

REQUEST FOR BOARD ACTION

Henderson County Board of Commissioners

Meeting Date: August 16, 2006

Subject: Water Line Extension – Fox Glen, Phase 3
Sewer Line Extension – Carriage Park, Section 15

Attachments: Project Summary
Engineer's Report
County Review Sheet

Summary of Request:

The City of Hendersonville has requested County comments on proposed water line extension for Fox Glen, Phase 3 and sewer line extension for Carriage Park, Section 15.

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

County Manager's Comments:

Recommend that the Board take action to support the referenced water and sewer line extension.

**City of Hendersonville - Project Summary
Water Line Extension
Fox Glen, Phase 3**

Date: April 10, 2006

This is a project to extend existing water lines to provide water service to a proposed residential development. This phase will serve twenty-one (21) townhouse units consisting of seven (7) buildings. This project is located on the east side of Howard Gap Road across from the Fletcher Elementary School.

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

This project requires approximately **370** linear feet of water line sized as following:

Description:	Approximate Length
2" PVC SDR 13.5	370 lf

Fire Protection will be provided by an existing (phase 1) hydrant.

The entire cost of the proposed water line extension is to be paid for by Glade Holding, Inc of Hendersonville, NC.

Water pressure and flow in this area is as follows:

Static Pressure:	78 PSI
Residual:	45 PSI
Flow:	785 GPM

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: 7-7-06
Hendersonville City Council:	<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved	Date: _____

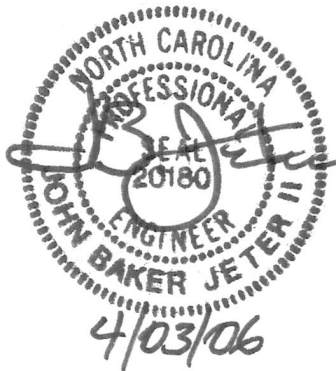
The undersigned represents this utility extension line request has been evaluated in light of the adopted land use plan for the municipality or Henderson County. In the absence of such a plan for the general area to be served, this extension has been evaluated in terms of its future impact on existing land uses.	
Reviewing Jurisdiction: Henderson County (sent 7-19-06)	
Signing Official: _____	
Date of Review: _____	
<input type="checkbox"/> Approved	<input type="checkbox"/> Disapproved
Narrative Comments Provided: <input type="checkbox"/> Yes <input type="checkbox"/> No	

**FOX GLEN
(PHASE III)**

**FLETCHER
NORTH CAROLINA**

ENGINEER'S REPORT

**WATER DISTRIBUTION SYSTEM
IMPROVEMENTS**



Prepared by:
MOUNTAIN ENGINEERING COMPANY
121 Third Avenue West Suite 2
Hendersonville North Carolina 28792

Telephone No. (828) 697-2122

Facsimile No. (828) 697-8458

FOX GLEN
(Phase III)

ENGINEER'S REPORT

WATER DISTRIBUTION SYSTEM IMPROVEMENTS

APPLICANT NAME and ADDRESS

CITY of HENDERSONVILLE
Post Office Box 1760
Hendersonville, North Carolina 28793

PROJECT DESCRIPTION AND NARRATIVE

Fox Glen is a proposed residential community. The project has frontage on **Howard Gap Road** (SR # 1006) and is located on the east side; across from the Fletcher Elementary School. The property is outside the city limits of Hendersonville.

The current plan and permit provides for the development of twenty-one (21) residential condominium (townhouse) units on **3.02** acres.

CURRENT PROJECT NARRATIVE

The proposed water improvements include a water-main extension (**2-inch** water-line: 532.0 lf) and required appurtenances to serve only the Fox Glen – Phase III neighborhood; with a possible twenty-one (21) connections.

PROJECT SUMMARY

Air Release Valve (ARV.)	1 ea.
Water Lines	
2" PVC/SDR-13.5	532 lf.
Water Valves	
2" Gate Valve w/box	2 ea.
Water Services	21 ea.

IDENTIFICATION and DESCRIPTION of the SERVICE AREA

The service area for this project is only the Fox Glen – Phase III community.

FUTURE SERVICE AREAS

Future water-line extensions around the project will serve the surrounding area. This Water system extension is proposed to serve only the **Fox Glen Townhouse** community.

PRESENT and ANTICIPATED WATER DEMAND

There is no current water use. When this phase is completed, the anticipated water demand will be 8,400 GPD (21 units @ 400 GPD).

CHARACTER of the WATER SUPPLY SOURCE

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

**HENDERSON COUNTY
REVIEW OF CITY WATER LINE EXTENSIONS**

Project Name: Fox Glen, Phase 3

Size of Water Line (Main & Distribution Pipe Size): 2" PVC SDR 13.5, 370 lf.

County Staff Reviewing Extension: Rocky Hyder, Fire Marshal; Matt Card, Subdivision Admin.; Rodney Tucker, Project Mgr.

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

Date reviewed: February 15, 2005

Action: Standard conditions, final plat conditions and approval of utilities.

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: Fox Glen is subject to a statutory vested right.

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

The proposed project is consistent with the CCP which encourage water in the Urban Areas.

Does the project have **adequate hydrant location and spacing**? Project does not meet the requirements of the NC Fire Prevention Code Section 508.5 (all portions of each building must be within 400 feet of a fire 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**? 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
Sewer Line Extension
Carriage Park, Section 15

Date: July 24, 2006

This is a project to extend existing sewer lines to provide sewer service to an additional section of Carriage Park. This section is located just northeast of Carriage Park Way. This extension will serve a total of sixty-six (66) lots.

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

This project requires approximately **5,431** linear feet of sewer line sized as following:

Description:	Approximate Length
2" PVC SDR 13.5	669'
4" PVC SDR 21	1374'
8" PVC SDR 35	672'
8" DIP CL350	2716'

Pump station required: yes – two (2) No

The amount of wastewater generated by this project will be approximately **23,760** gallons per day.

The entire cost of the proposed sewer line extension is to be paid for by Carriage Park Associates, LLC of Hendersonville, NC.

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 sewer line extension project and to authorize the City manager to execute the sewer line extension agreement on behalf of the City.

Water & Sewer Department: <input checked="" type="checkbox"/> Approved <input type="checkbox"/> Disapproved	Date: 7-24-06
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	
Signing Official: _____	
Date of Review: _____	
<input type="checkbox"/> Approved <input type="checkbox"/> Disapproved	
Narrative Comments Provided: <input type="checkbox"/> Yes <input type="checkbox"/> No	

PATTERSON & PATTERSON

PAUL PATTERSON

PROFESSIONAL ENGINEER/LAND SURVEYOR

WILLIAM PATTERSON

PROFESSIONAL LAND SURVEYOR

P.O. BOX 1189

HENDERSONVILLE, NC 28793-1189

1-828-692-6629 (TEL & FAX)

MEMORANDUM

To: NCDENR - Division of Water Quality
From: Paul Patterson, P.E.
Date: July 24, 2006
Subject: Carriage Park Section 15 - Sewer Extension

An extension of the existing sewer located within Section 14 of Carriage Park is required to provide sewer service to Section 15 of Carriage Park. This section is situated just northeast of Carriage Park Way. The sewer extension will serve a total of sixty-six (66) lots. The proposed site is currently owned and being developed by:

Carriage Park Associates, L.L.C.
2827 Haywood Road
Hendersonville, NC 28791
Mr. Dale Hamlin, General Manager
(828) 697-7200

At the present time, Mr. Hamlin will be responsible for signing the Sewerline Extension Agreement with the City of Hendersonville.

The project will consist of thirty-eight (38) standard precast manholes, 672 linear feet of 8" SDR35 PVC Sewer Pipe, 2716 linear feet of 8" CL350 D.I. Sewer Pipe, sixty-seven (67) sewer laterals, two (2) Sewer Lift Stations Complete with appurtenances, 669 linear feet of 2" SDR13.5 PVC Force Main, and 1374 linear feet of 4" SDR21 or C900 PVC Force Main. The proposed sewer force main will tie into the existing sewer system within Section 14 of Carriage Park. For additional information, see the attached plans. (The above quantities are approximate.)

Once complete and approved, the City of Hendersonville Water & Sewer Department will take over ownership of the system. The City of Hendersonville Water and sewer Department can be contacted at:

Water & Sewer Department
Engineering Division
318 Fourth Avenue East
P.O. Box 1760
Hendersonville, N.C. 28793
Telephone No. (828) 697-3065
Fax No. (828) 697-1707

The project will be served by public water also owned (or to be owned) by said city department. The proposed system ties into the existing sewer system within Section 14 of Carriage Park. The existing sewer system within Carriage Park should be sufficient to handle the proposed sewerage for the entire proposed project.

ENGINEERING - SURVEYING - PLANNING

Two sewer lift stations have been designed for this project. All calculations can be found on the accompanying plans. Furthermore, attached herewith are the pump data sheets for the proposed system. The pumps shall have backup power in the form of an ONAN generator or approved equal with radio telemetry. See accompanying plans for further details.

We are asking that the plans be reviewed by your office. Should you have any questions and/or comments concerning the plans, please feel free to call. Thanks in advance for your cooperation in this matter.

Sincerely,

A handwritten signature in cursive script that reads "Paul Patterson". The signature is written in black ink and is positioned above the printed name.

Paul Patterson, PE/PLS

cc: File: 05-11-62-ENG

**HENDERSON COUNTY
REVIEW OF CITY SEWER LINE EXTENSIONS**

Project Name: Carriage Park, Section 15
Size of Sewer Line: 2" PVC SDR 13.5 – 669 lf.; 4" PVC SDR 21 – 1374 lf.; 8" PVC SDR 35 – 672 lf.; 8" DIP CL 350 – 2716 lf.
County Staff Reviewing Extension: Gary Tweed, County Engineer; Matt Card, Subdivision Administrator; Rodney Tucker, Project Engineer

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

Date reviewed: December 20, 2005
Action: Standard Special Use Permit and Final Plat Conditions
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

Conditionally approved under Special Use Permit #SP-93-13 (as amended)

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

If yes, explain: The project site is also located in a WSIV Water Supply Watershed District.

Does the project conform to the **2020 Henderson County Comprehensive Plan (CCP)**? The proposed sewer extension project is consistent with the CCP. The Urban Area encourages water and sewer services. Yes No N/A

Comment from Gary Tweed, County Engineer: Since this project connects to the City of Hendersonville, I have no comments.

BOARD OF COMMISSIONERS APPROVAL

- | | | |
|--------------------------|-------------------------------------|-----------------------------|
| <input type="checkbox"/> | Approved | Date of Board Review: _____ |
| <input type="checkbox"/> | Not Approved | Comments: _____ |
| <input type="checkbox"/> | Conditional Approval (See Comments) | |