

HENDERSON COUNTY REVIEW OF CITY WATER LINE EXTENSIONS

Project Name: Blacksmith Run
 Size of Water Line (Main & Distribution Pipe Size): Mueller Centurion – National Standard Thread
 County Staff Reviewing Extension: Matt Card, Planner; Lori Sand, Project Manager; Rocky Hyder, Fire Marshal

Has the project been reviewed under the **County Subdivision Ordinance**? Yes No N/A

Date reviewed: 12/21/04
 Action: Approved with Conditions
 Conditions: Approval of Sewer and Water, Final Plat Requirements, Soil Erosion Plan Approval and Other Conditions
 Comments: _____

Has the project been reviewed under the **County Manufactured Park Ordinance**? Yes No N/A

Date reviewed: _____
 Action: _____
 Conditions: _____
 Comments: _____

Has the project been reviewed under the **County Zoning Ordinance (i.e. Special-Use or Conditional-Use Permit)?** Yes No N/A

Date reviewed: _____
 Action: _____
 Conditions: _____
 Comments: _____

Is the project subject to **any other County Land Use Ordinance**? Yes No N/A

If yes, explain: _____

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

Does the project have **adequate hydrant location and spacing**? Good spacing for Blacksmith Run – No hydrants in Blacksmith Mountain area. 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 structure spacing of more than 30 feet. Does NOT meet standard in Blacksmith area. Yes No N/A

BOARD OF COMMISSIONERS APPROVAL

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

Date of Board Review: _____
 Comments: _____

**City of Hendersonville - Project Summary
Water Line Extension
Blacksmith Run**

Date: October 19, 2005

This is a project to extend existing water lines to provide water service to a residential development consisting of 187 lots. This project is located long US64

This project is under the reviewing jurisdiction of: **Henderson County.**

This project requires approximately **16,083** linear feet of water line sized as following:

Approximate Length	Description:
2369 lf	12" DIP
4015 lf	8" DIP
3791 lf	6" DIP
5908 lf	4" DIP

This project will include a hydro-pneumatic pump station.

Fire Protection will be provided by the installation of 21 fire hydrant(s).

The entire cost of the proposed water line extension is to be paid for by Blacksmith Run, LLC. Care of: Vista Developers

Water pressure and flow in this area is as follows:

Static Pressure:	60 PSI	Hydrant # 04-0069
Residual:	40 PSI	
Flow:	970 GPM	Hydrant # 04-0070

Based on the above information, the Water & Sewer department is capable of supporting the additional connections and recommends approval of the project contingent upon approval of the final plans and specifications from the Water & Sewer Department.

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

I move to accept this water line extension project and to authorize the City manager to execute the water line extension agreement on behalf of the City.

Water & Sewer Department:	<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	Date: _____
Hendersonville City Council:	<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	Date: _____

The undersigned represents this utility extension line request has been evaluated in light of the adopted land use plan for the municipality or Henderson County. In the absence of such a plan for the general area to be served, this extension has been evaluated in terms of its future impact on existing land uses.	
Reviewing Jurisdiction: Henderson County	
Signing Official: _____	
Date of Review: _____	
<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved	
Narrative Comments Provided: <input type="checkbox"/> Yes <input type="checkbox"/> No	



BROOKS & MEDLOCK
ENGINEERING, PLLC

Memo

Date: Wednesday, September 14, 2005
To: Lee Smith, Director of Water & Sewer, C/o Rhonda Wiggins
From: Norman Divers
RE: Blacksmith Run Water System Extension

Lee:

Please find enclosed the required documents for the review of the water system extension necessary to serve a new 187 lot residential community. Estimated flows have been based upon each lot being developed with a new 4-bedroom home which provides an average daily demand of approximately 93,500 gallons.

The proposed project is an extension of the existing public water distribution system owned and maintained by the City of Hendersonville. The existing water system is located along US 64 (Chimney Rock Road). The project will include installing approximately linear feet of approximately 2369 LF of 12" DIP, 4015 LF of 8" DIP, 3791 LF of 6" DIP, and 5908 LF of 4" DIP water main including a hydro-pneumatic pump station. Service taps shall be installed to each lot as required by the City.

We have included plans for both water and the private sewer system for your review to see and coordinate between the two utilities. In addition, a water system extension is included to serve Blacksmith Mountain as discussed using a new pneumatic pump station and 4" distribution line. The mountain will not be provided with fire protection.

We appreciate your expeditious review and look forward to working with you on this project. Should you have any questions please feel free to contact us.

Best regards,

Norman Divers

ADDENDUM TO ENGINEER'S REPORT
Proposed Water Line Improvements
for
Blacksmith Run Subdivision
Henderson County, North Carolina
September 9, 2005

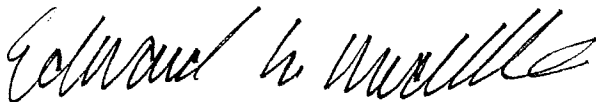
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Additional information as described in 15A NCAC 18C.0307 is as follows:

1. The proposed extension will tie into the existing 12" water main located along US 64 (Chimney Rock Road) which is owned by the City of Hendersonville.
2. The proposed water line extension is located in Henderson County as well as in the utility service district of the City of Hendersonville and will serve a new residential subdivision. The surrounding property on the east, south, north and west side of the project is served by private onsite systems.
3. The applicant is: *Blacksmith Run, LLC*
525 N. Main Street
Hendersonville, NC 28792
4. The proposed project is located on approximately 82 acres of land which will be developed into a new residential subdivision.
5. The future service area for the proposed extension will remain unchanged since the new line will only serve the subject property.
6. Not applicable.
7. Not applicable.

8. The proposed project involves the construction of approximately approximately 2369 LF of 12" DIP, 4015 LF of 8" DIP, 3791 LF of 6" DIP, and 5908 LF of 4" DIP water main including a hydro-pneumatic pump station. The anticipated future peak water usage is 93,500 gallons per day. The current City-wide water usage and production is shown in Item #13 in this Engineer's Report.
9. Water is to be supplied to this extension by the City of Hendersonville.
10. Not applicable.
11. Not applicable.
12. The proposed water line extension is to be constructed of ductile iron pipe with a minimum design service life of 50 years.
13. The maximum daily treated water supply for the City of Hendersonville is 12 M.G.D. The maximum daily demand is 6.5 M.G.D.
14. Not applicable.
15. Refer to the attached hydraulic modeling to review the anticipated performance of the water system.

The above information is believed to be accurate for the proposed development entitled *Vista @ Blacksmith Run* as designed and specified in the construction documents entitled *Utility Plans* prepared by Brooks & Medlock Engineering, PLLC and dated 09/09/05, latest revision.



[Engineer's Signature]



[Engineer's Seal & Date]

09/09/05