#### **REQUEST FOR BOARD ACTION**

#### HENDERSON COUNTY CANE CREEK WATER AND SEWER DISTRICT BOARD OF DIRECTORS

<b>MEETING DATE:</b>	February 15, 2012
SUBJECT:	Initiate Project and Funding Plan Fletcher Warehouse Interceptor Project (District Priority #4)
PRESENTER:	Marcus Jones, P. E.
ATTACHMENTS:	<ol> <li>Yes</li> <li>Draft Capital Improvement Plan (CIP) Map for District</li> <li>Preliminary Engineering Memo w/ Cost Estimates</li> <li>Project Layout Map</li> <li>NCDOT Proposal</li> <li>Fletcher Warehouse Proposal</li> </ol>

#### **SUMMARY OF REQUEST:**

Staff has developed a potential funding partnership with the Cane Creek Water and Sewer District, NCDOT and several property owners that would be served by the Fletcher Warehouse Interceptor Project and recommends initiating the construction of the project immediately to take advantage of the funding opportunities. This project is the fourth priority project on CCWSD's draft Capital Improvement Plan; see the attached map detailing the CIP projects. Further investigation by William Buie, PE from William G. Lapsley & Associates since completion of the CIP has determined that the project can be constructed entirely with gravity sewer without an additional lift station. As the attached letter from Mr. Buie indicates, the project will also eliminate two lift stations: the school's station at Fletcher Elementary and CCWSD's Johnson Farm station. This project has significant positive impacts on the School's and CCWSD's operating budgets by eliminating lift station expenses and positive impacts on the environment. Lift stations are high risk locations in a sewer system for sanitary sewer overflows.

As shown in the attached Project layout map, the project is broken out into four phases. Phase 1 constructs a gravity main from the District's Rockwell Lift Station to Old Asheville Hwy at Fletcher Crossing (aka Fletcher Warehouse). Phase 2 abandons the Johnston Farm lift station and constructs a gravity main to Phase 1. Phase 3 abandons the Fletcher Elementary lift station and constructs a gravity main to Phase 1. Phase 4 of the project does not have a funding partner at this time and is not under consideration. Mr. Buie's cost estimate for the first three phases is \$1.45 Million. The funding partners described below will pay approximately \$400,000 of project costs upfront; \$150,000 to \$200,000 more would be added up front or assessed when the property is developed.

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Brief descriptions of the funding partners are as follows:

North Carolina Department of Transportation (NCDOT): NCDOT has submitted the attached letter proposing to contribute \$358,696 to this project. This contribution is the funding required to upgrade Fletcher Elementary lift station to CCWSD and DENR standards. This upgrade is necessary to receive wastewater from the adjacent apartments which are impacted by NCDOT's Howard Gap Road project. The NCDOT project is removing the apartment's drainage field and eliminating the onsite sewer system. NCDOT is left with the option of either condemning the apartments and relocating the occupants or assisting CCWSD in providing sewer service via our system. They have chosen to assist CCWSD in providing the service. In turn and in the best interest of our customers and the environment, staff recommends using this contribution to construct CCWSD's priority project instead of adding another pump station. NCDOT's project is scheduled to bid this month making for an aggressive project schedule for CCWSD's project. A formal agreement will be developed and brought back to the Board for approval.

Note, NCDOT's project will also require a small amount of right of way in front of Fletcher Elementary. The Board of Commissioners has retained ownership of this property and will need to approve an offer from NCDOT for this property. The offer will be presented at a future meeting but is less than \$5,000 dollars and does not impact the CCWSD's enterprise fund or project funding.

Fletcher Crossing: Mr. Charlie Owen is the owner of Fletcher Crossing (aka Fletcher Warehouse) and other surrounding property's where CCWSD's project will be located. Mr. Owen is looking for an alternative to his facility's onsite wastewater treatment plant and would benefit from this gravity project. It would allow CCWSD to serve his property by gravity instead of the current option requiring a private pump station. Mr. Owen has offered to contribute \$40,000 to the project based on the value of the cost of the private lift station, see attached letter. This is the same methodology used to determine NCDOT's contribution; Mr. Owen will require a much smaller lift station as evident by the smaller contribution. He has also agreed to provide access to his property for the project by approving the necessary utility easements. Also, he is agreeable to transferring his treatment permit if allowable by NCDENR. As with the NCDOT offer, a formal agreement will be developed and brought back to the Board for Approval.

Brickton Village: Negotiations have been on going with the owner of the Brickton Village residential development to provide the sewer capacity for Phase 2 of his development. The development is served by CCWSD's Johnson Farm lift station. This lift station is at capacity after serving the first phase of his development. Negotiations until now have centered on him upgrading the lift station; however now that a gravity option has been identified, it is appropriate for him to contribute the construction cost of his developments share of the gravity project. At the time of submitting this agenda item, contact with the owner regarding this specific project has not been made. Staff recommends the Board require the owner to contribute funding calculated in the same method as NCDOT and Fletcher Crossing. At a future meeting staff will bring to the Board either an agreement from the owner or a motion to access the property a fair contribution to be made at the time the property is further developed. A fair contribution will be based on his share of the actual construction of Phase 2 of the District's project. A rough estimate of the contribution is between \$150,000 and \$200,000.

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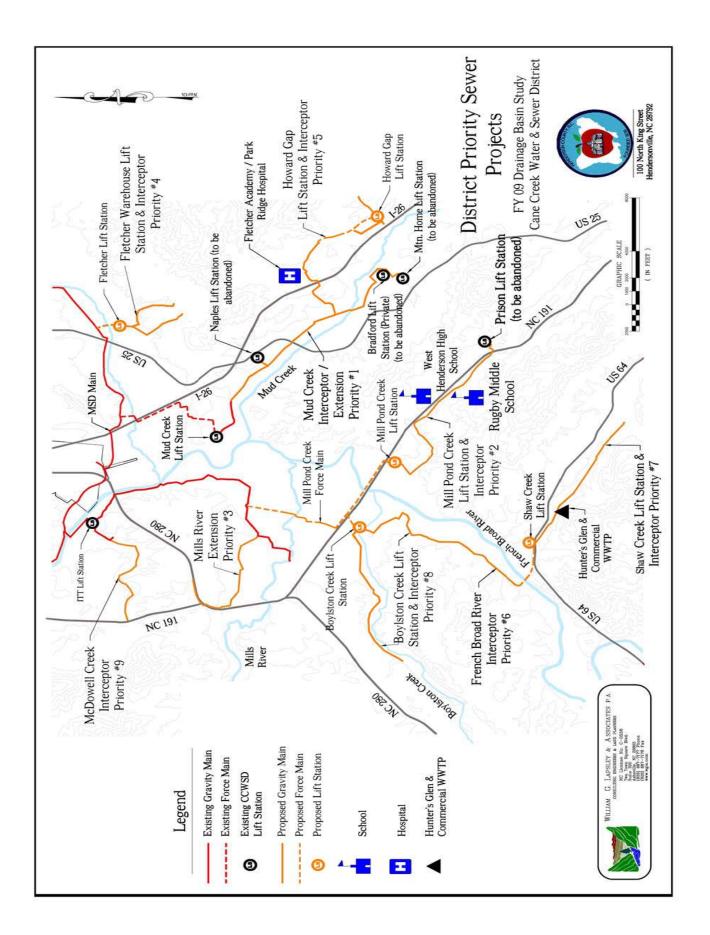
Cane Creek Water and Sewer District: The District would provide the remainder of the funding for the Project from its fund balance. As the Board is aware, CCWSD is an enterprise fund; its operating budget and fund balance are funded by sewer revenue and completely separate from the General fund and property taxes. However as with the General fund, a fund balance is generated to provide for emergencies and to take advantage of opportunities. This is a significant opportunity for the District to construct a priority project for almost half the cost.

Should the Board approve this project, staff will quickly return with a recommendation for the Board to select an engineer for the project and with formal agreements from the funding partners for Board approval.

**BOARD ACTION REQUESTED:** Authorize the County Engineer to quickly begin the preconstruction phase of the Fletcher Warehouse Interceptor Project to maintain schedule with the NCDOT project to widen Howard Gap Road and develop agreements from the projects funding partners for Board approval at a future meeting.

#### **Suggested Motion:**

I move that the Board authorize the County Engineer to quickly begin the pre-construction phase of the Fletcher Warehouse Interceptor Project to maintain schedule with the NCDOT project to widen Howard Gap Road and develop agreements from the projects funding partners for Board approval at a future meeting.



## WILLIAM G. LAPSLEY & ASSOCIATES, P.A. Consulting Engineers & Land Planners



Two Town Square Blvd, Suite 320 Asheville, NC 28803 (828) 687-7177 - Fax (828) 687-7178 www.wgla.com

# MEMORANDUM

- TO: Mr. Marcus Jones, P.E.; Henderson County
- FROM: William R. Buie, P.E. いら William G. Lapsley & Associates, P.A.
- RE: Fletcher Warehouse Sewer Extension
- DATE: January 5, 2010

We have completed a preliminary analysis of the possible gravity sewer extension from the existing Rockwell pump station to the Fletcher Warehouse site. Based on the survey data provided by David Hill, it appears that a 12" gravity sewer line can be installed that will be approximately 4 - 5 feet deep at the intersection of Howard Gap Road and Jackson Road. This gravity sewer line can also be extended to eliminate the existing pump stations at Fletcher Elementary School and the Johnson Farm pump station.

As you will recall, the Cane Creek Sewer Basin Study identified a new pump station to be located on the Fletcher Warehouse site as a backbone project. It was listed as a short-term need in the study. By extending a gravity sewer line from the Rockwell Pump Station, the need for a new sewer pump station at the Fletcher Warehouse site will be eliminated. Further, the existing Johnson Farm pump station and the station serving Fletcher Elementary School could both be eliminated with extension from this line. So in total, this project could eliminate two existing pump stations and one proposed future station.

Included with this memorandum is a schematic drawing showing the proposed routing for the gravity sewer line to serve Fletcher Warehousing (Phase 1) as well as the lines to eliminate the Johnson Farm pump station (Phase 2) and the Fletcher Elementary School pump station (Phase 3). A fourth phase sewer extension is also shown that would provide gravity sewer service to the Fox Glen subdivision and eliminate their pump station. Phase 4 would require approval from the Fox Glen property owners association as well as the acquisition of numerous private easements.

Mr. Marcus Jones, P.E. January 5, 2010 Page 2

Also included with this memorandum are project cost estimates for Phases 1 - 3 as described above. Following is a summary of the estimated costs:

Fletcher Warehouse extension (Phase 1)	\$797,421.88
Johnson Farm extension (Phase 2)	\$235,609.38
Fletcher School extension (Phase 3)	\$419,328.75
ESTIMATED PROJECT COST	\$1,452,360.01

Again, this cost does not include the future Phase 4 project that could eliminate the Fox Glen subdivision pump station.

If you have any questions about this information, don't hesitate to contact our office.

CC: Mr. Doyle Freeman, Cane Creek Sewer District

## William G. Lapsley & Associates, P.A. Consulting Engineers and Land Planners

### Preliminary Cost Estimate Cane Creek Water & Sewer District Fletcher Warehouse Gravity Sewer Extension Phase I - Rockwell Lift Station to Fletcher Warehouse

	Date: 12/31/09		Project #: 09191	
Sanitary Sewer Improvements				
Clearing and Grubbing	I	LS	\$15,000.00	\$15,000.00
12" Gravity Sewer (to Cranson Site)	7,400	LF	\$45.00	\$333,000.00
Stone Bedding	3,000	TN	\$28.00	\$84,000.00
4' Diameter Manholes	26	EA	\$2,500.00	\$65,000.00
Roadway & Railraod Bore (12" Gravity Line)	250	LF	\$275.00	\$68,750.00
Gravity Creek Crossings	6	EA	\$4,000.00	\$24,000.00
Asphalt Open Cut & Patch	75	SY	\$50.00	\$3,750.00
Incidential Stone	500	TN	\$28.00	\$14,000.00
Erosion Control Measures	I	LS	\$15,000.00	\$15,000.00
Seeding and Mulching	4.25	AC	\$2,500.00	\$10,625.00
		SL	IBTOTAL	\$633,125.00
TOTAL ESTIMATED CONSTRUCTION COST				\$633,125.00
Contingency (10% budget)				\$63,312.50
Rock Contingency				\$30,000.00
Engineering, Design, Permitting & Bidding Assistance (WGLA)				\$31,656.25

Construction Observation & Administration (WGLA)
Surveying, Easement Plat Preparation & As-Builts (Hill & Associates)
Stream/Wetland Delineation & Environmental Permitting (Clearwater Environmental)
Legal & Administrative (County)

TOTAL ESTIMATED PROJECT COST

\$797,421.88

\$15,828.13 \$17,500.00 \$2,500.00

\$3,500.00

## William G. Lapsley & Associates, P.A. Consulting Engineers and Land Planners

### Preliminary Cost Estimate Cane Creek Water & Sewer District Fletcher Warehouse Gravity Sewer Extension Phase 2 - Interceptor to Johnson Farm Pump Station

	Date: 12/31/09		Project #: 09191	
Sanitary Sewer Improvements				
Clearing and Grubbing	0.75	AC	\$9,500.00	\$7,125.00
10" Gravity Sewer (to Johnson Farm Pump Station)	2,400	LF	\$38.00	\$91,200.00
Stone Bedding	925	TN	\$28.00	\$25,900.00
4' Diameter Manholes	11	EA	\$1,900.00	\$20,900.00
Eliminate Johnson Farm Pump Station	I	EA	\$7,500.00	\$7,500.00
Rockwell Drive Bore (10" Main)	60	LF	\$150.00	\$9,000.00
Gravity Creek Crossings	I	EA	\$5,000.00	\$5,000.00
Asphalt Open Cut & Patch	75	SY	\$50.00	\$3,750.00
Erosion Control Measures	1	LS	\$7,500.00	\$7,500.00
Seeding and Mulching	1.50	AC	\$2,500.00	\$3,750.00
		S	UBTOTAL	\$181,625.00
TOTAL ESTIMATED CONSTRUCTION COST				\$181,625.00
Contingency (10% budget)				\$18,162.50
Rock Contingency				\$10,000.00
Engineering, Design, Permitting & Bidding Assistance (WGLA)				\$9,081.25
Construction Observation & Administration (WGLA)				\$4,540.63

Stream/Wetland Delineation & Environmental Permitting (Clearwater Environmental) Legal & Administrative (County)

TOTAL ESTIMATED PROJECT COST

Surveying, Easement Plat Preparation & As-Builts (Hill & Associates)

\$235,609.38

\$5,700.00

\$2,000.00

\$4,500.00

## William G. Lapsley & Associates, P.A. Consulting Engineers and Land Planners

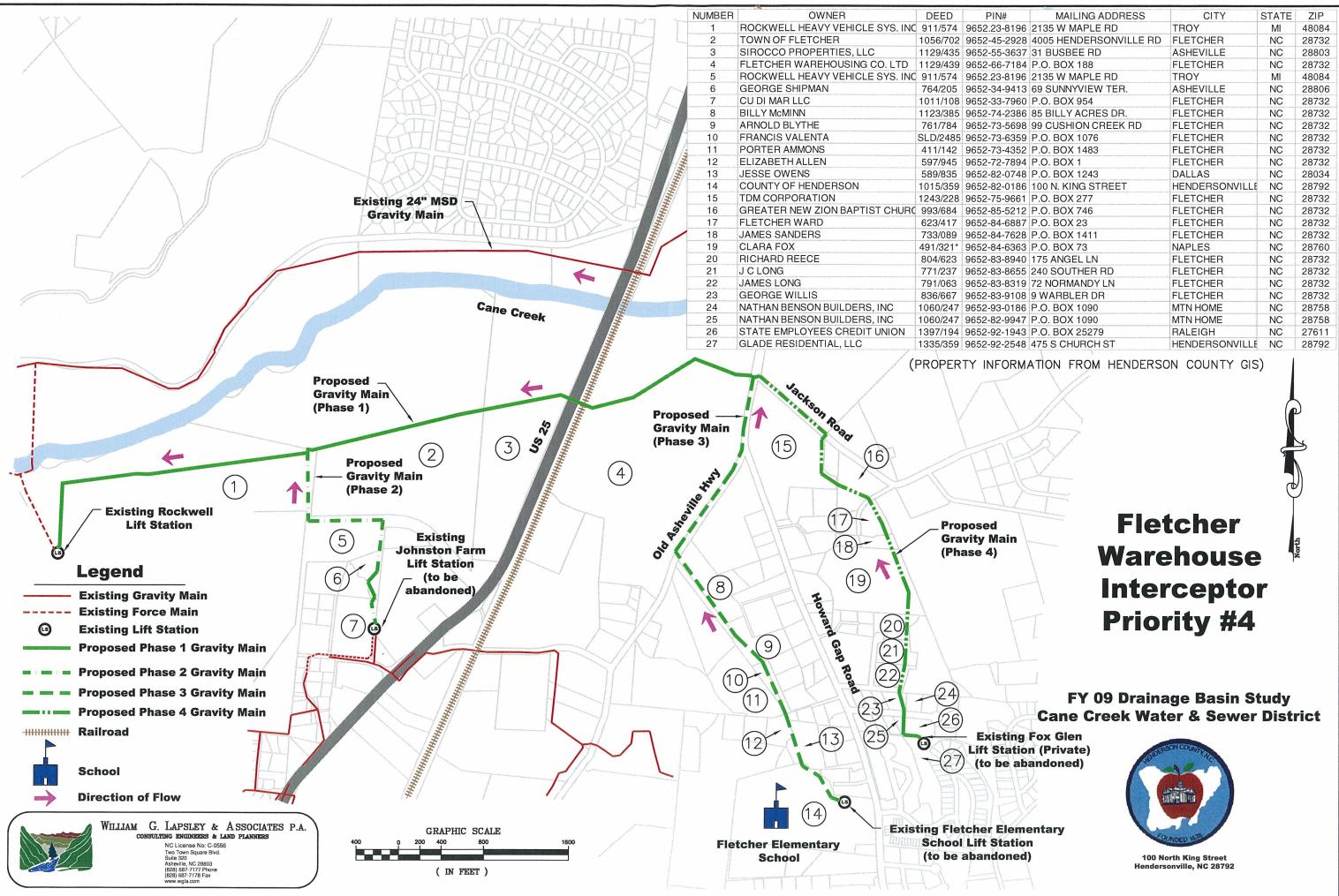
Preliminary Cost Estimate Cane Creek Water & Sewer District Fletcher Warehouse Gravity Sewer Extension Phase 3 - Fletcher Warehouse to School

		01/05/10	Project #: 09191	
Sanitary Sewer Improvements				
Clearing and Grubbing	1.50	AC	\$9,500.00	\$14,250.00
8" & 10" Gravity Sewer	4,850	LF	\$38.00	\$184,300.00
Stone Bedding	1,900	TN	\$28.00	\$53,200.00
4' Diameter Manholes	18	EA	\$1,900.00	\$34,200.00
Old Asheville Highway Bore (10" Main)	60	LF	\$150.00	\$9,000.00
Gravity Creek Crossings	l I	EA	\$5,000.00	\$5,000.00
Asphalt Open Cut & Patch	100	SY	\$50.00	\$5,000.00
Erosion Control Measures	1	LS	\$12,000.00	\$12,000.00
Seeding and Mulching	3.00	AC	\$2,500.00	\$7,500.00
		SUBTOTAL		\$324,450.00
TOTAL ESTIMATED CONSTRUCTION COST				\$324,450.00
Contingency (10% budget)				\$32,445.00
Rock Contingency				\$20,000.00
Engineering, Design, Permitting & Bidding Assistance (WGLA)				\$16,222.50
Construction Observation & Administration (WGLA)				\$8,111.25
Surveying Essement Plat Properties 9 As Puilts (Hill 9 Associates	A			¢11.00.00

Surveying, Easement Plat Preparation & As-Builts (Hill & Associates)\$11,600.00Stream/Wetland Delineation & Environmental Permitting (Clearwater Environmental)\$2,000.00Legal & Administrative (County)\$4,500.00

#### TOTAL ESTIMATED PROJECT COST

\$419,328.75





## STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE GOVERNOR EUGENE A. CONTI, JR. Secretary

February 2, 2012

Marcus A. Jones, Director of Engineering Henderson County Engineering 1 Historic Courthouse Square, Suite 6 Hendersonville, NC 28792

Subject: R-5207B, Howard Gap Road, Parcel 188 Sewer Service

Dear Mr. Jones,

The NCDOT, Division 14, has reviewed the estimate provided by Henderson County Engineering to connect Parcel 188 and Fox Glen development to a proposed gravity sewer main.

The NCDOT agrees to participate in the proposed sewer project known as the Fletcher Warehouse Interceptor project in the amount of \$358,696. As part of this agreement, Parcel 188 (apartments owned by Donna Marie Riley, DB 870, PG 155) on the TIP project R-5207B and the Fox Glen development will be connected to the proposed gravity sewer main. The NCDOT will be responsible for the funding contribution, access to the apartment property for construction, and access to Fox Glenn development for construction, and a sewer service application from the property owner (application to be provided by the sewer district). The county will be responsible for all engineering, design, permits, and construction that may be required as part of the Fletcher Warehouse Interceptor project.

Once the Henderson County Board of Commissioners approves this sewer project and the NCDOT participation, a reimbursable municipal agreement between Henderson County and the NCDOT will be prepared.

Please contact Stephen J. Williams at 828-586-2141 or <u>sjwilliams@ncdot.gov</u> if you have any further questions.

Sincerely, Joel B. Setzer

Fourteenth Division Office, 253 Webster Road, Sylva, North Carolina 28779 Telephone: 828-586-2141 Fax: 828-586-4043



February 3, 2012

Marcus Jones Director of Engineering, Henderson County 1 Historic Courthouse Square Hendersonville NC 28739

Dear Marcus,

The Fletcher Warehousing Company, LP will contribute \$40,000.00 towards the Howard Gap Road gravity sewer line project. We will also provide access across our property via the line surveyed by William Laipsley and Associates. This will include use of our existing easements from the east side of the Norfolk Southern Railway line to the Henderson County pump station. In exchange we expect to receive three free sewer taps and free use of the sewer for a period of two years for the waste generated. The taps are for our property along Jackson Road for Sirocco Properties, LLC and two free taps on our property.

Sincerely,

hun land

Charles D. Owen, III President