRGL, TSEP
City of Boulder	PER for wastewater	RRGL, TSEP
City of Conrad	PER/Feasibility Study for industrial park development	Big Sky Trust Fund
Town of Jordan	PER for wastewater	TSEP
Jefferson Local Development Corp	PER/Feasibility Study for Sunlight Business Park development	EDA
Big Horn County	Comprehensive Capital Improvements Plan (CCIP)	TSEP
Carter County	CCIP	TSEP
Fergus County	CCIP	TSEP
Glacier County	CCIP	TSEP
Judith Basin County	CCIP, Growth Policy	TSEP, CDBG
Petroleum County	Growth Policy	CDBG
Petroleum County	Community Center	CDBG
West Mont Rehabilitation Services - Helena	PAR for residential facility	CDBG
City of Deer Lodge	PER for water source	RRGL, RDGP



Water and Wastewater Infrastructure Construction Grant Writing and Administration Experience		
Community	Grant Related Activity	Funding Agency
Lewis and Clark County	Lewis and Clark Fairgrounds/Dunbar Wastewater Upgrades - assistance with PER, grant writing, public relations, grant administration	TSEP, CDBG, RRGL, WRDA, STAG, SRF
Bridger Pines County Water and Sewer District	Wastewater Upgrades - PER, grant writing, public relations, grant administration	TSEP, RRGL, WRDA, SRF
City of Helena	Westside Wastewater Collection System - PER, grant writing	TSEP, RRGL
Town of Jordan	Wastewater Treatment Upgrades - PER, grant writing	TSEP, RRGL
Town of Winifred	Water Storage and Distribution Upgrades	RRGL, RD
Town of Wibaux	Wastewater Treatment	RRGL, TSEP
City of Hardin	Wastewater Treatment	RRGL, TSEP, RD

Public Facilities/Program Funding

Montana Department of Commerce provides access to CDBG Public Facilities and Housing grants and HOME grants. Our grant writer has experience with writing and administering these valuable resources for communities in addition to a small variety of other grants that have helped to fund facilities and programs.

Public Facilities/Housing Grant Writing and Administration Experience		
Community/Client	Grant Related Activity	Funding Agency
Lewis and Clark County	YWCA Renovation - CDBG Housing grant writing, administration and project management for major renovation of historical facility	CDBG Housing and Public Facilities, HOME, Historic Tax Credits
Lewis & Clark County and City of Helena	West Mont Rehabilitation Services two facilities <ul style="list-style-type: none"> • Ron's Place • Farm & Gardens Residence 	HOME, CDBG
Glacier County	Sheriff's Office Records Building - grant administration	HB645 Stimulus Funding
Glacier County	Courthouse Window Upgrades	HB645 Stimulus Funding and Energy Efficiency Community Block Grant
Glacier County	Emergency Medical Services Innovative Home Health Care service added to emergency services department - grant writing	Montana Healthcare Foundation

Trails and Welcome Monuments

Assistance with applications and administration of Community Transportation Enhancement Program (CTEP) and Safe Routes to Schools grants has been provided by Stahly Engineering. That program is now replaced by the Transportation Alternatives (TA) program through MDT and has become a much more competitive process. TA improvements are administered by MDT. Stahly Engineering completed a design for a TA project to improve



ADA sidewalks in Lewistown and is currently involved in a similar project in Butte. Recent CTEP projects:

- Glacier County Welcome Monuments
- Three Forks City Entrance Signs
- West Yellowstone Welcome Signs
- Glacier County Veteran's Memorial
- Cut Bank Central Park
- Anna Jeffries School Path
- Manhattan Trails
- Manhattan Sidewalks
- Browning High School Path
- Big Horn County Fairgrounds Path
- East Helena Safe Routes to Schools Sidewalk Improvements
- Helena 11th Avenue Sidewalks
- Gallatin County West Side Path
- Gallatin County Yadon Road Path
- Anaconda Deer Lodge County Copper Sands Road Trail

Survey/GIS

For over 45 years, Stahly Engineering has been entrusted to perform land survey services for a variety of public and private sector clients ranging from conservation easement surveys to construction staking. We use state-of-the-art land surveying equipment, resources, and software that assist our professional staff to produce quality deliverables for our clients.

City of Helena Engineering Department, Helena, Montana

Stahly Engineering has been providing surveying services to the City of Helena for over 45 years. Stahly has been responsible for management of GPS and Total Station surveys, and CADD drafting of topographic, site, boundary, and right-of-way surveys for the cities. Projects include:

- Charlie Russel Drive Amended Plat
- Topographic Surveys of Various South Side Streets
- Swaney Minor/Park Boundary Relocation
- Reeder's Village Drive Parking Lot Expansion
- Custer Benton Intersection
- West Main Street
- Airport Road Corridor
- Henderson Street
- Gold Street
- Wedgewood Lane
- Sanders Street
- Benton Avenue
- Sanders Street North

GIS Projects

Stahly staff provides GIS services including mapping, data collection database development and maintenance. The deliverable is completed customized to the needs of the end user and can vary from a PDF to a cloud-based GIS accessible from any web browser. Below is a comprehensive list of clients served:



- City of Belgrade
- City of Hardin
- City of Lewistown
- City of Three Forks
- Town of Manhattan
- Town of West Yellowstone
- Sanders County
- Glacier County

City of Livingston Utility Mapping

Stahly Engineering helped the City of Livingston map their City utilities. This included using high resolution ortho-rectified color aerial photography. Ground surveys were also conducted providing spatial coordinates for 19 photo control points. After this mapping was complete, Stahly used ArcView to complete a map book that includes locations of all utilities. As this information changes, the book is updated.

Having assisted West Yellowstone with establishing their GIS, Stahly Engineering has institutional knowledge of the Town's infrastructure. We will continue to assist the Town in keeping up to date, easily accessible data available to Town staff.

Excelsior Avenue/Park Street Survey

Stahly Engineering conducted survey as part as the MDT project on Excelsior Avenue and Park Street in Butte. The project consisted of a major road rehabilitation in urban Butte, and was conducted in effort to be 100% compatible to MDT survey standards utilizing standard codes, software, and methods. Survey crews with up to five team members were put to work to collect thorough corridor topo using RTK and conventional survey methods. The project resulted in a better understanding of MDT standard codes, chaining codes, and data collection methods that will help streamline future surveys.

Other Urban Roadway Project Surveys

Montana Department of Transportation has been a major client of Stahly Engineer's since 1970. Stahly's survey team has been involved in many urban road surveys for the Department. Some of these include:

- Butte Uptown ADA Ramps
- Excelsior/Park Street Reconstruction - Butte
- Lewistown West Overpass, Sidewalk, West Sidewalks
- Brady Street Reconstruction - Helena
- Boulevard Avenue - 16th W to 11th Street - Havre
- Nissler Interchange - Butte

Environmental Services and Regulatory Agency Interactions

Every project conducted by Stahly Engineering for our local government clients is governed by environmental and/or regulatory actions. Maintaining a staff that is professionally licensed in engineering and surveying by a ratio greater than 1:3 licensed vs. unlicensed staff can help West Yellowstone rest assured that knowledge of local, state, and federal laws is intact at Stahly Engineering. Staying abreast of regulatory requirements is of utmost importance to our professional staff who frequently attend training and conferences that provide continuing education on laws governing their projects.



Professional engineers (P.E.) and Land Surveyors (P.L.S.) are familiar with legal code governing environmental laws such as the Montana Environmental Protection Act (MEPA) and the National Environmental Protection Act (NEPA). Surveyors, led by Dan Stahly, who served for many years as the Legislative Liaison to the Montana Association of Registered Land Surveyors, are very involved in legislative changes to the Montana Subdivision and Platting Act and assist communities with ensuring their subdivision regulations are up to date and appropriately written for their community. Structural Engineers at Stahly Engineering are knowledgeable regarding the most recent building codes and civil engineers collaborate with Montana Department of Environmental Quality regulators on a regular basis.

State and Federal grant and loan funding is likewise governed by a myriad of state and federal regulations. Our grant and construction administrators are familiar with laws governing procurement, HUD regulations, and employment laws. Our office in Helena and relationships built with state and federal government agencies is effective in assisting our local government clients with navigating the regulatory agency requirements of most municipal projects.

Additional Ways our Team can Provide the Scope of Services Anticipated by the Town of West Yellowstone

Meeting Attendance and Participation

As a mid-sized engineering firm in Montana the entire state becomes our meeting room. Our project managers and other staff travel from Ekalaka to Libby and Westby to Lima. West Yellowstone is “local” to us. We will attend meetings as needed to assist with planning projects, reporting on project progress, and addressing any project issues.

Work Products

All work products including, but not limited to, reports, analyses, correspondence, plans, proposals, submittals, schematics, exhibits, and drawings produced in our consulting relationship with the Town will be provided in printed and electronic (pdf) form. We will work with Town staff to make this process as user friendly and organized as possible.

Responsiveness

Stahly Engineering, as part of our Project Team structure, commits to responding to all calls from West Yellowstone within 24 hours and generally much sooner than that. Theron Thompson, P.E., as the Town’s point of contact and client liaison will follow up on phone calls and requests from the Town and will be available in the absence of a Project Manager to respond to the Town’s needs. In Theron’s absence, Greg Benjamin, the Project Principal will be the Town’s contact. All of the Stahly Engineering staff believe in our mission statement premise that we are “committed to sustainable growth driven by exceptional professional services to communities and clients.” We are confident that all staff will provide services to the Town in a timely manner, without unreasonable delays.

Contact Theron:

406-522-8594

tthompson@seaeng.com

Contact Greg:

406-601-4056

gbenjamin@seaeng.com





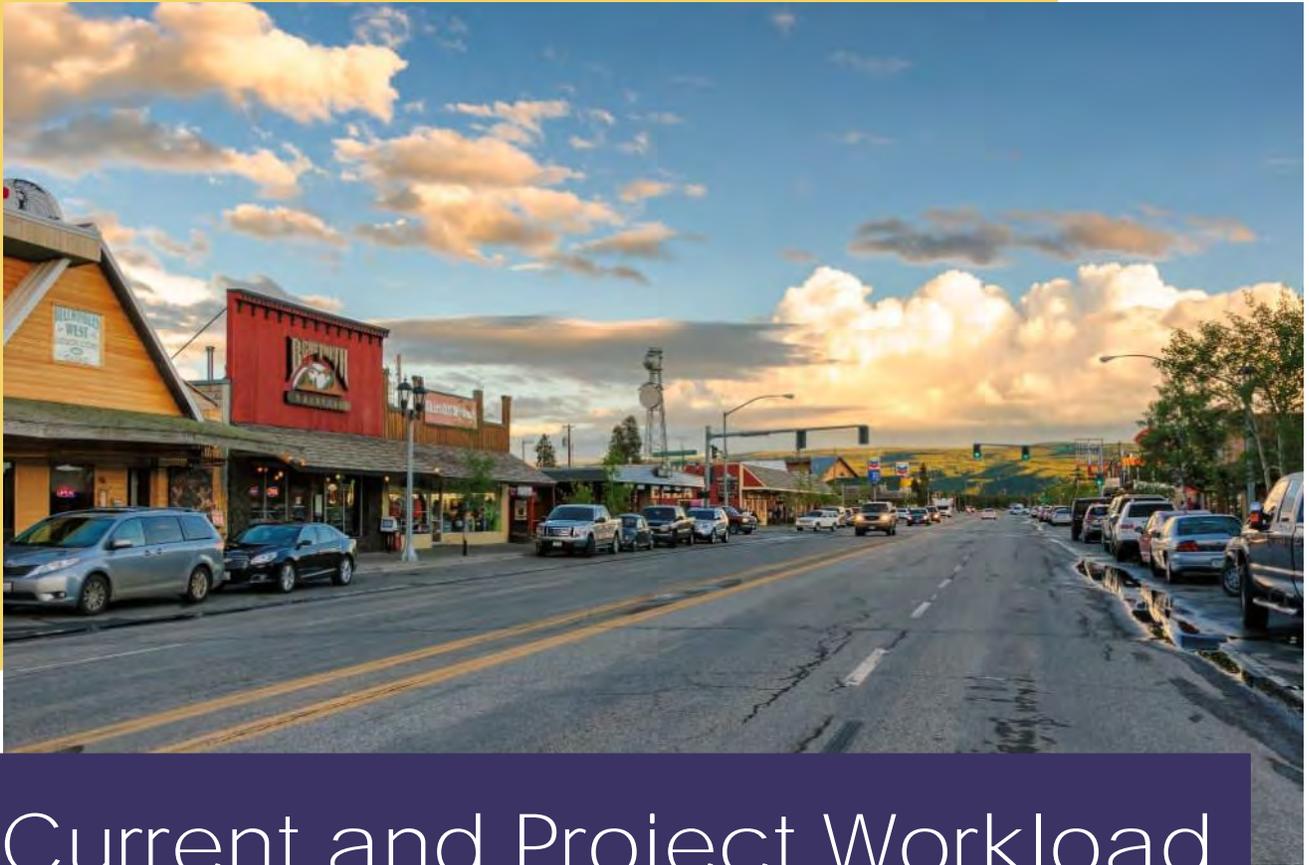
Current Municipal and Related Clients



CURRENT MUNICIPAL AND RELATED CLIENTS

Client	Duration of Relationship	Contact
City of Deer Lodge	2016-Present	Brian Bender, 406-846-3649
City of Hardin	2013-Present	Joe Purcell, 406-665-9292
Town of Wibaux	2017-Present	David Bertelson, 406-796-2412
Town of Terry	2013-Present	Lynn Schilling, 406-635-5411
Town of Jordan	2014-Present	Evelyn Ritter, 406-557-2692
Park County	January 2018-Present	Parks Frady, 406-222-4114
Wibaux County	2017-Present	Darin Miske, 406-796-2481
Fergus County	2011-Present	John Anderson, 406-535-5006
Judith Basin County	2011-Present	Cody McDonald, 406-566-2277
Petroleum County	2011-Present	Bill Cassell, 406-429-5311
Carter County	2015-Present	Steve Rosencranz, 406-775-6218
Glacier County	2009-Present	Mike DesRosier, 406-873-5063
Big Horn County	2011-Present	Sidney Fitzpatrick, 406-665-9700
Gallatin County	2001-Present	Nick Borzak, 406-582-2050
Lewis & Clark County	Prior to 1980-Present	Audra Zacherl, 406-447-8035
City of Helena	Prior to 1980-Present	Sharon Haugen, 406-447-8430
Town of Winifred	2016-Present	Travis Willson, 406-462-5614





Current and Project Workload



CURRENT AND PROJECTED WORKLOAD

The Town of West Yellowstone will be a priority client for Stahly Engineering. Being an established firm for almost 50 years, we have built our reputation on delivering successful projects...success being defined as quality designs/services being completed on-time and within budget. We are eager to accept projects and/or task assignments from the Town of West Yellowstone.

Our goal is to steadily grow our successful small business by keeping staff working productively and efficiently. Workload is coordinated through weekly staff meetings. Our commitment to scheduling and staffing needs is enhanced with planning and resource software that provides the tools needed for workload management and successful project delivery.

The entire staff at Stahly Engineering is available to the Town of West Yellowstone as we serve your on-call engineering needs. Projects for the Town of West Yellowstone will be managed primarily from our Bozeman office and by the staff located there. Stahly Engineering operates under a department-based model which, provides teams based on areas on expertise rather than office location. The Client Liaison/Principal assigned to West Yellowstone, Theron Thompson, is located in our Bozeman office. His role is to ensure the resources of the firm are fully available to the Town of West Yellowstone and to serve as an overall client manager, assisting with decisions on workload and capabilities. Depending on the nature of the project needs of the Town, Theron will determine the most appropriate team for the job. The depth of our project teams allows our firm to manage multiple projects at once. Stahly Engineering only responds to Requests for Qualifications when we are certain we have the resources to accommodate our clients' schedule and project needs.

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At Stahly, we have capacity in every department to take on additional work and would appreciate the opportunity to deliver projects to the Town of West Yellowstone to help fill that capacity.





References



REFERENCES

Reference	Contact Information
Brian Bender, City of Deer Lodge	(406) 846-3649
Ed Meece, City of Bozeman	(406) 224-5981
Sidney Fitzpatrick, Big Horn County	(406) 665-9700
Nick Borzak, Gallatin County	(406) 582-2050
Parks Frady, Park County	(406) 222-4114

We have also included multiple reference letters from previous and current clients on the pages to follow.



Mayor
Caleb A. Burton
Chief Administrative Officer
Brian P. Bender
City Attorney
Peter Elverum
Public Works Superintendent
Trent Freeman
Treasurer
Judi Whitney
Utility Billing Clerk
Jill DeSilva

City of
Deer Lodge

300 Main Street
Deer Lodge MT 59722-1057

City Council
Rex Anderson
Amada Bohrer
Jill Garland
Mary Hathaway
Robert Kersch
Tom Malcomb
Abby Martin
John J. Molendyke

November 7, 2018

Subject: Recommendation for Stahly Engineering & Associates

To Whom It May Concern:

The City of Deer Lodge entered into a term contract relationship with Stahly Engineering & Associates in 2017. Prior to that time, we utilized the firm to assist the City in developing a Comprehensive Capital Improvements Plan. I am pleased to say that our association with the firm and its staff has been very positive.

Projects that have been completed or are in process through the assistance of Stahly Engineering include preliminary engineering of an additional public water source, a PASER evaluation of City streets and subsequent upgrades to identified priority streets, a rate analysis of our water system and two Special Improvement Districts, initiation of a GIS to map infrastructure, and various survey and mapping consultations. Where possible, the firm has assisted in applying for and administering grant and loan funds. Through their efforts we have received funding from a variety of sources including the Montana Department of Commerce, the Montana Land Information Act Committee, the Montana DES, and Fish, Wildlife, and Parks.

The firm's method of maintaining a single point of contact and a technical engineering consultant that are directly assigned to our City has provided us with confidence that we can rely on them whenever we need them. Over the last several years, the City Council has made informed decisions regarding infrastructure projects after receiving honest and accurate recommendations from the firm's staff. This commitment has made Stahly Engineering an integral part to our organization as their advice is indispensable. Essentially, Stahly Engineering serves as an extension of our limited staff, and for me personally as a trusted resource.

For these reasons, I would recommend Stahly Engineering & Associates to serve as your on-call engineering firm.

Sincerely,



Brian P. Bender, AICP CEP, CFM | ICMA-CM (Candidate)
City Administrator

Rolane Christofferson, Mayor
Lynn Schilling, Clerk
James Schilling, PWD

TOWN OF TERRY
PO Box 650
Terry, MT 59343
406-635-5911

Councilmembers
Clinton Rares
Cindy Bond
Fred Ramburger
Ken Laquerment

(800) 253-4091 (TTY) / (246) 253-4090 (Voice)

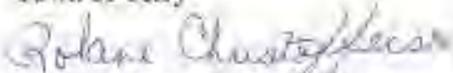
To Whom It May Concern:

The Town of Terry has been working with Stahly Engineering & Associates since they were procured to provide wastewater engineering services for our community in 2013. Since that time they have done a detailed study of our system and worked with us to determine the best alternative for upgrades. We appreciate their willingness to involve the citizens of Terry in the process since the cost of upgrades will be a factor. The Town anticipates that the efforts of Stahly Engineering will be instrumental in helping us fund our project through grants and low interest loans.

Throughout the firm's work with the Town of Terry we have found them to be responsive to our needs, communicative with our Town leaders and citizens, knowledgeable in the technology needed for our system, and practical in helping us deal with regulations that affect the future use of that system. We truly appreciate their professionalism mixed with approachability.

I would highly recommend Stahly Engineering for all of your planning, survey, and engineering needs.

Sincerely,

Town of Terry

Rolane Christofferson, Mayor



GALLATIN COUNTY

January 12, 2017

Subject: Letter of recommendation for Stahly Engineering & Associates

To Whom It May Concern:

Gallatin County has had a professional relationship with Stahly Engineering & Associates for more than 15 years. Stahly Engineering has provided services on numerous projects including:

- New Road and Bridge Shop – 2006
- Facility Condition Index – 2006
- Law and Justice Center Analysis – 2009 and 2016
- History Museum Foundation Repairs – 2013
- New 911 Communication Tower – 2014
- Rest Home Renovation - 2016
- West Yellowstone Compost Facility Renovation – 2016

Gallatin County's association with Stahly Engineering and the staff responsible for our projects has been very positive. We have found their advice to be practical and cost effective. They are accurate and practical in their engineering designs, thorough in creating cost estimates, and, above all, accessible for communication, not only with the County, but with contractors as well. We appreciate their flexibility in working with our own County staff to help us solve problems in a cost effective method. This team approach to projects has provided Gallatin County a great value and timely responses to our needs.

I would not hesitate in recommending the services of Stahly Engineering for your technical needs.

If you would like to speak directly, please call (406)582-3185.

Sincerely,

A handwritten signature in blue ink, appearing to read "Nick Borzak".

Nick Borzak
Operations and Project Manager

CITY OF HARDIN

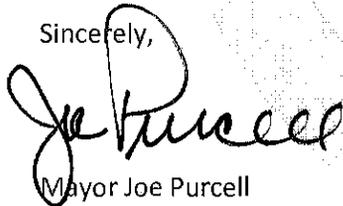
July 10, 2018

To Whom It May Concern:

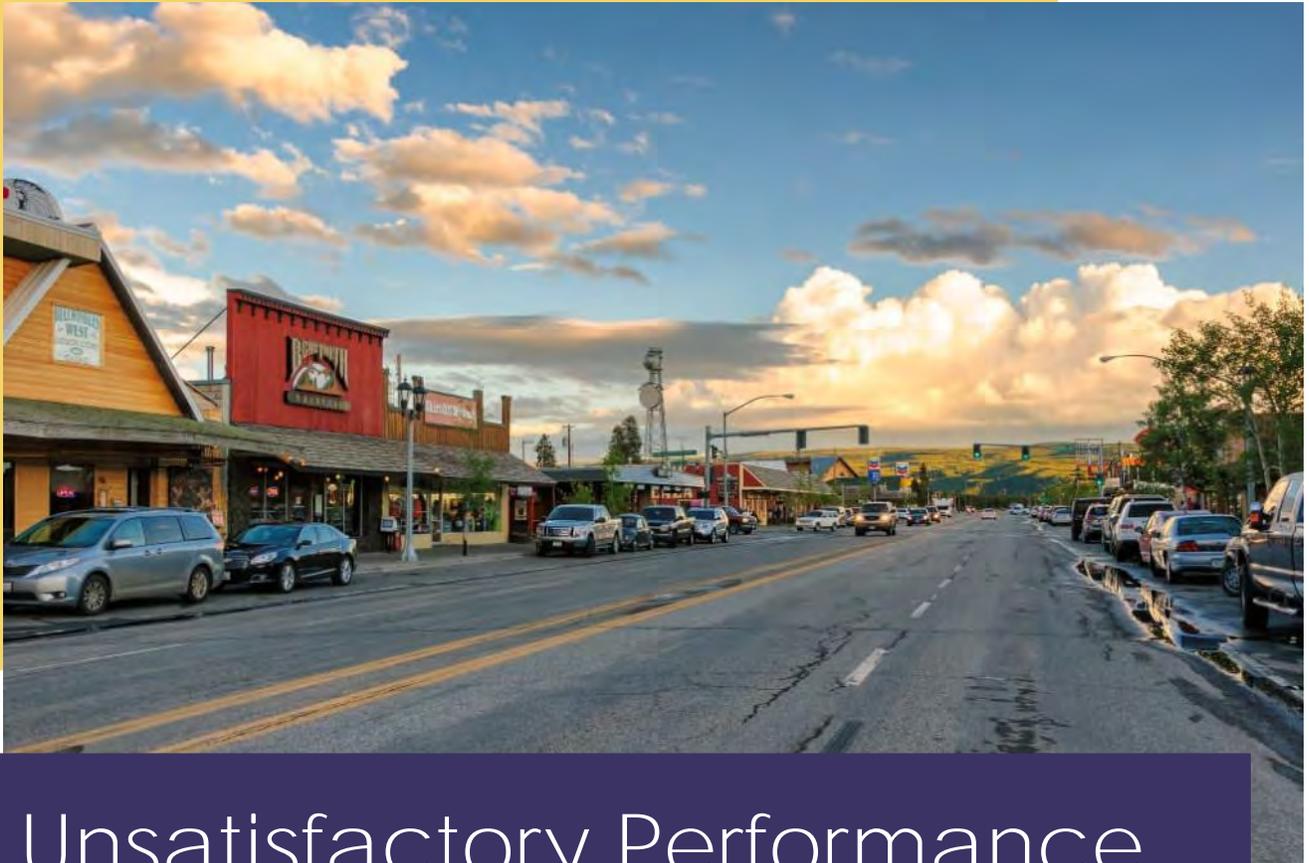
The City of Hardin has utilized the on-call engineering services of Stahly Engineering & Associates since 2015. We are happy with the service they provide and the quality of projects they produce. They have worked with our staff on a variety of project types including water system, sanitary sewer, and wastewater treatment plant upgrades. They responded quickly and efficiently to storm water management issues we had during a flood event. Stahly Engineering has also provided valuable advice, engineering plans, and funding assistance as we improve streets and roadways throughout the City.

We would recommend Stahly Engineering to serve your community with services that address your individual project and budget needs.

Sincerely,

A handwritten signature in black ink, appearing to read "Joe Purcell". The signature is written in a cursive style with a large, looping initial "J".

Mayor Joe Purcell
City of Hardin



Unsatisfactory Performance or Legal Proceedings

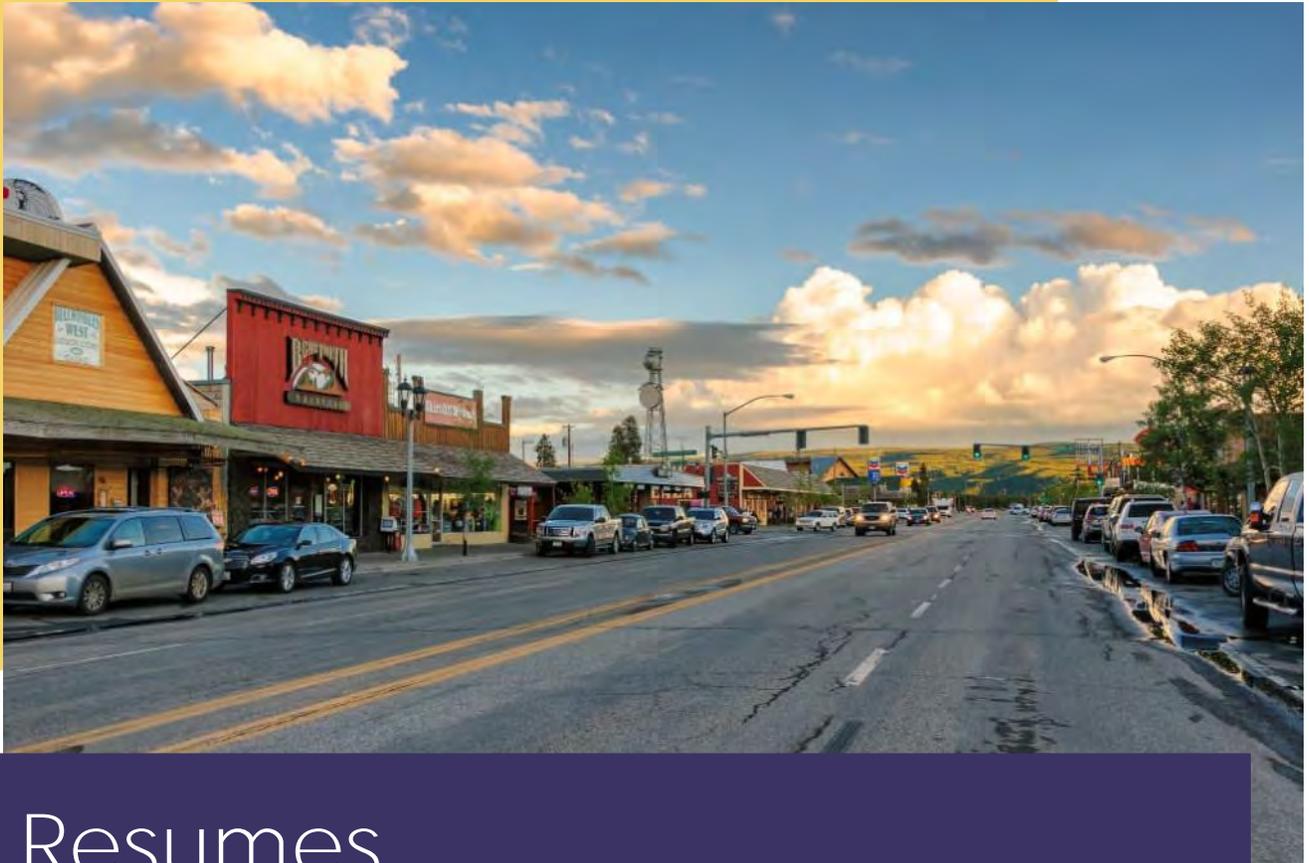


UNSATISFACTORY PERFORMANCE OR LEGAL PROCEEDINGS

While there are no “perfect” projects and issues arise from unexpected project challenges, Stahly Engineering is proud of our record of satisfactory performance. Our firm has developed a formal Quality Assurance/Quality Control plan that is used to set each project up for success from the beginning. We have also had nearly 50 years of managing unexpected challenges from engineering projects and our project managers are trained to deal with those challenges through communication, patience, and follow through. We have not had contracts for services awarded that have been canceled or terminated for unsatisfactory performance.

Likewise, Stahly Engineering has not been named as a party in any litigation during the time period of January 1, 2010 to present.





Resumes





Theron Thompson, P.E.

Associate Principal

Bozeman Office Manager

Education

B.S. Civil Engineering, University of Wyoming,
Laramie, WY - 2002
M.S. Structural Engineering, Washington State University,
Pullman, WA - 2004

Licenses/Registrations

Professional Engineer, Montana, 2008
Professional Engineer, Idaho, 2009
Professional Engineer, Wyoming, 2013
Professional Engineer, North Dakota, 2014
Professional Engineer, Ohio, 2017

Biosketch

Mr. Thompson has 14 years of experience in project management and designing building structures. His project management experience includes directing multi-disciplined teams in successful residential, commercial, industrial and nuclear projects.

His structural experience ranges from designing bridges to detailed plans for single and multi-family residences, office buildings, retail buildings, industrial structures, hospital renovations and schools.

Theron's designs have used a variety of materials including reinforced concrete, tilt-up concrete, structural steel, light gauge steel, masonry, timber and log. He has experience designing in high seismic regions and for severe snow loads. Projects include new construction, remodels, and retrofits. Theron has also designed structural systems and components for nuclear systems.

Employment History

2013-Present – Lead Technical Structural Engineer, Office Manager Stahly Engineering & Associates, Bozeman, MT
2009-2013 – Project Engineer/Design Lead, CH2M-WG Idaho, LLC, Idaho Falls, ID
2007-2008 – Project Engineer, Apex Engineering Services, Inc., Missoula, MT
2004-2007 - Project Engineer, Visser Engineering, Federal Way, WA

Project Experience

COMMERCIAL:

Kenyon Noble Big Sky Ready-Mix Plant, Big Sky, MT

Design for a new pre-manufactured steel building and concrete foundation. Design consisted of light gage steel and concrete.

Client: NE45 Architecture

Carroll College Library, Helena, MT

Design for the renovation and addition to the existing Carroll College library. Design consisted of light gage steel, concrete and steel framing.

Client: Mosaic Architecture

Montana Tech Student Housing, Butte, MT

Design of two student housing buildings at Montana Tech with ~48,000 total s.f. Design consisted of wood and timber framing.

Client: DSA Architects

East Helena Elementary and Middle School, Helena, MT

Provided quality control and technical assistance in all phases of the design.

Client: CWG Architects

Siegel Learning Center, West Yellowstone, MT

Design of the daycare and childcare facility. Design consisted of standard wood framing and concrete foundation.

Client: ThinkOne Architects

Central Montana Head Start, Lewistown, MT

Design of the daycare and childcare facility. Design consisted of standard wood framing and concrete foundation.

Client: Fergus County

Belgrade Head Start, Belgrade, MT

Design of the daycare and childcare facility. Design consisted of standard wood framing and open web steel trusses.

Client: Comma Q Architecture

Madison River Ranch Lodge, Three Forks, MT

Design of the lodge and hotel addition totaling ~20,000 S.F. Design consisted of standard wood, concrete and steel framing.

Client: Van Bryan Studio Architects

Moonlight Basin Lodge, Big Sky, MT

Design of the lodge addition and retrofit. Design consisted of standard wood, concrete and steel framing.

Client: Reid Smith Architects



***Experience gained with previous employer*



Montana City School Remodel and Expansion, Montana City, MT

Design of the addition and remodel to the existing Montana City School. Structural design included light gauge metal, wood and steel moment frames.

Client: Montana City School District

Judith Basin County Library

Stanford, MT

Structural and civil team member for the Judith Basin County Library expansion PAR.

Client: Slate Architecture

St. Peter's Hospital

Helena, MT

Design of the addition and remodel for the Radiology and Oncology departments. Structural design included structural steel, light gage steel and concrete.

Client: Slate Architecture

Livingston Preliminary WWTP Design,

Livingston, MT

Preliminary design and cost estimates for the concrete A2O, Aerobic Digester, Clarifier and ICEAS tanks.

Client: City of Livingston

Gallatin Gateway Wastewater Treatment Facility,

Gallatin Gateway, MT

Design and cost estimate for the concrete SBR and Aerobic Sludge Digester.

Client: Gallatin Gateway County Water and Sewer District

Montana City Fire Station #2, Montana City, MT

Engineer of Record for the design of the 8500+ s.f. wood framed essential facility.

Client: DSA Architects

Earth Elements, Gallatin Gateway, MT

Design of the prefabricated steel building foundation, interior framing and exterior façade for the ~40,000 s.f. retail facility.

Client: Reid Smith Architects

DMA Air Assault Tower, Helena, MT

Design of the 55'+ rappelling and training tower utilizing steel concentrically braced frames.

Client: Dept. of Military Affairs

Broadway and Cruse Parking Garage, Helena, MT

Renovation and repair of the two story parking garage. Included demolition and repair of the steel structure and concrete parking deck.

Client: State of Montana A&E

Livingston Fire and Rescue, Livingston, MT

Renovation of the Livingston Fire and Rescue including the revision of the CMU building requiring the addition of steel moment frames

Client: Livingston Fire and Rescue

Town Pump, Livingston, MT

Renovation and addition to existing Town Pump convenience store and casino. Addition of 2500+ s.f. of wood framing and open web trusses.

Client: Town Pump

Thriftway, Butte, MT

Renovation and addition to existing wood and CMU building.

Client: Sutey Oil

ArtCraft, Bozeman, MT

Renovation and seismic retrofitting of existing brick masonry and concrete commercial building for a restaurant.

Client: Van Bryan Studio Architects

BRIDGES

Moonlight Basin Ski Area, Big Sky, MT

Structural design of multi-span steel framed ski bridges.

Client: Moonlight Basin, LLC

Battle Creek Bridge, Blaine County, MT

Structural design and consultation for rehabilitation and reuse of existing truss bridge. Project funded by TSEP.

Client: Blaine County



MDT Short Span Bridge Standards

Structural design assistance with creation of design standards for MDT short-span bridges.

Client: MDT

Various Pedestrian Bridges

Structural design of wood and steel pedestrian bridges for manufacturer of bridges.

County Bridge Project Quality Control

Provide QA/QC of bridge designs and plans for Montana County clients served by Stahly Bridge Department:

Clients: Blaine, Fergus, Judith Basin, Big Horn, Anaconda-Deer Lodge, and Glacier Counties

MULTI-FAMILY RESIDENTIAL:

South Rows Condominiums, Bozeman, MT

Design of a 17 duplex to 5-plex three-story condominium buildings comprised of conventionally framed construction.

Belfry 5-Plex, Belfry, MT

Design of a 5-plex two-story apartment building comprised of conventionally framed construction.

Norton Ranch 12-Plex, Bozeman, MT

Design of a 12 unit multi-family apartment building comprised of two levels of conventionally framed construction.

SINGLE FAMILY RESIDENTIAL:

Elite Development NW, Tank Residence, Kirby Residence, Various

Design of high-end residential single family homes consisting of conventional framing, timber framing, steel framing, and steel moment frames.

Client: Locati Architects

Gunther Residence, Big Sky, MT

Design of a single family home consisting of analysis and design of conventional framing and timber framing.

Client: Van Bryan Studio Architects

Jones Residence, Big Sky, MT

Design of a 7,500+ s.f. single family home consisting of analysis and design of conventional framing, timber framing, log truss and steel moment frame design.

Client: Reid Smith Architects

Thompson, Donaldson, and Rockstad Residences Big Sky, MT

Design of a single family homes in Spanish Peaks and Yellowstone Club consisting of conventional framing, timber framing and steel moment frame design.

Client: Reid Smith Architects

Weinstein Residence, Moonlight Basin, MT

Design of a 6,500+ s.f. single family home consisting of analysis and design of conventional framing, timber framing and steel moment frame design.

Client: Van Bryan Studio Architects

Brooks Residence, Bozeman, MT

Design of a 8,500+ s.f. single family consisting of analysis and design of conventional framing and timber framing.

Client: Reid Smith Architects

Stergar Residence, Georgetown Lake, MT

Design of a 6,500+ s.f. single family consisting of analysis and design of conventional framing and timber framing.

Client: Reid Smith Architects

Green Residence, Bozeman, MT

Design of a 8,000+ s.f. single family consisting of analysis and design of conventional framing and timber framing.

Client: Reid Smith Architects

Deming Residence, Bozeman, MT

Design of a 6,000+ s.f. single family consisting of analysis and design of conventional framing and timber framing.

Client: Think One Architects

Other Residences:

Design of numerous other single family residences located throughout the West. Projects consisted of analysis and design of conventional framing and foundation systems as well as timber frame and log with mixed steel.



Kurt Thomson, P.E.

Senior Engineer/Associate Principal

Education

B.S. Civil Engineering, Montana State University,
Bozeman, MT – 1998

Licenses/Registrations

Professional Engineer, Montana, 2001
Professional Engineer, Wyoming, 2015

Memberships

American Public Works Association (APWA), Rocky
Mountain Chapter, 1998-Current – Board of Directors,
2008 - Current

Civic Engagement

Greater Gallatin United Way, Board of Directors
Charter Member, East Billing Sunrise Rotary

Employment History

2010-Present – Senior Engineer, Stahly Engineering &
Associates, Bozeman, MT
2000-2010- Senior Engineer, Engineering, Inc., Billings &
Bozeman, MT
1998-2000- Staff Engineer, City of Billings, Engineering
Department, Billings, MT
1992-1998- Seasonal Engineering Tech, City of Billings,
Engineering Department, Billings, MT

Biosketch

Mr. Thomson has over 20 years' experience in engineering design and project management for numerous land development and municipal projects. His experience in a wide range of projects (commercial, residential, industrial) gives him the ability to manage engineering tasks from planning to construction.

Project Experience

Berg Property Feasibility – Lewistown, MT

Project Manager for the feasibility study of developing City-owned property in northwest Lewistown. Worked with a large steering committee to develop a preferred alternative. Started with 4 layout options, and agreed on one altered alternative as the preferred.

Client: Snowy Mountain Development Corporation

Town Pump, N.19th - Bozeman, MT

Project Manager for site development of a corner lot in Bozeman. Layout required water and sewer extensions from the City, access from both 19th (a state road) and Baxter, and drainage challenges. *Client: Town Pump, Inc.*

Main Street Streetscape – Livingston, MT

Project Engineer / Project Manager for the improvements of Main Street in Livingston. Improvements included street restoration, including ADA compliance, and upgrading the major supply water mains from storage tank to distribution lines. *Client: City of Livingston*

Town Pump - Belgrade, MT

Project Manager and Site Engineer for site re-development of 3 parcels adjacent to on/off ramps to I-90. *Client: Town Pump, Inc.*

Morning Star Elementary Approach Relocation – Bozeman, MT

Design of re-alignment of an existing approach to allow for easier access for traffic (school buses) and safer crossing for pedestrians. *Client: Bozeman School District*

B Street Streetscape – Livingston, MT

Project Engineer / Project Manager for the improvements of B Street in Livingston. Improvements included resurfacing and replacing curb and gutter to be ADA compliant. Historic sidewalks and underground vaults were taken into consideration during design and construction phases. *Client: City of Livingston*

2018 Street Maintenance – Deer Lodge, MT

Project Manager for asphalt maintenance project in Deer Lodge. All roads in Deer Lodge were graded/scored in 2017. First planned project included 7,000 LF of digouts, crack seal and chip seal with 8,000 LF of mill and overlay on major streets. *Client: City of Deer Lodge*





Mitchell Road Reconstruction – Hardin, MT

Project Engineer / Project Manager for the overlay of Mitchell Avenue. Project entails widening the driving surface and adding curb and gutter on the west side, ditches and replacement of failed areas, striping and signing. *Client: Big Horn County*

Gallatin Gateway Wastewater Treatment and Collection – Gallatin Gateway, MT

Project Manager for the design and construction of the collection system and connection to an existing treatment system. Project entails the design, permitting and construction of the \$4.3 million project.

Client: Gallatin Gateway Water and Sewer District

Sutey Oil – Anaconda, MT

Project Manager and Engineer for site rehabilitation including a new, larger store. Stahly had surveyed the site several years previous and that survey became the base for site layout options. Initial to final layout took many iterations so that the original store could remain open during construction. Site work included curb and gutter onsite and laying out new sewer and water hookups. *Client: Sutey Oil*

****Meadow Creek Subdivision - Bozeman, MT**

Project Manager for a 202 acre major subdivision on the south side of Bozeman. Design includes new water distribution system and wastewater collection system which will hook into the current City infrastructure, connecting into major city roads, new lighting and signalization, new roads new trails and wetland and agricultural considerations.

- Designed off-site street improvements consisting of additional turn lanes, new street striping and signing, and a new signalized intersection.
- Designed off-site trunk water main extensions to loop subdivision for fire protection.
- Provided construction engineering services for on-site and off-site street and infrastructure construction valued at over \$11,000,000.

Client: GVRE Development

****Gallatin Heights Subdivision, Gallatin County**

Off-Site Development Engineer / Project Manager for impacts to the surrounding road system for major subdivision. Most impacts were to Jackrabbit Lane. Design included signalized intersection and widening along most of the frontage of subdivision. *Client: Gallatin Heights, LLC, Mike Stewart*

****Denny Menholt Frontier Chevrolet, Billings, MT**

Site Development Engineer / Project Manager for a regional car dealership. Site had multiple buildings and test track on site. Designed parking lot, storm drainage, water and sanitary sewer. Off-site improvements included widening arterial road to five lane divided street with median and lighting. Included signalized intersection.

Client: Denny Menholt

****Coal Fired Power Plant, Hardin, MT**

Site Development Engineer for a large site for a new power plant. Site included parking and access for multiple buildings, grading and storm drainage. Also included railroad spur design for future rail loading.

Client: Lead Architect

****Town Pump Four Corners - Bozeman, MT**

Project Manager and Site Engineer for site re-development of a major corner lot in Four Corners. Extended water and sanitary sewer to serve the site. Coordinate multiple access points with MDT for Town Pump.

Client: Town Pump, Inc

***Experience gained with previous employer*



Ryan Rittal, P.E.

LEED AP/Project Engineer/Associate Principal

Education

B.S. Civil Engineering, Montana State University,
Bozeman, MT – 2004

Licenses/Registrations

Professional Engineer, Montana, 2008
Professional Engineer, North Dakota, 2011
LEED Accredited Professional
Montana Notary Public

Memberships

American Water Works Association
American Council of Engineering Companies

Employment History

2011-Present – Stahly Engineering & Associates,
Bozeman, MT
2009-2011- Double Tree, Inc., Bozeman, MT
2005-2009 – Sanderson Stewart, Bozeman, MT

Biosketch

Mr. Rittal's 13 years of experience include serving as a senior engineer for water, sewer and storm water infrastructure projects. He manages the Water and Wastewater Department at Stahly, providing project management and coordination for water and wastewater clients. He is skilled in the use of AutoCAD and WaterCAD software. Ryan's diverse abilities and leadership skills make him a valuable addition to the Stahly Team.

Project Experience

Gallatin Gateway Wastewater Treatment System

Project Engineer assisting with discharge site selection, design, and preliminary engineering of the site. This preliminary step leads to design of a complete collection and treatment system for a gateway community between Big Sky and Bozeman.

Client: Gallatin Gateway County Water Sewer District

City of Livingston WWTP Improvements Preliminary Design

Project Manager for preliminary design of estimated \$13,000,000 secondary treatment improvements at the City of Livingston Wastewater Treatment Plant. Preliminary design included analysis and modeling of two potential treatment technologies and recommendation for final design. Preliminary design portion of the project finished on schedule and under the allowed budget.

Client: City of Livingston

Wastewater Treatment Disinfection Improvements

Project Engineer responsible for wastewater treatment plant disinfection bidding and construction administration to upgrade the system at the City of Livingston.

Client: City of Livingston

Town of Manhattan WWTP Improvements Design

Project Manager for design of emergency aeration replacement system at the Town of Manhattan Water Reclamation Facility (WWTP). Project involved fast track design and permitting for the replacement of a failed aeration system at the plant.

Client: Town of Manhattan

Town of Wibaux WWTP Consulting

Engineering Consultant for the Town of Wibaux to assist with analysis and recommendations regarding a failed wastewater treatment system upgrade. Project involved analysis of constructed system and determination of potential design and construction errors. Project also involves creation of a Preliminary Engineering Report with recommendations on fixing the issues with the treatment system.

Client: Town of Wibaux

Town of Plevna Water System Improvements

Project Manager and Engineer for installation of 200,000 gallon water storage tank, new booster pumping system, and complete distribution and service line replacement for the Town of Plevna. Three year project that finished 0.3% over budget on this \$3.3 million dollar total cost.

Client: Town of Plevna





Fallon County Water and Sewer District Collection System

Project Manager and Engineer for design of sewer collection system for the Fallon County Water and Sewer District which serves the Stanhope Subdivision near Baker, MT. Negotiations with adjacent land owners and the City of Baker were key components during design.

Client: Fallon County Water and Sewer District

Town of Terry

Project Manager for design of sewage treatment facility in Terry, MT. Design features include new cell design, influent diversion structures, disinfection, and new outfall piping. Discharge permitting with DEQ was also included.

Client: Town of Terry

Absarokee Water and Sewer District, Stillwater County, MT

Project Engineer assisted with sewer main replacement project. Started by conducting infiltration study and finding major sections that needed replacing. As financing allows, sections are being replaced in phases.

Client: Absarokee WSD

South University Development, Bozeman, MT

Project Engineer for storm water design on this highly visible development near Montana State University Bozeman. Storm water design had to take into account surface water to the east of the site and ways to tie into the City of Bozeman's existing infrastructure.

Client: RTR Holdings II

Bridger Pines Water System Improvements

Project Engineer responsible for completing a Preliminary Engineering Report for the water supply system improvements at Bridger Pines. Project will include new water supply well and supply lines, as well as storage system improvements.

Client: Bridger Pines Home Owners Association

Preliminary Engineering Reports

Project Manager leading teams in the evaluation and determination of upgrade considerations for water and wastewater treatment systems throughout Montana. Reports include analysis of current conditions and proposing alternatives to bring systems into compliance with DEQ. Long-term costs and benefits are analyzed to find the best solution for each individual community.

Wastewater Clients:

City of Livingston, MT

Town of Terry, MT

Fallon County Water/Sewer District, Baker, MT

Town of Jordan, MT

Town of Wibaux, MT

City of Hardin, MT

Water Clients:

Fallon County Water/Sewer District, Baker, MT

Town of Plevna, MT

City of Deer Lodge, MT

On-Site Wastewater Treatment

Project Engineer responsible for designing on-site wastewater treatment system. Systems designed include: pressure dosed, elevated sand mound, at grade system for residential and commercial application.

Client: Various



Cordell Pool, P.E.

Project Engineer/Associate Principal

Education

B.S. Civil Engineering, Montana State University,
Bozeman, MT – 1994

Licenses/Registrations

Professional Engineer, Montana, 1999

Employment History

2005-Present – Project Engineer Stahly Engineering &
Associates, Bozeman, MT
1995-2004- Project Engineer, FLUIDYNE, Inc., Bozeman,
MT

Biosketch

Mr. Pool has 22 years of experience in engineering design and project management. His work emphasis has been site development for both public and private entities. Cordell takes a multi-faceted approach to land development by incorporating land constraints in planning, water supply and distribution, wastewater collection and treatment, storm drainage, and street design concepts into his designs. His background includes a particular interest in water resources engineering which has made him a valuable asset to clients requiring a variety of solutions to their water supply and wastewater treatment design needs. Project management experience includes preliminary design through bid and contract administration and construction engineering.

Project Experience

Story Mill Park, Bozeman, MT

Project Manager for a multi-phase development located on 55 acres. Tasks include schematic design, master planning/design development, site plan, and construction documents.

Client: Design Workshop

Cannery District, Bozeman, MT

Project Manager for a multi-phase development located on 12.24 acres. This adaptive and dynamic reuse of four existing industrial buildings also includes the construction of seven new buildings.

Client: Cannery District Partners

South University District, Bozeman, MT

Site Development Engineer for a highly visible development near Montana State University Bozeman. Responsible for site design including grading, street layout, and utility layout. Also provided planning and submitted plats and other documents required by the City. Acted as liaison for the Planner to the rest of the design team and served as liaison between the City and design team.

Client: RTR Holdings II

Big Horn County Fairgrounds Master Plan

Project Engineer responsible for design and phasing of the Big Horn County Fairgrounds Master Plan and Construction. Site design included grading and utility layout and relocation.

Client: Big Horn County

Town and Country Foods, Bozeman, MT

Civil Site Engineer for an extensive reuse of a movie theatre site for a new 20,000+ sf grocery store. As part of a professional design team, Mr. Pool's design and engineering activities included:

- Off-site street improvements consisting of additional turn lanes, new street striping and signing, and a new signalized intersection.
- Re-grading a 100,000+ sf parking lot to accommodate upper level and lower level pedestrian and vehicle access.
- Construction engineering services for on-site and off-site street and infrastructure construction valued at over \$1,000,000.

Client: Van Bryan Studio Architects

G25 Development, Bozeman, MT

Project Manager and site development engineer on this infill development project. An old hardware store and lumberyard were demolished to make way for a boutique hotel in Downtown Bozeman.

Client: G25Development





Moonlight Basin Ranch, Big Sky, MT

Water and Wastewater Engineer for a multi-phased development of 228 lots in Madison County. As part of a professional design team with

Stahly Engineering and Associates, Mr. Pool conducted comprehensive land development planning and engineering for water and wastewater infrastructure for existing and future development of up to 500 lots.

- Explored, developed and permitted groundwater supply, including water rights.
- Designed water distribution system consisting of 32,000 feet of water main.
- Designed 30,000 feet of pressure and gravity sewer collection system.
- Designed 100,000 gpd extended aeration wastewater treatment system with sprinkler irrigation.
- Provided construction engineering services for 8 years of phased infrastructure construction.

Client: Moonlight Basin Ranch LP, Kevin Germain

Aspen Park Subdivision, Bozeman, MT

Site Development Engineer for a 200+ lot major subdivision on the southside of Bozeman. Design includes new water distribution system (24,000 linear feet) and wastewater collection system (27,000 linear feet) which will hook into the current City infrastructure, connecting into major city roads, new lighting and signalization, new roads (5.4 miles), new trails (1.4 miles), wetland and agricultural considerations.

Client: Eighteen89 Development Corp, Tracy Poole

North Forty Subdivision, Ennis, MT

Water Engineer for subdivision with 22 lots being immediately development with a potential of having 55 lots. Engineered water distribution system (6340 linear feet of main) that hooks into the current City system. Special design requirements were necessary to include the possibility of a new school going into the subdivision. Also assisted the Project Engineer with wastewater (8470 linear feet) and road design.

Client: North Forty Development, Josh Vujovich

Hyalite View Estates, Bozeman, MT

Site Development Engineer for a 36-lot major subdivision south of Bozeman. Design includes individual well and septic, new roads, connections into developed trail system and adding length to trails and agricultural considerations.

Client: Eighteen89 Development Corp, Tracy Poole

Peak View Estates, Gallatin County, MT

Site Development Engineer for a 47-lot major subdivision northeast of Belgrade. Design includes individual well and septic, new roads and agricultural considerations.

Client: Eighteen89 Development Corp, Tracy Poole

West Lake Park, Bozeman, MT

Site Development Engineer for a 29-lot major subdivision west of Bozeman. Design includes individual well and septic, new roads and agricultural considerations.

Client: Richard Thompson



Greg Steckler, PE

Project Engineer

Education

B.S. Civil Engineering, Montana State University,
Bozeman, MT – 2010
A.A.S. Drafting Technology, Montana Tech College of
Technology, Butte, MT - 2002

Licenses/Registrations

Professional Engineer, Montana, 2016
Engineer Intern, Montana, 2010

Biosketch

Mr. Steckler is a Project Engineer in our Bozeman office. Greg brings a wealth of background knowledge in site civil engineering and water and wastewater design. Greg has experience in creating submittals and overseeing construction of water and wastewater facilities. Prior to receiving his degree in civil engineering, Greg utilized his degree in drafting technology to provide detailed drawings for the engineering design process on projects that include major and minor subdivision plat maps, certificates of survey, mortgage surveys, sewer and water plan and profiles, topographic maps, flood plain drawings, and structural plan sets. His knowledge of computer software and network administration is a valuable asset that will enhance the productivity and efficiency of our firm.

Employment History

2013- Present – Stahly Engineering & Associates,
Bozeman, MT
2012-2013- Civil Intern, C&H Engineering, Bozeman, MT
2010-2012- Civil Intern/Drafter, Double-Tree, Inc.
2006-2010- Drafter, C&H Engineering, Bozeman, MT

Project Experience

Town of Plevna Water System Upgrades

Staff Engineer responsible for preliminary and final design of the water storage and distribution system including creation of preliminary and final plan sets. Created and distributed bid documents.

Client: Town of Plevna

Fallon County Splash Park

Staff Engineer responsible for preliminary and final design of the splash park pumping, recirculation, and drainage system along with creation of final plan sets and specifications. Created and distributed bid documents.

Client: Fallon County

City of Livingston Wastewater Preliminary Engineering Report Update and Preliminary Wastewater Treatment Plant Design

Staff Engineer that assisted in evaluating design alternatives. Created site and treatment layout exhibits.

Client: City of Livingston

Fallon County Water and Sewer District Wastewater Collection System

Staff Engineer responsible for design of a new wastewater collection system including creation of final plan sets and bid documents.

Client: Fallon County Water and Sewer District

Earth Elements Design Center – Site Layout, Grading, Drainage, and Utility Plan

Project Manager responsible for site layout, grading, drainage, water service, and sewer service plans for a commercial building addition. Created a MDEQ re-write application for relocation of the water supply well. Designed the parking area and entry corridor to prevent relocation of the existing septic system drainfield. Coordinated relocation of the existing septic tank.

Client: Reid Smith Architects / Earth Elements Design Center





Kenyon Noble Belgrade – Site Grading & Drainage/Septic System Evaluation

Project Manager responsible for preliminary and final site grading and drainage plans for a new steel building with loading dock and additional outdoor storage pads. Conducted capacity research on existing septic system.

Client: Kenyon Noble

Town of Jordan Wastewater Preliminary Engineering Report

Staff Engineer that assisted in evaluating design alternatives and created site and treatment layout exhibits.

Client: Town of Jordan

Green Meadow Subdivision Phase 1 – Utility and Street Design

Staff Engineer responsible for design and plan set creation for infrastructure including sanitary sewer and water main extensions, storm drainage/retention, and streets to serve a new multi-family housing development.

Client: Cal Kunkel

Fallon County Water and Sewer District Wastewater Preliminary Engineering Report

Staff Engineer that assisted in evaluating design alternatives and created site and collection system layout exhibits.

Client: Fallon County Water and Sewer District

Town of Terry Wastewater Preliminary Engineering Report

Staff Engineer that created site and treatment layout exhibits.

Client: Town of Terry

Harlem Wastewater Improvements

Staff Engineer that assisted in testing and data gathering during construction at Harlem.

Client: Town of Harlem

Kenyon Noble Bozeman -Site Improvements

Project Manager responsible for preliminary and final site grading and drainage plans for an existing Kenyon Noble site.

Client: Kenyon Noble

Continental Drive Thriftway, Butte

Staff Engineer responsible for preliminary design of site grading and drainage plans for an existing gas station and convenience store. Plans included additional information for planned upgrades to site and store.

Client: Sutey Oil

South University District

Staff Engineer responsible for preliminary design of site grading and drainage plans for a planned subdivision on the south side of Bozeman

Client: Fountain Residential

Gallatin Gateway Wastewater Collection and Treatment System

Staff Engineer responsible for preliminary design of treatment system, collection system layout, and electrical one-line diagrams. Also assisted with Monitoring well sampling.

Client: Gallatin Gateway WSD, Gallatin County

Bridger Pines Water System

Staff Engineer responsible for conducting and analyzing pump tests for water system upgrades.

Client: Bridger Pines, Gallatin County

****Target Logistics Tioga Wastewater Treatment Plant**

Staff Engineer that assisted in design, equipment procurement, construction management, plant startup, and testing.

****Target Logistics Dickinson Water Distribution System**

Staff Engineer responsible for preliminary and final design of a water distribution system. Also performed construction engineering management through to final close out.

****HRDC West End Condominiums Phase 3**

Staff Engineer responsible for design of site grading, drainage, and utility plan.

****Spring Creek Village Resort**

Staff Engineer responsible for preliminary plat and master site plan, site grading, drainage, and utility plan.

****Oak Springs Subdivision**

Staff Engineer that assisted in drafting subdivision plat.



Zachary W Lowe, P.E.

Project Engineer

Education

B.S. Civil Engineer, Montana State University, Bozeman, MT – 1996

B.A. Applied Science, George Fox University, Newberg, OR – 1996

Licenses/Registrations

Professional Engineer, Montana, 2002

Professional Engineer, North Dakota, 2012

#TSP-05-5541, 2006/TSP

HAZWOPER, 2010

Training

40-hour Occupational Safety and Health Administrative Training

8-hour HAZWOPER / MSHA Refresher

American Society of Civil Engineer

Employment History

1996-2018 – Civil Engineer, DOWL, Bozeman, MT

2018-Present – Civil Engineer, Stahly Engineering and Associates, Bozeman, MT

Biosketch

Zach is a senior civil engineer and project manager with over 22 years of experience, specializing in site-civil design, land development, and utility design. Zach has worked extensively with the City of Bozeman Engineering and Planning staff and understands the process of getting a project approved, designed and out to bid.

Project Experience

MSU Building Projects, Bozeman, MT.

Zach has provided site-civil engineering design services for several buildings on the MSU Bozeman campus over the years, including:

- Norm Asbjornson Hall (NAH)
- Chemistry Research Building
- Strand Union Addition
- Black Box Theater
- Gaines Hall Renovation
- ASMSU Recreation Building

Zach designed utility connections, grading and stormwater improvements for the projects listed above. DOWL provided geotechnical engineering, site civil engineering, construction materials testing and special inspections for the design and construction of a 4-story 65,000 sf footprint chemistry research building on the Montana State University Campus.

Montana State University Roads & Parking Lots, Bozeman, MT.

Zach has overseen two term contracts with MSU for their parking Lots and roads. Zach has also assisted in the design of several, large parking lots and access roads on the MSU campus. Zach helped develop a pavement maintenance program at the University which included inventorying and assessing pavement conditions using the PASER rating system. Identified specific treatments for each area and developed a pavement maintenance program. The maintenance program provided a schedule for replacement and maintenance activities as well as associated cost estimates and an estimated annual payment that would be required to pay for the scheduled maintenance activities. Zach provided design and construction administration for the reconstruction of the following parking lot and service drive projects on the MSU campus:

- Roskie Parking Lot
- South Hedges Parking Lot
- 12th Ave Parking Lot
- Antelope Parking Lot
- Greenhouse Parking Lot
- Lewis and Clark Parking Lot
- Cleveland Parking Lot
- Hamilton Hall Parking Lot
- SUB Service Drive





- Linfield Hall Service Drive
- Hapner Hall Service Drive

Montana State University Irrigation Improvements and Design to the Family Graduate Housing, Bozeman, MT. Modeled the existing irrigation system on MSU Family-Graduate Housing (FGH) area of campus which was supplied by the City of Bozeman treated water, and estimated annual cost savings of over \$100k if the campus used untreated surface water that it holds irrigation water rights for. Zach helped prepare the irrigation study on the MSU irrigation system. The study involved evaluating irrigation application rates, irrigation source alternatives, distribution system, and control system. Based on the irrigation study, MSU commissioned an irrigation design for the Family Graduate Housing portion of the campus. Over 2 miles of fused HDPE pipe was installed, upgrading the existing MSU irrigation distribution network and expanding it to include large portions of the nearly 70-acre FGH campus.

Montana State University 8th and Cleveland Reconstruction, Bozeman, MT.

Project Manager for four blocks of utility improvements and street reconstruction on the MSU-Bozeman campus. Zach designed utility improvements, a new road section with improved pedestrian and bike facilities on the blocks of 8th and Cleveland street on the MSU-Bozeman campus. Elements of the project included ADA compliance, designing a new center median in 8th Avenue, road realignment, new sidewalk installation, designing a retaining wall, as well as landscaping and irrigation elements.

Hyalite Elementary School, Bozeman, MT.

Project Manager for civil design and site improvements for the project. Design elements for the new Hyalite Elementary School in Bozeman included a bus loading/unloading zone off of Babcock Street, two new parking lots, water and fire lines, grading plan, landscaping, irrigation, stormwater collection and detention system and over 800 feet of stream realignment.

Monforton School District Impact Fee Study, Bozeman, MT.

Project Engineer for the Impact Fee Study. Project consisted of studying current conditions and projected growth rates for the school which would trigger future facilities improvements. Using the aforementioned information, and studying proposed developments within the Monforton School District, impact fees were proposed to the District.

Journey Church, Bozeman, MT.

Project manager and engineer for planning and designing improvements to the church's 40-acre campus. Project consisted of developing a 40-acre site and providing an onsite well system, septic system and onsite storm management system. Services included site survey, AutoCAD drafting, planning and design for water, sewer, storm, grading and utilities, and construction staking. Journey Church includes a multipurpose indoor facility, classrooms, offices and a kitchen. All facilities are serviced by public water and wastewater systems.

West Winds Planned Unit Development, Bozeman, MT.

Zach helped in creating the West Winds Planned Unit Development, a 160-acre, 900 unit mixed-use residential community. This multi-phase development provides a wide range of housing, including apartments, townhouses, single family and senior facilities. Zach was Project Manager for Phases 3-5 of the development. Mr. Lowe was responsible for the design of road, water, sewer and storm improvements for Phases 3-5 in addition to preparing site plan applications for assisted living and memory care facilities that were built in the subdivision. Zach managed the City approval process, the design, permitted, construction oversight, testing and utility certifications.

BLM Radio Repeater Sites, Statewide, MT.

Design included foundations for towers and adjacent buildings or structures housing equipment. Zach performed an inventory of 28 radio tower facilities owned by the Bureau of Land Management (BLM), selected locations for new towers and buildings, and prepared construction documents for each facility.

NRCS IDIQ Modify Existing Pump Station, Culbertson, MT.

Project engineer responsible for calibrating hydraulic modeling results for pump sites, producing design reports and calculation estimates, drawings and specifications, and construction oversight for pump site improvements. This project was part of a term contract with the Natural Resources and Conservation Service. Projects consisted of evaluating and providing modification plans for over 50 existing pump sites to function under proposed ecological reservoir releases from Fork Peck Reservoir. Zach worked with constituents (landowners, local Conservation Districts, NRCS, and U.S. Fish and Wildlife Service) to protect existing irrigation facilities from flooding during proposed, artificial "spring rise" releases out of Fork Peck Reservoir.



Montana Tech Digger Turf, Butte, MT.

This project consisted of the construction and placement of approximately 90,000 square feet of synthetic turf with subsurface drainage system to replace the existing grass turf for the Montana Tech football field located at Alumni Coliseum. Zach's responsibilities included site planning, artificial turf underdrain design, grading and drainage plan, and SWPPP permitting. In addition to the construction and placement of the synthetic turf, a mechanically stabilized earth (MSE) retaining wall was constructed with sidewalk around the perimeter of the synthetic turf.

East Anaconda Yards Development PER, Anaconda, MT.

Responsibilities included planning of water, sewer, stormwater, roadway and site design. Program included evaluation of water supply, storage and distribution system and preparation of recommendations for long-term planning for the municipal water system. These findings were summarized in a Preliminary Engineering Report which was used to obtain development grants.

Monforton SD Impact Fee Study Update, Bozeman, MT.

Project Manager for the update of the Impact Fee Study completed in 2007.

Bozeman School District 2013 - 2014 Term Contract, Bozeman, MT.

Zach provided engineering design and management services for the Bozeman School District while he was employed at DOWL. The projects Zach oversaw were the construction of eight tennis courts, the Longfellow Elementary sanitary sewer service replacement project, the Bozeman High School Main Street Parking Lot conceptual design and the Wilson Building Parking and Sidewalk Improvements Project.

Bozeman Stormwater Term Contract 2015, Bozeman, MT.

Zach was project manager for a two-year term contract with the City of Bozeman's new Stormwater Division which was extended for a third year. Zach and his team designed five CDS sedimentation units at different stormwater outfalls within the City to reduce sediment loads in the receiving waters. The units were sized to treat 90% of all storm events in Bozeman. The contract also included advising the City of Bozeman on a potential site for a regional stormwater treatment facility incorporating staged pools, wetlands, and walking trails.



Mark Juras, P.E. Professional Engineer

Education

M.S. Civil Engineering, Montana State University,
Bozeman, MT - 2017
B.S. Civil Engineering, Montana State University,
Bozeman, MT – 2011
Associated Bible Degree, Montana Wilderness School,
Augusta, MT – 2006

Licenses/Registrations

Professional Engineer, Montana, 2012

Employment History

2017-Present – Civil Engineer, Stahly Engineering and
Associates, Helena, MT
2011-2015 – Private Civil Engineer, TD&H Engineering,
Inc., Bozeman, MT
2010-2011 – Lab Technician, Thomas Dean & Hoskins,
Great Falls, MT
2008-2009 – Sales Associate, Holiday Gas Station, Great
Falls, MT

Biosketch

Mark is a second-generation Montana Civil Engineer. His higher education includes a Masters of Science in Civil Engineering from Montana State University, Bozeman. Mark has worked in full time private civil engineering consulting for 5 years, and has been with Stahly Engineering and Associates since 2017. Mark brings knowledge and proficiency in the fields of construction engineering, subdivision design, and site development. Mark is experienced in working with large design teams, clients, and contractors to design, build, and close out civil projects successfully.

Project Experience

GENERAL CIVIL:

Central Montana Head Start Building Expansion, Lewistown, MT 2017. Performed the civil site design from the topo to the construction drawings. Drafted, grading design, storm design, storm water report, demolition and existing conditions plan, site plan, and details. Civil design fee = \$7,500
Story Mill Park, Bozeman, MT 2017. Primary roles included composing the engineering report for water and sewer design, assisting in addressing City of Bozeman site plan review comments, drafting of site plan (primarily redline changes), responding to comments, drafting climbing boulder foundation drain detail, and drafting of MDT encroachment exhibits.



WATER:

Green Meadows Subdivision, Helena, MT 2017. Updated the WaterCAD model to include phase 2 and 3 of the development. Included drafting of a figure in AutoCAD.

Manhattan High School Expansion, Manhattan, MT 2017. Performed a Hydraulic analysis using WaterCAD to evaluate a new water main that loops near the high school. The report was composed to settle an issue regarding whether the new main needed to be 8" or 12" diameter.

Cannery District, Bozeman, MT 2017. Designed and drafted the fire service lines for building N and building K at the Cannery District. Composed submittal to the City of Bozeman, delivered submittal, and received approval.

WASTE WATER:

Gallatin Gateway Sewer Improvements, Gallatin Gateway, MT 2017. Performed drafting and re-design for two sewer gravity sewer runs, about a half mile of pipe and manholes. Manipulated existing pipe networks and plan sheets.

STORM WATER:

Manhattan High School Expansion, Manhattan, MT 2017. Composed a detailed storm report for the high school expansion. The design had already been completed, the storm report was done at a later date to satisfy City engineering requirements.



CONSTRUCTION ENGINEERING:

South University District, Phase 2, MT 2017. Provided construction engineering services primarily in a project engineer role. Construction related duties include processing contractor pay apps, coordinating between owner and contractor on various changes orders, and managing a team of inspectors and surveyors. Engineering duties included revising the design drawings to reflect addendums and revisions that were required because of building permit review comments, composing sleeving plans and performing shallow utility design/construction oversight, and drafting and producing a construction site coordination set. The project had a 4 million dollar civil construction cost.

CONSTRUCTION INSPECTION:

HRDC Infrastructure, Belgrade, MT 2017. Provide inspection and testing services for roadway, water, sewer, and storm improvements. Drafted as-built drawings and composed documentation to meet City requirements.



Paul Herbst, E.I.

Staff Engineer

Education

B.S. Civil Engineering, Montana State University,
Bozeman, Montana – 2014
B.S. Mechanical Engineering, Montana State University,
Bozeman, Montana – 2014

Licenses/Registrations

Engineer Intern, State of Montana, 2014

Registered Site Evaluator, Gallatin County, 2016

Training

ACI Concrete Field Testing Technician
Grade 1, 2013
ATI Portable Nuclear Density/Moisture Gage Use
And Safety Training, 2014

Biosketch

Mr. Herbst is a graduate of Montana State University with a bachelor of Science in Civil Engineering and Mechanical Engineering. His past five years of experience has given him excellent experience to provide quality site design, construction site inspection, and materials testing. Paul also assists with design and construction administration with site civil, water and wastewater projects.

Employment History

2016-Present – Staff Engineer, Stahly Engineering & Associates, Bozeman, Montana
2014-2016 – Staff Engineer, Gaston Engineering & Surveying P.C., Bozeman, Montana
Summer 2013 Project Engineer Intern, Gaston Engineering & Surveying P.C, Bozeman, Montana

Project Experience

Korner Klub Sewer Main Extension – Four Corners, MT

Design Engineer responsible a sewer main extension of the Four Corners Water and Sewer District to serve the Korner Klub Restaurant. Design included a gravity sewer main to bore under Jackrabbit Lane. Facilitated the permitting process of DEQ and MDT.

Client: HRDC

HRDC Belgrade Site Improvements – Belgrade, MT

Design Engineer responsible for the design of a new site development for HRDC in Belgrade. The site development design included water and sewer main extensions and site grading for storm drainage.

Client: HRDC

Town of Terry Spring Street Sewer Rehab – Terry, MT

Design Engineer for the rehabilitation of failed main in the Town of Terry. Facilitated the approval of DEQ and MDT for this project.

Client: Town of Terry, MT

Gallatin Gateway Wastewater Improvements – Gallatin Gateway, MT

Owner's representative during the construction of a new sewer system for the town of Gallatin Gateway. The new system consisted of 2 miles of gravity sewer main and 5 miles of force main.

Client: Gallatin Gateway Water and Sewer District

South University District Phase 2 – Bozeman, MT

Staff Engineer responsible for assisting with the water, sewer, and stormwater design for a future phase of the South University District student housing project. Assisted with developing and submitting the engineering reports and plans to the City of Bozeman.

Client: Capstone

County Septic Permitting

As a registered Site Evaluator in Gallatin County, he is responsible for the design, details, and applications for septic permitting necessary for new residential wastewater systems within Gallatin County.

Client: Various

MDEQ Re-writes

Project Engineer responsible for submitting DEQ applications in order to change the allowed use of existing parcels. This process involves site plan development, stormwater analysis and design, and septic system design.

Client: Various





Winifred Water Main Extension

Staff engineer assisting with the site layout, grading, and water line layout for a water main extension in the Town of Winifred.

Client: Norm Asbjornson

Rocking C's Ranch – Water and Sanitary Sewer Investigation

Staff engineer assisting with investigation of current water and sanitary sewer systems of the Rocking C's Ranch. Wrote Preliminary Engineering Report to outline necessary upgrades for each system.

Client: Smith River Ranch

Bridger Pines Subdivision – Water System Testing

Staff Engineer overseeing leak testing of existing force main and lift station. Assisted in finding solutions for lift station repair.

Client: Bridger Pine Subdivision

Asphalt Maintenance – Bozeman Public Schools – Bozeman, MT

Inspecting Engineer for seal coating and stripping of various Bozeman School parking lots and play grounds.

Client: Bozeman School District

TCA – Ennis, MT

One of inspecting staff engineers performing material testing of bridge backfill. *Client: TCA*



Phil Bachofner, P.E.

Sr. Structural Engineer

Education

B.S. Civil Engineering, Montana State University, Bozeman, MT - 2005

Licenses/Registrations

Professional Engineer, Montana, 2010
Professional Engineer, South Dakota, 2011
Professional Engineer, Oregon, 2012
Professional Engineer, New York, 2014
Professional Engineer, Washington 2015
Professional Engineer, Colorado 2015

Biosketch

Mr. Bachofner has more than 10 years of experience in the field of structural engineering working in the State of Montana. His diverse experience includes numerous building types and building systems: structural steel, reinforced concrete, masonry, cold formed steel and complex timber and log systems. Phil is skilled in all aspects of project management including initial project scoping and setup, team coordination, time allocation, scheduling, construction administration, and shop drawing review.

Mr. Bachofner has experience with working in numerous different states and jurisdictions.

Employment History

2014-Present - Stahly Engineering and Associates, Helena, MT
2006-2014 - Apex Engineering Services, Inc., Missoula, MT

Project Experience

Prickly Pear Elementary School – East Helena, MT

Project manager and engineer of record for a 52,000-square-foot elementary school that is under construction in East Helena, MT. The main structure was comprised of wood framing with steel and reinforced concrete elements incorporated into the design. Performed lateral analysis and design, as well as steel framing and foundation design. A frost protected monolithic foundation was utilized in the design to eliminate excess concrete in the foundation and reduce overall excavation and foundation costs for the owner. Dick Anderson Construction served as the Construction Manager/General Contractor on this project. This accelerated delivery method required t, and this was the largest monolithic foundation that they have constructed. The structural design team to coordinate extensively with the architect and other engineering consultants throughout the design process. Typically, the design for this extensive of a project will take up to a year. However, the Stahly team completed the plans in 5 months. The team also spear-headed a design that allowed the mechanical engineer to have much larger areas to work with within the building.

Client: CWG Architects

Swanson CLT Cabin – Camamo, WA

Provide structural engineering services for the gravity and lateral system. Structural engineering services for all heavy timber members and their connections.

Client: JE Thornton GC

Grant Structural Assessment – Helena, MT

Detailed report into the structural deficiencies in a newly constructed log home. Complete with recommended repair details for many items including the calculated settling distance required for the building.

Client: Diamond Construction

Smith Residence – Alyn, WA

Provide structural engineering services for the gravity and lateral system. Structural engineering services for all heavy timber members and their connections.

Client: NEW Energy Works

Carroll College Entry & Concession – Helena, MT

Provide structural engineering services for the gravity and lateral system as well as an evaluation of the existing facility.

Client: NEW Energy Works





Rocking C Ranch – White Sulphur Springs, MT

Structural engineer for a private ranch that includes over 60 building ranging in size from 500 square feet to 7500 square feet. Building types on the ranch include log, heavy timber, conventionally framed, and steel. The main house has been the primary point of focus, as the client's desire is to revise the existing log dominated elements to be a hybrid of both rustic and modern architecture.

Client: Formescent Architects

Chester-Joplin-Inverse Public School Addition – Chester, MT

Project manager and structural engineer of record on a public school expansion aimed at improving the existing kitchen, cafeteria, and multipurpose layout of the current facility. Careful consideration was required to bridge various construction types, building heights, and drainage configurations with the new construction. Existing mechanical tunnels under the slab on the main level needed to be worked with during the design of the foundation system.

Client: SMA Architects

Dick Anderson Construction Office Building– Helena, MT

This multi-level building was comprised of cold formed steel exterior walls, heavy steel columns and beams, and elevated concrete slabs. Out-of-the-box thinking was required to achieve the architects' desire to create "floating balconies and canopies" at the upper levels. Cantilevered and hanging steel beams were utilized to provide a way for the client to reach their design goals.

Client: SMA Architects

Klein Residence – Lake Oswego, OR

Structural engineer responsible for the design and construction coordination for a 9,450 square foot residence located in Clackamas County, Oregon. The home was comprised of heavy timber construction with specially reinforced concrete and steel components incorporated into the design. A desire to coordinate and utilize the structural elements in an aesthetically pleasing manner was the main focus of the project team. This required in depth and constant communication between the architect and engineering to accomplish this.

Client: Tolstedt Architects

Lewis and Clark Brewery – Helena, MT

Project manager and structural engineer of record on a 15,300 square foot production facility located at the current Lewis and Clark Brewing building site. The new space required extensive coordination with industrial and mechanical engineers due the intricate systems required for day to day operations. A combination of wood shear walls and large moment frames were used to resolve the lateral forces.

Client: Bjerke Architects

Medical Arts Block Remodel – Helena, MT

Structural Engineer who worked closely with the architect to creatively maintain historic material on a large office complex while incorporating a new façade and canopy to improve the looks and function of the building. Moment connections were applied to existing steel columns in order to allow the new and existing veneers to attractively work together.

Client: Mosaic Architecture

Coffee Creek Post Office Remodel – Coffee Creek, MT

Collaboration with contractor to determine most beneficial structural system that would mitigate storm water issues with an aesthetically pleasing solution.

Client: Diamond Construction

Department of Military Affairs Air Assault Tower – Fort Harrison, MT

Structural Engineer responsible for structural design modifications and inspections of a Range Air Assault Tower at Fort Harrison. The Tower is a 55 ft. tall concentrically braced steel tower that provides climbing, FastLine, and rappelling training for the military's Special Forces units.

Client: Department of Military Affairs

Birdseye Fire Department – Helena, MT

Sub-consultant to an architect for design and construction of a 10,000 sq ft fire station. Station included seven apparatus bays, meeting /training area, kitchen, and restrooms and was constructed with conventionally framed and concrete masonry unit walls and trussed roof. Provided preliminary plan review, lateral design, assistance with final design development, and construction inspection for structural elements.

Client: Slate Architecture

Midway Insurance Building – Helena, MT

Structural Engineer serving as sub-consultant to the architect for design and construction administration of new multi-story insurance office building. The building is sited on a redeveloped lot requiring innovated approaches in the structural assemblies. The building was comprised of wood and heavy steel elements.



Client: Bjerke Architects

Parking Garage – Broadway and Cruse – Helena, MT

Project Engineer providing construction inspection for upgrades to the parking garage at Broadway and Cruse, owned by the State of Montana. Reconstruction of the garage was necessary due to deficiencies caused by drainage issues which had compromised concrete and steel members of the structure. Following the recommendations of Stahly Engineering, the Department of Administration chose to remove and replace the entire concrete deck was removed and replaced and adjustments were made to steel beams to improve future drainage.

Client: Montana Department of Administration

Karl Tyler Volkswagen – Missoula, MT

Structural Engineer of Record for a large two story commercial dealership building. The design utilized special concrete masonry unit (CMU) shear walls as well as steel moment frames and cold formed steel shear walls. A complicated building in the structural sense that required outside the box thinking and a full team approach to accomplish.

Client: Process Architecture

Custom Log Homes – Multiple Locations.

Project Manager for several multi-million dollar high end log homes. Homes have been located across the United States as well as Canada. Intricate log truss design and connections are common in these custom homes, and thorough coordination between all disciplines is critical to ensure project success.

Client: Montana Log Homes

Holiday Inn Express – Missoula, MT

Structural Engineer of Record and project manager for a large four story building with an approximate total area of 75,000 square feet. Construction was comprised of conventional framed walls and steel beams and column lines with a cantilevered steel column porte-cochere.

Client: Process Architecture

The Corner Condominium Building - Missoula, MT

Lead Project Structural Engineer for this multi-level steel building located in downtown Missoula. Project consisted of an underground parking garage with a hollow core main level, four story composite steel structure, and several hanging floors throughout the building. The front of the structure was designed to fit at the corner of two streets that came together at an approximate 43.5 degree angle, requiring extensive care in design documents and coordination with all trades. Awarded the American Institute of Steel Construction (AISC) 2013 IDEAS² award.

Client: Eric Hefty Architects

Walker Medical Office Building – Great Falls, MT

Structural Engineer responsible for all elements of the structural design for a large medical facility. Project was comprised of wood framing with steel elements and heavy timber accents.

Client: Moretti Architecture

Aqua Creek Pool Lifts – Multiple Locations

Responsible for the entire structural design and anchorage of several different models handicap lifts. These ADA compliant lifts are used to raise and lower individuals into pools and spas. The lifts have been sent to numerous states across the country.

Client: Process Architecture



John Nicholas, E.I.

Staff Engineer

Education

B.S. Architectural Engineering, University of Wyoming, Laramie, WY – 2015

M.S. Structural Engineering, Montana State University Bozeman, MT – Projected Graduation May 2019

Licenses/Registrations

Engineering Intern, State of Wyoming, 2015

Employment History

2009-2015 - Principal, J.H. Nicholas, Laramie, WY

2009-2013 - Project Foreman, Arcon Inc., Laramie, WY

2008-2009 – Carpenter, Precision Applications, Fort Collins, CO

2007 – Drill Rig Floor Hand, Patterson UTI, Wamsutter, WY

Biosketch

John Nicholas graduated in May 2015 from the University of Wyoming with a Bachelor Degree in Architectural Engineering (Structural Option).

John is currently completing a Master of Science in Civil Engineering (Structural Option) at Montana State University. He has experience with residential and commercial construction and design of new projects and renovations. He is skilled in the use of Revit and AutoCAD software along with structural analysis software.

Project Experience

South Rows – Bozeman, MT

Performed complete structural design for 17 new multifamily residential structures ranging from duplexes to fiveplexes.

Client: Mosaic Architecture/CP Build

St. Peter's Hospital Radiation Oncology Renovation – Helena, MT

Performed complete structural design for renovation to St. Peter's Hospital.

Client: Slate Architecture

CMMC Physicians Lounge – Great Falls, MT

Performed structural assessment of existing structure for potential expansion of Central Montana Medical Center.

Client: Nelson Architects

Carroll College Entry – Helena, MT

Performed complete structural design of new entry at Carrol College.

Client: Dowling Studio Architects

Montana City Fire Station – Montana City, MT

Performed complete structural design for the Montana City Fire Station.

Client: Dowling Studio Architects

Carter County Road & Bridge Shop – Ekalaka, MT

Performed complete structural design, contract documents, public bid process, inspections, and construction administration for county structure.

Client: Carter County, MT

Parkhaven Addition

Performed complete structural design of new addition to the Parkhaven Retirement and Assisted Living Community.

Client: Slate Architecture

Wool Barn & Mercantile Hotel – Dillon, MT

Performed structural assessment of multi-story unreinforced masonry structure retrofit.

Client: Diamond Construction

Heritage Acres Nursing Home – Hardin, MT

Performed project coordination for various improvement projects to Heritage Acres Nursing Home including contract documents, public bid, inspection, and construction administration.

Client: Big Horn County, MT





Rick Snidarich, E.I.

Staff Structural Engineer

Education

B.S. Civil Engineering, Montana State University,
Bozeman, MT – 2014
M.S. Civil Engineering, Montana State University,
Bozeman, MT – 2016

Licenses/Registrations

Engineer Intern, State of Montana, 2017

Memberships

American Institute of Steel Construction
Structural Engineering Institute
American Society of Civil Engineers
American Concrete Institute

Biosketch

Rick Snidarich graduated in 2014 from Montana State University with a Bachelor of Science in Civil Engineering (Structural Option). He then went on to earn his Master of Science in Civil Engineering (Structural Option) from Montana State University in 2016, where is his research focused on the development of Ultra High-Performance Concrete for the Montana Department of Transportation. His technical knowledge of engineering mechanics and material design, as well as structural analysis software has proved to be an asset to the structural team.

Employment History

2017-Present – Structural Engineer, Stahly Engineering and Associates, Bozeman, MT
2015-2017 – Graduate Research Assistant, Montana State University, Bozeman, MT
2014-2015 – Structural Engineer Intern, Beaudette Consulting Engineers, Bozeman, MT
2013 (Summer) – Construction Engineering Intern, Civil Science, Williston, ND
2012 (Summer) – Materials Testing Technician, DOWL HKM, Billings, MT

Project Experience

New East Helena Elementary School – East Helena, MT

Project engineer for a 52,000-square-foot elementary school to be constructed in East Helena, MT. The main structure was comprised of wood framing with steel and reinforced concrete elements incorporated into the design. Performed lateral analysis and design, as well as steel framing and foundation design. A frost protected shallow foundation was utilized in the design to eliminate excess concrete in the foundation and reduce overall excavation and foundation costs for the owner. Dick Anderson Construction served as the Construction Manager/General Contractor on this project. This accelerated delivery method required the structural design team to coordinate extensively with the architect and other engineering consultants throughout the design process.

Client: CWG Architects

Judith Basin County Library – Stanford, MT

Project engineer for a 3,400-square-foot addition to the existing library building in Stanford, MT. Performed complete structural analysis and design for the addition. The structure was comprised of wood framing, and utilized steel columns to support large girder trusses to maximize open space in the floor plan. Additionally, post and beam construction was implemented on one side of the addition to allow the owner the opportunity for future expansion.

Client: Slate Architecture

HRDC Head Start – Belgrade, MT

Project engineer for a 5,500-square-foot early education building in Belgrade, MT. Performed complete structural analysis and design. The structure was comprised of entirely of wood framing. Efficient structural design allowed for ease of construction and reduction of costs for the owner.

Client: Comma Q Architecture

Various commercial and residential designs

Project engineer responsible for performing structural analysis and design on various residential and commercial projects. Smart and efficient designs are utilized to provide structural solutions that are unique to the project.



Erin Olson

CADD/Technical Designer

Education

Associates Degree, Science Drafting & Construction
Methods & Materials, North Harris County Community
College, Houston, TX - 2006

Biosketch

Erin Olson has over 15 years of experience in the construction field with past 8 years primarily as a Draftsman. He is highly experienced with Civil and Structural Engineering as well as Structural and Pre-Engineered Metal Building Estimating and Project Management. He is skilled in the use of Revit, Acad, Civil 3D, Sds, Mbs & Fab-Suite

Employment History

2013-2014 – Western Steel Company, Corpus Christi, TX
2011-2013 – Pioneer Technical Services, Helena, MT
2009-2011 – Global International Construction Inc.,
Houston, TX
2006-2009 – Robert S. Henry Co., Houston, TX
2003-2006 – Americon Construction Services, Houston,
TX
2000-2003 – Foundation Savers Inc., Huffman, TX

Project Experience

Arnst Residence – Helena, MT

Revit modeler for multi-level residence located in Helena.

Client: SMA Architects

Carroll College Entry & Concessions

Remodel – Helena, MT

Revit modeler for remodel of Carroll College PE Center entry way and concessions area in Helena.

Client: Dowling Studio Architects

Central Montana Head Start – Lewistown, MT

Revit modeler for remodel of Central Montana Head Start in Lewistown, Montana.

Client: Comma Q Architects

Hilton Double Tree Canopy and Renovations – Bozeman, MT

Revit modeler for reconstruction of canopy and awnings at the Hilton Double Tree in Bozeman.

Client: Slate Architecture

St. Peter's Radiology and Oncology Renovation – Helena, MT

Revit Modeler for renovation of the radiology and oncology unit and St. Peter's Hospital in Helena.

Client: Slate Architecture

East Helena Public Schools – East Helena, MT

Revit modeler for construction of a new elementary school in East Helena.

Client: CWG Architects

Beverly Rogers Residence – Clancy, MT

Revit modeler for 3200 square foot multilevel residence located in Clancy, MT.

Client: Bjerke Architects

Dick Anderson Construction Office Building – Helena, MT.

Lead Revit modeler on a multi-level building comprised of cold formed steel exterior walls, heavy steel columns and beams.

Client: SMA Architects

Lewis & Clark Brewery – Helena, MT.

Lead structural draftsman on a 15,300 square foot production facility Located on the Lewis & Clark building site

Client: Bjerke Architects

Nagy Residence – Montana City, MT

Lead structural draftsman for residential home / compound in Montana City inspired by Maharishi Vastu Architecture with 2 story main house, garages, dhyana garbha (meditation house) all wood construction.

Client: Stephen Nagy

Claimstake Condo Deck Design – Helena, MT

Lead structural draftsman for condo association improvements to 9 separate decks on site and including wood and steel construction.

Client: Claimstake Condos





Stonetree Climbing Gym – Helena, MT

Draftsman for structural trusses lining the walls of a local rock climbing gym using wood construction.

Client: Stonetree Properties

Montana City Fire Station, Montana City, MT

Draftsman for local fire station using steel construction.

Client: Dowling Studio Architects

Medical Arts Block Remodel – Helena, MT

Lead draftsman for remodel of existing historic building fascia in downtown Helena.

Client: Mosaic Architecture

Placer Condos – Helena, MT

Lead Revit modeler for reconditioning of roof cornice, cat walks & shoring design existing historic building in downtown Helena.

Client: Placer Condominium Association, Inc.



Robie Baldwin-Culver

Grant Writer/Administrator

Associate Principal

Education

BSW (Bachelors of Social Work with Honors), University of Wyoming, Laramie, WY - 1982
Coursework in Business Management, University of Wyoming-Casper & Carroll College

Training

W2ASACT Funding Workshop – 2007 - 2015
CDBG Grant Administration Workshop - 2011
TSEP Grant Administration Workshop – 2005-2014
TSEP Bridge System Workshop – 2006-2009
Get That Grant: Grantwriting from Conception to Completion – 2005

Employment History

2002-Present - Public Relations and Funding Specialist, Stahly Engineering and Associates, Helena, MT
1999-2002 - Administrative Support Specialist/Project Accountant, Harding ESE, Inc./MACTEC, Helena, MT
1988-1999 - Customer Service/ Bookkeeping/Inventory Management, The Base Camp, Helena, MT
1984-present - Owner/Business Manager, Nitro-Green/Bar C Bar Enterprises, Helena, MT

Memberships

Hangman's Tree Water User's Assc. – secretary/treasurer
Montana Economic Developers Association

Biosketch

Ms. Baldwin-Culver has worked in the engineering field for 17 years. She serves as the firm's business development manager providing public relations, marketing, and general administration assisting engineering project managers with project coordination and preparation and distribution of bid documents and plans and construction specifications.

Robie prepares grant and loan applications for funding community infrastructure (bridges, water, wastewater) projects and public facilities. She has the ability to conduct needs assessments, find appropriate funding sources, and manage the grant process. She also provides grant administration for communities where she works closely with administrators and other personnel to carefully manage valuable grant funding contracts. Her commitment to the communities she serves is evident in the positive relationships she has established.

Project Experience

GRANT WRITING AND ADMINISTRATION

West Mont Farm Residence – Helena, MT

Grant writer for project to rehabilitate an existing group home located in rural Lewis and Clark County. The home requires additional room to accommodate eight disabled adult residents, ADA upgrades, and new water and sewer systems. A CDBG grant has been awarded and West Mont awaits results of the HOME grant application

Client: Lewis and Clark County

Center for Mental Health Group Home – Helena, MT

Grant writer for project to construct an eight bed group home for mental health patients, primarily those recently released from hospitalization. This home is intended to provide a permanent residence in a supportive environment. The project is planned for construction directly adjacent to the Center for Mental Health campus and will involve the demolition of two blighted properties. The CDBG application (awarded in 2017) was sponsored by the City of Helena.

Client: Center for Mental Health

Lewis and Clark Public Health – Helena, MT

Grant writer for project to consolidate Lewis and Clark Public Health Services (excluding Environmental Health) at the Murray Building. This project will address multiple concerns of the low to moderate income clients served by the myriad of services provided by the department. Remodel of the space will provide safe and comfortable working environments that will be more accessible for public health clients. A CDBG public facilities grant requesting \$450,000 in assistance for the construction project was awarded in 2017..

Client: Lewis and Clark County

Helena YWCA Rehabilitation – Helena, MT

Project Coordinator/Grant Administrator for rehabilitation project at the historic YWCA which provides temporary housing for homeless women and children. Project upgrades include new entrances, ADA compliance, refurbishment of living spaces, and remodel of administrative offices. Provide contracting with grant agencies that include CDBG and HOME. The project will utilize Historic Tax Credits. Provide management of grants, provide for relocation of residents, and participate in construction contractor management.

Client: Lewis and Clark County





City of Helena West Side Wastewater System Connection – Helena, MT

Grant writer submitting TSEP and RRGL grants during the 2015 grant cycle for the City of Helena. Project will provide wastewater collection mains to an area currently served by on-site systems that are failing and non-replaceable.

Client: Lewis and Clark County

Town of Jordan Wastewater System Upgrade – Town of Jordan

Grant writer submitting TSEP and RRGL grants during the 2015 grant cycle for the Town of Jordan. Project will upgrade a currently undersized wastewater treatment system in order to meet DEQ requirements.

Client: Town of Jordan

MDT Transportation Alternatives (TA) Grant Applications – 2017

Grant writing provided for TA projects detailing preliminary plans, cost estimates, need and reason for the projects, public outreach to determine type of project, and maintenance plans for built project. Grants were written for the following:

Glacier County/Cut Bank Trail – continuation of a multi-use path connecting an existing trail to the Sports Complex in Cut Bank. This project will be another accomplishment of an overall trail master plan. Project awarded.

Anaconda-Deer Lodge (ADLC) County – addition of historic lighting to 3rd street in Anaconda from Willow to Hickory. This project will be a continuation of safety replacement of lights within the City.

City of Deer Lodge – ADA upgrades to sidewalks along Main Street (California to Texas Streets) which would provide enhanced connectivity from the Grant Kohrs Ranch to the Old Prison. Project awarded.

Clients: Glacier and Anaconda-Deer Lodge Counties, City of Deer Lodge

City of Deer Lodge Grant Writing – Miscellaneous Projects

Grant writer assisting the City of Deer Lodge with various grant application to improve infrastructure and their service to City residents:

- **Preliminary Engineering Grants – Water Supply System** – TSEP, RRGL, and RDGP grants written to acquire funding for a PER to determine alternatives to a currently contaminated water supply.
- **FEMA – Pre-disaster Mitigation Grant** – a two-part grant process utilized to determine awards for projects intended to mitigate effects of natural disasters. Deer Lodge's application is to purchase two homes located within a historic floodway.
- **Montana Land Information Act Committee Grant** – Utilization of MLIA grant funds to purchase computer software and hardware to create GIS solutions that will assist the local government by improving the efficiency of operations of their Public Works and other City Departments. Through a multi-phased plan, the City will utilize GIS to map existing infrastructure including streets, water mains, and sewer and storm water collection systems. Recordation of building permits is also planned for the new system.
- **State Homeland Security Program (SHSP) Grant** – Utilization of grant fund to purchase and install a backup generator that will serve City Hall and the adjacent Fire Hall in the event of intentional or accidental loss of power.

2015 Glacier County Montana Healthcare Foundation Grant

Grant writing provided for funding to institute a pilot program of Integrated Mobile Health managed by Glacier County Emergency Medical Services. The project will improve health outcomes and save healthcare dollars by working with regional hospitals and other healthcare organizations to provide in-home discharge follow up. Assisted with a subsequent grant to the Robert Wood Johnson Foundation partnering with a professional program evaluation firm and the University of Washington to establish evaluation methods to determine effectiveness of the program.

Client: Glacier County EMS

MDT Transportation Alternatives (TA) Grant Applications – 2015

Grant writing provided for projects in Glacier and Anaconda-Deer Lodge (ADLC) Counties. Awaiting funding for a trail project in the City of Cut Bank sponsored by Glacier County and a lighting project in ADLC. If successful, both projects will enhance current ongoing activities to improve alternative transportation in these communities. Applications required extensive coordination with County employees and, in Cut Bank, the trail group formed to improve local trails.

Clients: Glacier and Anaconda-Deer Lodge Counties

Judith Basin County Free Library Grant Writing Assistance

Grant writing specialist assisting the Stanford Library Guild with research and preparation of grant applications to raise money to fund \$1.7 million expansion.

Client: Stanford Library Guild/Judith Basin County



2014 CDBG Housing Grant for YWCA of Helena

Grant writing specialist completing a CDBG Housing grant application for the funding package necessary to begin the rehabilitation project for the Helena YWCA as described above. This was the first time CDBG allowed temporary housing projects to apply for the housing grant. The YWCA was successful in acquiring funding.

Client: YWCA

EECBG Grant – Glacier County Facilities

Funding specialist providing planning and management assistance to Glacier County to utilize an Energy Efficiency and Conservation Block Grant. Grant administration activities included working closely with DEQ to provide information including Buy America documentation, payroll reporting requirements, and waste stream report for projects completed since 2010. Also assisted in providing construction documents and bidding assistance for an uncompleted project to replace windows in the County courthouse.

Client: Glacier County

2012 HOME and CDBG Housing Grant for Ron's Place

Grant writing specialist completing two grant applications for Ron's Place, a permanent home for disabled adults with fluctuating medical needs. This revolutionary concept in housing and treatment for disabled individuals will provide a continuum of care for the clients served by West Mont. Applications were carefully coordinated with West Mont staff and the architect completing the PAR. Activities included a variety of public meetings to support the applications. West Mont received award of both of these grants.

Client: West Mont

2011 CDBG Planning Grant for West Mont

Grant writing specialist responsible for planning grant application to the CDBG that provided funding for the PAR for West Mont Ron's Place.

Client: West Mont

2011 CDBG Public Facilities Grant for the Center for Mental Health Care House

Grant writing specialist responsible for public facilities grant application to CDBG for new construction of an eight bed mental health crisis stabilization facility. Lead a team of professionals including the architect responsible for the PAR, mental health staff, and county personnel in developing responses to the CDBG application. Coordinated meetings and communication between funding agencies, county commissioners, and the public to provide information for the application. Application was not submitted due to administrative changes at the CMH.

Client: Center for Mental Health

TSEP Planning Grants

Grant writing specialist coordinating information to submit planning grant applications to TSEP for use in preparing preliminary engineering studies and reports, including county-wide bridge inventories and PERs, water and sewer infrastructure PERs, and Capital Improvements Plans.

2016 1. Fergus County

2015 1. Gallatin County

2. Carter County

2011 1. Glacier County

2. Judith Basin County

3. Big Horn County

TSEP Bridge Construction Grant Applications

Grant writing specialist responsible for grant application to the TSEP for replacement of bridges. Coordinated all information related to the grant application including engineering information (Preliminary Engineering Report), community planning, road and bridge department planning, and financial information. Produced all documents required for the application submitted to TSEP for consideration by the legislature.

2016 1. Gallatin County Nixon Bridge
2. Judith Basin County Ross Fork Bridge
3. Big Horn County Soap Creek and Upper Road Bridges

2014 1. Fergus County Paradise and Roundhouse Road Bridges

2012 1. Glacier County Pardue Road Bridge
2. Judith Basin County Bridge North of Hobson
3. Big Horn County Owl Creek and Two Leggin's Creek Bridges

2010 1. Fergus County Ployhar, Paradise, and Kendall Road Bridges
2. Big Horn County Two Leggin's Canal and Two Leggin's Creek Bridges

2008 1. Fergus County Warm Springs Creek Bridge

2006 1. Fergus County Cottonwood Creek Bridge



TSEP Grant Administration

Administering grants received from TSEP following legislative approval. Grant administration includes coordination with County staff to complete contract start up conditions and preparation of quarterly reports and correspondence with grant agency during term of the grant contract. Counties assisted:

- **Fergus County.** Kendall Road Bridge, Scott Crossing Emergency Bridge Project, Warm Spring Creek Bridge, Cottonwood Creek Bridge, Roundhouse Bridge, Paradise Road Bridge
- **Big Horn County.** Two Leggins Creek, Owl Creek Bridges
- **Judith Basin County.** North Hobson Bridge
- **Anaconda Deer Lodge County.** Stumptown and Willow Glen Bridges
- **Glacier County.** Pardue Road Bridge

Community Transportation Enhancement Program (CTEP) Grants

Assisted Glacier and Judith Basin Counties with applications to MDT's CTEP for funding. Glacier County utilized funding for a Veteran's Memorial with access from the State Highway in Browning. Judith Basin County made upgrades to the exterior of their historical courthouse.

Clients: Glacier and Judith Basin Counties

Glacier County Office Records Building

Glacier County utilized HB 645 funding to complete the construction of a record retention facility for use by the county administration. Provided assistance to the County to maintain the timeline for reporting to the Department of Commerce, and also worked with the DOC to use the funding for an additional project in order to utilize all of the funds associated with the grant. The County used this additional funding for roadway improvements to the Governor Hugo Aaronson Road.

Administration of this grant involved close coordination with County personnel, the contractor, engineer, and DOC staff. Grant administrator was responsible for assisting with oversight of the contractor during construction, including review of certified payrolls to assure compliance with labor standards requirements, ARRA grant reporting, correspondence with the DOC, and all performance reports and closeout documents.

Client: Glacier County

Bridger Pines Water and Sewer District PER and Grant Applications/Grant Administration

Grant specialist assisting the engineer in preparing grant applications for sewer improvements within the Bridger Pines Water and Sewer District near the Bridger Ski Area. Project was awarded TSEP and RRGL grants in 2008. Also submitted project for STAG and WRDA funding. Coordinated efforts to assure funding including passage of a large bond election with the District.

Also served as grant and loan administrator for this challenging wastewater upgrade project. Upgrade involved a community at the base of Bridger Bowl ski area that had limited options for wastewater treatment. Funding included an RRGL grant used to complete preliminary engineering in order to gain approval of a system from DEQ in order to secure additional SRF loan and TSEP grant funding. Once that funding was successfully secured a WRDA grant was added to the funding package. The nearly \$3 million project was completed in 2013.

Client: Bridger Pines County Water and Sewer District

Lewis and Clark Fairgrounds/Dunbar Area Water System Update to the PER and Grant Applications – Helena, MT

Assisted engineer with producing an update to the Preliminary Engineering Report for the Lewis and Clark Fairgrounds/Dunbar Area Water System Upgrade to be used for application for funding from various sources. Worked with the Grants Coordinator for Lewis and Clark County to write and produce grant applications to the Treasure State Endowment Program (TSEP), the Renewable Resource Grant and Loan Program (RRGL), and the Community Development Block Grant Program (CDBG).

Client: Lewis and Clark County

Lewis & Clark County Fairgrounds/Dunbar Area Infrastructure Study – Wastewater System Upgrade - Helena, MT

Public Relations Specialist serving as project coordinator for wastewater upgrades to the Lewis and Clark Fairgrounds, the AGC Laborer's Training Facility, and a mixed commercial/residential subdivision – Woodlawn Addition. Responsible for creating presentations for public meetings and for coordinating public information. Project assistant for Preliminary Engineering Report and TSEP Grant Application. Worked closely with County staff to submit applications for funding including an SRF loan and STAG grant proceeds.

Client: Lewis & Clark County Commissioners

Manhattan Facility Plan Amendment – Manhattan, MT

Public Relations Specialist responsible for preparation of electronic presentation of alternatives for upgrading the Manhattan wastewater facility. Presentation was submitted by the project manager to the Town Council. Also



edited and assembled preliminary and final drafts of the Wastewater Facility Plan (PER) prior to submittal to client, regulating, and funding agencies.

Client: Town of Manhattan

COMPREHENSIVE CAPITAL IMPROVEMENT PLANNING, RESOURCE ASSESSMENT, and GROWTH POLICIES

Glacier County CCIP – Glacier County, MT

Successfully assisted County with application to TSEP for a planning grant to prepare a CCIP. Process included close coordination with County commissioners and staff, needs assessment process with county department heads and public, compilation of information and costs related to identified capital need, and preparation of a written CCIP document. The CCIP was adopted by the commission in 2014.

Client: Glacier County

Other Community CCIP Completed:

- Judith Basin County - 2014
- Big Horn County – 2014
- Carter County – 2016
- Fergus County – 2016
- City of Deer Lodge – 2017

Judith Basin County Growth Policy – Judith Basin County, MT

Utilizing a CDBG planning grant and a stipend from the Opportunity Link regional planning organization, Judith Basin County completed their Growth Policy. Serving as the Growth Policy technician, coordinating all activities to complete the Policy including work with the planning board to develop and implement public outreach activities. Responsible for research and content of the Policy in accordance with MCA Section 76-1-601. Planning Board meeting facilitation to develop goals and objectives relevant to the values and wishes of Judith Basin County and its residents.

Client: Judith Basin County

Petroleum County/Town of Winnett Growth Policy – Petroleum County, MT

Utilizing a CDBG planning grant Petroleum County in coordination with the Town of Winnett is in the process of completing their Growth Policy. Serve as the Growth Policy coordinator working closely with the planning board.

Client: Petroleum County

MEDA Volunteer – Sanders County Resource Assessment Team – Sanders County, MT

Served as a volunteer on a resource assessment team, sponsored by Montana Department of Commerce with coordination by Montana Economic Developers Association and the local Certified Regional Development Corporation. Participated in a county wide, community based planning and assessment process involving interviewing a number of people in the community, recording their suggestions and writing portions of an implementation plan for Sanders County's use. Our Team suggested ways of accomplishing the goals of the community.

Client: Sanders County



Steven V. Jenkins, P.E.

Design and Marketing Engineer

Education

B.S. Civil Engineering, Utah State University, Logan, Utah – 1983
M.S. Civil Engineering w/ Geotechnical Emphasis, Utah State University, Logan, Utah - 1985

Licenses/Registrations

Professional Engineer, Montana 1994, Utah 1987
IMSA, ATSSA, NACE, APWA

Employment History

MSU Civil Engineering 1994-2016 LTAP Director
Engineering Training and expertise for Tribal and Local governments
Utah State University Civil Engineering 1989-1994
T2 Director, Engineering, Funding, and Safety Training
Utah Department of Transportation 1983-1989
Project Design Engineer, Local Governments Engineer,
Hydraulic Engineer, Construction Inspection

Biosketch

Steven V. Jenkins has been practicing engineering in Montana for over 23 years. His experience working with State, Tribal and Local Governments has him involved with project funding, design, and construction of all types of Highway projects. Steve has extensive experience in training local governments to obtain funding, seek civil engineering design and perform construction safely. Steve's experience with materials uniquely prepares him to write specifications and estimates and perform design. He observes defects of roadways, bridges and all aspects of transportation systems and seeks simple solutions for improvement. Steve's civil experience generally includes site development, roads, signing and trails/sidewalks. Steve has established long-term relationships with City and County professionals by prioritizing client's training needs and assisting them with project development. Steve's focus on exceptional professional services has resulted in sustainable growth to better serve clients.

Project Experience

Has helped Montana Local transportation officials through funding, design and construction of FEMA, TSEP, FLAP, DEQ projects.

Director, Montana Local Technical Assistance Program and Native American Technology Transfer Center

Directed all training activities including course preparation, teaching, researching new technologies, assisting all levels of government. Implemented the Montana Flagger Training Program and MDT Maintenance Traffic Control Training. Designed the Montana Road Scholar program to provide education and advancement for Local Transportation officials. Over one thousand graduates of this program and close to 100 graduates of the Road Master's program attest to its success.

Director, Utah Technology Transfer Center

Managed all aspects of technology transfer for Transportation providers in Utah: proposals, work plan, budget, newsletters, training, library assistance, corresponded with all local governments and professional organizations, UDOT and FHWA.

Roadway Design, Project Design Engineer, UDOT

Project design engineer on crucial projects including Panguitch Main Street, Manti Main Street, 2100 South 300 West Salt Lake City, Black Smith Fork River Bridge, Jordanelle, Railroad Projects, etc. Coordinated design activities with local governments.

Transportation Planning, Local Government Aid, UDO

Worked as local government engineer, administering B and C funds and Federal Aid Secondary funds for all road and bridge replacement projects off system for local governments.

Research, Materials and Research, UDOT-Principal investigator on "Pipe Culvert Durability" and "Seasonal Load Restriction" research duties.

Hydraulics Design, Roadway Design, UDOT

Reviewed hydraulic design for replacement bridge structures after the floods of 1983 – 1984 in Thistle, Utah. Served as an inspector of drainage pipe placement and backfill as well as a surveyor for roadway and right of way land surveying.





Prospects/Reports/Publications

- FHWA technical panel "Pavement Management for Local Governments"
- National Association of County Engineers; update and rewrite manuals for Procurement, Public Awareness and Support, and Drainage and Storm Water Design.
- FHWA technical panel to establish training for "Culvert Management," "Bridge Management," "Hydraulic Design," and "Storm Water Design."
- "Risk Management for Montana"
- "Safety Management for Local Governments".
- Flagger's Handbook, Montana 2004
- Flagger's Handbook, Montana 2010
- Flagger's Handbook, Montana 2013
- Guidelines for Temporary Traffic Control, Montana 2005
- Guidelines for Temporary Traffic Control, Montana 2009
- Guidelines for Temporary Traffic Control, Montana 2010

Courses Developed and Taught

Preparing and Teaching "Winter Maintenance" courses: This course includes all aspects of preparation for winter storms including, equipment preparation, anti-icing, deicing with the use of chemicals, sanding, salting, and effective plowing. This course has been taught in many of the Western states.

Snow Rodeo: This training and competition have been hosted by LTAP for over twenty years. Participants learn effective roadway maintenance and equipment operations.

Prepare and administer Work Zone Flagging course for Montana; certified thousands of students over a twenty-year period on Work Zone Safety Signing and Flagging.

Currently teach workshops on: Sign Management System, Road Surface Management System, Gravel Road Maintenance, and Safety Features for Local Roads and Streets.

Prepared and taught WZTC Level I for Technicians.

Prepared and taught WZTC Level II for Supervisors.

Assisted Forest Service in design, signing and bridge aspects of training.

Assisted Forest Service in court cases regarding signing; implemented a sign inventory program throughout Utah, Idaho, and Montana.

Assisted FHWA and MDT; implemented a sign management program.

Assisted MACO (Montana Association of Counties), Montana League of Cities & Towns, MACRS (Montana Association of County Road Supervisors), APWA, ATSSA, NACE; developing and conducting annual meetings.

Assisted MACRS to become Affiliate Members of NACE

Developed MACRS organization from a small group of counties officials to over 300 with all 56 counties involved. Currently county commissioners also attend the annual conference and district meetings.

Developed a webinar system for monthly safety meetings in Montana.

Distance learning on the EdNet System at MSU, reaching 14 locations with over 1,000 participants.

Implemented the PASER (Pavement Surface Evaluation and Rating) to manage pavements for Montana Local Governments.



Jerry Gray, P.E.

Senior Transportation Engineer

Education

B.S. Civil Engineering, University of Washington, 1986

Licenses

Professional Engineer, Montana
Professional Engineer, Wyoming
Professional Engineer, Washington

Employment History

2017-Present Transportation Technical Lead Engineer, Stahly Engineering, Helena, MT
1996-2017 Senior Transportation Engineer, Morrison-Maierle, Inc., Helena, MT
1993-1995 Project Engineer, Geodimensions, Inc., Phoenix, AZ
1990-1993 Project Engineer, Entranco, Inc, Bellevue, WA
1987-1990 Engineer, Boeing Military Airplanes, Seattle, WA

Biosketch

Jerry Gray, P.E. brings over two decades of experience as a consulting engineer to Stahly Engineering. His experience includes numerous Montana Department of Transportation (MDT) projects, as well as public and private civil engineering projects in Montana, Wyoming, Washington and Arizona. Jerry has been involved in project management, construction engineering, street, highway, and interchange design, hydrologic analysis, culvert design, storm drain design, and detention/retention design for over 30 years.

Project Experience

Montana Department of Transportation

Jerry is the Lead Technical Engineer for the SE&A Transportation team and is involved in all aspects of MDT project development. Jerry is proficient with Microstation and Geopak software and leads the SE&A in-house Open Roads training for the transportation team.

Westby-West

Project Engineer for 8.9 miles of total reconstruction with no added capacity along State Primary Route 30/MT 5, including major rehabilitation, utility and railroad coordination, and storm drain improvements through the town of Westby. This project is currently in the final design phase and construction is anticipated in 2019.

Client: MDT

Excelsior Avenue/Park St–Butte

Responsible for utility plans and conflict coordination for project located in a high use urban setting in uptown Butte. The project includes design associated with minor rehabilitation of the roadway surface, beautification of the Park Street corridor, and upgrades to existing sidewalk corners for new ADA ramps achieving current PROWAG design standards. This project is currently in the final design phase with construction anticipated in 2019

Client: MDT

Deep Creek Canyon, Townsend MT

Project Manager for localized improvements, pavement preservation and eight timber bridge replacements designed and constructed in three segments under an expedited scope and schedule. Project included extensive public involvement and agency coordination, roadway re-alignment, mitigation of rock fall hazards, sight distance improvements, bank stabilization and re-vegetation. The final phase of construction to be completed in 2017 includes subgrade improvements to address frost heaves, culvert replacements and 11 miles of cold mill and asphalt overlay. All three segments included stream channel and riparian enhancements while working within the topographic and environmental constraints of the Deep Creek Canyon.

Client: MDT

Conrad I-15 North Interchange and Rest Area, Conrad MT

Project Manager for interchange ramp reconfiguration and improvements. Tasks included design of new on/off ramps, environmental review and documentation, public involvement, drainage improvements, interstate lane modifications, and the preliminary design for a future Rest Area.

Client: MDT





Conrad I-15 North Design–Build Rest Area, Conrad MT

Project Manager for the site/civil improvements for the new rest area with truck weigh scale. Improvements included site grading, parking layout, drainage and detention basin design, and water and sewer main extensions to connect to City of Conrad services.

Client: MDT

West Laurel Interchange-West, Laurel MT

Project Engineer for a \$35 million project to realign 2 miles of I-90 and replace existing bridges over the Montana Rail Link tracks to replace the existing half-interchange with new partial cloverleaf interchange. Project included environmental review and documentation, traffic engineering, realignment of and improvements to connecting roadways, and drainage and irrigation design.

Client: MDT

West Billings Interchange-King Avenue Bridges, Billings MT

Project Manager for the replacement of dual bridge structures spanning Laurel Road and the Montana Rail Link tracks. Replacement alternatives considered continuous steel and pre-stressed superstructure types in various span arrangements. Other project features included aesthetic abutment modifications to the existing I-90 single point urban interchange structure.

Client: MDT

Lovell-Emblem, Big Horn County WY

Project Manager for the widening and asphalt overlay of 3-miles of Highway 32 south of Lovell, Wyoming. Project included wetland mitigation design, coordination with irrigation company representatives on the replacement of irrigation crossings within the project, and relocation of irrigation canals to outside of highway right-of-way.

Client: Wyoming Department of Transportation

40 km North of Havre, Hill County MT

Project Manager for the development of right-of-way plans, deeds, exhibits, easements and GLO plats for 14.6-km (9-miles) of reconstruction.

Client: MDT

Montana Secondary Highway 324, Grant-West, Beaverhead County MT

Project Engineer for the reconstruction of an 8-mile section of Montana S-324 located near the main Lewis and Clark Expedition route. The project included route location studies, public involvement, environmental review and documentation, and a turnout with interpretive historical signs for tourists. A significant fen-type wetland, or peat bog, is located along the project that required realignment of 1-mile of the roadway to avoid the natural geographic feature.

Client: MDT

Carroll College Residence Hall, Helena MT

Project Manager for the site/civil improvements for a new dormitory on Carroll's campus. Site improvements included infrastructure upgrades to City of Helena streets and water and sewer mains, and multiple new parking lots on campus. Site work also included coordination with NorthWestern Energy to abandon the existing three-phase overhead power line on Campus and replace it with a new relocated power line.

Lewis & Clark County Rural Improvement Districts

Project Manager for pavement preservation and maintenance, and storm drainage improvements for Lewis & Clark County's Rural Improvement District (RID) program. The RID program was established to fund street maintenance projects in rural subdivisions throughout the County. Tasks included completing annual assessments of pavement conditions in numerous subdivisions and assisted the County in identifying each year's maintenance projects. Annual projects included pavement patching, crack sealing, chip sealing, overlays and drainage improvements in multiple subdivisions. Projects included developing plans and specifications, quantities and estimates, contract documents, project advertising and bidding, and construction engineering services.

Montana Secondary Highway 487, Big Mountain Road, Whitefish MT

Project Engineer during the final design phase for reconstruction of the 5-mile section of roadway in mountainous terrain accessing the Big Mountain ski resort. Project required significant public involvement with local residents and the Big Mountain ski resort. Tasks included geometric design, cross sections, earthwork and final quantities.

Client: MDT

City of Conrad Street Overlay, Conrad MT

Project Manager for developing SID boundaries and assessment areas, and providing engineering assistance to the City of Conrad in assessing the need for asphalt overlays, chip seals and drainage improvements to the community's 20-year-old streets. Assisted in the development and creation of three SID's to fund the project with improvements including street reconstruction, curb and gutter, sidewalks and valley gutters. Tasks included



developing plans, specifications, quantities and estimates, contract documents, and construction engineering services for the improvements which included cold mill and asphalt overlay of 10.5 miles of city streets.

Client: City of Conrad

NorthWestern Energy Parking Lot Improvements, Helena MT

Project Manager for the existing asphalt parking lot and entrance approach redesign to match the new alignment and grade of North Main Street being reconstructed by MDT. The new parking lot and approach were designed under contract with NorthWestern Energy and constructed by MDT with the North Main Street project. The approach was constructed on a high embankment requiring a retaining wall along the Montana Rail Link right-of-way and a landscaped rock covered slope on the other side. The two projects under design and construction simultaneously required close coordination with MDT and their consultant, the City of Helena, and NorthWestern Energy.

Old Shodair Hospital Parking Lot Improvements Helena MT

Project included expansion of the existing asphalt parking lot, demolition of existing buildings, removal of large mature trees, new curb and gutter, sidewalk, stormwater retention basin with injection well, and construction engineering.

Missoula Safeway, Missoula MT

Project Manager for the site/civil improvements for the new Safeway store located at Brooks and Reserve in Missoula. Site/civil components included utility design, site grading, parking lot design, drainage design consisting of swales, culverts and injection wells, and coordination with the project architect, City of Missoula and Montana Rail Link.

M&H Subdivision-Dillon Safeway, Dillon MT

Project Manager for a 20-acre commercial subdivision and site/civil improvements for the new Safeway store on one of the 5-acre parcels. Site/civil components included parking lot design, site grading, drainage design, and utility relocations/improvements and coordination with the project architect, City of Dillon and local irrigation company. Other improvements included new access roads within the subdivision, widening improvements to adjacent city streets and a regional storm water detention basin.



Jim Nallick, P.E. Senior Engineer

Education

B.S. Civil Engineering, Montana State University,
Bozeman, MT – 1992
M.S.C.E. Emphasis in Water Resources
Montana State University,
Bozeman, MT - 1994

Licenses/Registrations

Professional Engineer, Montana 1997

Training

Recent training includes: Prefabricated Bridge Applications, MDT Preconstruction Seminar, Utility Coordination for Highway Projects, Pervious Pavers, Hydrodynamic Separation

* Senior Transportation Engineer, Sanderson Stewart

**Design Supervisor, MDT/MSU Design Unit

Employment History

Present – Stahly Engineering & Associates

2013-2016 – Sanderson Stewart, Bozeman

2000-2013 - Montana Department of Transportation-MSU Design Unit, Bozeman, MT

Biosketch

Mr. Nallick has a solid background in transportation design with extensive MDT experience. Specialty areas include Hydraulics Design, Roadway Design, and 3D modeling.

Project Experience

Westby-West; STPP 30-1(20)16 – Westby, Montana

In process of completing or supervising design of all hydraulic elements on this project. The project includes design for 8.9 miles of total reconstruction with no added capacity along State Primary Route 30/MT 5, including highway drainage, PESC design, pipe alternates for bridge replacement, and a new storm drain system for the town of Westby. Construction is anticipated in 2019.



Excelsior Ave / Park St – Butte; STPU 1899(30) – Butte, Montana

In process of providing design of updated storm drain inlets, ADA curb ramp conceptual design, roadway reconstruction design, and oversight of road plans preparation. Construction is anticipated in 2019.

Roberts Reconstruction – Roberts, Montana*

Provided project management and hydraulic design for lined irrigation ditches, irrigation culverts and siphons, storm water diversion, storm water overflow weir, and general highway drainage.

Right Turn Patterson Lane – Bozeman, Montana*

Provided project management, road design, and hydraulic design for irrigation siphon replacement and highway drainage. Researched water rights and coordinated design with ditch company.

Roundabout projects at Grass Range, 56th and King (Billings), Central and King – Billings, Montana*

Provided storm drain design, highway drainage design, irrigation research, and irrigation design for roundabout projects.

D4 Culverts Phase I and Phase IV**

Supervised hydraulic design for 33 bridge replacement sites. Including hydrology, hydraulic modeling, sizing pipe alternates, alternate pipe installations, culvert rehabilitation, AOP passage, and floodplain permitting.

Bridger Creek – Bozeman, Montana**

Supervised bridge opening design including scour evaluation and bank protection. Project also included restoration/relocation of Lyman Creek outside of right-of-way and creation of wetland area using natural features to enhance abutment scour protection.

East Bozeman Interchange Wetland Mitigation – Bozeman, Montana**

Supervised survey and design of wetland remediation project including groundwater modeling, stream relocation, and pond design.



Harold "Arne" Wiebe, Jr.

Sr. CADD Technician/Designer

Education

Diploma (AutoCAD),
Oregon Poly Technical Institute - 1991

Training

Microstation 2d Training Course- MDT 1991
AutoCAD Customizing Course – Salt Lake City College
PC Maintenance Workshop – Helena VO-Tech
MDT Training Seminar on GEOPAK – Helena, MT
GEOPAK Training Seminar – Billings, MT
Autodesk University – Las Vegas, NV 2002-2004

Employment History

1992-Present – Stahly Engineering
and Associates, Helena, MT
1991-1992 – Bridge Bureau, MDT, Helena, MT
1989-1991 – General Manager, Western Wicker
Wholesale, Salem, OR
1979-1988 – Floation Distributing, Tualatin, OR

Memberships

Elkhorn Search and Rescue –
Member since 1993
(Past President, Vice President)

Biosketch

Mr. Wiebe's 20+ years of experience includes a wide range of skills including a thorough knowledge of AutoCAD Civil 3D through 2015, Bentley's Microstation V8i, and Geopak V8i. Mr. Wiebe has utilized his extensive experience and skills associated with these software packages on numerous projects for Stahly Engineering including structural designs and the design of highways and bridges, water and wastewater facilities, city streets and sidewalks, and subdivision plans.

As manager of Stahly Engineering's Drafting Department, Arne schedules and oversees technical drafting submittals for the firm's projects. In addition, he is a skilled designer/drafter with extensive project experience in drawing and reviewing structural plans and site civil amenities.

Project Experience

STRUCTURAL DRAWINGS AND DETAIL

Arne is an integral part of the construction design documents phase for structural projects. Typically, Arne will coordinate the structural drawings to the architectural drawings. Arne's vast knowledge of the construction industry helps him correctly detail the drawings. This knowledge leads to an efficient and cost effective set of plans.

Arne works hand in hand with the structural engineer to implement all of the design features of the building design. In addition, he cross references all of the architectural drawings to check for discrepancies in the drawings.

RECENT PROJECTS:

- Our Redeemers Lutheran Church
- J-4 Automotive Building Expansion
- Northwestern Energy -Masonry building
- Studio 360 AES-Havre seed building
- Stahly Engineering- Office Building Design/Build
- Lewis & Clark Fairgrounds- Exhibition Hall
- St. Peter's Hospital Entrance



SITE CIVIL DESIGN AND DRAWINGS

Arne also provides detailed design of site civil elements for Stahly Engineering projects including; residential and commercial structures, subdivisions, state highways, city streets, parking lots, and water and sewer extensions. Arne is very knowledgeable about ADA compliance standards within parking lots, sidewalks, and structures.

RECENT PROJECTS:

MDT Westby West – Westby, MT

Lead designer for 9 miles of highway reconstruction. The reconstruction will include a roadway realignment, new grades, utility plans, right of way plans, cross sections, signing and striping.

Client: Montana Department of Transportation

Excelsior Avenue/Park St–Butte

Lead designer for this high use urban setting in uptown Butte. The project includes design associated with minor rehabilitation of the roadway surface, beatification of the Park Street corridor, and upgrades to existing sidewalk corners for new ADA ramps achieving current PROWAG design standards. This project is currently in the preliminary design phase with construction anticipated in 2019



Uptown ADA Ramps–Butte

Lead designer for approximately 31,000 square feet of concrete sidewalks and new ADA Ramps at the corners of streets along West Park Street and North Excelsior Avenue. This project is currently in the preliminary design phase with construction anticipated in 2018

7th Ave ADA Ramps–Lewistown

Design associated with new ADA ramps on 7th Avenue from West Broadway to 1st Street. Design for this project is complete and construction will be conducted during the 2016 season.

Lewis and Clark County-Cooperative Heath Center – Helena, MT

Project Manager/designer for site improvements for the modification and addition to the existing medical building. Duties included coordinating with architects and county for design of new parking, ADA access to building and new ADA ramps at entrances and street crossing, new parking lot, and storm water detention. This challenging site had no available room for storm water detention so an underground facility was designed.

Client: Bjerke Architects, SMA Architects and Lewis and Clark County

Prickly Pear Sportsman Shooting Range – Helena, MT

Lead designer for adding an additional pistol and a 400 yard shooting range at the McDonald Pass range. We coordinated ideas from the board members and presented options for best use of the land and functionality. In the design process a pistol range was cut into the landscape which incorporated safety berms. Excavated material was used for a safe backstop for the 400 yard rifle range.

Client: Prickly Pear Sportsman Club

Aspen Gardens Assisted Living – Helena, MT

Project Manager /designer for an assisted living 4-plex. This site required storm water detention as well as grading for the driveways and parking. The subdivision's existing storm water basin was utilized by designing a storm water drop inlet and piping network to get the water from the new site to the existing basin. The basin was enlarged based on the new storm water calculations. Negotiations with the City of Helena Parks Department allowed the contractor to get a temporary encroachment permit because the site paralleled a City Park and there was no other way construction could be achieved.

Client: Bjerke Architects

MDT Haugan Scale Site – Haugan, MT

Lead designer for site improvements for the Haugan Scale site on Interstate 90. The design provided two new scale pits, latrines, storm water upgrades and striping and signing.

Client: Montana Department of Transportation

Glacier County Browning School Path CTEP Project – Browning, MT

Lead designer for construction of a 4300 foot path for Browning's high school that included signing, ADA gates and additional sidewalk for the school. Challenges included creating an easement for the tribe as well as negotiating around delineated wetlands.

Client: Glacier County

Lewis and Clark County Forest Highways Safety Improvements (Project 1 & 4)-Augusta, MT

Project 1~Project Manager /designer for Sun River Road and Benchmark Road overlays which included approach design, dig-outs and overall construction inspection and certifications.

Project 4~Project Manager /designer for Sun River Road and Benchmark Road curve safety improvements which included reconstruction of 1500' on both roads. Design consisted of realignment, grades, fencing and easements.

Client: Lewis and Clark County

MDT Lima Rest Area Design/Build – Lima, MT

Lead designer for construction of new rest area. Activities included reconstruction of Bailey Street as well as the design of a new rest area, parking and site design to accommodate passenger cars up to WB-67 interstate trucks and provided site geometrics and access.

Client: Diamond Construction, Inc., Design/Build lead

MDT Dearborn Rest Area Design/Build – Dearborn, MT

Site design provided as part of the design/build team providing reconstruction of two rest areas near Dearborn (North and South). Role was limited to the area immediately surrounding the buildings including landscape, sidewalk, utilities, and picnic facilities.

Client: Dick Anderson Construction, Design/Build lead

Glacier County Central Park CTEP Project – Cut Bank, MT

Lead designer for improvements at Central Park in Cut Bank that include a skate park, upgraded sidewalks, and landscaping.

Client: Glacier County



MDT Custer/Benton Avenue Extension & Intersection Improvements – Helena, MT

Lead designer for intersection reconstruction which included lane additions, ADA ramps, and new traffic signals. Extensive storm drain improvements were designed into constricted right-of-way that was available.

Client: City of Helena

Marysville Road Reconstruction Design – Marysville, MT

Lead Designer responsible for design of 6.8 miles of roadway reconstruction and safety improvements on Marysville Road. Design incorporated measures to deal with challenges such as wetlands and large rock outcroppings that had to be pre-split. Stream restoration plans were required as well. Wetland mitigation plans were prepared for a site away from the project area adjacent to the existing pond at the Lewis & Clark County Fairgrounds.

Client: Montana Department of Transportation/Lewis and Clark County

Massough Ponds

Lead Designer for creation of three ponds at the head of Jackson Creek within Jefferson County for a private landowner. These ponds expanded a wetland and utilized water for fisheries.

Client: Private

Brady Street Reconstruction – Helena, MT

Assistant Designer responsible for drawing the topo-map and the C.O.S. for this project. Also defined the horizontal alignment and grades, drew signing plans, and entered all the design criteria into GEOPAK which generated cross sections and quantities.

Client: City of Helena

Guardrail Upgrade Project – Montana

Lead Designer in charge of replacing blunt ends on non-interstate routes in all 5 districts.

Client: Montana Department of Transportation

6th Avenue Reconstruction and Overlay – Helena, MT

Lead Designer responsible for creating the base map from the survey data and for defining the horizontal alignment, centerline profile, sidewalk profiles, ADA ramps, storm sewer, and drafting of signals.

Client: City of Helena

Montana Avenue Widening – Helena, MT

Lead Designer for horizontal alignment, profiles, sidewalks, ADA ramps and for drafting the signals.

Client: Montana Department of Transportation

City of Helena 400 Block Streetscape Project – Helena, MT

Lead Designer overseeing horizontal alignment, centerline profile, and sidewalk grades. Drafted landscaping plans and ADA compliant ramps.

Client: City of Helena

Sportsmans Campground - Dickie Bridge/Wise River Total Reconstruction Design – Montana

Assistant Designer for horizontal alignment and profiles. Created the base map from MDT field books. Project included GEOPAK Design Criteria Input.

Client: Montana Department of Transportation

Bannack Road Reconstruction Design – Beaverhead County, MT

Assistant Designer for alignment and grades. Project included GEOPAK Design Criteria Input.

Client: Beaverhead County

Hillside North and South Highway Reconstruction Design – Miles City, MT

Assistant Designer involved in all aspects of the design. Provided GEOPAK Design Criteria Input.

Client: Montana Department of Transportation

North Main Street Reconstruction Design – Helena, MT

Assistant Designer involved in all aspects of the design. GEOPAK Design Criteria Input was a part of project responsibilities.

Client: Montana Department of Transportation

Lyndale Overpass Design – Helena, MT

Assistant Designer with duties that included drafting the pedestrian overpass, signing plans and developing the GEOPAK Design Criteria Input for the entire project.

Client: Montana Department of Transportation

Lemhi Pass Reconstruction Design – Beaverhead County, Montana

Lead Designer with duties that included defining the horizontal alignment and profiles in an area where minimal impact was expected. This 8 mile stretch of road was a real challenge with 70 curves, irrigation features and 2 concrete arch pipes for the streams.

Client: Beaverhead County



Robie Baldwin-Culver

Grant Writer/Administrator

Associate Principal

Education

BSW (Bachelors of Social Work with Honors), University of Wyoming, Laramie, WY - 1982
Coursework in Business Management, University of Wyoming-Casper & Carroll College

Training

W2ASACT Funding Workshop – 2007 - 2015
CDBG Grant Administration Workshop - 2011
TSEP Grant Administration Workshop – 2005-2014
TSEP Bridge System Workshop – 2006-2009
Get That Grant: Grantwriting from Conception to Completion – 2005

Employment History

2002-Present - Public Relations and Funding Specialist, Stahly Engineering and Associates, Helena, MT
1999-2002 - Administrative Support Specialist/Project Accountant, Harding ESE, Inc./MACTEC, Helena, MT
1988-1999 - Customer Service/ Bookkeeping/Inventory Management, The Base Camp, Helena, MT
1984-present - Owner/Business Manager, Nitro-Green/Bar C Bar Enterprises, Helena, MT

Memberships

Hangman's Tree Water User's Assc. – secretary/treasurer
Montana Economic Developers Association

Biosketch

Ms. Baldwin-Culver has worked in the engineering field for 17 years. She serves as the firm's business development manager providing public relations, marketing, and general administration assisting engineering project managers with project coordination and preparation and distribution of bid documents and plans and construction specifications.

Robie prepares grant and loan applications for funding community infrastructure (bridges, water, wastewater) projects and public facilities. She has the ability to conduct needs assessments, find appropriate funding sources, and manage the grant process. She also provides grant administration for communities where she works closely with administrators and other personnel to carefully manage valuable grant funding contracts. Her commitment to the communities she serves is evident in the positive relationships she has established.

Project Experience

GRANT WRITING AND ADMINISTRATION

West Mont Farm Residence – Helena, MT

Grant writer for project to rehabilitate an existing group home located in rural Lewis and Clark County. The home requires additional room to accommodate eight disabled adult residents, ADA upgrades, and new water and sewer systems. A CDBG grant has been awarded and West Mont awaits results of the HOME grant application

Client: Lewis and Clark County

Center for Mental Health Group Home – Helena, MT

Grant writer for project to construct an eight bed group home for mental health patients, primarily those recently released from hospitalization. This home is intended to provide a permanent residence in a supportive environment. The project is planned for construction directly adjacent to the Center for Mental Health campus and will involve the demolition of two blighted properties. The CDBG application (awarded in 2017) was sponsored by the City of Helena.

Client: Center for Mental Health

Lewis and Clark Public Health – Helena, MT

Grant writer for project to consolidate Lewis and Clark Public Health Services (excluding Environmental Health) at the Murray Building. This project will address multiple concerns of the low to moderate income clients served by the myriad of services provided by the department. Remodel of the space will provide safe and comfortable working environments that will be more accessible for public health clients. A CDBG public facilities grant requesting \$450,000 in assistance for the construction project was awarded in 2017..

Client: Lewis and Clark County

Helena YWCA Rehabilitation – Helena, MT

Project Coordinator/Grant Administrator for rehabilitation project at the historic YWCA which provides temporary housing for homeless women and children. Project upgrades include new entrances, ADA compliance, refurbishment of living spaces, and remodel of administrative offices. Provide contracting with grant agencies that include CDBG and HOME. The project will utilize Historic Tax Credits. Provide management of grants, provide for relocation of residents, and participate in construction contractor management.

Client: Lewis and Clark County





City of Helena West Side Wastewater System Connection – Helena, MT

Grant writer submitting TSEP and RRGL grants during the 2015 grant cycle for the City of Helena. Project will provide wastewater collection mains to an area currently served by on-site systems that are failing and non-replaceable.

Client: Lewis and Clark County

Town of Jordan Wastewater System Upgrade – Town of Jordan

Grant writer submitting TSEP and RRGL grants during the 2015 grant cycle for the Town of Jordan. Project will upgrade a currently undersized wastewater treatment system in order to meet DEQ requirements.

Client: Town of Jordan

MDT Transportation Alternatives (TA) Grant Applications – 2017

Grant writing provided for TA projects detailing preliminary plans, cost estimates, need and reason for the projects, public outreach to determine type of project, and maintenance plans for built project. Grants were written for the following:

Glacier County/Cut Bank Trail – continuation of a multi-use path connecting an existing trail to the Sports Complex in Cut Bank. This project will be another accomplishment of an overall trail master plan. Project awarded.

Anaconda-Deer Lodge (ADLC) County – addition of historic lighting to 3rd street in Anaconda from Willow to Hickory. This project will be a continuation of safety replacement of lights within the City.

City of Deer Lodge – ADA upgrades to sidewalks along Main Street (California to Texas Streets) which would provide enhanced connectivity from the Grant Kohrs Ranch to the Old Prison. Project awarded.

Clients: Glacier and Anaconda-Deer Lodge Counties, City of Deer Lodge

City of Deer Lodge Grant Writing – Miscellaneous Projects

Grant writer assisting the City of Deer Lodge with various grant application to improve infrastructure and their service to City residents:

- **Preliminary Engineering Grants – Water Supply System** – TSEP, RRGL, and RDGP grants written to acquire funding for a PER to determine alternatives to a currently contaminated water supply.
- **FEMA – Pre-disaster Mitigation Grant** – a two-part grant process utilized to determine awards for projects intended to mitigate effects of natural disasters. Deer Lodge's application is to purchase two homes located within a historic floodway.
- **Montana Land Information Act Committee Grant** – Utilization of MLIA grant funds to purchase computer software and hardware to create GIS solutions that will assist the local government by improving the efficiency of operations of their Public Works and other City Departments. Through a multi-phased plan, the City will utilize GIS to map existing infrastructure including streets, water mains, and sewer and storm water collection systems. Recordation of building permits is also planned for the new system.
- **State Homeland Security Program (SHSP) Grant** – Utilization of grant fund to purchase and install a backup generator that will serve City Hall and the adjacent Fire Hall in the event of intentional or accidental loss of power.

2015 Glacier County Montana Healthcare Foundation Grant

Grant writing provided for funding to institute a pilot program of Integrated Mobile Health managed by Glacier County Emergency Medical Services. The project will improve health outcomes and save healthcare dollars by working with regional hospitals and other healthcare organizations to provide in-home discharge follow up. Assisted with a subsequent grant to the Robert Wood Johnson Foundation partnering with a professional program evaluation firm and the University of Washington to establish evaluation methods to determine effectiveness of the program.

Client: Glacier County EMS

MDT Transportation Alternatives (TA) Grant Applications – 2015

Grant writing provided for projects in Glacier and Anaconda-Deer Lodge (ADLC) Counties. Awaiting funding for a trail project in the City of Cut Bank sponsored by Glacier County and a lighting project in ADLC. If successful, both projects will enhance current ongoing activities to improve alternative transportation in these communities. Applications required extensive coordination with County employees and, in Cut Bank, the trail group formed to improve local trails.

Clients: Glacier and Anaconda-Deer Lodge Counties

Judith Basin County Free Library Grant Writing Assistance

Grant writing specialist assisting the Stanford Library Guild with research and preparation of grant applications to raise money to fund \$1.7 million expansion.

Client: Stanford Library Guild/Judith Basin County



2014 CDBG Housing Grant for YWCA of Helena

Grant writing specialist completing a CDBG Housing grant application for the funding package necessary to begin the rehabilitation project for the Helena YWCA as described above. This was the first time CDBG allowed temporary housing projects to apply for the housing grant. The YWCA was successful in acquiring funding.

Client: YWCA

EECBG Grant – Glacier County Facilities

Funding specialist providing planning and management assistance to Glacier County to utilize an Energy Efficiency and Conservation Block Grant. Grant administration activities included working closely with DEQ to provide information including Buy America documentation, payroll reporting requirements, and waste stream report for projects completed since 2010. Also assisted in providing construction documents and bidding assistance for an uncompleted project to replace windows in the County courthouse.

Client: Glacier County

2012 HOME and CDBG Housing Grant for Ron's Place

Grant writing specialist completing two grant applications for Ron's Place, a permanent home for disabled adults with fluctuating medical needs. This revolutionary concept in housing and treatment for disabled individuals will provide a continuum of care for the clients served by West Mont. Applications were carefully coordinated with West Mont staff and the architect completing the PAR. Activities included a variety of public meetings to support the applications. West Mont received award of both of these grants.

Client: West Mont

2011 CDBG Planning Grant for West Mont

Grant writing specialist responsible for planning grant application to the CDBG that provided funding for the PAR for West Mont Ron's Place.

Client: West Mont

2011 CDBG Public Facilities Grant for the Center for Mental Health Care House

Grant writing specialist responsible for public facilities grant application to CDBG for new construction of an eight bed mental health crisis stabilization facility. Lead a team of professionals including the architect responsible for the PAR, mental health staff, and county personnel in developing responses to the CDBG application. Coordinated meetings and communication between funding agencies, county commissioners, and the public to provide information for the application. Application was not submitted due to administrative changes at the CMH.

Client: Center for Mental Health

TSEP Planning Grants

Grant writing specialist coordinating information to submit planning grant applications to TSEP for use in preparing preliminary engineering studies and reports, including county-wide bridge inventories and PERs, water and sewer infrastructure PERs, and Capital Improvements Plans.

2016 1. Fergus County

2015 1. Gallatin County

2. Carter County

2011 1. Glacier County

2. Judith Basin County

3. Big Horn County

TSEP Bridge Construction Grant Applications

Grant writing specialist responsible for grant application to the TSEP for replacement of bridges. Coordinated all information related to the grant application including engineering information (Preliminary Engineering Report), community planning, road and bridge department planning, and financial information. Produced all documents required for the application submitted to TSEP for consideration by the legislature.

2016 1. Gallatin County Nixon Bridge
2. Judith Basin County Ross Fork Bridge
3. Big Horn County Soap Creek and Upper Road Bridges

2014 1. Fergus County Paradise and Roundhouse Road Bridges

2012 1. Glacier County Pardue Road Bridge
2. Judith Basin County Bridge North of Hobson
3. Big Horn County Owl Creek and Two Leggin's Creek Bridges

2010 1. Fergus County Ployhar, Paradise, and Kendall Road Bridges
2. Big Horn County Two Leggin's Canal and Two Leggin's Creek Bridges

2008 1. Fergus County Warm Springs Creek Bridge

2006 1. Fergus County Cottonwood Creek Bridge



TSEP Grant Administration

Administering grants received from TSEP following legislative approval. Grant administration includes coordination with County staff to complete contract start up conditions and preparation of quarterly reports and correspondence with grant agency during term of the grant contract. Counties assisted:

- **Fergus County.** Kendall Road Bridge, Scott Crossing Emergency Bridge Project, Warm Spring Creek Bridge, Cottonwood Creek Bridge, Roundhouse Bridge, Paradise Road Bridge
- **Big Horn County.** Two Leggins Creek, Owl Creek Bridges
- **Judith Basin County.** North Hobson Bridge
- **Anaconda Deer Lodge County.** Stumptown and Willow Glen Bridges
- **Glacier County.** Pardue Road Bridge

Community Transportation Enhancement Program (CTEP) Grants

Assisted Glacier and Judith Basin Counties with applications to MDT's CTEP for funding. Glacier County utilized funding for a Veteran's Memorial with access from the State Highway in Browning. Judith Basin County made upgrades to the exterior of their historical courthouse.

Clients: Glacier and Judith Basin Counties

Glacier County Office Records Building

Glacier County utilized HB 645 funding to complete the construction of a record retention facility for use by the county administration. Provided assistance to the County to maintain the timeline for reporting to the Department of Commerce, and also worked with the DOC to use the funding for an additional project in order to utilize all of the funds associated with the grant. The County used this additional funding for roadway improvements to the Governor Hugo Aaronson Road.

Administration of this grant involved close coordination with County personnel, the contractor, engineer, and DOC staff. Grant administrator was responsible for assisting with oversight of the contractor during construction, including review of certified payrolls to assure compliance with labor standards requirements, ARRA grant reporting, correspondence with the DOC, and all performance reports and closeout documents.

Client: Glacier County

Bridger Pines Water and Sewer District PER and Grant Applications/Grant Administration

Grant specialist assisting the engineer in preparing grant applications for sewer improvements within the Bridger Pines Water and Sewer District near the Bridger Ski Area. Project was awarded TSEP and RRGL grants in 2008. Also submitted project for STAG and WRDA funding. Coordinated efforts to assure funding including passage of a large bond election with the District.

Also served as grant and loan administrator for this challenging wastewater upgrade project. Upgrade involved a community at the base of Bridger Bowl ski area that had limited options for wastewater treatment. Funding included an RRGL grant used to complete preliminary engineering in order to gain approval of a system from DEQ in order to secure additional SRF loan and TSEP grant funding. Once that funding was successfully secured a WRDA grant was added to the funding package. The nearly \$3 million project was completed in 2013.

Client: Bridger Pines County Water and Sewer District

Lewis and Clark Fairgrounds/Dunbar Area Water System Update to the PER and Grant Applications – Helena, MT

Assisted engineer with producing an update to the Preliminary Engineering Report for the Lewis and Clark Fairgrounds/Dunbar Area Water System Upgrade to be used for application for funding from various sources. Worked with the Grants Coordinator for Lewis and Clark County to write and produce grant applications to the Treasure State Endowment Program (TSEP), the Renewable Resource Grant and Loan Program (RRGL), and the Community Development Block Grant Program (CDBG).

Client: Lewis and Clark County

Lewis & Clark County Fairgrounds/Dunbar Area Infrastructure Study – Wastewater System Upgrade - Helena, MT

Public Relations Specialist serving as project coordinator for wastewater upgrades to the Lewis and Clark Fairgrounds, the AGC Laborer's Training Facility, and a mixed commercial/residential subdivision – Woodlawn Addition. Responsible for creating presentations for public meetings and for coordinating public information. Project assistant for Preliminary Engineering Report and TSEP Grant Application. Worked closely with County staff to submit applications for funding including an SRF loan and STAG grant proceeds.

Client: Lewis & Clark County Commissioners

Manhattan Facility Plan Amendment – Manhattan, MT

Public Relations Specialist responsible for preparation of electronic presentation of alternatives for upgrading the Manhattan wastewater facility. Presentation was submitted by the project manager to the Town Council. Also



edited and assembled preliminary and final drafts of the Wastewater Facility Plan (PER) prior to submittal to client, regulating, and funding agencies.

Client: Town of Manhattan

COMPREHENSIVE CAPITAL IMPROVEMENT PLANNING, RESOURCE ASSESSMENT, and GROWTH POLICIES

Glacier County CCIP – Glacier County, MT

Successfully assisted County with application to TSEP for a planning grant to prepare a CCIP. Process included close coordination with County commissioners and staff, needs assessment process with county department heads and public, compilation of information and costs related to identified capital need, and preparation of a written CCIP document. The CCIP was adopted by the commission in 2014.

Client: Glacier County

Other Community CCIP Completed:

- Judith Basin County - 2014
- Big Horn County – 2014
- Carter County – 2016
- Fergus County – 2016
- City of Deer Lodge – 2017

Judith Basin County Growth Policy – Judith Basin County, MT

Utilizing a CDBG planning grant and a stipend from the Opportunity Link regional planning organization, Judith Basin County completed their Growth Policy. Serving as the Growth Policy technician, coordinating all activities to complete the Policy including work with the planning board to develop and implement public outreach activities. Responsible for research and content of the Policy in accordance with MCA Section 76-1-601. Planning Board meeting facilitation to develop goals and objectives relevant to the values and wishes of Judith Basin County and its residents.

Client: Judith Basin County

Petroleum County/Town of Winnett Growth Policy – Petroleum County, MT

Utilizing a CDBG planning grant Petroleum County in coordination with the Town of Winnett is in the process of completing their Growth Policy. Serve as the Growth Policy coordinator working closely with the planning board.

Client: Petroleum County

MEDA Volunteer – Sanders County Resource Assessment Team – Sanders County, MT

Served as a volunteer on a resource assessment team, sponsored by Montana Department of Commerce with coordination by Montana Economic Developers Association and the local Certified Regional Development Corporation. Participated in a county wide, community based planning and assessment process involving interviewing a number of people in the community, recording their suggestions and writing portions of an implementation plan for Sanders County's use. Our Team suggested ways of accomplishing the goals of the community.

Client: Sanders County



Dan Stahly, P.L.S

Principal

Education

Land Survey Curriculum, Montana State University, Bozeman, MT 2001-2003
Civil Engineering Curriculum, Montana State University, Bozeman, MT 1995-1998

Licenses/Registrations

Professional Land Surveyor, Montana, 2004
Board of Realty Regulation Continuing Education
Instructor #15RR021

Employment History

2005- Present Principal, Stahly Engineering & Associates, Bozeman, MT

2004-Present Professional Land Surveyor, Stahly Engineering & Associates, Bozeman, MT
1994-Present CADD Designer/Drafter Stahly Engineering & Associates, Bozeman, MT
1990-1994 Survey Crew Chief Stahly Engineering & Associates, Helena, MT
1986-1990 Survey Crew Aid, Stahly Engineering & Associates, Helena, MT

Professional Affiliations

Montana Association of Registered Land Surveyors (MARLS) President and Legislative Chair (Current)
MARLS President (2010-2011)
SCC MARLS President (2009-2010)

Biosketch

Dan Stahly serves as a principal and Survey Department Manager for Stahly Engineering with his focus on land surveying, mapping, and planning. He has 25 years' experience in the land surveying and civil engineering arenas. He also leads staff in assisting Montana communities with Subdivision Administration, Technical Review, and Examining Land Surveyor services and consulting. Public education is an area of focus; Dan develops and presents seminars across the state on topics such as professional land surveying, record research, land use planning, and the Montana Subdivision and Platting Act. Further, he has led workshops for the National Business Institute. He is a current certified instructor by the Board of Realty Regulation for Land Use Planning, Construction and Land Development. Dan is active in the Montana Association of Registered Land Surveyors (www.marls.com) as 2010/2011 and 2016/2017 MARLS State President, Legislative Chair (2009-present), past president of South Central Chapter (2009/2010). Dan's clients and coworkers appreciate the positive working relationships he develops and the expertise he brings in the field of land surveying.

Project Experience

U.S. Department of Agriculture National Resource Conservation Service (NRCS) Wetland & Upland Easement Surveys – Montana (2012-Present)

Project Manager/Land Surveyor. Ongoing Land Survey and Platting of wetland/upland reserve program easements located throughout the state. These projects are heavy in the United States Public Lands Survey System (USPLSS) scope, with original monument recover, reconstruction, and line marking being typical project tasks.



Technical Reviews, Subdivision Administration and Examining Land Surveyor, Montana Counties/Communities.

Stahly assists fourteen Montana Communities with technical review services and consulting. Duties include reviewing Certificates of Surveys and Subdivision Plats for conformance to Administrative Rules of Montana and mathematical closure, providing educational seminars and updates, and subdivision administration/review.

Bozeman School District Land Surveying & Mapping Projects - Bozeman, MT

Lead PLS involved in boundary survey and mapping several elementary school sites in Bozeman. Specialty utility infrastructure mapping with focus on ease of use with regards to communicating information quickly and clearly to school staff. These surveys are designed to be easily converted for GIS data and information systems.

Montana Subdivision and Platting Act: Exemptions, Surveys, and Other Topics, Instructor.

Designed to assist smaller Montana communities navigate the Montana Subdivision and Platting Act as well as their locally adopted Subdivision Regulations. This class is most commonly taught for the Montana Clerk and Recorder's Association, Montana Land Title Association, and National Business Institute Continuing Education Seminars.

Title Law From Start to Finish, Faculty Instructor. Six hour course designed for Attorneys, Title insurance agents, Title and abstract professionals, Paralegals, and Lenders to understand the entire breadth of title-related issues.



Precinct District Mapping and Legal Descriptions.

Worked with Clerk and Recorder to map and write legal descriptions of 16 precincts in Glacier County.

Gallatin County GCDB Enhancement Survey-Bozeman, MT

Project Manager/Land Surveyor. An ongoing United States Public Land Survey System (USPLSS) monument recovery, survey, and mapping project. Section corners surveyed and reported to County for use in their Geodetic Control Database Enhancement Project.

Stadium View University Housing Project-Bozeman, MT (www.stadiumviewliving.com)

Team member involved in boundary survey and planning, base map topographic/existing conditions survey, ALTA/ACSM Land Title survey and mapping, design, and construction administration, survey, and inspection. An interesting aspect to this job is Stahly's use of their aerial camera, providing aerial photographs for project renderings as well as ongoing project footage to out-of-state team members.

The Element Hotel Project-Bozeman, MT (www.elementbozeman.com)

Lead PLS in Boundary, Pre-Design, Construction Layout, and "As-Built" Foundation verification Surveys for the Element Hotel site in downtown Bozeman, MT.

City of Livingston Aerial Orthoimagery and Streetscape Surveys – Livingston, MT

Project manager/Land Surveyor for mapping the City of Livingston using high resolution ortho-rectified color aerial photography. Ground survey including setting and providing spatial coordinates for 19 photo control points. After the mapping was complete, Stahly Engineering used ArcView to complete a map book that includes locates of all utilities. This information is updated as it changes. Also ongoing streetscape/utility improvement Lead Surveyor for in town design surveys.

Big Horn County – On-Call Professional Land Surveying

Project Manager and Land Surveyor for Big Horn County in all land survey activities. Dan has been the project manager on several survey retracement and platting projects in Hardin and Lodge Grass, working closely with the Big Horn County Commission and Clerk and Recorder to insure county properties are adequately recorded.

Yellowstone Ranch Preserve – Gallatin County, MT

Project Manager for an environmentally sensitive private land conservation and lakeside recreation project bordering Hebgen Lake near West Yellowstone, Montana (<http://www.yellowstoneranchpreserve.com>). Project owners desired to protect wildlife corridors, guard against the overpopulation of the lake, maintain public view sheds, and set a precedent for future developments in the Yellowstone Area. Technical aspects included Public Land Survey System (PLSS) boundary retracement, aerial orthophotography and digital elevation modeling, design and construction of 2-1/2 miles of gravel road, design and construction of lakeside marina and dock system, Army Corp of Engineer's permitting, mapping of high water elevation of Hebgen Lake Dam and more.

M.L.I. Re-Development Projects – Livingston, MT

Project Manager for planning, design and survey of several re-development projects in Livingston, the most visible one being "The Point at Del Mar" (pointatdelmar.com), which took an historic motel campus and reused the existing structures to make a business park. Project aspects included retrofitting all existing structures into a master plan, drainage design, producing a marketing map, defining and located highway and railroad rights-of-way, and entryway design to incorporate the historic Del Mar sign.

Moonlight Basin Resort - Big Sky, MT

Located on 25,000 acres in between Ennis and Big Sky in the Jack Creek drainage, Moonlight Basin has been an ongoing conservation and development project (www.moonlightbasin.com). Dan a key member in the project for over 15 years. His duties have included all facets of land surveying, civil layout, ski lift layout, ski bridge grading and layout, lot layout, and much more. In the summer and fall of 2004, Dan undertook a very large topographic mapping job for Moonlight Basin. He managed 3 survey crews, who, along with himself, collected over 10,000 survey data points, covering about 360 acres on very diverse topography that spanned over 720 vertical feet. Using this data, he then produced a topographic map that served as the foundation for the Jack Nicklaus golf course design. Dan also was a member of the survey team that was responsible for field locating wetlands in the new ski resort area for wetland permitting. In addition to collecting the field data for this task, he was responsible for preparing the maps needed for the wetland permitting process. Dan has also used a combination of survey and title data to create maps that told in pictures what the title company had produced in words. These maps showed all of Moonlights holdings in 2006. Another project of interest in which Dan was project manager was mapping "Avalauncher" trajectories, in which high quality maps were produced showing the limits of reach for an avalanche explosive launcher.

Town & County Reconstruction – Bozeman, MT

Project manager for boundary survey of reuse/reconstruction site that transformed the old movie theater adjacent to Montana State University into a grocery store.



Elk Meadows Ranch – Near Cameron, MT

Project manager for a complete survey retracement and color aerial photography of approximately 15,000 acres located in the Madison Valley. Also produced a working GIS map for the client to use electronically. Client can add/revise data on the map with use of their hand-held GPS and “mine” the map for specific data. Interesting facets of this job include recovering original Homestead Entry Survey stone corners that were over 100 years old and discovering 5 acres that was recorded in deeds, but overlooked on the ground.

MT Fish, Wildlife and Parks Fishing Access Sites - Montana

Project manager for multiple fishing access site surveys located at various rivers in Montana. Duties include coordination with all appropriate public entities to survey, map, and assist in permitting appropriate boundary relocations, parking and access easements, and sealed privy usage.

MT Fish, Wildlife and Parks Bison Fence Survey-Gardiner, MT

Project manager for records research, surveying and mapping proposed and constructed locations of Bison fencing adjacent to Yellowstone National Park.

North Forty Subdivision - Madison County, MT

Project Manager for a multi-use subdivision on the south side of Ennis.

Hyalite View Subdivision – Bozeman, MT

Project surveyor and design team member for 36 lot subdivision on South 19th Avenue.

Aspen Park Subdivision – Bozeman, MT

Project surveyor and design team member for a planned 200 lot subdivision on South 19th Avenue.

Churn Creek Subdivision – Bozeman, MT

Project surveyor and design team member for planned subdivision near Bozeman.

Cowboy Heaven Surveys – Big Sky, MT

Project manager for multiple topographic mapping and construction layout surveys located within Moonlight Basin Ranch.

Logan Landfill Survey – near Logan, MT

Project managing surveyor for existing site topographic survey used for design in landfill improvement design. Also provided project contractor with construction staking services.

Thriftway Center – Manhattan, MT

Project managing surveyor for new construction of Thriftway Service center in Manhattan, Montana. Drainage, grading and appurtenance layout and staking.

Gallatin County Detention Center – Bozeman, MT

Prepared Land Title survey document detailing property boundaries and all easements for Gallatin County Detention Center site planning and base map.

Buffalo Bump Pizza – Bozeman, MT

Project managing surveyor for topographic and utility survey for parking lot expansion design.

Gateway Pedestrian Trail Design - Gallatin Gateway, MT

Designer for 1.5 mile paved pedestrian trail, which included two water crossings. Trail was built completely within the highway right-of-way, yet includes many curves typically not seen in trails constructed next to highways. One of the main challenges of this job was keeping the trail out of the clear zone as much as possible.

Manhattan Sidewalk Project - Manhattan, MT

Team designer for new sidewalk placement/replacement. New curb and gutter and ADA sidewalk curb ramps. Project challenges were dealing with water drainage and retrofitting existing features.

Townsend Sidewalk Project - Townsend, MT

Team designer for new sidewalk placement/replacement. New curb and gutter and ADA sidewalk curb ramps. Also a member of survey crew that collected existing field data.

Trident Trail – Three Forks, MT

Designer for paved pedestrian trail, which included two water crossings. Trail is designed to be on the old Milwaukee Railroad bed and in the highway right-of-way and will connect Three Forks to the Missouri Headwaters State Park.

Bright Minor Subdivision – Bozeman, MT

Project manager for a 3 lot minor subdivision located near Four Corners. Dan surveyed the property, prepared the subdivision plat, and walked the minor subdivision through the county subdivision processes.

Slide Inn Site Development – Near Cameron, MT

Survey manager for a site survey on the Slide Inn recreational property adjacent to the Madison River. Project entailed a complete boundary retracement and topographic survey and mapping which included portions of the Madison River.

66 Ranch - Ennis, MT



Responsible for road design with large topographical relief near Ennis, Montana next to the Madison River. Also designed the lot layout, with large amounts of open space, horse pasture common areas, and a landing strip easement.

Pintail Ridge Land Development - Ennis, MT

Designer for roads within a multi-lot subdivision, also performed topographic survey.

Wastewater System Improvements - Manhattan, MT

Team designer for progressive wastewater delivery system upgrade.

Kreig Pond Design - Ennis, MT

Team designer for waterfowl refuge pond and earth dam.

Bozeman Downtown Beautification Project - Bozeman, MT

Team designer for 5 blocks of sidewalk replacement and streetscape beautification. Worked closely with city of Bozeman forester to select tree species and placement. Responsible for field survey and production of construction plans.

North Musselshell Survey - Meagher County, MT

PLS boundary survey and certificate preparation. Established positions for missing public land survey section monuments for Montana Department of Transportation bridge replacement. Project entailed field surveying, boundary calculations, sectional subdivisions, Certificate of Survey preparation and corner record preparation.

Beaver Creek Survey - Big Sky, MT

Survey Crew Chief for PLS boundary survey for a sectional subdivision. Project entailed field surveying and boundary calculations in the heart of bear country.

Huffine Lane-Highway Construction Survey, Bozeman, MT

Survey Crew Chief/Project Manager in charge of construction survey for highway widening and grade change project from Bozeman to Four Corners.

Curb and Gutter layout from Gallatin Valley mall to Baxter Lane

Grade setting for highway from Baxter Lane to Four Corners.

Missoula County Line North Highway Construction Survey - Condon, MT

Survey Crew Chief responsible for construction survey for Montana Department of Transportation highway reconstruction.

Big Timber North Highway Construction Survey - Big Timber, MT

Survey Crew Chief overseeing construction survey for Montana Department of Transportation highway reconstruction.

Good Creek Highway Construction Survey - Olney, MT

Survey Crew Chief and Inspector for construction survey during Montana Department of Transportation highway reconstruction. Inspected dig-out areas for depth, grade and fabric quantities.

Albertsons Construction - Belgrade, MT

Survey Crew Aid for parking lot and building staking.

Aspen Groves Subdivision Survey - Big Sky, MT

Survey Crew Chief responsible for slope staking position of mountainous road.

ASMI Construction Survey - Rocker, MT

Survey Crew Chief for slope staking, water/sewer utilities and road construction survey project leading to the ASMI Silicon refinery building near Rocker.

Bozeman Readiness Center Construction Survey - Belgrade, MT

Survey Crew Chief for parking lot, curb and gutter and infrastructure staking for the Montana National Guard Readiness Center located next to the Gallatin Field Airport.



John Pugh, P.L.S.

Professional Land Surveyor

Education

B.S., Forest Resource Management, West Virginia University, Morgantown, WV – 1982
Telecommunication Classes, University of Wyoming, Laramie, WY – 1988-2000

Licenses/Registrations

Professional Land Surveyor, Montana, 2004
Professional Land Surveyor, North Dakota, 2010

Training

Trimble GPS RTK & Post Process Training 1999, 2005, 2007 and 2013.
NOAA, OPUS Projects Certification - 2014

Employment History

2011-Present – Surveyor, Stahly Engineering & Associates, Bozeman, Montana
2002-2011 – Surveyor, Allied Engineering Bozeman, Montana
Apr-Dec 2001 – Surveyor, Morrison-Maierle Bozeman, Montana
1987-1999 – Surveyor, Jorgensen Engineering Jackson, Wyoming

Memberships

Montana Association of Registered Land Surveyors (MARL) – Present VP South Central Chapter

- Past VP State Chapter
- Past SCC Chapter President

National Society of Professional Surveyors (NSPS)- Current Member
Montana Officiating Assoc. (MOA) – Current Montana High School Soccer Official
United States Soccer Federation (USSF) – Current USSF Grade 7 Soccer Official

Biosketch

Mr. Pugh is a Professional Land Surveyor with over 30 years of experience. Mr. Pugh is well versed in all aspects of the land surveying profession. The majority of his work involves boundary, construction and topographic surveys, but he also has significant experience in detailing hydrographic and floodplain surveys. Mr. Pugh has extensive background and knowledge in Local, State and Federal guidelines and policies. He is also responsible for conducting office to field coordination, management and field staking on a large variety of projects including highway and road construction projects. He is involved in these projects from the initial scope of proposals to final plan sheet production. He has had extensive interaction and coordination with local governmental agencies, including planning, review of exemptions and subdivision administration. Mr. Pugh is also well versed in the Geodetic aspect of surveying and the processing of GPS data.

Project Experience

Major and Minor Subdivisions, Certificates of Surveys, and Section Breakdowns

Land Surveyor in charge of field work, calculations, drafting, platting and local governmental review of various projects throughout Wyoming, North Dakota, Montana and their surrounding areas.

ALTA, Design and Topographic Surveys.

Land Surveyor in charge of field and office preparation and implementation of ALTA and topographic surveys for private and public entities for a multitude of design and review purposes. This was performed in Wyoming, North Dakota, Montana and their surrounding areas.

Montana Department of Transportation (MDT) – Westby West Project

Land Surveyor in charge of fieldwork, calculations, GPS static processing of 42 control points and cadastral/ROW and strip topo site work on 8 miles of roadway along Hwy. 5 near and within the town of Westby Montana.

Montana Department of Transportation (MDT) – Butte Street Project

Land Surveyor in charge of collecting field data for GPS control, Cadastral and ROW retracements and strip topo's of the ROW's for ADA design along portions of Park and Excelsior avenues in the Town of Butte.

National Resources Conservation Services (NRCS) - Easement Surveys

Land Surveyor in charge of survey and platting of Wetland and Grassland reserve program easement COS's located throughout the state. Stahly serves as a term surveyor for the NRCS and has completed or is in the process of completing eighteen (19) of these surveying and platting projects.

MSU College of Agriculture – Ownership of Lands Contract

Land Surveyor in charge of Office, Field and Certificate of Survey filings for large parcels of land administered by Montana State University and known as Red Bluff and Mount Ellis Parcels. These were retraced and re-monumented as needed.

Montana Fish Wildlife and Parks – (FWP) – Fishing Access Sites

Land Survey in charge of boundary and retracement COS creation surveys on property owned by the FWP in Montana.





Montana Department of Natural Resources and Conservation (DNRC) – Numerous Projects

Land Surveyor in charge of office and field projects that include relocation of a Common Boundary lines, Retracement of boundaries, State lease site exemption surveys, easement creation surveys and site design surveys. Location areas that we have completed work for the DNRC include approximately 12 counties in the state of Montana with my most recent work being in Gallatin, Park and Madison counties.

United State Forest Service (USFS) – Gallatin Region

Land Surveyor assisting with boundary ties and marking of the forest service property lines adjoining private land in the Upper Boulder River drainage. Also responsible for helping prepare Certificate of Surveys and Section Breakdowns of PLSS sections within this area.

South University District (SUD) Major Subdivision – Bozeman, MT

Land Surveyor assisting with boundary, mapping and construction surveying with GPS and Conventional uses.

FEMA - Madison and Jefferson River Flood Study – Three Forks, MT

Land Surveyor assisting with GPS control and RTK Bathymetric cross sections of the Madison and Jefferson Rivers. The study included over 6.3 river miles and a mapping area of about 7.5 square miles. The control survey, bathymetric survey, and bridge features were conducted to meet FEMA standards as specified in the document "Guidelines and Specifications for Flood Hazard Mapping Partners".

AECOM UAV Photo Control Project – Mission Interchange-Livingston, MT.

Land Surveyor in charge of establishing a final coordinate listing for horizontal and vertical Photo Control along Highway 89 from the Interstate 90 Mission Creek Interchange to a point approximately 7.5 miles north.

Northwestern Energy (NWE) – Gallatin Valley Boundary Surveys

Land Surveyor responsible for a contract with NWE to conduct retracement surveys and to reset monuments lost by their construction activities in the Gallatin Valley area.

Family Dollar Stores Inc. – Three Forks, Whitehall and Ennis, MT

Land Survey Project manager in charge of producing ALTA Land Title Surveys, Retracement surveys and Minor Subdivision work for the Family Dollar stores being built in Montana that are under the control of Burkhardt Engineering. Additional construction surveying as needed.

McDonalds of Bozeman – Construction Staking and Design

Land Surveyor in charge of the office, field and additional drainage design work associated with the newly designed Bozeman McDonalds Store on West main in Bozeman, Mt.

Yellowstone River Flood Study – Livingston, MT

Land Surveyor helping to perform cross-sections using GPS and conventional means along Private Rip Rap sections of the river for the study of its movements and to see if work should be needed to fix the erosion of the fill in the future.

Gallatin County Flood Study – Three Forks, MT

Land Surveyor helping to perform cross-sectional surveys using GPS, bathometric and conventional means along the Jefferson, Madison and Gallatin rivers for the study of its movements, flows and volume that was needed for the last flood plain study report of Gallatin County.

Gallatin County – Numerous Misc. Projects, MT

Land Surveyor in charge of or assisting in numerous past and present boundary, site, design and construction staking projects with some of the most recent projects such as the Gallatin Rest Home boundary the Nixon Gulch Bridge and easement project and other TSEP bridge projects throughout the county.

Term County Engineer/Surveyor – Numerous Counties, MT

Land Surveyor in charge of or assisting in numerous past and present boundary, site, design and construction staking projects as the past or present term engineer/surveyor for Park, Fergus, Big Horn, Glacier, Judith Basin, Petroleum, Carter, Fallon, Blaine and Anaconda/Deer Lodge counties.

Term City Engineer/Surveyor – Numerous Cities, MT

Land Surveyor in charge of or assisting in numerous past and present boundary, site, design and construction staking projects as the past or present term engineer/surveyor for the City of Livingston, Deer Lodge, Wibaux, Hardin, Plevna, Terry, Jordon, West Yellowstone and Ennis.

Human Resources Developmental Council (HRDC) Block 28-29 Armstrong Add. – Belgrade, MT

Land Survey Project manager in charge of the platting, site and topographic survey within Block 28 and 29 of the Armstrong Addition to the City of Belgrade.

Cannery District Partners Site Development – Bozeman, MT

Land Surveyor in charge of the platting, site and topographic surveying, Oak street corridor strip topo for future expansion and construction staking of infrastructure and buildings.

Homebase Properties (Black and Olive Development) – Bozeman, MT



Land Surveyor in charge of the site and topographic surveying, boundary retracement and exemption relocation and aggregation of lots within the project. We also as-built the new curb, gutter and infrastructure completed by the City of Bozeman during the 2016-2017 budget year.

Homebase Properties (One 11) – Bozeman, MT

Land Surveyor assisting in the site and topographic surveying and boundary retracement of lots within the project.

Homebase Properties (Bozeman Street Sewer Rehab) – Bozeman, MT

Land Surveyor in charge of and assisting in the site and topographic surveying of Bozeman street within Main street and Babcock for the design of a new sewer line.

Homestead Lot 5A Minor Subdivision – Gallatin County, MT

Land Surveyor in charge of the boundary retracement, platting and assisting project engineer with the site development needs of the subject property.

Gallatin Gateway Community Development – Gallatin Gateway, MT Land Surveyor in charge of the boundary retracement, site and topographic survey including the pickup of all infrastructure and utilities and then working with GG and the county to come up with a plan for a new sewer and water system in the area. We also conducted construction administration and stakeout for the project.

Gallatin Gateway Sewer Forced Main Trunk Line – Gallatin Gateway, MT

Land Surveyor in charge of conducting a site and topographic strip corridor survey from Gallatin Gateway to the Elk Grove Sewage treatment plant and working with the project engineer to design the system. We also were responsible for the projects horizontal and vertical control of the site in addition to being the construction staking of the project.

Bozeman Co-Op Expansion Project – Bozeman, MT

Land Surveyor in charge of the boundary retracement and site/topographic survey work for the future expansion of the Bozeman Co-op.

Bozeman School District Projects – Bozeman, MT

Land Surveyor in charge of or assisting in numerous past and present boundary, site and design projects for the school district including but not limited to Bozeman High, Sacajawea, Hawthorne, Morning Star, Whittier, Longfellow, Meadowlark and LaMotte schools.

Big Sky Area Surveys – Big Sky, MT

Land Surveyor in charge of or assisting in numerous past and present boundary, platting, site, design and construction staking projects with the Big Sky area including Meadow Village platting and surveys.

City of Livingston Term Engineer Projects – Livingston, MT

Land Surveyor in charge of or assisting in numerous past term contract boundary, site, design and construction layout of projects for streetscape revitalization in random areas around the city of Livingston.

Yellowstone Club – Big Sky, MT

Land Surveyor in charge of or assisting in numerous past and present boundary, site, design and construction layout projects for numerous private parties within the boundaries of the Yellowstone Club of Montana.

Moonlight Basin – Big Sky, MT

Land Surveyor in charge of or assisting in numerous past and present boundary, site, design and construction layout projects for numerous private parties within the boundaries of the Moonlight Basin Subdivision of Montana.

Federal Highway Administration – Yellowstone National Park, Craig Pass Road

Survey Party Chief co-responsible for slope staking, road alignment and layout of a 15-mile section of the Craig Pass Road.



Brian Kray, L.S.I.

Survey Crew Chief/CADD

Education

B.S., Geology, GIS Minor, Fort Lewis College, Durango, CO - 2004

License/Registrations

Land Survey Intern, Montana, 2011

Certified Survey Technician-Level II, 2015

Employment History

2012 – Present: Survey Project Manager & Draft personnel, Stahly Engineering & Associates, Bozeman, Montana

2011 – 2012: Underground Surveyor, Drumlummon Gold Corp. Marysville, Montana

2006 – 2011: Crew Chief / Draftsman, Gateway Engineering & Surveying, Bozeman, Montana

2005 – 2006: Instrument Man, Church Surveying, LLC, Durango, Colorado

2004: Summer & Fall Survey Tech, NCW & Associates, Crested Butte, CO

Biosketch

Mr. Kray has 14 years of experience and joined Stahly Engineering & Associates, Inc., as a Survey Crew Chief. He has since moved into managing construction and boundary survey projects, while still providing drafting support and technical assistance to our CADD department. Brian's strength's in surveying, Auto CAD and construction methods make him an asset to any project team. Brian's surveying experience has utilized GPS, conventional and Robotic total station work, and geomatics software to perform a variety of surveys including, boundary surveys, topographic surveys, utility and as-built surveys as well as underground mine mapping and development surveys.

Project Experience

Bozeman School District Term Contract- Bozeman, MT (2015-17)

The bulk of the surveys performed under this contract were comprehensive in nature, incorporating boundary retracement of school district #7 campuses, public and private utility mapping, and hardline feature and detailed building footprint surveys. These projects were integrated into a GIS database to provide our client a lasting and dynamic planning tool with which to make future improvements on school district properties. I was responsible for researching boundary and easement records, as well as infrastructure as-built plans, and public utility data to prepare for field work. The field work utilized a combination of GPS, and Robotic Total Station equipment to ensure high accuracy was achieved in data collection. In addition to running the field work, I processed the data into exhibits, and worked with a supervising PLS to determine boundaries and in several cases prepare and file a COS on the following schools:

- **Hawthorne Elementary School**
- **Irving Elementary School**
- **Morningstar Elementary School**
- **Whittier Elementary School**
- **Longfellow Elementary School**

Manhattan School Addition- Manhattan, MT (2016)

Survey field crew/Drafting - This project entailed a detailed topographic survey with accurate vertical tolerances on existing building finish floor elevations to site a substantial addition to the K-12 campus in Manhattan. In addition to site topo for grading design, public and private utilities were mapped, along with easements, and a boundary retracement of the school district #3 parcels containing the proposed addition. Thorough field data collection yielded a data-rich design base drawing and exhibits to facilitate our partnering Architect's siting of the new addition.

Selected Retracement Surveys within Bozeman city limits

Woods- 5th & Cleveland: Topographic survey and block breakdown/retracement, Draft and file COS, primary field and draft personnel

American bank- North Church boundary Block E, Rouses

Addition: Topographic survey and block breakdown/retracement. Field personnel





American bank- 1533 West Babcock: Topographic survey and Boundary retracement. Primary field personnel

Caditz- Lot 5, Block 3, Capitol Hill Addition: Block breakdown/retracement, and line marking for client site development. Primary field personnel

Homebase- Block I Bozeman Townsite Original Plat: Site Topo and lot/block breakdown and retracement for site development proposal. I was responsible for records research, primary field work and subsequent drafting of site plan.

Cross- Tracy's 3rd Addition, 612 W. Beall St.: Retracement of several lots which necessitated the breakdown of the entire block to re-establish boundaries. Primary field personnel

NRCS (Natural Resources Conservation Service) Wetlands/Grasslands Reserve Program, NRCS Term Surveyor (2017-2018)- Sites throughout Montana

Survey Field Crewmember/ Drafter- The scope of these projects entails retracement of private ranch/agricultural properties of significant acreage to create and monument easements along wetland and grassland corridors to improve and restore wildlife habitat. Each project includes extensive preliminary research of General Land Office notes, and subsequent encumbrances, and

easements on the property pre-field work. The majority of these projects have challenging PLSS boundaries to retrace, demanding a thorough knowledge of the principles of Cadastral survey of the Public Land Survey System. Subsequent drafting of Certificates of Survey depicting the easements, and filing of corner records rounded out the project.

- Kalsta Divide WRP-Butte-Silverbow County, 2012
- Mohn WRP-Daniels County, 2012
- Foust WRP-Lake County, 2012
- Schmechel GRP- Musselshell/Golden Valley County, 2012
- Burroughs WRP-Golden Valley County, 2013
- Suites WRP-Rosebud County, 2013
- Shields WRP- Musselshell County, 2013
- Moseman GRP-Musselshell/Golden Valley County, 2013
- Bear Creek Ranch GRP- Fergus County, 2015
- Ruby Habitat Foundation WRE- Madison County, 2017
- Larry Smith ACEP WRE (multiple sites)- Phillips County, 2018
- RCR Ranch LLC ACEP WRE- Phillips County, 2018
- James Mark & Staci French (2 sites)- Phillips County, 2018

Client: NRCS

Mountain Sky Guest Ranch ALTA survey- Park County, MT (2016)

Survey field crew, and drafting- This project entailed a boundary retracement and feature mapping per ALTA/ASCM standards of a 655 acre ranch in the Yellowstone river valley. Preparation and research for this survey was vital in efficiently retracing the exterior boundary of this land, which was comprised of a combination of subdivided lots and aliquot parts. The site was defined by abandoned railroad right of way, and active highway right of way, and riparian boundaries, and had a myriad of obscure easements and encumbrances to decipher. The resulting ALTA survey provided a valuable document to the client that clarified the record, and provided security in closing on the sale of the property.

Webb Ranch ALTA survey- Park County, MT (2016)

Survey field crew and drafting- The scope of this survey was to provide a boundary retracement and map significant ALTA Table-A requirements on a 6,332 acre ranch property along the Yellowstone River. The challenging aspect of this project was that it was initiated in December, with a year-end deadline, which put crews out in the extremes of winter in an already physically demanding mountainous area. The property was comprised largely of Aliquot parts, but also had cadastral parcels that were bisected by State highways, and bounded by riparian corridors. The net result was a document that resulted in a successful closing for our client, and was a demonstration of the teamwork that the department was able to exhibit in order to achieve a fast turnaround on a large project.

Panera Bread ALTA survey- Missoula County, MT (2018)

Survey Party Chief and drafter- The developer of Panera Bread Company contacted Stahly to assist with site design, survey and subdivision administration for a proposed new franchise in Missoula. The preliminary steps involved conducting an ALTA survey on the parent lot to be subdivided, which is a presently operated commercial department store site. I was in charge of field work and document procurement and research for the civil design and infrastructure phase as well as the supporting title work data for the ALTA. Due to client due diligence time constraints, the field work was conducted in winter conditions, and resulting ALTA survey



was produced in an expedited timeframe to allow for coordination of future site planning and negotiations with the parent parcel owner. *Client: Mountain bread, LLC*

Trident Cement Plant ALTA and Retracement surveys- Gallatin County, MT (2018)

Project Manager, Survey field crew and drafter- The change in ownership of the Trident Cement Plant near Three Forks, MT resulted in Stahly's involvement of providing an ALTA land title survey on 1,306 acres of Plant owned land. The project featured a multi-disciplinary approach to collecting detailed site planimetrics and boundary data over a large and complex active industrial mining site, as well as a challenging retracement of boundaries that were bounded and intersected by major Navigable (meandered) waterways, highway, county road, and railroad rights-of-way, and fractional PLSS boundaries spanning 5 sections of land. This project utilized the company's recently acquired PPK (Post Process Kinematic) UAV (Unmanned Aerial Vehicle) to obtain large scale, high resolution orthophotography to aid in the planimetrics mapping, and required coordination of 5 crew members at various times to complete the field work. A substantial re-monumentation effort necessitated filing a retracement Certificate of Survey following the ALTA survey, with Certified Corner Records. *Client:GCC Three Forks, LLC.*

MARS (Montana Aquatic Resources Services) Flood Conservation Easement- Sidney, MT (2014)

Survey field crew- Stahly was contracted to retrace several parcels of land to put into a conservation easement along the Yellowstone River, to improve endangered aquatic species habitat. The client's property was bounded by the Yellowstone River, which was meandered by the G.L.O., intersected by railroad, and bounded by State highway, in addition to being Government Lots. This required a rigorous interpretation of available records to clarify exactly which acreage the client owned, and revealed discrepancies in the prior recorded COS in that a deeded easement was not monumented, nor acreage accounted for. I worked closely with the supervising PLS on this project to conduct the records research, field survey/ monumentation, and boundary determination.

Client: MARS

Gallatin County GIS Control Database Survey-Gallatin County, MT (2012-2014)

Primary survey field member- The scope of this multi-year project was to tie as many PLSS corners in the specified Townships and Ranges throughout the county as the budget allowed, for the purpose of improving Parcel shift errors in the GCDB (Geographic Coordinate Data Base) and Montana Cadastral Mapping System. This project involved extensive research of any existing records of corners being found or set in the selected areas, and providing accurate, RTK GPS coordinates of the corners, when found in the field. It reinforced the knowledge of geodetics as applied to rapid-static, and real time kinematic methods of data collection, and post processing solutions software over a large project region.

Client: Gallatin County GIS Department

Niehart Mining claim retracements- Cascade County, MT (2013)

Primary Survey field member-This project was the initial step necessary to begin superfund site cleanup in the historic Niehart mining district. We were asked to retrace over a dozen mineral claims and topo the various improvements and adits on these claims to pinpoint the source of acid mine runoff affecting the Belt creek drainage. Locating these claim corners required following the original survey notes, and interpreting various topo calls and ties from adjoining claims. As with most mining districts, in Montana, these claims were located in very rugged and overgrown terrain, which added an additional challenge to retracing these historic claims.

Client: Arcadis US Inc.

Westby Cadastral work- Sheridan County, MT (2013-2014)

Survey field member-As part of a phased improvement to MT State Highway 5, this project encompasses 7 miles of highway which needed control, topographic and cadastral surveys conducted for preliminary design to commence. As a crew member primarily on the cadastral phase of this project, I was tasked with researching the original GLO notes, and searching for original monuments, retracing the highway right-of-way and participating in the calculations and data management required in breaking down the sections of land that the highway passed through. The scale and remoteness of this project were challenges that we met by working long hours and utilizing the ability of 4 crew members using 2 base stations to tie monuments to MDT standards of accuracy.

Client: Montana Department of Transportation

Gerber Retracement- City of Bozeman, MT (2014)

Survey field member, drafting-The scope of this survey was to replace lot corners on 2 lots in one of the original town site subdivisions in the city of Bozeman. The field work entailed collecting both original and subsequent block and lot monuments, as well as structures and occupation evidence to compare to the measurements made. The analysis of this boundary reinforced many principals of town site surveying, and the evidence used to retrace the block that the lots were located in spanned several adjacent city blocks. The resulting Amended Plat that was created from this survey will serve as a useful record that balances the public's interest in preserving right-of-way, and closely agrees with the work of previous Surveyors, while also satisfying the client's initial request.



Client: Diane Gerber

Storymill Park Retracement and Preliminary Engineering- City of Bozeman, MT (2014)

Primary Survey field member, and drafter-This multi-faceted project involved the retracement of 9 existing parcels of land in city limits that the client was preparing to transfer ownership of to the City of Bozeman for the development of a city park. This project entailed an extensive boundary survey, interpretation of chains of title, and prior recorded plats, and plotting of easements to ensure the property had no encumbrances that would impede park development. I was involved in the bulk of the boundary field work, and subsequent COS drafting and records analysis. The later phase of this project included a design topo and inventory of infrastructure and vegetation for park site design, and creating a base map for the engineering team.

Client: Trust for Public Lands (TPL)

MSU- College of Agriculture Land inventory- Gallatin & Madison County, MT (phases 1-7 ongoing)

Survey crew field member-In an ongoing project with the Montana State University College of Agriculture, we were rehired to retrace the exterior boundaries of all the state, BLM and private mining claim inholding parcels which are owned by the University. The Fort Ellis survey under this project was a complex retracement of Railroad, Highway, Cadastral and PLSS boundaries, including retracing court ordered survey boundaries. The site encompassed portions of the historical frontier outpost site, and is steeped in historical significance to the Gallatin Valley.

The Red Bluff phase of the project is in its 6th season, and entails a comprehensive retracement and platting of MSU College of Agriculture lands encompassing several thousand acres of original land patents and mining claims, in Madison County. This survey site covers steep and rugged canyon country that is intersected by 2 state highways. In previous phases of the project we were tasked with searching for original mining claim corners, and tying into the corresponding PLSS monuments, and highway right-of-way monuments. The resulting Certificates of Survey greatly clarified the record and identified the private mining claim inholdings. I was involved with retracement, monument setting and records interpretation aiding the PLS in charge of the project.

Client: MSU College of Agriculture

Chico Hot springs Resort Utility Mapping, Park County, MT (2016)

Survey field crew/Drafting- Chico Hotsprings Resort manager contacted Stahly to aid in producing some master planning maps of the historic sites utility infrastructure. In addition to public One-call utility locates, a private locate company was sub-contracted to locate private utility service lines. Field data was collected and utilities were photographed and inventoried for integration into a GIS format map. The resulting map has served as a useful planning tool for facilities operations.

Reid Smith Architects topographic surveys, Gallatin & Madison County, MT

Survey field crew/ Drafting- RSA has contracted with Stahly to provide several Topographic surveys for site layout of their client's future homes. These projects entail Boundary retracement, utility and easement mapping, site development and zoning requirements, view shed analysis and topographic survey. The sites chosen have frequently been in densely forested or steep terrain and have been a welcome challenge to map.

-American Spirit Subdivision Ph1 Lot 804A

-American Spirit Subdivision Ph1 Lot 835

-Strawberry Ridge Subdivision Lot 1

Anaconda Courthouse Master Plan- Deer Lodge County, MT

Survey field crew/Drafting- Topographic survey of existing buildings, utilities and other infrastructure surrounding the Anaconda Courthouse and Law and Justice facilities

Client: SMA Architects



Ryan Harbach

Survey Technician

Education

Montana State University, 2016
B.S. Fish & Wildlife Ecology, Major;
Geographic Information Systems (GIS), Minor

Employment History

May 2016-Present – Survey/GIS Technician, Stahly Engineering & Associates, Bozeman, Montana

Summer 2015 – Biological Technician, U.S. Forest Service, Stanford, Montana

Summers 2011-2014 – Engineering Aid (Student Trainee), National Park Service, Mammoth Hot Springs, WY

Biosketch

Mr. Harbach joined Stahly Engineering & Associates, Inc., Spring 2016 as a Survey Technician. He has experience in surveying and GIS, which includes data collection using GPS and conventional methods. Ryan also has an educational and professional background in wildlife management and forestry.

Project Experience

*experience gained prior to employment at SE&A

USFS (United States Forest Service)* **Biological Science Technician/Wildlife**

Member of a biological team performing an ongoing study of northern goshawks - The scope of these projects entailed recording nest data, identifying, measuring, and aging trees to determine old growth status and performing vegetative surveys.

NATIONAL PARK SERVICE* **Engineering Aid (Student Trainee)**

Perform condition assessments of trails, buildings, utility systems, housing, campgrounds, and thermal walks in variable weather conditions. The majority of these projects required the use of hand-held GPS and topographic maps.



GIS

Infrastructure Data Collection – West Yellowstone, MT – GIS Technician

Collect utility point data for West Yellowstone, Montana. Infrastructure data for water, sewer and storm water was collected both in the field and digitized from as-built records including water valves, manholes, hydrants, air boxes, curb stops etc. Data was collected using a survey grade GPS in conjunction with ArcGIS Online.

Client: Town of West Yellowstone

Surveying

Topographic, Boundary and Construction Staking Surveys

Survey technician on topographic and boundary surveys for various private and public organizations.

- Topographic survey tasks include meeting specific requirements from the client and collecting field data such as hardscape features, utilities, and topographic information. This work was either completed independently or as part of a survey crew. Typically a CADD deliverable is desired by the client which includes a surface with contour elevations.
- Boundary survey tasks include record research, searching for monuments, and placing new monuments based on calculated positions.
- Construction staking tasks include laying out precise points and calculating additional points from design per contractors' needs.



City of Hardin: Watson Water Drive – Survey Technician

Perform topographic survey for a new water line and deliver CADD drawing with a surface as part of a two-man crew.

Client: City of Hardin

Michael Gearson: West Boulder Area Boundary – Survey Technician

Set t-posts for a new fence along a boundary line as part of a two-man crew.

Client: Michael Gearson

STOA: Headwaters Foodbank Elevation – Survey Technician

Run a level loop as part of a two-man crew to acquire floodplain elevations based on an NGS benchmark.

Client: STOA

Caster: Grass Range Retracement – Survey Technician

Search for existing monuments including an original townsite stone as part of a two-man crew.

Client: E. Caster

Homebase – Survey Technician

Co-responsible for topographic data collection and CADD deliverable of two sites in downtown Bozeman using both GPS and conventional methods.

Client: Homebase

Hobble: Hangman's Creek Greycliff Boundary – Survey Technician

Conduct boundary survey along the Yellowstone River as part of a two-man crew using GPS.

Client: Hobble Diamond Ranch

Town of Terry: Sewer Main Replacement – Survey Technician

Perform topographic survey of a road corridor using GPS as part of a two-man crew and produce CADD deliverable with surface.

Client: Town of Terry

CHS: Billings Easement Staking and Buffalo Station Tanks – Survey Technician

Projects that relied heavily on site calibration in order to perform. Both were performed as part of a two-man crew and required monumentation to be set for the purpose of establishing a boundary line and an easement line, respectively.

Client: CHS Inc.

Comma-Q: Belgrade HRDC – Survey Technician

Searched and set boundary monuments on the site and performed topographic survey as part of a team. A CADD deliverable was produced with a surface.

Client: Belgrade HRDC

BHC: Lodgegrass Road Design – Survey Technician

Co-responsible for conducting topographic survey along a road corridor to solve drainage issues. A CADD deliverable was produced with surface.

Client: Bighorn County

Slate: AGR House – Survey Technician

Surveyor in charge of conducting topographic survey for design of a new fire service line and producing CADD deliverable with surface.

Client: Slate Architects

Montana Partners: Cannery District – Survey Technician

Set subdivision boundary monuments as part of a two-man crew using both GPS and conventional methods.

Client: Montana Partners

PRG Group: YC20-Sandstone Construction – Survey Technician

Multiple visits as part of a crew staking for excavation and hub-and-tack staking for concrete footers using both GPS and conventional methods.

Client: PRG Group

Capstone: SUD Ph2 Off site Sewer – Survey Technician

Collect topographic data for a road corridor and produce CADD deliverable with surface.

Client: Capstone Builders

Century Companies: MDT Lewistown Staking – Survey Technician

Stake hub and tack for curb and gutter along a new road. The work was completed as part of a survey crew.

Client: Century Construction



Graden Construction: Benoit Home Layout – Survey Technician

Assist in setting hubs based on architectural design for house layout in order to determine feasibility of construction, given zoning setbacks and utility limitations. On-the-fly processing was required in order to tie into existing site.

Client: Graden Construction

Park Haven Investment: Survey – Survey Technician

Collect topographic data as part of a two-man crew for purpose of building expansion design. Both GPS and conventional methods were used.

Client: Parkhaven Investment

Fergus County: 2015 TSEP Bridge Project – Survey Technician

Surveyor as part of a two-man crew assigned to collecting hydrologic cross-section data and other topographic data using both GPS and conventional methods.

Client: Fergus County

First Interstate Bank: 98 N. Broadway Site Survey – Survey Technician

Assist with the data collection for site survey, and surveyor in charge of producing CADD deliverable.

Client: Triple Creek Realty

Roman Gate: Final Platting – Survey Technician

Find and set cadastral monuments using GPS.

Client: Roman Gate Enterprises

Pete Strom: West Babcock Site Predesign – Survey Technician

Collect topographic data as part of a two-man crew using GPS, and search for property monuments.

Client: P. Strom

Town of West Yellowstone: Site Topo – Survey Technician

Surveyor in charge of conducting topographic surveys for public areas of West Yellowstone using GPS, and producing CADD deliverable with surface to be used for design.

Client: Town of West Yellowstone

Yellowstone: YCC Campus Site 2 – Survey Technician

Conduct a topographic survey for pre-design of a 60-acre area that included both natural and urban features using GPS. The work took place in Yellowstone as part of a survey crew.

Client: Hennebery Eddy Architects

Yellowstone Club/ Moonlight Basin – Topographic surveys – Survey Technician

Perform numerous topographic surveys of house lots in the Yellowstone Club or Moonlight Basin. Collect topographic field data using GPS and conventional methods. Surveys were completed in heavily wooded and steep terrain. Research boundary and easement documents, search for monuments. Deliverables were a CADD drawing with viewshed and surface.

Client: Reid Smith Architects

MSU Red Bluff- College of Agriculture Lands inventory – Madison County, MT – Survey Technician

An ongoing project with the Montana State University College of Agriculture to retrace the exterior boundaries of all the state, BLM and private mining claim inholding parcels which are owned by the University. Search for original mining claim corners, and tying into the corresponding PLSS monuments. This survey site was in steep and rugged terrain.

Client: MSU College of Agriculture

DNRC – Willow Creek Boundary Retrace/Relocate, Harrison, MT– Survey Technician

Cadastral survey work and deliverables for the Willow Creek Project near Harrison, MT. Team role included data collection and setting monuments for boundary relocation using GPS.

Client: Montana Department of Natural Resources and Conservation

Bozeman School District – Morningstar and Longfellow Staking, Bozeman, MT– Survey Technician

Survey crew responsible for setting hubs and tack for curb layout and blue-topping for a parking lot at Longfellow Elementary using a level.

Client: Bozeman School District #7

Manhattan School – High School Design Survey, Manhattan, MT– Survey Technician

Crew member for high school improvement design, both assisting and in charge of field data collection and in charge of creating a CADD existing conditions model.

Client: Manhattan School District

TPL – Story Mill Community Park Project, Bozeman, MT– Survey Technician

Park planning and design project in Bozeman, MT. Team role included field data collection and CADD Drafting using total station.



Client: Trust for Public Lands

Gallatin Gateway Wastewater System- Gallatin Gateway, MT– Survey Technician

Survey field crew on a large-scale wastewater infrastructure project requiring a detailed topographic survey of a highway corridor along Highway 191. Team role included field data collection and CADD Drafting.

Client: Gallatin Gateway County Water-Sewer District

Webb Ranch – Survey Technician

Search for PLSS monuments that represent the property boundary as part of a survey crew for an ALTA survey. This survey site covers an area greater than 10,000 acres and includes steep and rugged terrain. The survey was completed in winter conditions.

Client: Mountain Sky Ranch

AECOM UAV Photo Control Project – Mission Interchange-Livingston, MT– Survey Technician

Collect field data to establish a final coordinate listing for horizontal and vertical Photo Control along Highway 89 from the Interstate 90 Mission Creek Interchange to a point approximately 7.5 miles north. The project required the use of a level and GPS.

Client: AECOM



Maxim Shchemelinin

Survey/GIS Technician

Education

B.S. Physics, University of California Davis, 2009
B.S. Snow Science with statistics emphasis, Montana State University Bozeman, 2015

Employment History

2015-Present- Survey/GIS Technician, Stahly Engineering & Associates
2013-2015- 3D Designer and Lesson Planner, Bridger 3D Imagination
2009-2011- Research Assistant, Montana State University
2007-2009-Research Assistant, University of California

Biosketch

Mr. Shchemelinin has experience in GIS and surveying as well as education and brings a background in snow science and physics to Stahly Engineering. He is skilled in quickly learning new software as well as data collection methods and is a value to Stahly assisting in both land surveying and GIS departments.

Project Experience

GIS

Infrastructure Data Collection – Hardin, Lewistown, Manhattan, Belgrade, MT – GIS Technician

Collect utility point data for four communities in MT. Infrastructure data for water, sewer and storm water was collected both in the field and digitized from as-built records including water valves, manholes, hydrants, air boxes, curb stops etc. Data was collected using a ruggedized tablet along with Arc Collector in conjunction with ArcGIS Online.

Clients: City of Lewistown, City of Hardin Town of Manhattan, City of Belgrade

Infrastructure Data Collection – Three Forks, MT– GIS Technician

Collect utility point data for Three Forks, Montana. Infrastructure data for water, sewer and storm water was collected both in the field and digitized from as-built records including water valves, manholes, hydrants, air boxes, curb stops etc. Data was collected using a Mobile Mapper GPS in conjunction with ArcGIS Online.

Client: City of Three Forks

West Yellowstone GIS – GIS Technician

Collect utility point data for West Yellowstone, Montana. Infrastructure data for water, sewer and storm water was collected both in the field and digitized from as-built records including water valves, manholes, hydrants, air boxes, curb stops etc. Data was collected using a survey grade GPS in conjunction with ArcGIS Online.

Client: Town of West Yellowstone

Sanders County Electronic Plat Book – GIS Technician

Create a digital plat book by linking scanned COS's and plats to a Cadastral parcel shapefile. Manage the plat book as an ArcGIS Online web mapping application.

Client: Sanders County

Surveying

Topographic, Boundary and Construction Staking Surveys

Survey Technician on topographic and boundary surveys for various private or public organizations. Topographic survey tasks include communicating specific requirements from the client, field data collection independently or on a survey crew and CADD drafting.

Boundary survey tasks include record research, searching for monuments, and placing new monuments based on calculated positions. Construction staking tasks include laying out precise points and calculating additional points from design per contractors' needs.





Yellowstone Club/ Moonlight Basin – Topographic surveys – Survey Technician

Perform numerous topographic surveys of house lots in the Yellowstone Club or Moonlight Basin. Collect topographic field data in heavily wooded and steep terrain and search for property corners. Research boundary and easement documents, and draft the results in CADD.

Client: Reid Smith Architects

Reid Smith Architects – Sandstone 20 – Construction layout

Field crew for a construction layout project involving consistently high precision over multiple field days for a three story house. This project involved setting repeat points as the retaining walls were poured, including setting points on top of a vertical wall.

Client: Reid Smith Architects

MDT – Excelsior Ave. / Park St., Butte, MT– Survey Technician for cadastral survey work and deliverables for a Department of Transportation improvement design project in Butte, MT. Team role included pre-field records research, field data collection, and searching for section corners.

Client: Montana Department of Transportation

MSU Red Bluff- College of Agriculture Lands inventory- Madison County, MT

Survey crew member-In an ongoing project with the Montana State University College of Agriculture to retrace the exterior boundaries of all the state, BLM and private mining claim inholding parcels which are owned by the University. Search for original mining claim corners, and tying into the corresponding PLSS monuments. This survey site was in steep and rugged terrain.

Client: MSU College of Agriculture

DNRC – Willow Creek Boundary Retrace/Relocate, Harrison, MT– Survey Technician for cadastral survey work and deliverables for the Willow Creek Project near Harrison, MT. Team role included pre-field records research, field data collection, and setting mission monuments from existing occupation lines.

Client: Montana Department of Natural Resources and Conservation

Bozeman School District – Morningstar, Irving and Longfellow Mapping – Survey Technician

Facility, underground utility, and hardscape mapping projects in Bozeman, MT. Team role included coordinating with utility locate service and school facility personnel, data collection, search for property monuments and helping to prepare aerial overlay CADD deliverables.

Client: Bozeman School District #7

Manhattan School – High School Design Survey, Manhattan, MT– Survey Technician

Crew member for High School improvement design. Tasks involved field data collection and assisting in processing a CADD existing conditions model.

Client: Manhattan School District

TPL – Story Mill Community Park Project, Bozeman, MT– Survey Technician

Topographic survey for a park planning and design project in Bozeman, MT. Team role included field data collection and CADD Drafting.

Client: Trust for Public Lands

Gallatin Gateway Wastewater System- Gallatin Gateway, MT– Survey Technician

Survey field crew on a large-scale wastewater infrastructure project requiring a detailed topographic survey of a highway corridor along Highway 191. Team role included field data collection and CADD Drafting.

Client: Gallatin Gateway County Water-Sewer District

Bright Minor Sub – Survey Technician

Research existing COS's and easement records. Search for boundary monuments. Set new monuments to replace destroyed property corners from record. Draft an amended plat of the boundary retracement reflecting the reset monuments in CADD.

Client: Keith J. Bright

Webb Ranch – Survey Technician

Search for PLSS monuments that represent the property boundary as part of a survey crew. This survey site is a large area including steep and rugged terrain and was surveyed in winter conditions.

Assist with CADD drafting of a preliminary ALTA survey.

Client: Mountain Sky Ranch

AECOM UAV Photo Control Project – Mission Interchange-Livingston, MT– Survey Technician

Collect field data to establish a final coordinate listing for horizontal and vertical Photo Control along Highway 89 from the Interstate 90 Mission Creek Interchange to a point approximately 7.5 miles north.



Clint B. Smith, C.E.T.

Construction Engineering Technician/Associate Principal

Education

B.S., Construction Engineering Technology,
Montana State University, Bozeman, MT - 1997

Training

Montana Contractors Association
Convention 2000-present
MARLS Associate Member &
Conventions 2006-present
AutoCAD Civil 3D 2013
Improving Public Works
Construction Inspection Skills,
University of Wisconsin, 1999 & 2007
Maintaining Asphalt Pavements,
University of Wisconsin, 2007
Construction of Quality Hot Mix
Asphalt Pavements, Asphalt Institute, 2007

Biosketch

Mr. Smith has worked for Stahly Engineering & Associates as a construction-engineering technician for the past 20 years. He provides construction management and inspection services for transportation and development projects. Clint is also experienced as a survey crew chief on projects that include water and wastewater system construction, major and minor subdivisions, and transportation projects. Types of survey activities performed are topographic, cadastral, construction, and encroachment surveys, family member transfers, and flagging and aerial markings. He is skilled in both traditional and Global Positioning System surveying techniques, use of Trimble Business Center and AutoCAD Civil 3D.

Mr. Smith is a Veteran Army Helicopter Instructor Pilot with 22 years in the military. He has completed two yearlong tours of duty in Iraq for Operation Iraqi Freedom, a 100-day duty in Kuwait for the National Guard, provided security for the 2002 Olympics in Salt Lake, and Border Security in New Mexico and additional activations for State Emergencies to fight forest fires.

Employment History

1988 to Present - Survey Crew Member then CET, Inspector, Crew Chief, Stahly Engineering & Associates
June 1989 to 2011 - Chief Warrant Officer Four, Instructor Pilot and Instrument Examiner of the UH-60 Blackhawk helicopter, Montana Army National Guard

Certifications

Certified Approach Installer – Lewis & Clark County
Certified Survey Technician
Certified Army Helicopter Instructor Pilot/Instrument Examiner
Instrument & Commercial Pilots Licenses
Certified Nuclear Densometer Operator
Certified Concrete Testing Technician

Memberships

Youth Girls Basketball Coach
PTO – East Helena
VFW & American Legion

Project Experience

CONSTRUCTION MANAGEMENT/INSPECTION- ROADS, STREETS, TRAILS

Construction Inspector is the Engineer's direct representative responsible for the day to day oversight of construction. Tasks include weekly project meetings, scheduling, observing work and comparing the quality of work with the requirements of the Contract Documents. Additional responsibilities include measuring quantities for payment, record drawings for as-builts, and project closeout inspection binders.

Recent projects include:

- Lewis & Clark County Benchmark Road Graveling 2013
- Fergus County – Road repairs Large & Small FEMA Projects
- Crystal Lake Road Graveling and Compaction Tests
- Lewis and Clark County Road Improvements District (RID) 2006 & 2007
- Lewis and Clark Forest Roads Overlay Project
- Lewis and Clark Forest Roads Graveling Projects
- Lewis and Clark Forest Roads Safety Project
- Glacier County CTEP Path – Browning High School

CONSTRUCTION MANAGEMENT/INSPECTION-WATER AND SEWER INSTALLATION, STORM DRAINAGE, AND OTHER SITE IMPROVEMENTS

Recent projects include:

- Mountain View Meadows Subdivision
- H&H Wheat Ridge Estates II & III
- 6th Avenue Reconstruction
- Fort Harrison Infrastructure
- Intermountain Cottages
- R&D Commercial Phase I & II, Favor Loop, and Alexis Extension
- Sunlight Business Park





- Lewis and Clark Fairgrounds/Dunbar Area Wastewater Connection to City of Helena
- Northside Center
- Skelton Addition
- Lewis and Clark County Forestvale Cemetery Mausoleum
- Sussex Park Subdivision
- Kessler School Connection to the City of Helena
- Fort Harrison Wastewater Connection to the City of Helena
- Lincoln Projects - Wastewater Treatment Facility & Wastewater Collection Upgrades
- Golden Estates II - IV Subdivisions
- Crystal Springs Subdivision Phase I & II
- Town of Manhattan, Phase 1C
- City of Helena Projects, Woolston Reservoir & Lyndale/North Main
- Crazy Mountain Ranch

SURVEY AND CONSTRUCTION STAKING

Responsible for surveying and coordination of various projects throughout the State of Montana

- 2014 Forest Service - Boundary Survey, Monuments, Corner Records and Line Marking
- Rimini – Reclamation and Quantity Surveys, Multi-year Surveys
- Confluence – Stream Mitigation Surveys, State wide
- MDT - 7th Avenue Lewistown ADA Design Survey
- Marysville Road – Complete Design Survey
- Court Sheriff Campground – Layout, Construction Staking
- Cedar St. Interchange – Bluetop Staking
- North Main Bridges – Layout, Construction Staking
- Nature Park Trail – Bluetop Staking
- Missoula County Line North – Bluetop Staking
- Boulder Main Street – Bluetop Staking
- Brady/Joslyn Street – Bluetop Staking
- Checkerboard-Martinsdale – Hydraulic Survey

**Town
of
West Yellowstone**

**Request for Qualifications
for
Engineering Services**

November 9, 2018



FORSGREN
Associates Inc.



November 9, 2018

Town of West Yellowstone
Attn: Daniel Sabolsky, Town Manager
440 Yellowstone Avenue
P.O. Box 1570
West Yellowstone, MT 59758
dsabolsky@townofwestyellowstone.com

RE: Qualification for Engineering Services – Town Engineer - 2018

Dear Mr. Daniel Sabolsky:

Dave Noel and I have had the pleasure of assisting the Town of West Yellowstone this past year with water sample training and evaluation of portions of the water and wastewater system. Positive feedback regarding these efforts from you and Town Staff have made us excited to respond to your RFQ. The work service categories and design needs that have been identified are services that we are very familiar with and enjoy doing. Our team is qualified and experienced to assist West Yellowstone in providing these services. Forsgren brings a depth of applicable experience, specialty expertise, resources of a regional firm, and local presence to be able to respond promptly and cost-effectively to you.

We recognize the elected officials, public works staff, citizens and customers, and regulatory officials all have a stake in the outcome of a successful project, and projects are much more successful when the stakeholders work as partners toward the same goals. We want to bring that approach to West Yellowstone. In short, if your job is easier as a result of our relationship and your constituents are satisfied with your efforts, then we know our work follows our motto of *“engineering stronger communities.”*

Our proposed team to provide municipal services will be Dave Noel, Kevin Harris, and Larry Evans. We understand the importance of face to face meetings. Our team is readily available for these essential project meetings. Both Dave and Kevin are located in the Rexburg office and can easily respond to short lead time requests for in person meetings, or video conferencing if more convenient. Larry Evans will provide support and quality control reviews and is also available and accessible to Town Staff as needed.

Serving communities like West Yellowstone is our focus. The Forsgren team led by Dave Noel and Kevin Harris, supported by our local office and regional company, are ready to “go to work” to serve the Town of West Yellowstone. Both Dave and I are authorized to represent Forsgren Associates regarding all matters related to this proposal. We can be reached by phone at (208) 356-9201 or by email at dnoel@forsgren.com and kharris@forsgren.com.

Sincerely,

A handwritten signature in blue ink that reads "Kevin Harris".

Kevin Harris, P.E. | Division Manager

Capability to Perform Project

Firm History

Forsgren Associates, Inc. is a multi-disciplinary engineering firm providing complete services for a broad range of projects. The Company, established in Rexburg, Idaho in 1962, celebrates 56 years of providing engineering expertise to the communities of Eastern Idaho. Since its founding, Forsgren Associates has expanded our firm to over 100 permanent employees, including over 60 engineers, scientists and surveyors in 14 offices across 10 western states. We specialize in providing planning, design, surveying, and construction management services for water and wastewater, solid waste, transportation, water resources, irrigation, environmental, structural, and recreation projects for cities similar in size to the Town of West Yellowstone.

Areas of Expertise

Forsgren has grown from its humble roots in Southeast Idaho into a company that has the capacity to complete \$18 million worth of work per year, primarily for municipalities throughout the Intermountain West and Pacific Northwest. Professional services offered to clients include planning, design, and construction supervision. Our expertise and specialties include the following:

- Bridges
- Capital Improvement Planning (CIP)
- City/County Engineering
- Community Master Planning
- Computer Modeling (water, storm, sewer)
- Construction Management
- Downtown Revitalization
- Environmental Studies and Permits
- Flood Plain Mapping
- GIS Mapping
- Hydroelectric Facilities
- Inspection Services
- Irrigation Systems
- Land Surveying
- Local Improvement Districts (LID)
- Ordinance & Specification Updates
- Pavement Management
- Project Funding
- Public Acceptance/Mediation
- Public Works Projects
- Roads and Highways
- Sign & Asset Management
- Site Design
- Storm Drainage
- Traffic Studies
- Transportation Planning
- Wastewater Collection, Transmission, and Treatment
- Water Supply, Distribution, Storage, Pumping, etc.
- Water Resources
- Water Rights

A majority of our business has been helping municipalities with all their engineering needs. Our number one goal is to look out for the Town of West Yellowstone's interests.

FORSGREN OFFICE LOCATIONS



West Yellowstone Office
121 Madison Ave
West Yellowstone, MT 59758
(406) 646-9340

Rexburg Office
350 N 2nd East
Rexburg, ID 83440
(208) 356-9201

<http://www.forsgren.com>

Customer Service Philosophy

Our approach to business is simple: we bring passion and creativity to addressing our clients' challenges. Providing solid value for our services and finding common ground among stakeholders enables us to cultivate and maintain long-term relationships with our clients and regulatory personnel.

The Forsgren Associates team specializes in implementing and completing public works projects. Whether we are working with municipalities, counties, utilities, professional firms or government agencies, our clients can depend on us to carefully manage projects from their conceptualization through construction. At Forsgren we work as a team. Not only can you depend on the expertise of our engineers and technicians, but you can be sure that every member of the Forsgren Engineering team is dedicated to helping the Town succeed.

Principals of the Firm

Rick Noll, PE: Mr. Noll has served as President since 2001. Over his distinguished 40-year career, he has focused his technical prowess on water quality and water treatment processes. He is an assertive proponent of integrated water management and beneficially reusing treated effluent. Rick conceived and managed the first unrestricted wastewater reuse projects in three different states. He is a deft communicator and client advocate, frequently serving on diverse committees, boards, and panels to help the lay public and other professionals understand the implications, nuances, and opportunities of technical and regulatory issues.

Larry Evans, PE: Mr. Evans has more than 30 years of experience managing, designing, and reviewing transportation, drinking water, wastewater, development and plat review projects for state and local agencies. His superb project management and structural engineering skills make him a trusted advisor to multiple state departments of transportation, especially for bridge load ratings.

Rudd Conover: Mr. Conover's 32 years of professional experience spans civil, mechanical, structural, and architectural design projects. He manages a diverse array of offices while also serving as the technical lead for our water and wastewater engineering group. His team has conceived, planned, and designed numerous award-winning water and wastewater treatment facilities including new plants, major expansions and upgrades. His strong reputation with funding agencies has produced over \$200M in construction loans and grants for local government clients.

Alan Driscoll: Mr. Driscoll's 25 years of mineral exploration, mine development, regulatory compliance, and consulting experience make him an ideal choice to lead our planning, permitting, design, and reclamation services for exploration and mining companies. He has also managed water and environmental projects for utilities, special districts, agencies, and private entities. He has a long history of building and maintaining relationships with regulatory agencies, local communities, industry advocates, and other special interest groups in order to expedite projects.

Stephen Waldinger, PE: Mr. Waldinger has more than 28 years of experience in the transportation industry. His expertise includes developing and managing roadway and bridge projects for numerous state departments of transportation. He routinely assesses, plans, evaluates, and develops alternatives to enhance infrastructure. He is skilled in communicating the rationale for recommended solutions, seeking and incorporating guidance and requested design changes by clients and regulatory agencies, and in addressing citizen concerns for transportation projects.

John R. Moeller, PhD: Dr. Moeller's 47 years of experience center upon integrated water management for communities, industry, agencies, and developers. Having worked in state government, the university setting, and private consulting, he offers broad perspective into planning, permitting, design, implementation, and public outreach for natural resource issues.

Will Kroger, PE: Mr. Kroger has more than 30 years of varied municipal engineering experience including water supply, treatment, storage, and distribution; wastewater collection and treatment; and stormwater management. He routinely manages a multidisciplinary staff; prepares and manages capital improvement programs and budgets; prepares and negotiates agreements; provides technical briefings to boards and

commissions; makes technical presentations at public meetings; and coordinates engineering studies, project planning, preliminary and detailed designs, permit applications, and construction administration and inspection. He has also helped his clients obtain more than \$4.5 million in grant funding. In addition to managing a broad range of projects with engineering firms, Will also managed Castle Rock's engineering department as the Town Engineer, overseeing water utilities, transportation, GIS, land development, and construction management projects.

Dave Noel, PE: Mr. Noel has more than 23 years of municipal engineering experience centered upon integrated water and wastewater management including water supply, treatment, storage, distribution, and wastewater collection. He routinely manages a multidisciplinary staff; prepares and manages capital improvement programs and budgets; prepares and negotiates agreements; provides technical briefings to boards and commissions; makes technical presentations at public meetings; and coordinates engineering studies, project planning, preliminary and detailed designs, permit applications, and construction administration and inspection. He has also helped his clients obtain more than \$50 million in grant and low interest funding through government assistance programs. Mr. Noel will be the Primary Representative to the town working closely with the Town Manager and staff to bring passion and creativity to addressing the Town of West Yellowstone's engineering needs.

Statement of Service

The Forsgren approach to project management includes frequent and consistent communication with the client. Stakeholders are identified, project objectives established, project risks evaluated, change control procedures adopted, and channels of communication delineated. Project progress is communicated through regular project meetings and status reports to the client.

"We are passionate about protecting and enhancing public infrastructure cost effectively, promptly, and sustainable to the benefit of our clients and users."

Statement of Qualifications

Forsgren Associates is able to bring the experience and expertise of over 140 professionals to the communities we serve. Our engineers understand that successful local government engineering is much more than the technical design of "projects". Our success is also measured by our responsiveness, and the level of service provided to each community. We know firsthand the importance of paying close attention to the needs of residents, learned through innumerable council and commission meetings and daily interaction with the public.

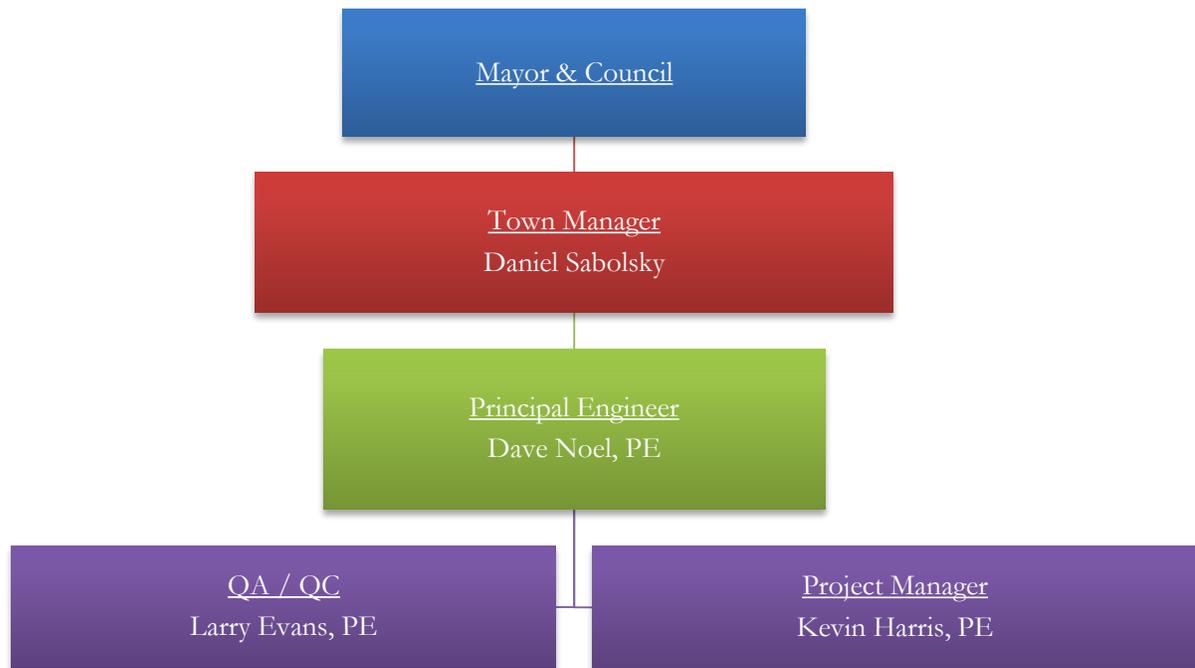
We prioritize the use of scarce public resources to increase the value and benefits of community assets. We also regularly assist communities with finding additional outside funding sources to meet critical infrastructure and other needs. Our engineering in support of local government represents well over half of our engineering workload, including the following services:

- Funding support
- Master planning
- Capital planning
- Water and Wastewater
- Transportation
- Subdivision plat reviews
- Building inspection and plan reviews
- Code enforcement

- Asset management
- Construction management
- Regulatory compliance
- GIS mapping and programming
- Standards development
- Public liaison
- Economic development
- Computer aided design and drafting
- In-house material testing
- In-house survey

Organizational Chart

Forsgren Associates has assembled a team with over 75 years combined infrastructure planning and experience. This team has completed planning and design projects for clients in Montana, Idaho, Utah, California, and Wyoming. The following organization chart represents the roles and responsibilities of each team member.



Dave Noel, PE - Principal Engineer

Key Roles:

- Primary Point of Contact
- Day-to-Day Management

Qualifications:

- Montana Professional Engineer (reciprocity pending)
- 23 Years' Experience

Mr. Noel will serve as the Principal Engineer and primary client contact. Dave is familiar with your Town's infrastructure as he has examined and proposed cost effective solutions and upgrades that will allow the Town to increase usership for both the water and wastewater facilities. Dave will be working with Kevin Harris and Larry Evans; these senior level engineers make available to the Town the depth of experience needed to develop successful solutions to Town engineering needs, foreseen or unforeseen.

FEATURED PROJECT EXPERIENCE

City of Shelley City Engineer: Dave is the City engineer and has provided engineering support to the City for more than 10 years. Dave is the go-to for the City Mayor, individual council members, clerk, public works director, and staff, all whom have his cell number and use it often. Dave routinely attends city council meetings providing technical presentations, as well as plan review, and assistance in coordination with the department of Water Resources and DEQ regarding water and wastewater facilities. For example, Dave determined the hydraulic and organic loading the Golden Valley Natural (GVN) facility was discharging to the City wastewater system was in excess of the permitted allowance. This information was used to set additional fees and was the basis for negotiated reimbursement to the City for flows in excess of the permitted rate and volume. The effort included placing in-line flumes and pressure transmitters, analyzing collected data to determine flow, review of discharge permits in comparison to City ordinances and development agreements, technical presentations to the City Council and GVN, recommending corrective action to eliminate excessive flow, and designing piping modifications. As a result, the City avoided potentially astronomical fines from DEQ and EPA for violations to the wastewater discharge permit and recouped nearly \$500,000 in fees associated with excess flow and loading.

Kevin Harris, PE - Project Manager

Key Role:

- Management and Allocation of Resources

Qualifications:

- Montana Professional Engineer (49209)
- MS Civil Engineering, Utah State University
- 23 Years' Experience

Mr. Harris will serve as Project Manager. Kevin has 23 years of experience as a civil engineer including specializing in capital improvement planning and design for municipalities. Kevin will provide management and support to the project team for the array of possible municipal engineering needs of the Town. Examples of experience in this area include:

Iona Bonneville Sewer District Facility Planning Study, Bonneville County, ID: Prepared Master Plan evaluating condition and capacity of system, collection system hydraulic modeling, master planning and recommendations for capital improvements, managed video inspection and condition assessment for entire collection system.

Garden City Utility Master Plan, Garden City, ID: Collection system hydraulic modeling, master planning and recommendations for capital improvements.

Beeches Corner Sewer Evaluation, Bonneville County, ID: Identified the deficiencies with and remedies for a concrete sewer line being corroded by trapped gasses. Made recommendations as to who would be responsible for which portions of repairs.

Midway/Eagle Interceptor, Idaho Falls, ID: Collection system design for 2-miles of 30-inch interceptor, evaluated collection system interference between the City of Ammon and IBSD, provided recommendations for resolving customer-system conflicts.

Wildwood Lift Station Force Main Realignment and Upgrades, Ammon, ID: Designed lift station upgrade and ½ mile of sewer force main.

Larry Evans, PE - QA/QC

Key Role:

- QA/QC

Qualifications:

- Montana Professional Engineer (34948)
- MBA Business, Stanford University
- MS Structural Engineering, Stanford University
- 33 Years' Experience

Mr. Evans will serve as a Project QA/QC for the project. He brings a wealth of understanding in municipal engineering. Larry's expertise is illustrated in this resume that is attached to this proposal. An example of his QA experience is when he was the QC reviewer or QA auditor on many of the load ratings completed for MDT. In particular, he was the QC reviewer for most of the steel girder-floorbeam-stringer bridges on I-90.

Statement of Commitment

Found in the back of this proposal you will find more detailed resumes for the key personnel that will primarily associate with the Town. Forsgren has adequate manpower supporting our West Yellowstone office and stationed in Rexburg who are committed and able to service the ongoing engineering needs for the Town of West Yellowstone. Specifically, Dave Noel and Kevin Harris are stationed in the Rexburg office and are committed to the Town of West Yellowstone. Larry Evans, stationed in the Boise office and regional manager over the West Yellowstone and Rexburg offices, is also committed to the Town of West Yellowstone and the success of this ongoing working relationship.

Relevant Project Experience

Project Experience Overview

Forsgren has completed thousands of municipal projects over the past fifty years for small communities throughout the intermountain west. While Forsgren Associates has successfully completed numerous municipal projects in the last decade, the projects featured below are current ongoing municipal projects for communities similar in size to West Yellowstone and represent the variety of work we are able to perform. The featured projects, all currently being managed by proposed team members, illustrate our ability to satisfactorily meet the Town of West Yellowstone's goals and objectives in procuring engineering services.

City of Soda Springs, Idaho

Water Distribution System Improvements

Description: Aging infrastructure in the City of Soda Springs has necessitated the need for water distribution system improvements throughout the City. Forsgren is continually working on various water distribution upgrades for the City to ensure the public water system remains a reliable source for the City's potable water. Work includes identification and cataloging of needed upgrades, prioritization of improvements, engineering design, and construction inspection.

Source Water Improvements

Description: Soda Springs utilizes source water from a spring collection system. Forsgren is currently working on a design of a new spring collection box, overflow structure, and removal of the existing dam. The project includes engineering design, construction administration, surveying, and permitting required to complete the upgrades.



Wastewater Collection System Improvements

Description: For nearly three decades, the City of Soda Springs enjoyed minimal rate increases for the wastewater treatment and collection facilities by choosing to minimize maintenance and upgrades on the system. However, this has come at a cost, and now they are facing system failures throughout. Forsgren has been working closely with the City since 2006 to identify and prioritize system improvements. We have assisted the City in acquiring nearly \$10 million in grants and low interest government funding to replace the failing wastewater treatment facility, reducing needed staff from 6 full-time employees to 2 part-time employees. Additionally, Forsgren has designed replacements for nearly half of the lift stations in the City, as well as over a mile of the worst sections of deteriorating collection lines.

Roadway Improvements

Description: Similar to the water and wastewater infrastructure systems, very minimal roadway improvements and maintenance has taken place in the City in the last 30 years. Forsgren prepared a Transportation Planning Study for the City in 2006 that proposed a capital improvements plan. Since that time, Forsgren has worked closely with the City to design and construct capital improvements within the City in accordance with that plan. As recent at 2018, Forsgren assisted the City in acquiring \$100,000 in grant money for roadway improvements.

City Park Improvements

Description: The City of Soda Springs has four city parks, all of which Forsgren has provided design and construction administration for improvements including: new sidewalks, building upgrades, playground equipment, ball field improvements, fencing, installation of water lines, grading, and future planning. Additionally, Forsgren has been assisting the City with funding applications to acquire grant monies to develop safe walking paths connecting city parks and schools.

City of Shelley, Idaho

Water System Improvements

Description: In 2008, Forsgren completed a state-funded Facility Planning Study for the Shelley water system. The primary focus of the study was to identify and develop a capital improvements plan. Forsgren has been assisting the City with implementation of that plan utilizing grant and low-interest funds from Community Block Grant, Army Corps of Engineers, IDEQ State Revolving Fund, and the USDA Rural Development programs.

Source Water: Based on an update to the Water Facilities Planning Study completed for the City two years ago by Forsgren, it was determined that the current water system in the City of Shelley does not meet DEQ regulatory requirements for pumping capacity. Forsgren prepared an application to the Department of Water Resources to combine the diversion points for all of the City water rights to each of the City's wells. Additionally, Forsgren assisted the City in acquiring a new water right to meet growing demands within the City.



Water Storage: As part of the capital improvements plan, Forsgren design and provided construction administration for a new 0.8 MG water storage tank. Forsgren worked with the City and a worldwide tank building contractor to bring new construction technology to the municipal market, saving the City nearly \$500,000 in construction cost.

Water Distribution: The capital improvements plan identified that the system was deficient in capacity to meet the minimum fire flow demand. Forsgren worked with the City, the local fire chief, and the state fire marshal to evaluate current fire

flow demand in the City. The updated evaluation resulted in a reduced fire flow demand, reducing capital improvement requirements providing significant cost savings to the City. Additionally, Forsgren designed the improvements to Well No. 4, increasing the pumping capacity by approximately 30%, bringing the system into regulatory compliance. Forsgren has also provided extensive distribution system modeling and GIS mapping.

Reuse System Analysis

Description: The City of Shelley owns numerous surface water rights and is working with Forsgren to develop a groundwater recharge plan utilizing their decommissioned wastewater lagoon cells. This project has the potential to increase revenues to the City as much as \$250,000 per year.

Iona Bonneville Sewer District, Idaho

Plan Review

Description: Since 2010, Forsgren has performed ongoing plan review for development occurring within the sewer district boundaries. Work includes review of development design plans to ensure proposed sewer improvements are in compliance with state and local regulations.

Sewer Lift Station Design

Description: The Iona Bonneville Sewer District has seven lift stations all of which were designed by developers utilizing economy grade pumps and controls. Forsgren has designed replacement pumps and controls for the worst two lift stations, reducing maintenance from a daily effort to an annual effort. Additionally, Forsgren has developed a new standard for wastewater lift station design to be used by developer in future design.

Wastewater Collection System Improvements

Description: Due to changes in management, the Iona Bonneville Sewer District personnel were left with little information regarding the conditions and flow through their infrastructure. Forsgren has been assisting the District as they make the transition and prepared a facility master plan evaluating the condition and capacity of the collection system for IBSD. We have designed slipline repairs and dig and replace repairs for approximately three miles of collection line in the last three years.



Fremont County, Idaho

Wastewater Treatment/Collection System Facilities Planning Studies

Description: Due to fluctuating wastewater flows between winter and summer in the Island Park area within Fremont County, wastewater collection and treatment can prove to be a challenge. Forsgren is currently evaluating the wastewater systems in Last Chance and Mack's Inn, and will be completing Wastewater Facilities Planning Studies for both systems, treatment and collection, to help the County understand the current and future needs of the systems. Work includes inventory of existing facilities and flows, identifications of deficiencies within the system, alternatives to upgrade the systems to better serve the residents of the Island Park area and bring the system into compliance with state and local standards, and a report of the findings that can be used in pursuit of State and/or Federal funding for future improvements.



Solid Waste Facilities Improvements

Description: Forsgren has assisted Fremont County with improvements to and completion of several new solid waste facilities, including a two new scale buildings, two new solid waste recycle building, and two new transfer stations in two locations within the County. Work includes coordination with the County Engineer, attendance at commissioner meetings, engineering design, bidding and award assistance, coordination with contractors, construction inspection and

administration, and materials testing. The project also includes preparation of Closure and Post-Closure Plans to meet state requirements.

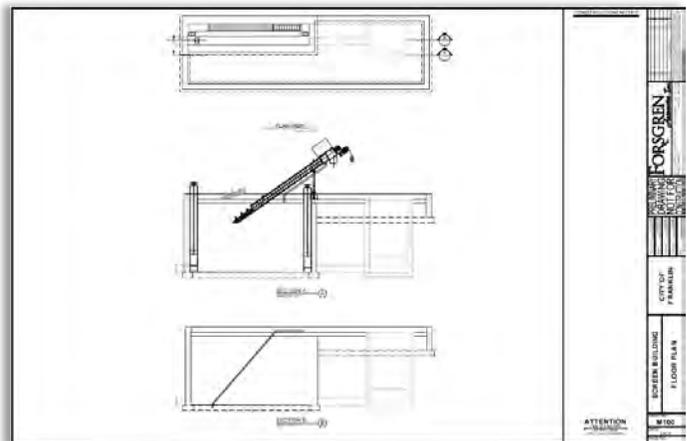
City of Franklin, Idaho

Water Distribution System Improvements

Description: The City of Franklin relies on spring water for their potable water source. Two of the four springs have become unusable over the past decades due to deterioration of the distribution lines connecting the springs to the distribution system. Therefore, Forsgren has been working with the City to obtain funding and to design a rehabilitation plan for the springs, including replacement of the distribution lines.

Wastewater Treatment System Upgrades

Description: City of Franklin has recently completed an upgrade to the treatment facilities. However, the City has been dissatisfied with the level of service and final product. As a result, the City has hired Forsgren to re-evaluate the design from their previous engineer and help the City develop a capital improvements plan and operations plan. Forsgren has worked closely with the City and funding agencies to acquire a \$150,000 grant to design and construct an influent screen facility that was neglected in the original design.



Funding Assistance

Description: Forsgren has been working with the City for many years and provided assistance with funding applications for water, wastewater and roadway infrastructure improvements. To date, the total funding assistance through government programs acquired for the City is in excess of \$5 million. Additionally, \$1 million in roadway assistance grant monies is pending approval.

Current Municipal Clients and References

Forsgren provides engineering services for clients and municipalities all across the intermountain west. Five municipalities that Forsgren is currently providing engineering services, similar to this RFQ, utilizing Dave Noel, Kevin Harris and Larry Evans, and based out of our Rexburg office include:

List of Contacts:

City of Soda Springs

Alan Skinner, Director of City Services
(208) 251-4836

City of Shelley

Sandy Gaydusek, City Clerk
(208) 357-3390

Iona Bonneville Sewer District

Marina Meier, District Manager
(208) 524-4545

Fremont County

Brandon Harris; County Engineer
(208) 624-1539

City of Franklin

Tami Midzinski; Administrator/Public Works
(208) 646-2300

Projected Workload and Schedule

Currently, our Rexburg/West Yellowstone Division has a healthy workload that has allowed us to add 2 new engineers to our staff over the past 6 months. This addition to staffing and the resources from our regional firm allows us to absorb projects of numerous sizes and meet a schedule anticipated by the Town. As a consulting firm that focuses on municipal customers, we are looking to add to our projected workload with clients like West Yellowstone. We have been working to establish a strong work load for the future and have sufficient manpower to allocate to the scope of work depicted in this RFQ. As you already know, Dave Noel and Kevin Harris have made West Yellowstone a priority by being available for consultation with Town staff on short notice. We have met schedules and are committed to continue making West Yellowstone a priority client in the future.

Terminated Contracts

The West Yellowstone and Rexburg offices have not had any canceled or terminated contracts for unsatisfactory performance during the timeframe from January 1, 2010 to present.

Resumes

Dave Noel, P.E.

Experience: • Joined Firm: 2003 • Idaho Professional Registration Arizona #39509, Idaho #11838, Wyoming #11349

Assignment Rexburg Project Manager – Forsgren Associates, Inc.

Education BS Civil Engineering, Civil Engineering, Arizona State University

Professional Activities American Society of Civil Engineers

Summary Mr. Noel has experience in design and construction administration, including providing “third-party” construction services. As a design engineer, he has experience in water treatment plant design, water distribution system design, water booster pump station design, water disinfection facility design, and water reservoir rehabilitation. As a construction engineer, Mr. Noel also has experience with on site resident engineering for construction of water treatment plants, distribution piping, disinfection facilities, booster pumping facilities, and reservoir rehabilitation. Other experience includes design and construction engineering of wastewater treatment plants, gravity sewers, force mains, and sewer lift stations.

Selected Experience **Wastewater**

- Eastern Idaho Regional Wastewater Treatment Facility Planning Study, Shelley, Idaho. Project manager for the EIRWT Facility Planning Study. The study is a comprehensive effort between multiple governmental entities including the cities of Shelley, Ammon, Iona, Basalt and Firth along with Bingham and Bonneville Counties. The planning effort proposes a 5.0 MGD regional wastewater treatment facility located near Shelley along with a 36” transmission line from Ammon to the treatment location. The project is the largest planning effort undertaken in Idaho with regard to the number of government entities involved.
- Eastern Idaho Regional Wastewater Authority Oxbow WWTP Headworks Lift Station with Fine and Coarse Screens, Shelley, Idaho. Designed the primary lift station in the EIRWWA Oxbow WWTP. Several configurations for primary lift station and screen types were evaluated with the final section including coarse screening followed by grit removal, followed by fine screening, and finally submersible pumps sized for peak day flows up to 8 MGD. The primary design consideration was to provide reliable protection for the secondary activated sludge membrane system by eliminating the potential for pumped debris to be chopped or cut into sharp or abrasive pieces. The coarse screening consists of a two parallel manual bar screens, and the fine screening consists of two parallel band screens. Grit removal was installed between the coarse and fine screens to protect the fine screen seals and extend the life of the equipment.
- Eastern Idaho Regional Wastewater Authority River Bend Lift Station Screen Upgrade Design, Shelley, Idaho. Project manager and design engineer to incorporate a 20 MGD screen to remove excessive ragging and debris from the River Bend Lift Station. Critical design considerations and equipment design modifications were required to place the screen in a very small foot print. The lift station is 30 feet deep and 9 feet wide with approximately 50 square feet of floor space available for the screen and compactor equipment combined. Project included evaluation of several screen types and manufactures with a final recommendation for sole source equipment selection and working directly with the equipment manufacturer to modify the standard design to work specifically with the available lift station space.
- Soda Springs Wastewater System Value Analysis, Soda Springs, Idaho. Lead the 3rd party review effort for Value Analysis of the completed design to upgrade the existing Soda Springs WWTP to meet nutrient removal requirements. Analysis recommended a new design to incorporate operator friendly STM aerator and Zickert clarifier equipment that ultimately reduced the construction cost by \$2.5M and changed the operator certification requirement from a Level 4 to a Level 3 providing the opportunity for the City Operators to continue operating the new facilities rather than requiring the City employ and new Operator with the higher certification.

- Burley Wastewater Treatment Plant Upgrade, Burley, Idaho. Project manager for the solids dewatering process of the Burley Wastewater Treatment Plant Upgrade project. The plant upgrade replaces the lagoon treatment system with a mechanical wastewater treatment plant utilizing oxidation ditch aeration basins, secondary clarification and filtration. The solids dewatering process houses a belt filter press, a gravity belt press, and a thermal dryer along with appurtenant equipment in a concrete masonry block building.
- Cokeville Wastewater Treatment Plant, Cokeville, Wyoming. Project manager for the design of a new mechanical wastewater treatment facility to replace aging lagoons and comply with more stringent discharge requirements. The utilizing STM Aerotor process, secondary clarification and solids dewatering screw press.
- Wastewater Treatment Plant Headworks Design, Soda Springs, Idaho. Designed the new 1.5 MGD headworks facility for the existing wastewater treatment plant. Calculated hydraulic profile of headworks process. Processes included new drum screen, vortex grit chamber, bar screen, and primary lift station.
- Paul Wastewater Improvements, Paul, Idaho. Project manager for improvements to the Paul wastewater system. The improvements to the Paul wastewater system include replacement of the entire collection system, expansion and permitting of the land application system, treatment lagoon improvements, and lift station rehabilitation.
- Anthem Water Campus, Wastewater Treatment Plant Phase 2 Expansion, Anthem, Arizona. The project included new construction of a Micro Filtration Membrane (MF) system to replace the existing MF plant increasing treatment capacity from 0.5 MGD to 1.5 MGD. New construction included a diversion man hole and influent pump station, a grinder and grit removal system housed in a new headworks building, a bioreactor/equalization basin, MF membrane tanks, odor control facilities, WAS pumping station, an electrical control room, a process pump and piping area and a process air supply system housed in a new process equipment building. The project also requires modifications to the existing chlorine contact basin, demolition of the existing MF facility, transformation of the existing MF membrane basins into sludge holding tanks.
- Surprise Wastewater Treatment Plant Expansion, Surprise, Arizona. The project increased the plant capacity from 0.8 MGD to 3.2 MGD. Construction involved improvements to the existing liquid stream facilities and the addition of a new facility adjacent to the existing facilities. Improvement to the existing facilities included modifications to the headwork's system, flow diversion improvements to the Oxidation Ditch diversion structure, modifications to the thickened sludge-holding tank, conversion of the chlorine disinfection system to a UV disinfection system and increased capacity to the plant water delivery system. New facility construction included oxidation ditches, secondary clarifiers, Autothermal Thermophillic Aerobic Digestion (ATAD) system, odor control system, effluent pump station, and solids handling facility. Final construction cost: \$8.3 million. Original cost: \$7.6 million.

Water

- Baggs Water Treatment Plant, Baggs, Wyoming. Project manager for design and construction administration of a 0.45 MGD water treatment facility for the Town of Baggs. Baggs draws its potable water supply through an infiltration gallery constructed across the channel of the Little Snake River, a surface water source that exhibits seasonal high turbidity and algae growth. The Preliminary Engineering Report recommended installing a membrane filtration treatment plant to replace the 30 year old conventional treatment facility. Dave assisted the Town in piloting multiple membrane filtration systems to determine feasibility and design parameters. Dave also authored a pre-selection package for the membrane filtration equipment and assisted the Town in selecting the best process and vender for the specific needs of the Town through a competitive bid resulting in the Town pre-purchasing the membrane filtration system. The primary challenge in the design of the system was to provide a temporary treatment train to allow full process capacity in the existing building prior to taking the existing system off line. The existing facilities are scheduled to be removed this summer and upon removal the temporary treatment train will be re-positioned in the building in the same foot print as the existing system. Project budget is 1.2 million.

- Franklin Water Treatment Plant, City of Franklin, Idaho. Project manager for design and construction administration of a 1.0 MGD water treatment facility for the City of Franklin. The water source for the City of Franklin stems from several springs, some of which were deemed as “surface water influenced”, which forced the City into addressing a new water source or treating the existing source for bacteria as well as turbidity and color during spring runoff. The feasibility study recommended installation of a membrane filtration plant for the existing water source. Dave assisted the City in piloting an ultra filtration system for three months to determine the backwash and cleaning cycles as well as the flux rate across the membranes. Dave also authored a pre-selection package for the membrane filtration equipment and assisted the City in selecting the best process and vendor for the specific needs of the Town through a competitive bid. Bid construction costs: 1.3 million.
- Preston Water Storage Reservoir, Preston, Idaho. Project engineer for developing plans and specifications for construction of a new 2.0 million gallon reinforced concrete reservoir. The project included evaluation of welded and bolted steel reservoirs versus reinforced concrete. The location required a partially buried structure, which influenced the decision for reinforced concrete. Improvements also included design of a valve building, reservoir site piping, and transmission line upgrades. Dave assisted the lead designer in project development, design data collection and quality control and review activities.
- Bancroft Water System Improvements, Bancroft, Idaho. Project engineer for a new 350,000 gallon reservoir for the City of Bancroft. Project components included updates to the hydraulic analyses from the Facility Planning Study and preparing design plans and specifications. Dave assisted the lead designer in project development, design and quality control and review activities.
- Anthem Water Campus, Water Treatment Plant Phase 2 Expansion, Anthem, Arizona. Resident project representative for third party construction services. The project includes new construction of a Micro Filtration Membrane system to increase the plant treatment capacity from 1 MGD to 3 MGD. New construction includes a process equipment building and a micro filtration tank building. The process equipment building houses a new electrical control room, a process pump and piping area and a process air supply system. The micro filtration tank building houses the new micro filtration tank and membranes as well as the existing micro filtration plant. Additionally, chemical system modifications include a citric acid solution mixing and distribution system and the addition of a fluoride injection system. Final construction costs: \$1.7 million.
- Water Plant No. 2, Sun City Grand, Arizona. Resident project representative for third party construction services. The project included groundbreaking construction for two new steel 1-million-gallon aboveground storage tanks. Construction is within the Del Webb Sun City Grand communities, which required special attention to aesthetic blending, nighttime illumination, and sound attenuation. Final construction cost: \$2.2 million.
- Potable Water Reservoir Rehabilitation and Miscellaneous Repairs, City of Phoenix, Arizona. Project engineer for the rehabilitation and miscellaneous repair design for many of the City of Phoenix potable water storage reservoirs. Completed rehabilitation design for Upper Reservoir No. 1 and No.2 and provided design for the Ray Road Reservoir, the Squaw Peak Reservoir No. 1, and the Deer Valley Reservoir No 1. Upper Reservoir No. 1 and No. 2 are of similar circular configuration and store up to 20 MG each. The Ray Road Reservoir, Squaw Peak Reservoir No. 1, and the Deer Valley Reservoir No. 1 are rectangular and store up to 1.5 MG, 20 MG, and 20 MG, respectively. The design recommendations are similar for all reservoirs and include the addition of a ventilation system, a polypropylene liner, a new aluminum standing seam roof, miscellaneous structural repairs, preventative measures to guard against corrosion, and sampling systems.
- Franklin Water Distribution System Replacement, City of Franklin, Idaho. Project manager for design and construction administration of approximately 1.25 miles of in town water

distribution line replacement. Project components included 4, 6, and 8 inch distribution mains, fire hydrant replacement, industrial and residential water meter installation, as well as disinfection facilities and multiple source connections. Construction costs: 1.3 million.

- Williams Lake Chapter One Water Facilities Planning Study, Williams Lake, Idaho. Dave assisted with the preparation of the Water Facility Planning Study for the Williams Lake Water and Sewer District, a resort community near Salmon, Idaho. The project team developed a water model of the existing system that is being used for planning future development within the District boundaries.
- Preston 2.0 Million Gallon Storage Reservoir, Preston, ID. Dave assisted the lead designer with design efforts associated to the distribution system including design of a valve building, reservoir site piping, and transmission line upgrades.
- Bancroft Water System Improvements, Bancroft, ID. Dave assisted the lead designer with design and quality control for installation of meters, replacement of approximately 17,000 feet of distribution pipe, installation of 12,000 feet of transmission line, replacement of fire hydrants, and replacement of nearly 120 services.
- Cave Creek Road Facilities Project, Phoenix, Arizona. Design engineer for the selection of a preferred alignment for eight miles of 48-inch-diameter water transmission main and site selection, and preliminary layout and final design of four pumping stations. Each of the pumping stations has a capacity of approximately 20 MGD (14,000 gpm) with a total connected motor horsepower of 750 hp. The pumping station sites include multiple pressure reducing valves for reversing flow for operational flexibility and consideration for including pumping facilities for reclaimed water transmission. Landscaping, berming with walls for sight screening, noise mitigation and surge protection are all part of the design effort. The planning effort includes a public involvement process to take into consideration the concerns and issues of the affected public in the selection of alignments and pumping station sites and the design of the four pumping stations.
- Lindsay and Pasadena Intermediate Pump Stations, City of Mesa, Arizona. Project engineer for preliminary and final designs of two separate potable water booster pump stations. Each of the pump stations will operate to boost pressure in adjacent 42-inch water transmission mains during peak demand periods or as desired by the City. Under normal flow conditions, the IPS's will be bypassed. The Lindsay IPS' capacity is approximately 30-MGD, and the Pasadena IPS' capacity is approximately 35-MGD. Control of the facility will be manual and/or automatic via the City's SCADA system, and the facility will incorporate variable frequency drives. A hydraulics report outlining the pump station characteristics and requirements was prepared by the City. The report served as the basis for determining the flow and head requirements for each of the IPS's.
- Val Vista Transfer Station Improvements, City of Mesa, Arizona. Project engineer for the preliminary and final designs and for the bid assistance for the Val Vista Transfer Station Improvements Project. This project consists of a new pressure reducing facility located at the existing Val Vista Booster Pump Station. The facility will operate to reduce pressure and allow flow to move from the Falcon Field Pressure Zone (upper zone) to either a low pressure 108-inch transmission main or directly to the City Pressure Zone (lower zone). The pressure reduced from the Falcon Field Pressure Zone to the 108-inch transmission main is approximately from 70 psi to 5 psi at a maximum flow of 18 MGD. The pressure reduced from the Falcon Field Pressure Zone to the City Pressure Zone is approximately from 70 psi to 40 psi at a maximum flow of 18 MGD. The pressure reducing facilities will be solenoid operated via the City's control center and SCADA system.

Municipal

- City of Shelley City Engineer, City of Shelley, Idaho. As City Engineer Dave has developed a system wide water model, evaluated current water demands and compared them to the City water rights, reviewed subdivision plats and determined line size requirements for new subdivisions with regard to peak hour demand and fire flow needs. Dave has also developed the system wide water maps that are used by the City for operation and maintenance as well as system planning.

Kevin L. Harris, P.E.

Experience Started Career: 1997 • Joined Firm: 2007 • Professional Registration, Idaho PE #11364;
Montana PE #49209

Assignment Division Manager/Project Manager / Project Engineer

Education MS, Civil and Environmental Engineering, Utah State University
BS, Civil and Environmental Engineering, Utah State University (Cum Laude)

Summary Mr. Harris has 23 years of experience including water treatment, wells, storage, pumping, and distribution design; wastewater treatment, pumping, and collection design; development; hydrologic and hydraulic analysis; construction administration; and facilities planning studies.

Selected Experience **Water Planning**

- Franklin Drinking Water Facility Planning Study, Franklin, ID. Mr. Harris prepared a facility planning study to evaluate the condition and capacity of the drinking water system for the City of Franklin. The existing system includes a collection of drinking water springs located in two states, wells, transmission lines, a membrane surface water treatment plant, deteriorating tanks, and a distribution system. Study elements include system modeling utilizing WaterCAD, evaluation of the current system, evaluation of fees, evaluation of water rights, and development of capital improvement plans to upgrade the system.
- Arco Drinking Water Facility Planning Study, Arco, ID. The City of Arco is in critical need of water system upgrades due to failure of one of its wells. Mr. Harris is currently assisting in the preparation of a facility planning study to evaluate the condition and capacity of the existing drinking water system. The existing system includes wells, transmission lines, pressure reducing valves, tanks, and a distribution system. Study elements include system modeling utilizing WaterCAD, evaluation of the current system, evaluation of fees, evaluation of water rights, and development of capital improvement plans to upgrade the system.
- Garden City Utility Master Plan, Garden City, ID. Mr. Harris was the project engineer for the completion of a utility master planning study evaluating the production, storage, delivery, and water quality aspects of the Garden City water system. Study elements included water and wastewater modeling utilizing MWH Soft *InfoWater* and *InfoSWMM*; evaluation of water rights issues and development of capital improvement plans to upgrade the system. This planning document also included evaluation and development of capital improvement plans for the wastewater collection system and a wastewater treatment system.
- Ashton Well Evaluation, Ashton, ID. Being faced with nitrates above the MCL in their drinking water wells, Mr. Harris assisted the City of Ashton in evaluating other water sources. Kevin investigated the potential of purchasing and converting an existing irrigation well into a public drinking water well. Well logs and water rights were researched to evaluate the feasibility of converting the well and water quality sampling was performed to determine the quality of the well.
- Country Club Wastewater Facility Planning Study, Idaho Falls, ID. Mr. Harris prepared a facility planning study evaluating the production, collection and treatment of wastewater associated with a planned 600 home community near Idaho Falls. The study resulted in recommendations to provide collection and treatment using the newly constructed Eastern Idaho Wastewater Authority system.
- Test Area North Groundwater Remediation Annual Reports, Idaho National Laboratory, ID. Mr. Harris assisted in the preparation of planning documents and annual reports regarding the remediation of contaminated groundwater at the Test Area North Facility in Eastern Idaho. These plans documented using new techniques to clean up the TCE contaminated plume using bioremediation, pump and treat, and monitored natural attenuation. All work was approved by the U.S. Department of Energy, the U.S. EPA, and the Idaho Department of Environmental Quality. Mr. Harris performed groundwater monitoring, sampling, and analysis to assess the project progress.

Water Distribution System Design

- Tetonia Water Distribution System Improvements Project, Tetonia, Idaho. Project Manager. The design included distribution system improvements, new water meters, and a new well. The project included several bores under the state highway. The project included 12,000 feet of 6-, 8-, and 12-inch water lines and replacement of associated services.
- Arco Water System Improvements, Arco, Idaho. Project Manager. The Arco City Council faced a water supply emergency. The pump in the Water Street well had failed for the fourth time in several years leaving the City with only one well to supply the community with drinking water. However, the scare of losing a single source of water served as a catalyst for the Council to authorize improvements to the water system including a new well, rehabilitation of the City Park Well, distribution system improvements, and replacement of a deteriorating storage tank. Kevin designed the water distribution improvements that included new water lines, water meters, and pressure reducing valves.

Water Pumping System Design

- Targhee Landing, Alpine, WY. Mr. Harris was the lead designer for the design of the water and wastewater distribution system for an 86 unit townhouse development located near Alpine, Wyoming. Mr. Harris prepared design plans and specifications and managed construction of the project. Project components included construction of a well, liftstation, and all associated distribution and collection piping.

Water Source Development and Design

- Tetonia Well, Tetonia, Idaho. Project Manager. Tetonia relied on a single 100-year-old drinking water well that had been originally drilled by the Union Pacific Railroad. A new well site was selected, a test well was drilled, and a 400-gpm well and well house were designed.

Wastewater Planning

- Garden City Utility Master Plan, Garden City, ID. Mr. Harris was the project engineer for the completion of a utility master planning study evaluating the production, storage, delivery, and water quality aspects of the Garden City water system. Study elements included water and wastewater modeling utilizing MWH Soft *InfoWater* and *InfoSWMM*; evaluation of water rights issues and development of capital improvement plans to upgrade the system. This planning document also included evaluation and development of capital improvement plans for the wastewater collection system and a wastewater treatment system.
- IBSD Facility Planning Study, Bonneville County, ID. Mr. Harris prepared a facility master plan evaluating the condition and capacity of the collection system for the Iona Bonneville Sewer District located in Bonneville County, Idaho. Study elements include wastewater modeling utilizing SewerCAD, evaluation of the current system, evaluation of fees, and development of capital improvement plans to upgrade the system.
- Shelley Wastewater Collection Facility Planning Study, Shelley, Idaho. Project Manager. The study reviewed and recommended improvements to the City's aging wastewater collection system. Most of the recommendations included rehabilitation of existing lines using methods that minimized excavation.
- Eagle Farms Application Permitting, Idaho Falls, Idaho. Project Manager. Eagle Farms LLC utilizes its potato wash water effluent to irrigate alfalfa. Under its DEQ-issued reuse permit, it must document and report the efficiency of its land application system in removing required amounts of nutrients and other wastewater constituents. Prepared permit applications for different permit cycles. Also, conducted seepage testing of wastewater lagoons and prepared annual reports.

Wastewater Treatment Design

- Wastewater Treatment Plant Design, Soda Springs, Idaho. Project Engineer. Designed the new 1.0 MGD wastewater treatment facility. Processes included STM Aerotor secondary treatment process, rectangular secondary clarifiers, tertiary filtration system for phosphorus removal, pump stations, and associated facilities.

- Wastewater Treatment Plant Headworks Design, Soda Springs, Idaho. Project Engineer. Designed the new 1.5 MGD headworks facility for the existing wastewater treatment plant. Calculated hydraulic profile of headworks process. Processes included new drum screen, vortex grit chamber, bar screen, and primary lift station.

Wastewater Collection Design

- Eastern Interceptor Sewer Transmission Line, Ammon, Idaho. Project Engineer. Assisted the project manager in the design of a thirteen-mile long, 36 to 48-inch diameter sewer transmission line. The transmission line carries sewage from the City of Ammon to the new regional Oxbow sewer treatment plant in Shelley, Idaho.
- Midway/Eagle Interceptor, Idaho Falls, ID. Mr. Harris prepared an evaluation of the collection system interferences between the City of Ammon and the Iona Bonneville Sewer District (IBSD) complete with recommendations for resolving customer-system conflicts. The project also included the design of a 2-mile, 30-inch diameter interceptor that required modeling, easement acquisition, and utility coordination.
- Wildwood Lift Station Force Main Realignment and Upgrades, Ammon, ID. Mr. Harris prepared was the designer of a lift station upgrade for the Iona Bonneville Sewer District (IBSD). This project includes the installation of a ½- mile of new force main that includes permitting for crossing an irrigation canal and railroad tracks. In addition, the lift station is being upgraded to meet current State of Idaho standards.

Wastewater Pumping Design

- Soda Springs Wastewater Treatment Pump Stations, Soda Springs, Idaho. Project Engineer. Designed the pump stations for the new wastewater treatment plant including the 3.0-MGD headworks pump station, 7,005-gpm recirculation pump station, 1860-gpm feed forward pump station, and three plant drains lift stations.
- Eastern Idaho Regional Wastewater Authority River Bend Lift Station Design, Shelley, Idaho. Mr. Harris was the design engineer for Phase I of the new 20 MGD River Bend Lift Station. The lift station is 30 feet deep and 9 feet wide. The lift station is designed to allow the addition of pumps as flow increases and is currently able to pump 8 MGD.
- Wildwood Lift Station Force Main Realignment and Upgrades, Ammon, ID. Mr. Harris prepared was the designer of a lift station upgrade for the Iona Bonneville Sewer District (IBSD). This project includes the installation of a ½- mile of new force main that includes permitting for crossing an irrigation canal and railroad tracks. In addition, the lift station is being upgraded to meet current State of Idaho standards.

Development

- Targhee Landing, Alpine, WY. Mr. Harris was the lead designer for the design of the water and wastewater distribution system for an 86-unit townhouse development located near Alpine, Wyoming. Mr. Harris prepared design plans and specifications and managed construction of the project. Project components included construction of a well, lift station, and all associated distribution and collection piping.
- Iona Bonneville Sewer District, Idaho Falls, ID. Mr. Harris performs all subdivision reviews for the sewer district. These reviews are to ensure that plans and specification meet those adopted by the Board.

Solid Waste

- Teton County Landfill Rehabilitation Design and Engineering Report, Teton County, Idaho. Project Manager. The Teton County Landfill was formally closed in 2007 but the state believed that its evapotranspiration cover had failed, leachates were escaping, and a new cover was necessary. Forsgren Associates conducted a detailed review and investigation of the original closure plan, cap materials, and regulatory concerns. We recommended an alternative method of rehabilitation that consisted of removing the existing cap, regrading the landfill, replacing the cap material, and bringing in additional material to increase the thickness of the cap. Our approach saved the County hundreds of thousands of dollars.

- Teton County Post Closure Plan, Teton County, Idaho. Project Manager. Following rehabilitation of the existing evapotranspiration cap at the Teton County landfill, prepared the Post Closure Plan to address monitoring and maintenance of the closed landfill. Monitoring included construction of a lysimeter test pad to monitor the seepage through the landfill cap.
- Fremont County St. Anthony Closure Plan. Project Manager. Fremont County operated a landfill that intermixed municipal and construction / demolition waste streams and was nearly full. As a result, the entire facility was required to meet the more stringent closure standard of a municipal landfill. In response to a voluntary Consent Order for closure, Forsgren Associates prepared closure and post-closure care plans that recommended installation of a Subtitle D cap. Our negotiations with DEQ and ability to find a nearby source for closure material saved the county money that it could apply to a new scale building.

Construction Administration

- Wastewater Treatment Plant Headworks Construction Administration, Soda Springs, Idaho. Project Engineer. Performed construction administration for the new 1.5 MGD headworks facility for the existing wastewater treatment plant. Processes included new drum screen, vortex grit chamber, bar screen, and primary lift station.

Larry L. Evans, P.E.

33 Years • Joined Firm: 1994 • Idaho #7628 • California #C42075 • Oregon #19363 • Montana #34948 • Utah #4996483-2203

Assignment Director of Operations / Project Manager / Project Engineer

Education M.B.A., Business, Stanford University
M.S., Structural Engineering, Stanford University
B.S., Civil Engineering, Stanford University

Summary Larry is Forsgren's senior transportation and bridge engineer. In his 33 years of experience, he has played a leadership role in the funding, design, and construction of over 80 roadway improvement projects, including gravel roads, paved roads, pavement rehabilitation, bridge replacement, culvert replacement, storm drainage, intersections, railroad crossings, emergency repairs, guardrail improvements, signing, striping, traffic signals, and roadway lighting. Below is just a small portion of the most relevant projects Larry has successfully managed.

Selected Experience **Project Manager**

- Montana Transportation Department Bridge Load Rating Contract (2014-2017) Under Larry's oversight, Forsgren's team developed 188 bridge load ratings following MDT's Bridge Inspection and Rating Manual and AASHTO's MBE. Our load ratings were separated into 19 submittal packages that were all submitted on schedule. Almost all of our load ratings were approved by MDT without comment or the need for revisions and resubmittal. As a result, both of our term assignments were completed over 2 months prior to the contract end date and with budget remaining. Larry coordinated with MDT to add 30 bridge load ratings to our initial term assignments with no change in contract time or amount.

Larry was the QC reviewer or QA auditor on many of the load ratings completed for MDT. In particular, he was the QC reviewer for most of the steel girder-floorbeam-stringer bridges on I-90. Larry understood the importance of accurate load rating results for these complex and fracture-critical structures on one of the State's primary transportation corridors

- Utah Department of Transportation Statewide Bridge Load Ratings (2012-2016) – Larry led Forsgren Associates' team that load rated 689 bridges for UDOT. In addition to completing load ratings we were a technical partner in assisting UDOT in establishing the schedule and methodology for the load rating program. We assisted UDOT in developing their policies and procedures manual, quality control check templates, and standard deliverables for each bridge. The bridges rated for UDOT follow the Manual for Bridge Evaluation and use the BrR software. Larry has reviewed load ratings for all common bridge types, including pre-stressed concrete girder, steel girder, reinforced concrete girder, slab, and box culvert bridges. Under Larry's management all 17 of our UDOT load rating submittals were completed on time and under budget.
- Idaho Transportation Department Heavy Haul Permit Assistance (2012-2016) Larry has managed several projects where Forsgren assisted heavy haul transporters in selecting a route for non-standard gauge super loads traveling through Idaho. Larry coordinated with ITD and the heavy haul transporters to determine acceptable routes and the bridge analysis required along those routes. Forsgren evaluated the bridges on each route for the proposed loads following ITD's in house process. We have performed load ratings and evaluated routes for approximately 20 different overweight truck configurations on 10 routes throughout Idaho.
- I-84 Robinson Road and Black Cat Road Overpasses, ID Larry Managed and lead the design of the replacement of the Robinson and Black Cat Road Bridges over Interstate 84 between Boise and Nampa, Idaho. Larry led the team in responding to a demanding 9-month fast track project schedule developed by Connecting Idaho Partners (CIP) for this project. Larry was responsive to a demanding review and QA/QC process developed for the CIP projects and ensured that his project team was responsive and timely to the needs of CIP. Larry will ensure that the same level of responsiveness is provided to the City of Boise. The Black Cat Road and Robinson Road

Overpass designs included roadway tie-ins, drainage, utilities, four (4) retaining walls, and roadway safety improvements for both structures.

- US 95 Mactileme Creek Bridge and Windfall Pass Curve, ID; The project began as a bridge replacement project and a safety improvement project under two key numbers with an accelerated 6-month design schedule. Forsgren and the team submitted the final design on schedule. At the Final Design Review, ITD D1 asked the team to add the replacement of a nearby failing structure to the design package. Forsgren worked with ITD to accelerate this additional roadway and bridge design into the original package, only adding 8 weeks to the project schedule. A temporary shoofly was designed around each bridge replacement to maintain traffic during construction.

QA Reviewer and QC Auditor

- Idaho Transportation Department Statewide Bridge Load Ratings (2009-2017) The Forsgren Associates team has load-rated over 770 bridges since 2009 for the Idaho Transportation Department (ITD). Load ratings have been performed utilizing AASHTOWARE Bridge Rating (BrR) software using both the BRASS and AASHTO engines, and the most current editions of the AASHTO Manual for Bridge Evaluation. We utilized LRFR methods for bridges designed under the AASHTO LRFD Bridge Design Specifications and LFR methods for bridges designed under the AASHTO Standard Specifications. Larry reviewed load ratings for over 200 bridges using both LFR and LRFR methodologies.
- SH-55, Smiths Ferry to Round Valley, ID – The Smiths Ferry to Round Valley project includes 7 miles of roadway investigation including the design of passing lanes south of Smiths Ferry on SH-55, improvements to the Wellington Snow Park/SH-55 and Smiths Ferry Drive/SH-55 intersections, canyon section north of Smiths Ferry safety improvements including widening with the use of retaining walls, rock outcrop removal, bridge replacements and raising the grade of SH-55 at Round Valley Creek Road intersection to remove drainage issues. An extensive Concept Analysis is being completed including a traffic study, cost/benefit analysis, and costs for each improvement. Drainage investigation will include the entire segment of roadway reviewing existing cross drain culverts and drainage facilities. Hydraulic work included a hydraulic report for the project. Forsgren is the project manager and roadway designer for the project.



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406.646.9340 • Forsgren.com

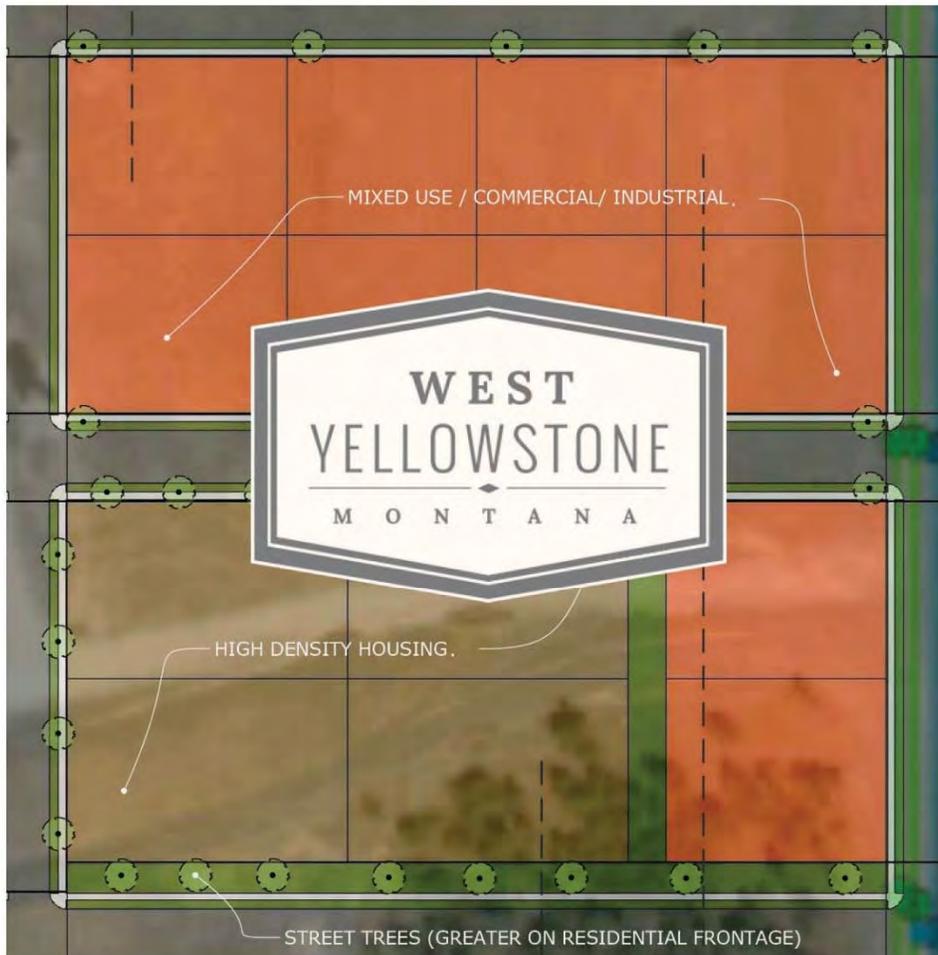
We've been engineering stronger communities since 1962.



THINKTANK
DESIGN GROUP inc.

80 ACRE EXPANSION PLANNING REPORT

Prepared for the Town of West Yellowstone



DRAFT: GREEN TEXT = DESCRIPTIONS / NARRATIVE TO BE ADDED.

FUNDING FOR THIS REPORT WAS PROVIDED, IN PART, BY THE MONTANA DEPARTMENT OF COMMERCE, BSTF PROGRAM.



80 ACRE EXPANSION PLANNING REPORT

TABLE OF CONTENTS

Basis of Planning Report	3
Existing Conditions and Challenges	3
Maximizing Redevelopment Potential: Highest and Best Use	3
Site Plan Study and Use Matrix	6
Sites for Mixed Use Commercial / Housing Development	7
Sites for Housing Development	8
Sites for Relocating Public Works	9
Roads, Parking, and Open Space Planning	9
Site Development Strategies	10
Zoning for housing	13
Zoning for small-scale light manufacturing & small businesses	14
Relocation of City Shops: A Strategy to Open Prime Sites for Commercial Redevelopment	15
Redevelopment Potential of Prime Commercial Sites (Yellowstone Ave)	17
Summary Findings	20
Appendix: Public Comments / Community Engagement	
A. THINKTANK Site Plans Presented to Town / Community	21
B: Land Solutions Town Hall Meeting	23
C: Northern Rocky Mountain (NRMEDD) Economic Focus Session	27



80 ACRE EXPANSION PLANNING REPORT

BASIS OF REPORT

This report provides an outline of the development potential of 80 acres located on the western boundary of The Town of West Yellowstone (Town). The intent of the analysis is to ensure the property reaches its greatest social, economic, and environmental potential to facilitate a high quality of life for residents and contribute to a growing economy. The guiding principles for the 80 acres study are a high priority for residential use, providing opportunities to strengthen the local economy, and the planning for the future needs to the Town.

The site plan study and use matrix included in the report illustrate high level property divisions and relationships. Development strategies include a market assessment (the cost, return, and tax revenue associated with development); proposed zoning for housing and small scale, light manufacturing; relocation of City Shops; redevelopment potential along Yellowstone Avenue; and diversification of commercial development for economic expansion.

EXISTING CONDITIONS & CHALLENGES

Although the Town of West Yellowstone is a primary tourism partner with the State of Montana, the Town's boundaries were established decades ago and are constrained by the surrounding public lands of both Yellowstone National Park and the Custer-Gallatin National Forest. With these fixed boundaries, the Town is completely land locked. While most towns can annex additional land to meet expanding housing, business, and destination visitor needs, this opportunity does not exist in West Yellowstone. This affects the Town in the following adverse ways:

- Commercial growth is limited to existing structures or the demolition and construction of new buildings.
- The Town's manufacturing sector is almost non-existent due to unavailable lands, and the shipping and transportation costs of raw materials and finished products.
- Because of the limited supply of affordable buildable property, land and housing costs are high, especially when considering household incomes. As of 2015, the median household income in West Yellowstone was 20% lower than in Montana and 39% lower than in Gallatin County.
- The lack of available affordable housing is a significant issue for West Yellowstone's seasonal summer workforce. Businesses are heavily reliant on a seasonal workforce, yet potential employees coming to work during the summer season are challenged to find rental housing. In some instances, employees are forced to live in campgrounds or camp illegally in nearby national forest land.

MAXIMIZING DEVELOPMENT POTENTIAL: HIGHEST & BEST USE

In determining the highest and best use of the property, guiding principles were established from the Town's 2017 Growth Policy, as well as community input collected through a series of public meetings



80 ACRE EXPANSION PLANNING REPORT

conducted by Land Solutions in 2016 / 2017 and a focus group discussion of business and community leaders conducted by Northern Rocky Mountain Economic Development District in December 2016. The community driven goals which will support a high quality of life for residents are distilled into prioritizing residential use on the 80 acres, providing opportunities for strengthening a local, year-round economy, beautification, and planning for the future needs of the Town.



Prioritize Residential Use on 80 Acres

High Density Housing R-3: A solution to meet affordability demands, promote a range of housing choices, and preserve neighborhood livability.

In the R3 High Density Residential zone, multi-family residential units are appropriate and encouraged to create a denser urban form than the other residential zones. The zone also allows other housing options, such as multiple dwelling houses and single dwelling houses, and is generally applied to land surrounding centers where residents can readily access services.

Medium Density Housing R-4: A second strategy for providing workforce housing & market rate options.

The residential uses allowed in this district are very supportive of the goals of creating more affordable housing options. These range from town house style homes, manufactured homes (on permanent foundations), inclusion of accessory dwelling units and apartments all of which often can be more affordable options for the community. The limited supportive commercial uses listed as permitted for this district include Day cares and home-based businesses with less than 2 employees. The district also provides for some unique conditional uses.

Open Space / Green Space: Creating recreational opportunities near medium and high-density housing.

Open space provides recreational areas for residents and helps to enhance the beauty and environmental quality of neighborhoods. The development scenarios provided in this report include street trees on all frontages with greater tree density on residential streets. A neighborhood public park within the 80-acre development will provide open space near the medium and high-density housing. In addition to the 80 acres development, boulevard trees and landscaping along the Town's entrance on Highway 80 will also add to the urban forest inventory. Our development strategies increase the total Town owned trees by 100%.



80 ACRE EXPANSION PLANNING REPORT



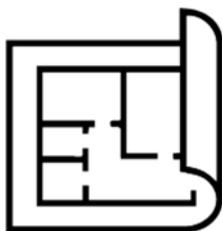
Provide Opportunities for Strengthening the Local Economy

Mixed Use Industrial on 80 acres allows for light, low impact industrial that can accommodate housing on second or subsequent floors.

Zoning land for mixed use commercial / residential projects can provide a cluster of commercial uses and create a “town center” atmosphere for both new and old residents. Small-scale light manufacturing businesses that export products and services on a regional and national level will bring more money into the community and state of Montana. This business diversification strategy can stabilize the economy during times of recession. The zoning recommended within this report (page 12) will provide for these opportunities in a targeted live / work area located on the northern end of the 80-acre expansion, along highway 80. To ensure the success of the new commercial development zone, we recommended that The Town of West Yellowstone, Northern Rocky Mountain Economic Development District, or other economic development partner employ a targeted businesses recruitment strategy to attract new businesses providing niche produces and specialized services concurrent with phased development.

Entryway Commercial That Highlights Town Sprit & Character.

The Town of West Yellowstone plays host to nearly two million destination visitors a year as a major gateway to Yellowstone National Park. This is a both a unique responsibility and an opportunity. By strategically developing an Entryway Corridor on the 80 acres bordering Highway 20, The Town can establish itself as both a world class adventure destination and a strong community with schools, parks, local citizens, and a charm that is worth stopping for. Design guidelines should emphasize creating a of sense of place by highlight the spirit and character with archways announcing arrival, way-finding signage, landscaping with boulevard trees, and public art. Commercial activity along the Town’s gateway should focus on beautification, cohesive architectural design, and public gathering spaces for locals and visitors.



Plan for the Future Needs of the Town of West Yellowstone

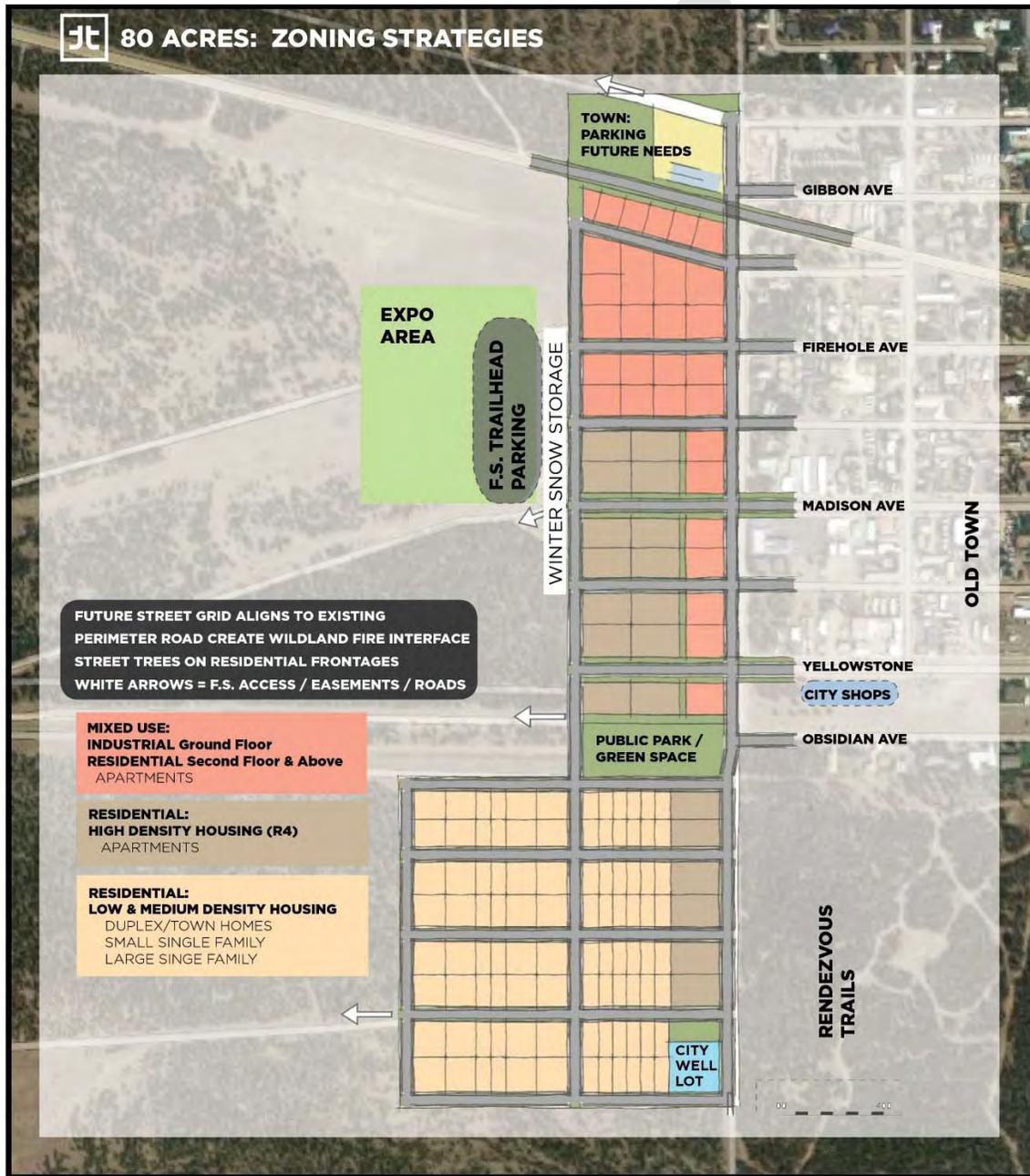
Description be added expanding on future needs, public lands and institutions, city services, other municipal infrastructure, and open space / parks.



80 ACRE EXPANSION PLANNING REPORT

SITE PLAN STUDY AND USE MATRIX: ADDRESSING COMMUNITY GOALS

To adequately address the communities' stated goals, the following high-level Site Plan prioritizes residential development with a cohesive mix of densities ranging from low to high. Mixed-use zoning allows for the development a year-round, light manufacturing industry while also increasing housing options. Tree lined streets seamlessly connection the 80 acres to the existing town street grid and residents share access to a centrally located community park. Lastly, a designated area has been set aside at the Town's entrance parking and future needs.





80 ACRE EXPANSION PLANNING REPORT

Description be added expanding Site Plan and images below. Topics = Town entrance / entryway corridor; creating a sense of year-round community (to overcome perception that WY is just a parking lot to YNP); live/work benefits of mixed use commercial / light Industrial with housing above as shown below in Site Plan and images.



MIXED USE:
INDUSTRIAL Ground Floor
RESIDENTIAL Second Floor & Above
 APARTMENTS

RESIDENTIAL:
HIGH DENSITY HOUSING (R4)
 APARTMENTS

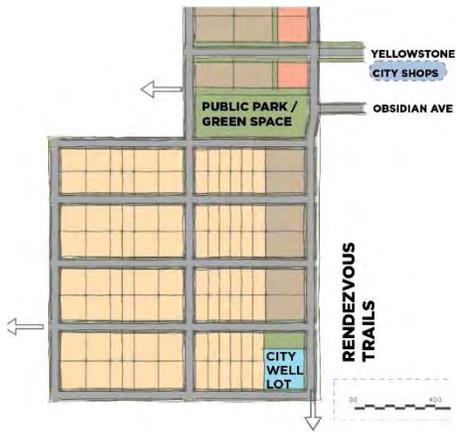
- TOWN ENTRYWAY CORRIDOR**
 CREATING A SENSE OF PLACE:
- TOWN AS COMMUNITY, NOT JUST A GATEWAY
 - ARCHWAYS
 - WAY-FINDING
 - LANDSCAPING
- COMMERCIAL/INDUSTRIAL
- HIGH DENSITY RESIDENTIAL
- LIVE / WORK
- FRONTAGE STREET TREES





80 ACRE EXPANSION PLANNING REPORT

Description be added expanding on housing development strategies shown below in Site Plan and images.



**RESIDENTIAL:
HIGH DENSITY HOUSING (R4)**
APARTMENTS

**RESIDENTIAL:
LOW & MEDIUM DENSITY HOUSING**
DUPLIX/TOWN HOMES
SMALL SINGLE FAMILY
LARGE SINGLE FAMILY

- HIGH DENSITY:**
- APARTMENTS
- LOW DENSITY:**
- DUPLIX/TOWN HOMES
- SMALL SINGLE FAMILY
- LARGE SINGLE FAMILY
- FRONTAGE STREET TREES
- OPEN SPACE / GREEN SPACE





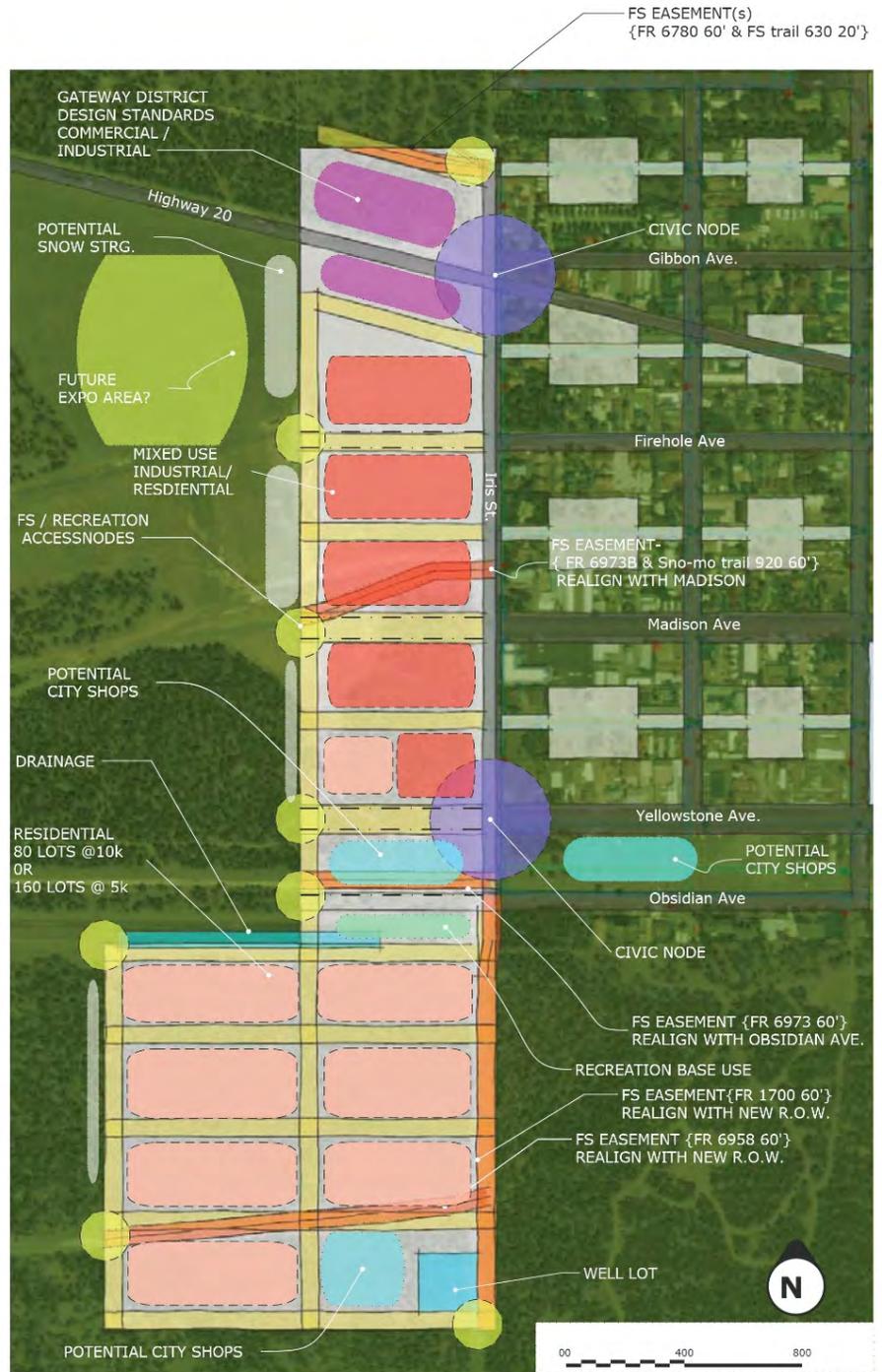
80 ACRE EXPANSION PLANNING REPORT

Description be added expanding on strategies shown below in Site Plan, to include:

- 3 sites for the relocation of City Shops.
- Roads, Parking, Open Space Planning
- Civic Node – KEY INTERSECTIONS AND ENTRYWAYS THAT CONNECT BACK TO THE COMMUNITY
- Forest Service Easements / Connectivity

- Areas to work with the Forest Service on relocating easements and providing access have been identified on the following Site Plan

- Drainage / Snow Removal
 - Gestures toward this yet full engineering analysis would be needed to assess the size, scale, and function of snow removal and drainage ways, which is beyond the scope of this study





80 ACRE EXPANSION PLANNING REPORT

SITE DEVELOPMENT STRATEGIES

5 LOT MINOR SUBDIVISION

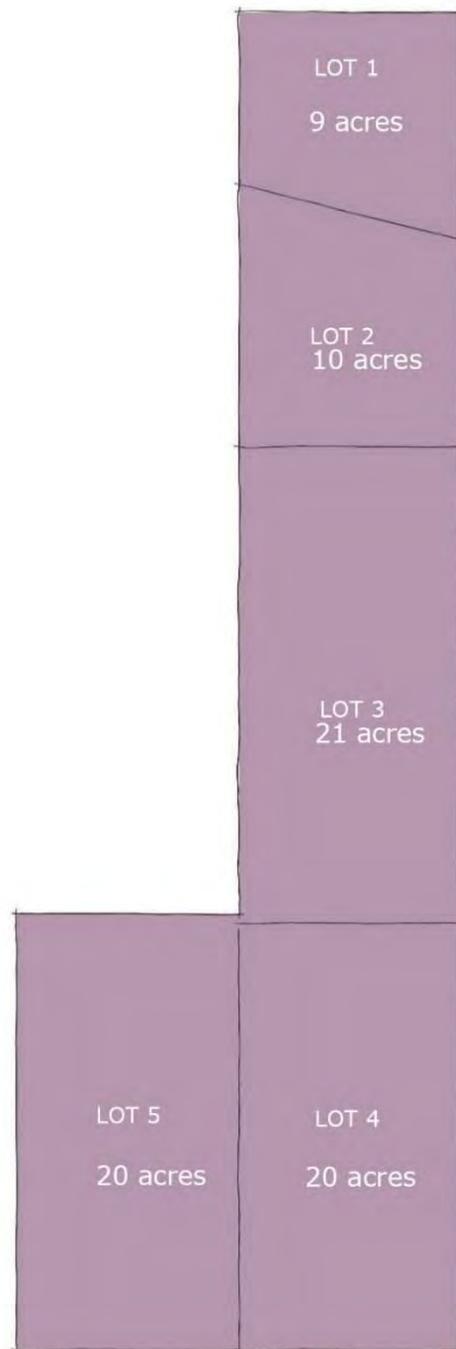
The creation of a simple 5 lot minor subdivision of the land requires minimal infrastructure improvements per state law and Town regulations. This strategy allows for the easy transfer of land if needed and provides the flexibility to proceed with phased development. Phasing the development also phases the cost, thereby reducing financial risk and increasing the feasibility of the project. By creating a 5 Lot Minor Subdivision, the Town will also be in a position respond to future conditions not known at this time. The option allows for the following:

Partnerships: Public and Private. This approach will allow for public / private partnerships to be more readily negotiated and can offer smaller parcels for development. The private sector will have an easier time developing the property and marketing it in its final form. There would most certainly be a need for the town to work with any entity either public or private to further the goals of creating housing and economic vitality for the town. Some of the options as mentioned above and outlined below

- Sale / Trade of portions of the 5 Lot minor
- Sale / Trade of Subdivided lots
- Predevelopment of sites

Restrictions Intact. The Town can place any and all necessary restrictions on the land or negotiate terms that will continue to achieve the community goals set forth for this land.

Sale / Retainage of Land. By offering a portion of the land for private development, future costs to develop the retained land can be reduced because the initial development burden is covered in the first phases.



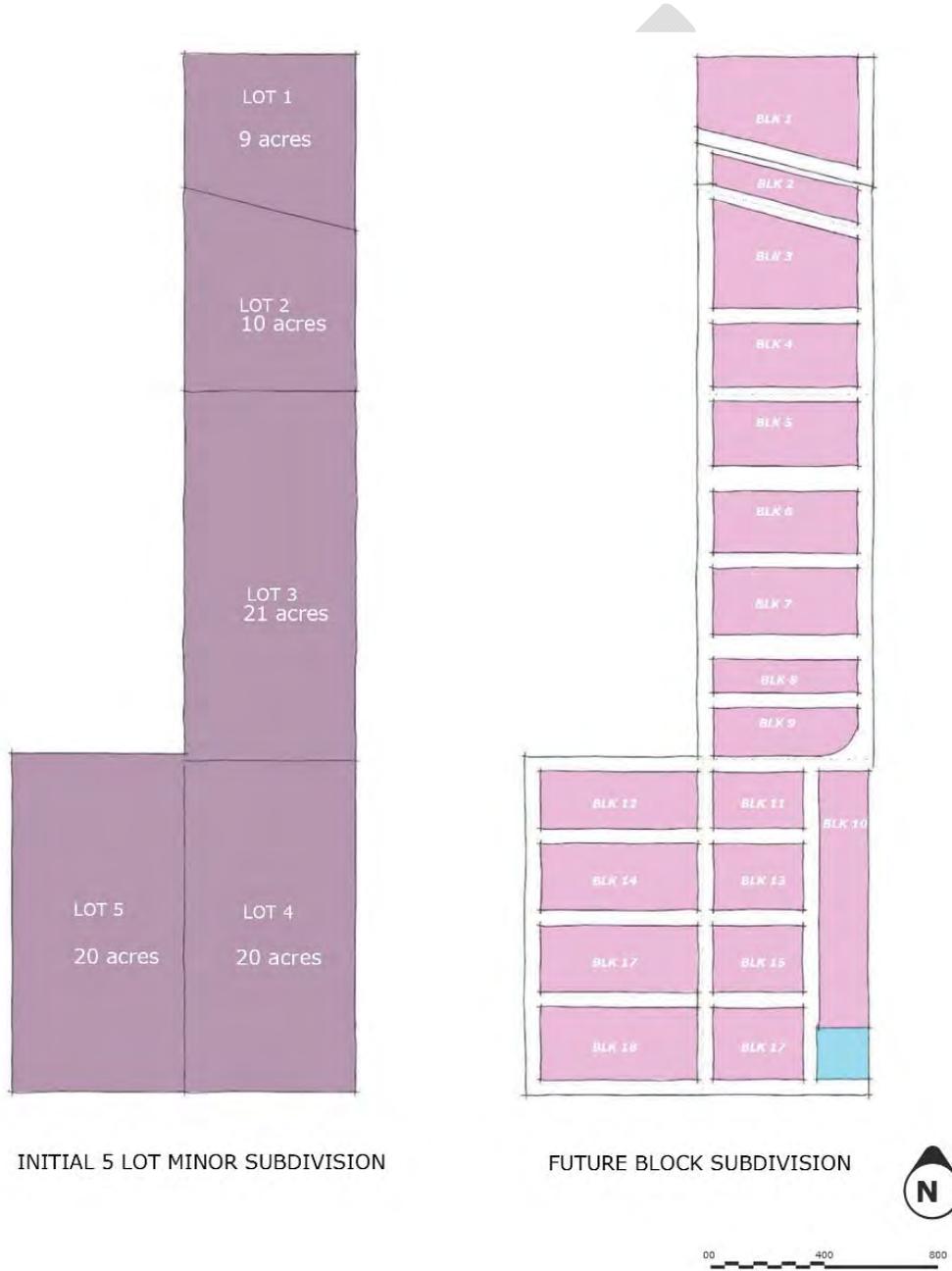
INITIAL 5 LOT MINOR SUBDIVISION



80 ACRE EXPANSION PLANNING REPORT

FUTURE BLOCK SUBDIVISION on all or portions of the 5 Lot Minor Subdivision

The Town of West Yellowstone can at any time elect to further subdivide any or all portions of the 5 lots into block subdivisions. By transferring the land as block subdivisions, the Town will have the ability to transfer and in smaller parcels giving it more control on the outcome. Smaller parcels may also be favorable to housing authorities looking to develop workforce housing.





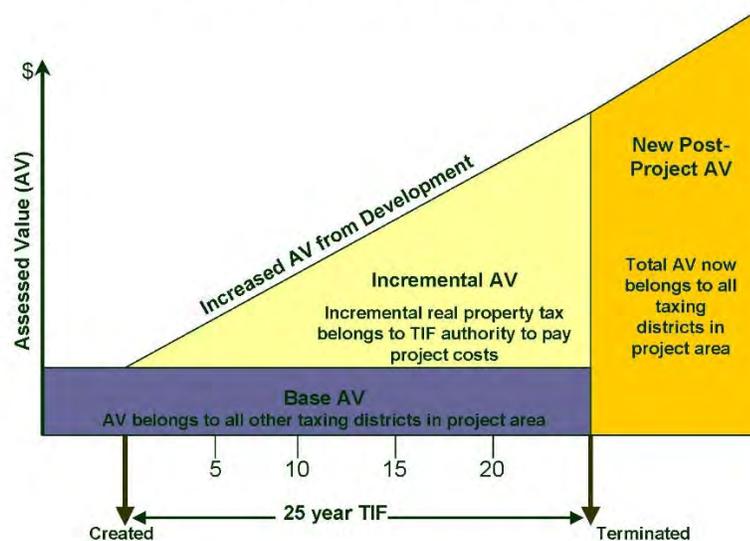
80 ACRE EXPANSION PLANNING REPORT

OTHER ENTITLEMENT ACTIONS OF BENEFIT

Creation of a TEDD (Targeted economic development district)

The creation of a TEDD (Targeted economic development district) is a powerful way to leverage future tax value with using tax increment financing for present day development needs. As an example, this may include the creation of roads or other infrastructure in exchange for the creation of secondary value-added industries location within the District established on the commercial portions of the 80 acres. These costs would be covered through the increased increment of future taxes.

Exhibit 1. TIF Assessed Value (AV) Over Project Life



There are many more benefits in pursuing the TEDD for all or portions of the 80 acres. For full details on Montana State Targeted Economic Development District laws please reference Montana Code Annotated 7-15-4279 via: https://leg.mt.gov/bills/mca/title_0070/chapter_0150/part_0420/section_0790/0070-0150-0420-0790.html.

Entryway guidelines

There are several communities throughout the country that use planning and zoning entryway guidelines. The expansion of the 80 acres extends the current entryway corridor for the town and as such consideration of the impact on this is very important. Residents and visitors alike take visual cues from what they see as they enter a town, these cues begin to tell the story of who the town is. In general guidelines such as this begin to ask, “What does the town want to see?”, “What does the community look like?” The Guidelines are offered as a unified answer, a consensus of community



80 ACRE EXPANSION PLANNING REPORT

leaders and constituents. They do not presume to dictate design solution but encourage the design process.

Special Improvement District (SID).

Description be added expanding on this very common municipal tool used to include property owners in partial funding capital improvements.

ZONING: RECOMMENDED

Title 17 zoning regulations for the town offer several types of zoning that address the needs of the 80 acres. This report has recommended pursuing R-4 for the bulk of the housing types.

R4 Zoning: Residential Mixed Use High Density District

The current draft of the zoning update describes the intent R-4 zone type as follows:

The intent of the R-4 Residential Mixed-Use High-Density District is to provide for high density residential development through a variety of housing types and limited supportive commercial uses to serve the varying needs of residents.

The residential uses allowed in this district are very supportive of the goals of creating more affordable housing options. These range from town house style homes, manufactured homes (on permanent foundations), inclusion of Accessory dwelling units and apartments all of which often can be more affordable options for the community.

The limited supportive commercial uses listed as permitted for this district include Day cares and home-based businesses with less than 2 employees. The district also provides for some unique conditional uses, which require approval by the Town Council on a case by case basis. The uses include banks, restaurants, small scale retail, general commercial uses (max of 10,000 SF), pharmacies, medical offices, and grocery stores. Again, all of these uses would need to be approved by the council on an individual basis.

R3 Zoning: Residential High Density District

The current draft of the zoning update describes the intent R-3 zone type as follows:

The intent of the R-3 Residential High-Density District is to provide for high density residential development, and related uses, through a variety of housing types to serve the housing needs of residents.

The main distinction between R-3 and R-4 is that R-3 does not provide for any commercial mixed uses in the zone type. Both the R-3 and R-4 provide for higher density housing options as



80 ACRE EXPANSION PLANNING REPORT

well as lower densities such as single-family homes. Much of which can be moderated through the various lot sizes ultimately platted in a subdivision.

M1 Zoning: Light Manufacturing District

The current draft of the zoning update describes the intent M-1 zone type as follows:

The intent of the M-1 Light Manufacturing District is to provide for the community's needs for wholesale trade, storage, warehousing, light manufacturing and similar activities.

This district is being contemplated for the commercial portions of the site as indicated on the site plans. The goal for this zoning is to provide opportunities for diversification of the West Yellowstone economy with businesses producing niche products or specialized services, especially for export outside of Montana. Additionally, the goal is to have residential as an included theme for this mixed-use area so that lack of available housing is not a limiting factor to commercial expansion.

This zone type allows for apartments and townhouse dwellings to exist only above commercial and light industrial establishments. Commercial uses permitted in this zone type includes breweries, distilleries, and wineries; food and beverage processing and packaging; light manufacturing, assembly, and fabrication; public buildings and facilities; boat sales; vehicle rental; and wholesale and warehousing facilities. This district does not provide for any retail of any kind, short term rentals, restaurants, motels / hotels, offices, medical facilities, or health and fitness establishments.

The M1 zone type is within the Town's zoning regulations, however it is not currently utilized or applied to any land in the community. Designation of an M1 area within the 80 acres expansion would create a unique opportunity for diversifying the economy with niche products and specialized services businesses.

Proposed Code Modification

The current zone types indicated on the map would include M-1 which provides for small scale light manufacturing. The way the M-1 zone type is currently written does allow for some degree of residential above shop spaces or other commercial actives. We recommend a high emphasis on residential uses in this zone as it provides the housing to support commercial recruitment efforts and growth. Additionally, we recommend that the M-1 zone type include other residential compatible commercial opportunities as are found in the R-4 district, such as home-based businesses, banks, community centers, grocery stores, medical and dental, clinics, and pharmacies.



80 ACRE EXPANSION PLANNING REPORT

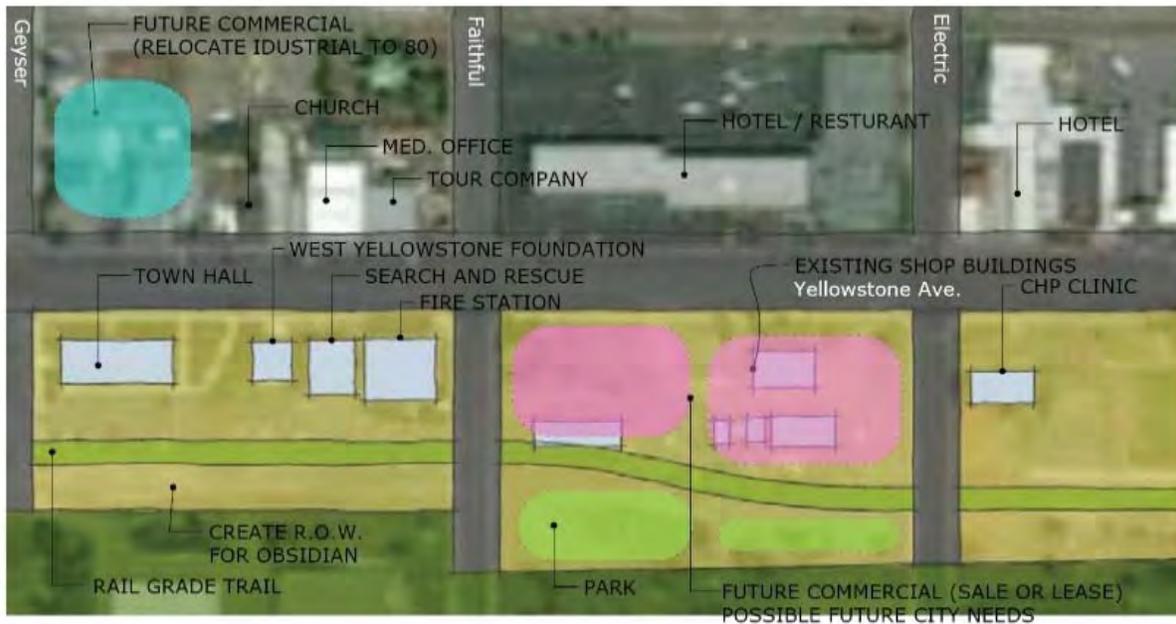
Summary of Zoning Recommendations

The goals for the 80-acre property are to create a broader base of housing for the community to include more apartments and smaller or attainable dwellings. Additionally, there is a need to provide opportunities to strengthen and diversify the economy with light manufacturing and specialized service commercial uses within this district. It is the recommendation of this report that classifying portions of the property as R-3, R-4, and M1 would yield the best outcome for the stated goals.

RELOCATION OF CITY SHOPS: A STRATEGY TO OPEN PRIME SITES FOR COMMERCIAL REDEVELOPEMENT

The Town Garage “City Shops” are currently located on Yellowstone Avenue in the heart of the Town’s commercial and historic center (See full inventory map, page 18). In order to open prime sites to commercial development, this report has identified three possible scenarios to consider for the relocation of the City Shops, each with potential benefits. In each case a final needs assessment from the director of public works would need to be completed to evaluate the best location.

Current Yellowstone Avenue Inventory (partial map highlighting City Shops location)



Option 1: Relocating City Shops on the 80 acres central to the public park area.

See map page 16, block 8.

This option would allow for central and easy access for the shop vehicles. However, given it would be in a highly visible location it would need to be carefully designed to be harmonious with the surrounding character.



80 ACRE EXPANSION PLANNING REPORT

Option 2: Relocating City Shops on the 80 acres in the Southern portion near the well lot. See map below, block 10.

This option takes the industrial facilities and places it in the more residential district of the property. This could create more conflict than where it is currently located.

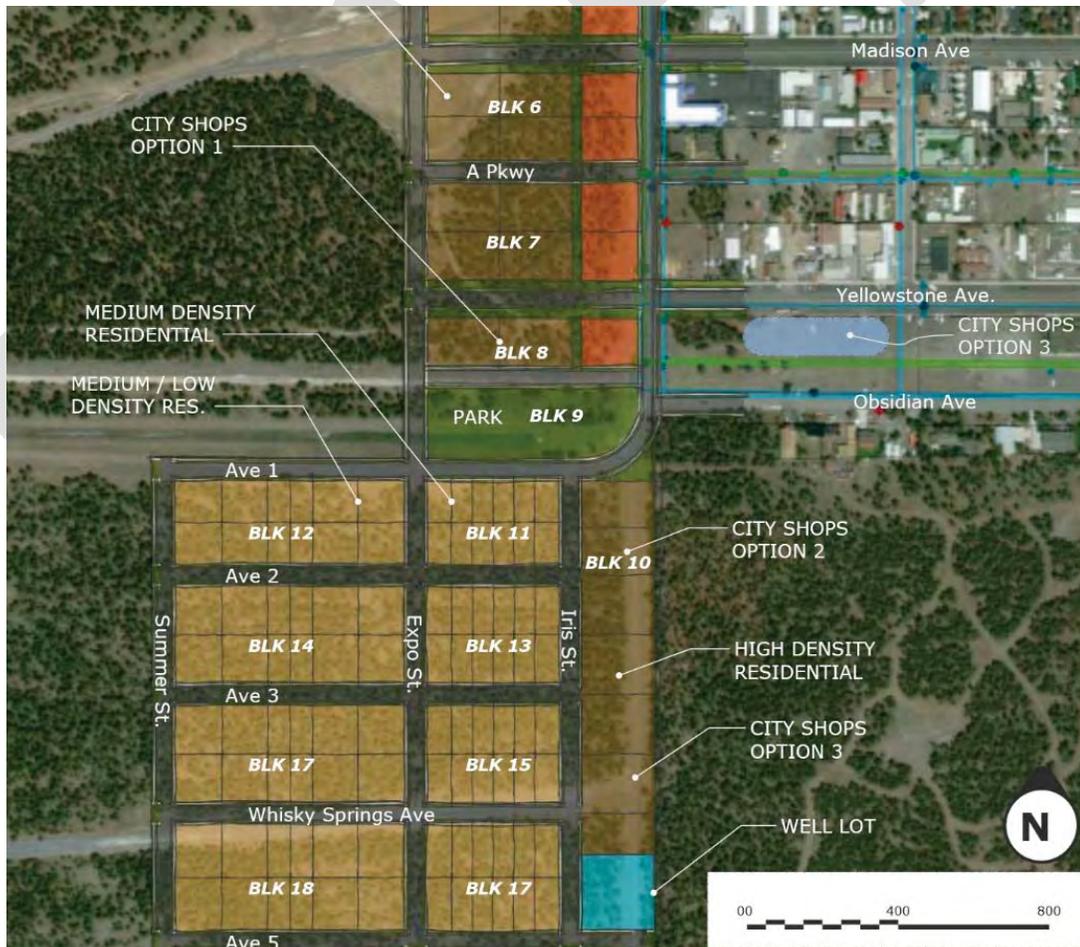
Option 3: Relocating City Shops on west end of Yellowstone Avenue (between Iris & Hayden).

This option places the industrial City Shops facilities on Town owned storage property on the south side of Yellowstone Avenue, adjacent to the 80-acres expansion area. The north side of Yellowstone Avenue on this block contains industrial storage and excavating company.

Option 4: Keep the facility in its current location and make the needed improvements.

This option might be the best given the relocation might create further issues with surrounding properties. However, if the goal were to free up the valuable real estate along Yellowstone Avenue then relocation might be preferred.

Map Identifying 3 Potential Sites for Relocated City Shops





80 ACRE EXPANSION PLANNING REPORT

REDEVELOPMENT POTENTIAL OF PRIME COMMERCIAL SITES (YELLOWSTONE AVE)

Existing Conditions

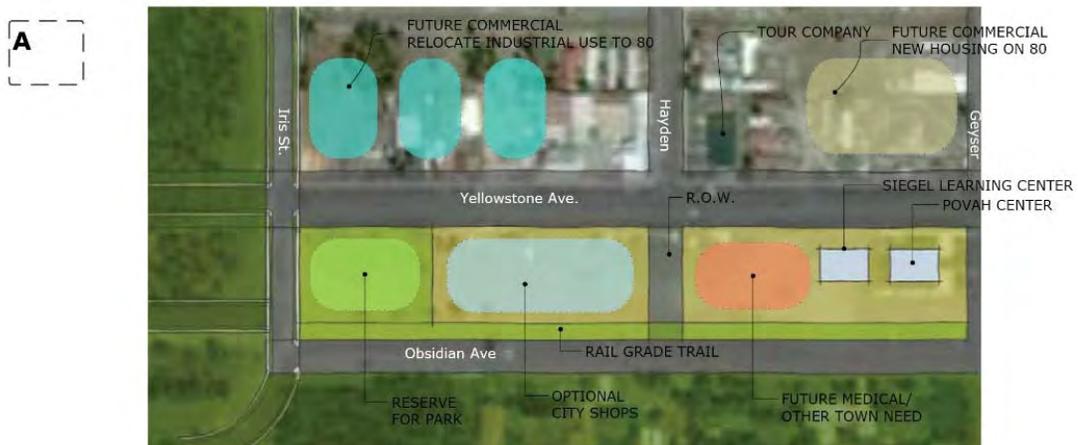
Yellowstone Avenue is the primary access street for destination visitors to Yellowstone National Park and is host to several hospitality-oriented businesses. This commercial corridor is also home to most, if not all, the historic structures in the Town. On the east side, the historic Union Pacific Dining Lodge and YHC railroad museum attract and cater to both visitor and community member alike. Destination visitors seek places with authenticity and Yellowstone Avenue has a prime opportunity to define and provide this authenticity for the Town.

Yellowstone Avenue houses many of the Town’s primary offices, providing important community facilities and services. Yellowstone Avenue will also align with the new 80-acre development and can serve as a strong connection to the new area of town. Given all these important features, the character and identity of Yellowstone Avenue is of the utmost importance to the Town and its identity. Strategic site redevelopment and in-fill development are encouraged to preserve and enhance this asset to the community.

Land Supporting City Needs

The south side of Yellowstone Avenue currently contains the bulk of city services, however, several of these key commercial core sites could be used to invite development which would strengthen the identity for this historic area of town. The Town should strive to make efficient use of its current locations or consider relocating facilities so that more of the destination visitor focused amenities can locate to this stretch of Yellowstone Avenue. The map below highlights several areas where possible redevelopment can occur or be encouraged. Specifically, it would be advised, though not mandatory, to encourage more industrial uses to locate on the 80 acres, opening opportunity for more service-oriented businesses in the Towns commercial core.

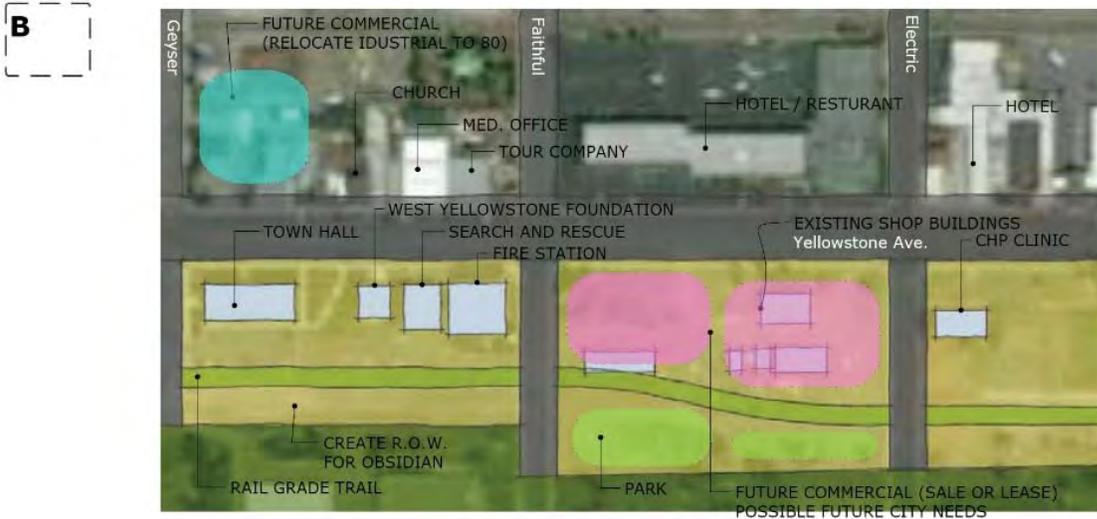
Yellowstone Avenue: Current Inventory and Redevelopment Options (West End)



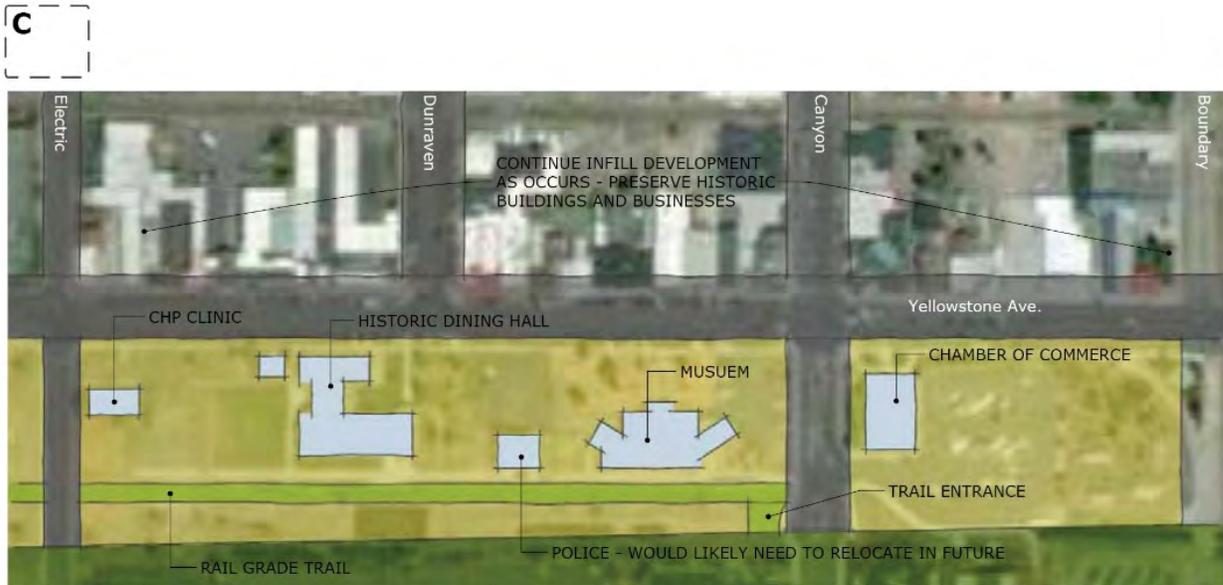


80 ACRE EXPANSION PLANNING REPORT

Yellowstone Avenue: Current Inventory and Redevelopment Options (Central)



Yellowstone Avenue: Current Inventory and Redevelopment Options (East End)





80 ACRE EXPANSION PLANNING REPORT

Yellowstone Avenue: Current Inventory





80 ACRE EXPANSION PLANNING REPORT

SUMMARY FINDINGS

The 80 acres presents a great opportunity for the town to set new goals and look for solutions with this newly acquired land. This land sets the stage for the future but can help today as well.

The Town would be well served focusing and directing redevelopment on existing committed lands. Infill development is certainly a preferred alternative to expanding the Town for the sake of expansion. We have identified both public and private land holdings along Yellowstone Avenue (see maps on page 17 - 19) that can be redeveloped into higher and better use given the nature and character of Yellowstone avenue. New commercial infill development can happen not only along key corridors such as Yellowstone Ave but can also occur in undeveloped pockets throughout town. This approach to infill development will lift property values surrounding each new development while expanding commercial opportunities, thereby creating a stronger community.

The overarching goal for the 80-acre property is to create a broader base of housing for the community to include more apartments, and smaller or attainable / affordable dwellings. Additionally, there is a need to diversify and expand West Yellowstone's economy with non-tourism related industries which a portion of the 80-acres can address with mixed use, live / work developments. The current zone types indicated on the site plan would include R-3 Residential High Density and R-4 Residential Mixed-Use High Density as well as M-1 zoning which provides for small scale light manufacturing. The M-1 zone type is within the Town's zoning regulations, however it is not currently utilized or applied to any land in the community. Designation of an M-1 area within the 80 acres expansion would create a unique opportunity for diversifying the economy with niche products and specialized services businesses.



80 ACRE EXPANSION PLANNING REPORT

ADDENDUM A: SUMMARY OF PUBLIC COMMENTS TO PROPOSED 80 ACRE SITE PLANS

Presented by THINKTANK Design Group at Public Town of West Yellowstone Meeting (October 9, 2018) / Site Plans Shared Via Town Website, Facebook, Fliers, Newspaper and Email

OVERALL PLAN:

- Plan is on the right path and strides ahead of everything seen to this point.
- Design standards should create attractive, cohesive standards. Log and stone facades favored.
- Consider reducing # of roads to lower infrastructure / maintenance cost & increase community continuity.

COMMERCIAL DEVELOPMENT IN 80 ACRES:

For:

- In favor of “cottage industry” scheme.
- Affordable commercial development can encourage year-round manufacturing business growth.
- Limit only to neighborhood bodega / coffee house. No hotels, restaurants, souvenir shops.

Against:

- Housing should be the priority.
- Commercial property is available in original townsite for expansion / light manufacturing.
- May pull existing businesses and customers away from historic district.
- Commercial development will increase property values, thereby reducing residential affordability.
- Light manufacturing would be unattractive town entrance (i.e. equipment rental, gravel pit).
- Area along Hwy 20 should be used for truck / trailer / RV parking in lieu of some commercial lots.

HOUSING:

- Current plan is on the right track with lots of permanent housing (no RV or temporary).
- Encouraged by proposed plan since affordable / safe housing is key to persons health status.
- In favor of mixed uses, w/emphasis on affordable permanent stick build, modern manufactured, tiny homes.
- Affordable lots for workforce housing should be priority. This opportunity may never occur again.
- Restrictions against short term rentals requested (VRBO, AirBnB, etc).
- Deed restrictions to allow for owners only & minimum of 6 months occupancy requested in R2 area.
- Lot sizes continuity needed within each area (larger lots grouped with similar).
- Land trust should be held by town to keep housing affordable.
- Town should be the developer to ensure goals are maintained and costs are minimized. Developers have different incentives (max ROI, time pressures, etc)
- RV / Trailer home spaces should be available.
- Safe crosswalks / connection to schools across highway will be needed.

CITY SHOPS RELOCATION:

- City Shops should be less visible and located in less valuable area then the downtown business core.



80 ACRE EXPANSION PLANNING REPORT

- In-fill development of existing City Shops site could improve visual appearance and value of historic district.
- Proposed Yellowstone Avenue location.
 - FOR: Sight, smell, movement of City Shops equipment does not belong in residential area. Proposed site has somewhat industrial feel already with Tri State Excavation neighbor.
 - AGAINST: Prefer Town Parking Future Needs site fenced with trees site barriers on south & west

GATEWAY ARCH / ENTRANCE:

- Route 20 is major freight corridor and arch would have to accommodate all vehicles.
- In favor of boulevard trees along Route 20.
- Entrance should be inviting, attractive, but not pretentious.

OTHER:

- Parking and fueling area for large trucks / trailers / RV's is needed for Town.
- Long term summer RV park should be placed on Future Town Needs site until converted for future needs.
- Adequate off-street parking and snow storage needed.
- Will USFS allow proposed Trailhead parking and snow storage?

CALL FOR PUBLIC COMMENT

On Tuesday, October 9, 2018, the Town hosted a public meeting to gather feedback from the community about the proposed planning and development of the new 80 acres. A conceptual plan (attached) has been developed, which emphasizes multiple housing options as well as a mixed use industrial area (housing and commerce in the same area, non-hospitality functions). There was a great turn out to the meeting and a lot of ideas and opinions were shared. For the next two weeks, the Town is encouraging comments and feedback on the conceptual plan. Please feel free to send your comments, suggestions, or criticisms to info@townofwestyellowstone.com or deliver them to the Town Hall at 440 Yellowstone Avenue, here in West Yellowstone. We would also be happy to answer questions or even arrange a meeting with the Town Manager. Our phone number is (406) 646-7795. Help us plan the next phase of our community.



80 ACRE EXPANSION PLANNING REPORT

ADDENDUM B: LAND SOLUTIONS PUBLIC MEETING INPUT REPORT, DECEMBER 2016



GROWTH POLICY & GRANT WRITING • SUBDIVISION DESIGN • ZONING & PERMITTING

To: Dan Sabolsky and West Yellowstone Planning Advisory Board
From: Dave DeGrandpre and Matthew Rohrbach, Land Solutions and Erica Evans Mita, NRMEDD
Date: December 29th, 2016
Re: West Yellowstone Growth Policy Update Key Issues

Purpose

The purpose of this memo to provide a summary of key issues identified during the initial public engagement process for West Yellowstone's Growth Policy Update. This is not a list of all of the issues identified to date, but summarizes the major or key issues that will be critical to address in the coming months.

Background

In December of 2016 Land Solutions and Northern Rocky Mountain Economic Development District (NRMEDD) kicked off a key issues identification process for West Yellowstone's Growth Policy Update. The process began with an economic focus group facilitated by NRMEDD. Following this, Land Solutions worked to identify key issues facing West Yellowstone by meeting with the West Yellowstone Planning Advisory Board, interviewing town staff and civic leaders, and holding a public meeting attended by 30 people. Below is a summary of the key issues identified during this process.

Summary of Key Issues

Water and Sewer Infrastructure

The ability of West Yellowstone to develop the newly acquired 80-acres and accommodate future development in town hinges on the Town's ability to provide sufficient water and sewer capacity. A decrease in water at West Yellowstone's primary water source, Whiskey Springs, has forced the Town to issue a moratorium on new commercial and multifamily water connections. West Yellowstone has plans to drill new well in the near future, though it is not expected to be fully operational until late 2017 or early 2018. In terms of sewer infrastructure, while West Yellowstone's system of sewer mains has sufficient capacity, the sewer lagoon is nearing full capacity and is unable to accommodate development of the 80acres and anticipated hotel development. West Yellowstone is currently in the



80 ACRE EXPANSION PLANNING REPORT

process of developing a new sewer lagoon and is working through the process with the Montana Department of Environmental Quality.

Economy

Seasonal Economy

As a gateway to Yellowstone National Park, West Yellowstone's economy is reliant on tourism. In the past, when private snowmobiles were allowed in Yellowstone National Park, the summer and winter tourist seasons were relatively balanced. However, after Yellowstone National Park limited winter motorized access to snow coaches and guided snowmobile trips, the winter economy in West Yellowstone declined substantially. The change in winter access rules resulted in increased numbers of day trippers coming from Bozeman and Big Sky and fewer people staying in West Yellowstone for extended periods. As a result many businesses in West Yellowstone close down during winter, which reduces services for potential winter travelers and residents alike. Consistency in businesses being open year-round (or at least for longer shoulder seasons) would help to attract more visitors and strengthen the economy.

Town Appearance

One sentiment that was echoed during the public engagement process was that West Yellowstone itself is not a destination: It is a pass-through or parking lot for Yellowstone National Park. Several people indicated that this was a result of West Yellowstone's appearance and that the Town needs to work on beautification, so visitors are encouraged to stop and stay awhile. Ideas centered around making Canyon Street and Yellowstone Avenue inviting places for people to walk, shop, and congregate, architectural design, and also creating gateways along the highways entering the Town. Another common theme was the need to increase the amount of landscaping in town, especially on parking lots abutting streets.

Economic Diversification

As the gateway to Yellowstone National Park, West Yellowstone's economy will likely continue to be driven by tourism. However, West Yellowstone's heavy reliance on tourism makes the local economy vulnerable to consumers' travel and spending habits. There is a need to diversify West Yellowstone's economy by enabling and attracting light industry and small manufacturing employers as well as attracting telecommuters. In order to attract these types of businesses and individuals, West Yellowstone needs to address several issues including affordable housing, availability of daycare and medical services, availability of high speed internet, and the provision of land dedicated to light industry and manufacturing.

Housing

Housing Affordability and Availability

West Yellowstone has a lack of available rental and owner-occupied housing for both year-round residents and summer employees. Private developers are constrained in their ability to build additional



80 ACRE EXPANSION PLANNING REPORT

housing because the Town is surrounded by the Gallatin National Forest and Yellowstone National Park. Seasonal residents have also purchased homes that are only occupied for part of the year. Because of the limited supply of buildable land, land and housing costs in West Yellowstone are high.

Workforce Housing

The lack of available affordable housing mentioned above is a significant issue for West Yellowstone's seasonal summer workforce. Employees coming to work during the summer tourist season are challenged to find affordable rental housing. Several employers have stated they will not hire someone if the employee does not already have housing lined up. One problem lies with large seasonal employers, such as hotels, who do not provide housing for their employees. The lack of available workforce housing has made it difficult for employers to attract employees during the summer tourist season. Several employers, particularly the Delaware North Corporation, have taken to buying existing housing units for their employees. While this helps to house West Yellowstone's seasonal work force, it can also take housing units for year-round residents off the market. Also, there is little incentive for companies to keep employee housing well maintained and attractive.

Vacation Rentals

Being a gateway to Yellowstone National Park, West Yellowstone has long been home to nightly vacation rentals. With the rise of internet based vacation rental services such as Air BnB and Vacation Rental By Owner (VRBO) however, it has become increasingly easy for landlords and homeowners to convert monthly rentals (or for sale housing) to nightly vacation rentals, where they can make increased profits. A search on Air BnB yields 140 vacation rentals in West Yellowstone with an average nightly rate of \$183. The result is that existing housing stock is effectively being taken off the market for seasonal employees and year-round residents. This situation further exacerbates issues surrounding housing affordability as vacation rental conversions decrease supply and thus drive up rents. In addition, it is unknown how many vacation rentals in West Yellowstone are paying West Yellowstone's resort and Tourism Business Improvement District taxes and Montana's lodging facility sales and use tax.

Zoning

With the exception of the Madison Addition, most of West Yellowstone is zoned some form of commercial. The Old Town area (zoned B-3 Central Business District) allows a variety of commercial and residential uses. What has transpired in this area is a mix of retail, general commercial, hotels, and residential dwellings. The result is an incongruent mix of land uses that, in certain areas, detracts from the appearance of West Yellowstone. One concern is that because the B-3 district allows such a wide variety of uses, there will be pressure on existing residential land uses to change to commercial where investment returns tend to be a higher, thus decreasing housing supply further. With regard to Old Town, public meeting attendees expressed interest in maintaining residential uses on the west side and keeping hotels and other commercial uses on the east side and along Yellowstone Avenue. Enforcement of zoning rules was also cited as a necessity as the Town moves forward.



80 ACRE EXPANSION PLANNING REPORT

80 Acres

West Yellowstone's recent acquisition of 80 acres to the west of Town presents a unique opportunity to address several of the issues noted above. Below is a list of the common themes echoed during the public engagement process with regard to how the 80-acres should be developed.

- Preserve open land for future development and unforeseen needs.
- Move municipal uses to the 80-acres thereby opening up Yellowstone Avenue for development.
- Provide for a range of housing options from single family homes to townhouses and apartments.
- For single family homes provide small lots to keep homes affordable and for efficient use of land.
- Ensure that affordable housing is provided. The need for a community land trust was mentioned several times. Under a community land trust, the land where a house sits is owned by a land trust (usually a non-profit) and the individual owns the structure. This provides for affordable owner-occupied housing by removing high land prices from the equation and also reduces speculative land purchases.
- Provide workforce housing opportunities, including, but not limited to, dormitories.
- Do not allow vacation rentals.
- Limit commercial development so as not to create competition with existing commercial areas.
- Dedicate a portion of the 80-acres to light industry and small manufacturing.
- Provide quality open spaces but do not dedicate too much land to open space.
- Provide trails and other opportunities to access adjacent National Forest Land.

ADDENDUM C: N.R.M.E.D.D ECONOMIC FOCUS SESSION REPORT, DECEMBER 2016
(Partial to include 80 acres discussion)



TRANSCRIPT FOR _TOWN OF WEST YELLOWSTONE ECONOMIC FOCUS SESSION

Date: Dec 1, 2016 Time: 11am to 2:30

Location: West Yellowstone Chamber of Commerce Conference Room

IS ACQUISITION OF THE 80 ACRES A GOOD THING? WHY? WHAT OPPORTUNITIES DOES IT PRESENT? WHAT CHALLENGES?



80 ACRE EXPANSION PLANNING REPORT

- Yes Votes: 6 *participant 1, 5, 7, 8, 9, 10*
- No Votes: 0 (*4 did not comment*)
- OPPORTUNITIES
 - Make town entrance beautiful along Hwy 20. **UNANIMOUS VOTE 10 PEOPLE.**
 - Opportunity to solve long term problems (ie controlled affordable housing). Should NOT be used to expand tourism / commercial development. *_participant 7*
 - Move Public Works and provide affordable housing. *_participant 8*
 - Increase housing and needed services. *_participant 10*
- CHALLENGES
 - Prevent big money from dictating outcome. Concern about town getting bought out. *_participant 5*
 - Prevent selling of affordable housing to highest bidder in future. *_participant 8*
 - Zoning restrictions to keep housing affordable (don't allow turn and burn of properties to highest bidder). *_participant 10*

WHAT IS THE TOWN'S RESPONSIBILITY TO DEVELOPING THE 80 ACRES?

- Make town entrance beautiful along Hwy 20. **UNANIMOUS VOTE 10 PEOPLE.**
- Town purchased therefore they should develop. *_participant 1*
- Plant trees in area, install high speed internet, and recruit small high tech firms to bring higher paying / year-round jobs and younger families. *_participant 2*
- Focus on aesthetics because it is the main entry into town. *_participant 4*
- Town should not be landlords, develop a "smart plan", resist folding to higher bidder, need economic development experts to recruit year-round, cottage industries or research organizations that use park. Improve education opportunities. *_participant 5*
- Limit inflation of property value to ensure affordability. *_participant 7*
- Ensure well thought out corridor access for winter use (ie snow mobile, skiing) in Parcel "D". *_participant 7*
- To make improvements for community as a whole, not just for a few people. *_participant 8*
- Town should NOT be the developer. *_participant 9*
- Establish a community land trust. *_participant 10*
- Increase business diversity and year-round businesses. *_participant not disclosed.*

WHAT IS THE BEST USE(S) OF THE PROPERTY?



80 ACRE EXPANSION PLANNING REPORT

- Public / private partnerships for affordable housing via Community Land Trust. This takes value of land out of equation to make it available to low income owners. *_participant 1*
- Include some commercial, for example, light, craft manufacturers. Offer incentives businesses that create value added products for export outside of WY. *_participant 1*
- Increase trees. No on aquatic center. *_participant 2*
- Focus on recruiting youthful, internet, high-tech industries (if WY can get high speed internet). *_participant 2*
- Move public works to Northside and use existing PW area for improvement to historical area such as a health/fitness/medical center or museum. For example, the Cody museum complex is a draw to that town. Trends around country are focused on health. *_participant 3*
- Main entrance to town from Highway 20 must be beautiful. *_participant 4*
- Echoes others comments regarding affordable year-round housing and green space. Reminder that 80 acres is not a huge amount of land. *_participant 4*
- Land lease, provide year-round opportunities, increase grammar school system possibly. *_participant 5*
- Solve long term problems facing town. Phase development / infrastructure. Be thoughtful and don't rush. *_participant 7*
- Priority should be affordable workforce housing for year-round residents with controls that restrict access to highest bidders. This will open housing downtown for seasonal workers. *_participant 7*
- Light industry to diversify economy away from tourism. *_participant 7*
- North side of Highway 20 should be used as Public Works, this frees up land in inner city which should be changed to commercial property. *_participant 8*
- Affordable housing but restriction for year-round residents only. Need to also restrict sale to highest bidders, 2nd home owners, investment owners to keep this housing affordable in future. *_participant 8*
- Light industry to diversify economy with year-round jobs. *_participant 8*
- New health care clinic, move town hall to outskirts of the 80 acres. Potentially lease section to aquatic center. *_participant 8*
- Housing with focus on 1st time homeowners, and deed restricted. Potentially likes housing land trust idea. To reduce home costs, covenants should allow for smaller square footage homes (ie tiny home trend). Covenants at Madison Addition require larger homes. Phase infrastructure after mains are in so property can be budgeted and built in phases. (Benefit of phasing: to avoid overcommitting financially in short



80 ACRE EXPANSION PLANNING REPORT

term). Town should NOT be the developer. However, plans must be economically viable for developer. *_participant 9*

- Include greenspace area for recreation, and emphasis on beautiful appearance from Highway 20. *_participant 9*
- Diversify housing to include multiple types: rentals, for purchase, dorms with central community area with kitchen for J1's. Implement zoning restrictions to prohibit short term rentals and avoid resale / lease that allow highest bidder to acquire property. *_participant 10*
- Focus on needed services such as health care. *_participant 10*

BECAUSE OF THE ACQUISITION, WHAT CHANGES CAN WE EXPECT REGARDING GROWTH, HOUSING, THE ECONOMY?

- More affordable housing will increase the number of families that stay. *_participant not disclosed.*
- Expecting more stability. *_participant not disclosed.*
- There needs to be education on what a community or municipal land trust is and how they operate. *_participant not disclosed.*

IS THE LOCAL ECONOMY TOO RELIANT ON TOURISM? YES, NO, WHAT TO DO ABOUT IT?

- Yes! vote = 10
- No vote = 0
- Increase family recreation activities.
- Make town a nicer place to live and visit (resort town).
- Recruit year-round light / craft manufacturing industry.
- Install high speed internet
 - Recruit small high tech firms to bring higher paying / year-round jobs and younger families.
 - Recruit year-round telecommuter families.

HOW WOULD YOU RATE THE TOWN'S AESTHETICS?

Median Value = 3.0 Average Value = 3.33

Rating system: 1 = extremely unattractive 10 = beautiful.

<u>Rating</u>	<u># of votes (9 total votes)</u>
5	2 votes <i>_participants 1 & 7</i>
3.5	1 vote <i>_participant 9</i>
3	4 votes <i>_participants 2, 4, 6, & 10</i>
2.5	1 vote <i>_participant 5</i>



80 ACRE EXPANSION PLANNING REPORT

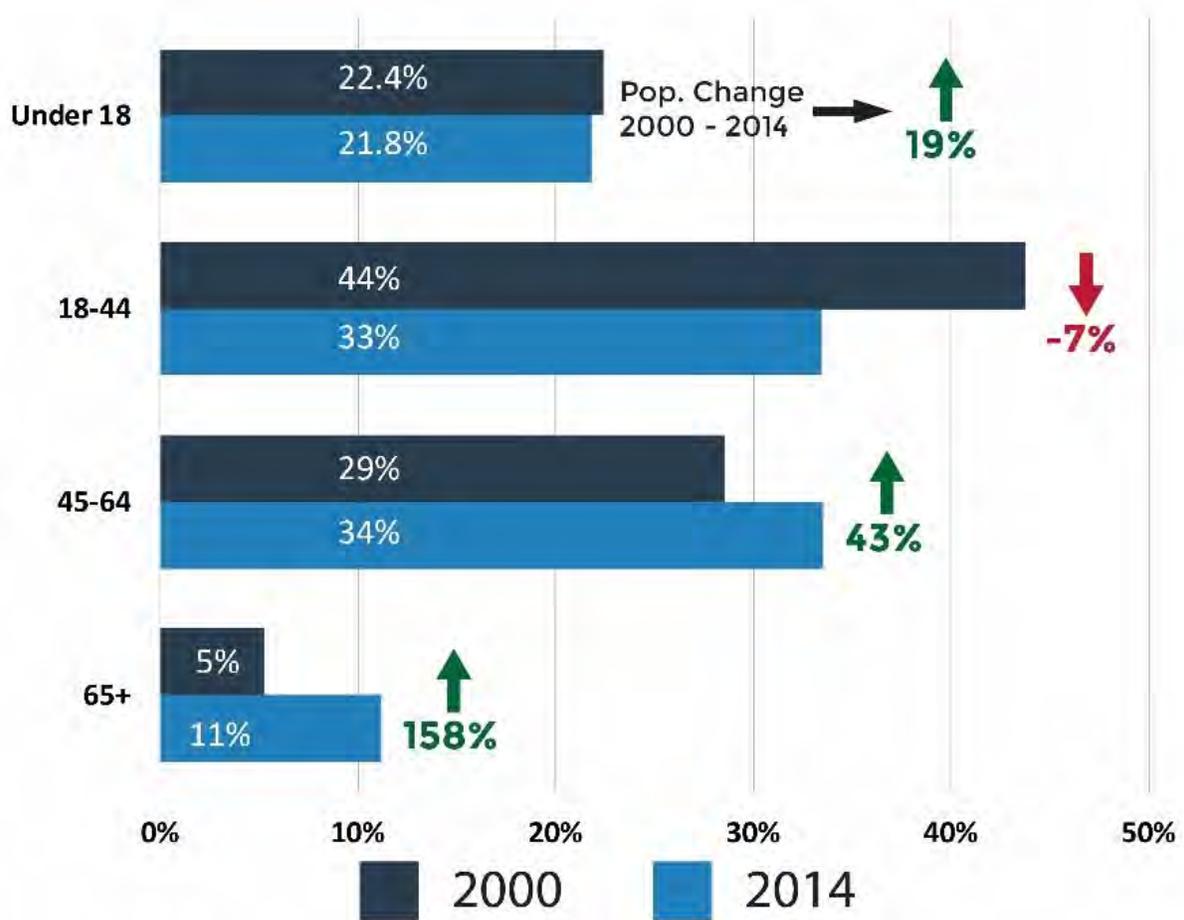
2 1 vote _participant 8

SHOULD THE TOWN DEVELOP ARCHITECTURAL STANDARDS TO KEEP NEW DEVELOPMENT IN TUNE WITH WY'S SENSE OF PLACE OR LET THE MARKET DECIDE WHAT IS ACCEPTABLE?

- Town to Develop Standards vote = 10
- Market to Decide vote = 0

Age Distribution: % of Population Per Age Group

65+ more than doubled + a 43% Increase in those reaching retirement age within 20 years. Aging population may have different needs in terms of housing, mobility, and healthcare.

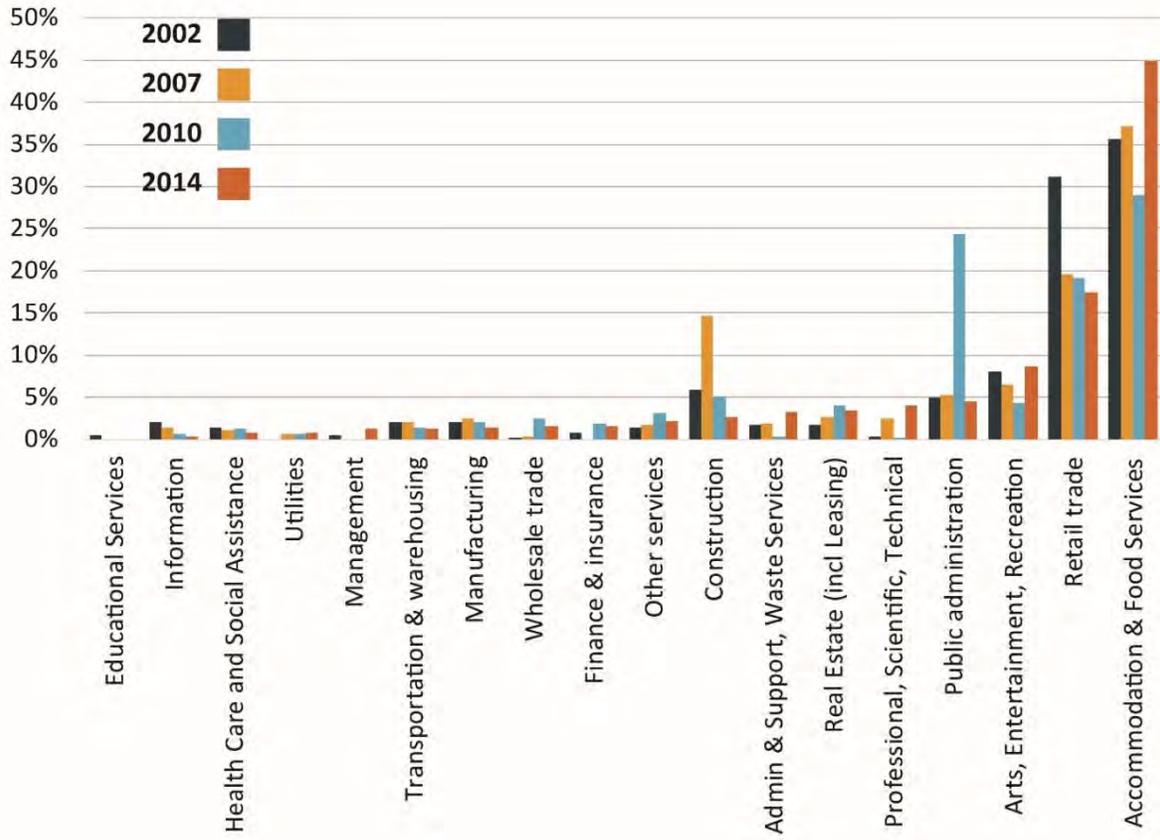




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PAGE 1 & 2 SOURCES: CEIC, MT DEPT OF COMMERCE + HEADWATERS ECONOMICS ECONOMIC PROFILE SYSTEM

EMPLOYMENT: SHARE BY INDUSTRY





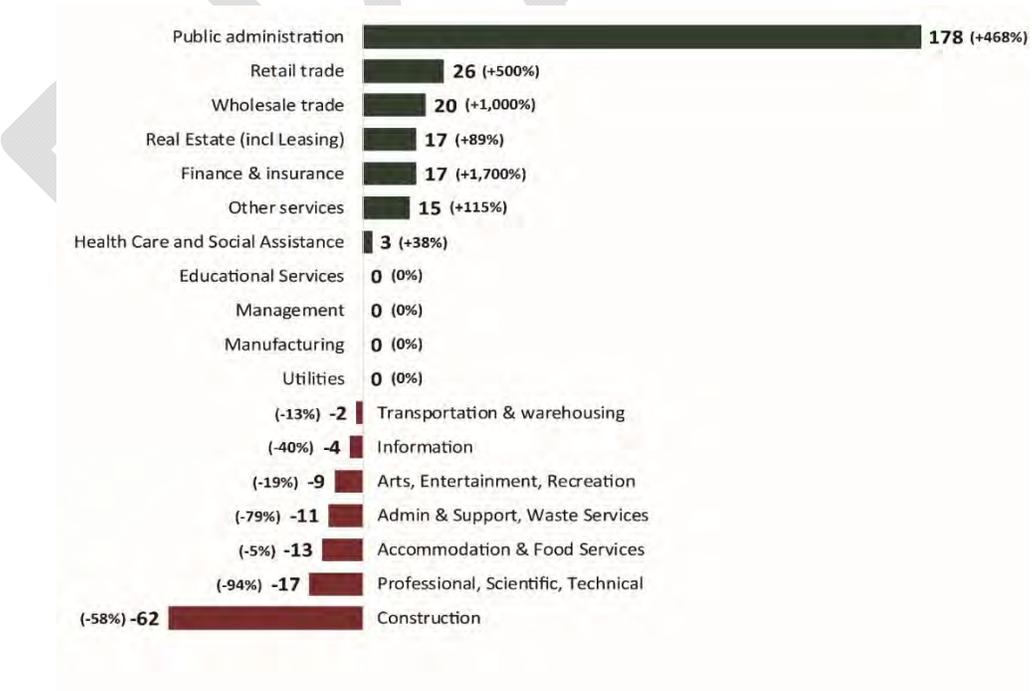
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EMPLOYMENT CHANGE: BY INDUSTRY 2010 - 2014



SOURCE FOR BOTH: U.S. CENSUS BUREAU, ONTHEMAP APPLICATION

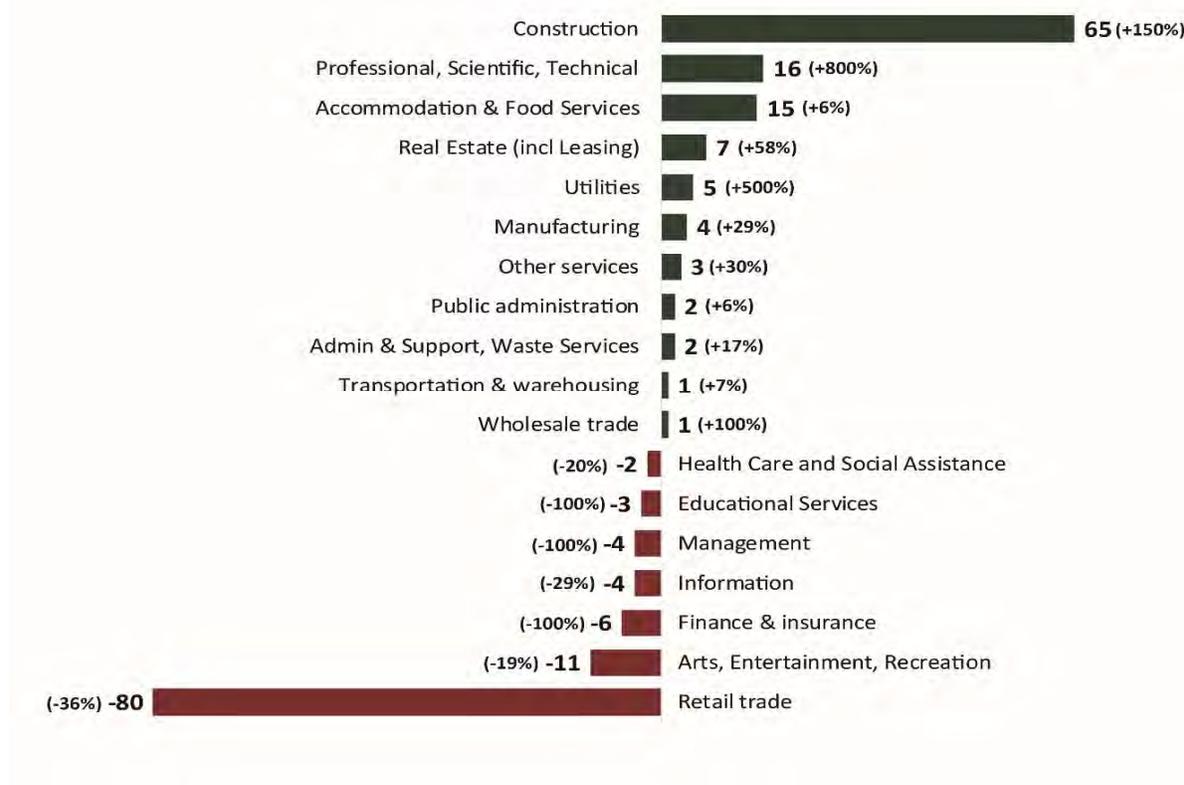
EMPLOYMENT CHANGE: BY INDUSTRY 2007 - 2010





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EMPLOYMENT CHANGE: BY INDUSTRY 2002 - 2007

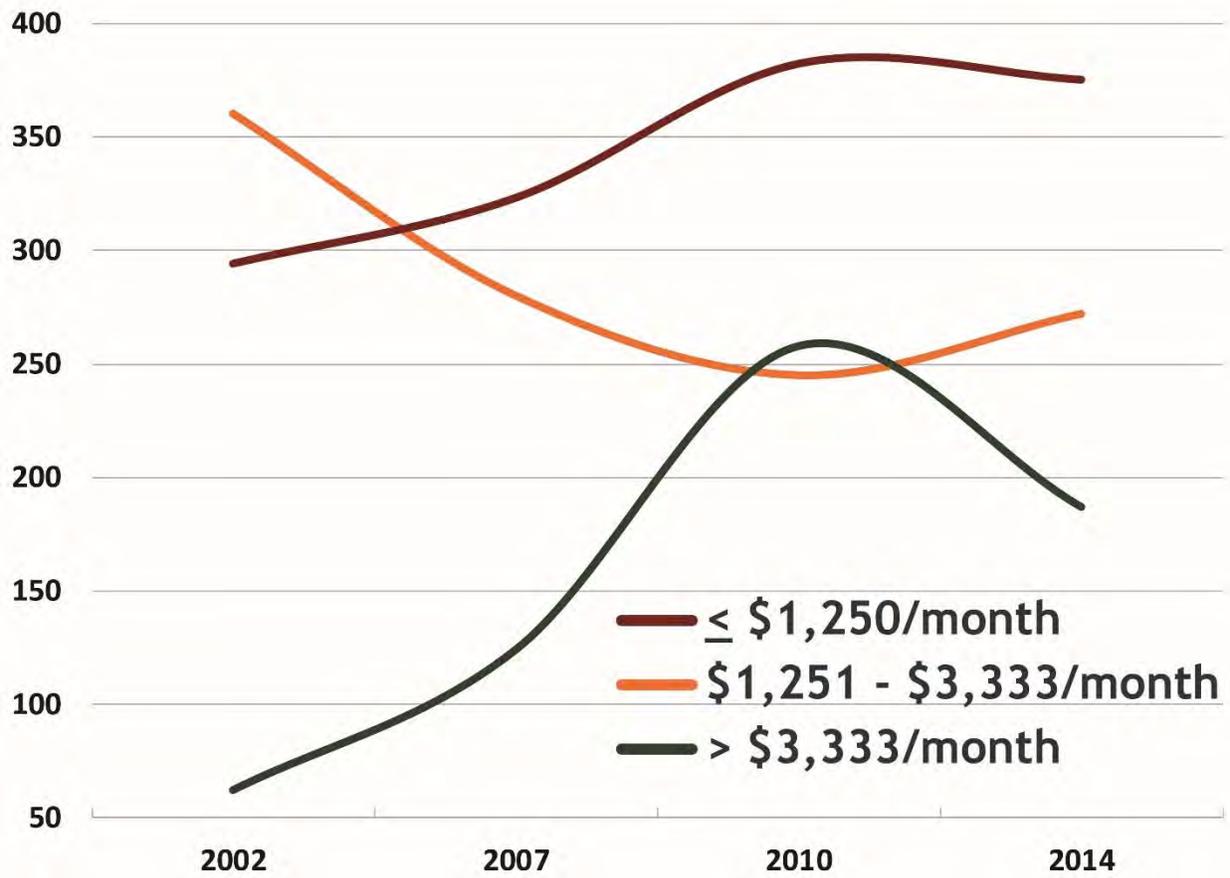


SOURCE FOR BOTH: U.S. CENSUS BUREAU, ONTHEMAP APPLICATION



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INCOME: EARNINGS BY PRIMARY JOBS 2002-2014

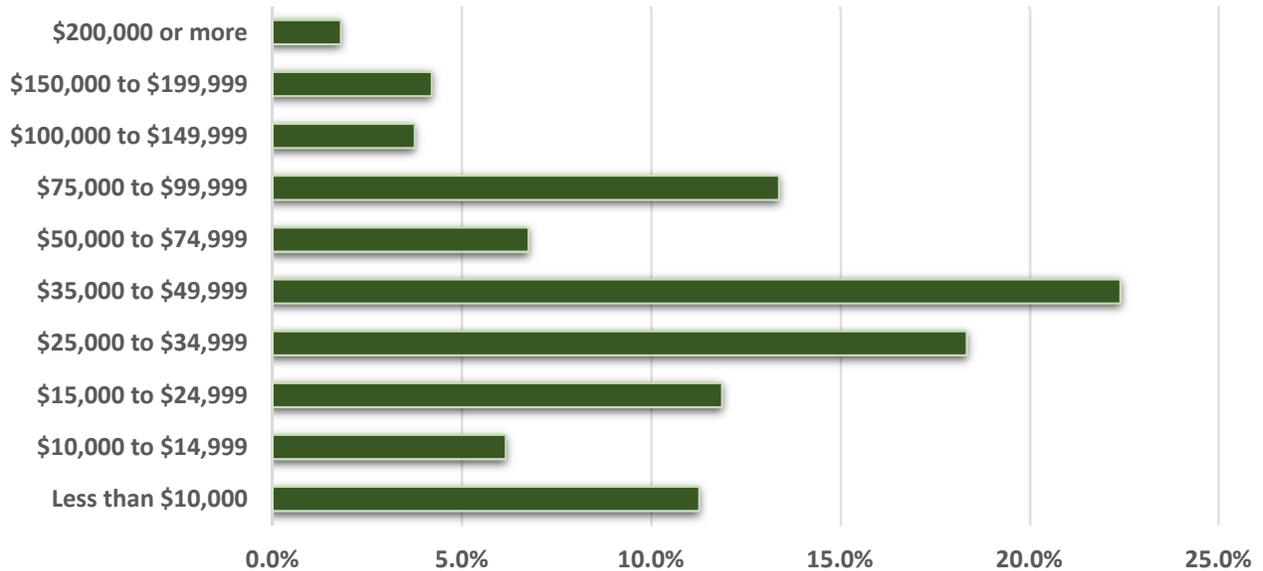




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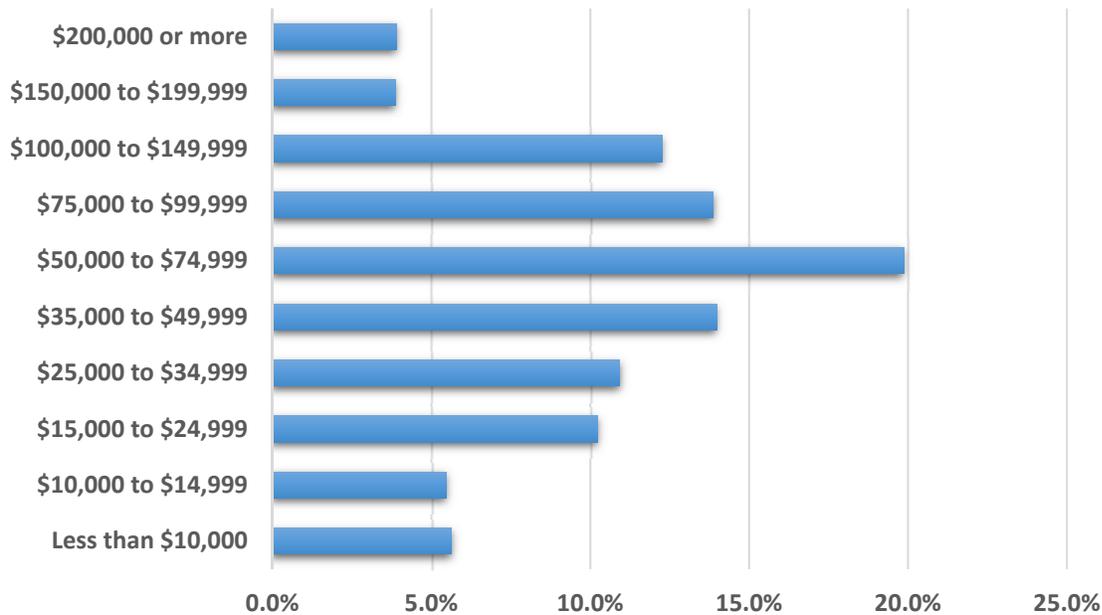
INCOME: DISTRIBUTION BY HOUSEHOLD 2014 WY

Nearly half of all of households (47.7%) have income below \$35K. 70% are below \$50K.



INCOME: DIST. BY HOUSEHOLD 2014 GALLATIN CO

32% of all of households have income below \$35K. 46% are below \$50K

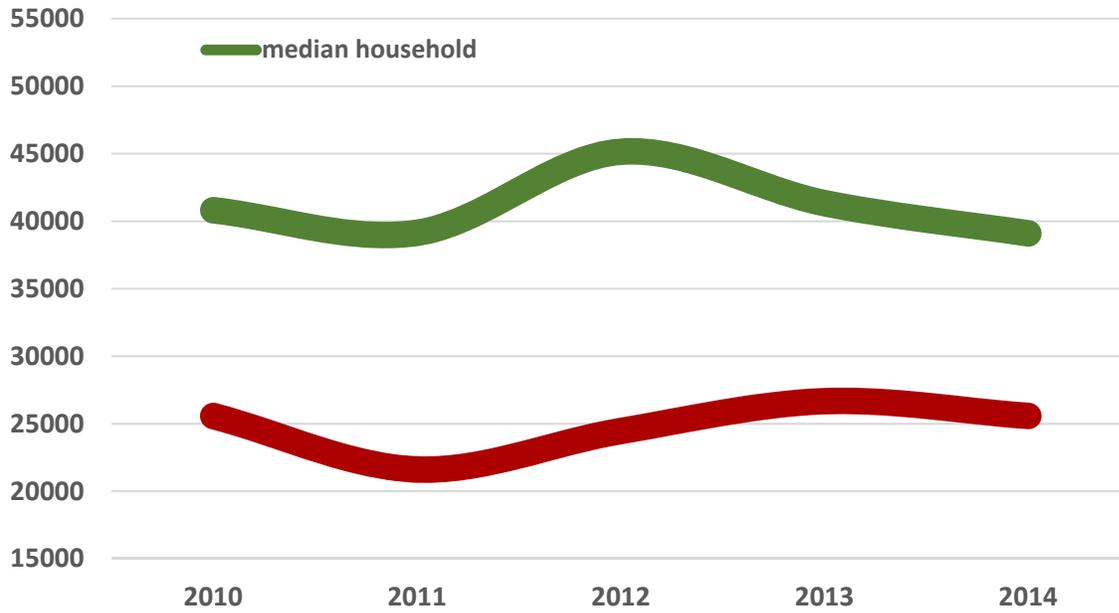


SOURCE: HEADWATERS ECONOMICS ECONOMIC PROFILE SYSTEM



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INCOME: CHANGE IN HOUSEHOLD & PER CAPITA WY



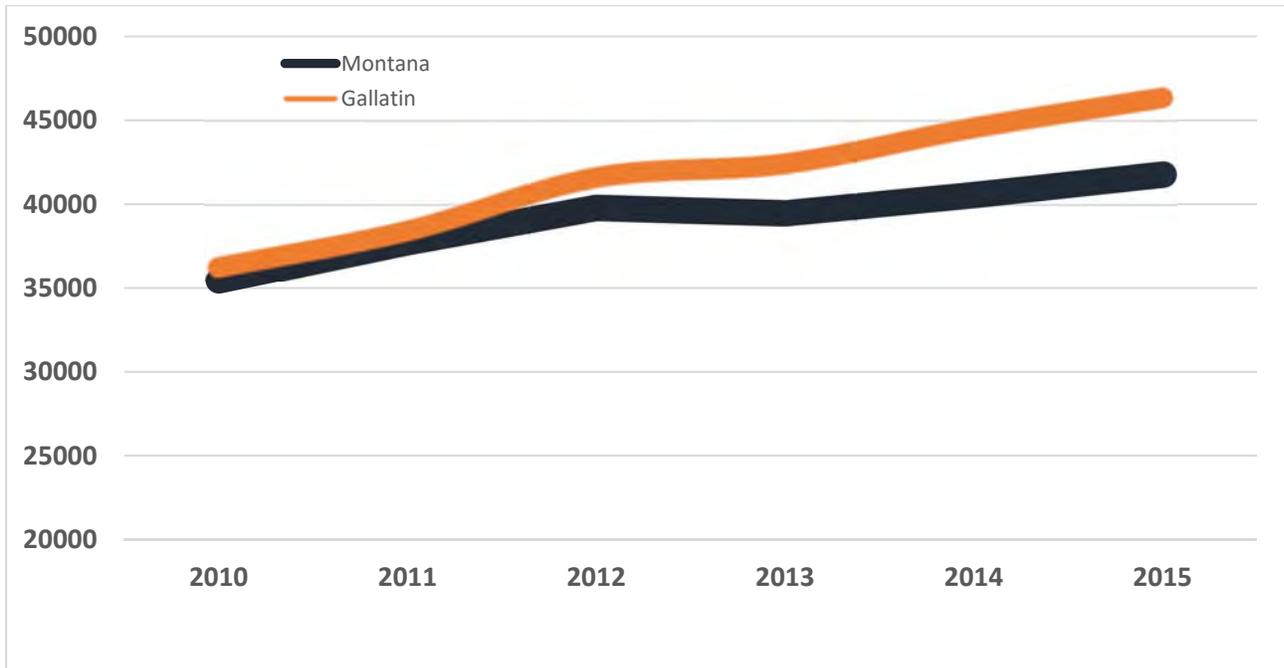
SOURCE: U.S. CENSUS BUREAU, 2010-2014 AMERICAN COMMUNITY SURVEY 5-YEAR ESTIMATES

DRAFT



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INCOME: CHANGE IN PER CAPITA GALLATIN CO & MT



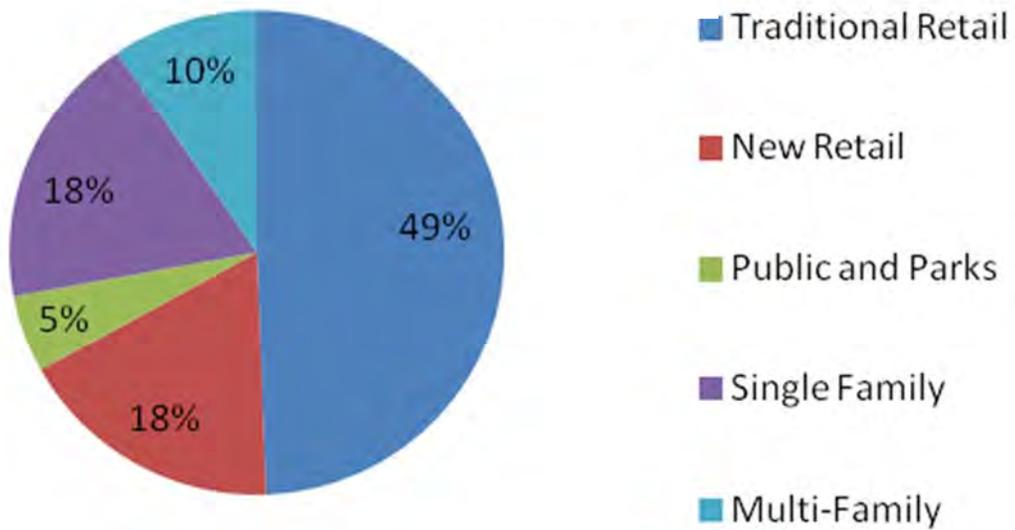
BUREAU OF ECONOMIC ANALYSIS

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LAND USE: RETAIL, HOUSING, PUBLIC SPACE / PARK



SOURCE: TOWN OF WEST YELLOWSTONE PLAT, MONTANA CADASTRAL FRAMEWORK, GALLATIN COUNTY GIS DEPARTMENT, MONTANA STATE LIBRARY VIA WORKFORCE HOUSING NEEDS ASSESSMENT AND HOUSING PLAN FOR THE TOWN OF WEST

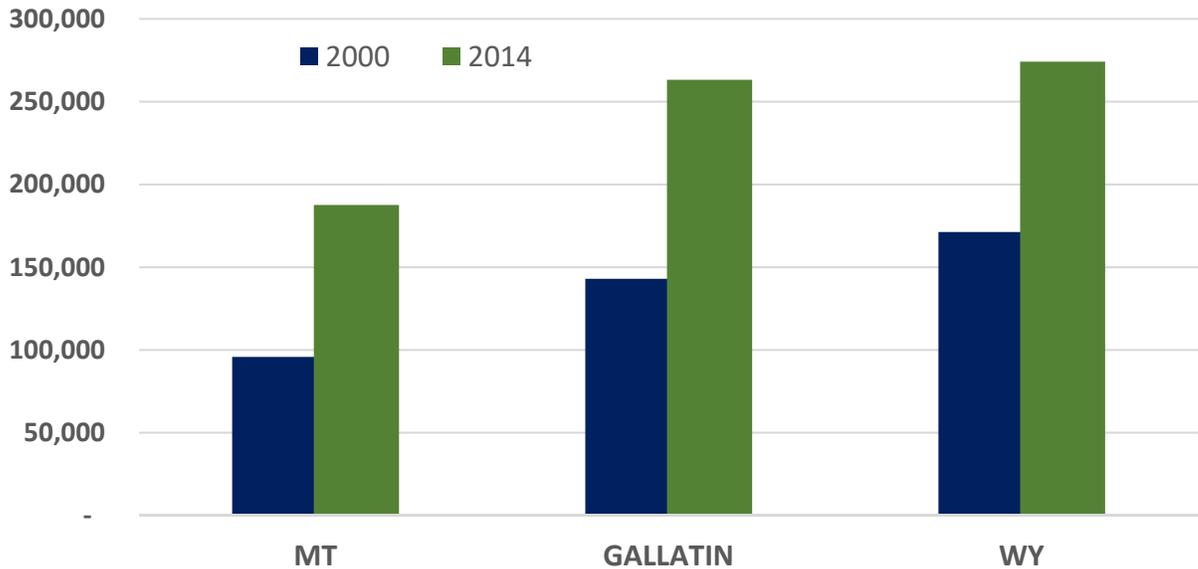
DRAFT



80 ACRE EXPANSION PLANNING REPORT

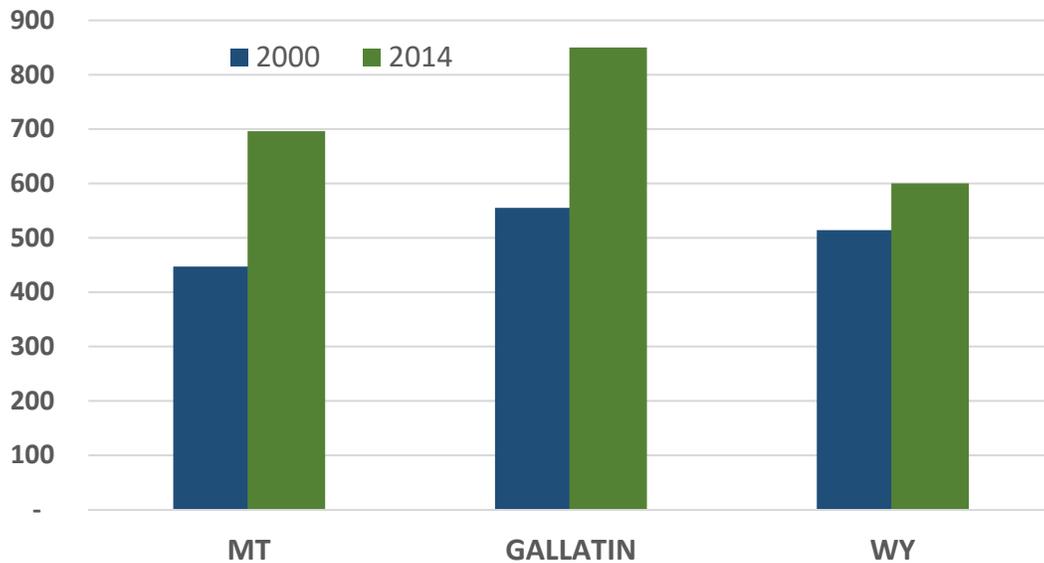
HOUSING: MEDIAN VALUE OWNER OCCUPIED

WY_2014 Median Value = \$274,200 (60% increase from 2000),
higher than both Gallatin Co (\$263,200) and Montana (\$187,600)



HOUSING: MEDIAN RENT

WY_2014 Median Rent = \$600 (17% increase since 2000),
slightly less than Montana at \$696 and substantially less than Gallatin County at \$850





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SOURCE: LAND PLANNING SOLUTIONS, LLC

HOUSING: % WITH HOUSING COST BURDEN

Looking at housing cost burden (paying more than 30% of household income on housing) provides a snapshot of housing affordability.

In 2014: estimated 24% of homeowners & 42% of renters had a housing cost burden.

