



MadisonConnect Project Plan:

January 29, 2021

Executive Summary

Madison County Government is partnering with Craley™ Group, sole source provider for this National Sanitation Foundation (NSF) approved wet fiber technology, to deploy Craley™ Atlantis Hydrotec® Pipe in Pipe Solution (herein referred to as Pipe-in-a-Pipe) through our Madison County waterlines to create a fiber backbone that will allow for a variety of projects including:

- Project 1: Emergency Public Safety Radio Network Backbone
- Project 2: Bluegrass Regional Radio Network (BRRN)
- Project 3: Broadband Deployment to Rural Madison County

Placing fiber in waterlines is an effective way to reduce the cost of connectivity in various ways including but not limited to reducing the expense associated with traditional boring of fiber optics, while expediting the permitting process by running the fiber through NSF approved conduit within an existing waterline.

Due to the complexity of the projects above, Madison County Government is breaking this project into three phases.

- Phase 1: Madison County Fiber Deployment
 - Lexington Road Links (Attachment A: Craley™ Fibre Full Study: Lexington Road Links)
 - Jolly Ridge Links (Attachment B: Craley™ Fibre Full Study: Jolly Ridge Links)
- Phase 2: Fayette County Deployment
- Phase 3: Scott County Deployment

Contact Information

The point of contact will be:

Colleen Chaney (Primary Contact)
Madison County Deputy Judge
Office phone: 859-624-4700 x 3
colleen.chaney@madisoncountky.us

Timeline for Action (Phase 1):

January/February 2021

- Submit plan to Division of Water
- Finalize contract negotiations with the Craley™ Group
- Determine Madison County Craley™ fiber deployment schedule

March 2021

- Product delivery of Pipe-in-a-Pipe product from Craley™
- Training meeting with Craley™ and Madison County team
- Deploy first line in Madison County
- Hold debrief meeting upon first deployment completion of Lexington Road line
- Modify plan (if necessary) and deploy Jolly Ridge Run

May 2021

- Initiate process to begin fiber deployment on Phase 2 and Phase 3 for eight (8) remaining tower sites.

Partner Public Water Systems

Madison County Utilities

John Clark (Manager)

Jared Webb (Supervisor)

Jim Carr, Board Chairman

Phone: 859-624-1735

Email: info@madisoncountyutilities.com

Kirksville Water Association

Mike Agee (Manager)

Phone: 859-624-4715

Email: info@kirksvillewaterassociation.com

Map of Water Lines Impacted by the Project

Full map with line lengths are provided in Attachment A: Craley™ Fibre Full Study: Lexington Road Links and Attachment B: Craley™ Fibre Full Study: Jolly Ridge Links

Community Engagement Activities

- Public Outreach
 - Participation poll
 - Fiscal Court public meeting
 - Social media outreach
 - Newspaper and radio
 - Press conference
- Public inquiries or concerns to:
 - Madison County Utilities (technical issues related to waterlines)
 - Madison County Government (issues related to broadband)

Pre-installation Line Work

Studies related to vault and pipe-in-a-pipe instillation have been performed on two of the planned runs. In addition, a line flow and pipe material analysis was completed.

Installation Overview

Notification

Only events that would occur during installation would fall under the same processes that currently exist for the water district/association's existing procedures. All protocols regarding notifications will be followed in compliance with Madison County Utilities and Kirksville Water Association's plans that include but not limited to:

- Boil Water advisories;
- Disinfection procedures;
- State Agency notifications; and
- Customer notifications.

Installation Procedure

An unofficial installation procedure outline is:

Step 1: Start at head of the run and expose the line

Step 2.: Support water line with gravel

Step 3: Insert utility vault

Step 4: Clamp the water pipe with Craley™ fittings at both ends of the run near valves

Step 5: Drop pressure on the line

Step 6: Tap both sides of line near valves through the Craley™ fittings

Step 7: Insert pipe through the head end fitting

Step 8: Craley™ line parachute activates and pushes pipe-in-pipe fiber through water line to next fitting

Step 9: Pull pipe-in-a-pipe bottom end fitting

Step 10: Back fill exposed line

Step 11: Have loop of pipe-in-a-pipe in utility vault

Step 12: Repeat steps 1-11 for next run

Step 13: Water district/association implements water treatment and testing procedures