

# **REQUEST FOR BOARD ACTION**

## **Henderson County Board of Commissioners**

**Meeting Date:** March 19, 2008

**Subject:** Water Line Extension – Cobblestone Village

**Attachments:** Memo for Planning Staff  
Vicinity Map  
Engineer's Report  
Project Summary  
Project Map  
County Review Sheet

### **Summary of Request:**

The City of Hendersonville has requested that the County comment on the proposed water line extension for Cobblestone Village. The proposed water line is 14,394 linear feet with 13 fire hydrants. It will involve an interbasin transfer from the French Broad River to the Broad River Basin. The cost of the water line will be paid for by Raging Bull Development, LLC.

Under the current Growth Management Strategy of the Henderson County Comprehensive Plan, the project will fall within the Conservation area (approximately 7,078 linear feet), the Rural/Agricultural Area (RAA) (approximately 3,712 linear feet) and the Urban Services Area (USA) (approximately 3,604 linear feet). The location of the line in the Conservation and RAA is not consistent with the Henderson County 2020 Comprehensive Plan.

The Board will hold a public hearing on proposed amendments to the Henderson County 2020 Comprehensive Plan on Thursday, March, 27, 2008. Under the proposed changes to the Growth Management Strategy Map, the project would fall predominately in the USA and the Rural/Urban Transition Area (RTA). Less than 200 linear feet of the proposed water line extension appears to fall in the RAA. While the proposed extension is more in compliance with the proposed changes to the CCP than under the existing Growth Management Strategy Map, any future extensions of the water line to the south would not be in compliance.

**Board Action Request:**

Action by the Board of Commissioners is needed to either grant or deny this request. If the Board decides to approve or deny the requested extension the following motions have been provided.

**Suggested Motion:**

I move that the Board approve the Cobblestone Village Subdivision water line extension and direct staff to convey the County's comments to the City of Hendersonville.

**Alternative Motion:**

I move that the Board deny the Cobblestone Village Subdivision water line extension due to its location in the current Growth Management Strategy of the Henderson County Comprehensive Plan. Staff should be directed to convey the County's comments to the City of Hendersonville.

**HENDERSON COUNTY**  
**Planning Department**

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213 First Avenue East • Hendersonville, NC 28792  
Phone 828-697-4819 • Fax 828-697-4533

**MEMORANDUM**

**TO: Board of Commissioners**  
**Steve Wyatt, County Manager**  
**Selena Coffey, Assistant County Manager**

**FROM: Planning Staff**

**DATE: March 6, 2008**

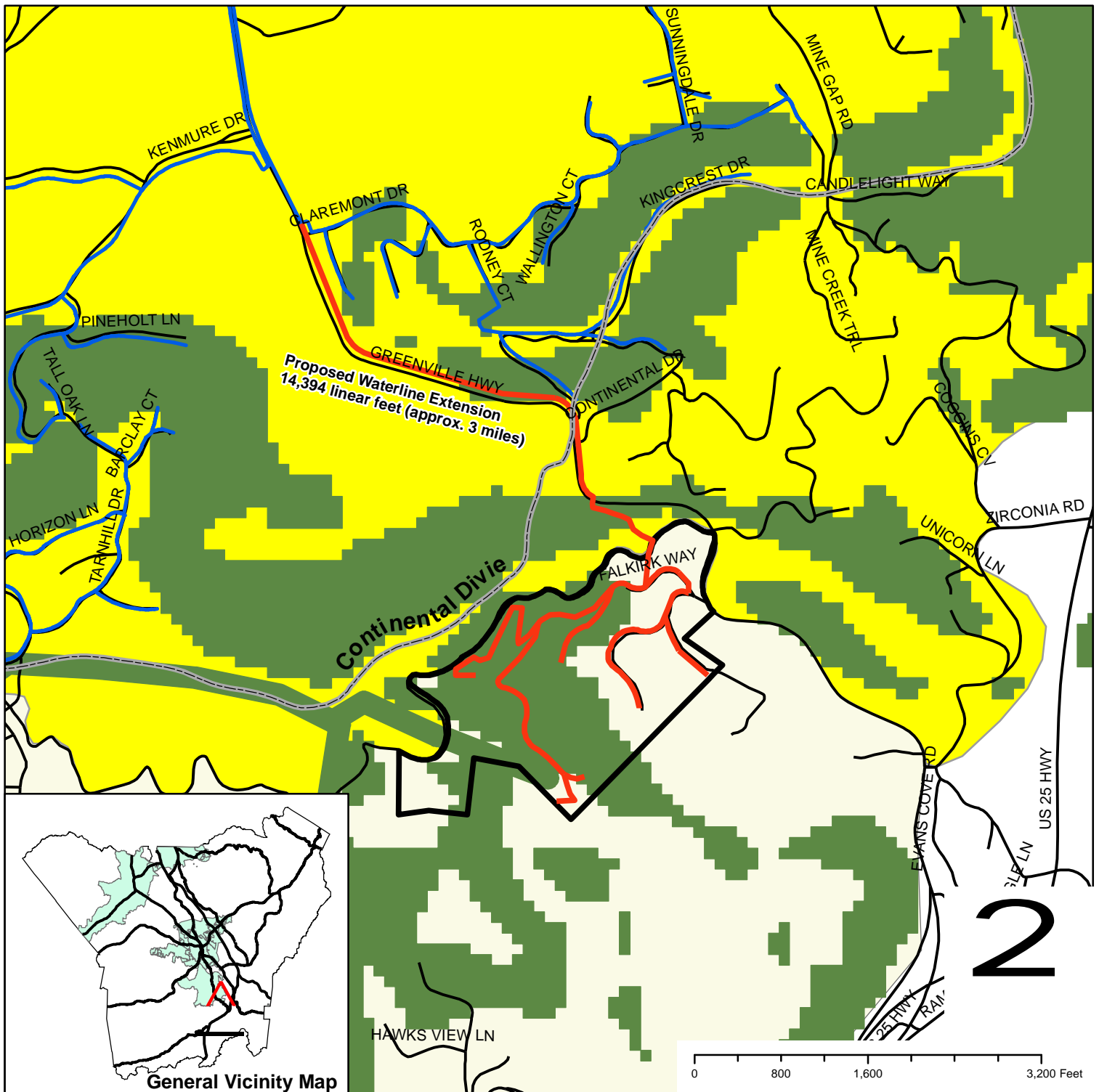
**SUBJECT: Water Line Extension for Cobblestone Village**

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The City of Hendersonville has requested that the County review and comment on a proposed water line extension for Cobblestone Village, located off Pinnacle Mountain Road. The proposed water line will extend from Claremont subdivision south along Greenville Hwy to Cobblestone Village, approximately 14,394 linear feet (3 miles). The proposed system will service the 122 existing homes in Claremont and 60 new homes in Cobblestone Village. The proposed system will be designed to service an additional 60 homes to be developed as a future second phase of Cobblestone Village that has currently not been approved by the County. The proposed water line extension will also involve an interbasin transfer from the French Broad River to the Broad River Basin.

According to the Henderson County 2020 Comprehensive Plan, Growth Management Strategy Map, Cobblestone Village is located in the Rural/Agriculture Area (RAA) and the majority of the subdivision is identified as conservation. The Urban Service Area (USA) is adjacent to the north of Cobblestone Village and also contains Claremont subdivision. Approximately 14,194 linear feet (2.68 miles) of the proposed water line would be extended within the boundaries of the USA, and approximately 200 linear feet of the proposed water line appears to fall in the RAA which is Cobblestone Village.

The Board will hold a public hearing on proposed amendments to the Henderson County 2020 Comprehensive Plan (CCP) on Thursday, March 27, 2008. One of the proposed amendments will include revisions to the Growth Management Strategy Map. The boundary of the Rural/Urban Transition Area (RTA) is proposed to be expanded in the southeast section of the County and will include a portion of the area where Cobblestone Village is located. The CCP does not support the extension of water and sewer lines to the RAA or conservation areas. Public utilities should be extended within the USA and RTA. If the Board approves the revised boundaries of the Growth Management Strategy Map and Cobblestone Village is thus located with the RTA boundary, the CCP and Staff supports the Board approving the proposed water line extension. Staff notes that future expansion of the subdivision and extension of the new water line should only be supported in areas within the USA and RTA. Staff does not support the proposed water line extension in areas that are located in the RAA.

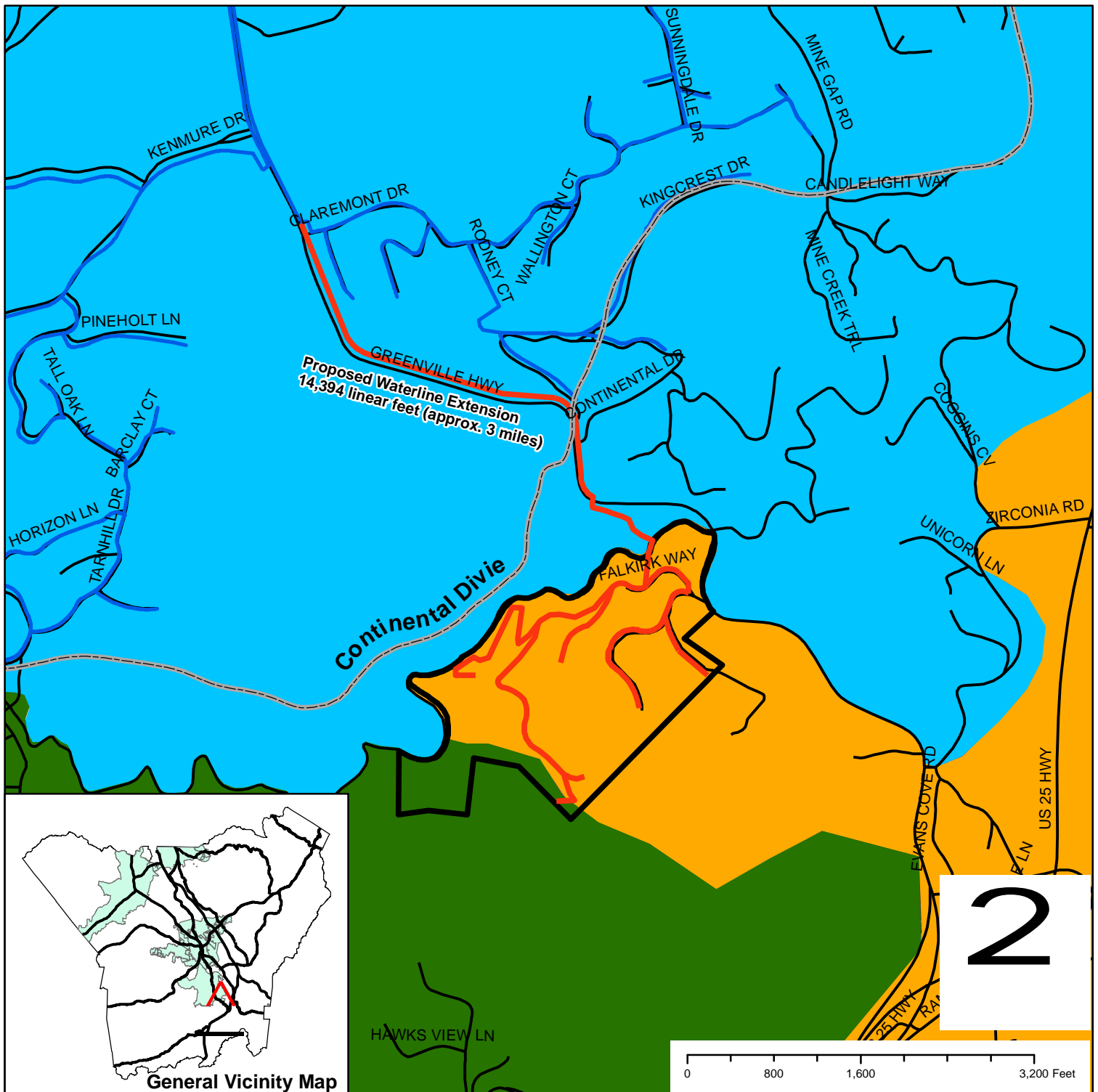


# Cobblestone Subdivision

OWNER/DEVELOPER: Flat Rock Valley, LLC  
AGENT: Brian Ely  
CURRENT ZONING: R-3  
SEWER SYSTEM: Private  
ROAD SYSTEM: Private and Public

## Legend

- Continental Divide
- Proposed Waterline Extension
- Existing Hendersonville Water Line
- Streets
- Cobblestone
- Conservation
- Urban Services Area
- Rural/Open Space/Agricultural Area
- Parcels



# Cobblestone Subdivision

Proposed Changes to CCP

OWNER/DEVELOPER: Flat Rock Valley, LLC

AGENT: Brian Ely

CURRENT ZONING: R-3

SEWER SYSTEM: Private

ROAD SYSTEM: Private and Public

## Legend

- Continental\_Divie
- Proposed Waterline Extension
- Existing Hendersonville Water Line
- Streets
- Cobblestone
- Parcels
- Urban Service Area
- Rural/Urban Transition Community
- Rural/Open Space/Agriculture

February 5, 2008

Mr. Lee Smith  
Utilities Director  
Water & Sewer Department  
City of Hendersonville, North Carolina



Reference: **Cobblestone Subdivision**  
**Water Line Extension**  
**PIN 9576813638**  
**EAS Project Number 07-171**

Dear Mr. Smith,

An extension of the 8-inch water main located along US Highway 225, at the existing hydropneumatic station for Claremont Subdivision, is required to provide water service for the above referenced project. The project is currently being developed as a 60-lot residential subdivision and was originally designed for individual private water wells to serve each lot. However, recent well installations for several homes under construction have exceeded depths of 1,000-feet with little or no water available.

The water line extension is proposed for the current and future phases of Cobblestone Subdivision but, in turn, will eliminate the existing hydropneumatic system for Claremont Subdivision. The existing hydropneumatic station will be bypassed by the proposed system and Claremont residents will be serviced from the new Cobblestone storage tank located approximately 480-feet higher in elevation.

The proposed system is currently designed to service the 122-existing homes in Claremont Subdivision and 60-new homes in Cobblestone Subdivision with an initial daily usage of 45,500-gallons per day of domestic water use. The proposed system is also designed to service an additional 60-homes to be developed as a future second phase of Cobblestone Subdivision. The proposed site is currently owned and being developed by:

Flat Rock Valley, LLC  
Mr. Brian Ely, Agent  
101 Pinnacle Peak Ln.  
Flat Rock, North Carolina 28731  
Phone: (828) 699-9111

The sewer service for this project will be provided individual septic tanks.

At the present time, Mr. Brian Ely will be responsible for signing the Water Utility Extension Agreement (WUEA) with the City of Hendersonville.

The project will consist of approximately:

8" Ductile Iron Pipe Water Line	12,193 lf
2" SDR 13.5 PVC	2,201 lf
Fire Hydrants	13 ea

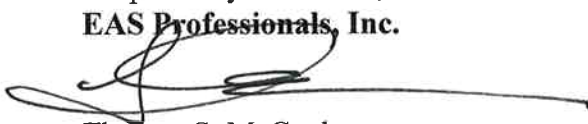
The estimated flow rate for the most hydraulically distant fire hydrant is approximately 500 gallons per minute. For more information regarding this proposed project see the accompanying preliminary plans.

This project is estimated to be completed in approximately 120-days after final grading has been completed, assuming favorable weather conditions. An EAS representative will be observing and monitoring the progress of construction for this project.

#### **Closure**

EAS appreciates the opportunity to be of service to you on this project. Please call if you have any questions or if you need additional information.

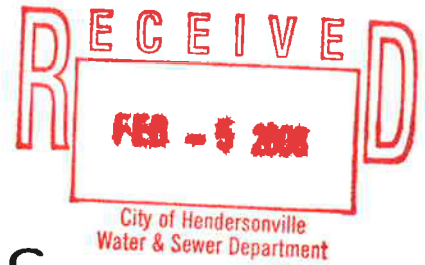
Respectfully submitted,  
**EAS Professionals, Inc.**



Thomas S. McCanless  
Site Development Principal



Jason R. Flowers, P.E.  
Senior Engineer



CIVIL & GEOTECHNICAL ENGINEERING  
LAND SURVEYING • MATERIALS TESTING

## ENGINEER'S REPORT

### WATER DISTRIBUTION SYSTEM IMPROVEMENTS

### COBBLESTONE SUBDIVISION US HIGHWAY 225 & PINNACLE MOUNTAIN ROAD HENDERSON COUNTY, NORTH CAROLINA

FEBRUARY 5, 2008

EAS PROFESSIONALS, INC  
153 Brozzini Ct., Suite C  
Greenville, South Carolina 29615  
Office (864) 234-7368  
Fax (864) 234-7369







**PROFESSIONALS, INC.**

CIVIL & GEOTECHNICAL ENGINEERING • LAND SURVEYING • MATERIALS TESTING

153 Brozzini Ct., Suite C  
Greenville, South Carolina 29615  
Phone (864) 234-7368  
Fax (864) 234-7369

February 5, 2008

Mr. Lee Smith  
Utilities Director  
Water & Sewer Department  
City of Hendersonville, North Carolina

Reference: **Engineer's Report  
Cobblestone Subdivision  
Water Line Extension  
EAS Project Number 07-171**

Dear Mr. Smith,

The following information is provided to address the requirements of 15A NCAC 18C .0307 of the North Carolina Administrative Code for the above referenced project.

**APPLICANT NAME and ADDRESS**

City of Hendersonville  
305 Williams St., Suite 119  
Hendersonville, NC 28792

**PROJECT NARRATIVE**

An extension of the 8-inch water main located along US Highway 225, at the existing hydro-pneumatic station for Claremont Subdivision, is required to provide water service for the above referenced project. The project is currently being developed as a 60-lot residential subdivision and was originally designed for individual private water wells to serve each lot. However, recent well installations for several homes under construction have exceeded depths of 1,000-feet with little or no water available.

The water line extension is proposed for the current and future phases of Cobblestone Subdivision but, in turn, will eliminate the existing hydropneumatic system for Claremont Subdivision. The existing hydropneumatic station will be bypassed by the proposed system and Claremont residents will be serviced from the new Cobblestone storage tank located approximately 480-feet higher in elevation.

The proposed system is currently designed to service the 122-existing homes in Claremont Subdivision and 60-new homes in Cobblestone Subdivision with an initial daily usage of 45,500-gallons per day. The proposed system is also designed to service an additional 60-homes to be developed as a future second phase of Cobblestone Subdivision.

**PROJECT SUMMARY**

8" Ductile Iron Pipe Water Line	12,193 lf
2" SDR 13.5 PVC	2,201 lf
Fire Hydrants	13 ea

**IDENTIFICATION and DESCRIPTION of SERVICE AREA**

The service area for this project is primarily for the development of the current and future phases of Cobblestone Subdivision with continuing service to Claremont Subdivision.

**FUTURE SERVICE AREAS**

The water system expansion is proposed to only serve Cobblestone and Claremont Subdivisions. Provisions are being included in the overall system that would permit future expansion of the system along US Highway 225 and Pinnacle Mountain Road.

**CHARACTER of the WATER SUPPLY SOURCE**

The water supply for this project is from the City of Hendersonville Water Treatment Plant

**AGREEMENTS to PURCHASE WATER**

Not applicable.

**FACILITIES USEFUL LIFE**

For this project, the expected useful life of the water lines is at least 30-years.

**MAXIMUM DAILY TREATED WATER SUPPLY and MAXIMUM DAILY DEMAND**

The maximum daily treated water supply for the City of Hendersonville Water Treatment Plant is 12 MGD. The average demand is 7.2 MGD with a daily peak of 9.5 MGD

**CONSIDERATION of ALTERNATIVES to CONSTRUCTING A NEW WATER SYSTEM**

Individual water wells were attempted for the proposed development; however, little to no water was encountered to depths exceeding 1,000-feet. Due to the apparent geologic conditions of the Pinnacle Mountain area, an on-site public water supply system utilizing wells was deemed unreliable for the intended development.

**POPULATION RECORDS and TRENDS**

In 1998, the reported population of the City of Hendersonville was 9,538. The reported population in 2007 is 12,237. This represents a growth rate of approximately 28%.

**PRESENT and FUTURE YIELD FROM the SOURCE of SUPPLY**

The Hendersonville Water Treatment Plant draws water from the Mills River. Both present and future yield from this source is expected to adequate for the City's needs.

**PROPOSED WATER TREATMENT PROCESS**

Not applicable.

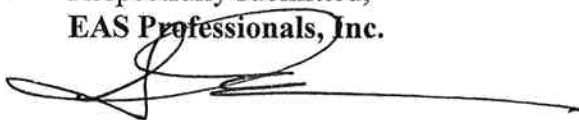
**PROPOSED LIST of INFRASTRUCTURE IMPROVEMENTS**

No infrastructure improvements are required for the proposed expansion.

**Closure**

EAS appreciates the opportunity to be of service to you on this project. Please call if you have any questions or if you need additional information.

Respectfully submitted,  
**EAS Professionals, Inc.**



Thomas S. McCanless  
Site Development Principal



Jason R. Flowers, P.E.  
Senior Engineer

**PROJECT SUMMARY  
WATER UTILITY EXTENSION  
Cobblestone**

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**March 3, 2008**

To: Honorable Mayor and Members of City of Council

From: Water & Sewer Department Staff

RE: STAFF RECOMMENDATION FOR ACCEPTANCE OF  
WATER UTILITY EXTENSION AGREEMENT (WUEA)

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This is a project to extend lines to provide water service to **Cobblestone Subdivision** and to eliminate the existing hydro-station at **Claremont Subdivision**. This project is located along a portion of **Highway 225 and Pinnacle Mountain Road**. This project is under the reviewing jurisdiction of **Henderson County** and is located within the **USA – Urban Services Area**. This project will involve an IBT (Interbasin Transfer) from the French Broad River Basin to the Broad River Basin. The entire cost of the proposed water line extension is to be paid for by **Raging Bull Development, LLC**.

This project requires approximately **14,394** linear feet of water line sized as following:

Approximate Length:	Description:
<b>12,193 If</b>	<b>8" DIP</b>
<b>2,201 If</b>	<b>2" SDR 13.5 PVC</b>

Fire Protection will be provided by the installation of **13**-fire hydrant(s).

The Reviewing Jurisdiction, listed below, has completed their review of this utility extension request in regard to their adopted land use plan or in terms of its future impact on existing land uses for that local government.

Reviewing Jurisdiction: **Henderson County (revision sent 3/3/08)**

☐ Approved ☐ Disapproved (See attached letter provided to the City by the Reviewing Jurisdiction)

Narrative Comments Provided: ☐ Yes ☐ No

Signing Official: \_\_\_\_\_  
(Print)

Date: \_\_\_\_\_

Based on the above information, the Water & Sewer Department has the capacity to support this additional infrastructure and associated connections and hereby recommends approval of said project contingent upon final approval of construction plans and specifications by the Water & Sewer Department.

A motion is needed to approve and accept this project. Suggested wording for motion is as follows:

***"I move to accept this Water Utility Extension Project and to authorize the City Manager to execute the associated Water Utility Extension Agreement on behalf of the City."***

Water and Sewer Department:	<input checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	Date: 2-7-08
Henderson Co. Commissioners:	<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	Date: _____
Hendersonville City Council:	<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	Date: _____

## HENDERSON COUNTY REVIEW OF CITY WATER LINE EXTENSIONS

Project Name: Cobblestone Village  
Size of Water Line (Main & Distribution Pipe Size): 14,394 lf (12,193 lf 8" DIP; 2,201 lf 2" SDR 13.5 PVC)  
County Staff Reviewing Extension: Rocky Hyder, Fire Marshal; Alexis Baker, Planner; Autumn Radcliff, Senior Planner

Has the project been reviewed under the **County Subdivision Regulations of the Land Development Code?** ☒ Yes ☐ No ☐ N/A  
Date reviewed: 6.20.06  
Action: Development Plan approved by Planning Board  
Conditions: \_\_\_\_\_  
Comments: \_\_\_\_\_

Has the project been reviewed under the **County Manufactured Park Regulations of the Land Development Code?** ☐ Yes ☒ No ☐ N/A  
Date reviewed: \_\_\_\_\_  
Action: \_\_\_\_\_  
Conditions: \_\_\_\_\_  
Comments: \_\_\_\_\_

Has the project been reviewed under the **County Zoning Regulations (i.e. Special-Use or Conditional-Use Permit) of the Land Development Code?** ☐ Yes ☒ No ☐ N/A  
Date reviewed: \_\_\_\_\_  
Action: \_\_\_\_\_  
Conditions: \_\_\_\_\_  
Comments: \_\_\_\_\_

Is the project subject to **any other County Land Use Regulations?** ☐ Yes ☒ No ☐ N/A  
If yes, explain: \_\_\_\_\_

Does the project conform with the **2020 Henderson County Comprehensive Plan (CCP)?** ☐ Yes ☒ No ☐ N/A

Much of the project falls within the Conservation and Rural/Agricultural Areas, which generally discourage sewer and water developments. However, if the proposed CCP changes are made to the growth management strategy, approximately 135 linear feet would not conform because of its location in the RAA. The majority of the line would fall in the Rural Transition Area.

Does the project have **adequate hydrant location and spacing?** The current waterline proposal has adequate hydrant spacing. Future lines 3A and 3B did not include hydrant location. ☒ Yes ☒ No ☐ N/A

Description of **hydrant type and thread:** Mueller Centurion – National Standard Thread  
Does the estimated flow rate (gpm) meet **fire protection standards?** Meets standard for structural spacing of more than 100 feet for remote hydrant locations(500 gpm), more than 30 feet structural spacing is required for areas with a hydrant gpm flow of 750 or more. ☒ Yes ☐ No ☐ N/A

### BOARD OF COMMISSIONERS APPROVAL

- ☐ Approved  
☐ Not Approved  
☐ Conditional Approval (See Comments)

Date of Board Review: \_\_\_\_\_  
Comments: \_\_\_\_\_