

**APPLICATION FOR GRANT FUNDING**

**STEP 1 – Applicant and Partner Information**

**Primary Applicant (Required): City of Belgrade**

Name of principle individual: Steve Klotz  
Name of agency/entity: City of Belgrade  
Street: 91 E Central  
City: Belgrade  
County: Gallatin  
State: Montana  
Zip Code: 59714  
Contact email address: sklotz@cityofbelgrade.net  
Contact fax address: 406-388 -4996  
Contact phone: 406-388-3760

**Organizational Unit (if applicable)**

Department: Public Works  
Division:

**Other Project Partners – complete for each partner (copy box as needed):**

Name of contact: Molly Hirschi  
Name of Agency: Stahly Engineering & Associates  
Street: 851 Bridger Drive Suite 1  
City: Bozeman  
County: Gallatin  
State: MT  
Zip Code: 59715  
Contact email address: mhirschi@seaeng.com  
Contact phone: 406-522-8594

**Date Submitted (Required):**

**Date Received by State:**

**Descriptive Title of Applicant's Project (Required):**

*City of Belgrade Comprehensive GIS*

## STEP 2 – Relevance and Public Benefit

The City of Belgrade intends to develop a standardized, sustainable method to collect, maintain, and disseminate information regarding planning and public works in a digital format. As the 11<sup>th</sup> largest City in Montana, Belgrade has an extensive network of water, sewer, storm water, and street infrastructure as well as zoning and floodplain data. City staff has recognized the need for a GIS database in order to map City infrastructure with associated attributes to be able to increase efficiency within the City as well as to document maintenance. This increased efficiency will not only assist City staff, but will benefit local citizens as well.

This proposed project will meet grant category 3, Rural County and Tribal GIS Development, requirements in which an emphasis is placed on localized GIS solutions that demonstrate the value of GIS in improving the quality of life for Montana citizens and building grass roots support for location based services.

In 2015, the City began the process of creating a GIS by contracting Stahly Engineering & Associates to collect points for water, sewer, storm water, and street attributes. This data was collected using a tablet connected to a Trimble R1 receiver using Arc Collector in order to prepare it for transfer to the City.

In 2016, the intent of the City is to purchase the software and hardware to put the previously collected features into a master database and obtain training for City staff. The City currently has a layer for each feature type with attribute fields including air release valves, curb boxes, fire hydrants, manholes, sewer valves, storm drains, street signs, and water valves with customized attribute fields which include (as applicable) feature number, coordinates, pressure, flow, flush date, address, and pipe size, among others. The attribute fields are in place; however, the attribute data for each feature still needs to be entered using City records.

The larger picture for this project is more comprehensive. The City will phase the project throughout the next 5 years at which time a comprehensive database will include all public infrastructure, expanding this to include addressing, road centerlines and other data that will set the City and Gallatin County up for success when the Next Generation 9-1-1 program is implemented. Creating this GIS will benefit many local entities including Belgrade Public Works, Belgrade and Gallatin County Planning, the Central Valley Fire Department, and many others. With Gallatin County dissolving its long-standing GIS Department, it will be critical for municipalities within the County to maintain an accurate database of infrastructure, addressing, roads, and other pertinent features in a world that is becoming increasingly digitized.

The City will sustain the subsequent phases financially utilizing the equipment purchased and training received during the 2016 phase. Since the data has already been collected and is in a useable format, the City intends to purchase software and hardware in order to maintain the current features and collect new features as needed as well as obtain training for staff members responsible for maintaining the GIS.

## STEP 3 – Scope of Work Narrative

### Goal: Create GIS from data previously collected to include water, sewer, and storm features

#### **Objective 1: Purchase hardware and software**

##### **Tasks:**

1. Purchase four Panasonic Toughpad MZ-F1 tablets and load with Arc Collector Application by July 15<sup>th</sup>, 2016. These tablets will be crucial in allowing public works staff to update attribute information from the field.
2. Purchase ArcGIS for Desktop Basic (which includes ArcGIS Online Subscription) by July 15<sup>th</sup>, 2016 in order to create a map and master database of previously collected City features.

#### **Objective 2: Train assigned City staff on software and hardware**

##### **Tasks:**

1. Assign duties to two City staff who will be trained on using the tablets and ArcGIS software (Steve Klotz, Public Works Director, and Paul Burkhardt Public Works Superintendent) by July 30<sup>th</sup>, 2016.
2. Train additional field staff on collecting new features and updating feature attributes by September 30<sup>th</sup>, 2016.

#### **Objective 3: Update attributes for previously collected features**

##### **Tasks:**

1. Using paper as-built records, office staff to assign attributes to previously collected features to begin October 3<sup>rd</sup>, 2016 and be completed by June 30<sup>th</sup>, 2017.

#### **Project Schedule:**

Purchase software and hardware	July 15 <sup>th</sup> , 2016
Train City staff on hardware and software	September 30 <sup>th</sup> , 2016
Assign attributes to features to begin	October 3 <sup>rd</sup> , 2016
Feature assignments to be completed	June 30 <sup>th</sup> , 2017

## **STEP 4 – Project Management and Organizational Capability Narrative**

Steve Klotz will serve as the project manager. He has served as the Director of Public Works for the City of Belgrade for 9 years and has extensive experience in municipal public works and public utilities. He has a background in construction, scheduling, and budgeting and has been project manager for numerous successful projects for the City of Belgrade. Prior to his employment with Belgrade, Steve served 8 years as the Director of Public works for the City of Laurel. During his time with the City of Laurel Steve used a GIS managed by Yellowstone County in order to streamline productivity within the public works department.

Field work, including collecting new feature points and updating attribute fields for existing feature points, will be supervised and partially performed by the Belgrade Public Works Superintendent, Paul Burkhardt, along with field and office staff. Paul has served 17 years for the City of Belgrade, first working as a Belgrade Police officer for 5 years before joining the public works department. In his tenure he has been responsible for maintaining a fast growing network of water, sewer, and storm infrastructure as well as sidewalks, roads and signs covering a land area exceeding 3.25 square miles.

Office work to include updating attributes will be performed by Steve Klotz as well as Jason Karp, who serves as the Belgrade Planning Director, Floodplain Administrator and Building Inspector. Jason has over 20 years of experience in this role with the City and has extensive knowledge of City infrastructure. Jason's role will be to maintain layers such as the zoning maps and bike lane maps (previously developed by Molly Hirschi of Stahly Engineering), floodplain layer, and any other planning related data the City includes in their comprehensive GIS.

Molly Hirschi is a GIS Specialist/Planner with Stahly Engineering & Associates and has a B.S. in Earth Science GIS/Planning option from Montana State University. She will provide training to City staff on using the tablets, ArcGIS software, ArcGIS online and the Collector Application. She will also be available for on-call support for this project as the City needs. Molly has prior experience working as an intern for the City and is familiar with City personnel and processes.

Project Manager: Steve Klotz, Public Works Director  
Key Personnel: Jason Karp, Planning Director  
Paul Burkhardt, Public Works Superintendent  
Subcontractors: Molly Hirschi, Stahly Engineering & Associates

## STEP 5 – Budget Justification Narrative and Tables

The total cost of this project is expected to be \$20,385. The first phase of the project was a large-scale data collection of all pertinent water, sewer, and storm water features as well as all signs within Belgrade city limits. During this phase, the City of Belgrade contributed \$3500. **The City requests \$12,720 in MLIA funding for the remaining costs associated with the second phase of the project to include purchasing software, hardware, training for City staff, and entering attribute data for each feature into the existing attribute fields.**

The long term plan is for the subsequent phases of the project to be financially sustained by the City of Belgrade as budgeted items for the Public Works and Planning Departments. The personnel tasked with collecting data and researching attribute information will be permanent City Public Works employees. The maintenance of the database will be conducted by Steve Klotz, Jason Karp, and Paul Burkhardt with occasional assistance from two permanent City water clerks, and public works field staff. Stahly Engineering will continue to be available to provide local training and support to the City on an as-needed basis in order to facilitate successful implementation by the City.

### 1. Personnel

City of Belgrade field staff, to be directed by Paul Burkhardt, will conduct field data collection and will update the GIS attributes for each feature collected as needed. Approximately 2-5 hours per week will be assigned to this task.

The GIS attribute data will be updated by Steve Klotz and Jason Karp with occasional assistance from permanent public works staff for approximately 5-10 hours per week (as time allows) for approximately 40 weeks for a total of 200 to 400 hours.

Estimated in-kind attributed to City of Belgrade staff is \$3,500. A fringe benefit factor, estimated to be 19% of the total wage has also been included as in-kind contribution from the City.

Stahly Engineering will contribute up to 60 hours in training (as-needed) with the tablets, Arc Online, Arc Collector and ArcGIS Desktop software at a negotiated rate of \$65 per hour for a total of \$3900. Stahly Engineering's involvement in this project is necessary to assist, train and advise the City in implementing this new program. As project manager for the data collection project, Molly Hirschi has intimate knowledge of the data and the methods by which they were collected. Additionally, she previously worked as an intern for the City of Belgrade and is familiar with City personnel and processes. During her time as intern she created a new zoning map for the City along with a bike lane map which included current and future bike lane routes she researched using public participation GIS. This data will be incorporated into the master GIS in a subsequent phase.

2. Equipment

Four tablets (Panasonic Toughpad FZ-M1) will be purchased and will be loaded with the Collector Application (Free) for a total cost of \$5320.

ESRI ArcGIS Basic concurrent license (\$3500) will be purchased to update the database from collected data points and assign additional attributes. This software will be installed and used on two desktop computer to be used by Office staff.

ArcGIS online account (free-included in price of Desktop software) will be created to manage day to day changes to feature attributes from edits made via the Collector Application. This will be used in conjunction with ArcGIS for Desktop.

***Applicant budget summary***

Category	MLIA Share	Applicant Share	Other Share	Total
a. Personnel	0	3500		3500
a.1 Fringe Benefits	0	665		665
b. Travel	0	0		
c. Equipment	8820	0		8820
d. Supplies	0	0		
e. Contractual (Stahly Engineering)	3900	3500		7400
f. Other		0		
g. Totals	12720	7665		20385

***Project Partner budget summary (provide a separate budget summary for each partner (including subcontracts). See page 6 for a definition of a project partner.***

Category	Stahly	Partner 2	Partner 3	Total
a. Personnel	3900			3900
a.1 Fringe Benefits	0			
b. Travel	0			
c. Equipment	0			
d. Supplies	0			
e. Contractual	0			
f. Other	0			
Totals	3900			3900

**STEP 6 – Statements of Support**

Statements of support must be included from any party listed as a project partner (see page six for the definition of a project partner). DO NOT include other statements of support as they will not be evaluated.

## STEP 8 – Sign the Application

### Authorizing Statement

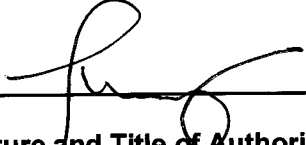
I hereby certify that the information and all statements in this application are true, complete and accurate to the best of my knowledge and that the project or activity complies with all applicable state, local and federal laws and regulations.

I further certify that this project will comply with applicable statutory and regulatory standards.

I further certify that I am (by my signature) authorized to enter into a binding agreement with the Montana State Library to obtain a grant if this application receives approval.

Theodore A Berkley  
Name (print or type)

CITY MANAGER  
Title (print or type)

  
Signature and Title of Authorized Representative(s) of Public Entity Applicant

16 FEB 2016  
Date



[www.seaeng.com](http://www.seaeng.com)

*Engineers and Land Surveyors*

3530 Centennial Drive, Helena, MT 59601 | phone: 406-442-8594 | fax: 406-442-8557  
851 Bridger Drive, Suite 1, Bozeman, MT 59715 | phone: 406-522-8594 | fax: 406-522-9528  
404 West Broadway, Lewistown, MT 59457 | phone: 406-535-8594

February 15, 2016

Steve Klotz  
City of Belgrade Director of Public Works  
91 E Central  
Belgrade, MT 59714

**RE: City of Belgrade MLIA Grant Application Letter of Support**

Dear Mr. Klotz:

Stahly Engineering completely supports the City of Belgrade's request for grant funding from the Montana Land Information Act Grant program in order to create a City GIS database. This project aligns with the City's planning for digitizing infrastructure records. The use of GIS within the City will open the door for the City to implement many new projects and would assist with the planning and prioritization of current projects.

Sincerely,

Stahly Engineering & Associates

A handwritten signature in black ink, appearing to read "Greg Benjamin". The signature is fluid and cursive, written over a light blue horizontal line.

Greg Benjamin, P.E.  
Vice President