

C. Total Capital Contribution. The sum of the capital costs calculated under subparagraphs A and B above of this paragraph 4 shall equal the relative capital contributions of JBSA and ST applicable to the Project; provided, however, that such amount shall be subject to adjustment as herein provided. In the event the United States of America or the Commonwealth of Pennsylvania, acting through any agency or department, shall make a grant to ST for application and toward any portion of the Project and in the event ST shall earn interest on invested project capital during construction of the Project then:

(1) Regarding the Treatment Plant portion of the Project, the ST consulting engineer shall determine the portion, if any, of such grant or interest attributable to the Treatment Plant portion of the Project. The portion, if any, of such grant or interest attributable to the Treatment Plant under consideration shall be multiplied by the percentage which the Design Flow Capacity of the Treatment Plant reserved for JBSA bears to the total design capacity of the Treatment Plant, and the result shall be deducted from the capital cost of the Treatment Plant portion of the Project attributable to JBSA calculated under subparagraph A of this paragraph 4.

(2) Regarding the Shared Facilities portion of the Project, the ST consulting engineer shall determine the portion, if any, of such grant or interest attributable to the Shared Facilities portion of the Project. The portion, if any, of such grant or interest attributable to the Shared Facilities under consideration shall be multiplied by the percentage which the Design Flow Capacity of the

Shared Facilities reserved for JBSA bears to the total Design Flow Capacity of such Shared Facilities and the result shall be deducted from the capital cost of the Shared Facilities under consideration attributable to JBSA as calculated under subparagraph B of this paragraph 4.

(3) It is the intent of this subparagraph C that JBSA shall receive a credit for its proportional share of any grant received or interest earned by ST attributable to the Project under consideration. However, if JBSA has elected to pay a portion or all of its capital contribution in a lump sum in accordance with paragraph 5, below, its credit for interest shall be calculated to reflect only the amount borrowed by ST for JBSA's capital contribution in relation to the entire amount borrowed by ST.

D. Other Shared Sewer Lines. The Parties agree that the anticipated portions of each other's sewer systems, other than the Treatment Plant and the Shared Facilities, that will be used in common are in such balance that there shall be no capital contribution made between the Parties as to these portions.

5. PAYMENT OF CAPITAL CONTRIBUTION. JBSA, in consideration of the reservation of capacity in the Treatment Plant and the Shared Facilities as constructed in the Project, covenants and agrees to pay to ST its share of the Net Capital Cost of the Project determined under paragraph 4 hereof from current revenues and/or other legally available funds at its option, (i) in a lump sum, (ii) in an annual sum sufficient to amortize the debt incurred to finance the total amount of the Net Capital Cost of the Project or (iii) in a combination of a lump sum

and annual sum at the times, in the manner and in the amount as hereinafter provided.

A. Amortized Payments.

(1) Annual Payment. The Parties recognize that the portion of the Net Capital Cost of the Project attributable to JBSA not paid in a lump sum by JBSA must be obtained by ST from the proceeds of borrowed funds initially financing the Project. The portion of any debt attributable to JBSA will be retired from payments made by JBSA to ST.

(a) The annual sum payable by JBSA to ST, attributable to its proportional share of the Net Capital Cost of the Project, as contemplated by this paragraph 5, shall be (1) estimated initially by ST for every calendar year over the stated life of the debt, (2) estimated by ST annually for each following calendar year, and (3) in subsequent calendar years, adjusted by ST for any variances from estimates for the prior calendar year. If the annual cost of amortization shall include coverage required under any trust indenture or debt instrument, any buildup of funds as the result of such coverage may be used only to benefit the Parties in proportion to the contribution of such coverage by the Parties. If it is necessary to borrow to fund a debt service reserve or similar fund, such fund may only be used to retire the debt for which such fund was created and funded.

(b) Such total annual sums shall be payable no less frequently than quarterly and no more frequently than monthly, depending on the amortization schedule for the debt, commencing when the debt is issued to finance construction of the Project. The total

payment in the first calendar year shall be a pro rata portion of the regular annual payment contemplated by this paragraph 5 representing the applicable portion of the calendar year. Annual payments shall continue until the amount equal to the Net Capital Cost of the Project attributable to a Party shall have been fully amortized.

(2) Adjustment for Refinancing. If the debt which financed the costs and expenses of the Project is refinanced, ST shall cause the annual sums payable by a Party which are attributable to their proportional share of the Net Capital Cost of the Project to be recomputed, such recomputation to be made in accordance with the principles set forth in this paragraph 5.

B. Lump Sum Contribution. In lieu of or in addition to making the annual capital contribution payments contemplated by subparagraph A of this paragraph 5, JBSA may elect to pay ST its share of the Net Capital Cost of the Project in whole or in part in a lump sum payment to be paid no later than the day ST settles on the financing for the Project. In order for JBSA to properly plan for its financing, ST will periodically advise JBSA of the estimated cost of the Project. Within 5 days of opening of bids, ST will advise JBSA of the amounts bid for the Project and ST will again advise JBSA of the estimated cost of the Project. Within 15 days of opening of bids, ST will advise JBSA of the estimated amount to be borrowed, assuming that JBSA will not be making any lump sum contribution. Within 15 days of receipt of such notice, JBSA will notify ST concerning its intentions to participate in ST's borrowing or its intention to make a lump sum contribution.

C. Capital Contribution Adjustment for Actual Costs. Upon completion of the Project the actual Construction Cost for the Treatment Plant and the Shared Facilities shall be determined by audit of an independent certified public accountant satisfactory to JBSA and retained by ST for such purpose. The estimated Net Capital Cost contribution attributable to a Party shall thereafter be adjusted to reflect the actual Construction Cost as determined by the audit. Any overpayment shall be refunded to JBSA from the construction fund for the project or balance shall be collected from JBSA in accordance with the principles set forth in this paragraph 5.

6. OPERATION AND MAINTENANCE RESERVE. If ST is required by its lender or if ST's consulting engineer recommends and ST approves a reasonable operation and maintenance reserve, such reserve shall be funded. The amount required shall initially be collected as a Construction Cost or a Cost of Operation, depending upon the time when the reserve must be funded; provided that the relative amounts contributed by the Parties shall be determined in accordance with the principles set forth in paragraph 7, hereof. Amounts required to replenish or increase the reserve shall be collected as a Cost of Operation within the time required.

7. TREATMENT SERVICE CHARGES. In consideration of the payment of treatment charges to be calculated and payable in accordance with the terms of this paragraph 7, ST shall permit use of the ST Sewer System for transmission and treatment of sewage and waste flows from the JBSA Sewer System in an amount not exceeding JBSA's Reserved

Capacity in the Treatment Plant and the Shared Facilities, as applicable.

A. Initial Service Charge. Effective immediately, the initial service charge rate shall be \$ 13.50 per EDU discharged from the JBSA Sewer System into the ST Sewer System and shall be payable to ST quarterly on the 1<sup>st</sup> day of MAR., JUNE, Sept. and Dec. in each year commencing 1998. Each quarterly payment shall be based upon the number of EDU's discharged from JBSA into the ST Sewer System during the preceding calendar quarter. The initial payment shall be based on 540 EDU's. The initial rate shall remain in effect without adjustment until and throughout the calendar year 1999.

B. Future Service Charges. After calendar year 1999 the initial service charge shall be subject to automatic annual adjustment upon and in accordance with the following terms and conditions:

(1) Method of Computation. In every calendar year following the first Test Year, ST shall engage an independent certified public accountant satisfactory to JBSA who shall determine the following matters and deliver a detailed written report thereon to the Parties not later than March 15 of the calendar year following such Test Year:

(a) The Cost of Operation of the Treatment Plant for such Test Year;

(b) The Cost of Operation of the Shared Facilities for such Test Year;

(c) The number of EDU's of sewage and wastes treated in such Test Year in the Treatment Plant;

(d) The number of EDU's of the total sewage and wastes transported in such Test Year in the Shared Facilities; and

(e) The amount obtained by dividing subparagraph (c) above into subparagraph (a) above, plus the amount obtained by dividing subparagraph (d) above into subparagraph (b) above, the result being the Costs of Operation of the ST Treatment Plant and the Shared Facilities, respectively, in such Test Year per EDU. The respective Costs of Operation of the Treatment Plant and Shared Facilities per EDU as so determined shall be the service charge rates per EDU of sewage and wastes discharged from the JBSA Sewer System payable by JBSA to ST for the calendar year following such Test Year and until the charges per EDU are again changed in accordance with the above procedure, subject to (f), below, of this subparagraph 7.

(f) In sufficient time for the independent certified public accountant to deliver the required detailed written report, JBSA shall deliver to such accountant the records of the Costs of the Operation of its pumping station and force main in the vicinity of Main Street at Boundary Avenue, also known as School Road. Using the same methodology as is indicated above in this paragraph 7, the accountant shall determine the Cost of Operation for such facilities per EDU and, in calculating the service charges for JBSA, shall give it a credit for the Cost of Operation for such facilities attributable to sewer customers in Springfield Township.

(2) Service Charge Adjustment for Test Year. In addition to the basic quarterly payment due for treatment charges, on the 1<sup>st</sup> day of APRIL, AUG. and DEC. of every calendar year

following the first Test Year, an adjustment to the payment due on such dates shall be made to provide for:

(a) Payment to ST of an amount equal to one-third (1/3) of the amount by which the actual treatment costs attributable to JBSA exceed the amount of service charge actually paid by JBSA to ST on account of the preceding Test Year resulting from the recalculation of the service charge; or

(b) Credit to JBSA of an amount equal to one-third (1/3) of any amount of any service charge overpayment in the preceding Test Year as a result of the recalculation of the service charge.

C. Calculation of EDU's.

(1) Initially, the number of EDU's contributed by the Parties shall be deemed to be as follows:

(a) Treatment Plant. ST 1843; JBSA 767.

(b) Shared Facilities. ST 879; JBSA 767.

(2) Future Calculations. In every calendar year following the first Test Year, the consulting engineers of ST and JBSA shall confer and shall determine the number of EDU's discharged from each system at the following locations: the pumping station in the vicinity of Nixon Drive, the pumping station in the vicinity of Main Street at Boundary Avenue, also known as School Road, and the Treatment Plant. These determinations shall be made as of January 1 of each year, beginning January 1, 1999. If the consulting engineers cannot make a determination, the above named independent certified public accountant shall make a determination, which shall be conclusive.

D. Special Handling or Treatment Charge. In the event the sewage wastes or flows discharged from the JBSA Sewer System or the ST Sewer System violate the covenant of subparagraph A(4) of paragraph 9 hereof and require special handling for treatment or sludge disposal, the total costs incident to providing such special handling or treatment shall be borne solely by JBSA or ST, as applicable, as an additional treatment charge.

E. ST Sewer System Financial Records. The Parties shall keep appropriate records and accounts with respect to Costs of Operation of their respective sewer systems, and portions thereof, so that determinations which shall be necessary under this paragraph 7 can be made promptly, at the required times, with fairness and accuracy. Such records and accounts shall be open to inspection by any Party, upon reasonable notice, at reasonable times. ST shall also provide to JBSA its operating budget for the ST Sewer System for the next occurring calendar year so that the Parties can project for budgeting purposes any potential increase or decrease in treatment charges in said calendar year that might arise resulting from, the annual treatment service charge recalculation. ST shall segregate the funds and keep separate accounts for its dealings with its own sewer customers on the one hand, and its dealings with municipal or authority customers on the other hand. ST shall make fair allocations of cost of owning and operating equipment used in part for purposes unrelated to the transportation and treatment of sewage from the JBSA Sewer System.

8. FLOWS. JBSA shall prohibit any connection to the JBSA Sewer System without a permit.

9. SEWER SYSTEM OPERATION COVENANTS.

A. General. The Parties covenant that all sewage and wastes collected by them and discharged into the ST Sewer System shall be subject to the terms and conditions of this Agreement and do further covenant:

(1) To maintain their Sewer Systems as sanitary sewers and not permit the discharge into their systems by any contributor of roof drainage water, storm water, surface drainage or building foundation drainage nor permit the excessive infiltration or inflow of ground water into the systems.

(2) To prohibit any contributor from discharging into the Sewer Systems any sewage or waste containing any substance or matter or having any characteristic which violates the sewage discharge limitations, criteria, standards or provisions of the ordinance or ordinances and regulations of Springfield Township or its municipal authority in effect at the time governing the discharge of sewage and wastes into the ST Sewer System.

(3) To not discharge into the ST Sewer System any sewage or waste containing any substance or matter or having any characteristic which violates the sewage discharge limitations, criteria, standards or provisions of the ordinance or ordinances and regulations of ST or its municipal authority in effect at the time governing the discharge of sewage and wastes into the ST Sewer System.

(4) To adopt, maintain and enforce such ordinances<sup>1</sup> and regulations as are necessary to fulfill the obligations of subpara-

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<sup>1</sup> Jacobus Borough joins in this Agreement for the purpose of making this covenant.

graphs A 1, 2 and 3 above and subparagraph B below of this paragraph 9 which shall be at least as stringent as the ordinance or ordinances and regulations of ST and its municipal authority in effect at the time governing connection to and discharge of sewage and wastes into the ST Sewer System, and to grant no exceptions or variances to discharge limits or criteria except as have been approved in writing by ST or its municipal authority, as applicable, which approval shall not be withheld unless the request could not have been approved under the ordinance or ordinances and regulations of ST and its municipal authority, as applicable, in effect at the time governing the discharge of sewage and wastes into the ST Sewer System if the contributor had been directly connected thereto.

B. Industrial Waste Contributors. JBSA agrees to notify ST or its municipal authority, as applicable, immediately of each Industrial Connection to the JBSA Sewer System, showing the name and address of such industry, the nature of its business and, in general, the characteristics of the sewage and wastes which will be discharged into the JBSA Sewer System and such other information as ST or its municipal authority, as applicable, may reasonably require, including any information that may be required to be reported to DER, EPA or any other governmental body having jurisdiction.

(1) JBSA agrees, on request of ST or its municipal authority, as applicable, to take appropriate measures to require any occupant of property discharging industrial wastes into the JBSA Sewer System, to provide, at such occupant's sole expense, suitable facili-

ties to enable sewage and waste samples to be collected by the appropriate Party.

(2) In the event that any report submitted to JBSA, ST or its municipal authority, as applicable, stating the results of an analysis of any sample, shall include a finding that sewage or wastes discharged from the industrial waste contributor violates the covenant set forth in subparagraph A(2) of this paragraph 9 in regard to contents or components of sewage or wastes, JBSA shall have the right at its sole expense to submit a portion of the same sample to an independent testing laboratory, satisfactory to ST or its municipal authority, as applicable, for determination and whose determination of the question shall be final.

(3) If the ST, or its municipal authority, as applicable, determination is not challenged or is confirmed, JBSA or the Borough of Jacobus, as applicable, agrees to take such action against the contributor as is necessary to cure the violation and upon such terms and using such compliance options as would be available to ST or its municipal authority, as applicable, if the contributor were directly connected to the ST Sewer System, and to grant no exceptions or variances to the discharge limits or criteria except in accordance with subparagraph A(4) of this paragraph 9.

(4) JBSA agrees that in the event a contributor of industrial wastes located in Jacobus Borough discharges sewage or waste into the JBSA Sewer System of a quantity or character such that if directly connected to the ST Sewer System, the contributor would be subject to ST or its municipal authority, as applicable, then in effect

industrial waste surcharge, then JBSA shall, upon billing to JBSA by ST or its municipal authority, as applicable, pay to ST or its municipal authority, as applicable, an amount equal to such industrial waste surcharge.

C. Indemnification. JBSA agrees to pay the cost of any damage to the ST Sewer System, or fine imposed upon ST or its municipal authority resulting from discharge of improper sewage or waste from the JBSA Sewer System, in violation of this Agreement, or from improper operation or maintenance of or high flows from such system. ST agrees to pay or to cause its municipal authority to pay the cost of any fine imposed upon it or its municipal authority resulting from discharge of improper sewage and waste from the ST Sewer System in violation of this Agreement, and from improper operation or maintenance of or high flows from such system. Each Party agrees to indemnify and save harmless the other Party against all costs, losses or damage on account of any injury to persons or property occurring in the performance of this Agreement, due to the negligence of a Party or its respective servants, agents or employes. A Party shall not at any time and under no circumstances, be liable to another Party for any damages to another Party's sewer system caused by reason of any condition beyond the control of such Party; conditions detailed in this paragraph C shall not be deemed beyond such control.

10. SEWER SYSTEM MAINTENANCE COVENANTS.

A. JBSA Sewer System. JBSA covenants and agrees that it will:

(1) Maintain its sewer system, in good repair, working order and condition;

(2) Continuously operate the same;

(3) from time to time make all necessary repairs, renewals and replacements thereof and all necessary improvements thereto in order to maintain adequate service and prevent infiltration and inflow;

(4) Comply with all present and future laws, rules, regulations, permits, orders and requirements lawfully made by the DER, EPA or any other governmental body having jurisdiction; and

(5) Provide authorized representatives of ST with access at reasonable times to the JBSA Sewer System in order to assure compliance with the terms of this Agreement.

B. ST Sewer System. ST covenants and agrees that it will:

(1) Maintain the ST Sewer System in good repair, working order and condition;

(2) Continuously operate the same;

(3) From time to time make all necessary repairs, renewals and replacements thereof and all improvements thereto in order to maintain adequate service and prevent infiltration and inflow;

(4) Comply with all present and future laws, rules, regulations, permits, orders and requirements lawfully made by the DER, EPA or any other governmental body having jurisdiction; and

(5) Provide authorized representatives of JBSA with access at reasonable times to the ST Sewer System in order to assure compliance with the terms of this Agreement.

11. REQUIRED UPGRADING OF FACILITIES. If, pursuant to any requirement of DER or EPA, ST is required to upgrade the level of sewage waste treatment or sludge stabilization and disposal at the Treatment Plant, then JBSA shall pay the same share of the costs of such upgrading as its Reserved Capacity bears to the total capacity of the Treatment Plant. Payment of such share shall be made in accordance with paragraph 5 hereof.

12. ADDITIONAL TREATMENT AGREEMENTS. ST may enter into additional agreements concerning transportation, treatment and disposal by ST of sewage and wastes from any other municipality or municipality authority; provided, however, that no such agreement shall impair the ability of ST to receive, transport, treat and dispose of sewage and wastes collected in the JBSA Sewer System in accordance with the terms of this Agreement or increase the costs of JBSA for the treatment or transportation of its sewage; provided, further, that any such agreements include the provisions found in sections 8 through 10 of this Agreement.

13. RESERVE CAPACITY OVERFLOWS.

Excess Discharge. In the event that the total discharge of sewage and wastes from the JBSA Sewer System into the ST Sewer System shall exceed in volume the Reserve Capacity of JBSA in any portion of the ST Sewer System, JBSA shall not permit any further connections to its sewer system and the Parties agree that they will negotiate in good faith with respect to appropriate methods of providing additional capacity or reallocation of existing capacity and for any appropriate additional payments by reason thereof. In the event that the Parties

shall fail to agree with respect to provisions for additional capacity or reallocation of existing capacity and appropriate payments thereof, JBSA shall continue to have the right to discharge sewage and wastes from the JBSA Sewer System into the ST Sewer System in an amount not exceeding its Reserve Capacity.

14. MISCELLANEOUS PROVISIONS.

A. Payments. JBSA covenants and agrees that:

(1) The sums payable to ST hereunder will be paid at the times set forth herein without suspension, set-off or abatement of any nature, irrespective of delays in completion of any construction relating to the Project or the Shared Facilities.

(2) It will provide in its annual budget during the term hereof, commencing with the annual budget for the first year in which payments are due hereunder to ST, for sufficient current revenues which, together with such other funds as legally may be available, will enable JBSA to pay all its obligations to ST hereunder in each such year.

(3) If during any year any obligation hereunder remains unpaid, the unpaid balance shall be provided for and paid from current revenues for the succeeding year, in addition to all obligations payable hereunder in such succeeding year.

B. Factual Disputes. The Parties hereto agree that if, at any time, disputes shall arise between them concerning factual determinations under the terms of this Agreement, the matter in dispute shall be referred to three arbitrators chosen as follows: one member to be appointed by ST, one to be appointed by JBSA, and the third to be

agreed upon by the two appointees so selected; provided, however, that in the event such appointees cannot agree on the third arbitrator, the President Judge of the Court of Common Pleas of York County, Pennsylvania, shall appoint the third arbitrator. The decision or award of the majority of such arbitrators shall be final and binding upon the Parties hereto, their respective successors and assigns. Each Party to the dispute shall pay the costs of its own appointee and one-half of the costs of the third arbitrator.

C. User Meetings. Representatives of the Parties to this Agreement shall initially meet quarterly to discuss mutual concerns and issues relating to the subject matters of this Agreement. Such meetings may be held less frequently unless one of the Parties requests that they be held quarterly.

D. Term. This Agreement shall continue until amended or terminated by the Parties.

E. Headings. Paragraph and subparagraph headings are provided for the convenience of users and are not a part of this Agreement.

F. Agreement Binding. This Agreement shall be binding upon the Parties hereto and their respective successors and assigns as of the date of execution. It is contemplated that ST will incorporate a municipal authority under the Pennsylvania Municipality Authorities Act to construct, finance and operate the Project. This Agreement may be assigned in whole to such an authority incorporated solely by ST; provided that ST shall remain responsible for the same covenants as are undertaken herein by Jacobus Borough; provided further, that all other

obligations undertaken herein by ST are assigned to such municipal authority.

G. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original, but such counterparts together shall constitute but one and the same instrument.

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed by their duly authorized appropriate officers and their respective seals to be affixed hereunto, all as of the day and year first above written.

Attest:

Barbara E. Switzer  
Secretary  
(SEAL)

SPRINGFIELD TOWNSHIP

BY E. Luma Lehman  
Supervisor

BY Patrick S. White  
Supervisor

BY \_\_\_\_\_  
Supervisor

Attest:

Ronald K. Kohn  
Secretary  
(SEAL)

JACOBUS BOROUGH SEWER AUTHORITY

BY Ray B. Kohn  
Chairman

JOINDER

Jacobus Borough hereby joins in the foregoing Agreement for the purposes stated therein.

Attest:

G. Bernell Bellinger  
Secretary  
(SEAL)

JACOBUS BOROUGH

BY Barry L. Shaffer  
President, Borough Council

EXHIBIT "A"

Points of Connection

EXHIBIT "B"

Reserve Capacity

Treatment Plant

Shared Facilities

ADMINISTRATIVE COMPLETENESS CHECKLIST

PART II - SEWERAGE

36

Due Out: \_\_\_\_\_

Client: Jacobus Borough Sewer Authority

Site: \_\_\_\_\_

Permit #: 6703406

Township: Jacobus Borough

County: York

(Creekwood Drive PS)

\_\_\_ NEW \_\_\_ AMENDMENT

- General Information Form (w/land use questions answered)
- Check for \$500.00 (not over 15 days old) #40800  
(\$25.00 for Single Family Residences)
- 2 Completed Applications with Signature(s) and Notarization
- 2 Copies of Design Engineer's Report w/Engineer's Signature & Seal on Cover/First Page
- 2 Copies of Plans and 1 Copy of Specifications  
(Engineer's Signature and Seal on Cover Sheet)  
(Engineer's Seal on Each Sheet of Plans)
- Copy of DEP Planning Approval Letter
- Acts 14, 67 & 68 Notification (copies of letters & signed certified mail receipts)
- \_\_\_ Sludge Disposal Method Identified for Treatment Plants
- \_\_\_ For Permit Amendments: Please Provide Original Permit Number
- \_\_\_ Provide General or Individual Permit No(s) for any Permit Issued for Stream Crossings, Wetland Encroachments, and/or Stream Encroachment Headwalls

In House:

6/30 PA Bulletin (date e-mailed) \_\_\_\_\_ e-FACTS

Administrative Completeness/In-Completeness Letter



Pennsylvania Department of Environmental Protection

909 Elmerton Avenue  
Harrisburg, PA 17110-8200

DEC 29 2003

FILE COPY

**Southcentral Regional Office**

717-705-4707  
FAX - 717-705-4760

Raymond E. Kuhn, Chairman  
Jacobus Borough Sewer Authority  
126 N. Cherry Lane  
Jacobus, PA 17407

Re: Sewage <sup>36</sup>  
The Woods at Lake Redman  
Part II Permit No. 6703406  
APS ID No. 490033  
Authorization ID No. 511085  
Jacobus Borough, York County

Dear Mr. Kuhn:

Your permit is enclosed.

You must comply with all Standard and Special Conditions attached to this Permit. Construction must be done in accordance with the permit application and all supporting documentation. Please review the permit conditions and the supporting documentation submitted with your application before starting construction.

Enclosed is the "Sewage and Industrial Wastewater Facilities Construction Certification" form. A Pennsylvania-registered Professional Engineer must sign and complete this form prior to startup of the facilities (see Special Conditions). You or your authorized representative must also sign the form. This certification and other post-construction documentation must be submitted to the Department within 30 days following startup of the facilities.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, PO Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

Mr. Raymond E. Kuhn

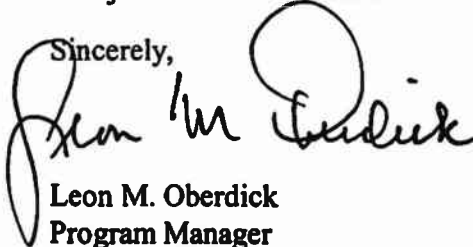
- 2 -

IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.

IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717-787-3483) FOR MORE INFORMATION.

If you have any questions, please call Mr. Sean Furjanic at 717-705-4826.

Sincerely,

A handwritten signature in black ink, appearing to read "Leon M. Oberdick". The signature is written in a cursive style with a large, prominent initial "L".

Leon M. Oberdick  
Program Manager  
Water Management Program

Enclosures

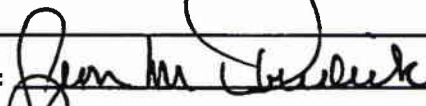
cc: W. Casey Deller, C.S. Davidson, Inc.



COMMONWEALTH OF PENNSYLVANIA  
 DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 BUREAU OF WATER SUPPLY AND WASTEWATER MANAGEMENT

PERMIT NO. 6703406  
 APS ID. 490033  
 AUTH. ID. 511085

**WATER QUALITY MANAGEMENT  
 PERMIT**

A. PERMITTEE (Name and Address): Jacobus Borough Sewer Authority		CLIENT ID #: 211465	B. PROJECT/FACILITY (Name): The Woods at Lake Redman	
C. LOCATION (Municipality, County): Jacobus Borough, York County			SITE ID #: 619369	
D. This permit approves the construction of sewerage facilities consisting of: <ul style="list-style-type: none"> <li>o One wet-well mounted sewage pump station (Creekwood Drive Pump Station) that will pump sewage to the existing York Road Pump Station and then Springfield Township WWTP for treatment. The pump station will consist of two suction lift pumps rated at 120 GPM at 50 feet Total Dynamic Head, a 4-foot inside diameter wet well, emergency power via portable generator, and an autodialer alarm system.</li> <li>o Approximately 2,600 linear feet of 8-inch PVC gravity sewers, and 910 linear feet of 4-inch PVC force main to serve the 44 residential lots.</li> </ul>				
Pump Station(s): <u>Creekwood Drive Pump Station</u>		Industrial Wastewater/Sewage Treatment Facility:		
Design Capacity: <u>120</u> GPM		Annual Average Flow: _____ MGD		
		Design Hydraulic Capacity: _____ MGD		
		Design Organic Capacity: _____ lb. BOD <sub>5</sub> /day		
E. APPROVAL GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING:				
1. All construction, operations, and procedures shall be in accordance with the Water Quality Management Permit application dated <u>May 13, 2003</u> , and its supporting documentation, which are hereby made a part of this permit.				
2. Permit Conditions Relating to Sewerage and Erosion and Sediment Control are attached and made part of this permit.				
F. THE AUTHORITY GRANTED BY THIS PERMIT IS SUBJECT TO THE FOLLOWING FURTHER QUALIFICATIONS:				
1. If there is a conflict between the application or its supporting documents and amendments and the attached conditions, the attached conditions shall apply.				
2. Failure to comply with the rules and regulations of DEP or with the terms or conditions of this permit shall void the authority given to the permittee by the issuance of this permit.				
3. This permit is issued pursuant to the Clean Streams Law Act of June 22, 1937, P.L. 1987, as amended 35 P.S. § 691.1 <u>et seq.</u> , and/or the Dam Safety and Encroachments Act of November 26, 1978, P.L. 1375, as amended, 32 P.S. § 693.1 <u>et seq.</u> Issuance of this permit shall not relieve the permittee of any responsibility under any other law.				
PERMIT ISSUED: DEC 29 2003		BY: 		
		TITLE: <u>Water Management Program Manager</u>		



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WATER SUPPLY AND WASTEWATER MANAGEMENT

**PERMIT CONDITIONS RELATING TO SEWERAGE**  
Water Quality Management Permit No. 6703406

Jacobus Borough Sewer Authority

**General**

1. Consistent with the Department of Environmental Protection's (DEP) technical guidance document *Conducting Technical Reviews of Water Quality Management Permit Wastewater Treatment Facilities* (DEP ID: 362-2000-007 available on DEP's website at [www.dep.state.pa.us](http://www.dep.state.pa.us)), DEP did not conduct a detailed technical review of this application. DEP considers Joshua George, the registered Professional Engineer whose seal is affixed to the design documents, to be fully responsible for the adequacy of all aspects of the facility design.
2. The permittee shall adopt and enforce an ordinance requiring the abandonment of privies, cesspools or similar receptacles for human waste and on-lot sewage disposal systems on the premises of occupied structures accessible to public sewers. All such structures must be connected to the public sewers.
3. The approval is specifically made contingent on the permittee acquiring all necessary property rights, by easement or otherwise, providing for the satisfactory construction, operation, maintenance and replacement of all sewers or sewerage structures in, along, or across private property with full rights of ingress, egress and regress.
4. When construction of the approved sewerage facilities is completed and before they are placed in operation, the permittee shall notify DEP in writing so that a DEP representative may inspect the facilities.
5. If, at any time, the sewerage facilities covered by this permit create a public nuisance, including but not limited to, causing malodors or causing environmental harm to waters of the Commonwealth, DEP may require the permittee to adopt appropriate remedial measures to abate the nuisance or harm.
6. This permit does not relieve the permittee of its obligations to comply with all federal, interstate, state or local laws, ordinances and regulations applicable to the sewerage facilities.
7. This permit does not give any real or personal property rights or grant any exclusive privileges, nor shall it be construed to grant or confirm any right, easement or interest in, on, to, or over any lands which belong to the Commonwealth.

**Construction**

8. The facilities shall be constructed under the supervision of a Pennsylvania-registered Professional Engineer in accordance with the approved reports, plans and specifications. Any deviations from approved plans or specifications so revised should, therefore, be submitted well in advance of any construction work that will be affected by such changes, to permit sufficient time for review and approval. Structural revisions or other minor changes not affecting capacities, flows or operations are permitted during construction without approval. "As-built drawings" shall be filed with DEP at the completion of the work.
9. A Pennsylvania-registered Professional Engineer shall certify that construction of the permitted facilities was completed in accordance with the Part II application and design plans submitted to DEP, using the enclosed "Sewage and Industrial Wastewater Facilities Construction Certification." It is the permittee's responsibility to ensure that a Professional Engineer is on-site to provide the necessary oversight and/or inspections to certify the facilities. The facilities may not be placed into operation until the Professional Engineer completes the certification. The certification must be submitted to DEP within 30 days following startup of the facilities, along with as-built drawings, photographs (if available), and a description of any DEP-approved deviations from the application and design plans.
10. Manhole inverts shall be formed to facilitate the flow of the sewage and to prevent the stranding of sewage solids. The whole manhole structure shall be built to prevent undue infiltration, entrance of street wash or grit and provide safe access to facilitate manhole maintenance activities.

**Operation and Maintenance**

11. The local Waterways Conservation Officer of the Pennsylvania Fish and Boat Commission (FBC) shall be notified when the construction of any stream crossing and/or outfall is started and completed. A written permit must be secured from the FBC if the use of explosives in any waterways is required and the permittee shall notify the local Waterways Conservation Officer when explosives are to be used.

12. The permittee shall maintain facility operation and maintenance (O&M) manuals at the facility and ensure proper O&M of the permitted facility. The permittee shall file the O&M manuals with DEP upon request.
13. The sewers shall have adequate foundation support, as soil conditions require. Trenches shall be back-filled to ensure that sewers will have proper structural stability, with minimum settling and adequate protection against breakage. Concrete used in connection with these sewers shall be protected from damage by water, freezing, drying or other harmful conditions until cured.
14. Stormwater from roofs, foundation drains, basement drains or other sources shall not be admitted directly to the sanitary sewers.
15. The approved sewers shall be maintained in good condition, kept free of deposits by flushing or other cleaning methods and repaired when necessary.
16. The sewerage facilities shall be properly maintained so that the facility will perform as designed.
17. The attention of the permittee is called to the highly explosive nature of certain gases generated by the digestion of sewage solids when these gases are mixed in proper proportions with air and to the highly toxic character of certain gases arising from such digestion or from sewage in poorly ventilated compartments or sewers. Therefore, at all places throughout the sewerage facilities where hazard of fire, explosion or danger from toxic gases may occur, the permittee shall post conspicuous permanent and legible warnings. The permittee shall instruct all employees concerning the aforesaid hazards, first aid and emergency methods of meeting such hazards and shall make all necessary equipment and material accessible.
18. The permittee shall properly control any industrial waste discharged into its sewerage system by regulating the rate and quality of such discharge, requiring necessary pretreatment and excluding industrial waste, if necessary, to protect the integrity or operation of the permittee's sewerage system.
19. There shall be no physical connection between a public water supply system and a sewer or appurtenance to it that would permit the passage of any sewage or polluted water into the potable water supply. No water pipe shall pass through or come in contact with any part of a sewer manhole.
20. Collected screenings, slurries, sludge and other solids shall be handled and disposed of in compliance with 25 Pa. Code Chapters 271, 273, 275, 283 and 285 (related to permits and requirements for land filling, land application, incineration and storage of sewage sludge), Federal Regulations 40 CFR 257 and the Federal Clean Water Act and its amendments.



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WATER SUPPLY AND WASTEWATER MANAGEMENT

**PERMIT CONDITIONS RELATING TO EROSION AND SEDIMENT CONTROL**  
Water Quality Management Permit No. 6703406

Jacobus Borough Sewer Authority

**General**

1. By approval of the plans for which this permit is issued, neither the Department of Environmental Protection (DEP) nor the Commonwealth of Pennsylvania assumes any responsibility for the feasibility of the plans or the measures and facilities to be constructed thereunder.
2. If at any time the erosion and sediment control activities undertaken pursuant to this permit or other activities carried out at the location is causing or contributing to pollution of the waters of the Commonwealth, the permittee shall forthwith adopt such remedial measures as are acceptable to DEP.
3. This permit does not authorize any earth disturbance controlled or regulated by an ordinance enacted by a local municipality. Additional permits must be secured from local municipalities where earthmoving activities are covered by such local ordinances.
4. When the erosion and sediment control measures and facilities approved in this permit are completed, the permittee shall notify the County Conservation District or the DEP regional office so that a final inspection of the measures and facilities may be made.
5. The permittee shall be responsible for assuring that permit conditions are implemented in accordance with 25 Pa. Code Chapter 102.
6. The permittee shall comply with the Individual or General NPDES Permit for Stormwater Discharges Associated with Construction Activities issued by DEP or the County Conservation District.

**Construction**

7. The erosion control measures and facilities shall be constructed under the supervision and competent inspection of an individual trained and experienced in erosion control, in accordance with the plans, design and other data as herein approved or amended and with the conditions of this permit. Control facilities shall be inspected and maintained to ensure effective control.
8. At least seven days before earthmoving will begin, the permittee, by telephone or certified mail, shall notify DEP or its designee of the date for beginning of construction and invite the County Conservation District representative to attend a pre-construction conference. The permittee shall have his erosion control plan available at the activity site at all times.
9. All earthmoving activities shall be undertaken in the manner set forth in the erosion and sediment control plan identified with this permit. Revisions to the plan shall be pre-approved by DEP or the County Conservation District.
10. All slopes, channels, ditches or any disturbed area shall be stabilized as soon as possible after the final grade or final earthmoving has been completed. Where it is not possible to permanently stabilize a disturbed area immediately after the final earthmoving has been completed or where the activity ceases for more than 20 days, interim stabilization measures shall be implemented promptly.

**Operation and Maintenance**

11. No stormwater, sewage or other wastes not specifically approved in this permit, shall be admitted to the erosion and sediment control facilities for which this permit is issued.
12. Sediment shall at no time be permitted to accumulate in sedimentation basins to a depth that may limit storage capacity or interfere with the facility's settling efficiency. The sediment removed shall be handled and disposed of in a manner that will not create pollution problems so that every reasonable and practical precaution is taken to prevent the said material from reaching the waters of the Commonwealth.
13. Upon completion of the project, all disturbed areas shall be stabilized to prevent accelerated erosion. Any erosion and sediment control facility required or necessary to protect areas from erosion during the stabilization period shall be maintained until stabilization is completed. Upon completion of stabilization, all unnecessary or unusable control measures and facilities shall be removed, the areas shall be graded and the soils shall be stabilized.



**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
SOUTHCENTRAL REGIONAL OFFICE  
WATER MANAGEMENT PROGRAM  
909 ELMERTON AVENUE  
HARRISBURG, PA 17110-8200**

**SEWAGE AND INDUSTRIAL WASTEWATER FACILITIES  
CONSTRUCTION CERTIFICATION**

Permittee: Jacobus Borough Sewer Authority

Address: 126 N. Cherry Lane, Jacobus, PA 17407

Municipality: Jacobus Borough

County: York

I (We) hereby certify that the Creekwood Drive sewage pump station, consisting of a 4-foot diameter concrete wet well and two Smith & Loveless Model No. 4B2D pumps rated at 120 GPM @ 50' TDH, with a sewage collection system consisting of 2,600 LF of 8-inch PVC sewers and 910 LF of 4-inch PVC force main at The Woods at Lake Redman approved under Part II Permit No. 6703406, Auth. ID 511085, has been inspected and constructed in accordance with the plans and specifications approved by the Department.

***THE FOLLOWING INFORMATION MUST BE COMPLETED AND RETURNED TO THE PERMITS SECTION AT THE ABOVE ADDRESS WITHIN 30 DAYS OF COMPLETION OF THE PROJECT, ALONG WITH AS-BUILT DRAWINGS, PHOTOGRAPHS (IF AVAILABLE), AND A DISCUSSION OF ANY DEVIATIONS FROM THE DESIGN PLANS DURING CONSTRUCTION.***

Construction Completion Date (MM/DD/YYYY): \_\_\_\_\_

**Supervising Professional Engineer:**

Name: \_\_\_\_\_  
(Please Print or Type)

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

Title: \_\_\_\_\_

Firm or Agency: \_\_\_\_\_

Telephone: \_\_\_\_\_

**Permittee's Authorized Representative:**

Name: \_\_\_\_\_  
(Please Print or Type)

Signature: \_\_\_\_\_

Title: \_\_\_\_\_

Telephone: \_\_\_\_\_

**Principal Operator Information (For Sewage Facilities):**

Name: \_\_\_\_\_  
(Please Print or Type)

Certification Number (if applicable): \_\_\_\_\_

Class: \_\_\_\_\_

Type: \_\_\_\_\_

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
WATER MANAGEMENT PROGRAM

INTERNAL REVIEW AND RECOMMENDATIONS

Name of North Londonderry Project North Londonderry Township  
Applicant Township Authority Location Lebanon County Permit No. 3803403

**BRIEF DESCRIPTION OF PROJECT AND DISCUSSION**

This application requests approval to construct and operate improvements at the Authority's existing Pump Station No. 2. The project will allow additional connections to be made to sewers in the existing service area. The existing wet/dry well station was originally built under Part 2 Permit No. 388409 to its present location. Wastewater is currently pumped through a force main to a gravity sewer in Pajabon Drive where it is eventually conveyed by gravity sewers to the Authority's Pump Station No. 4. Problems have been identified with available capacity in the sewers receiving the force main discharge so a new force main and associated sewers are proposed. The proposed modifications will include:


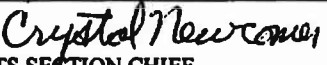

1. Modifications to the existing wet well to include a new sewage grinder. The existing dry well will be abandoned.
2. Construction of a new wet well fitted with dual 40 HP submersible pumps each rated at 525 gpm (119 ft. TDH).
3. Construction of a new pump station building to house the new pump controls, a telephone dialer, a new emergency generator, and various appurtenances. The existing building will be abandoned.
4. Construction (under two separate contracts) of 7,300 feet of new 8-inch diameter DIP force main. The existing force main will be abandoned. Approximately 4,300 feet of the force main will be constructed by the Authority and the remainder will be constructed by a private developer (Arbor Greene) as part of his site improvements.
5. Construction of various lengths of 8, 10, and 12-inch diameter gravity sewers within Arbor Greene Phase 1. Included will be 1,400 feet of 12-inch diameter sewer that will convey the new force main discharge to the Authority's existing Pump Station No. 4.

The modified station will have an average design capacity of 0.19 mgd (0.76 mgd peak).

There are no stream/wetland/floodway encroachments. The Erosion and Sedimentation Control Plan was found to be adequate by the Lebanon county Conservation District on November 7, 2003.

Planning approval was granted under the based 537 plan. The Arbor Greene project was granted a waiver from plannings.

Permit issuance is recommended.

Recommendation and Action				
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	 Timothy E. Carpenter PERMITS SECTION	12/17/03
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Martin L. Ferry, P.E.  REGIONAL PERMITS SECTION CHIEF	12/23/03
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Leon M. Oberdick  PROGRAM MANAGER	12/29/03

**Permit Conditions**

- ° Special - A through Q



*Excellence in Civil Engineering*

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38 N. Duke Street, York Pennsylvania 17401  
Telephone - (717) 846-4805 - FAX - (717) 846-5811  
www.csdavidson.com

**FAX TRANSMISSION COVER SHEET**

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**DATE:** December 22, 2003

**TO:** Sean Furjanic  
PA DEP

**FAX:** (717) 705-4760

**SENDER:** W. C. Deller, E.I.T.

**RE:** Church Reserve, LLC  
The Woods at Lake Redman  
Engineer's Project No. 3949.3.03.00

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***YOU SHOULD RECEIVE 3 PAGE(S), INCLUDING THIS COVER SHEET. IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL (717) 846-4805.***

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I have attached GP-4, 5 & 7 Permits from DEP regarding the Pumping Station Permit, for The Woods at Lake Redman.

If you have any questions or comments, please call.

  
W. Casey Deller, E.I.T.



Pennsylvania Department of Environmental Protection  
 909 Elmerton Avenue  
 Harrisburg, PA 17110-8200  
 October 16, 2003

Southcentral Regional Office

717-705-4707  
 FAX - 717-705-4760

Mr. Jeffrey Rutt  
 Church Reserve, LLC  
 214-A Willow Valley Lakes Drive  
 Willow Street, PA 17584

Re: General Permit Acknowledgement  
 DEP File No. GP-04-67-03-119  
 Jacobus Borough, York County

Dear Mr. Rutt:

This is in reference to your request to use General Permit No. 4 (Intake and Outfall Structures) to construct an 18-inch outfall pipe to discharge into an unnamed tributary to Lake Redman in Jacobus Borough, York County.

This will acknowledge receipt of your notification (copy enclosed) and registers your use of a General Permit. You are responsible for assuring the work is done in accordance with the drawings and conditions contained in the General Permit. You may proceed with your project after making the required notifications stipulated in the General Permit and securing all other approvals that may be necessary.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, PO Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

**IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.**



Pennsylvania Department of Environmental Protection

909 Elmerton Avenue  
Harrisburg, PA 17110-8200

May 5, 2003

Southcentral Regional Office

FILE COPY  
SPGP Sent

717-705-4707  
FAX - 717-705-4760

Mr. Jeffrey Rutt  
Church Reserve L.L.C.  
214-A Willow Valley Lakes Drive  
Willow Street, PA 17584

Re: General Permit Acknowledgment  
DEP File Nos. GP-05-67-03-112 & GP-07-67-03-107  
Jacobus Borough, York County

Dear Mr. Rutt:

This is in reference to your request to use General Permit Nos. 5 and 7 (Utility Line Stream and Minor Road Crossings) to install and maintain one eight-inch and one two-inch PVC utility line encased in concrete, and one 60-inch reinforced concrete culvert pipe to cross an unnamed tributary to the East Branch Codorus Creek (CWF), located just south of Lake Redman (York, PA Quadrangle N: 2.9 inches; W: 11.8 inches) in Jacobus Borough, York County.

This will acknowledge receipt of your notification (copy enclosed) and registers your use of a General Permit. You are responsible for assuring the work is done in accordance with the drawings and conditions contained in the General Permit. You may proceed with your project after making the required notifications stipulated in the General Permit and securing all other approvals that may be necessary.

Also, enclosed is your Federal Clean Water Act Section 404 authorization in the form of the Pennsylvania State Programmatic General Permit (PASPGP-2).

If you applied for a GP-7 (Minor Road Crossing), it is your responsibility to ensure that your crossing is sized correctly. Please be advised that you may be liable for any damages to adjacent properties if under-sizing of your crossing causes flooding on adjacent properties or roads.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, PO Box 8457, Harrisburg, PA 17105-8457, 717-787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800-654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717-787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.



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**FAX TRANSMISSION COVER SHEET**

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**DATE:** June 25, 2003

**TO:** Kelly Rathfon  
PA Department of Environmental Protection

**FAX:** (717) 705-4760

**SENDER:** Joshua C. George, P.E.

**RE:** Keystone Custom Homes  
The Woods at Lake Redman  
Engineer's Project No. 3949.3.03.00

**FILE COPY**

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**YOU SHOULD RECEIVE 9 PAGE(S), INCLUDING THIS COVER SHEET. IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL (717) 846-4805.**

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Kelly -

Attached is the General Information Form and related material for the above referenced project.

Josh

8000-PM-IT0001 Rev 06/07/2002



**COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
GENERAL INFORMATION FORM – AUTHORIZATION APPLICATION**

Before completing this General Information Form (GIF), read the step-by-step instructions provided in this application package. This version of the General Information Form (GIF) must be completed and returned with any program-specific application being submitted to the Department.

Related ID#s (If Known)		<b>DEP USE ONLY</b>	
Client ID# _____	APS ID# _____	Date Received & General Notes	
Site ID# _____	Auth ID# _____		
Facility ID# _____			

**CLIENT INFORMATION**

DEP Client ID# _____	Client Type / Code _____		
Jacobus Borough Sewer Authority			
Organization Name or Registered Fictitious Name		Employer ID# (EIN)	Dun & Bradstreet ID#
Individual Last Name	First Name	MI	Suffix SSN
Additional Individual Last Name	First Name	MI	Suffix SSN
Mailing Address Line 1 126 N. Cherry Lane		Mailing Address Line 2	
Address Last Line – City	State	ZIP+4	Country
Jacobus	PA	17407	USA
Client Contact Last Name	First Name	MI	Suffix
Kuhn	Raymond	E	
Client Contact Title	Phone		Ext
Chairman	(717) 428-1752		
Email Address	FAX		

**SITE INFORMATION**

DEP Site ID# _____	Site Name		
	The Woods at Lake Redman		
EPA ID# _____	Estimated Number of Employees to be Present at Site		
Description of Site			
Proposed Residential Community			
County Name	Municipality	City	Boro Twp State
York	Jacobus	<input type="checkbox"/>	<input checked="" type="checkbox"/> <input type="checkbox"/> PA
County Name	Municipality	City	Boro Twp State
		<input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/>
Site Location Line 1		Site Location Line 2	
Proposed Creekwood Drive			
Site Location Last Line – City	State	ZIP+4	
Jacobus	PA	17407	
Detailed Written Directions to Site			
Susquehanna Trail South to Jacobus Borough, property on left			
Site Contact Last Name	First Name	MI	Suffix
Wallace	Thomas	L.	
Site Contact Title	Site Contact Firm		
Borough Engineer	James R. Holley & Associates, Inc.		
Mailing Address Line 1	Mailing Address Line 2		
18 South George Street	Suite 501		
Mailing Address Last Line – City	State	ZIP+4	
York	PA	17401	
Phone	Ext	FAX	
(717) 846-4373		Email Address	
		twallace@jrholley.com	

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NAICS Codes (Two- & Three-Digit Codes - List All That Apply)

6-Digit Code (Optional)

Client to Site Relationship  
OWN/OP

**FACILITY INFORMATION**

- Modification of Existing Facility** Yes  No   
 1. Will this project modify an existing facility, system, or activity? Yes  No   
 2. Will this project involve an addition to an existing facility, system, or activity? Yes  No   
*If "Yes", check all relevant facility types and provide DEP facility identification numbers below.*

Facility Type	DEP Fac ID#	Facility Type	DEP Fac ID#
<input type="checkbox"/> Air Emission Plant	_____	<input type="checkbox"/> Industrial Minerals Mining Operation	_____
<input type="checkbox"/> Beneficial Use (water)	_____	<input type="checkbox"/> Laboratory Location	_____
<input type="checkbox"/> Blasting Operation	_____	<input type="checkbox"/> Land Recycling Cleanup Location	_____
<input type="checkbox"/> Captive Hazardous Waste Operation	_____	<input type="checkbox"/> Mine Drainage Trm/LandRecyProjLocation	_____
<input type="checkbox"/> Coal Ash Beneficial Use Operation	_____	<input type="checkbox"/> Municipal Waste Operation	_____
<input type="checkbox"/> Coal Mining Operation	_____	<input type="checkbox"/> Oil & Gas Encroachment Location	_____
<input type="checkbox"/> Coal Pillar Location	_____	<input type="checkbox"/> Oil & Gas Location	_____
<input type="checkbox"/> Commercial Hazardous Waste Operation	_____	<input type="checkbox"/> Oil & Gas Water Poll Control Facility	_____
<input type="checkbox"/> Dam Location	_____	<input type="checkbox"/> Public Water Supply System	_____
<input type="checkbox"/> Deep Mine Safety Operation -Anthracite	_____	<input type="checkbox"/> Radiation Facility	_____
<input type="checkbox"/> Deep Mine Safety Operation -Bituminous	_____	<input type="checkbox"/> Residual Waste Operation	_____
<input type="checkbox"/> Deep Mine Safety Operation -Ind Minerals	_____	<input type="checkbox"/> Storage Tank Location	_____
<input type="checkbox"/> Encroachment Location (water, wetland)	_____	<input type="checkbox"/> Water Pollution Control Facility	_____
<input type="checkbox"/> Erosion & Sediment Control Facility	_____	<input type="checkbox"/> Water Resource	_____
<input type="checkbox"/> Explosive Storage Location	_____	<input type="checkbox"/> Other:	_____

Latitude/Longitude Point of Origin	Latitude			Longitude		
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

Horizontal Accuracy Measure	Feet	--or--	Meters
Horizontal Reference Datum Code	<input type="checkbox"/> North American Datum of 1927		
	<input type="checkbox"/> North American Datum of 1983		
	<input type="checkbox"/> World Geodetic System of 1984		

Horizontal Collection Method Code	
Reference Point Code	
Altitude	Feet --or-- Meters
Altitude Datum Name	<input type="checkbox"/> The National Geodetic Vertical Datum of 1929
	<input type="checkbox"/> The North American Vertical Datum of 1988 (NAVD88)
Altitude (Vertical) Location Datum Collection Method Code	
Geometric Type Code	
Data Collection Date	
Source Map Scale Number	Inch(es) = Feet
	--or-- Centimeter(s) = Meters

**PROJECT INFORMATION**

**Project Name**  
The Woods at Lake Redman

**Project Description**  
46 Lot Residential Community (44 building lots)

<b>Project Consultant Last Name</b> George	<b>First Name</b> Joshua	<b>MI</b> C.	<b>Suffix</b>
<b>Project Consultant Title</b> Project Manager		<b>Consulting Firm</b> C. S. Davidson, Inc.	
<b>Mailing Address Line 1</b> 38 North Duke Street		<b>Mailing Address Line 2</b>	
<b>Address Last Line - City</b> York		<b>State</b> PA	<b>ZIP+4</b> 17401
<b>Phone</b> (717) 846-4805	<b>Ext</b> 253	<b>FAX</b> (717) 846-5811	<b>Email Address</b> jcg@csdavidson.com

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Time Schedules	Project Milestone (Optional)
August, 2003	Begin Construction of Public Improvements
September, 2003	Begin Home Construction
May, 2004	Complete Construction of Public Improvements
June, 2006	Complete Home Construction (estimated)

1. Is this application for an authorization type on the list of authorizations affected by the land use policy?  Yes  No

Note: If "Yes", you must complete the following Land Use Information section, unless exempted by Questions 2 or 3 below.

If "No", skip Questions 2 & 3 below as well as the following Land Use Information section.

For referenced list, see Appendix A attached to the GIF Instructions.

2. For an Air program authorization only. All other authorizations continue with Question 3 below. Will the permit authorize the construction of facilities outside an existing permitted area?  Yes  No  
N/A

Note: If "Yes", you must complete the following Land Use Information section unless exempted by Question 3 below. If "No", skip Question 3 below as well as the following Land Use Information section.

3. Have you attached or submitted municipal and county 'Early Opt Out' approval letters for the project?  Yes  No

Note: If "Yes" to Question 3, skip the following Land Use Information section. This should only be checked "Yes" if applicant is choosing the early opt-out option. Required approval letters described in the GIF Checklist and Instructions should be attached.

If "No" to Question 3, continue with the following Land Use Information section.

**LAND USE INFORMATION**

Note: Applicants are encouraged to submit copies of local land use approvals or other evidence of compliance with local comprehensive plans and zoning ordinances.

1. Is there a municipal comprehensive plan(s)?  Yes  No

2. Is there a county comprehensive plan(s)?  Yes  No

3. Is there a multi-municipal or multi-county comprehensive plan?  Yes  No

4. Is the proposed project consistent with these plans? If no plan(s) exists, answer "Yes".  Yes  No

5. Is there a municipal zoning ordinance(s)?  Yes  No

6. Is there a joint municipal zoning ordinance(s)?  Yes  No

7. Will the proposed project require a zoning approval (e.g., special exception, conditional approval, re-zoning, variance)? If zoning approval has already been received, attach documentation.  Yes  No

8. Are any zoning ordinances that are applicable to this project currently the subject of any type of legal proceeding?  Yes  No

9. Will the project be located on a site that has been or is being remediated under DEP's Land Recycling Program?  Yes  No

10. Will the project result in reclamation of abandoned mine lands through re-mining or as part of DEP's Reclaim PA Program?  Yes  No

11. Will the project be located in an agricultural security area or an area protected under an agricultural conservation easement?  Yes  No

12. Will the project be located in a Keystone Opportunity Zone or Enterprise Development Area?  Yes  No

13. Will the project be located in a Designated Growth Area as defined by the Municipalities Planning Code?  Yes  No

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**COORDINATION INFORMATION**

**Note:** The PA Historical and Museum Commission must be notified of proposed projects in accordance with DEP Technical Guidance Document 012-0700-001 and the accompanying Cultural Resource Notice Form.

If the activity will be a mining project (i.e., mining of coal or industrial minerals, coal refuse disposal and/or the operation of a coal or industrial minerals preparation/processing facility), respond to questions 1.0 through 2.5 below.

If the activity will not be a mining project, skip questions 1.0 through 2.5 and begin with question 3.0.

1.0	Is this a coal mining project? If "Yes", respond to 1.1-1.6. If "No", skip to Question 2.0. (DEP Use/48y1)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
1.1	Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be equal to or greater than 200 tons/day? (DEP Use/4x70)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
1.2	Will this coal mining project involve coal preparation/ processing activities in which the total amount of coal prepared/processed will be greater than 50,000 tons/year? (DEP Use/4x70)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
1.3	Will this coal mining project involve coal preparation/ processing activities in which thermal coal dryers or pneumatic coal cleaners will be used? (DEP Use/4x70)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
1.4	For this coal mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters? (DEP Use/4x62)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
1.5	Will this coal mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet? (DEP Use/3140)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
1.6	Will this coal mining project involve underground coal mining to be conducted within 500 feet of an oil or gas well? (DEP Use/4z41)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
2.0	Is this a non-coal (Industrial minerals) mining project? If "Yes", respond to 2.1-2.6. If "No", skip to Question 3.0. (DEP Use/48y1)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
2.1	Will this non-coal (Industrial minerals) mining project involve the crushing and screening of non-coal minerals other than sand and gravel? (DEP Use/4x70)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
2.2	Will this non-coal (Industrial minerals) mining project involve the crushing and/or screening of sand and gravel with the exception of wet sand and gravel operations (screening only) and dry sand and gravel operations with a capacity of less than 150 tons/hour of unconsolidated materials? (DEP Use/4x70)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
2.3	Will this non-coal (Industrial minerals) mining project involve the construction, operation and/or modification of a portable non-metallic (i.e., non-coal) minerals processing plant under the authority of the General Permit for Portable Non-metallic Mineral Processing Plants (i.e., BAQ-PGPA/GP-3)? (DEP Use/4x70)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
2.4	For this non-coal (Industrial minerals) mining project, will sewage treatment facilities be constructed and treated waste water discharged to surface waters? (DEP Use/4x62)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
2.5	Will this non-coal (Industrial minerals) mining project involve the construction of a permanent impoundment meeting one or more of the following criteria: (1) a contributory drainage area exceeding 100 acres; (2) a depth of water measured by the upstream toe of the dam at maximum storage elevation exceeding 15 feet; (3) an impounding capacity at maximum storage elevation exceeding 50 acre-feet? (DEP Use/3140)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No

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3.0	Will your project, activity, or authorization have anything to do with a well related to oil or gas production, site development for such activity, or the waste from such a well? If "Yes", respond to 3.1-3.3. If "No", skip to Question 4.0. (DEP Use/4z41)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
3.1	Does the oil- or gas-related project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)? (DEP Use/4z41)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
3.2	Will the oil- or gas-related project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or storm water system? If "Yes", discuss in <i>Project Description</i> . (DEP Use/4z41)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
3.3	Will the oil- or gas-related project involve the construction and operation of industrial waste treatment facilities? (DEP Use/4z41)	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
4.0	Will the project involve a construction activity that results in earth disturbance? If "Yes", specify the total disturbed acreage. (DEP Use/4x66)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
	4.0.1 Total Disturbed Acreage 21.0				
5.0	Does the project involve any of the following: placement of fill, excavation within or placement of a structure, located in, along, across or projecting into a watercourse, floodway or body of water (including wetlands)? (DEP Use/4x66)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
6.0	Will the project involve discharge of industrial wastewater or stormwater to a dry swale, surface water, ground water or an existing sanitary sewer system or separate storm water system? If "Yes", discuss in <i>Project Description</i> . (DEP Use/4x62)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
7.0	Will the project involve the construction and operation of industrial waste treatment facilities? (DEP Use/4x62)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
8.0	Will the project involve construction of sewage treatment facilities, sanitary sewers, or sewage pumping stations? If "Yes", indicate estimated proposed flow (gal/day). Also, discuss the sanitary sewer pipe sizes and the number of pumping stations/treatment facilities/name of downstream sewage facilities in the <i>Project Description</i> , where applicable. (DEP Use/4x62)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
	8.0.1 Estimated Proposed Flow (gal/day) 12,300				
9.0	Was sewage planning submitted and approved? If "Yes", attach the Act 537 approval letter unless the submitted application is actually requesting Act 537 approval (Approval required prior to 10S/NPDES approval). (DEP Use/4x61)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
	9.0.1 Is Act 537 Approval Letter attached?	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
10.0	Is this project for the beneficial use of biosolids for land application within Pennsylvania? If "Yes" indicate how much (i.e. gallons or dry tons per year). (DEP Use/4X62)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	10.0.1 Gallons Per Year (residential septage)				
	10.0.2 Dry Tons Per Year (biosolids)				
11.0	Does the project involve construction, modification or removal of a dam? If "Yes", identify the dam. (DEP Use/3140)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	11.0.1 Dam Name				
12.0	Will the project interfere with the flow from, or otherwise impact, a dam? If "Yes", identify the dam. (DEP Use/3140)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	12.0.1 Dam Name				
13.0	Will the project involve operations (excluding during the construction period) that produce air emissions (i.e., NOX, VOC, etc.)? If "Yes", identify each type of emission followed by the amount of that emission. (DEP Use/4x70)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
	13.0.1 Enter all types & amounts of emissions; separate each set with semicolons.				

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14.0	Is an on-site drinking water supply (well), other than individual house wells, proposed for your project? If "Yes", indicate total number of people served and/or the total number of connections served, if applicable. Also, check all proposed sub-facilities. (DEP Use/4x81)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
14.0.1	Number of Persons Served	_____			
14.0.2	Number of Employee/Guests	_____			
14.0.3	Number of Connections	_____			
14.0.4	Sub-Fac: Distribution System	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
14.0.5	Sub-Fac: Water Treatment Plant	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
14.0.6	Sub-Fac: Source	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
14.0.7	Sub-Fac: Pump Station	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
14.0.8	Sub-Fac: Entry Point	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
14.0.9	Sub-Fac: Transmission Main	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
14.0.10	Sub-Fac: Storage Facility	<input type="checkbox"/>	Yes	<input type="checkbox"/>	No
15.0	Will your project involve purchasing water in bulk, excluding during the construction period? If "Yes", name the provider. Also, indicate the daily number of employees or guests served. (DEP Use/4x81)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
15.0.1	Provider's Name	_____			
15.0.2	Number of Employees/Guests	_____			
16.0	Is your project to be served by public water supply? If "Yes", indicate name of supplier and attach letter from supplier stating that it will serve the project. (DEP Use/4x81)	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
16.0.1	Supplier's Name	The York Water Company			
16.0.2	Letter of Approval from Supplier is Attached	<input checked="" type="checkbox"/>	Yes	<input type="checkbox"/>	No
17.0	Will this project involve a new or increased drinking water withdrawal from a stream or other water body? If "Yes", provide name of stream. (DEP Use/4x81)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
17.0.1	Stream Name	_____			
18.0	Will the construction or operation of this project involve treatment, storage, reuse, or disposal of waste? If "Yes", indicate what type (i.e., hazardous, municipal (including infectious & chemotherapeutic), residual) and the amount to be treated, stored, re-used or disposed. (DEP/Use4x32)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
18.0.1	Type & Amount	_____			
19.0	Will your project involve the removal of coal, minerals, etc. as part of any earth disturbance activities? (DEP Use/48y1)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
20.0	Does your project involve installation of a field constructed underground storage tank? If "Yes", list each Substance & its Capacity. <u>Note:</u> Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
20.0.1	Enter all substances & capacity of each; separate each set with semicolons.	_____			
21.0	Does your project involve installation of an aboveground storage tank greater than 21,000 gallons capacity at an existing facility? If "Yes", list each Substance & its Capacity. <u>Note:</u> Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
21.0.1	Enter all substances & capacity of each; separate each set with semicolons.	_____			
22.0	Does your project involve installation of a tank greater than 1,100 gallons which will contain a highly hazardous substance as defined in DEP's Regulated Substances List, 2570-BK-DEP2724? If "Yes", list each Substance & its Capacity. <u>Note:</u> Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570)	<input type="checkbox"/>	Yes	<input checked="" type="checkbox"/>	No
22.0.1	Enter all substances & capacity of each; separate each set with semicolons.	_____			

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23.0 Does your project involve installation of a storage tank at a new facility with a total AST capacity greater than 21,000 gallons? If "Yes", list each Substance & its Capacity. **Note:** Applicant may need a Storage Tank Site Specific Installation Permit. (DEP Use/2570)  Yes  No

23.0.1 Enter all substances & capacity of each; separate each set with semicolons.

**CERTIFICATION**

I certify that I have the authority to submit this application on behalf of the applicant named herein and that the information provided in this application is true and correct to the best of my knowledge and information.

Type or Print Name Joshua C. George, P.E.

J.C.G.  
Signature

Project Manager  
Title

6/25/03  
Date



**The York Water Company**  
 fax 717.843.2715

April 29, 2003

Mr. Joshua George  
 C.S. Davidson, Inc.  
 fax 717.846.5811

**Reference: Water Availability for "The Woods at Lake Redman"  
 Keystone Custom Homes, Inc.  
 Jacobus Borough - York County, PA**

We wish to advise that subject to proper application being made and provided that water demands placed upon our system by this proposed location and use does not exceed the capacity, as determined by us of our pipes or system, public water is available for the subject location.

Sincerely,

Ryan M. Ural  
 Engineer

cc: Thomas Blackwell



**Pennsylvania Department of Environmental Protection**

**150 Roosevelt Avenue  
York, PA 17404**

April 8, 2003



**York District Office**

Jacobus Borough Council  
126 N. Cherry Lane  
Jacobus, PA 17407

**Re: Exemption from Sewage Facilities Planning  
Woods at Lake Redman  
Jacobus Borough, York County  
DEP Code No. A3-67932-012-3E**

Ladies and Gentlemen:

This confirms the Department's determination that the above-referenced project is exempt from the requirement to revise the official plan for new land development. This determination is based in part on municipal and other sign-offs.

A copy of the Sewage Facilities Planning Module Application Mailer submitted to the Department requesting this exemption is enclosed with this letter.

Please reference the DEP code number above when either corresponding on this project or if applying for permits. If you have any questions, please call me at 717-771-4481.

Sincerely,

Carrie A. Wilt  
Sewage Planning Specialist  
Water Management Program

cc: Keystone Custom Homes  
C. S. Davidson, Inc.  
James R. Holley & Associates





Pennsylvania Department of Environmental Protection

909 Elmerton Avenue  
Harrisburg, PA 17110-8200  
June 25, 2003

(717) 705-4707  
FAX (717) 705-4760

**FILE COPY**

**Southcentral Regional Office**

Jacobus Borough Sewer Authority  
126 N. Cherry Lane  
Jacobus, PA 17407

RE: Administrative Incompleteness Review Letter  
Application No. 6703406

Dear Applicant:

The Department of Environmental Protection (DEP) has reviewed the above-referenced application. We have determined that it does not contain the information, maps, fees, and other necessary documents and is administratively incomplete; therefore, the application must be revised. Upon your request, the application will be returned to you for revision and resubmittal.

The following checklist specifies the items that must be included in the resubmittal of your application or the submission of additional information. Please note that this information must be received within 60 days or DEP will return the application to you without action.

1. General Information Form.
2. Copy of the DEP Planning Approval Letter.

Also, in accordance with DEP's Money-Back Guarantee Program, the clock tracking the elapsed time for the review of your application has stopped while you prepare a response to this letter. The clock will start again when we receive all the requested information.

If you have any questions about your application, please call Sean Furjanic at 717-705-4826 and refer to Application No. 6703406.

Sincerely,

Kelly L. Rathfon  
Permits Section  
Water Management Program

CC: Joshua C. George, P.E., C.S. Davidson, Inc.



**FILE COPY**

○ York Office

38 North Duke Street • York, PA 17401  
(717) 846-4805 • FAX (717) 846-5811

Gettysburg Office ○

50 West Middle Street • Gettysburg, PA 17325  
(717) 337-3021 • FAX (717) 337-0782

June 17, 2003

Mr. Sean Furjanic  
PA Department of Environmental Protection  
909 Elmerton Avenue  
Harrisburg, PA 17110

Re: The Woods at Lake Redman  
Proposed Creekwood Drive Pump Station  
Engineer's Project No. 3949.3.03.00

Dear Sean:

Enclosed, please find three copies (one original, two copies) of the operating data for the existing York Street pump station. The proposed Creekwood Drive pump station connects directly to the York Street pump station. This information is intended to supplement the permit application previously sent to you on May 20, 2003.

If you have any questions or need additional information, please contact me at our York office.

Sincerely,

C.S. DAVIDSON, INC.

Joshua C. George, P.E.

Enclosures

furjanic(6\_17\_03).wpd



**C.S. Davidson, Inc.**

*Excellence in Civil Engineering*

## **The Woods at Lake Redman**

**Jacobus Borough Sewer Authority  
York County, Pennsylvania**

### **Creekwood Drive and York Street Pump Stations**

The 2002 Chapter 94 report for the Jacobus Borough Sewer Authority indicates that the York Street pump station is operating well below its rated capacity. The following data was provided to C.S. Davidson, Inc. by the Authority's engineer:

Original Design Capacity	220 gal/min.
Measured Output (May, 2001)	201 gal/min.
Average Running Time (2002)	1.91 hrs./day
Maximum Weekly Running Time (2002)	3.15 hrs./day
Average Gallons per Day	23,035 gpd
Maximum Weekly Gallons per Day	37,989 gpd
Actual Capacity	289,440 gpd

As part of The Woods at Lake Redman residential community, the Creekwood Drive pump station will be constructed. This new pump station will discharge directly into the existing York Street pump station. Based upon the projected discharge of 12,300 gallons per day from the Creekwood Drive pump station and average flow of 23,035 gallons per day in the York Street pump station, no overload is projected.



**C.S. Davidson, Inc.**

*Excellence in Civil Engineering*

## **The Woods at Lake Redman**

**Jacobus Borough Sewer Authority  
York County, Pennsylvania**

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## **The Woods at Lake Redman**

**Jacobus Borough Sewer Authority  
York County, Pennsylvania**

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6703406



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
WATER MANAGEMENT PROGRAM

DEP USE ONLY
Date Received

FILE COPY

### SEWER EXTENSIONS AND PUMPING STATIONS PERMIT APPLICATION

Before completing this form, read the step-by-step instructions provided with this form.	
<b>SECTION A. APPLICANT IDENTIFIER</b>	
Applicant Name: <u>Jacobus Borough Sewer Authority</u>	
<b>SECTION B. PROJECT INFORMATION</b>	
<i>If the project is associated with existing or proposed residential or industrial development, complete the following:</i>	
Name of Development	<u>The Woods at Lake Redman</u>
Type of Development	<u>Single Family Residential Subdivision</u>
Number of Units	<u>44</u>
Project Acreage	<u>Approximately 32</u>
WQM Part II Permit No. of Receiving Sewers	<u>6796412</u>
<b>SECTION C. BASIS OF DESIGN</b>	
Design Year: <u>2005</u>	Design Population: <u>154</u>

DEPARTMENT OF ENVIRONMENTAL PROTECTION  
 03 MAY 21 PM 1:51  
 13 JAN 00

SECTION D. CERTIFICATION AND SIGNATURE

I hereby apply for approval on (Date) \_\_\_\_\_ to construct and operate [ ] Sewers and Appurtenances

[ X ] Sewage pumping station(s) which  does  does not include stream crossing(s)/100 year floodplain location.

Applicant:

Affidavit: I hereby certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and based on my inquiry of those individuals immediately responsible for obtaining the information I believe the submitted information is true, accurate and complete.

APPLICANT'S SIGNATURE: Raymond E. Kuhn

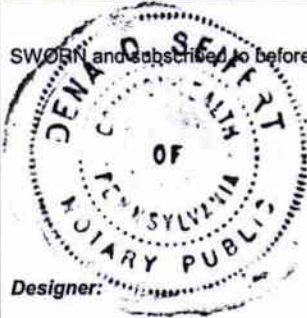
NAME: RAYMOND E. KUHN

TITLE: CHAIRMAN, JACOBUS BOROUGH SEWER AUTH.

NOTARY SEAL

ADDRESS: 126 N. CHERRY LANE  
JACOBUS, PA. 17407

SWORN and subscribed to before me this 13<sup>th</sup> day of May, 2003



**NOTARIAL SEAL**  
Dennis D. Selfert, Notary Public  
York Township, County of York  
My Commission Expires Jul. 8, 2004

Dennis D. Selfert NOTARY

I, Joshua C. George, P.E., do hereby certify that the information contained in the accompanying plans, specifications, and reports has been prepared in accordance with accepted engineering practice, is true and correct, and is in conformance with the standards, guidelines and requirements of the Department of Environmental Protection.

DESIGNER'S NAME: Joshua C. George

NAME OF FIRM: C.S. Davidson, Inc.

ADDRESS, ZIP: 38 North Duke Street, York, PA 17401

TELEPHONE NUMBER: 717-846-4805



J.C. George 3/28/03  
DESIGNER'S SEAL AND SIGNATURE

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
WATER MANAGEMENT PROGRAM

**WATER POLLUTION CONTROL  
DESIGN MODULE**

**TABLE 1 – SEWER SYSTEM**

1. CLASS OF CONSTRUCTION     NEW SYSTEM     REPLACEMENT OF EXISTING SYSTEMS     SANITARY     COMBINED

2. INITIAL POPULATION \_\_\_\_\_ DESIGN YEAR POPULATION \_\_\_\_\_

3. DESIGN FLOW DATA

(a) Laterals and Submain Sewers (GPCD) \_\_\_\_\_

(b) Interceptors (GPCD) \_\_\_\_\_

(c) Average Daily Flow (MGD) \_\_\_\_\_

(d) Infiltration/Inflow (MGD) \_\_\_\_\_

(e) Industrial Waste Flow (MGD) \_\_\_\_\_

(f) Total Average Design Flow (MGD) \_\_\_\_\_

(g) Maximum Expected Flow Rate (Peak Instantaneous) (MGD) \_\_\_\_\_

4. GENERAL INFORMATION:

(a) Describe measures taken to reduce I/I in the system including leakage test and reference applicable portion of the specifications.

(b) Describe any overflows or bypasses within the system.

(c) If applicable, describe capacity of receiving sewers and pumping station and submit two copies of the executed intermunicipal agreement.

**TABLE 2 – PUMP STATION (Submit separate table for each pump station)**

1. PUMP STATION NAME: Creekwood Drive

2. LOCATION (street name, etc.): Approximately 200 feet west of Creekwood Drive

3. TYPE (e.g. Conventional, suction lift, ejector or submersible) wet well mounted

4. INITIAL POPULATION TO BE SERVED: 154, FUTURE POPULATION TO BE SERVED: 154  
DESIGN YEAR 2005

5. DESIGN INFORMATION:

	AVG (MGD)	MAX (Peak Instantaneous) (MGD)
(a) Domestic Flow Rate (based on Design population to be served)	<u>0.0123</u>	<u>0.0308</u>
(b) Industrial Flow Rate	<u>0</u>	<u>0</u>
(c) Infiltration/Inflow Rate	<u>0</u>	<u>0</u>
(d) Design Flow Rate	<u>0.0123</u>	<u>0.0308</u>
(e) Effective Wet Well Capacity (Gal) <u>188</u>		
(f) Detention Time (Min) <u>24</u>		
(g) Design Average Velocity In Force Main (Fps) <u>3.06</u>		
(h) Total Dynamic (Head Pump Station + Force Main)	Static Head <u>41.6</u> Ft.	
	Friction Loss <u>8.4</u> Ft.	
	TDH <u>50.0</u> Ft.	

(continued)

**WATER POLLUTION CONTROL  
DESIGN MODULE**

**6. GENERAL INFORMATION**

(a) Describe the proposed project with respect to the 100 year flood elevation, ventilation, emergency power provision and alarm system.

The project consists of the construction of a 44 lot single family residential subdivision. The project site is bisected by an unnamed tributary to Lake Redman and the proposed pump station will be located adjacent to this tributary but outside the 100 year floodplain. All lots in the subdivision will drain to the pump station which in turn discharges to the existing York Road Pump Station which is owned and operated by the Jacobus Borough Sewer Authority. Emergency power will be provided by the Authority with their existing portable emergency generator. The station will be equipped with a telephone line and automatic dialer of the same make and model used at the Authority's existing pump stations.

**TABLE 3 -- PUMPING FACILITIES**

LIST ALL THE PUMPS IN THE PUMPING FACILITY

NUMBER OF IDENTICAL PUMPS	Describe Pump Use	Make Model and Type of Pump (Please attach pump performance curve(s))	Check Columns That Apply To Each Pump							Pump Capacity			
			EXISTING	PROPPOSED	VARIABLE SPEED	CONSTANT SPEED	AUTOMATIC CONTROL	MANUAL CONTROL	PNEUMATIC INJECTOR	STAND BY OPERATION	(GPM)	TDH (FT.)	
2	Wet-well Mounted	Smith & Loveless Model No. 4B2D 3" non-clog		X		X	X					120	50



COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
WATER MANAGEMENT PROGRAM

**SEWER EXTENSIONS AND PUMPING STATIONS PERMIT APPLICATION  
CHECKLIST**

**APPLICANT'S CHECKLIST**

Please check the following list to make sure that you have included all the required information. Place a checkmark in the column provided for all items completed and/or provided.

Failure to provide all of the requested information will delay the processing of the application and may result in the application being placed on hold with no action, or will be considered withdrawn and the application file closed.

ENCLOSE THIS CHECKLIST WITH YOUR APPLICATION FORM.

	Requirement	Check <input type="checkbox"/> If Included	* DEP * Use Only
	Accompanying materials and documentation (See General Instructions)	<input type="checkbox"/>	
1.	Appropriate application fee (\$500)	<input checked="" type="checkbox"/>	
2.	Three (3) copies of application, design engineer's report, and accompanying drawings and plans.	<input checked="" type="checkbox"/>	
	Additional copies for ECHD, ACHD, and DRBC.	<input type="checkbox"/>	
	a. Affidavit and proper signatures	<input checked="" type="checkbox"/>	
	b. Engineer's professional seal	<input checked="" type="checkbox"/>	
	c. Properly notarized	<input checked="" type="checkbox"/>	
3.	Supplemental Information:	<input checked="" type="checkbox"/>	
	-General Layout Diagram	<input checked="" type="checkbox"/>	
	-Sizes, capacities, & Dimensions Diagram	<input checked="" type="checkbox"/>	
4.	Topographic map with appropriate details	<input checked="" type="checkbox"/>	
5.	Completed Design Modules	<input checked="" type="checkbox"/>	
6.	Act 14 Notification	<input checked="" type="checkbox"/>	
7.	Other (specify):	<input checked="" type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	
		<input type="checkbox"/>	

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
WATER MANAGEMENT PROGRAM

**WATER POLLUTION CONTROL  
MODULE 13**

**STREAM ENCROACHMENT**

FOR DEPARTMENT USE ONLY

**GENERAL**

For encroachment permits for stream crossings and outfall structures contact the Bureau of watershed management. Include a copy of the permit or application with this module. Also, answer the questions below.

**STREAM CROSSINGS**

1. Please justify the need for each stream crossing including evaluation of alternatives to minimize the number of crossings.
2. What measures will be taken to insure the sewer crossing under a stream will be rendered thoroughly water tight and remain in alignment?
3. For any sewer without the required cover (1 foot in rock and 3 feet in other material), please explain why such cover is not provided and what measures are to be taken to minimize the erosion threat at the crossing location and the aesthetics of the permanent sewer crossing.
4. Note how manholes along the stream will be made watertight if the top elevation is below the 100-year flood plain.
5. List crossings by stream name and sheet numbers in plans. Provide extra set of plan sheets only with stream crossing.

**HEADWALLS/OUTFALLS**

1. Explain how the headwall/outfall structure will be constructed to minimize downstream and/or bank erosion and achieve complete mixing of the treated effluent with the streamflow within a short distance.
2. Identify stream by name, show design of outfall/headwall on plan sheet and provide an extra copy.

Describe below all of the applicable items from the above.

**Module 13**

**Stream Encroachment**

**Stream Crossings**

1. There are two stream crossings proposed with this project. Because the project site is bisected by an unnamed tributary to Lake Redman and approximately one-half of the project occurs on each side of the tributary, it is necessary to connect the utility services on each side of the project.

The main stream crossing consists of an 8" diameter PVC sanitary sewer that is tributary to the proposed pump station and connects the west side of the project to the east side of the project. The secondary stream crossing consists of a 2" diameter PVC sanitary sewer force main that collects and conveys the sewage from two proposed homes to the sanitary sewer system for the remainder of the project.

The secondary stream crossing will be constructed concurrently with a proposed driveway culvert that will also serve the two proposed homes mentioned above. The proposed driveway culvert requires that coverage under the GP-7 for minor road crossings be obtained from PA DEP.

2. The proposed stream crossings will be constructed of new PVC pipe with watertight joints and will be encased in flowable fill after construction. The combination of the watertight joints and the flowable fill will provide a watertight seal at each of the proposed stream crossings.
3. The stream crossing with the 8" diameter PVC pipe is designed to have two feet of cover over the top of the pipe and will have 18" of cover after the flowable fill encasement is constructed. The cover has been minimized in order that the pump station be constructed to the minimum possible depth.

The stream crossing with the 2" diameter PVC pipe is designed to have three feet of cover over the top of the pipe and will have 30" of cover after the flowable fill encasement is constructed.

4. The top of rim elevations of all of the proposed manholes are outside the 100 year floodplain and are proposed to be watertight manhole frames and covers.
5. The 8" diameter PVC stream crossing occurs about 200 feet west of Creekwood Drive near the proposed parking lot area. The 2" diameter PVC stream crossing occurs about 150 feet west of the proposed cul-de-sac on Creekwood Drive.

**Headwalls/Outfalls**

1. There are no headwalls or outfalls associated with construction of the pump station.
2. There is no design information for headwalls or outfalls associated with construction of the pump station as no such headwalls or outfalls are required for the pump station.

**Engineer's Design Report**

for

**Pump Station Construction**

at

**The Woods at Lake Redman**

Jacobus Borough  
York County, PA

March 28, 2003



Prepared by:



38 North Duke Street  
York, PA 17401  
(717)846-4805  
Fax (717)846-5811  
[www.csdavidson.com](http://www.csdavidson.com)



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York Office

38 N. Duke St. • York, PA 17401  
(717) 846-4805 • FAX (717) 846-5811

Gettysburg Office

50 W. Middle St. • Gettysburg, PA 17325  
(717) 337-3021 • (717) 337-0782

Client	KEYSTONE	Sheet	1	Of	6
Project	WOODS @ REEMAN	No.			
Subject	PUMP STATION				
Prepared By	JLG	Date	3/27/2003		
Reviewed By		Date			
Approved By		Date			

### PUMP STATION CHARACTERISTICS

USE SMITH & LOVELESS PUMP STATION TO BE CONSISTENT WITH OTHER STATIONS THAT ARE PART OF JACOBUS BOROUGH SEWER AUTHORITY SYSTEM.

### DESIGN FLOW COMPUTATIONS

44 RESIDENTIAL LOTS @ 280 GAL / HOME = 12,320 GAL/DAY

### PEAK FLOW COMPUTATION

USING A PEAKING FACTOR OF 2.5 FOR PEAK INSTANTANEOUS FLOWS  
12,320 GAL/DAY x 2.5 = 30,800 GAL/DAY

### NON-RESIDENTIAL FLOWS

ALL FLOW TO THE PROPOSED PUMP STATION WILL BE FROM RESIDENTIAL DEVELOPMENT. NO INFLOW/INFILTRATION IS EXPECTED BECAUSE ALL FLOWS WILL BE FROM A NEW SYSTEM.

### EFFECTIVE WET WELL CAPACITY

PUMPS ON @ 534.43

PUMPS OFF @ 532.43

$$V = \left(\frac{\pi}{4}\right)(D^2)(h)$$

$$= \left(\frac{\pi}{4}\right)(4)^2(2) \left(\frac{7.48 \text{ GAL}}{\text{FT}^3}\right)$$

$$= 188 \text{ GALLONS}$$



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50 W. Middle St. • Gettysburg, PA 17325  
(717) 337-3021 • (717) 337-0782

Client KEYSTONE Sheet 2 Of 6  
Project WOODS @ REDMAN No. \_\_\_\_\_  
Subject PUMP STATION  
Prepared By JCG Date 3/27/03  
Reviewed By \_\_\_\_\_ Date \_\_\_\_\_  
Approved By \_\_\_\_\_ Date \_\_\_\_\_

### EFFECTIVE DETENTION TIME

WORST CASE SCENARIO IS FULL FLOW INTO WET WELL WHILE THE PUMPS ARE OPERATING. THEREFORE, DETENTION TIME IS:

$$t_d = \frac{188 \text{ GAL}}{(12,320 \frac{\text{GAL}}{\text{DAY}}) \left( \frac{1 \text{ DAY}}{24 \text{ HR}} \right) \left( \frac{1 \text{ HR}}{60 \text{ MIN}} \right)} + \frac{188 \text{ GAL}}{(172,800 - 12,320 \frac{\text{GAL}}{\text{DAY}}) \left( \frac{1 \text{ DAY}}{24 \text{ HR}} \right) \left( \frac{1 \text{ HR}}{60 \text{ MIN}} \right)}$$

$$= 21.97 \text{ MIN} + 1.69 \text{ MIN}$$

$$\text{WHERE PUMPING RATE} = 120 \frac{\text{GAL}}{\text{MIN}}$$

$$= 23.66 \text{ MIN}$$

$$= 172,800 \text{ GPD}$$

SAY 24 MIN

### CALCULATE UPLIFT POTENTIAL

THE BUOYANT FORCE IS FORCE EXERTED ON THE WET WELL AS A RESULT OF THE  $\gamma$  OF WATER DISPLACED BY THE WELL.

$$F_B = (\gamma_{\text{water}})(V_{\text{displaced}})$$

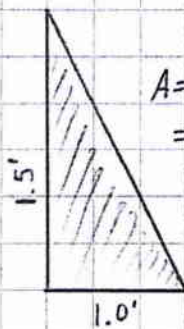
$$= (62.4 \text{ lb/ft}^3) \left[ \left( \frac{\pi}{4} \right) (4.8333)^2 (550 - 530.93) + \left( \frac{\pi}{4} \right) (5.8333)^2 (530.93 - 530.26) \right]$$

$$= (62.4)(349.89 + 17.82)$$

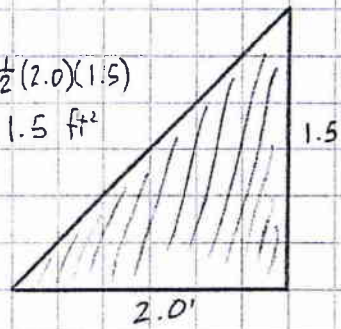
$$= 22,945 \text{ lb}$$

THE WEIGHT FORCE IS THE FORCE EXERTED BY THE WEIGHT OF THE WET WELL AND EQUIPMENT.

CALCULATE THE VOLUME OF THE FILLETS POURED IN THE BOTTOM OF THE WET WELL.



$$A = \frac{1}{2}(1.0)(1.5) \\ = 0.75 \text{ ft}^2$$



$$A = \frac{1}{2}(2.0)(1.5) \\ = 1.5 \text{ ft}^2$$

ASSUME THAT  $\frac{3}{4}$  OF THE BOTTOM OF THE WET WELL IS OCCUPIED WITH THE AVERAGE AREA OF THE FILLETS.

$$V = \frac{1}{2}(0.75 + 1.5 \text{ ft}^2)(\pi)(4.0)\left(\frac{3}{4}\right) \\ = 10.6 \text{ ft}^3$$

$$F_w = (\gamma_{\text{conc.}})(V_{\text{conc.}}) + (\gamma_{\text{soil}})(V_{\text{soil OF FLANGES}})$$

$$= (150 \text{ lb/ft}^3) \left[ \frac{\pi}{4} (4.833^2 - 4.00^2) (550.0 - 530.93) \right] + \frac{\pi}{4} (5.833^2) (530.93 - 530.26) + 10.6 \\ + (110 \text{ lb/ft}^3 - 62.4 \text{ lb/ft}^3) \left[ \frac{\pi}{4} (5.833^2 - 4.833^2) (550.0 - 530.93) \right]$$

$$= 20,806 \text{ lb} + 7,604 \text{ lb}$$

$$= 28,410 \text{ lb (EXCLUDING EQUIPMENT)}$$

ASSUME EQUIPMENT WEIGNS 2,000 lb

$$F_w = 30,410 \text{ lb}$$



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Gettysburg Office  
50 W. Middle St. • Gettysburg, PA 17325  
(717) 337-3021 • (717) 337-0782

Client KEystone Sheet 4 Of 6  
Project WOODS @ REDMAN No. \_\_\_\_\_  
Subject PUMP STATION  
Prepared By JLG Date 3/25/03  
Reviewed By \_\_\_\_\_ Date \_\_\_\_\_  
Approved By \_\_\_\_\_ Date \_\_\_\_\_

THE FACTOR OF SAFETY IS THE RATIO BETWEEN THE BUOYANT AND WEIGHT FORCES

$$F.S. = \frac{30,410 \text{ lb}}{22,945 \text{ lb}} = 1.32$$

### HEAD CALCULATIONS

#### STATIC HEAD

ELEVATION @ SUCTION ENTRANCE = 531.43

ELEVATION @ DISCHARGE POINT = 573.0

$$\text{TOTAL STATIC HEAD} = 573.0 - 531.43 = 41.6 \text{ FT}$$

#### FRICTION HEAD

<u>TYPE OF FITTING</u>	<u>NO. OF EACH</u>	<u>EQV. LENGTH</u>	<u>TOTAL LENGTH</u>
4"φ PVC PIPE	910 L.F.	1	910
4"φ CHECK VALVE	1	30	30
4"φ 45° PVC BENDS	6	5	30
4"φ 90° PVC BENDS	1	11	11
4"φ PVC TEE	1	22	22
		<u>TOTAL</u>	<u>1,003 L.F.</u>

TOTAL DYNAMIC HEAD - SEE ATTACHED SPREADSHEET

**The Woods at Lake Redman  
Jacobus Borough, York County  
Pump Station Computations**

C = 150 (pipe roughness constant)  
 L = 1000 (equivalent length of pipe, ft.)  
 D = 0.333 (pipe diameter, ft.)  
 Static = 41.6 (feet)

$$\text{Dynamic Head} = (q^{1.85} \times L) \div (17037.2 \times (C^{1.85} \times D^{4.86}))$$

<u>FLOW (g)</u>	<u>DYNAMIC HEAD</u>	<u>STATIC HEAD</u>	<u>TOTAL HEAD</u>
10	0.08	41.60	41.68
20	0.29	41.60	41.89
30	0.62	41.60	42.22
40	1.06	41.60	42.66
50	1.60	41.60	43.20
60	2.25	41.60	43.85
70	2.99	41.60	44.59
80	3.82	41.60	45.42
90	4.75	41.60	46.35
100	5.78	41.60	47.38
110	6.89	41.60	48.49
120	8.09	41.60	49.69
130	9.39	41.60	50.99
140	10.76	41.60	52.36
150	12.23	41.60	53.83
160	13.78	41.60	55.38
170	15.42	41.60	57.02
180	17.14	41.60	58.74
190	18.94	41.60	60.54
200	20.82	41.60	62.42
210	22.79	41.60	64.39
220	24.84	41.60	66.44
230	26.97	41.60	68.57
240	29.18	41.60	70.78
250	31.47	41.60	73.07
260	33.83	41.60	75.43
270	36.28	41.60	77.88
280	38.80	41.60	80.40
290	41.41	41.60	83.01
300	44.09	41.60	85.69

# ENGINEERING DATA



Smith & Loveless, Inc.®

14040 West Santa Fe Trail Drive  
Lenexa, Kansas 66215-1284

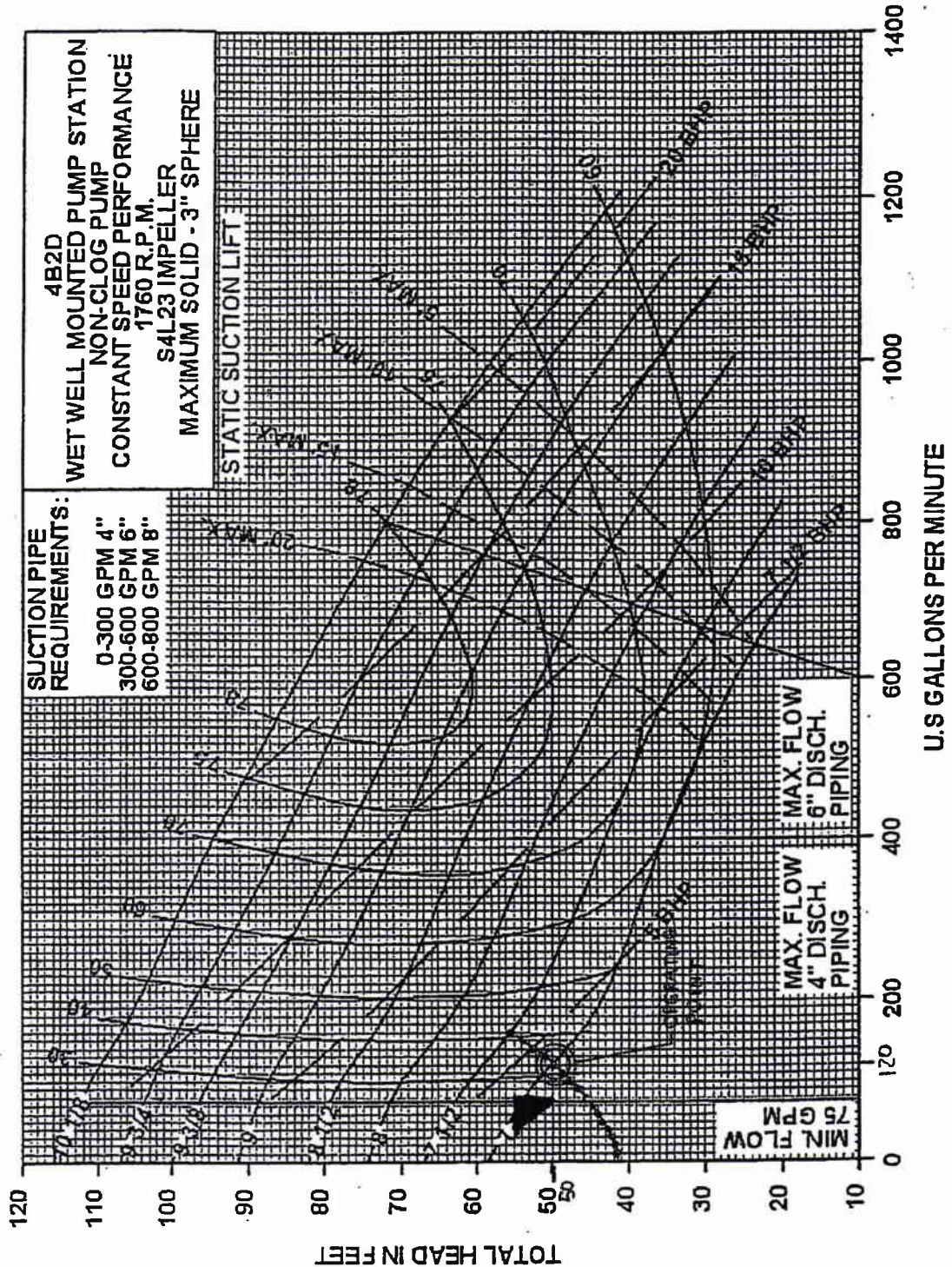
Vacuum Primed Pump  
Performance Curves  
Constant Speed  
4B2D Non-Clog Pump  
1760 RPM

*CR = 120 GPM H = 50' TDA*

**4B2D  
WET WELL MOUNTED PUMP STATION  
NON-CLOG PUMP  
CONSTANT SPEED PERFORMANCE  
1760 R.P.M.  
S4L23 IMPELLER  
MAXIMUM SOLID - 3" SPHERE**

**SUCTION PIPE  
REQUIREMENTS:  
0-300 GPM 4"  
300-600 GPM 6"  
600-800 GPM 8"**

**STATIC SUCTION LIFT**



ACT 67  
York Water Co.  
K. C. H.



○ York Office  
38 North Duke Street • York, PA 17401  
(717) 846-4805 • FAX (717) 846-5811

Gettysburg Office ○  
50 West Middle Street • Gettysburg, PA 17325  
(717) 337-3021 • FAX (717) 337-0782

February 14, 2003

York County Administration Office  
1 West Market Way, Fourth Floor  
York, PA 17401

Certified Mail No. 7001 1940 0007 4647 9898

Jacobus Borough  
126 North Cherry Lane  
Jacobus, PA 17407

Certified Mail No. 7001 1940 0007 4647 9904

Re: Keystone Custom Homes  
York Water Company Parcel  
Engineer's Project No. 3949.3.03.00

Dear Ladies and Gentlemen:

The purpose of this notice is to inform you of our intent to submit an application to the Pennsylvania Department of Environmental Protection (DEP) for the following application:

Permit Application type: General National Pollutant Discharge Elimination System (NPDES) Permit

Applicant Contact: C. S. Davidson, Inc., W. Casey Deller, E.I.T.

Project Location: Main Street and York Road, Jacobus Borough, York County, PA

Project description: 32 acre proposed subdivision with 44 proposed lots

PA DEP Regional Office: Southcentral Region, 909 Elmerton Ave., Harrisburg, PA 17110-8200

Act 67, 68 and 127 of 2000, which amended the Municipalities Planning Code (MPC) to direct state agencies to consider comprehensive plans and zoning ordinances when reviewing applications for permitting of facilities or infrastructure, specify that state agencies may rely upon comprehensive plans and zoning ordinances under certain conditions as described in Sections 619.2 and 1105 of the MPC.

DEP invites you to review and comment on the land use aspects of this project; please be specific to DEP and focus on relationship to zoning ordinances. If you wish to submit comments to DEP to become part of a land use review of this project, you must respond within 30 days to the DEP regional office referenced above. If there are no land use comments received by the end of the comment period, DEP will assume that there are no substantive land use conflicts and proceed with the normal application review process.



Appropriate Municipalities  
Re: Keystone Custom Homes

February 14, 2003  
Page Two

For more information about this land use review process, please visit [www.dep.state.pa.us](http://www.dep.state.pa.us). If you have any questions in regard to this notification, please feel free to contact me at our York office.

Sincerely,

C. S. DAVIDSON, INC.

A handwritten signature in black ink that reads "Casey Deller". The signature is written in a cursive, slightly slanted style.

W. Casey Deller, E.I.T.

WCD/vs  
Enclosure

T:\3949\30300\Act14 Ltr (2\_14\_03)

U.S. Postal Service  
**CERTIFIED MAIL RECEIPT**  
 (Domestic Mail Only, No Insurance Coverage Provided)

Act 14 Letter A 3949.3.03.003 E

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark Here

Sent To  
 York County Administration Offices  
 Street, Apt. No., or PO Box No.  
 City, State, ZIP+4

PS Form 3811, January 2001 See Reverse for Instructions

9696 2494 2000 0467 7002

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete Item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

Jacobus Borough  
 126 N. Cherry Lane  
 Jacobus, PA 17407

**COMPLETE THIS SECTION ON DELIVERY**

A. Received by (Please Print Clearly) B. Date of Delivery  
 C. Signature  
 X *Peggy Snell*  Agent  Addressee  
 D. Is delivery address different from item 1?  Yes  No  
 If YES, enter delivery address below:

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

2. Article Number (Copy from service label) 7001 1940 0007 4647 9904

**SENDER: COMPLETE THIS SECTION**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1. Article Addressed to:

York County Adm. Offices  
 1 West Marketway, 4th Floor  
 York, PA 17401

**COMPLETE THIS SECTION ON DELIVERY**

A. Received by (Please Print Clearly) B. Date of Delivery  
 C. Signature  
 X *[Signature]*  Agent  Addressee  
 D. Is delivery address different from item 1?  Yes  No  
 If YES, enter delivery address below:

3. Service Type  
 Certified Mail  Express Mail  
 Registered  Return Receipt for Merchandise  
 Insured Mail  C.O.D.

4. Restricted Delivery? (Extra Fee)  Yes

2. Article Number (Copy from service label) 7001 1940 0007 4647 9898

U.S. Postal Service  
**CERTIFIED MAIL RECEIPT**  
 (Domestic Mail Only, No Insurance Coverage Provided)

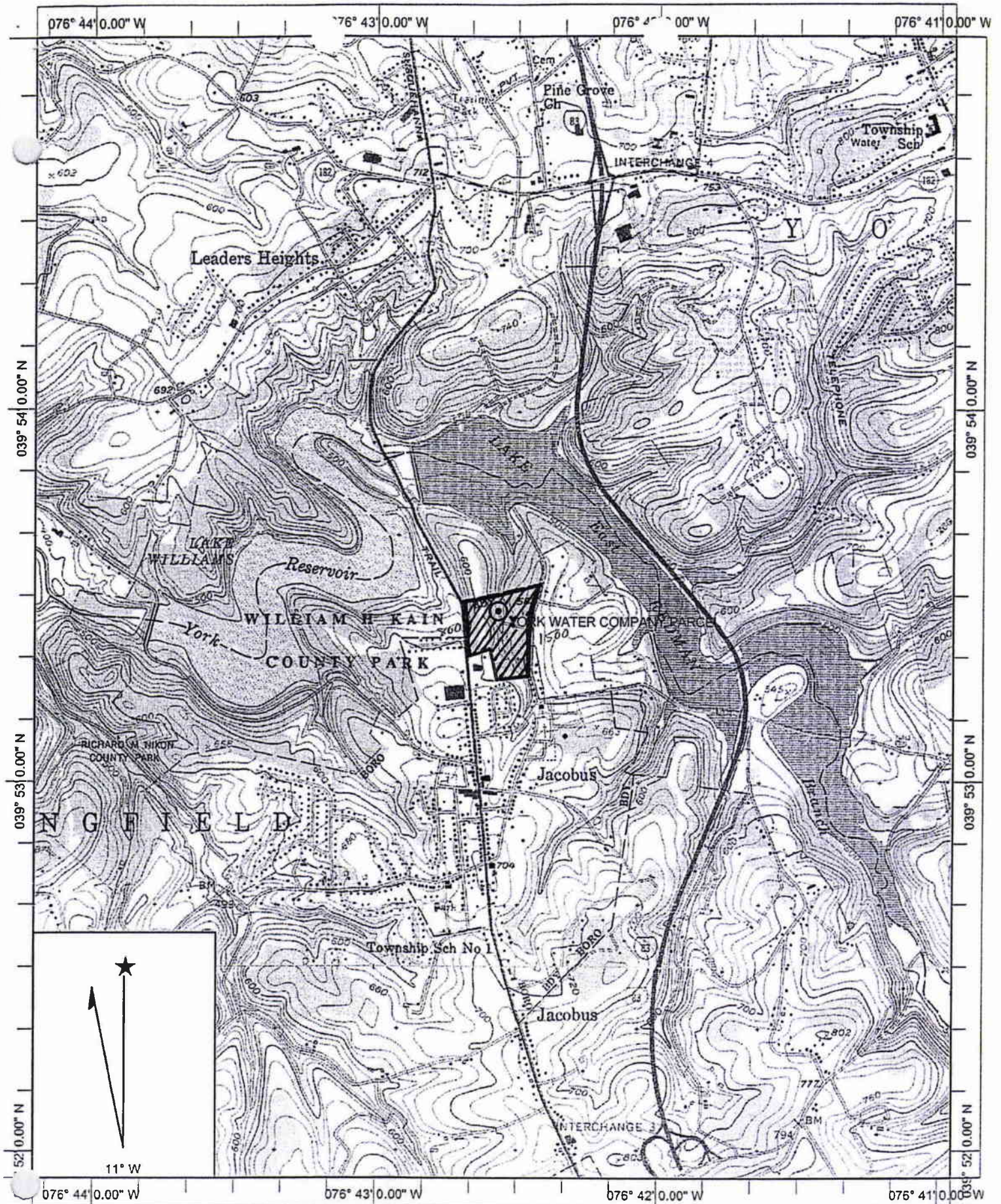
Act 14 Letter A 3949.3.03.003 E

Postage	\$
Certified Fee	
Return Receipt Fee (Endorsement Required)	
Restricted Delivery Fee (Endorsement Required)	
Total Postage & Fees	\$

Postmark Here

Sent To  
 Jacobus Borough  
 Street, Apt. No., or PO Box No.  
 City, State, ZIP+4

PS Form 3811, January 2001 See Reverse for Instructions



Name: YORK  
 Date: 1/29/2003  
 Scale: 1 inch equals 2000 feet

Location: 039° 53' 27.3" N 076° 42' 34.8" W  
 Caption: York Water Company Parcel  
 Jacobus Borough, PA  
 3949.3.03.00

**JRH**

**James R. Holley  
& Associates, Inc.**

14 MAR 2003

March 13, 2003

Jacobus Borough  
126 N. Cherry Lane  
Jacobus, PA 17407

Ref: Sewage Capacity  
The Woods at Lake Redman

Gentlemen:

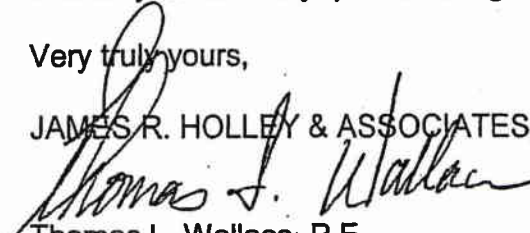
The Jacobus Borough Sewer Authority as authorized me to provide this letter to verify the availability of sewage capacity for the above referenced project.

Please be advised that the developer has reserved a total of 44 Equivalent Dwelling Units (EDU) for this property identified as Tax Map G1, Parcel 4. Also, please be advised that the current Chapter 94 Report shows that the Springfield Township Treatment Facility is operating well within it's permit requirements and has capacity for this project.

Should you have any questions regarding this matter, please contact me.

Very truly yours,

JAMES R. HOLLEY & ASSOCIATES, INC.

  
Thomas L. Wallace, P.E.  
Vice-President

cc: Jacobus Borough Sewer Authority

ENGINEERS • PLANNERS • LANDSCAPE ARCHITECTS • SURVEYORS

The Corporate Center • 18 South George Street, Suite 501 • York, Pennsylvania 17401 • (717) 846-4373 • Fax (717) 843-1568

1. Development Information:

Name of Development WOODS AT LAKE REDMAN  
Developer Name KEYSTONE CUSTOM HOMES  
Address 214-A WILLOW VALLEY LAKES DRIVE  
WILLOW STREET, PA 17584  
Telephone # (717) 464-9060

2. Location of Development:

a. County YORK  
b. Municipality JACOBUS BOROUGH  
c. Road or Street Coordinates BETWEEN MAIN  
STREET AND YORK ROAD  
d. USGS Quad Name YORK, PA  
inches up 2.9 over 11.7  
from bottom right corner of map.

3. Type of Development Proposed:

(check appropriate box)

Residential

Multi-Residential

Describe \_\_\_\_\_

Commercial

Describe \_\_\_\_\_

Institutional

Describe \_\_\_\_\_

Other (specify) \_\_\_\_\_

4. Size

a. # of lots 44 # of EDUs 44

b. # of lots since 5/15/72 \_\_\_\_\_

c. Development Acreage 32.40

d. Remaining Acreage 0.00

5. Sewage Flows 11,320 gpd. (280 GPD/EDU)

6. Proposed Sewage Disposal Method

(check appropriate boxes):

a.  Sewerage System

Name of existing system being extended  
JACOBUS BOROUGH

Public  Private

Interceptor Name \_\_\_\_\_

Treatment Facility Name \_\_\_\_\_

Pump Station(s)/Force Main

b.  Construction of Treatment Facility

With Stream Discharge

With Land Application (not including IRSIS)

Other

Repair?

Name of waterbody where point of discharge is proposed  
(if stream discharge)  
\_\_\_\_\_  
\_\_\_\_\_

c.  Onlot Sewage Disposal Systems

(check appropriate box)

Individual Onlot system(s) (including IRSIS)

Community Onlot system

Large Volume Onlot system

d.  Retaining Tanks

Number of Holding Tanks \_\_\_\_\_

Number of Privies \_\_\_\_\_

7. Request for Planning Exemption

a. Onlot Disposal Systems

(1) I certify that the Official Plan shows this area as an onlot service area.

\_\_\_\_\_  
(Signature of municipal official) Date

Telephone # \_\_\_\_\_

\_\_\_\_\_  
Name (Print) Title

Municipality (must be same as in 2.b.)

Telephone # \_\_\_\_\_

(2) I certify that each lot in this subdivision has been tested and is suitable for both a primary and replacement sewage disposal system.

\_\_\_\_\_  
(Signature of SEO) Date

\_\_\_\_\_  
Name (Print) Certification #

(3) I certify that each lot in this subdivision is at least 1 acre in size

\_\_\_\_\_  
(Signature of Project Applicant/Agent) Date

b. Public Sewerage Service (i.e., ownership by municipality or authority)

Based upon written documentation, I certify that the facilities proposed for use have capacity and that no overload exists or is projected within 5 years. (Attach Documents.)

Margaret A. Snell 3-14-03  
(Signature of Municipal Official) Date

Margaret A. Snell Sec/Treas.  
Name (Print) Title

Jacobus Borough  
Municipality (must be same as in 2.b.)

Telephone # 717-428-1752

5771.3.02.00 (1)

Return Correspondence/Forms to:

C.S. DAVIDSON, INC.

to JOSHUA GEORGE

38 NORTH DUKE STREET

YORK, PA 17401



Place First-Class Postage Here

DEPARTMENT OF ENVIRONMENTAL PROTECTION

150 ROOSEVELT AVE.

YORK, PA 17404

DEP USE	
<b>Components Sent</b>	
Onlot Disposal	<input type="checkbox"/>
Collection and Treatment	<input type="checkbox"/>
Planning Agency Review	<input type="checkbox"/>
Exempt from Planning	<input type="checkbox"/>
Code _____	
Date _____	

"Fold Here"

# SPECIFICATIONS

## WET WELL MOUNTED PUMP STATION WITH DUPLEX TWO-PORT IMPELLER TYPE NON-CLOG PUMPS

### GENERAL

The contractor shall furnish and install one factory-built, automatic pumping station as manufactured by Smith & Loveless, Inc., Lenexa, Kansas as supplied by Hydra-Numatic Sales Co. (973)-492-0181. The station shall be complete with all needed equipment, factory-installed on a welded steel base with fiberglass cover.

The principal items of equipment shall include two vertical, close-coupled, motor driven, vacuum primed, two-port impeller type non-clog pumps model 4B2D; valves; internal piping; central control panel with circuit breakers; motor starters and automatic pumping level controls; heater; ventilating blower; priming pumps and appurtenances; and all internal wiring.

The specifications and drawings detail Smith & Loveless equipment and represent the minimum standard of quality for both equipment and materials of construction. The CONTRACTOR shall prepare his bid on the basis of the particular equipment and materials specified.

### OPERATING CONDITIONS

Each pump shall be capable of delivering 120 GPM of raw water or wastewater against a total dynamic head of 50 feet. The minimum acceptable pump efficiency at this condition shall be 33 %. Due to the energy conservation requirements, the minimum efficiency will be enforced. The maximum allowable speed shall be 1750 RPM. The minimum rated horsepower of each pump motor shall be 7-1/2. The maximum static suction lift shall be 20 feet.

All openings and passages shall be large enough to permit the passage of a sphere 3" in diameter. The anticipated operating head range is from \_\_\_\_\_ feet minimum to \_\_\_\_\_ maximum. The pump motors shall not be overloaded beyond their nameplate rating at the design conditions nor at any head in the operating range.

### CONSTRUCTION

The station shall be constructed in one complete, factory-built assembly. It shall be sized to rest on the top of the wet well as detailed in the construction drawings. The supporting floor plate shall be minimum 3/8" thick steel with reinforcing, as required, to prevent deflection and ensure an absolutely rigid support.

The pump station shall be enclosed by a hinged insulated fiberglass cover. The cover shall have a suitable drip-lip around the edge and shall be provided with a hasp and staple connection to the floor plate to allow the pump chamber to be locked with a padlock.

The cover shall have a latch mechanism to keep the cover open under load. Adjustable ventilating louvers shall be provided on each end of the fiberglass cover, which are capable of being closed during cold weather operation.

An aluminum manway cover, located exterior to the fiberglass pump chamber shall be provided, complete with padlocking provisions. The manway shall be an integral part of the station floor plate and provide access to the wet well.

Enclosures utilized to house the valve train and/or controls, which are defined under OSHA Article 29CFR, Parts 1910 as a Confined Space shall not be acceptable.

A stanchion with lifting arm shall be provided to lift each pump. The lifting arm shall have a hook over the center of the motor to support a hoist (provided by others) for removal of the motors, impellers and pumps from the station.

The pump casings and discharge piping shall be mounted in relation to the floor plate as detailed in the construction drawings.

## **WELDING**

All steel structural members shall be joined by electric arc welding with welds of adequate section for the joint involved.

## **PROTECTION AGAINST CORROSION**

All structural steel surfaces shall be factory blasted with steel grit to remove rust, mill scale, weld slag, etc. All weld spatter and surface roughness shall be removed by grinding. Surface preparation shall comply with SSPC-SP6 specifications. Immediately following cleaning, a single 6-mil dry film thickness of VERSAPOX® shall be factory applied. This coating shall be as formulated by Smith & Loveless for abrasion and corrosion resistance.

Stainless steel, aluminum and other corrosion-resistant surfaces shall not be coated. Carbon steel surfaces not otherwise protected shall be coated with a suitable non-hardening rust preventative compound. Auxiliary components such as the electrical enclosure, ventilating blower and vacuum pumps shall be furnished with the original manufacturer's coating.

Finish coating shall be accomplished prior to shipment of the station from the factory and shall comply fully with the intent of these specifications. A touch-up kit shall be provided by the pump station manufacturer for repair of any mars or scratches occurring during shipping and installation. This kit shall contain detailed instructions for use and shall be the same material as the original coating.

## **MAIN PUMPS**

The pumps shall be (4") vertical, non-clog two-port impeller type of heavy cast iron construction, especially designed for the use of mechanical seals and vacuum priming. In order to minimize seal wear caused by linear movement of the shaft, the shaft bearing nearest the pump impeller shall be locked in place so that end play is limited to the clearance within the bearing. To minimize seal wear resulting from shaft deflection caused by the radial thrust of the pump, the shaft from the top of the impeller to the lower bearing supporting the impeller shall have a minimum diameter of 1-7/8" for motor frame sizes 213 through 286; 2-1/8" for motor frame sizes 324 and 326; and 3" for frame 364 and larger. The dimension from the lowest bearing to the top of the impeller shall not exceed 6".

The bearing nearest the impeller shall be designed for the combined thrust and radial load. The upper bearing shall be free to move in a linear direction with the thermal expansion of the shaft and shall carry only radial loads.

The shaft shall be solid stainless steel through the mechanical seal to eliminate corrosion and abrasive rust particles. Removable shaft sleeves will not be acceptable if the shaft under the sleeve does not meet the specified minimum diameter.

The pump impeller shall be of the enclosed type made of close-grained cast iron and shall be balanced. The impeller shall be keyed with a stainless steel key and secured to the motor shaft by a stainless steel cap screw equipped with a Nylock or other suitable self-locking device. The impeller shall not be screwed or pinned to the motor pump shaft and shall be readily removable without the use of special tools. To prevent the buildup of stringy materials, grit and other foreign particles around the pump shaft, all impellers less than full diameter shall be trimmed inside the impeller shrouds. The shrouds shall remain full diameter so that close minimum clearance from shrouds to volute is maintained. Both the end of the shaft and the bore of the impeller shall be tapered to permit easy removal of the impeller from the shaft.

The pump shall have an adapter providing a large water reservoir above the impeller to provide for positive exclusion of air from the impeller. The seal shall be inside this area to assure lubrication. Pumps which do not use hollow priming adapters for positive lubrication of the seal will not be acceptable.

The pump shall be constructed so as to permit priming from the lower pressure area behind the impeller. Priming from high pressure connections, which tends to cause solids to enter and clog the priming system, will not be acceptable. The priming bowl shall be transparent, enabling the operator to monitor the priming level.

The pump shall be arranged so that the rotating element can easily be removed from the casing without disconnecting the electrical wiring or disassembling the motor, impeller, backhead or seal, so that any foreign object may be removed from the pump or suction line.

The pump shaft shall be sealed against leakage by a single mechanical seal constructed so as to be automatically drained and primed each time the pump is drained and primed. Water which lubricates the mechanical seal shall be automatically drained from around the seal if the pump loses prime in order to allow both the pump and the seal to be drained, thereby preventing freezing and breakage of the seal during power outages in sub-freezing temperatures. Therefore, pumps mounted in a horizontal configuration shall not be considered equal to the vertical pumps specified herein.

The seal shall be of carbon and ceramic materials with the mating surfaces lapped to a flatness tolerance of one light band. The rotating ceramic shall be held in mating position with the stationary carbon by a stainless steel spring.

The pump volute shall be furnished with mounting lugs and bolted to the station floor plate, forming a gas-tight seal.

### **NON-CLOG TWO PORT IMPELLER**

The pump impeller shall be of the enclosed two-port type made of close-grained cast iron and shall be balanced. The eye of the impeller as well as the ports shall be large enough to permit the passage of a sphere 3" in diameter in accordance with nationally recognized codes. The impeller shall be keyed with a stainless steel key and secured to the motor shaft by a stainless steel cap screw equipped with a Nylock or other suitable self-locking device. The impeller shall not be screwed or pinned to the motor pump shaft and shall be readily removable without the use of special tools.

To prevent the buildup of stringy materials, grit and other foreign particles around the pump shaft, all impellers less than full diameter shall be trimmed inside the impeller shrouds. The shrouds shall remain full diameter so that close minimum clearance from shrouds to volute is maintained. Both the end of the shaft and the bore of the impeller shall be tapered to permit easy removal of the impeller from the shaft.

### **MOTORS**

The pump motors shall be vertical, solid shaft, NEMA P-base, squirrel-cage induction type, suitable for three phase, 60 cycle, 230 volt electric current. They shall have Class F insulation. Insulation temperature shall, however, be limited to Class B. The motors shall have normal starting torque and low-starting current, as specified by NEMA Design B characteristics. They shall be open drip-proof design with forced air circulation by integral fan. Openings for ventilation shall be uniformly spaced around the motor frame. Leads shall be terminated in a cast connection box and shall be clearly identified.

The motors shall have 1.15 service factor. The service factor shall be reserved for the owner's protection. The motors shall not be overloaded beyond their nameplate rating, at the design conditions, nor at any head in the operating range as specified under Operating Conditions.

The motor-pump shaft shall be centered, in relation to the motor base, within .005". The shaft runout shall not exceed .003".

The motor shaft shall equal or exceed the diameter specified under Main Pumps at all points from immediately below the top bearing to the top of the impeller hub.

A bearing cap shall be provided to hold the bottom motor bearing in a fixed position. Bearing housings shall be provided with fittings for lubrication as well as purging old lubricant.

The motor shall be fitted with heavy lifting eyes or lugs, each capable of supporting the entire weight of the pump and motor.

## **CONTROLS**

The control equipment shall be mounted in a NEMA Type 1 steel enclosure with a removable access cover. The circuit breakers, starter reset buttons, and control switches shall be operable without removing the access cover, for deadfront operation. The panel shall have a UL label.

A grounding type convenience outlet shall be provided on the side of the cabinet for operation of 120 volt AC devices.

Thermal magnetic air circuit breakers shall be provided for branch disconnect service and short circuit protection of all motor control and auxiliary circuits.

NEMA Magnetic across-the-line starters with under-voltage release and overload coils for each phase shall be provided for each pump motor to give positive protection. Each single-phase auxiliary motor shall be equipped with an over-current protection device in addition to the branch circuit breaker, or shall be impedance protected. All switches shall be labeled and a coded wiring diagram shall be provided.

To control the operation of the pumps with variations of liquid level in the wet well, a minimum of three (3) displacement switches shall be provided. A 30' cord shall be provided with each switch. The cord shall have a corrosion-resistant vinyl jacket and be multi-stranded in order to prevent fatigue.

An automatic alternator with manual switch shall be provided to change the sequence of operation of the pumps every eight hours. Alternating the pumps at less than eight-hour intervals will not be acceptable.

Provisions shall also be made for the pumps to operate in parallel should the level in the wet well continue to rise above the starting level for the low level pump.

## **FLOAT SWITCH CONTROL**

**High Wet Well Level** – An adjustable mercury displacement switch shall be provided to sense a high water level condition. The switch shall hang into the wet well, and shall activate a contact to indicate the high water condition. A high water float shall be dedicated to the auto-dialer.

**Low Wet Well Level** – An adjustable mercury displacement switch shall be provided to sense a low water level condition. The switch shall hang into the wet well, and shall activate a contact to indicate the low water condition. Provide local and remote contacts for high water alarm and low water alarm.

**Alarm Light 120 VAC** – A vapor-proof light fixture with 50 watt lamp for outdoor pole mounting.

- With red globe and guard.

**Intrinsically Safe Relay** – A relay to provide low current isolated switching for a float switch and/or other device.

### **PUMP FAILURE**

A limit switch shall be provided on the external arm of each discharge check valve to detect failure of the pump to delivery normal operating pressure. An auxiliary time delay relay shall be provided to prevent an alarm signal during pump startup period.

### **THREE PHASE POWER FAIL**

Three-Phase Power Failure – A relay with double pole, double throw contacts to monitor and protect against phase loss (single phasing), under voltage (brownouts) and phase reversal (improper sequence). Automatically resets when three-phase service returns to normal.

#### Adjustable Operating Voltage    Drop Out Voltage

158 – 224  
430 – 480

171 – 243  
387 - 432

### **RUNNING TIME METER**

A running time meter shall be supplied for each pump to show the number of hours of operation. The meter shall be enclosed in a dust and moisture-proof molded plastic case. The flush mounted dial shall register in hours and tenths of hours up to 9999.9 hours before repeating. The meter shall be suitable for operation from a 115 volt, 60 cycle supply.

### **ELECTRIC HEATER**

A 1300/1500 watt, dual range, electric heater with automatic circulating fan, thermostat control and an on/off switch is to be provided. The heater is to be operated by connection to the convenience receptacle located on the control panel.

### **INSULATED HOOD**

The wet well mounted pump station shall be enclosed by a hinged, insulated fiberglass cover, complete with drip lip, cutouts for ventilation system and hasp to allow the pump station to be locked with a padlock. The insulation shall be minimum 1" urethane.

### **TIME DELAY RELAY TO PREVENT SIMULTANEOUS STARTING**

Adjustable time delay relays shall be provided to prevent simultaneous starting of the pump motors after power failure. Auto base 1-2 selector switch shall be included.

### **PRESSURE GAUGE ON PUMP DISCHARGE**

A pressure gauge with a brass stop valve and manual air relief fittings shall be installed at the discharge of each pump.

### **VACUUM-PRIMING SYSTEM**

A vacuum priming system shall be furnished to prime the main pumps. The system shall be as shown on the vacuum priming schematic and shall include two vacuum pumps, providing 100 percent standby. Vacuum pumps shall have corrosion-resistant internal components. The vacuum priming system shall be complete with vacuum control solenoid valves, prime level sensing probes, float-operated check valves to protect the vacuum pumps, and all necessary shut-off valves as shown on the piping schematic. The float-operated check valves shall have a transparent body for visual inspection.

The priming system shall automatically provide positive lubrication of the mechanical seal each time a main pump is primed. To prevent excessive stoppage due to grease accumulation, no passageway in the

priming system through which the pumped liquid must pass shall be smaller than the equivalent of a 2-1/2" opening.

## **ENVIRONMENTAL EQUIPMENT**

A ventilating blower capable of delivering 250 CFM at 0.1" static water pressure shall be provided in order to remove the heat generated by continuous motor operation. The ventilating blower shall be turned on and off automatically by a preset thermostat. A louvered opening shall cover the discharge. A 500 watt electric heater controlled by a preset thermostat shall be furnished. The heater shall be rigidly mounted in the station to prevent removal.

## **MAIN PIPING**

The pump suction shall be drilled and tapped for a 125 pound American Standard flange for easy connection of the suction riser. The discharge line from each pump shall be fitted with a clapper-type check valve and eccentric plug valve. Size, location and quantity of check valves and plug valves shall be as shown on the construction drawing. The check valve shall be of the spring-loaded type with external lever arm and an easily replaced resilient seat for added assurance against vacuum leaks. Check valves shall have stainless steel shaft with replaceable bronze shaft bushings and shall be sealed with an adjustable Teflon seal. An operating wrench shall be provided for the plug valves.

Protrusions through the floor plate shall be gas-tight where necessary to effect sealing between the equipment chamber and the wet well. Bolted and sealed joints shall be provided at the pump casings or suction pipes in order to prevent corrosive, noxious fumes from entering the station. The pump station manufacturer shall extend the suction and discharge connections below the floor plate at the factory so that field connections can be made without disturbing the gas-tight seals.

The manufacturer of the pump station shall provide a compression-type sleeve coupling for installation in the common discharge pipe.

The attached pump specification and checklist must be met in total. There are many reasons for incorporating a good pump specification. For example, the stainless steel shaft with tapered impeller attachment is provided to minimize corrosion, extend seal life, and provide ease of impeller removal and seal replacement without use of a wheel puller. All items specified are for long life, durability and maintainability of the pumping equipment. Deviations from the pump specification will not be allowed.

A checklist is also provided to insure that the proper pumping system is provided to the owner.

## **FACTORY PERFORMANCE TESTS**

All components of the pump station shall be given an operational test at the pump station manufacturer's facility to check for excessive vibration or leaks in the piping or seals, and to correct operation of the automatic control and vacuum priming systems and all auxiliary equipment. Installed pumps shall take suction from a deep wet well, simulating actual service conditions. The control panel shall undergo both a dry logic test and a full operational test with all systems operating.

Factory test instrumentation must include flow measuring with indicator; compound suction gauge; bourdon tube type discharge pressure gauge; electrical meters to measure amperes, volts, kilowatts and power factor; speed indicator; and a Vibrometer capable of measuring both amplitude and frequency.

Each Pump shall receive a certified hydraulic non-witness test in accordance with Hydraulic institute standards. Reports of the test shall be forwarded to the ENGINEER.

## **SPARE PARTS**

A complete replacement pump shaft seal assembly shall be furnished with each pump station. The spare seal shall be packed in a suitable container and shall include complete installation instructions. A spare casing gasket and seal gasket shall be provided.

## **INSTALLATION AND OPERATING INSTRUCTIONS**

Installation of the pump chamber shall be done in accordance with the written instructions provided by the manufacturer.

Operation and maintenance manuals shall be furnished which will include parts lists of components and complete service procedures and troubleshooting guide.

## **START-UP**

The Manufacturer shall provide the services of a factory-trained representative for a maximum period of one day on-site to perform initial start-up of the pump station and to instruct the owner's operating personnel in the operation and maintenance of the equipment.

## **WARRANTY**

The manufacturer of the station shall warrant for one year from date of start-up, not to exceed eighteen months from date of shipment, that the structure and all equipment he provides will be free from defects in material and workmanship. Warranties and guarantees of the suppliers of various components in lieu of a single source responsibility by the Manufacturer will not be accepted. The Manufacturer shall assume prime responsibility for the warranty of the station and all components.

In the event a component fails to perform as specified or is proven defective in service during the warranty period, the Manufacturer shall repair or replace, at his discretion, such defective part. He shall further provide, without cost, such labor as may be required to replace, repair or modify major components such as the steel structure, main pumps, main pump motors and main piping manifold. After start-up service has been performed, the labor to replace accessory items, such as the blower, priming pumps, alternator, etc., shall be the responsibility of others.

The repair or replacement of those items normally consumed in service, such as seals, grease, light bulbs, etc., shall be considered as part of routine maintenance and upkeep.

It is not intended that the Manufacturer assume responsibility for contingent liabilities or consequential damages of any nature resulting from defects in design, material, workmanship or delays in delivery, replacement or otherwise.

## **MANUFACTURER'S INSURANCE**

ALL EQUIPMENT MANUFACTURERS, either direct or subcontractors to the general or mechanical contractors, SHALL HAVE in effect at TIME OF BID, CONTRACT AWARD, CONTRACT PERFORMANCE, and WARRANTY TERM, PRODUCT AND COMPREHENSIVE LIABILITY INSURANCE, INCLUDING SUDDEN AND ACCIDENTAL POLLUTION COVERAGE in the amount of FIVE MILLION DOLLARS, \$5,000,000, through an insurance company with a minimum rating of A+ (SUPERIOR) XV according to the BEST'S INSURANCE REPORTS. All policies must be written on an OCCURRENCE BASIS. Policies written on a CLAIMS MADE BASIS are not acceptable. A typical CERTIFICATE OF INSURANCE attesting to the specified coverage issued by the responsible carrier naming the ENGINEER OF RECORD and the OWNER as ADDITIONAL INSURED must be presented to the named additional insured prior to bid and contract award. A FAILURE TO COMPLY with this requirement BY THE BIDDER will require DISQUALIFICATION of the BID and CONTRACT AWARD.

**ENGINEERING SPECIFICATIONS  
AUTO-DIALER/MONITOR  
SENSAPHONE 2000**

**I. General**

The Automatic dialer shall be a self-contained microprocessor controlled system capable of monitoring 8 input channels. The system shall be integrated in construction and shall be installed and configured for operation by the user via Microsoft Windows™ software provided at no charge. Voice message recording shall be accomplished via local or remote touch-tone phone. Input channels shall be capable of monitoring analog or digital signals utilizing 10-bit resolution.

Upon detection of any alarm or status change, the system shall commence dialing telephone numbers from a list associated with the particular alarm condition(s) or combination thereof, and deliver the alarm message via a custom voice message, Fax, E-mail, modem, numeric pager or alphanumeric pager. The voice alarm message shall be delivered in digitized human voice using messages recorded by the user. The system will continue to call telephone numbers in succession until a positive acknowledgment of the alarm message is received. Acknowledgment can be accomplished from a voice phone call, a modem phone call, or by a callback from either a telephone or a computer with modem. Upon answering, the system shall attempt a data connection. If a connection is made the system shall allow remote access to programming and operation. If a data connection is not made, the system shall recite a voice status report and allow access to remote voice message programming.

The system shall be FCC registered for direct connection to the telephone network. The system shall have a one year warranty from the manufacturer. The system shall be a Sensaphone 2000 by Phonetics, Inc.

**II. I/O Channel Attributes and Features**

**A. Inputs**

The system shall come standard with 8 universal input channels. The input resolution shall be 10-bit with scalable lookup tables. All analog input values shall read to one decimal place. All input channels shall be user-configurable as:

1. NO or NC digital dry contact, using 0.5mA loop current
2. 4-20mA analog, using custom look up table
3. 0-5V analog, using custom look up table
4. Temperature from thermistor, using 2.8K or 10K devices
5. Run time accumulator
6. Pulse count

The system shall have the following built-in monitoring features:

1. AC power failure detection
2. Low battery detection

All monitored channels, including built-in monitoring features, shall allow local and remote data programming of pertinent operational data including, but not limited to:

1. Input type (NO/NC, 4-20mA and 0-5V analog, thermistor, run time, pulse count)
2. Units of measure (degrees F, degrees C, inches, feet, psi, volts, amps, pounds)
3. High and Low limits (-9999.9 to +9999.9)
4. Input recognition time (0 seconds to 270 minutes)
5. Alarm reset time (0 seconds to 270 minutes)
6. Alarm call list for each channel
7. Enable/Disable for each channel to dial out for alarm

### **III. Communication Features**

#### **A. Communication Methods**

The system shall be able to communicate alarms and other status information using the following methods.

1. Programmable voice
2. Fax
3. Modem
4. Numeric pager
5. Alphanumeric pager
6. Internet E-mail

#### **B. Telephone Specifications**

The system shall connect to a standard 2-wire telephone line using pulse or tone dialing methods, with loop start only. The system shall recognize ringer frequencies from 16 to 60 Hz. No leased or dedicated lines shall be required. The system shall also be capable of being used on the same telephone line as other answering devices. Call progress detection shall ensure that the alarm dial out is not hindered by no-answers or busy signals.

#### **C. Communications Interface**

The system shall have a built-in 14,400 bps modem to allow remote data communication and programming via computer. The system shall have a built-in RS232 serial port for the purpose of local communication and programming via computer. Both communication interfaces shall accept standard Modbus protocol.

#### **D. Telephone Numbers (Destinations)**

The system shall be capable of dialing up to 32 telephone numbers, 36 digits each (E-mail addresses may be up to 64 characters each). There shall be a capability to group the phone numbers into multiple lists to create calling schedules based on weekdays, weeknights and weekends. In addition, individual input alarms may be programmed to contact specific destinations.

#### **E. Voice Messages**

The System shall have the ability to record, store and reproduce voice messages and to use those messages to articulate the location and status of the monitored channels. In absence of user-recorded voice messages, the system shall articulate channel status using the internally resident vocabulary. All digitized speech message data shall be stored in nonvolatile memory. Such nonvolatile memory shall be capable of protecting speech memory for at least 10 years of complete power outage.

There shall be one recorded identification message for the system, and one recorded alarm message for each input channel. Message length shall be 4 seconds per input and 6 seconds for system identification.

### **IV. Programming**

#### **A. Local Programming**

The System shall have a built-in RS232 port for the purpose of locally programming all system data using an IBM PC or compatible with Windows 3.1 or greater, and Sensaphone 2000 programming software (included). All operational data, system setup and configuration data, and all information regarding the status of monitored input channels shall be accessible. In addition, voice messages may be recorded and reviewed using a standard touch-tone telephone.

#### **B. Remote Programming**

The system shall have a built-in 14,400 bps modem for the purpose of remotely programming and communicating all system, configuration, and input data using an IBM PC or compatible with modem, Windows 3.1 or greater, and Sensaphone 2000 programming software (included). A user-programmable security password shall protect the system from unauthorized tampering. Voice messages may be recorded or reviewed via a phone call using a standard touch-tone telephone.

## **V. System Features**

### **A. Power**

The system shall be provided with a UL/CSA listed 8 VAC 1.25A power transformer that the user may plug into a 115VAC outlet,  $\pm$  10%, 60Hz. Typical power consumption shall be 10 Watts.

### **B. Battery Backup**

The system shall have a battery compartment (batteries not included) to hold 6 "C-cell" Ni-Cad rechargeable batteries (2.2AH recommended). The batteries shall support approximately 8-10 hours of continued system operation in the absence of AC power (Actual battery backup performance is dependent upon the Amp-Hour rating, age of the batteries, ambient temperature, and the charge condition.) The unit shall include an integrated battery charging circuit. The battery charging shall be intelligent with microprocessor guided precision voltage control, which will activate only when batteries are installed.

### **C. Local Visual Indication**

Each input shall have a corresponding LED that will indicate the alarm and acknowledgment status of each input. The system shall also have LED's to indicate System On, Battery Condition and Phone Line status.

### **D. Data Log**

The system shall be capable of logging the values of all input channels, the battery voltage and the AC power status. Items to be stored shall be selectable to maximize memory usage. Up to 32,000 total samples can be stored in the unit's nonvolatile memory. The time between logs shall be user-programmable. The system shall have the capability to send the data log information via fax or E-mail on a time-programmable basis. Data log information may also be retrieved via computer and modem, by using the polling option of the Sensaphone 2000 Windows<sup>TM</sup> software.

### **E. Diagnostics and Testing**

The system shall have built-in diagnostic tests to pinpoint system problems.

### **F. Security**

The system shall allow the user to program a data password to prevent unauthorized local or remote access to programming.

## **VI. Remote Operation Features**

### **A. Status Report**

The system shall allow the user to call into the unit at any time using any standard telephone to obtain a full status report of all monitored channels. The status report shall be articulated using the resident voice synthesized English vocabulary, in combination with digitized user-recorded voice messages.

### **B. Data Status Report**

The system shall allow the user to call into the unit with a computer, modem and the Sensaphone 2000 software package. The system shall allow interrogation and programming access to system parameters and status. The real time input status can also be displayed graphically. Real time status snap shots can also be automatically transmitted to E-mail or Fax destinations on a time schedule.

### **C. Voice Acknowledgment**

An alarm on any monitored channel may be acknowledged remotely by pressing tones on a touch-tone telephone keypad or by calling the system back within a specified time period.

#### **D. Data Acknowledgment**

An alarm on any monitored channel may be acknowledged remotely by the user via a computer, modem and the Sensaphone 2000 software. Alarms may be acknowledged manually by calling into the unit or they may be acknowledged automatically using the alarm-answer mode of the Sensaphone 2000 software package.

#### **VII. Enclosure and Environmental**

##### **A. Enclosure**

The system shall be housed in a durable aluminum enclosure with integral mounting brackets for wall or panel mounting. The dimensions shall be 12.1W x 7.2"H x 1.6"D. The weight shall be 3 lbs.

##### **B. Electrical Protection**

Power and telephone connections shall have internal spike and surge protection using metal oxide varistors. All input channels shall have fault protected input circuits.

##### **C. Additional Electrical Surge Protection**

Additional Power and Telephone line surge protection shall be available from the manufacturer. When so installed, the system shall be fully warranted against any damage caused by transient surges entering the system through Power or Telephone lines.

##### **D. Environmental**

The system shall function over an operating temperature range of 32°F to 122 °F at up to 0 - 90% RH, non-condensing. The system may be stored within the temperature range of 0° - 130 °F.

##### **F. Maintenance**

The system manufacturer shall have in-house service facilities and technical assistance available during normal business hours, Monday - Friday 8 AM - 5PM (EST).

Specifications subject to change without notice.

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**Hydra-Numatic Sales Co.**

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**C.S. Davidson, Inc.**

*Excellence in Civil Engineering*

# LETTER OF TRANSMITTAL

**YORK OFFICE**

38 North Duke Street • York, PA 17401  
(717)846-4805

**GETTYSBURG OFFICE**

50 West Middle Street • Gettysburg, PA 17325  
(717)337-3021

**Date** **May 20, 2003**

**To:** PA Department of Environmental Protection  
909 Elmerton Avenue  
Harrisburg, PA 17110

**Attn:** Sean Furjanic  
**Re:** The Woods at Lake Redman  
Pump Station Permit Application  
**File No.** 3949.3.03.00

We are delivering to you via:

- Hand Delivery
- Overnight Courier
- Regular Mail
- Certified Mail
- Your Pick-Up
- Other

MAY 21 15 50  
COMMUNICATIONS SECTION

Herewith, please find:

COPIES	DATE	NO.	DESCRIPTION
3			Pump Station Permit Application
1			Check for \$500.00

These are transmitted:

- For Your Use
- For Approval
- For Review and Comment
- As Requested
- For Signatures and Dates
- For Corrections
- Rejected
- Approved as Submitted
- Note Markings

Remarks:

**Joshua C. George, P.E.**



# LETTER OF TRANSMITTAL

**YORK OFFICE**

38 North Duke Street • York, PA 17401  
(717)846-4805

**GETTYSBURG OFFICE**

50 West Middle Street • Gettysburg, PA 17325  
(717)337-3021

03 SEP 22 PM 12:42

Date **September 18, 2003**

WATER MANAGEMENT

To PA DEP  
Southcentral Regional Office  
909 Elmerton Avenue  
Harrisburg, PA 17110-8200

Attn: Sean Furjanic, Water Management Program  
Re: Keystone Custom Homes  
The Woods at Lake Redman  
File No. 3949.3.03.00

We are delivering to you via:

- Hand Delivery   
  Regular Mail   
  Your Pick-Up  
 Overnight Courier   
  Certified Mail   
  Other


Herewith, please find:

COPIES	DATE	NO.	DESCRIPTION
1	9/12/03		Required Pump Station Calculations
1	6/9/03	3949303_	Profile Drawings of Collection System

These are transmitted:

- For Your Use   
  As Requested   
  Rejected  
 For Approval   
  For Signatures and Dates   
  Approved as Submitted  
 For Review and Comment   
  For Corrections   
  Note Markings

Remarks:

  
 \_\_\_\_\_  
 W. Casey Deller, E.I.T.

## NPSH COMPUTATIONS

ACCORDING TO THE PUMP AND SYSTEMS CURVES SHOWN ON THE ATTACHED SHEETS, THE SYSTEM WILL OPERATE AT A FLOW OF APPROXIMATELY 120 GALLONS PER MINUTE AT A TOTAL DYNAMIC HEAD OF 50 FEET. THE FLOW IS BASED ON A 54L23 IMPELLER AND A 5 HORSEPOWER PUMP.  
 (7 1/4" TRIM)

AT THIS OPERATING POINT, THE REQUIRED NET POSITIVE SUCTION HEAD (NPSHR) IS APPROXIMATELY 5.75 FEET. THE NPSHR IS SHOWN ON THE ATTACHED PUMP CURVE.

COMPUTE THE AVAILABLE NPSH (NPSHA):

$$NPSHA = h_{ATM} + h_{z(s)} - h_{f(s)} - h_{vp}$$

WHERE:  $h_{ATM}$ : ATMOSPHERIC HEAD  
 AT FREE SURFACE

$$h_{ATM} = \frac{P}{\gamma} = \frac{(144 \frac{lb}{in^2}) (144 \frac{in^2}{ft^2})}{62.4 \frac{lb}{ft^3}} = 33.23 \text{ ft}$$

$h_{z(s)}$ : ELEVATION HEAD AT  
 SUCTION PIPE (ft)

$$h_{z(s)} = (551.8 \text{ FT} - 530.2 \text{ FT}) - (533.20 \text{ FT} - 531.20 \text{ FT})$$

$$h_{z(s)} = 19.60 \text{ FT}$$

$h_{f(s)}$ : FRICTION HEAD  
 AT SUCTION PIPE (ft)

$$h_{f(s)} = f (\text{LENGTH OF SUCTION PIPE})$$

$$= \left[ 0.2083 \left( \frac{100}{130} \right)^{1.85} \cdot \left( \frac{120^{1.85}}{4^{4.75}} \right) \right] (21.0 \text{ FT}_{\text{max}}) = 22.25 \text{ FT}$$

$h_{vp}$ : VAPOR PRESSURE  
 HEAD AT  $T = 120^\circ \text{ F}$   
 (WORST CASE)

$$h_{vp} = \frac{P}{\gamma} = \frac{(1.692 \frac{lb}{in^2}) (144 \frac{in^2}{ft^2})}{62.4 \frac{lb}{ft^3}} = 3.9 \text{ FT}$$

$$NPSHA = 33.23 \text{ FT} + 19.60 \text{ FT} - 22.25 \text{ FT} - 3.9 \text{ FT}$$

$$NPSHA = 26.68 \text{ FT}$$

$\therefore$  NPSH AVAILABLE = 26.68 FT > NPSH REQ<sup>d</sup> = 5.75 FT OK



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Client WBS @ LEHMAN Sheet 2 Of 2  
Project \_\_\_\_\_ No. \_\_\_\_\_  
Subject \_\_\_\_\_  
Prepared By \_\_\_\_\_ Date \_\_\_\_\_  
Reviewed By \_\_\_\_\_ Date \_\_\_\_\_  
Approved By \_\_\_\_\_ Date \_\_\_\_\_

TOTAL DYNAMIC SUCTION HEAD (LIFT)

$$= h_z(s) + h_f(s)$$

$$= 19.60 \text{ FT} + 22.25 \text{ FT}$$

$$= 41.85 \text{ FT} \leftarrow$$

TEL. (973) 492-0181  
FAX. (973) 492-1909



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[www.hydranumatic.com](http://www.hydranumatic.com)

Email: [Sales&Service@hydranumatic.com](mailto:Sales&Service@hydranumatic.com)

To: Casey Deller

Fax No.: (717) 846-5811

Company: C.S. Davidson

Reference: Lake Redman Pump Station  
Jacobus Borough

From: Chris Otto

Date: September 16, 2003

Email: [chrishydra@hydranumatic.com](mailto:chrishydra@hydranumatic.com)

Number Of Pages Including Cover Sheet: 3

Casey,

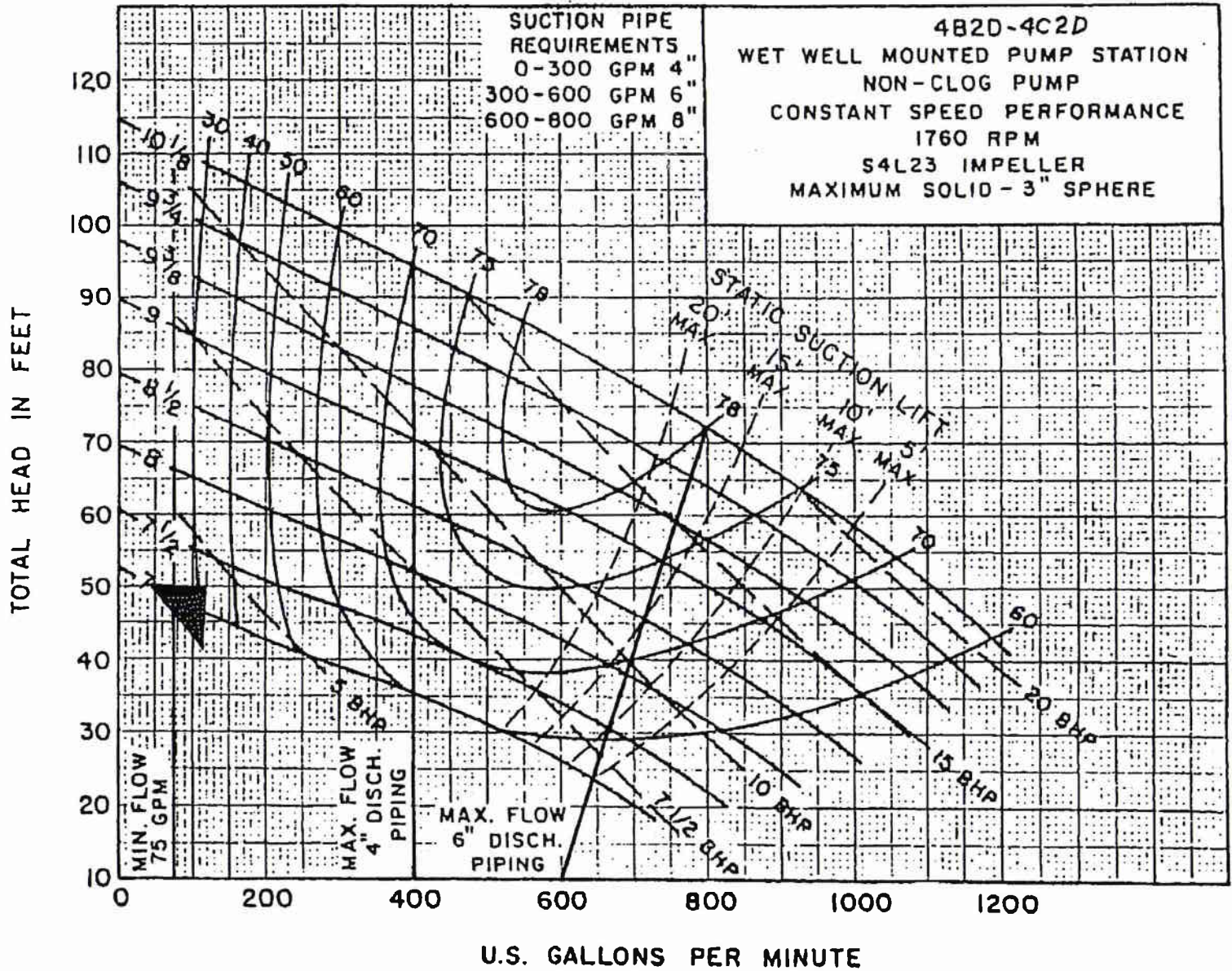
Attached are NPSHr curves for the proposed Smith & Loveless 4B2D pumps. The NPSHr @ 120 GPM is 5.75 feet. Please contact me if you need additional information.

Regards,

HYDRA-NUMATIC SALES CO.

*Chris Otto* (Signature)  
Chris Otto

CJO:jlh





Smith & Loveless, Inc.

ENGINEERING DATA

Sheet \_\_\_\_\_ of \_\_\_\_\_

Date \_\_\_\_\_

By M. WOOD P.E.

PUMP MODEL 4B2D RPM 1750

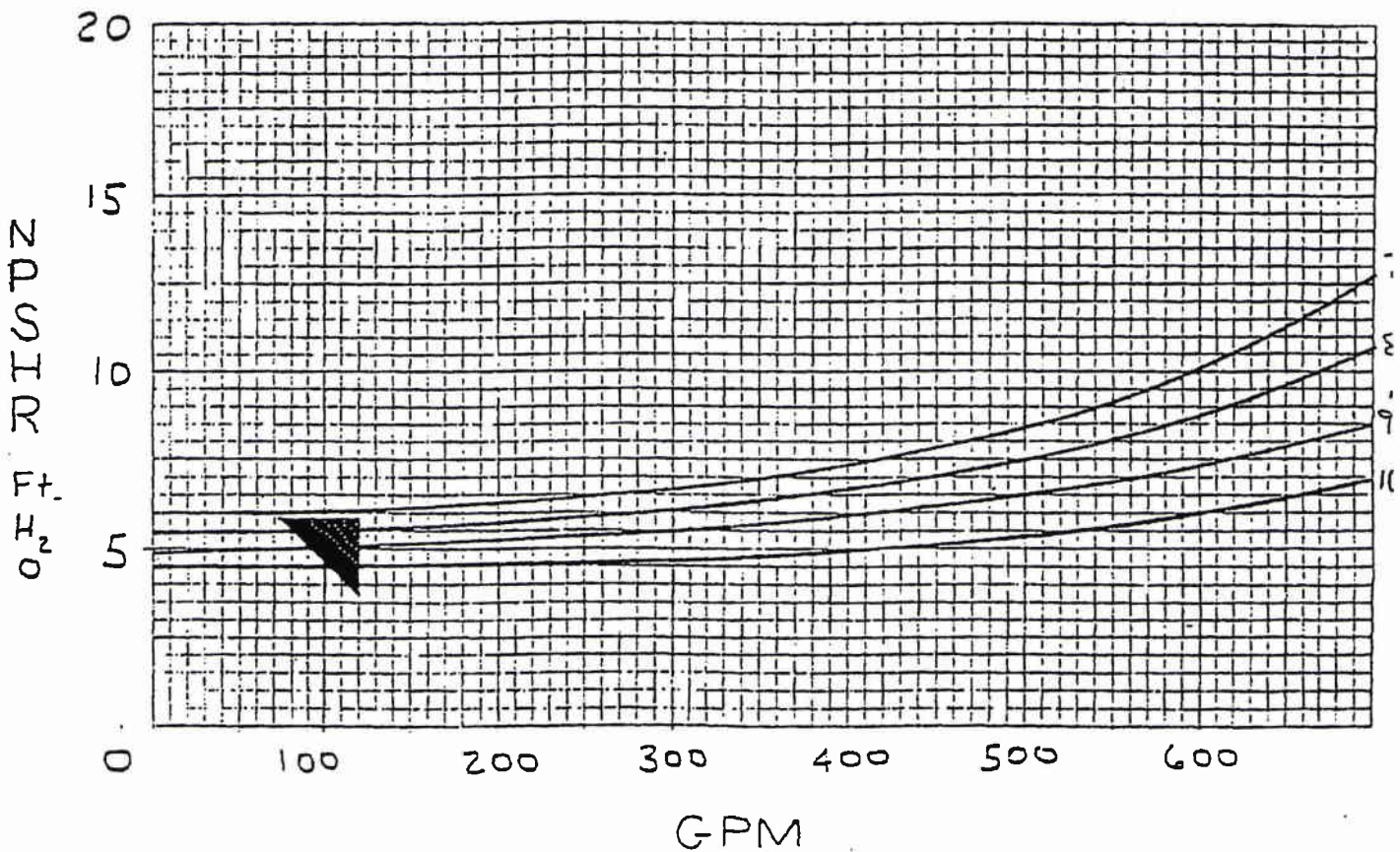
DESIGN CONDITIONS \_\_\_\_\_ GPM \_\_\_\_\_ TDH

IMPELLER DIAMETER 7, 8, 9 + 10" Dia

NPSHR AT STANDARD CONDITIONS

ATMOSPHERIC PRESSURE 30 IN HG

TEMPERATURE 85 ° F



## Casey Deller - FW: Part II Permit for Pump Station

---

**From:** "Furjanic, Sean" <sefurjanic@state.pa.us>  
**To:** "WCD@csdavidson.com" <WCD@csdavidson.com>  
**Date:** 9/11/03 11:01 AM  
**Subject:** FW: Part II Permit for Pump Station

---

I sent this to Josh George but then found out that he is no longer with your group. Please give me a call if you have any questions.

> -----Original Message-----  
 > From: Furjanic, Sean  
 > Sent: Thursday, September 11, 2003 10:46 AM  
 > To: 'Joshua C. George'  
 > Subject: RE: Part II Permit for Pump Station  
 >  
 > Hello Josh,  
 >  
 > I am looking at the Part II application for The Woods at Lake Redman pump  
 > station. Here are my comments:  
 >  
 > 1. Please send in the profiles for the collection system, and include the  
 > point of connection for this project. Anytime we permit a new pump  
 > station we also permit the collection system.  
 >  
 > 2. Please show what the combined total of dynamic suction lift at the pump  
 > off elevation and the required net positive suction head at design  
 > operating conditions is for the vacuum-primed pumps.  
 >  
 > I believe that is all I need to proceed with the permit. If you have any  
 > questions, please give me a call.  
 >  
 > Sean M. Furjanic  
 > PADEP  
 > Water Management Program  
 > 717-705-4826  
 > sefurjanic@state.pa.us

> -----Original Message-----  
 > From: Joshua C. George [<mailto:JCG@csdavidson.com>]  
 > Sent: Tuesday, May 27, 2003 3:11 PM  
 > To: sefurjanic@state.pa.us  
 > Subject: RE: Part II Permit for Pump Station  
 >  
 >  
 > Thanks, Sean. The application should be in your office (probably being  
 > checked for Administrative completeness) right now. I'll have to get you  
 > documentation from the Sewer Authority's engineer on the existing pump  
 > station that the new station will discharge into. Their engineer has  
 > already reviewed the package I sent to you and he did not comment on  
 > capacity issues, but I'll get something to you. Thanks again for your  
 > assistance.  
 >  
 > >>> "Furjanic, Sean" <sefurjanic@state.pa.us> 05/27/03 02:16PM >>>  
 > Hi Josh,  
 >  
 > Assuming that all information is presented that we like to see, a typical  
 > turnaround time of 60 days can be assumed. I am very swamped right now  
 > with  
 > many York and Adams projects being proposed, so 60 to 75 days would be a  
 > good guess. Please make sure that all calculations are included and, if  
 > the  
 > new station will enter into an existing station, documentation of the  
 > capacity of the existing station. If you have any questions, please let  
 > me

> know.  
>  
> Sean Furjanic  
> Water Management Program  
>  
> Take a Walk in Your Watershed!  
> May is Watershed Awareness Month  
> <http://www.pawatersheds.org/wsam03/default.asp>  
>  
> -----Original Message-----  
> From: Joshua C. George [<mailto:JCG@csdavidson.com>]  
> Sent: Friday, May 16, 2003 10:09 AM  
> To: sefurjanic@state.pa.us  
> Subject: Part II Permit for Pump Station  
>  
>  
> Sean -  
>  
> I will soon be submitting a Part II permit application for a new pump  
> station in Jacobus Borough, York County. The permit has been completed in  
> the name of the Jacobus Borough Sewer Authority and is for a project  
> called  
> the Woods at Lake Redman. What is your typical turn-around time for this  
> type of permit application? I assume that it's shorter than the money  
> back  
> guarantee time even though you can't commit to the shorter time. Thanks  
> for  
> your answer. I'm looking to establish a schedule for approvals and need  
> to  
> plug in a reasonable time.  
>  
>  
> Joshua C. George, P.E.  
> C.S. Davidson, Inc.  
> 38 North Duke Street  
> York, PA 17401  
> (717)846-4805  
> Fax (717)846-5811  
> [jcg@csdavidson.com](mailto:jcg@csdavidson.com)  
> [www.csdavidson.com](http://www.csdavidson.com)

**Furjanic, Sean**

---

**From:** Casey Deller [WCD@csdavidson.com]  
**Sent:** Thursday, September 18, 2003 10:11 AM  
**To:** sefurjanic@state.pa.us  
**Subject:** RE: FW: Part II Permit for Pump Station

Sean,

I mailed the required information/plans for the Woods at Lake Redman to you this morning, so you should be receiving them in the near future. Also, an update on the Erosion and Sedimentation Control permit. I spoke with Eric Jordan of the York County Conservation District on 9/17. He informed me that the all comments have been addressed for issuance of the NPDES permit. However, Keystone Custom Homes, the contractor for the project, have other sites in the area that are in non-compliance, and therefore the permit for the Woods at Lake Redman will be put on hold until the other sites are brought up to compliance. I will let you know when the permit is issued.

Casey

W. Casey Deller, E.I.T.  
wcd@csdavidson.com

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**FAX TRANSMISSION COVER SHEET**

**DATE:** November 17, 2003  
**TO:** PA DEP  
**ATTN:** Sean Furjanic  
**FAX NO.:** (717) 705-4760  
**SENDER:** W. Casey Deller, E.I.T.  
**RE:** The Woods at Lake Redman  
Jacobus Borough, PA  
Part II Permit for Pumping Station  
Engineer's No. 3949.3.03.00

**YOU SHOULD RECEIVE 4 PAGE(S), INCLUDING THIS COVER SHEET. IF YOU DO NOT RECEIVE ALL THE PAGES, PLEASE CALL (717) 846-4805.**

Sean,

Please find herewith:

1 copy of the NPDES permit for the Woods at Lake Redman, a residential subdivision in Jacobus Borough. Please let me know as soon as possible if you need anything else to issue the Pumping Station Permit. If you have any questions or comments, please contact me at our York Office.

Thank you,

W. Casey Deller, E.I.T.

NOV-17-2003 14:00

C.S. DAVIDSON INC.  
COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF WATERSHED MANAGEMENT

717 846 5811

P.02/04

**APPROVAL OF COVERAGE UNDER THE GENERAL NPDES  
PERMIT FOR STORMWATER DISCHARGES ASSOCIATED WITH  
CONSTRUCTION ACTIVITIES  
PAG - 2 (2002 Amendment)**

**NPDES PERMIT NO: PAG2006703059**

**Project Name & Address**

The Woods at Lake Redman

Main Street & York Street

Jacobus, PA 17407

**Permittee Name & Address**

Church Reserve, LLC

214-A Willow Valley Lakes Drive

Willow Street, PA 17584

In compliance with the provisions of the Clean Water Act, 33 U.S.C Section 1251 et seq. ("the Act") and Pennsylvania's Clean Streams Law, as amended, 35 P.S. Section 691.1 et seq., the Department of Environmental Protection hereby approves the Notice of Intent (NOI) submitted for coverage to discharge stormwater to the following surface water(s)

UNT to Lake Redman

CWF

from a  1 to less than 5 acre project with a point source discharge

5 acres or larger project

subject to the Departments enclosed PAG-2 which incorporates all effluent limitations, monitoring and reporting requirements and other terms, conditions, criteria and special requirements for the discharge of stormwater from point sources composed entirely of stormwater associated, in whole or in part, with construction activity, as defined in this general permit, to surface waters of the Commonwealth, including to municipal separate storm sewer or non-municipal separate storm sewer.

**APPROVAL TO DISCHARGE IN ACCORDANCE WITH THE TERMS AND CONDITIONS HEREIN MAY COMMENCE ON THE DATE OF THE APPROVAL OF COVERAGE, AND IS VALID FOR A PERIOD OF FIVE YEARS WHEN CONDUCTED PURSUANT TO SUCH TERMS AND CONDITIONS. COVERAGE MAY BE EXTENDED BY THE DEPARTMENT IF A TIMELY ADMINISTRATIVELY COMPLETE AND ACCEPTABLE NOI RENEWAL IS SUBMITTED TO THE DEPARTMENT AT LEAST 90 DAYS PRIOR TO DATE OF COVERAGE TERMINATION, UNLESS PERMISSION FOR SUBMISSION AT A LATER DATE HAS BEEN GRANTED BY THE DEPARTMENT. THE PERMIT MAY BE TERMINATED PRIOR TO THE EXPIRATION DATE UPON NOTICE TO AND APPROVAL BY THE DEPARTMENT OR AUTHORIZED COUNTY CONSERVATION DISTRICT. NO CONDITION OF THIS PERMIT SHALL RELEASE THE PERMITTEE OR CO-PERMITTEE FROM ANY RESPONSIBILITY OR REQUIREMENT UNDER PENNSYLVANIA, OR FEDERAL ENVIRONMENTAL STATUTES, AND REGULATIONS OR LOCAL ORDINANCES.**

COVERAGE APPROVAL DATE: 11/11/03

COVERAGE EXPIRATION DATE: 11/11/08

AUTHORIZED BY: 

TITLE: Engineering Technician II

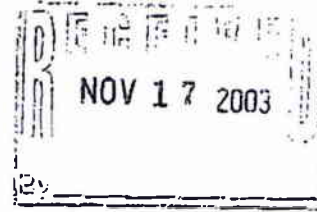


# York County Conservation District

"Conservation • Stewardship • Education"

November 13, 2003

Greg Hill  
Church Reserve LLC  
214A Willow Valley Lakes Drive  
Willow Street, PA 17584



RE: Erosion and Sediment Control Plan Review  
The Woods at Lake Redman  
Permit # PAG2006703059  
Jacobus Borough  
York County

Dear Sir:

The York County Conservation District has completed its review of the erosion and sedimentation control plan for the above referenced project submitted by Casey Deller of C.S. Davidson, Inc.

The revised plan dated September 9, 2003, has been reviewed and is **ADEQUATE** to meet the minimum requirements of the Department of Environmental Protection's (DEP) rules and regulations, Pa. Title 25, Chapter 102, Erosion and Sediment Control and The Clean Streams Law, provided all Best Management Practices (BMPs) are properly implemented and maintained until the project has been permanently stabilized.

The Conservation District has reviewed this plan solely to determine whether it is adequate to satisfy the requirements of 25 Pa Code 102 et seq., the Erosion Control Regulations of the Department of Environmental Protection. By a determination that the plan is adequate to meet these requirements, neither the Conservation District nor the County assumes any responsibility for the implementation of the plan or the proper construction and operation of the facilities contained in the plan. The design, structure integrity, and installation of the control measures are the responsibility of the landowner and/or the earthmover.

This approval expires according to the conditions as indicated under the York County Conservation District E&S Pollution Control Plan Review and Site Inspection Fee Rules and Guidelines. See section III D. #3 of guidelines and conditions as detailed under NPDES General and Individual Permits.

Enclosed is the above referenced permit, which authorizes the discharge of storm water from the construction activity described in the final erosion and sedimentation control plan and Notice of Intent (NOI). Please ensure that the **STAMPED APPROVED** Erosion and Sedimentation control plan is fully implemented and available at the construction site at all times.

Please read carefully Parts A, B and C of the permit which detail the terms and conditions of this authorization. Conservation District staff and/or representatives of the Department of Environmental Protection may inspect this earthmoving activity to determine compliance with applicable permit requirements, Chapter 92, 101 and 102 Rules and Regulations and The Clean Streams Law.

...when a facility or activity is owned by one person but is operated by another person, it is the operator's duty to obtain a permit". Please be advised that once an Operator (contractor) has been selected for the project, the permit must either be transferred to the contractor or the contractor must be made a Co-Permittee. The enclosed form must be used to designate a Co-Permittee/transferee. This office must receive this from at least 30 days prior to the co-permittee/transferee action-taking place.

Enclosed is a Notice of Termination (NOT) form that must be completed and filed with this office within seven working days after earth disturbance activities have ceased and final stabilization has been achieved. The NOT is a permit requirement, as well as a regulatory requirement under Pa. Code Chapter 102 Section 102.7. Failure to begin earth moving activities within two years from the permit issuance date will require resubmission of the erosion and sediment control plan.

This authorization does not relieve the applicant from applying for and obtaining any and all additional permits or approvals from local, state or federal agencies for the construction activity described in the Notice of Intent.

This office must be notified by telephone or by mail at least seven working days prior to the start of earth disturbance activities. A pre-construction conference is required prior to start of construction.

Please notify the York County Conservation District seven days prior to start and finish of construction.

If you have any questions regarding this authorization, please contact me at 717-840-7430.

Sincerely,

  
Eric Jordan  
Engineering Technician II

Enclosures- Stamped plan and NPDES permit  
cc: Casey Deller -  
Jacobus Borough  
Project File