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MAR 30 2009

Smith Seckman Reid DEPARTMENT OF ENVIRONMENT AND CONSERVATION

401 CHURCH STREET
L & C ANNEX SIXTH FLOOR
NASHVILLE TN 37243-1534

March 25, 2009

Mr. Andrew Johnson
Smith Seckman Reid Inc.,
2995 Sidco Drive
Nashville, TN 37204

Re: Franklin Wastewater System
County: Williamson
Water Pollution Control Number 09-0090
Project: Monticello

Dear Mr. Johnson:

The Tennessee Department of Environment and Conservation, Division of Water Pollution Control, acknowledges the receipt of five (5) set(s) of construction documents on 2/23/09.

The project consists of 10,315 LF of 8-inch diameter gravity sewer line.

Approval is granted in accordance with certain requirements of the Water Quality Control (WQC) Act of 1977 and Regulations of the Water Quality Control Board. The SITE set of plans and specifications will be stamped with the APPROVAL and APPROVAL EXPIRES STAMPS on the cover sheets only. Any indication of tampering with the bound set of documents will be subject to investigation and prosecution. One complete set of construction documents, bearing the official stamp, must be kept at the construction site.

Approval expires one year from the stamped approval date unless construction is either underway or complete. Any request for extension must be made prior to this expiration date. Significant deviations from the approved plan documents must be submitted and approved in writing before such changes are made. Minor changes made during construction need not have prior written approval. Modifications, however, may be required by this Department should the changes be deemed inappropriate. It is advisable, therefore to obtain prior approval in cases where the significance of the change is uncertain.

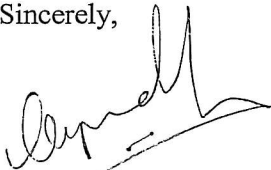
The Division of Water Pollution Control is authorized to inspect the construction work to verify compliance with the approved plans and specifications which are on the site. Therefore, the engineer shall notify the Water Pollution Control Office at the Nashville Environmental Field Office (615) 687 - 7000 of the start of construction.

Approval of these construction documents should not be construed as a permit for any activities related to this project. Activities which may require a permit under the WQC Act and Regulations include, but are not limited to, the following: streambank vegetation removal; creek crossing(s) for equipment or utility lines; construction within twenty (20) feet of a stream bank; construction in or near a marshy area or wetland, and/or land disturbance greater than one acre.

Additionally this approval does not authorize connection and use of sewer that will cause or contribute to collection system overflow or overload of receiving wastewater treatment facility. The Water Pollution Control Office previously referenced should be contacted for determinations regarding whether an Aquatic Resource Alteration Permit (ARAP) and/or a National Pollutant Discharge Elimination System (NPDES) Construction Storm water permit will need to be obtained prior to the beginning of construction of this project.

To expedite matters, please reference the assigned Water Pollution Control number on any future correspondence. If we may be of any assistance, please contact us at (615) 532-(0625).

Sincerely,



Mahendra Upadhyaya
Environmental Protection Specialist, Municipal Facilities Section
Division of Water Pollution Control

Enclosures

cc: Franklin Wastewater System
Nashville Environmental Field Office, Water Pollution Control

Owner: City of Franklin, TN
 Project: Monticello Gravity Sewer
 SSR Project Number: 08-41-029.0
 Date: 2/11/09

HYDRAULIC CALCULATIONS

Manning's Equation for Gravity Flow

LINE	FROM M.H.	TO M.H.	DNSTREAM INVERT (ft)	UPSTEAM INVERT (ft)	GRND ELEV UPSTEAM (ft)	LENGTH (ft)	SEWER DIA (in)	SLOPE (ft/ft)	MANNINGS "n"	VELOCITY (fps)	CAPACITY (mgd)
"A"	A1	A2	604.20	608.30	627.50	388.10	8	0.0106	0.012	3.85	0.87
"A"	A2	A3	608.50	609.40	624.00	300.00	8	0.0030	0.012	2.05	0.46
"A"	A3	A4	609.60	610.32	621.50	240.00	8	0.0030	0.012	2.05	0.46
"A"	A4	A5	610.52	611.57	622.00	350.00	8	0.0030	0.011	2.24	0.50
"A"	A5	A6	611.77	612.82	622.50	350.00	8	0.0030	0.011	2.24	0.50
"A"	A6	A7	613.02	614.07	623.00	350.00	8	0.0030	0.011	2.24	0.50
"A"	A7	A8	614.27	615.32	621.00	350.00	8	0.0030	0.011	2.24	0.50
"A"	A8	A9	615.52	617.60	622.00	260.00	8	0.0080	0.011	3.66	0.82
"A"	A9	A10	617.80	618.72	623.00	115.00	8	0.0080	0.011	3.66	0.82
"A"	A10	A11	618.92	620.12	625.00	150.00	8	0.0080	0.011	3.66	0.82
"A"	A11	A12	620.32	620.92	627.00	200.00	8	0.0030	0.011	2.24	0.50
"A"	A12	A13	621.12	632.25	638.50	445.00	8	0.0250	0.011	6.46	1.46
"A"	A13	A14	632.45	641.45	647.50	180.00	8	0.0500	0.011	9.14	2.06
"B"	A2	B1	608.50	617.95	631.00	210.00	8	0.0450	0.011	8.67	1.95
"B"	B1	B2	618.15	622.77	628.50	330.00	8	0.0140	0.011	4.84	1.09
"B"	B2	B3	622.97	628.01	633.50	360.00	8	0.0140	0.011	4.84	1.09
"B"	B3	B4	628.21	629.11	633.00	300.00	8	0.0030	0.011	2.24	0.50
"B"	B4	B5	629.31	629.73	634.00	140.00	8	0.0030	0.011	2.24	0.50

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Manning's Equation for Gravity Flow

LINE	FROM M.H.	TO M.H.	DNSTREAM INVERT	UPSTEAM INVERT	GRND ELEV UPSTEAM	LENGTH	SEWER DIA.	SLOPE	MANNINGS	VELOCITY	CAPACITY
			(ft)	(ft)	(ft)	(ft)	(in)	(ft/ft)	"n"	(fps)	(mgd)
"C"	A4	C1	610.52	622.52	629.00	400.00	8	0.0300	0.011	7.08	1.60
"C"	C1	C2	622.72	622.98	629.50	85.00	8	0.0031	0.011	2.26	0.51
"C"	C2	C3	623.18	628.88	633.50	190.00	8	0.0300	0.011	7.08	1.60
"C"	C3	C4	629.08	631.42	637.50	260.00	8	0.0090	0.011	3.88	0.87
"C"	C4	C5	631.62	633.26	641.00	410.00	8	0.0040	0.011	2.59	0.58
"C"	C5	C6	633.46	634.68	646.25	305.00	8	0.0040	0.011	2.59	0.58
"C"	C6	C7	634.88	634.99	647.50	27.00	8	0.0041	0.011	2.61	0.59
"C6"	C6	C6-1	634.88	645.08	653.25	170.00	8	0.0600	0.011	10.01	2.26
"C7"	C7	C7-1	634.99	635.56	640.00	190.00	8	0.0030	0.011	2.24	0.50
"C2"	C2	C2-1	623.18	626.28	636.50	310.00	8	0.0100	0.011	4.09	0.92
"C2"	C2-1	C2-2	626.48	628.28	635.25	240.00	8	0.0075	0.011	3.54	0.80
"C2"	C2-2	C2-3	628.48	630.58	636.00	280.00	8	0.0075	0.011	3.54	0.80
"C4"	C4	C4-1	631.62	636.87	642.50	150.00	8	0.0350	0.011	7.65	1.72
"C4"	C4-1	C4-2	637.07	642.32	649.00	350.00	8	0.0150	0.011	5.01	1.13
"A12"	A12	A12-1	621.12	624.12	629.50	400.00	8	0.0075	0.011	3.54	0.80
"A12"	A12-1	A12-2	624.32	630.02	637.00	380.00	8	0.0150	0.011	5.01	1.13
"A13"	A13	A13-1	632.45	633.11	640.00	220.00	8	0.0030	0.011	2.24	0.50
"A13"	A13-1	A13-2	633.31	633.97	639.00	220.00	8	0.0030	0.011	2.24	0.50
"A13"	A13-2	A13-3	634.17	635.22	642.50	350.00	8	0.0030	0.011	2.24	0.50
"A13"	A13-3	A13-4	635.42	644.42	648.50	360.00	8	0.0250	0.011	6.46	1.46