

TOWN OF



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Mayor

CHRIS KENNEDY  
Town Manager

PAUL S. MESSICK, JR.  
Town Attorney

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BOARD OF COMMISSIONERS

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CHARTERED 1787

**A RESOLUTION EXEMPTING TOWN OF PITTSBORO AWIA RISK AND  
RESILIENCY ASSESSMENT FROM G.S. 143-64.31**

**WHEREAS**, G.S. 143-64.31 requires the initial solicitation and evaluation of firms to perform architectural, engineering, surveying, construction management-at-risk services, and design-build services (collectively “design services”) to be based on qualifications and without regard to fee.

**WHEREAS**, the Town proposes to enter one or more contracts for design services for work on *AWIA Risk and Resiliency Assessment*; and

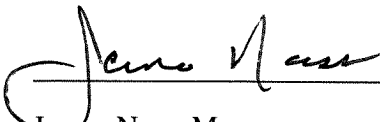
**WHEREAS**, G.S. 143-64.32 authorizes units of local government to exempt contracts for design services from the qualifications-based selection requirements of G.S. 143-64.31 if the estimated fee is less than \$50,000; and

**WHEREAS**, the estimated fee for design services for the above-described project is less than \$50,000.

**NOW, THEREFORE, BE IT RESOLVED** that the above-described project is hereby exempted from the provisions of G.S. 143-64.31 due to an estimated fee of less than \$50,000 and the compressed time available to complete the assessment no later than June 30, 2021 per the schedule established by the US EPA. The Town Manager or designee is hereby authorized to contract with a Professional Engineering Firm to complete the assessment according to EPA standards and schedules.

Adopted this 11<sup>th</sup> day of January, 2021.

TOWN OF PITTSBORO

By:   
James Nass, Mayor

ATTEST:



Cassandra M. Bullock, Town Clerk

# Pittsboro AWIA Risk and Resilience

## “Modified Minimum Compliance” Approach

*For Reference, Revised December 17, 2020*

### Background

America’s Water Infrastructure Act of 2018 requires that all community water systems serving populations greater than 3,300 persons will assess the risks to, and resilience of, its system (referred to hereinafter as the Risk and Resilience Assessment or “RRA”). The RRA will include the following elements:

- The risk to the system from malevolent acts and natural hazards
- The resilience of the infrastructure, including SCADA/cyber resilience
- The monitoring practices of the system
- The financial infrastructure of the system
- The use, storage, or handling of various chemicals by the system
- The operation and maintenance of the system

The detailed RRA will culminate with an implementation plan for capital and operational needs for risk and resilience management of the system. The assessment will be finalized and then certified, by the utility, to the Administrator of the Environmental Protection Agency (EPA) by June 30, 2021, in the case of systems (i.e. Town of Pittsboro) serving a population between 3,300 and <50,000 people.

The RRA must be reviewed at least every five years to determine if the assessment needs to be revised. Upon review, the water system will recertify the original assessment or certify a revision to the assessment. Within six months of completion of the RRA, America’s Water Infrastructure Act of 2018 also requires a letter of certification, by the utility, to EPA that the Emergency Response Plan (ERP) for the utility is updated, and at least every 5 years thereafter. For Town of Pittsboro (Town) ERP certification is required by December 31, 2021. The ERP must contain the following elements:

- Strategies and resources to improve the resilience of the system, including the physical security and cybersecurity of the system;
- Plans and procedures that can be implemented, and identification of equipment that can be utilized, in the event of a malevolent act or natural hazard that threatens the ability of the community water system to deliver safe drinking water;
- Actions, procedures, and equipment which can obviate or significantly lessen the impact of a malevolent act or natural hazard on the public health and the safety and supply of drinking water provided to communities and individuals, including the development of alternative source water options, relocation of water intakes, and construction of flood protection barriers; and
- Strategies that can be used to aid in the detection of malevolent acts or natural hazards that threaten the security or resilience of the system.

The ERP can be developed based on existing emergency plans and is required to include response protocols for any type of emergency or event identified as a threat during the RRA. The suggested format for the ERP is based on the Federal Emergency Management Agency

Comprehensive Preparedness Guide (CPG101) and on American Water Works Association guidance M19, with sections including the basic plan, hazard-specific procedures, and communication/coordination information. Community water systems shall, to the extent possible, coordinate with local emergency planning committees established under the Emergency Planning and Community Right-To-Know Act of 1986 when preparing or revising an assessment or emergency response plan under AWIA. Further, systems must maintain a copy of the assessment and emergency response plan for five years after certifying the plan to the EPA.

## Project Approach

Recognizing every utility is unique and has different expectations for the process, level of effort, and financial commitment for AWIA compliance, HDR has excelled in three levels of delivery for risk assessments. With scalable levels of effort, each of the following delivery methods utilizes a series of workshops to facilitate the chosen process:

Key Assessment Steps	Minimum Compliance	Intermediate Assessment	Interactive Detailed Evaluation
1	Qualitatively Identify Potential Threats and Hazards	Qualitatively Identify Critical Assets and Threats	Review and Rank Most Critical Assets
2			Identify Highest Priority Threats
3		HDR Assists County in Quantitative Risk Analysis Using Standardized Metrics	Understand Consequences or Threats Using Individualized Metrics
4			Complete Vulnerability Analysis
5	Understand Your Greatest Risks		
6	Develop Generalized Risk Profile	Develop Detailed Risk Profile	Prioritize a Path to Resilience
7			Develop Mitigation Measures
	<ul style="list-style-type: none"> <li>• Compliance Memorandum</li> <li>• ERP</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance Memorandum</li> <li>• ERP</li> </ul>	<ul style="list-style-type: none"> <li>• RRA</li> <li>• Emergency Management Gap Assessment</li> <li>• Incident Action Planning</li> <li>• ERP</li> </ul>

DESCRIPTION	HIGH UTILITY EFFORT	MEDIUM UTILITY EFFORT	LOW UTILITY EFFORT
1. Phase I RRA Only, or Expand for ERP*	1. Encumber & Authorize RRA Only	Encumber Both RRA & ERP Authorize RRA Only	Authorize Both RRA & ERP
2. Facilitated Workshop Approach to the Three Risk Areas (RA 2C)	2. RRA - 1-2 ERP - 0-1 Staff Support High	RRA - 2-4 ERP - 2 Staff Support Medium	RRA - 4-5 ERP - 2-3 Staff Support Minimal 'No Homework'
2A. Physical Security Assessment	Utility performs all field-related security assessments	3. Utility performs most assessments, identifies 1 to 2 days of field assessment by Consultant	Consultant performs field review of all critical assets
2B. Natural Hazards and Malevolent Acts Assessments	Utility performs all assessments and develops mitigation measures	4. Utility has some assessments done, needs work plan for partial assessments and/or develop mitigation measures	Consultant performs full assessment with J100 approach
2C. Cyber Assessment	5. AWWA Cyber Tool (New Version Sept 2018) or Similar	Expanded Assessment to develop programmatic budget for add'l mitigation	Comprehensive Assessment
3. Documented Report of Findings	Basic RRA outline, Utility to prepare, Consultant may provide J100 Tables	6. 'Summary Version' of both or either report, including summary of findings	Full RRA & ERP Reports by Consultant
4. Implementation Planning	Prepared by Utility	7. Outlined by Consultant	Prepared by Consultant
5. Facilitated Training Exercises (Not Required)	8. Not Included	Training Exercise Outlined	Consultant prepares & facilitates a 1 to 2 day training program
6. Continuity of Operations Plan (Not Required)	9. Prepared by Utility	Outlined or Updated by Consultant	Prepared by Consultant

## Scope Outline

### Risk and Resilience Assessment (RRA) - Funded in FY2020-21

Using the AWWA / RCAP's Small System Risk and Resilience Assessment Checklist, HDR can assist the Town in meeting the minimum requirements of AWIA at the lowest cost. This process qualitatively identifies potential negative impacts from threats and hazards to the utility's most critical assets. Based on this approach, the Town develops a generalized risk profile to support risk mitigation measure identification and prioritization. HDR can then prepare a summary memorandum documenting compliance with AWIA.

#### PROJECT KICKOFF

- HDR will provide a written data request of the data and information required to support development of the RRA
- Workshop 1: Kickoff
  - Introduce project team members' roles and responsibilities
  - HDR will introduce and guide the Town through the AWWA checklist for qualitative self-assessment of threat and asset pairings
  - Occur via virtual web conference

#### DATA COLLECTION AND REVIEW

- One day site visit of the Town's critical water system assets
  - Data collection and risk understanding to support both RRA and ERP

- The Town will utilize the AWWA / RCAP's Small System Risk and Resilience Assessment Checklist to complete its qualitative self-assessment of threat and asset pairings.
- The Town will utilize and self-complete the AWWA Cybersecurity Guidance Tool Report (Excel based) and provide to HDR for inclusion in the final report.

#### RRA DEVELOPMENT

- HDR to review Town's self-assessed risk checklists and provide recommendations on any additional risk factors or mitigation measures
- HDR production of Draft RRA
- Workshop 2: Present Draft RRA Report
  - Present draft RRA report for the Town's review and comment
  - Determination of final risk mitigation measure recommendations
  - Occur via virtual web conference
- HDR will provide instructions for Certification of RRA Completion to EPA

#### **Emergency Response Plan (ERP) - Funded in FY2021-22**

HDR will utilize a workshop approach to comply with the ERP portions of AWIA and facilitate a collaborative process. First, HDR will review the Town's existing emergency management documentation and AWIA ERP requirements to identify where additional documentation or planning is needed. HDR will then guide the Town to develop checklists for response to specific threats. HDR will then prepare an emergency response plan utilizing Town provided information.

#### ERP KICKOFF

- HDR review and gap analysis of Town's Emergency Response documentation for AWIA compliance
- Workshop 1: Kickoff
  - Kickoff meeting held via virtual web conference to introduce and guide the Town through emergency procedure development
  - Provide Town with template Incident Action Checklists (IACs) for high-risk threats identified in the RRA
  - Provide Town with template Incident Management Team (IMT) chart

#### DATA COLLECTION AND REVIEW

- HDR reviews IAC's and IMT after client feedback to provide additional guidance and resources as needed
- Brief follow-up Meeting to discuss emergency procedures

#### ERP DEVELOPMENT

- HDR production of Draft ERP document
- Workshop 2: Present Draft ERP
  - Present draft ERP for client review and comment
  - Occur via virtual web conference
- HDR will provide instructions for Certification of ERP Completion to EPA



## MEMORANDUM

**TO:** Mayor and Board of Commissioners

**VIA:** Chris Kennedy, AICP, Town Manager

**FROM:** Kent Jackson, PE, Engineering Director

**DATE:** January 11, 2021

**RE:** Town of Pittsboro AWIA Risk and Resiliency Assessment (RRA)

### Executive Summary:

The Town of Pittsboro is required by the Americas Water Infrastructure Act of 2018 to update and certify its Risk and Resiliency Assessment by June 30, 2021 and thereafter every 5 years. G.S. 143-64.31 requires the initial solicitation and evaluation of firms to perform architectural, engineering, surveying, construction management-at-risk services, and design-build services (collectively “design services”) to be based on qualifications and without regard to fee. G.S. 143-64.32 authorizes units of local government to exempt contracts for design services from the qualifications-based selection requirements of G.S. 143-64.31 if the estimated fee is less than \$50,000

In the essence of time, staff has secured a compliance approach from HDR, Inc. that will meet or exceed EPA’s requirements. HDR, Inc. has completed RRAs for many North Carolina water systems of all sizes and understands how to satisfy EPA on the first submittal. Staff proposes to exempt this project and engage with HDR, Inc. to complete the required study and certification.

### Background:

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certified, by the utility, to the Administrator of the Environmental Protection Agency (EPA) by June 30, 2021, in the case of systems serving a population between 3,300 and <50,000 people.

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**Budget Impact:**

The estimated maximum fee for the required system assessment, report, and certification is \$49,000. Staff collaboration with the consultant may further reduce the estimated fee. The attached budget amendment allocates the necessary funds.

**Options:**

1. Approve the Resolution.
2. Do not approve the Resolution.
3. Direct staff to evaluate other options.

**Recommended Action:**

Staff recommends approval of the Resolution thereby allowing work to begin right away to complete the Risk and Resiliency Assessment by the June 30, 2021 due date.

**Attachments:**

1. Resolution Exempting the Town of Pittsboro AWIA Risk and Resiliency Assessment from G.S. 143-65.31
2. Town of Pittsboro AWIA Approach, HDR Inc.