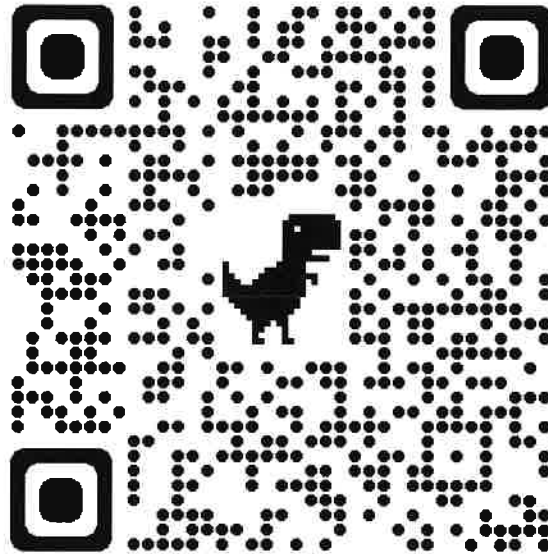


For your convenience, you can scan this QR code to access a digital version of this entire RFP as well as all supplemental brochures, images, and videos referenced in this RFP.



To use the QR code open your camera app and click the link that appears on your screen.



# PROPOSAL FOR GIS MAPPING SERVICES

Lawrenceburg Municipal Utilities

February 3, 2022

Version 1

This Proposal is the property of mPower Innovations and Lawrenceburg Municipal Utilities (Indiana) and is not to be viewed by anyone who is not employed by either of the above organizations. mPower Innovations makes no warranty, expressed or implied, including but not limited to any implied warranties of merchantability or fitness for a particular purpose, regarding the items proposed herein and makes such equipment and/or software available on an "as-is" basis only. In no event shall mPower Innovations be liable to anyone for special, collateral, incidental, or consequential damages in connection with or arising out of the purchase, licensing, or use of this equipment and/or software.

## Table of Contents

Cover letter .....	1
mPower comments, examples and recommendations to provided scope of work .....	2
GIS Mapping Bid Form .....	18
Contractor Oversight & Pre-Qualification Certification .....	20
Contractor Selection Process Incident / Accident Affidavit .....	24
Proof of Health & Safety Policy and Program .....	27
Certificates of Insurance .....	31
Appendix 1 – Schedule of Proposed Fees .....	35
Appendix 2 – Proposed Project & Training Schedule .....	36
Appendix 3 – Stages of GIS & Smart Grid Deployment.....	37
Appendix 4 – Example of Electric Feature List (DDF) .....	38
Appendix 5 – Pilot Project Plan of Action.....	40
Appendix 6 – Condor™ Fiber Management Brochure .....	42
Appendix 7 – Example of “Old way of doing things” .....	43



**Dear Mr. Kinnett:**

It is with pleasure and confidence that mPower Innovations along with our Indiana partner Frontier Geospatial submit this response to your GIS Mapping Professional Services – RFP.

mPower has a fifteen(15) year history of providing professional services and our own proprietary software solutions to utilities and communities of similar size to Lawrenceburg, Indiana. Since our incorporation in 2006, we have been helping organizations move from the world of no or paper maps to some of the more advanced GIS-based, Smart Grid/Smart Utility solutions. The proposal that follows should convey how our affordable services and software solutions can provide the necessary foundation to support the GIS and Smart Grid platform the city is looking to build.

It is somewhat rare that we approach or are evaluated by organizations that have wants and needs more in line with our company's core competencies! Our proposed solution will allow us to recommend our GIS-based solutions to manage and maintain the assets in each and every one of your utilities. mPower will deliver a universal and platform independent geodatabase as part of this project which will give the city the option to select other software and solutions going forward.

In addition to Submitting our bid and communicating our qualifications, mPower offers our customers full access to the suite of products we would recommend during this collection and mapping project. We do this for a number of reasons, some of which include:

- A real-time, web-based tool to report progress and show it on the evolving GIS map.
- Addressing QC issues, getting input or answers on what is observed or collected afield.
- A system of record to document and manage communications pertaining to the project.
- Provide familiarity and a look at future capabilities GIS and Asset Management solutions would/should provide.

In addition to the live presentations that Lawrenceburg personnel have participated in we will provide links to recordings of pertinent presentations that others in your organization may be interested in watching. Also, I am or will make people from my organization available at any time to address questions or, further explain anything that comes up.

Although not a requirement of this RFQ, it is worth noting that the web-based software solutions mPower offers are applicable across all city departments and our licensing structure is not limited by the number of users or departments using it. In addition to our listed references, we have shared information and examples of work performed for: Topeka, IN; Kingsford, MI; Gull Lake Sewer and Water, MI; and Silver Creek Water, IN. Each of the aforementioned projects began within the water and/or electric department and will eventually become enterprise-wide deployments for little or no additional cost.

Thank you for considering mPower Innovations!

Respectfully Submitted,

A handwritten signature in dark ink, appearing to read 'Jason M. Brown', is written over a long, horizontal, slightly wavy line that spans across the width of the signature area.

**Jason M. Brown**  
President & CEO, mPower

# PROPOSAL FOR GIS MAPPING PROFESSIONAL SERVICES

## GIS MAPPING SOLUTION

A key mPower core competency is the creation of a GIS Roadmap for our customers regardless of their stage of GIS deployment at which we engage. We will audit the type and quality of existing maps, data to be collected, needs and wants, and determine how to make it work with the utilities' other enterprise software, personnel, and resources available.

***Please refer to Appendix 3: Stages of GIS and Smart Grid Deployment***

mPower is uniquely qualified as a GIS based software and services provider that has carved out our niche supplying our web-based software and expert services to organizations like Lawrenceburg Municipal Utilities. In this case our software, described experience, attached success stories and references will illustrate the exceptional match between LMU's needs and mPower's capabilities!

As part of most collections, mPower implements a temporary installation of our Integrator™ software product to assist in capturing attributes and photos so LMU can experience a birds-eye-view of what this software can do in real time.

## DATA COLLECTION

### ***Use of Indiana Surveyor***

The collection team mPower has assembled will work with and under guidance of Brad Kleaving, an Indiana licensed surveyor (PLS LS21300007). His full bio is presented later in the project team section.

### ***Attribute Schedules***

Review of existing and past attribute schedules/data dictionaries/schemas are a typical first step in collection kickoff meetings with agreement on final data structure the primary goal. mPower will work with LMU and the city to create appropriate attribute schedules for each of the electric, water, sewer, fiber, and stormwater assets. These attribute schedules will then be used to create collection data dictionaries.

***Please refer to Appendix 4: Ex. Electric Feature Dictionary (DDF)***

### ***Pilot Collection***

In addition, we like to and often perform a pilot collection and review the results to ensure all attributes are being collected and that the final deliverable will be acceptable. Any work done during the pilot is directly applicable and is included in or credited toward the production collection and mapping project.

***Please refer to Appendix 5: Proposed Pilot Project***

### ***Photographs***

We believe a cost saving opportunity exists in the specification/requirement that pictures for each asset be captured, linked and stored in the GIS. mPower's pricing includes the cost to meet this requirement however, we would encourage LMU to consider the following:

1. We recommend photos be taken, stored and linked to assets that are unique, special, complicated, damaged, pose a safety hazard, are buried, underground i.e, in pits or manholes, vaults or enclosed in buildings or stations.
2. The thousands of pictures of identical assets, that will be thoroughly described with all appropriate attributes in the "new" GIS system, will use and consume resources better used elsewhere.
3. mPower's web-based GIS, Integrator software will allow direct linking of any and all pictures, videos, specifications and schematics to any and all assets but, our software also allows direct linking to Bing and Google maps and aerial but, more importantly activates Google Street View in the GIS at the position of any asset or assets being evaluated. These capabilities are typically superior to looking at single static photos from one perspective. Best of all, this capability is embedded in our software, will be available throughout the project and has no additional cost associated with it!

### ***Electric***

mPower has an extremely knowledgeable group of electric data collection personnel and will collect the following in accordance with a 3-meter accuracy or better standard:

- All electric primary conductors, electric secondary conductors from the transformer to the building, electric meter locations
- At least one photograph of each electric pole is to be attached to the feature in the GIS system (see applicable comments above in "Photographs")
- Overhead and underground conductor attributes shall include wire size
- All electric poles (including primary and secondary poles), overhead electric service from the transformer to the house.
- All electric pole attributes shall include pole number, owner, pole class, pole height, pole year, primary units, conductor wire size and type, transformer type voltage and phase, ground type, guy quantity and size and type, secondary type and wire size, service quantity size and meter, streetlights, each pole contact listing provider, and quantity of contacts on pole from provider, and general comments

***Please refer to Appendix 4: Ex. Electric Feature Dictionary (DDF)***

TTD Pole Attachments	
<b>TTD COPPER</b>	<input type="radio"/> *EMPTY* <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6
<b>TTD FIBER</b>	<input type="radio"/> *EMPTY* <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6
<b>CABLE VISION</b>	<input type="radio"/> *EMPTY* <input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6
<b>MYSTERY</b>	<input type="radio"/> *EMPTY* <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6
<b>FRONTIER</b>	<input type="radio"/> *EMPTY* <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input checked="" type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6
<b>ICENET</b>	<input type="radio"/> *EMPTY* <input checked="" type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6
<b>BOW FIBER</b>	<input type="radio"/> *EMPTY* <input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6
<b>DPW FIBER</b>	<input type="radio"/> *EMPTY* <input type="radio"/> 0 <input checked="" type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6
<b>CABLE VISION DOWN GUY</b>	<input type="text" value="0"/>
<b>FRONTIER DOWN GUY</b>	<input type="text" value="0"/>
<b>ICENET DOWN GUY</b>	<input type="text" value="0"/>
<b>CABLE VISION BOX</b>	<input type="text" value="0"/>
<b>FRONTIER BOX</b>	<input type="text" value="0"/>
<b>ICENET BOX</b>	<input type="text" value="0"/>
<b>CABLE VISION RISER</b>	<input type="text" value="0"/>
<b>FRONTIER RISER</b>	<input type="text" value="0"/>
<b>ICENET RISER</b>	<input type="text" value="0"/>
<b>B.O.W. RISER</b>	<input type="text" value="0"/>
<b>UNKNOWN RISER</b>	<input type="text" value="0"/>
<b>TTD RISER</b>	<input type="text" value="0"/>
<b>DPW RISER</b>	<input type="text" value="0"/>
<input type="button" value="Submit Form"/> <input type="button" value="Cancel"/>	


**Example of mobile form used in previous Joint Use Audit at Third Taxing District**

Zoom and Report Buttons	Pole Number	Cable Vision	Printer	Search	TTD Fiber	TTD Copper	B, O, W Fiber	OPW Fiber	Unknown
 	Pole Number: 1057 Ownership: FIBONTER (ATT) Post Type: PRIMARY	Cable Vision 1 CV Down Day 0 CV Inset 0 CV Box 0	Printer 0 Printer Down Day 0 Printer Inset 0 Printer Box 0	Search Fiber 0 Search Down Day 0 Search Inset 0 Search Box 0	TTD Fiber 0 TTD Down Day 0 TTD Inset 0 TTD Box 0	TTD Copper 0	BOW Fiber 1 BOW Down Day 0 BOW Inset 0 BOW Box 0	OPW Fiber 1 OPW Down Day 0 OPW Inset 0 OPW Box 0	Unknown 0 Unknown Down Day 0 Unknown Inset 0 Unknown Box 0
 	Pole Number: 1054 Ownership: FIBONTER (ATT)	Cable Vision 0 CV Down Day 0	Printer 0 Printer Down Day 0	Search Fiber 0 Search Down Day 0	TTD Fiber 0 TTD Down Day 0	TTD Copper 0	BOW Fiber 1 BOW Down Day 0	OPW Fiber 1 OPW Down Day 0	Unknown 0 Unknown Down Day 0

**Link to photos**


TTD Pole Attachments

PHOTO - ATTACHMENTS



1524253040958448001572.jpg

PHOTO - pole number



9767\_tag.JPG

ogr\_fid  
691

POLE\_NUM  
9767

**Screenshot showing link to photos taken during collection**



## ***Fiber***

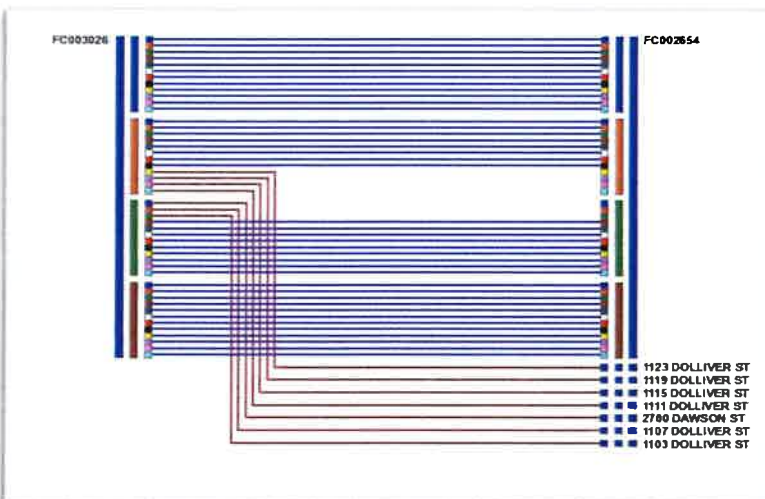
mPower will collect location (to 3-meter accuracy or better) and attribute data, map and photograph all Fiber Assets, including pedestals, handholes, cabinets, overhead fiber main lines, and fiber service drops from main lines to the building in a fashion that supports the GIS and potential future use of our Esri-based Fiber Management software Condor. Condor is more than just mapping the physical assets in the field but, rather a comprehensive solution allowing managing of devices such as Patch Panels, and Splice Closures. This solution assists with design, routing and troubleshooting of communications infrastructure as well.



***Screenshot of internal fiber network from Fargo, ND***

A	B	C	D	E	F	G	H	I	J	K	L
From Cable	Fiber Number	Fiber Name	To Cable/Port	Fiber Number	Fiber Name						
1103 DOLLIVER ST	1	1103 DOLLIVER ST	FC003026	27	1103 DOLLIVER ST						
1107 DOLLIVER ST	3	1107 DOLLIVER ST	FC003026	26	1107 DOLLIVER ST						
1111 DOLLIVER ST	1	1111 DOLLIVER ST	FC003026	24	1111 DOLLIVER ST						
1115 DOLLIVER ST	1	1115 DOLLIVER ST	FC003026	23	1115 DOLLIVER ST						
1119 DOLLIVER ST	1	1119 DOLLIVER ST	FC003026	22	1119 DOLLIVER ST						
1123 DOLLIVER ST	1	1123 DOLLIVER ST	FC003026	21	1123 DOLLIVER ST						
2700 DAWSON ST	1	2700 DAWSON ST	FC003026	25	2700 DAWSON ST						
FC002854	1	Unused	FC003026	1	Unused						
FC002854	2	Unused	FC003026	2	Unused						
FC002854	3	Unused	FC003026	3	Unused						
FC002854	4	Unused	FC003026	4	Unused						
FC002854	5	Unused	FC003026	5	Unused						
FC002854	6	Unused	FC003026	6	Unused						
FC002854	7	Unused	FC003026	7	Unused						
FC002854	8	Unused	FC003026	8	Unused						
FC002854	9	Unused	FC003026	9	Unused						
FC002854	10	Unused	FC003026	10	Unused						
FC002854	11	Unused	FC003026	11	Unused						
FC002854	12	Unused	FC003026	12	Unused						
FC002854	13	Unused	FC003026	13	Unused						
FC002854	14	Unused	FC003026	14	Unused						
FC002854	15	Unused	FC003026	15	Unused						
FC002854	16	Unused	FC003026	16	Unused						
FC002854	17	Unused	FC003026	17	Unused						
FC002854	18	Unused	FC003026	18	Unused						
FC002854	19	Unused	FC003026	19	Unused						
FC002854	20	Unused	FC003026	20	Unused						
FC002854	28	1027 DOLLIVER ST	FC003026	28	1027 DOLLIVER ST						
FC002854	29	1023 DOLLIVER ST	FC003026	29	1023 DOLLIVER ST						
FC002854	30	1019 DOLLIVER ST	FC003026	30	1019 DOLLIVER ST						

### Examples of Splicing Diagrams exported from Condor™



### Examples of Splicing Diagrams exported from Condor™

See Appendix 6: mPower Condor Fiber and Coax management Software Brochure or, watch an online demonstration of this solution here:

<https://www.mpowerinnovations.com/watch-fiber-webinar.html>

### Sanitary Sewer and Storm Sewer

mPower has extensive experience with multiple municipal and university clients ranging from participating in the collection, inspection, televising and asset management of their Sanitary and Storm Infrastructure. We have used training provided by and adhered to NASSCO standards.

mPower will locate and map the following features in accordance with Indiana Urban Surveys Relative Positional Accuracy per Rule 865 IAC 1-12-Land Surveying; Competent Practice:

- Manholes and storm structures
- Storm sewer end sections with the invert elevation
- Sewer main lines, sewer service piping from the main to the building, and stormwater main lines

In many cases, sewer and storm asset management involved moving our clients from paper and whiteboard methods to advanced GIS resulting in instant access to results and documentation from collections, some of which is shown below.

***Below are screenshots of our mapping and asset management portal, Integrator, and the resulting digital forms and reports that make the legacy data available but modernizes the entire workflow.***





Tools and Forms	Structure Number	Rim Elevation	Wall Material	surf. typ	Structure Type
	2736	1056.202	Precast	Asphalt	Sanitary
	2732	1056.796	Precast	Asphalt	Sanitary
	2731	1057.443	Precast	Asphalt	Sanitary
	3543	1059.006	Precast	Glass	Sanitary

City of Kingsford, Michigan
Jan 27, 2022

Sanitary Manhole Condition Assessment

Manhole Number: 2736
MSP North: 370580.621
MSP East: 25965610
Rim Elevation: 1056.322

Inspected By: AR/JH
Inspection Date: 9/18/2014 12:00:00 AM
Inspection Status: Surface

Surface Type: Asphalt
Surcharge Evidence: No
General Notes:

COVER

Cover Rim to Ground: At Grade
Cover Round: Yes
Cover Holes: Small
Cover Condition: 3
Cover Notes:

ADJUSTMENT RINGS

Ring Height: 10
Ring Material: Concrete
Ring I&I:
Ring Condition: 3
Ring Notes:

CHIMNEY

Chimney Height:
Chimney Material: Precast
Chimney Shape: Concentric
Chimney I&I:
Chimney Condition:
Chimney Notes:

WALL

Wall Material: Precast
Wall I&I:
Wall Condition: 3
Wall Notes:

BENCH

Bench Present: Yes
Bench Material: Concrete
Bench Condition: 3
Bench Notes:

STEPS

Step Material: Plastic Coated
Step Number: 8
Step Note:

	Size	Material	Direction	I&I	In/Out	Rim to Invert	Invert Elevation	Condition	Notes
Invert 1:	10	PVC	N		Out	11.9			
Invert 2:	10	PVC	S		In	11.79			
Invert 3:									
Invert 4:									
Invert 5:									
Invert 6:									
Invert 7:									
Invert 8:									
Invert 9:									
Invert 10:									
Invert 11:									
Invert 12:									

Overall Manhole Rating: 3
Overall Manhole Notes:

Design Engineer:
Engineer Structure Number

Street Location: River Pointe
Intersection Location: River Pointe

Examples of legacy collection forms and drawings can be found in Appendix 7: The Old Way of Doing Things

### ***Manholes and Associated Infrastructure***

mPower will collect manhole attributes and attributes associated with the inherent infrastructure as follows:

- Photographs of manholes are required, oriented to the North as up, and attached to the GIS feature
- Manhole attributes include but are not limited to material, cover type, size, condition (good, fair, poor), flow direction, owner, depth for each pipe, pipe size, pipe material, visible pipe condition, pipe flow direction, rim elevation, and general comments
- Pipe invert elevations shall be to Indiana Urban Surveys Relative Positional Accuracy per Rule 865 IAC 1-12-Land Surveying; Competent Practice.
- Pipe attributes shall include, but not limited to, diameter, material, condition, lined (yes or no), upstream structure number, downstream structure number, pipe slope percentage and ft/ft, and general comments

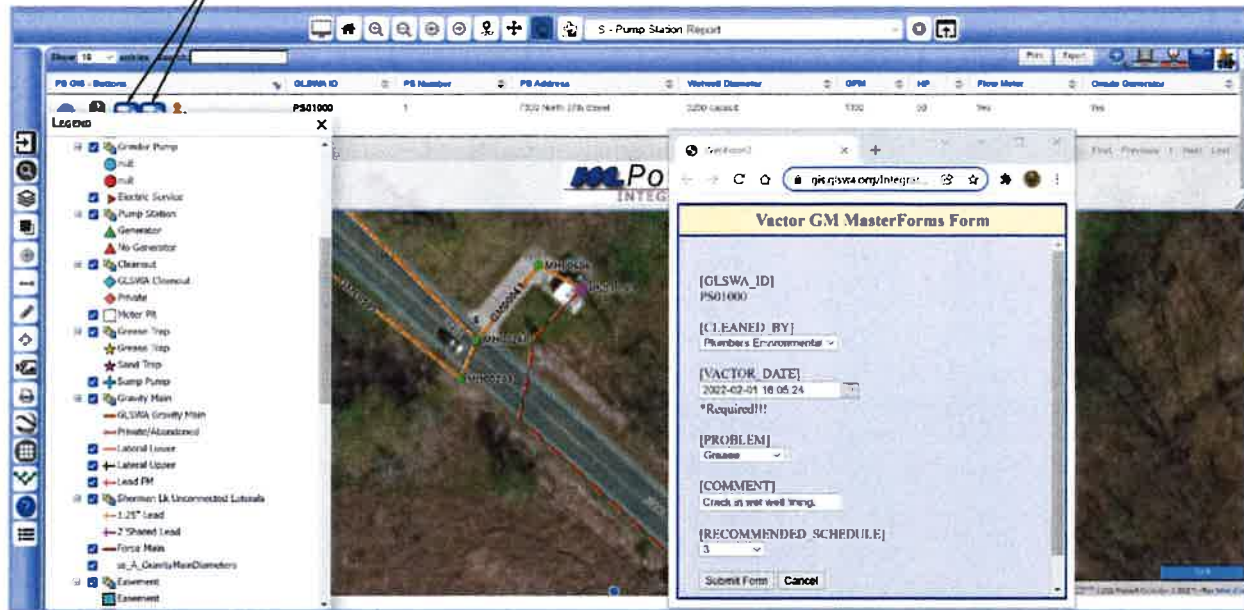
Manhole inspection can be performed and recorded to the above standards such that a manhole condition assessment can be performed. Proposed pricing is based on mPower's ability to manually remove manhole covers. If opening of manholes is impeded by debris, pavement, etc., it will be the responsibility of the utility to open or free and mark covers.

### ***Water***

mPower will collect the following water features at the specified accuracy (2cm when noted) with GPS devices capable of corrected positioning either through RTK (Real Time Kinematic) or PPK (Post Processing Kinematic) methods:

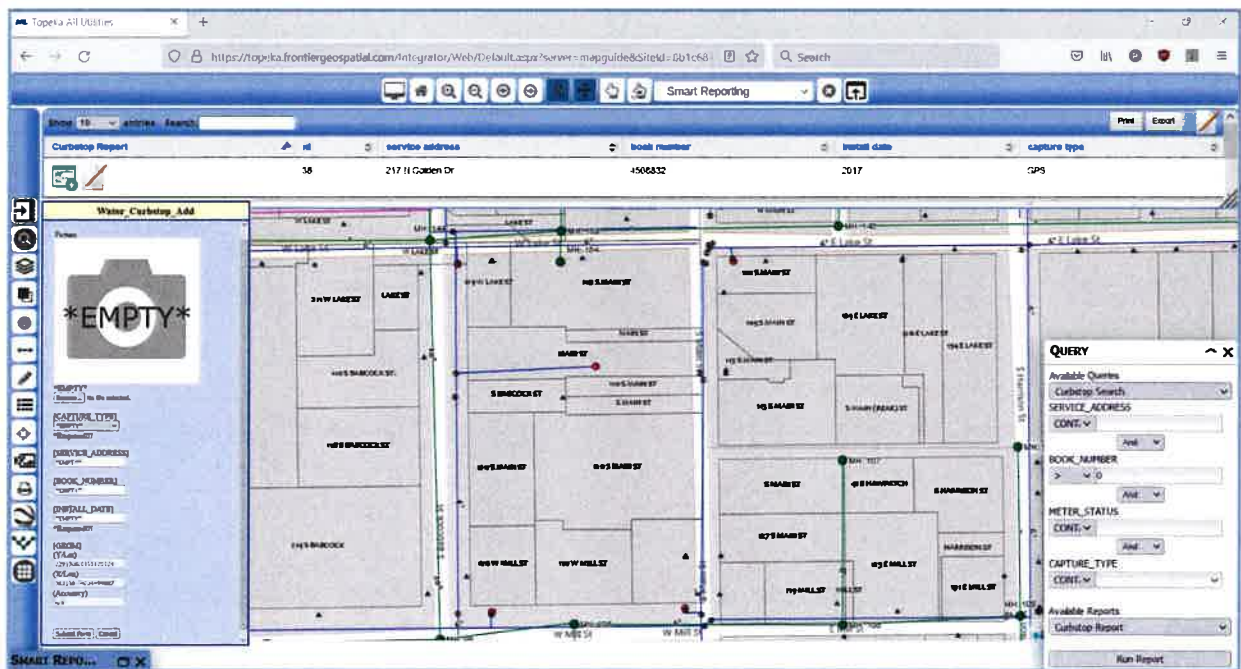
- Main valves, hydrant valves, hydrants, valve vaults, booster stations, and meters at 2 cm accuracy
- Water main piping, water service piping from the main to the building, water meter locations,
- Water lines including mains and services are to be mapped per information available from LMU or located in the field using tracer wire tone if available per the Indiana public underground locating standard of accuracy
- Valve attributes include size, turn direction to close, and general comments
- Hydrants require a picture for each feature showing the age and manufacturer stamp and include the following attributes: size, year, manufacturer
- Water main attribute information required is size, material, and year as provided by the LMU
- Water lines from the meter to the buildings are not included in this scope
- LMU water department will locate water lines and provide material and size information
- Photographs of lift stations are required (***see below screenshot from Gull Lake Sewer's mPower site showing details of a lift station, links to the photos, and an example of an associated maintenance form***)

## Links to Photos



## Metadata

Some attributes will be collected in the field, others will be derived from existing mapping or staff knowledge of the features. All GPS data from the field will be collected per the data dictionaries set up for the various layers, with GPS metadata to include horizontal accuracy, vertical accuracy, fix type, number of satellites, and fix time/date.



### ***Training***

mPower will provide training on a time and materials basis depending on the requests and needs of LMU and the City. Throughout the collection process, staff can train personnel on use of data collection devices to enable future onsite collection efforts, if desired, as well as use of mPower proprietary software.

Once the software platform is determined with LMU and City staff, mPower will develop a schedule to provide adequate training to LMU and City staff that will allow LMU and City to modify, add, and delete assets and attributes in the software platform.

mPower has developed a tentative training schedule with training details based on our proposed solutions. ***Please reference Appendix 2: Proposed Project & Training Schedule***

### **BRIEF HISTORY & OVERVIEW**

#### ***mPower Innovations (Primary)***

mPower Technologies, Inc. dba mPower Innovations is a Geographic Information Systems company established in 2006. mPower is based out of Iron Mountain, MI. mPower has offices in Appleton, WI, Flowery Branch, GA, and strategic partners throughout the country.

Many of our team members have more than 30 years of working in the GIS industry. We offer an innovative and comprehensive suite of software solutions that enhance or create utility smart-grid solutions nationwide. We also have a highly experienced and diverse services division that can assist in creating a robust GIS system through GPS data collection, mapping, data conversion, SQL database services, software and hardware training. Our personnel are experienced in electrical, water, wastewater, stormwater, and fiber distribution network data collections.

#### ***Frontier Geospatial (Subcontractor)***

Frontier Geospatial, LLC is a Geographic Information Systems company established in 2013. Frontier Geospatial, LLC is based out of Evansville, IN. Our experienced team has over 40 years' experience in the GIS industry. We have applied our skills with many water and sewer utilities taking a collaborative approach, working together, listening to their needs, and providing advanced technology and the tools to help them collect, map, and maintain their utility infrastructure. This includes services such as migration from paper to digital maps, field GPS data collection and data entry. We have worked with utilities throughout Indiana and Western Kentucky. Our evolving relationship with mPower has resulted in work in Massachusetts, Texas, and Minnesota.

## **SIMILAR PROJECTS & CONTACTS**

### ***Taunton Municipal Light Plant (MA)***

Taunton is a medium-sized utility with approximately 39,000 electric meters that we worked with to go from paper maps to an enhanced GIS solution, which included a complete electrical collection of all of their distribution network assets and included measurements of joint use lines/attachments, sags, etc. as they look ahead at adding a fiber network within the city. All collection data has been transferred to their AutoCAD mapping system. Total collection with approximately 6 personnel took approximately 8 months and the project is in the final QC and mapping stage.

Professional fees:	\$855,000, will grow to about \$1,000,000 as the project enters completion.
Client Contact:	Chris Boucher - Distribution Manager/Engineer
Phone:	(508) 824-3108
Email:	chrisboucher@tmlp.com
Address:	55 Weir Street Taunton, MA 02780

### ***Evansville Water & Sewer Utility (IN)***

We have had the opportunity to collect field data for the Evansville Water & Sewer Utility, including: the gathering of GPS features, opening and inspecting manholes, and creating 3D scans of buildings. As part of the GPS process we collected attribute information that conformed with the utility's GIS data dictionary. A major focus of these activities was to correct features that were either mapped incorrectly or not in their GIS system at all. Our projects corrected these errors and allowed the utility to have accurate GIS and asset management systems. . In addition to the traditional GIS work, we were tasked with targeted projects focusing on lift stations, air relief valves, and combined sewer outfalls.

Professional Fees:	\$210,000
Contact Name:	Joseph D Sloan - Director of Engineering Services
Phone:	(812) 421-2120 x 2236
Email:	jsloan@ewsu.com
Address:	1 SE 9th St, Suite 200 Evansville, IN 47708



### ***Templeton Municipal Light & Water Plant (MA)***

Templeton is a similarly sized utility with approximately 3,650 electric meters, 4,500 poles, and 2,200 water meters that we have worked with to go from paper maps to an enhanced GIS solution, which included a complete electric collection and using QGIS for mapping with mPower's proprietary Integrator and Editor software solutions for asset management and querying and reporting on data.

Professional Fees: \$167,700  
Contact Name: Tom Berry - Electric/Light Superintendent  
Phone: (978) 939-5323  
Email: tberry@templetonlight.com  
Address: 86 Bridge St.  
Baldwinville, MA 01436

### ***Maquoketa Municipal Electric Utility (IA)***

Maquoketa contracted mPower for a GPS collection of their electric system with approximately 2,500 poles and 3,500 meters. mPower's trace flow capabilities and dynamic forms, combined with the software's ability to grow with the city, were significant factors in his decision.

During the GPS collection, MMEU used Integrator to monitor the status of the collection project in real time and Editor to conduct their own underground locating, including photos and attribute data through digital forms. At the conclusion of the collection project, Maquoketa's field personnel were already comfortable with using the software, making training and full deployment of the applications very easy to accomplish.

Professional Fees: \$75,600  
Contact Name: Chris Krogman – General Manager  
Phone: (563) 65-6891-5323  
Email: chriskrogman@mmeu.org  
Address: 201 E Pleasant St.  
Maquoketa, IA 52060

### ***Other Indiana Customers***

Silver Creek Water Corporation, Tell City Electric Department, Miami-Cass EC, Town of Topeka, North & South Lawrence Water Companies, Town of Sellersburg, New Harmony, Palmyra and Spectrum Engineering Corporation.

## **PROJECT TEAM & ORGANIZATION**

mPower Innovations and Frontier Geospatial's combined knowledge base on utility collections, mapping, and software is second to none. All parties bring many years of experience to the table and will provide an outstanding deliverable to Lawrenceburg. Here is our team:

### ***Jason Brown***

Jason will serve Lawrenceburg by directly overseeing all consulting and project coordination. Jason is President and CEO of mPower Innovations and has directly coordinated and assembled successful project teams nationwide for a variety of collections and software implementations of varying size, scope, and complexity.

### ***Mark Nickels***

Mark will serve Lawrenceburg as Project Manager for the electric and fiber collection segment and communicate directly with Lawrenceburg management on progress and data presentation. Mark began with the Autodesk reseller that eventually created mPower and has been part of the team for 35 years, serving in a variety of roles including Chief Operations Officer. Mark has a B.S. from Ferris State University and URD Certification from Minnesota West Comm and Tech College. Mark has been project manager for electric collections at such utilities as Federated Rural Electric, Templeton Municipal Light & Water, Ludlow Electric Light Department, City of Taunton and countless other small and medium collections nationwide.

### ***Andy Arnoldussen***

Andy will serve Lawrenceburg as an Asst. Project Manager and oversee day-to-day field operations for the electric and fiber collection segment. Andy has been with mPower for 6 years and is a GIS/GPS Technician & Field Crew Supervisor. He has a B.S. in Geographic Info. Systems from the University of Wisconsin, Milwaukee and URD Certification from Minnesota West Comm and Tech College. Andy has been project manager or a field crew supervisor for large electric collections at such utilities as Adams-Columbia Electric Cooperative, City of Kiel, Swisher Electric Cooperative, City of Taunton, and Maquoketa Municipal Electric.

### ***David Christensen***

David will serve Lawrenceburg as part of the electric and fiber collection team. David recently joined mPower as a Sr. GIS/GPS Technician with 15 years of experience in the electrical utilities field. He has a A.S. in Electro-Mechanical Technology from Northern Michigan University. David served as an Engineering Technician at Marquette Board of Light & Power and then went on to serve as Electrical Distribution Manager at Menasha

Utilities. Prior to joining mPower, David was a key contact/customer of mPower's at both utilities.

***Brad Kleaving***

Brad will serve Lawrenceburg as the Licensed Surveyor and consultant for the data collection certifying process. Brad has been working in the surveying profession for the past 23 years. He holds an A.A.S. in Surveying Technology from Vincennes University. For the past seven years he has worked for a water and sewer utility collecting survey grade positions on water and sewer assets along with completing boundary and topographical surveys and creating easement exhibits. Brad also holds a Part 107 Pilot license (past 4 years) which he uses to fly UAV to create surfaces and planimetric maps for design purposes.

***Greg Grabner***

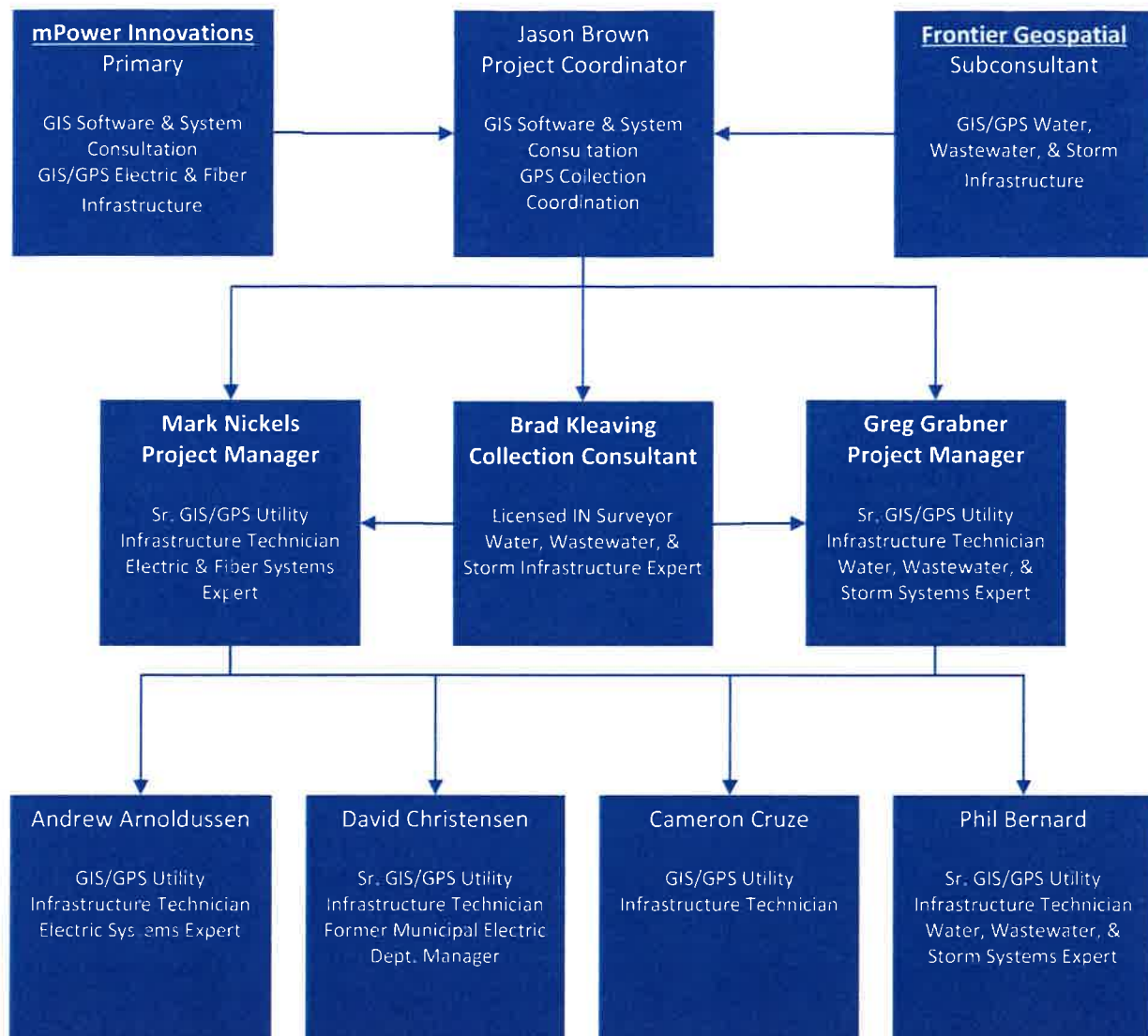
Greg will serve Lawrenceburg as Project Manager for the water, wastewater and storm systems collection segment and communicate directly with Lawrenceburg management on progress and data presentation. Greg has been working in the GIS industry for 20 years and is the owner of Frontier Geospatial, LLC. Greg has worked on managing multiple utilities projects from field collection to GIS cloud integration. Such as, the city of Evansville Water and Sewer, city of Bloomington Water and sewer, town of New Harmony Utilities, Town of Petersburg Utilities and the town of Patoka.

***Philip Bernard***

Philip will serve Lawrenceburg as an Asst. Project Manager and oversee day-to-day field operations for the water, wastewater and storm systems collection segment. Philip has been working in the GIS industry for 20 years and is the co-founder of Frontier Geospatial, LLC. Philip has been involved with several GIS integration projects for Utilities. Such as, the city of Evansville Water and Sewer, city of Bloomington Water and sewer, town of Topeka, town of Avilla, town of Palmyra and the town of Francisco.

***Cameron Cruse***

Cameron Cruse will serve Lawrenceburg as part of the water, wastewater and storm systems collection team. Cameron has recently graduated from the University of Western Kentucky. Cameron has a BS in Environmental and Geographic studies. Cameron worked on the large, expedited Taunton GPS collection and joint use evaluation.



**Organizational Chart**

## **PROPOSED SCHEDULE & PRICING**

### ***Schedule***

***Please reference Appendix 2: Proposed Project Schedule***

### ***Pricing***

***Please reference Appendix 1: Schedule of Proposed Fees***

## **NOTES**

Safety pre-qualification, proof of safety program (excerpt), insurance certificates, and the incident/accident affidavit are provided following the appendices. OSHA 10 and 30-hour cards are not required for non-construction activities and therefore not applicable nor provided.



Mayor  
Kelly Mollan  
Utility Director  
Billy Kinnett  
Utility Service Board  
Brett Bondurant  
Tony Abbott  
Justin Noppert  
Tom Rowlett  
Lennie Fryman  
City Attorney  
Delmar D. Weldon

## GIS Mapping Bid Form

Description	Bid Price
2,300 Electric Poles	\$63,600
3,000 Fiber Features	\$25,350
3,272 Storm Manholes	\$56,352
500 Sanitary Manholes	\$8,000
1,000 Water Valves	\$8,000
375 Water Hydrants	\$3,000
1,730 Water Meters	\$12,110
500 Sewer Lateral Cleanouts	\$4,250
13 Lift Stations	\$1,950
300 Low Pressure Sewer Service Pits	\$2,100
2,000 Sewer Laterals (transferred from paper maps)	\$10,000
Total	\$194,712

Notes or Any Additional Pricing (Please use additional pages if needed)

The above pricing depicts our Gross Bid Price, which is all-inclusive of expenses, and is meant as a "Not to exceed" price for the data collection component of this proposal. If you wish to see the Net Bid Price and associated Estimated Expenses, refer to the next page, "GIS Mapping Bid Price Breakout." This pricing is for the city's complete utility collection and mapping project as defined in the Request for Proposal - GIS Mapping Professional Services.

In developing overall prices, mPower typically provides more detailed pricing broken out by individual asset, mapping work/drawing, system connectivity (modeling), quality control and final delivery. So, to arrive at and support our "total" pricing we leveraged our experience with many municipal utilities of similar size and estimated device counts to support our pricing model. This is particularly important in costing the electric system due to the number of distinct assets and the need to collect and map them separately to support a geometric or utility network model (necessary for tracing and future smart grid applications). See Appendix 1 for pricing details.



230 Walnut Street · Lawrenceburg, In. 47025  
Phone: 812-532-3500 · Fax: 812-532-3512



## GIS Mapping Bid Price Breakout

Description		Gross Bid Price (Not to Exceed)	Net Bid Price (Expenses reimbursable)	Est. Expenses (M&I, Lodging, Travel)
2,300	Electric Poles	\$ 63,600	\$ 54,400	\$ 9,200
3,000	Fiber Features	\$ 25,350	\$ 17,200	\$ 8,150
3,272	Storm Manholes	\$ 56,352	\$ 39,877	\$ 16,475
500	Sanitary Manholes	\$ 8,000	\$ 5,975	\$ 2,025
1,000	Water Valves	\$ 8,000	\$ 3,950	\$ 4,050
375	Water Hydrants	\$ 3,000	\$ 1,475	\$ 1,525
1,730	Water Meters	\$ 12,110	\$ 5,110	\$ 7,000
500	Sewer Lateral Cleanouts	\$ 4,250	\$ 2,225	\$ 2,025
13	Lift Stations	\$ 1,950	\$ 1,800	\$ 150
300	Low Pressure Sewer Service Pits	\$ 2,100	\$ 900	\$ 1,200
2,000	Sewer Laterals (f/paper maps)	\$ 10,000	\$ 10,000	\$ -
<b>Total</b>		<b>\$ 194,712</b>	<b>\$ 142,912</b>	<b>\$ 51,800</b>

The above pricing depicts our Gross Bid Price, which is all-inclusive of expenses, and is meant as a "Not to exceed" price for the data collection component of this proposal. The Net Bid Price depicts our pricing for collection only and any and all expenses incurred would be reimbursable at cost and subject to a 5% administrative fee on the total receipts at project close. We have included Estimated Expenses allocated by feature to show the offset between Gross Bid Price and Net Bid Price.

This pricing is based on the same structure/model noted on the included GIS Mapping Bid Form. See Appendix 1 for a further breakdown of pricing details.



## **CITY OF LAWRENCEBURG**

---

**Mike Abdon**  
**230 Walnut Street**  
**Lawrenceburg, Indiana 47025**  
**[mabdon@lawrenceburg.in.gov](mailto:mabdon@lawrenceburg.in.gov)**

**Safety Coordinator**  
**812-532-3562 phone**  
**812-532-3559 fax**

# ***City of Lawrenceburg IN***

## ***Contractor***

## ***Safety***

## ***Pre-qualification***

## ***Packet***

City of Lawrenceburg  
Contractor Oversight and  
Pre-Qualification Certification

SAFETY PROGRAM EVALUATION CHECK LIST

DATE: 2/2/2022

TOTAL EMPLOYEES: 12

CONTRACTOR: mPower Technologies, Inc. dba mPower Innovations

SUPERINTENDENT: Jason Brown

SAFETY REPRESENTATIVE: Craig Paquin FULL TIME: YES – NO X

1. Provide to the City a Certificate of Insurance, including proof of Worker's Compensation Coverage or Worker's Compensation Clearance Certificate. YES X NO
2. City to be added as Additional Insured on your Certificate of Insurance YES X NO
3. City to require Contractors provide a renewal certificate at least 15 days before expiration YES X NO
4. Contractor implements Corporate Safety Program? YES X NO
5. Do you have an OSHA Compliant written safety program? YES X NO     
(Contractor must supply a copy of the written manual to the City upon request)
6. Are OSHA Regulations kept on site at the office? YES X NO
7. Do you have a first aid qualified person? YES X NO
8. Contractor conducts and documents "New Hire Orientation" YES X NO



9. Is a "Safe Practices" booklet given to each new employee and documented? YES X NO
10. Contractor conducts and documents "Monthly Supervisor Safety Meetings"? YES X NO
11. Contractor provides necessary "Safety Equipment" to employees and maintains necessary supply? YES X NO
12. Are employees trained in the proper use of personal protective equipment? YES X NO
13. Contractor has a written Emergency Action Plan? YES X NO
14. Contractor has Haz-Com/GHS Program and on site SDS files? YES    NO X N/A
15. Are copies of Safety Data Sheets supplied and available to the City? YES    NO X N/A
16. Have all employees completed Haz-Com Training? YES    NO X N/A
17. Are all employees briefed on hazardous situations prior to beginning the assigned task? YES X NO
18. Contractor has weekly "Tool Box" Safety Meeting? YES X NO
19. Are weekly / monthly safety meetings documented and signatures of attendees kept on file? YES    NO X
20. Do you document and follow-up on complaints from weekly "Safety Tool Box" meetings? YES X NO
21. Contractor has written record of site safety inspections and who performs them? YES X NO
22. Do you have a Disciplinary Action Program for employees? YES X NO
23. Contractor had OSHA Form # 300 on site and up to date? YES X NO
24. Are accident investigations conducted and written accident reports made? YES X NO
25. Is fire protection equipment provided in work areas and employees instructed in fire prevention and the use of fire extinguishers? YES X NO
26. Are all defective tools, equipment, etc. either properly tagged or taken out of service? YES X NO
27. Do you have a Ladder Training Program and is it documented? YES X NO
28. Contractor using GFCI Program? YES X NO
29. Contractor using Assured Equipment Grounding Program? YES    NO X N/A
30. Contractor has a written Fall Protection Program? YES X NO
31. Contractor has written "Crane Inspection Report" on site? YES    NO X N/A

**Contractor has written procedures for the following:**

- |   |   |
|---|---|
| 32. Confined Space  | YES <u>X</u> NO <u>  </u> N/A <u>  </u> |
| 33. Respiratory Protection  | YES <u>X</u> NO <u>  </u> N/A <u>  </u> |
| 34. Isolation, lockout/tagout   | YES <u>X</u> NO <u>  </u> N/A <u>  </u> |
| 35. Asbestos (Awareness Training)   | YES <u>  </u> NO <u>  </u> N/A <u>X</u> |
| 36. Blood-Borne Pathogens (Awareness Training)  | YES <u>X</u> NO <u>  </u> N/A <u>  </u> |
| 37. Lead  | YES <u>  </u> NO <u>  </u> N/A <u>X</u> |
| 38. Substance Abuse   | YES <u>X</u> NO <u>  </u> N/A <u>  </u> |
| 39. Traffic Control Four Hour Flagger Training Course<br>Show Certificate of Completion | YES <u>  </u> NO <u>  </u> N/A <u>X</u> |

As of April 1, 2007, the following training requirements for all contractors:  
Contractor's site Supervisor shall have successfully completed the OSHA 30-hour training on the construction standards. Contractor Craft / Skill workers shall have completed the OSHA 10-hour training on construction standards, must present valid card. If contractor's employees have had training equivalent such as building trades "LEAD", "MOST", or "BEST" these programs are acceptable if documentation is submitted for City of Lawrenceburg's review and approval.

**City of Lawrenceburg**  
**Contractor Selection Process**  
**Incident / Accident Affidavit**

Date: 2/2/2022

Contractor: mPower Technologies, Inc. dba mPower Innovations

Superintendent: Jason Brown

Using your past three year's OSHA 300 Log, provide the following information: (as an alternative you may submit copies of OSHA 300 Log jobs for the last three years).

Number of Lost Workday Cases 2019 0, 20 0, 21 0.  
(Days away from work because of injury)

Number of Restricted Workday Cases 2019 0, 20 0, 21 0.

Number of Cases with Medical Treatment only 2019 0, 20 0,  
21 0.

Number of Fatalities 2019 0, 20 0, 21 0.

Employee hours worked for each of the last three years 2019 23,655,  
20 26,387, 21 31,368.

Incidence Rate – Lost Work Days 2019 0, 20 0,  
21 0.

Incidence Rate – OSHA Recordables 2019 0, 20 0,  
21 0.

Number of OSHA Citations / Penalties or Summary (Furnish Copies).  
2019 0, 20 0, 21 0

I hereby certify that this is accurate to the best of my knowledge.

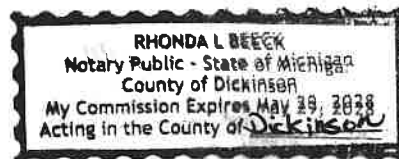
Signed

*G. J. [Signature]*

Company Name mPower Technologies, Inc.

Signed and sworn before me this 2nd day of, February -2022.

WHITNESS my signature and official seal, this 2nd day of, February 2022.



Notary Public

*Rhonda L. Beeck*

Printed Signature

*Rhonda L. Beeck*

My Commission Expires:

5/29/2028

**Please provide current information:**

**Name:** Craig Paquin

**Current Phone Number:** (906) 239-3201

**Current Cell Number:** (906) 282-1401

**Current Mailing Address:** 126 Woodward Ave., Iron Mountain, MI 49801

**Current E-Mail Address:** cpaquin@mpowerinnovations.com

## **Proof Excerpt from mPower Health Safety Policy and Program**

### **OCCUPATIONAL HEALTH AND SAFETY POLICY**

mPower Innovations is committed to providing a safe, accident-free, and healthy work environment for everyone. However, excellent safe and healthy conditions do not occur by chance. They are the result of diligent work and careful attention to all company policies by everyone.

Safety demands cooperation on everyone's part. Thus, it is important that communication be always kept open between the management and employees. Workers who notice hazards or other safety problems, or feel that they need additional training, must notify their supervisor. Supervisors and management at all levels must address these concerns and take corrective action when warranted, including development of new or enhancement of existing policies.

Everyone is obligated to know the safety standards for their area or job, and just as important, to abide by them. Supervisors must instill a positive attitude and safety awareness in their workers through personal adherence, personal contact, training, and regularly scheduled safety meetings. It is the duty of all employees to perform their work with maximum regard for the safety of themselves and co-workers.

Our safety policies are based on experience and current standards and are also an integral part of the company's personnel policies. This means that compliance with the policies is a condition of employment and must be taken seriously. Failure to comply is sufficient grounds for disciplinary action or for termination of employment.

Safety and health are a top priority in this organization and is every bit as important as productivity and quality. In fact, they go hand in hand. Of course, the best reason for you to observe these policies is because it's in your own self-interest to do so. Conscientiously following them can help you stay safe, healthy, and able to work, play, and enjoy life to its fullest.



Craig Paquin  
*Accounting & Administration*

12/3/2021

## **HEALTH AND SAFETY PROGRAM**

It is the policy and top priority of mPower Innovations to provide an accident-free and comfortable work environment by eliminating recognized hazards from the workplace. Our health and safety program, and specific individual programs, have been developed to assure compliance with federal, state, and local regulations with particular emphasis on the Michigan Occupational Health and Safety Rules and Regulations that apply to our operations.

To maintain the safety standards desired by our company, it is necessary to actively pursue an accident prevention program through all levels of our company, from top management through all employees. Health and safety are functional responsibilities of each supervisor.

Health and safety are of vital interest to everyone in the company. Each level of our organization is accountable for safe performance. Compliance with this program and safety and health rules are taken very seriously. This means that failure to comply is sufficient ground for disciplinary action or for termination of employment. These policies are an integral part of the company's personnel policies.

### **OCCUPATIONAL HEALTH AND SAFETY ACT**

The Michigan Occupational Health and Safety Act became effective January 1, 1975. It provides that:

An employer shall:

- a) Furnish to each employee, employment and a place of employment that is free from recognized hazards that are causing, or are likely to cause, death or serious physical harm to the employee.
- b) Comply with this act and with the rules and standards promulgated and the orders issued pursuant to this act.
- c) Post notices and use other appropriate means to keep his or her employees informed of their protections and obligations under this act, including applicable rules and standards.
- d) Provide personal protective equipment at the employer's expense when it is specifically required to be provided at the employer's expense in a rule or a standard promulgated under this act. When promulgating a rule or a standard concerning personal protective equipment, the director shall use at least the following criteria in determining who should pay for the equipment:
  - (i) Whether the equipment is transferable between employees.
  - (ii) Whether the equipment is maintained by the employer.
  - (iii) Whether the equipment generally remains at the work site after the work activity has been completed.
  - (iv) The amount of personal use involved with the equipment.

An employee shall:

- a) Comply with rules and standards promulgated, and with orders issued pursuant to this act.
- b) Not remove, displace, damage, destroy, or carry off a safeguard furnished or provided for use in a place of employment, or interfere in any way with the use thereof by any other person.

- c) Poison oak is a vine like poison ivy in appearance, except that the edges of the leaves are more deeply notched. The leaves are arranged in characteristic groups of three.
- d) Poison sumac is a shrub or small tree. Clusters of white berries identify the poison sumac from the nonpoisonous sumac.
- e) If exposed to a poisonous plant, wash the affected area of your body promptly and thoroughly with water and soap. The rash starts with redness and intense itching. Later, little blisters appear. If a rash had already developed, do not wash it. Avoid scratching. Get medical attention.

#### **Power Lines**

- a) Regard all power lines as dangerous.
- b) Avoid actual contact with or possible arcing to any equipment from electrical lines. In damp conditions, double your precautions.
- c) Power line elevations - do not make a "direct" measurement of the height of a power line, even with a fiberglass rod. Triangulate these vertical distances.

#### **Electrical Storms**

- a) If an electrical storm approaches while you are working, discontinue working and seek shelter.
- b) Do not use any metal objects, such as chains, transits, E.D.M.'s, levels, range poles or Philadelphia rods during an electrical storm.
- c) The best thing to do is to get into your truck or building and wait out the storm.

#### **Confined Space**

mPower employees would not be subject to confined space unless we do visual inspection of manholes/underground cabinets where entry is required. Any employee that may be exposed to a confined space entry will be required to complete a course that certifies them in OSHA Regulations 29 CFR 1910.146 and 29 CFR 1926 Subpart AA (1926.1207). Given the reasoning for entry, an employee would also need to complete the NASSCO PACP, LACP, & MACP certification.

#### **INDIVIDUAL SAFETY AND HEALTH PROGRAMS**

Michigan Occupational Health and Safety Rules and Regulations specifies various individual programs that may or may not be applicable to our company. If written programs or procedures are not incorporated or provided as appendixes into this document, they will be made available separately (if applicable) or will be developed separately and employees notified when the company knows it will be exposed to such safety hazards.



### **SAFETY INDOCTRINATION**

I hereby acknowledge that I have been briefed on the contents of mPower Innovations' Health and Safety Program, and the above subjects were discussed and explained to me.

I further certify that it is my responsibility to comply with the safety provisions and I understand that my own safety as well as the safety of my co-workers, the general public, and department equipment is an inherent obligation and that it is a part of my duties and responsibilities to identify, correct, eliminate, remove, and report hazardous conditions and unsafe practices that could result in an accident.

---

Employee Signature

---

Supervisor Signature

---

Name (Print)

---

Name (Print)

---

Job Title

---

Job Title

---

Date

---

Date



FRONGEO-01

RDECKER

## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
1/27/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> License # 1495370 <b>Schultheis Insurance Agency</b> 32 N Weinbach Avenue Evansville, IN 47711	<b>CONTACT NAME:</b> David Baker <b>PHONE</b> (A/C, No, Ext): 2247 <b>FAX</b> (A/C, No): <b>E-MAIL ADDRESS:</b> dbaker@schultheis.net
<b>INSURER(S) AFFORDING COVERAGE</b>	
<b>INSURER A:</b> Cincinnati Insurance Company	<b>NAIC #</b> 10677
<b>INSURER B:</b> Cincinnati Indemnity Company	<b>NAIC #</b> 10677
<b>INSURER C:</b> Old Republic Insurance Company	<b>NAIC #</b> 24147
<b>INSURER D:</b>	
<b>INSURER E:</b>	
<b>INSURER F:</b>	

**INSURED**  
  
**Frontier Geospatial LLC**  
PO Box 23070  
Evansville, IN 47710

## COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER <b>General Aggregate</b>			EPP 0218143	11/11/2021	11/11/2022	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 500,000 MED EXP (Any one person) \$ 10,000 PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COM/OP AGG \$ 2,000,000
A	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY			EPP 0218143	11/11/2021	11/11/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE  DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$
B	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below Y/N <input checked="" type="checkbox"/> N/A			EWC 0406381	11/11/2021	11/11/2022	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$ 100,000 E.L. DISEASE - EA EMPLOYEE \$ 100,000 E.L. DISEASE - POLICY LIMIT \$ 500,000
C	<b>Commercial Aircraft</b>			PB222862 01	6/24/2021	6/24/2022	limit \$ 17,200

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

## CERTIFICATE HOLDER

City of Lawrenceburg Indiana  
230 Walnut St.  
Lawrenceburg, IN 47025

## CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



MPOWTEC-01

TLAURIDSEN

## CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

1/28/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Danielson Insurance Agency, Inc. 801 Pyle Drive Kingsford, MI 49802	<b>CONTACT NAME:</b>	
	<b>PHONE (A/C, No, Ext):</b> (906) 779-1900	<b>FAX (A/C, No):</b> (906) 779-1930
	<b>E-MAIL ADDRESS:</b>	
	<b>INSURER(S) AFFORDING COVERAGE</b>	
<b>INSURED</b>  mPower Technologies, Inc., DbA mPower Innovations Po Box 308 Iron Mountain, MI 49801	<b>INSURER A:</b> Beazley Insurance Company, Inc.	
	<b>INSURER B:</b>	
	<b>INSURER C:</b>	
	<b>INSURER D:</b>	
	<b>INSURER E:</b>	
	<b>INSURER F:</b>	

## COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	<b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PROJECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COM/OP AGG \$ COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$
	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY						
	<b>UMBRELLA LIAB</b> <input type="checkbox"/> OCCUR <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE  DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) <input type="checkbox"/> Y/N <input type="checkbox"/> N/A If yes, describe under DESCRIPTION OF OPERATIONS below						PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	<b>Professional &amp; Cyber</b>			WG00004406AA	1/1/2022	1/1/2023	Limit 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)  
City of Lawrenceburg is named as Additional Insured with respect to Professional Liability coverage

## CERTIFICATE HOLDER

## CANCELLATION

City of Lawrenceburg  
230 Walnut Street  
Lawrenceburg, IN 47025

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Tina Lauridsen, CIC, CISR



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

1/25/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Simone Insurance Agency 118 N Stephenson Ave  Iron Mountain MI 49801		<b>CONTACT NAME:</b> <b>PHONE (A/C, No, Ext):</b> 906-774-2066 <b>FAX (A/C, No):</b> 906-774-0198 <b>E-MAIL ADDRESS:</b>	
		<b>INSURER(S) AFFORDING COVERAGE</b>	
		<b>INSURER A:</b> Grand River	
		<b>INSURER B:</b>	
		<b>INSURER C:</b>	
		<b>INSURER D:</b>	
		<b>INSURER E:</b>	
		<b>INSURER F:</b>	

**COVERAGES** **CERTIFICATE NUMBER:** 20220125131518743 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL SUBR INSD WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:		CP 5008179	12/28/2021	12/28/2022	EACH OCCURRENCE \$ 1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$ 100,000 MED EXP (Any one person) \$ Excluded PERSONAL & ADV INJURY \$ 1,000,000 GENERAL AGGREGATE \$ 2,000,000 PRODUCTS - COMP/OP AGG \$ 2,000,000 \$
A	<b>AUTOMOBILE LIABILITY</b> <input type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input checked="" type="checkbox"/> SCHEDULED AUTOS <input checked="" type="checkbox"/> HIRED AUTOS ONLY <input checked="" type="checkbox"/> NON-OWNED AUTOS ONLY		CA 5003698	12/28/2021	12/28/2022	COMBINED SINGLE LIMIT (Ea accident) \$ 1,000,000 BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
A	<input checked="" type="checkbox"/> <b>UMBRELLA LIAB</b> <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$		UM 5002222	12/28/2021	12/28/2022	EACH OCCURRENCE \$ 1,000,000 AGGREGATE \$ 1,000,000 \$
	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input type="checkbox"/> N/A				PER STATUTE <input type="checkbox"/> OTH-ER <input type="checkbox"/> E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

**CERTIFICATE HOLDER****CANCELLATION**

City of Lawrenceburg  
230 Walnut St.  
Lawrenceburg, IN 47025

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

© 1988-2015 ACORD CORPORATION. All rights reserved.



# CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)  
01/25/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> USG INSURANCE SERVICES INC 40524500 1000 TOWN CENTER WAY STE 300 CANONSBURG PA 15317	<b>CONTACT NAME:</b>		
	<b>PHONE</b> (800) 886-3897 (A/C, No, Ext):	<b>FAX</b> (724) 265-5751 (A/C, No):	
	<b>E-MAIL ADDRESS:</b>		
	<b>INSURER(S) AFFORDING COVERAGE</b>		
<b>INSURED</b> MPOWER TECHNOLOGIES INC PO BOX 308 IRON MOUNTAIN MI 49801-0308	<b>INSURER A:</b> Hartford Fire and Its P&C Affiliates		<b>NAIC#</b> 00914
	<b>INSURER B:</b>		
	<b>INSURER C:</b>		
	<b>INSURER D:</b>		
	<b>INSURER E:</b>		
	<b>INSURER F:</b>		

## COVERAGES

## CERTIFICATE NUMBER:

## REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/Y YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:						EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)
	UMBRELLA LIAB EXCESS LIAB <input type="checkbox"/> OCCUR CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION \$						EACH OCCURRENCE AGGREGATE
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N <input type="checkbox"/>	N/A	40 WEC AE6NMW	01/01/2022	01/01/2023	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTH-ER E.L. EACH ACCIDENT \$1,000,000 E.L. DISEASE -EA EMPLOYEE \$1,000,000 E.L. DISEASE - POLICY LIMIT \$1,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Those usual to the Insured's Operations.

## CERTIFICATE HOLDER

City of Lawrenceburg  
230 WALNUT ST  
LAWRENCEBURG IN 47025

## CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

*Susan L. Castaneda*

© 1988-2015 ACORD CORPORATION. All rights reserved.

## Appendix 1: Schedule of Proposed Fees

<b>Electric System Features (Given or Estimated)</b>	<b>Est. Quantity</b>	<b>Price Per Feature</b>	<b>Total</b>
Est Number of Poles (Pri and Sec)	2,300	see below	
Est Number of Meters	2,300	see below	
Est Number of UG Structures	300	estimated to support pricing	
Est Number of Other Devices (Fuse/Switch/Cap/etc..)	400	estimated to support pricing	
Est Number of Meters / Transformer Bank	2.0	estimated to support pricing	
<b>Electric System - Data Collection</b>	<b>Est. Quantity</b>	<b>Price Per Feature</b>	<b>Total</b>
Pole Collection w/ photo	2,300	\$14.00	\$32,200
Lights - included with pole	200	\$0.00	\$0
Polemount Transformer - included with pole	950	\$0.00	\$0
Padmount Transformer Collection	200	\$6.00	\$1,200
UG Struct Collection (Not opened)	300	\$5.00	\$1,500
Meter Collection - Electric	2,300	\$7.00	\$16,100
Other Devices Collection (Fuse/Cap/Switch/etc.) (Mandatory)	300	\$6.00	\$1,800
Linework -Electric Conductors	5,400	\$2.00	\$10,800
<b>Communications System - Data Collection</b>	<b>Est. Quantity</b>	<b>Price Per Feature</b>	<b>Total</b>
Fiber Features - Pedestal, Handhole, Cabinet - includes photo	3,000	\$6.00	\$18,000
Fiber Service Drops	450	\$2.00	\$900
Linework -Fiber Main Lines	6,450	\$1.00	\$6,450
<b>Water System - Data Collection</b>	<b>Est. Quantity</b>	<b>Price Per Feature</b>	<b>Total</b>
Water Valves	1,000	\$8.00	\$8,000
Hydrants	375	\$8.00	\$3,000
Water Meters	1,730	\$7.00	\$12,110
<b>Wastewater System - Data Collection</b>	<b>Est. Quantity</b>	<b>Price Per Feature</b>	<b>Total</b>
Sewer Lateral Cleanouts (GPS)	500	\$8.50	\$4,250.00
Sewer Laterals (transferred from paper maps)	2000	\$5.00	\$10,000.00
Sanitary Manholes	500	\$16.00	\$8,000.00
Low pressure sewer service pits	300	\$7.00	\$2,100.00
Lift Stations	13	\$150.00	\$1,950.00
<b>Storm System - Data Collection</b>	<b>Est. Quantity</b>	<b>Price Per Feature</b>	<b>Total</b>
Storm Manholes	3,272	\$16.00	\$52,352.00
Storm Inlets (est.)	800	\$5.00	\$4,000.00
<b>Final Pricing and Included Services &amp; Expenses</b>			
Map and Data Cleanup	included		
Error Checking : Re-fielding work	included		
Project Administration of Data Collection and Mapping	included		
Total travel, lodging and per diem expenses Estimate	included		
<b>Total Project Costs</b>			<b>\$194,712.00</b>



## APPENDIX 2

### Proposed Project & Training

#### Schedule

Lawrenceburg, IN

Sample Schedule - Dates expected to change

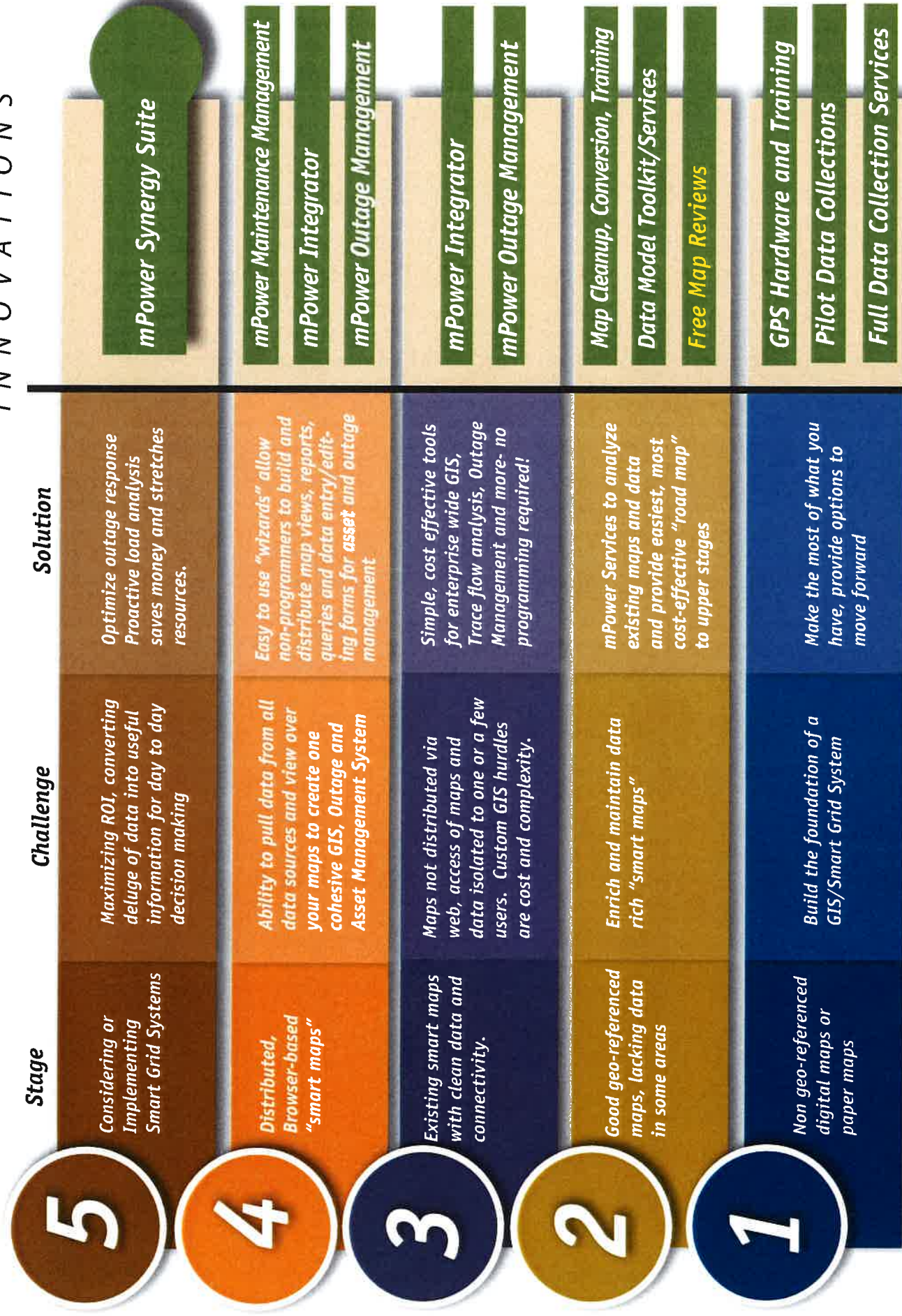
Project Start: 6/15/2022

Display Week: 0

Task	Start Date	End Date	15-Jun-2022	15-Jun-2022	15-Jun-2022	22-Jun-2022	22-Jun-2022	22-Jun-2022	22-Jun-2022	29-Jun-2022	29-Jun-2022	29-Jun-2022	29-Jun-2022	29-Jun-2022	6-Jul-2022	6-Jul-2022	6-Jul-2022	6-Jul-2022	6-Jul-2022	13-Jul-2022	13-Jul-2022
Project Award																					
Start Date	15-Jun-22	12-Nov-22																			
Approve Proposal	15-Jun-22	15-Jun-22																			
Issue Deposit Payment	15-Jun-22	15-Jun-22																			
Team Contact List	15-Jun-22	20-Jun-22																			
Initial Project Definition (Kick off Meeting)																					
Meter Database - gather Initial data	1-Jul-22	5-Jul-22																			
Determin Pilot Area (if required)	1-Jul-22	5-Jul-22																			
Determin Location of Database and Software	1-Jul-22	5-Jul-22																			
Update and Assign Tasks	1-Jul-22	5-Jul-22																			
Submit Schedule	1-Jul-22	5-Jul-22																			
Review Safety Requirements	1-Jul-22	5-Jul-22																			
Approve Working Schedule	5-Jul-22	5-Jul-22																			
Design																					
Confirm Equipment	5-Jul-22	5-Jul-22																			
Project Setup and Configuration																					
Identify Collection Parameters and Attributes for each system/Safety Process	8-Jul-22	10-Jul-22																			
Field Collection of Test Areas/Pilot	10-Jul-22	13-Jul-22																			
Define and Update Processes & Work Areas	14-Jul-22	14-Jul-22																			
Create Databases and Verify Working Environment	10-Jul-22	10-Jul-22																			
Define Progress Meeting Schedule	10-Jul-22	10-Jul-22																			
Adjust or Change Schedules as Needed	14-Jul-22	14-Jul-22																			
GPS Collection																					
Field Collection	14-Jul-22	31-Oct-22																			
O/C and Mapping Checks	31-Jul-22	5-Nov-22																			
Customer Training																					
GPS Equipment and Methods Familiarization	1-Sep-22	4-Sep-22																			
Field Collection Training (Accompany mPower)*	5-Sep-22	22-Oct-22																			
Post Process and Import Data to GIS	5-Sep-22	22-Oct-22																			
* Opportunity to learn while assisting mPower in challenging locations																					
Review Documentation and Workflows Provided to the Customer	15-Oct-22	22-Oct-22																			
Delivery																					
Review Meeting	10-Nov-22	12-Nov-22																			
Plan to Keep System Updated (Reference Training Above)	10-Nov-22	12-Nov-22																			
Next Steps and Future Requirements	10-Nov-22	12-Nov-22																			
Final Delivery																					

## APPENDIX 3

### Stages of GIS and Smart Grid Deployment





## APPENDIX 4: Ex. Electric Feature List (DDF)

### Power Poles

Attribute	Example
Pole Type	Primary, Secondary, Guy, Streetlight
Height	40
Class	4
Vintage	1998
Material	Wood
Pole Tag Number	1234567
Needs Attention	Broken Cross arm
Primary Assembly Codes used	RUS or REA (C1.11)
Primary Assembly Codes used	RUS or REA (K1.2)
Joint Use Attachments Type	Cable
Joint Use Attachment Count	2
Primary Riser Count	1
Secondary Riser Count	1
Ground Wire	Yes/No
Ownership	Name
Light Type	HPS, MVP, LED
Guy / Anchor Quantity	2

### OH / UG Transformer

Attribute	Example
Transformer Number	1234
Transformer Size 1 (if visible)	25
Transformer Size 2 (if visible)	50
Transformer Size 3 (if visible)	25
Transformer Type	CSP, Conventional, Padmount
Damaged	Comment
Phase	A, B, C, ABC

### Protection Devices

Attribute	Example
Device Number	12345
Device Type	OCR / FUSE
Status	NO or NC
Device Size	15
Phase	A, B, C, ABC

### Capacitors

Attribute	Example
Capacitor Number (if visible)	12345
Capacitor Size (kVAR)	100
Type	FIXED, SWITCHED
Damaged	Comment

## Regulators

Attribute	Example
Regulator Number (if visible)	12345
Type/Mounted	Platform/Pole
Damaged	Comment
Phase	A, B, C, ABC

## URD Structure

Attribute	Example
Equipment number (if visible)	12345
Type	Junction Box, Switchgear, Pedestal, Vault
Primary or Secondary	Primary
Damaged	

## Primary Wire

Attribute	Example
Conductor Type	1/0 ACSR
Type	Primary
Feeder	B7114
Substation	Sub1
Placement	OH or UG
Phase	A, B, C, ABC

## Secondary Wire

Attribute	Example
Conductor Type	2 TPX
Type	Secondary, Service
Feeder	B7114
Substation	Sub1
Placement	OH or UG
Phase	A, B, C, ABC

## Consumer

Attribute	Example
Meter Number	1234
Consumer Type	Residential, Commercial
Phase	A, B, C, ABC
Meter Assembly	M8

## Appendix 5

### Pilot Project Plan of Action

- **KICKOFF AND DATA SETUP:**

The first step in starting the project is scheduling one to two days of time with mPower and the Customer to take an all-inclusive look at the project. This time is required to establish complete data dictionaries in the GPS units, review current system maps, update assembly types and naming conventions, go over safety issues, determine the amount of assistance required by/from Lawrenceburg, establish schedules that coincide with areas where work will be performed so customers and residents can be notified.

- **PILOT PROJECT:**

The customer and mPower can define good representative areas for each utility to be collected. mPower will work with Lawrenceburg to identify the areas, the numbers of customers or endpoints involved and the extent of the pilot area(s) i.e., source to load, well/tank to meter, collection point to treatment plant etc. Beginning the project in this way allows mPower and Lawrenceburg the opportunity to “round trip” the data from the collection equipment into the maps and make any adjustments to the process or data schema before proceeding with the “production” collection. Any work done during the pilot phase will be credited against the overall bid

Pilot Data will be delivered in a mutually agreed upon format. **Upon completion of the Pilot a trial version of mPower’s applicable software solutions will be utilized so that Customer’s personnel and board members can monitor mapping progress and leverage the power of mPower’s Software from the very beginning of this project (see below).**

- **QUALITY CONTROL & SAFETY MEASURES:**

Inventories are conducted with Trimble Geo7 Series GPS handheld units. Crews utilize any and all resources that are available while in the field: these include hard-copy maps, 4-wheel drive vehicles, radio communications, safety equipment, etc. mPower is aware and sensitive to landowner concerns regarding access to private and public property. We insist that field crews are provided with Harrisonville’s vehicle decals, safety vests, business cards, and/or other company apparel. In addition, we will work with Harrisonville personnel to inform the public of the field collection.

To stream-line communication and get a better feel of the overall project status, mPower utilizes our **mPower Integrator** software (at no-cost) and makes this accessible to Harrisonville personnel. **Integrator** is a powerful, user-friendly web-based portal that gives prompt access to your GPS’d data. Any and all information collected will be available through secure channels on the mPower Integrator software which provides browser-based access to all personnel approved by Harrisonville. Information will be available on conductor sizes, transformer data, two-way feeds, locates, etc. Utilizing **Integrator** will allow for easy data access on inventoried equipment during the collection process.

**Investment (sample – dependent upon Customer's pilot area)**

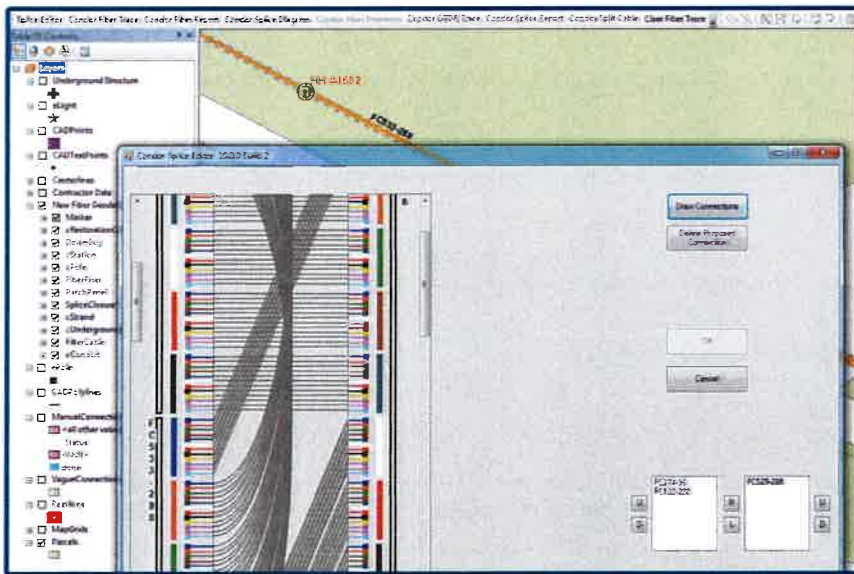
<b>Services - Data Setup - Pilot</b>	<b>Est. Quantity (Days)</b>	<b>Price Per Day</b>	<b>Total</b>
<b>Consulting</b> - "Kick-off" discovery meeting to discuss all aspects of the project. Collection of Test Area and Configuration of Data Dictionary and Attributes	2	\$1,300	\$2,600
<b>Collection</b> – Field collection of estimated features (listed below)	5	\$1,300	\$6,500
<b>Project Deliverable</b> - Mapping / Data Work / Project Management	3	\$1,300	\$3,900
<b>Total for Pilot</b>			<b>\$13,000</b>

<b>Services - Pilot Data Collection</b>	<b>Est. Quantity</b>	<b>Price Per Feature</b>	<b>Total</b>
Pole Collection	135		
Lights	25		
Transformer Collection	65		
UG Structure Collection	30		
Meter Collection	200		
Other Devices Collection (Fuse/Cap/Switch/etc.)	50		
Photos (Poles)	135		
Electric Linework	400		
Parent Child Connected Model for Tracing	TBD		
Map and Data Cleanup	Included		
Error Checking : Re-fielding work	Included		
Project Administration	Included		
Estimated Total Days Onsite (GPS)	8		
Total Travel Estimate	Included		
<b>Total for Pilot</b>			<b>\$13,000</b>

# Condor

## Fiber and Coax Management

*Manage your fiber and coax network with this powerful Esri add-on tool*



Condor is an ArcGIS toolset built on top of Esri's Telecommunications Geodatabase Framework that supports the mapping, analysis and design functions of a fiber-based and/or coax-based telecommunications network. The toolset has easy to use forms for splicing operations, patch panel configurations, coax equipment design and various analysis functions such as OTDR support, fiber tracing through splice closures, coax signal and voltage calculations and fiber cable utilization.

**Fiber Splicing** - Drag and drop functionality for creating fiber splices in Splice Closures, Patch Panels and Optical Splitters.

**Reporting** - Easily generate reports showing the splices inside a Splice Closure, Patch Panel or Optical Splitters.

**OTDR Trace** - Allows the user to find a location based on the readings obtained from an Optical Time Domain Reflectometer.

**Fiber Trace** - Select a fiber cable, and one fiber inside that cable to start an optical trace showing the route of the light out of both ends of the fiber in that cable.



