

TOWN OF SILER CITY

The Siler City Board of Commissioners met in Regular Session on **Monday, September 20, 2021**, at 6:30pm in Multipurpose at the Wrenn Memorial Library with Mayor Pro Tem Bray presiding. Commissioner Haiges gave the invocation with the recitation of the Pledge of Allegiance following. Commissioner Price recited the Town of Siler City Mission Statement and Commissioner Siler recited the Town of Siler City Vision Statement.

ELECTED TOWN OFFICIALS PRESENT: Norma Boone, Cindy Bray, Curtis Brown, Lewis Fadely, Bill Haiges, Thomas “Chip” Price, and Tony Siler

TOWN STAFF PRESENT: Attorney William Morgan, Planning Director Jack Meadows, Public Works Director Chris McCorquodale, Finance Director Tina Stroupe, Major James Underwood, and Town Clerk Jenifer Johnson, Zoom: Town Manager Roy Lynch

AGENDA ADJUSTMENTS/APPROVAL OF AGENDA

Lynch stated that on page 12 of the packet the second sentence should be removed from the draft minutes from September 7, 2021.

A motion to approve the agenda as amended was made by Commissioner Fadely, seconded by Commissioner Siler, and unanimously approved.

CONSENT

A motion to approve the consent agenda which includes the August 30, 2021 Minutes, September 7, 2021 Minutes (Incorporation by reference as if fully set forth herein Schedule B), Parks & Recreation Advisory Committee Appointment (Incorporation by reference as if fully set forth herein Schedule C), Hispanic Liaison Health Fair – 2nd Dose Street Closure Request (Incorporation by reference as if fully set forth herein Schedule D), Brownfields Grant Project Ordinance 2022.5 (Incorporation by reference as if fully set forth herein Schedule H) was made by Commissioner Fadely, seconded by Commissioner Boone, and unanimously approved.

PUBLIC HEARING

Town of Siler City proposes the following text amendments to the UDO: §18 Definitions (cease, discontinue, short term, temporary, vacant) and §117 Abandonment and Discontinuance of Nonconforming Situations (replace a single wide manufactured home located in the R-10 zoning district with a double wide manufactured home).

Mayor Pro Tem Bray opened the public hearing for the proposed text amendments to the UDO: §18 Definitions (cease, discontinue, short term, temporary, vacant) and §117 Abandonment and Discontinuance of Nonconforming Situations (replace a single wide manufactured home located in the R-10 zoning district with a double wide manufactured home) at 6:33pm. (Incorporation by reference as if fully set forth herein Schedule E)

Meadows shared the following documents: Ordinance amending Article 2 and 8, Aerial photo – 1113 N. 5th Ave., List of single wide manufactured homes located in R-10 district, Aerial Photo – E. 4th St./E. 5th St. area, Zoning map, Number of manufactured homes in the R-6 zoning district, worksheet.

Meadows stated that the proposed amendments were first discussed between town staff and a Siler City property owner. The planning board initiated the proposed amendments at the August 2021 planning board meeting.

Meadows shared the compatibility with existing Comprehensive Land Development Plan:

1. Amend ordinances as needed to accommodate uses or situations that arise and are not clearly covered by existing ordinances.
2. Amend ordinances as needed to address changes in physical, social, or environmental circumstances that make existing regulations unnecessary, outdated, or obsolete.
3. Modify the development ordinances to be more user-friendly where possible.

Meadows shared the Planning Board recommendation from the September 13, 2021, meeting:

The amendments are approved and consistent with the adopted LDP and any other officially adopted plan because the LDP recommends:

1. Amend ordinances as needed to accommodate uses or situations that arise and are not clearly covered by existing ordinances.
2. Amend ordinances as needed to address changes in physical, social, or environmental circumstances that make existing regulations unnecessary, outdated, or obsolete.
3. Modify the development ordinances to be more user-friendly where possible.

The Board of Commissioners asked Meadows to clarify some of the language on the amendment.

Mayor Pro Tem Bray closed the public hearing at 6:50pm.

A motion to approve the amendments to the UDO: §18 Definitions (cease, discontinue, short term, temporary, vacant) and §117 Abandonment and Discontinuance of Nonconforming Situations (replace a single wide manufactured home located in the R-10 zoning district with a double wide manufactured home) with the recommended changes and that the action is consistent with the adopted land development plan because amending ordinances as needed to accommodate uses or situations that arise and are not clearly covered by existing ordinances and approve the amendment because it is reasonable because amending ordinances as needed to address changes in physical, social, or environmental circumstances that make existing regulations unnecessary, outdated, or obsolete and modifying the development ordinances to be more user-friendly where possible was made by Commissioner Fadely, seconded by Commissioner Boone, and unanimously approved.

OLD BUSINESS

Minimum Nonresidential Code Update – Informational Item

Meadows shared an update on the enforcement of the Town's new minimum nonresidential code, including the following documents: meeting invitation, list of properties that are in violation, minimum standards notification letter, notice of violation letter and email notification. (Incorporation by reference as if fully set forth herein Schedule F)

The Board of Commissioners discussed conditions of the properties, including 106 East Raleigh Street which Chatham County Building Inspections has condemned. The Board of Commissioners thanked Meadows for the information.

Water Asset Inventory Assessment – McGill

David Honeycutt presented the Water Asset Inventory and Assessment (AIA). (Incorporation by reference as if fully set forth herein Schedule G)

The purpose of this Asset Inventory and Assessment (AIA) is to document the condition of the Town of Siler City's infrastructure and to develop a Capital Improvements Plan (CIP) to prioritize and guide future expenditures, and operations and maintenance. The Town currently owns and operates a water system including distribution lines and water treatment plant serving the Town of Siler City and surrounding areas. The distribution system includes of one (1) booster pump station, and approximately one hundred and eleven (111) miles of water mains and five (5) elevated storage tanks. Raw water is pulled from the Charles B Brooks Reservoir that is a part of the Rocky River at the Town's 4 MGD WTP, treated, and pumped via high service pumps into the system.

This asset inventory and assessment consisted of mapping all accessible valves, hydrants, and other appurtenances in the distribution system and condition assessments of the distribution system and WTP. Distribution system assessment work included valve locating, hydrant locating, hydrant testing, pressure monitoring, and water modelling. This information was evaluated and is summarized in this document which includes asset management and capital improvements plans. This process resulted in the development of a twenty-year CIP to guide the Town to prioritize the capital projects necessary to improve its water distribution system.

The highest priority projects are targeting resolution of low pressure, expanding the WTP, line replacements, extensions, and valve and hydrant replacements. This work is closely followed by projects to further reduce water loss and improve reliability. The CIP includes an aggressive replacement of water infrastructure to resolve deficiencies in the system and replace components of the system that have surpassed their typical useful life.

The Town should look to its CIP to guide its next projects; and the CIP should be updated regularly as priorities change and as projects are completed. It is noted that many factors may impact the priorities including failures, and funding availability both local and through grant and loan programs. This assessment project provides evidence for the prioritization of the water treatment plant, replacing lines, and other improvements projects in the CIP.

SYSTEM EVALUATION

The current highest priorities for the Town's water infrastructure are solving pressure issues, expanding the WTP, and reducing the amount of water loss. The assessment portion of the project included a number of components to evaluate the condition of its water infrastructure to identify projects in line with these goals. The following items were included in the AIA scope:

- Gather and review existing available information
- Compile inventory of existing water system by GPS locating
- Perform hydrant testing
- Perform pressure monitoring at six (6) locations
- Generate hydraulic model
- Evaluate risk of failure for key assets
- Prioritize water treatment and distribution system improvements

- Prepare opinions of probable costs for water treatment and distribution system improvements
- Create a twenty-year Capital Improvements Plan

Existing Water Distribution System

The existing water distribution system is comprised of approximately 111 miles of water mains ranging from 2-16". The water mains consist of asbestos cement, cast iron, ductile iron, galvanized iron, and polyvinyl chloride pipe. Since adequate mapping of pipe material was not available, the percentage of each material from the Local Water Supply Plan was used to estimate the quantity of each material in the system. The condition assessment is based on information gathered from discussions with the Town and observation of appurtenances such as valves and hydrants. Typically, cast iron and galvanized iron pipes are considered to be in poor condition. Asbestos cement is considered to be in fair condition. Ductile iron and polyvinyl chloride pipes are considered to be in good condition.

Water Valve Evaluations

The Town has approximately 1,239 valves. Each valve was visited and the ones that could be inspected were. Town staff indicated that many valves in poor condition are not operated due to risk of failure. It was found that there are 69 valves in excellent condition, 714 valves in good condition, 94 valves in fair condition, 46 valves in poor condition, and 316 valves in unknown condition.

Hydrant Evaluations

The Town has approximately 447 fire hydrants. Hydrants were visited and inspected. It was found that 35 hydrants were in excellent condition, 312 hydrants were in good condition, 80 hydrants were in fair condition, 17 hydrants were in poor condition, and 3 hydrants are in unknown condition because they were not able to be found or accessed.

Elevated Storage Water Tanks

The Town has five elevated storage tanks. Three tanks on Siler Business Dr. serve a majority of the Town. These tanks are filled by the high service pumps at the WTP. The two 500,000-gallon tanks are in good condition and are not included in the CIP. The 1,000,000-gallon tank is experiencing issues from age such as corrosion and paint flaking. Some of the minor components of Tank 1 on Siler Business Dr. such as the float system and level indicator are not working and need to be replaced. The 200,000 Tanglewood tank is in good condition. This area experiences low pressures and this issue has been addressed in the CIP. The last tank is located on S Second Ave. This 300,000-gallon tank is in good condition. The South Second Ave. Tank is located at a far point in the system from the water treatment plant and normal water levels do not fully fill the tank.

Booster Pump Station

There is one booster pump station in the Town. This BPS is currently serving to fill the Tanglewood tank and will also serve the CAM site when developed. This BPS was constructed in 2019 and is in excellent condition.

Water Treatment Plant

The WTP is able to service the Town's needs currently but due to expected future growth, the plant will need expanding from 4 MGD to 6 MGD. There was a recent project to replace the filters that was completed and an upcoming project to implement pre-treatment and air backwash systems.

Water Modeling

As a part of the AIA, a GIS map was created and from that information a water model was created. Using hydrant tests performed by the Town's fire department, the water model was calibrated. The water model was used to review available fire flows, typical system pressures and to assess the impacts of proposed improvements.

FINDINGS, RECOMMENDATIONS AND CAPITAL IMPROVEMENTS PLAN

The purpose of this asset inventory and assessment was to document the condition of the Town's inventoried infrastructure to assist the Town with becoming proactive in the management and financing of its water system. The Town should continue to look to its CIP to guide its next projects; therefore, it is vital that the CIP remains current to the Town's highest priorities and provides accurate cost estimates. The CIP includes treatment and distribution projects. The WTP needs expansion from 4 MGD to 6 MGD to accommodate expected future growth. The various field assessments revealed both specific defects and general problematic areas within the water system. Discussions with Town staff regarding problem areas, frequent repairs and complaints were also utilized in developing and prioritizing projects. These results were used to update the CIP and formulate a twenty-year plan.

Through the AIA process, the Town's entire water system was evaluated with visual inspections, hydrant testing, pressure monitoring, and water modeling. Deficiency such as low-pressure areas, WTP capacity, dead end lines, and 2" mains were targeted in the Capital Improvements Plan to meet the future needs of the Town and to comply with current and future limitations. Projects have been prioritized based on the condition of the asset, consequences of failure, and estimated operation and maintenance benefits. These projects are intended to include primarily major capital improvements and it is recommended that the Town continue to fund minor repairs, and replacements through the annual operating budget.

General recommendations to the Town included establishing valve exercising, hydrant testing and pressure monitoring programs in high priority areas to determine water system needs and to track the condition of these items. McGill also recommended the Town begin immediate repairs to some deficiencies to increase the pressure to meet minimum state requirements. Specific recommendations include projects that exceed the extent of typical maintenance practices.

Table 0.1 – Summary of High Priority Improvements Projects

No.	Project Name	Cost
1	Low Pressure Areas	\$2,179,800
2	High Priority Water Line Replacement	\$2,581,200
3	Lower 2 nd Ave Water Tank	\$582,300
4	Water Treatment Plant Expansion	\$17,000,400
5	N Garden Ave Area Replacement	\$3,255,700
6	12 th St Area Water Line Replacement	\$2,991,500
6	Alston Bridge Water Line Extension	\$1,614,800
7	N 2 nd Ave Area Water Line Replacement	\$3,448,800
8	S Chatham and S 2 nd Area Replacement	\$3,431,900
9	Industrial Park Water Line Extension	\$734,900
10	Line Replacement Projects (Years 16-20)	\$9,300,000
11	Stockyard Water Line Extension	\$816,900

12	Valve and Hydrant Replacement Program (Years 1-20)	\$2,850,000
	Estimated 20-year CIP Total Project Cost	\$50,788,200

FUTURE TASKS

It is recommended that the Town continue assessing the water system to determine the condition of aged water lines in the collection system as follows:

1. Develop a program for valve exercising and hydrant flushing to determine water rehabilitation needs.
2. Develop a program for pressure monitoring in high priority areas.
3. Conduct additional hydrant testing to assist in locating system deficiencies.
4. Inspect water lines, valves, and hydrants during routine work to track the condition of these items.
5. Continue to seek funding and review rates to implement capital improvements projects.
6. Encourage use of the ArcGIS Online map and field update as needed.

The Board of Commissioners discussed the plan and asked questions of Honeycutt and Town Staff.

A motion to adopt the resolution for the Water System Asset Management Plan was made by Commissioner Haiges, seconded by Commissioner Fadely, and unanimously approved.

NEW BUSINESS

none

MANAGER'S REPORT

Lynch shared the following with the Board of Commissioners: Special Meeting on September 27, 2021, for USDA Wastewater application resolution.

TOWN ATTORNEY INFORMATION

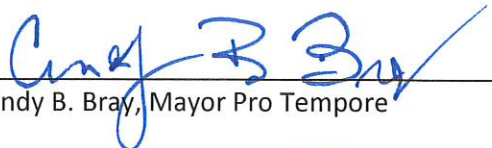
none

GOVERNING BODY COMMENTS

none


ADJOURNMENT

With no further business the Board of Commissioners adjourned at 7:45pm.



 Cindy B. Bray, Mayor Pro Tempore

ATTEST:



 Jenifer K. Johnson, Town Clerk

