

## MEMORANDUM

**TO: RIVANNA WATER & SEWER AUTHORITY  
BOARD OF DIRECTORS**

**FROM: JENNIFER A. WHITAKER, CHIEF ENGINEER**

**REVIEWED BY: THOMAS L. FREDERICK, EXECUTIVE DIRECTOR**

**SUBJECT: MEADOW CREEK INTERCEPTOR AWARD OF  
CONSTRUCTION CONTRACT AND ENGINEERING  
CONSTRUCTION SERVICES**

**DATE: DECEMBER 17, 2009**

### **Background**

The Meadow Creek Interceptor was placed into service in the mid-1950s and currently serves significant portions of City of Charlottesville and Albemarle County. In recent years there have been numerous emergency repairs to this sewer line caused by structural degradation and/or stream encroachment. In 2005 a flow metering and engineering study was authorized termed the “Comprehensive Sanitary Sewer Interceptor Study”, which evaluated the optimum capacity needed for wet weather management as well as daily peak service conditions system wide and concluded that increased capacity of the Meadow Creek Interceptor was needed. At the January 2007 meeting, the Board adopted the staff recommendation to advance the work on a project to upgrade the sanitary sewer capacity in the Meadow Creek drainage area, through a contract amendment with Greeley and Hansen consulting engineers.

At the June 2007 Board meeting, the findings of the Meadowcreek Interceptor Routing Study and Evaluation were presented to the Board and the Board endorsed moving forward with a contract to conduct design and permitting of a new, larger pipeline to be built along/within the alignment of the existing pipe. The preliminary design process began and soil borings, wetland delineation, cultural resources examination, and surveying were conducted. Numerous permits were submitted and approved including the Joint Permit Application to the Army Corps of Engineers, VDOT permit, Norfolk Southern Railroad Permit, and Army Corps of Engineers permit. Extensive coordination with outside agencies includes: the City and ACSA regarding utilities; the City Parks Department; City Trails and Rivanna Trails Foundation; The Nature Conservancy (TNC); the City regarding the Meadow Creek Stream Restoration Project; and VDOT regarding work for the Meadow Creek Parkway and McIntire Extended projects has been on-going and integral to the final design. As a result of VDOT coordination, it was recognized that it would be beneficial for RWSA to upgrade approximately 660 linear feet of the Schenks Branch Interceptor to bridge the relocation from the McIntire Extended project to the location where it ties into the Meadow Creek Interceptor and was included in the design of Contract A. Furthermore, VDOT has already relocated an approximate 880 linear foot section of the Meadow Creek Interceptor due to conflicts with the Meadow Creek Parkway Bridge construction. Public meetings, neighborhood meetings and public outreach during easement acquisition has also yielded substantial guidance on alignment, construction methodology and coordination issues, as well as the community’s desire for a re-vegetation plan which is under final design and will be bid as a separate contract by Williamsburg Environmental Group.

## **Bid Award for Construction**

Following years of diligent efforts to design the project and obtain easements, Contract A and B of the Meadow Creek Sanitary Sewer Interceptor Project advertised for bid on September 8<sup>th</sup>, 2009. A pre-bid meeting was conducted on October 6<sup>th</sup> with extensive interest in the project. Through an addendum during bidding, a portion of the Contract A work was removed from the project (approximately 2,540 linear feet) and issued to VDOT for construction via change order to their contract due to construction conflicts associated with the Meadow Creek Parkway Project as approved by the Board at the October 2009 meeting. The bid opening occurred on November 10<sup>th</sup>. There were 9 bids received for Contract A ranging from \$5,650,900 to \$10,058,050 (including the Schenks Branch Interceptor work and not including any alternate bid items). Furthermore, there were 9 bids received for Contract B ranging from \$5,187,000 to \$10,950,000 (not including any alternate bid items). Considering that the Engineer's estimates for Contract A and Contract B were \$10,607,875 and \$10,427,850 respectively, RWSA is very pleased that the bid prices are reflective of the current competitive bidding market. Greeley and Hansen has examined the bids and checked references and has recommended that Contract A and B both be awarded to Metra Industries, Inc. of Little Falls, New Jersey who was the lowest responsive and responsible bidder on both contracts.

In summary, the low bids from Metra Industries are broken down as follows:

Contract A (Meadow Creek portion):	\$ 5,310,000.00
Contract A (Schenks Branch portion):	<u>\$ 340,900.00</u>
Total Contract A:	\$ 5,650,900.00

Total Contract B (All Meadow Creek):	\$ 5,187,000.00
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Total Both Contracts:	\$10,837,900.00
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A DEQ Revolving Loan Fund application has been submitted to fund the construction. The project is expected to be approved for funding by the State Water Control Board at their December 14, 2009 meeting. Bonds will be issued in the spring of 2010. A reimbursement resolution associated with this loan is on today's Board Agenda as Item 3d.

There are currently five (5) parcels of land owned by the City of Charlottesville, on which easements are needed for the construction of the Meadow Creek Interceptor project. The City of Charlottesville City Council approved the easements following the first and second reading of the Meadow Creek Interceptor Easements on November 16<sup>th</sup> and December 7<sup>th</sup>.

In addition to the City land, easements have been executed on 49 privately-owned parcels, and one commercial parcel remains under active negotiation with considerable recent progress and an expectation that agreement will be reached within days. There are also five residential parcels for which easement negotiations have not been successful. Following a public hearing at today's special meeting and prior to the Board's consideration of the actions recommended below, the Board will vote on a staff recommendation to authorize condemnation proceedings to acquire easements by certificate of take on the five outstanding residential properties.

## **Construction Management Services**

Full time professional engineering support services will also be required during the scheduled fifteen months of construction by providing construction management and administration services to support the construction work and RWSA's staff. For example, engineering support will be provided in areas such as the review of shop drawings, interpretation of plans and specifications, and preparation of record drawings. Additionally, on-site construction management services will provide for observation and

documentation of the progress and quality of the contractor's work, observation and documentation of safety practices, assurance of compliance with permits, other regulatory issues, and easement agreements, review of contractor's scheduling and time performance, and provide logistical support for Authority's expectations. RWSA will also expect the construction management team to "look ahead" through daily communications with the Contractor's management team and property owners in order to anticipate conditions and conflicts such that the work progresses as smoothly as possible.

Staff anticipates that the on-site construction manager will be integrally involved with addressing and planning for the needs and issues of key stakeholders such as property owners, neighborhood associations, parks and trails managers and uses, etc. The construction management services will be performed as a joint effort of Greeley and Hansen and Jacobs Engineering. Fees for the services are as follows:

1. Meadow Creek Interceptor Construction Management and Field Observation Services: \$1,780,700
2. Schenks Branch Interceptor Construction Management and Field Observation Services: \$67,500

In consideration of all other project costs (expended and anticipated), including engineering, easement acquisitions, legal costs, landscaping plans, construction and administration costs, and contingencies, the total costs for the Meadow Creek and Schenks Branch projects are within the original CIP budgets as approved in March 2008.

**Board Action Requested:**

Staff requests that the Board of Directors authorize the Executive Director to award a construction contract to Metra Industries, Inc. and execute same for \$5,650,900 for the Meadow Creek items in Contract A and \$5,187,000 for Contract B to be funded out of the Meadow Creek Interceptor Improvements and Schenks Branch Interceptor budgets as approved in March 2008. Staff also requests authorization for a 10% contingency for this work, to be used only if the Executive Director considers it necessary and authorizes in writing any increase of the original contract amount.

Staff respectfully requests that the Executive Director be authorized to execute Work Authorizations with Greeley and Hansen for Construction Administration and Inspection Services for a total fee not to exceed an amount of \$1,848,200 to be funded appropriately from the Meadow Creek Interceptor Improvements and Schenks Branch Interceptor budgets as approved in March 2008. Staff also requests authorization for a 10% contingency for this work, to be used only if the Executive Director considers it necessary and authorizes in writing any increase of the original contract amount.

**ATTACHMENT**  
**Meadow Creek Sanitary Sewer Interceptor Upgrade Bid Tabulations**

**Contract A (RFB 282)**

Contractor	Total Base Bid	Alternate Item 15	Alternate Item 16 *	Alternate Item 17
Metra Industries	\$5,650,900.00	\$12,000.00	\$0.00	\$0.00
C.T. Purcell Excavating	\$5,994,150.84	(\$80,000.00)	(\$880,000.00)	\$0.00
Oscar Renda Contracting	\$6,373,000.00	(\$97,000.00)	(\$50,000.00)	\$0.00
S.J. Louis Construction	\$6,687,650.00	\$75,000.00	(\$100,000.00)	\$0.00
Central Builders	\$6,743,825.00 <sup>(1)</sup>	\$0.00	\$0.00	\$10,000.00
D.H. Griffin Infrastructure	\$6,883,825.00	\$0.00	\$0.00	\$0.00
DLB, Inc.	\$9,887,661.00 <sup>(1)</sup>	\$0.00	\$0.00	\$0.00
Falconer Construction Company	\$9,963,625.00	\$130,000.00	\$0.00	<sup>(2)</sup>
Allan A. Myers	\$10,058,050.00	\$25,000.00	(\$2,000,000.00)	\$0.00
Engineers Estimate	\$10,607,875.00	(\$212,158.00)	(\$848,630.00)	\$106,079.00
* Alternative Item 16 is for combined award of both Contract A and Contract B.				

(1) Math error corrected on bid tab

(2) Falconer Construction Company did not include Addendum No. 4 Bid Form which included Alternate Item 17.

**Contract B (RFB 283)**

Contractor	Total Base Bid	Alternate Item 8	Alternate Item 9
Metra Industries	\$5,187,000.00	\$50,949.00	\$0.00
R.L. Ryder	\$5,994,127.00	\$66,525.00	\$0.00
C.T. Purcell Excavating	\$6,198,776.73	(\$50,000.00)	\$0.00
D.H. Griffin Infrastructure	\$6,744,000.00	\$400,000.00	\$10,000.00
S.J. Louis Construction	\$6,819,500.00	\$150,000.00	\$30,000.00
Oscar Renda Contracting	\$7,418,247.00	(\$19,000.00)	\$0.00
G.L. Howard, Inc.	\$8,652,000.00	(\$12,000.00)	\$0.00
DLB, Inc.	\$9,395,039.00 <sup>(3)</sup>	\$0.00	\$0.00
Allan A. Myers	\$10,950,000.00	\$200,000.00	\$0.00
Engineers Estimate	\$10,427,850.00	(\$208,557.00)	\$104,278.50

(3) Math error corrected on bid tab