

**REQUEST FOR BOARD ACTION**

**HENDERSON COUNTY  
BOARD OF COMMISSIONERS**

**MEETING DATE:** March 2, 2006

**SUBJECT:** Water Line Extension

**ATTACHMENTS:** **Christopher's Crossing** - Project Summary  
Engineer's Report  
County's Review Sheet

**SUMMARY OF REQUEST:**

The City of Hendersonville has requested County comments on a proposed water line extension project to serve Christopher's Crossing development.

A City of Hendersonville Project Summary sheet, with backup documents and a County review sheet with staff comments are attached for Board review and action.

**COUNTY MANAGER'S COMMENTS:**

The Interim County Manager recommends approval of this water line extension and directs staff to convey the County's comments to the City of Hendersonville upon Board approval.

**City of Hendersonville - Project Summary**  
**Water Line Extension**  
**Christopher's Crossing**

Date: January 27, 2006

This is a project to extend existing water lines to provide water service to a proposed residential subdivision. This subdivision will create seventeen (17) lots but only eleven (11) will be served by this extension. The remaining six (6) lots will be tapped into an existing 8" line. This project is located on Oak Grove Road, southeast of East Flat Rock.

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

This project requires approximately **1,400** linear feet of water line sized as following:

Description:	Approximate Length
2" PVC SDR 13.5	1,400 lf.

Fire Protection will be provided by existing fire hydrants.

The entire cost of the proposed water line extension is to be paid for by Christopher Lindsey.

Water pressure and flow in this area is as follows:

Static Pressure:	66 PSI	Hydrant # 07-0736
Residual:	48 PSI	Hydrant # 07-0736
Flow:	830 GPM	Hydrant # 07-0731

*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 checked="" type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	Date: 1-24-06
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 Board of Commissioners	
Signing Official:	_____
Date of Review:	_____
<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved	
Narrative Comments Provided: <input type="checkbox"/> Yes <input type="checkbox"/> No	

**ENGINEER'S REPORT  
CHRISTOPHER'S CROSSING SUBDIVISION  
TWO-INCH WATER LOOP**

**1. NAME AND ADDRESS OF APPLICANT**

City of Hendersonville

P.O. Box 1760

Hendersonville, NC 28793

**2. PROJECT DESCRIPTION & INTRODUCTION**

This project is located on Oak Grove Road (SR 1807) southeast of East Flat Rock. The project involves the extension of approximately 1400 LF of looped 2" water main to serve 11 lots. The water system users are all residential in nature.

**3. DESCRIPTION OF FUTURE SERVICE AREAS**

There will be no future extensions.

**4. PRESENT AND ANTICIPATED WATER DEMANDS**

There is currently no water demand at the site. The subdivision will create 17 additional lots but only 11 will be served by the 2-inch loop. The 6 lots on Oak Grove Road will be tapped into the existing 8-inch waterline. Expected water usage is 6800 gallons per day.

**5. CHARACTER OF THE SOURCE OF SUPPLY**

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

**6. AGREEMENTS TO PURCHASE WATER**

Not Applicable

**7. USEFUL LIFE OF FACILITIES**

The useful life of the water lines for this project is expected to be 30 years minimum.

**8. MAXIMUM DAILY TREATED WATER SUPPLY AND MAXIMUM DAILY DEMAND**

The maximum daily treated water supply for the City of Hendersonville water plant is 12 MGD. The average demand is 7.2 MGD, with a daily peak (for the year) of 9.5 MGD.

**9. IDENTIFICATION & DESCRIPTION OF THE SERVICE AREA**

The service area for this project is the proposed Christopher's Crossing Subdivision. This property was previously forest and grass land.

**10. CONSIDERATION OF ALTERNATIVES TO CONSTRUCTING A NEW WATER SYSTEM**

Not applicable

**11. POPULATION RECORDS AND TRENDS**

According to the Office of State Planning, The population of the City of Hendersonville in 1998 was 9,538 persons. The growth rate from 1990 to 1998 was 30.9%.

**12. PRESENT AND FUTURE YIELD FROM THE SOURCES OF SUPPLY**

The City of Hendersonville Water Plant currently draws water from the Mills River. The present and future yield of the source of supply is expected to be adequate for the City of Hendersonville's needs.

**13. PROPOSED WATER TREATMENT PROCESSES**

Not Applicable

**14. DESIGN BASIS**

The design basis for this project is to provide adequate flow and 30 psi minimum throughout the system.

**15. PRIORITIZED LIST OF INFRASTRUCTURE IMPROVEMENTS**

Not applicable

## HENDERSON COUNTY REVIEW OF CITY WATER LINE EXTENSIONS

Project Name: Christopher's Crossing  
 Size of Water Line (Main & Distribution Pipe Size): 2" PVC SDR 13.5, 1400 lf. of waterline  
Rocky Hyder, Fire Marshal; Matt Card, Subdivision Admin.; Autumn Radcliff, Interim Project  
 County Staff Reviewing Extension: Mgr./Planner

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

Date reviewed: December 20, 2005  
 Action: Approved with Conditions  
 Conditions: Final Plat Requirements, Water Approval and Other Necessary Permits and Approvals  
 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? All lots must be within 1000 ft of a hydrant  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 thirty (30) feet.  Yes  No  N/A

### BOARD OF COMMISSIONERS APPROVAL

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

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