EXHIBIT P1

EAST NORRITON TOWNSHIP ACT 537 PLAN
(PLAN UPDATE 2006)

EDM CONSULTANTS, INC.
1101 South Broad Street, Suite 200, P. O. Box 1545, Lansdale, PA 19446
Phone (215) 393-0670 Fax (215) 393-0652

May 17, 2006

Mr. Clinton Cleaver
PaDEP- Southeast Regional Office
2 East Main Street
Norristown, PA 19401

RE: East Norriton Township
Act 537 Plan Update
i/c/w ENPWJSA

FILE: 158-037 (1.00)

Dear Mr. Cleaver:

Enclosed are three (3) copies of the East Norriton Township Act 537 Plan Update for the Department's review. This Update was prepared in connection with and will be included in the East Norriton-Plymouth-Whitpain Joint Sewer Authority (ENPWJSA) Regional Act 537 Plan Update presently being prepared by ARRO Consulting, Inc. An original copy of the East Norriton Township Adoption Resolution is attached to this letter.

Also enclosed is the Act 537 Plan Content Checklist from the Approved Plan of Study (Approved by PaDEP May 23, 2003). Please note Page #(s) of the Plan have only been indicated on the Checklist for those tasks which were to be completed by the Township.

If you require any additional information to process/approve the Plan Update, please let us know.

Very truly yours,

EDM CONSULTANTS, INC.

Stanley J. Endlich

Enclosure (3 copies of Plan with Original Adoption Resolution)

pc: Mr. Helmuth J.H. Baerwald, Manager, East Norriton Township (w/ 3 encl)
Mr. Bill Bohner, ARRO Consulting, Inc. (w/encl)

\037_depPlanTransmtl-5-15-06

RESOLUTION NO. 2294
FOR ACT 537 PLAN REVISION

RESOLUTION OF THE SUPERVISORS OF EAST NORRITONTOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA (hereinafter "the municipality").

WHEREAS, Section 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the "Pennsylvania Sewage Facilities Act," as amended, and the Rules and Regulations of the Department of Environmental Protection (Department) adopted there under, Chapter 71 of Title 25 of the **Pennsylvania Code**, requires the municipality to adopt an Official Sewage Facilities Plan providing for sewage services adequate to prevent contamination of waters and/or environmental health hazards with sewage wastes, and to revise said plan whenever it is necessary to meet the sewage disposal needs of the municipality, and

WHEREAS, EDM CONSULTANTS, INC. has prepared an Act 537 Plan Update, dated November 2005, Final Draft January 2006, which provides for sewage facilities in East Norriton Township, and

The alternative of choice to be implemented is to participate, on a one-third proportionate share, in the upgrade and expansion of the East Norriton Plymouth Whitpain Joint Sewer Authority (ENPWJSA) treatment facility to secure additional maximum monthly treatment capacity, continued implementation of the Township's Corrective Action Plan (CAP) to address sewer system I/I, continued I/I program monitoring, investigation and remediation, continued investigation of alternatives to reduce the peak flows at the Germantown and Sandra Lane Pumping Stations, continued implementation of the Township's OLDS (On-Lot Disposal System) Management program and Securing financing for the Township's share of the ENPWJSA upgrade/expansion costs. The key implementation activities/dates include Plan Submission to PaDEP on or about April 2006 and continued participation in the ENPWJSA plant upgrade and expansion in accordance with the Authority's schedule.

WHEREAS, East NorritonTownship finds that the Facility Plan described above conforms to applicable zoning, subdivision, other municipal ordinances and plans and to a comprehensive program of pollution control and water quality management.

NOW, THEREFORE, BE IT RESOLVED that the Supervisors of the Township of East Norriton hereby adopt and submit to the Department of Environmental Protection for its approval as a revision to the "Official Plan" of the municipality, the above referenced Facility Plan. The municipality hereby assures the Department of the complete and timely implementation of the said plan as required by law. (Section 5, Pennsylvania Sewage Facilities Act as amended).

Donald J. Gracia, Chairman, Board of Supervisors

I Helmuth J.H. Baerwald, Manager, East Norriton Township hereby certify that the foregoing is a true copy of the Township's Resolution No. 2294, adopted on Tuesday, April 18, 2006.

Helmuth J.H. Baerwald, Township Manager

ACT 537 PLAN CONTENT CHECKLIST

- ADMINISTRATIVE COMPLETENESS CHECKLIST
- GENERAL PLAN CONTENT CHECKLIST

Commonwealth of Pennsylvania
Department of Environmental Protection
Bureau of Water Quality Protection

ACT 537 PLAN CONTENT CHECKLIST

For specific details covering Act 537 planning requirements, refer to Chapters 71 and 73 of DEP's Regulations.

Municipality: East Norriton Township **County:** Montgomery

Local Municipal Contact Official: Helmuth J.H. Baerwald

Telephone Number of Official: (610) 275-2800

Consultant: EDM Consultants, Inc.

Consultant's Telephone Number (215) 393-0670

Consultant's Contact Person: Stanley J. Endlich, P.E.

Title of Submission: East Norriton Township Act 537 Plan Update, November 2005, Final Draft January 2006, Adopted April 2006

Date Submitted: May 17, 2006

About this checklist . . . . .

* **DEP publication 3640-BK-DER1480 11/92, "A Guide For Preparing Act 537 Update Revisions -- November 1992", is obsolete. Do not use checklist pages from that publication.**

* **You must complete and attach this checklist when you submit the plan to the department for review and approval.**

* **This checklist is composed of two parts, one for Administrative Completeness and one for General Plan Content. A plan must be "administratively complete" in order to be formally reviewed and approved by the department. The General Plan Content checklist identifies each of the issues which must be addressed in your Act 537 Plan Update based on a pre-planning meeting between you and/or your consultant and the Department. The Administrative Completeness checklist is found on page 3. The General Content checklist is found on pages 4 through 14. PENNVEST funded or applicant plans must address planning requirements on page 15.**

* **You must use the right-hand column blanks in the checklist to identify the page in the plan on which each planning issue is found or reference a previously approved update or special study (title and page number).**

* **If you determine a planning issue is not applicable even though it was previously thought to be needed, please explain your decision within the text of the plan (or as a footnote) and indicate the page number where this documentation is found.**

* **After Municipal Adoption by Resolution, submit three copies of the plan, any attachments or addenda, and this checklist to the department.**

Pennsylvania Department of Environmental Protection

Lee Park, Suite 6010
555 North Lane
Conshohocken, PA 19428

Southeast Regional Office

610-832-6130
Fax 610-832-6133

Helmuth Baerwald, Manager
East Norriton Township
2501 Standbridge Street
East Norriton, PA 19041

Re: Act 537 - Plan of Study
East Norriton-Plymouth-Whitpain Joint
Sewer Authority Regional Act 537 Plan
East Norriton Township
Montgomery County

Dear Mr. Baerwald:

We have completed our review of your municipality's proposed plan of study, as prepared by EDM Consultants, Inc., dated March 14, 2003.

The plan of study proposes the gathering and interpretation of information that will be used in the development of the East Norriton-Plymouth-Whitpain Joint Sewer Authority Regional Act 537 Plan. The Township's existing program regarding on-lot sewage disposal systems will also be evaluated.

Approval of this proposed plan of study is hereby granted. The estimated cost of the plan is $66,000.00.

Please note, however, that this plan of study approval does not constitute a final action by the Department. When a completed plan is submitted to us, we will act upon it consistent with PA Code Title 25, Chapter 71.

Please consider the following comments as your municipality prepares its Act 537 Official Plan Update:

1. Your municipality's Act 537 Official Plan Update should be formatted as suggested in our recently revised "A Guide for Preparing Act 537 Update Revisions" including the necessary items listed under Appendix I – "Act 537 Plan Content and Environmental Assessment Checklist". All necessary items must be included, and a copy of the completed checklist must be included with your Act 537 Plan. This form is available on our website at:

MAY 2 3 2003

http://www.dep.state.pa.us/dep/deputate/watermgt/wqp/Forms/Act537/Forms_537Plan.htm

2. Significant expenses listed on your task activity report are designated for flow monitoring. Please be advised that a final determination as to the eligibility of costs will be made by the Department's Central Office. Please review our technical guidance entitled *Recognition of Selected Cost Items Associated with "Inflow and Infiltration Studies" (I&I) as Planning Costs Considered for Sewage Facilities Planning Grants*, on the web at www.dep.state.pa.us under "Subjects," "Technical Guidance," "Final Guidance," "Bureau of Water Supply and Wastewater Management." The document identification number is 362-5512-003.

If you have any questions, please contact me at 610-832-6079.

Sincerely,

Elizabeth Mahoney
Sewage Planning Specialist II
Water Management

cc: Montgomery County Planning Commission
Montgomery County Health Department
Mr. Endlich
Mr. Bohner
Planning Section
Re 30

EDM CONSULTANTS, INC.
1101 South Broad Street, Suite 200, P. O. Box 1545, Lansdale, PA 19446
Phone (215) 393-0670 Fax (215) 393-0652

March 14, 2003

Elizabeth Mahoney
Sewage Planning Specialist II
PaDEP
Lee Park, Suite 6010
555 North Lane
Conshohocken, PA 19428

RE: Act 537 – Plan of Study
East Norriton Township
ENPWJSA

FILE: 158-037 (1.00)

Dear Ms. Mahoney:

Enclosed for your review is the East Norrition Township Act 537 Plan of Study in connection with the East Norriton-Plymouth-Whitpain Joint Sewer Authority (ENPWJSA) Regional Act 537 Plan Update. Also enclosed is the Task Activity Report.

If you require any additional information to process/approve the Plan of Study, please let us know.

Very truly yours,

EDM CONSULTANTS, INC.

Stanley J. Endlich

SJE/bp

Enclosure

pc: Mr. Helmuth J.H. Baerwald, Manager, East Norriton Township (w/encl)
Mr. Bill Bohner, Arro Consulting (w/encl)

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ENPWJSA

REGIONAL ACT 537 PLAN

EAST NORRITON TOWNSHIP

PLAN OF STUDY

EAST NORRITON TOWNSHIP
MONTGOMERY COUNTY

EAST NORRITON, PA

FEBRUARY 2003

ENPWJSA

REGIONAL ACT 537 PLAN

EAST NORRITON TOWNSHIP

PLAN OF STUDY

EAST NORRITON TOWNSHIP
MONTGOMERY COUNTY

EAST NORRITON, PA

February 2003

EDM CONSULTANTS, INC.
1101 South Broad Street
Suite 200
P.O. Box 1545
Lansdale, PA 19446
(215) 393-0670

Preface

The following Act 537 Plan of Study was developed utilizing the PaDEP Act 537 Plan Content Checklist (Form 3620-PA-WQ002 Rev.1/2000). The work effort to be accomplished by East Norriton Township is designated by the initials ENT adjacent to the task. Work to be accomplished by others is indicated by "-----". If a task is not applicable the designation "N/A" is utilized. Tasks to be completed by East Norriton Township in conjunction with the Authority are indicated by "ENT-ENPWJSA". It is anticipated much of the background information generated by the 1991/1993 Act 537 Plan update will be utilized. Where tasks are to be completed based on previous Act 537 Plan information, the designation "ENT-A" appears.

It is envisioned the primary effort to be accomplished by East Norriton Township will be to provide updated present and future sewage flow estimates. It is proposed sewage quantities be estimated using flow monitors and with flow records from the Township's pump stations. Flow monitors will be placed on the Township's major interceptors to measure flow and estimate infiltration/inflow (I/I) quantities. Based on PaDEP's current policy, the flow will be summarized as average annual flow and maximum monthly flow.

East Norriton Township's on-going infiltration/inflow (I/I) effort will be documented. Televising operations will be undertaken by the Township's staff to identify extraneous flow sources from laterals. Storm sewer pipes will also be televised to identify potentials cross connection with the sanitary sewer system. This work will be done on a force account basis with the Township's televising equipment.

The Township's current program regarding on-lot disposal systems (OLDS) will also be summarized. Modifications to the OLDS program to comply with PaDEP requirements will be

identified. Any proposed capital improvements to increase the efficiency of the sewage conveyance system will be evaluated.

In summary, East Norriton Township's Plan of Study will provide an update as to the Township's activities in regard to sewage facilities planning and summarize future needs.

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ADMINISTRATIVE COMPLETENESS CHECKLIST

DEP Use Only	Indicate Page #(s) in Plan	In addition to the main body of the plan, the plan must include items one through eight listed below to be accepted for formal review by the department. Incomplete Plans will be returned unless the municipality is clearly requesting an advisory review.
_____	TOC 1.1-2	1. Table of Contents
	ES 1.1-4	2. Plan Summary
_____	1.1, Fig 3.1-2	A. Identify the proposed service areas and major problems evaluated in the plan. (Reference - Title 25, §71.21.a.7.i).
_____	5.5, 6.2	B. Identify the alternative(s) chosen to solve the problems and serve the areas of need identified in the plan. Also, include any institutional arrangements necessary to implement the chosen alternative(s). (Reference Title 25 §71.21.a.7.ii).
_____	5.7	C. Present the estimated cost of implementing the proposed alternative (including the user fees) and the proposed funding method to be used. (Reference Title 25, §71.21.a.7.ii).
_____	6.1-2	D. Identify the municipal commitments necessary to implement the Plan. (Reference Title 25, §71.21.a.7.iii).
_____	8.1-2	E. Provide a schedule of implementation for the project which identifies the MAJOR milestones with dates necessary to accomplish the project to the point of operational status. (Reference Title 25, §71.21.a.7.iv).
_____	Attached to Transmittal Letter; App L	3. Original, signed and sealed Resolution of Adoption by the municipality which contains, at a minimum, alternatives chosen and a commitment to implement the Plan in accordance with the implementation schedule. (Reference Title 25, §71.31.f) Section V.F. of the Planning Guide.
_____	App H-J	4. Evidence that the municipality has requested, reviewed and considered comments by appropriate official planning agencies of the municipality, planning agencies of the county, planning agencies with areawide jurisdiction (where applicable), and any existing county or joint county departments of health. (Reference-Title 25, §71.31.b) Section V.E.1 of the Planning Guide.
_____	App G	5. Proof of Public Notice which documents the proposed plan adoption, plan summary, and the establishment and conduct of a 30 day comment period. (Reference-Title 25, §71.31.c) Section V.E.2 of the Planning Guide.
_____	App K	6. Copies of ALL written comments received and municipal response to EACH comment in relation to the proposed plan. (Reference-Title 25, §71.31.c) Section V.E.2 of the Planning Guide.
_____	8.1	7. A complete project implementation schedule with milestone dates specific for each existing and future area of need. Other activities in the project implementation schedule should be indicated as occurring a finite number of days from a major milestone. (Reference-Title 25, §71.31.d) Section F of the Planning Guide. Include dates for the future initiation of feasibility evaluations in the project's implementation schedule for areas proposing completion of sewage facilities for planning periods in excess of five years. (Reference Title 25, §71.21.b).
_____	4.2, App H-J	8. Documentation indicating that the appropriate agencies have received, reviewed and concurred with the method proposed to resolve identified inconsistencies within the proposed alternative and consistency requirements in 71.21.(a)(5)(i-iii). (Reference-Title 25, §71.31.e). Appendix B of the Planning Guide.

GENERAL PLAN CONTENT CHECKLIST

DEP Use Only	Indicate Page #(s) in Plan	Item Required
		I. Previous Wastewater Planning
		A. Identify and briefly analyze all existing wastewater planning that:
_____	ENT-A, 1.1	1. Has been previously undertaken under the Sewage Facilities Act (Act 537). (Reference-Act 537, Section 5 §d.1).
_____	N/A	2. Has not been carried out according to an approved implementation schedule contained in the plans. (Reference-Title 25, §71.21.a.5.i.A-D). Section V.F of the Planning Guide.
_____	ENT, 1.1	3. Is anticipated or planned by applicable sewer authorities. (Reference-Title 25, §71.21.a.5.i.A). Section V.D. of the Planning Guide.
_____	ENT, Tbl 4.3	4. Has been done through planning modules for new land development, planning "exemptions" and addenda. (Reference-Title 25, §71.21.a.5.i.A).
		B. Identify and briefly summarize all municipal and county planning documents adopted pursuant to the Pennsylvania Municipalities Planning Code (Act 247) including:
_____	ENT, 1.1-2, Fig 1.1	1. All land use plans and zoning maps which identify residential, commercial, industrial, agricultural, recreational and open space areas. (Reference-Title 25, §71.21.a.3.iv).
_____	ENT, 1.2-7, Fig 1.1	2. Zoning or subdivision regulations that establish lot sizes predicated on sewage disposal methods. (Reference-Title 25 §71.21.a.3.iv).
_____	ENT, 1.5,7, Fig 1.2	3. All limitations and plans related to floodplain and stormwater management and special protection (Ch. 93) areas. (Reference-Title 25 §71.21.a.3.iv) Appendix B, Section II.F of the Planning Guide.
		II. Physical and Demographic Analysis utilizing written description and mapping (All items listed below require maps, and all maps should show all current lots and structures and be of appropriate scale to clearly show significant information).
_____	ENT, 2.1	A. Identification of planning area(s), municipal boundaries, Sewer Authority/Management Agency service area boundaries. (Reference-Title 25, §71.21.a.1.i).
_____	ENT-A, Fig 1.2	B. Identification of physical characteristics (streams, lakes, impoundments, natural conveyance, channels, drainage basins in the planning area). (Reference-Title 25, §71.21.a.1.ii).
_____	ENT-A, 2.4-10	C. Soils - Analysis with description by soil type and soils mapping. Show areas suitable for in-ground on-lot systems, elevated sand mounds, individual residential spray irrigation systems, and areas unsuitable for soil dependent systems. (Reference-Title 25, §71.21.a.1.iii). Show Prime Agricultural Soils and any locally protected agricultural soils. (Reference-Title 25, §71.21.a.1.iii).

DEP Use Only	Plan Page No.	Item Required

ENT-A, 2.3, App E

D. Geologic Features - (1) Identification through analysis, (2) mapping and (3) their relation to existing or potential nitrate-nitrogen pollution and drinking water sources. Include areas where existing nitrate-nitrogen levels are in excess of five mg/l. (Reference-Title 25, §71.21.a.1.iii).

ENT-A, Fig 1.2

E. Topography - Depict slopes that are suitable for conventional systems; slopes that are suitable for elevated sand mounds; slopes that are unsuitable for on-lot systems. (Reference-Title 25, §71.21.a.1.ii).

ENT-A, 2.3-4

F. Potable Water Supplies - Identification through mapping, description and analysis to include available public water supply capacity and aquifer yield for groundwater supplies. (Reference-Title 25 §71.21.a.1.vi). Section V.C. of the Planning Guide.

ENT-A, Fig 1.2

G. Wetlands-Identify wetlands as defined in Title 25, Chapter 105 by description, analysis and mapping. Include National Wetland Inventory mapping and potential wetland areas per USDA, SCS mapped hydric soils. Proposed collection, conveyance and treatment facilities and lines must be located and labeled, along with the identified wetlands, on the map. (Reference-Title 25, §71.21.a.1.v). Appendix B, Section II.I of the Planning Guide.

III. Existing Sewage Facilities in the Planning Area - Identifying the Existing Needs

A. Identify, map and describe municipal and non-municipal, individual and community sewerage systems in the planning area including:

ENT-A, 3.1-4, Fig 3.1

1. Location, size and ownership of treatment facilities, main intercepting lines, pumping stations and force mains including their size, capacity, point of discharge. Also include the name of the receiving stream, drainage basin, and the facility's effluent discharge requirements. (Reference-Title 25, §71.21a.2.i.A).

ENT-A, 3.3-4

2. A narrative and schematic diagram of the facility's basic treatment processes including the facility's NPDES permitted capacity, and the Clean Streams Law permit number. (Reference-Title 25, §71.21.a.2.i).

ENT, 3.4-6, App F

3. A description of problems with existing facilities (collection, conveyance and/or treatment), including existing or projected overload under Title 25, Chapter 94 (relating to municipal wasteload management) or violations of the NPDES permit, Clean Streams Law permit, or other permit, rule or regulation of the department. (Reference-Title 25, §71.21.a.2.i.B). Televise laterals and storm sewers and conduct flow monitoring to identify I/I sources and quantities.

ENT, 3.4

4. Details of scheduled or in-progress upgrading or expansion of treatment facilities and the anticipated completion date of the improvements. Discuss any remaining reserve capacity and the policy concerning the allocation of reserve capacity. Also discuss the compatibility of the rate of growth to existing and proposed wastewater treatment facilities. (Reference-Title 25, §71.21.a.4.i & ii).

ENT, 3.5-6

5. A detailed description of operation and maintenance requirements of the municipality for on-lot systems and the status of past and present compliance with these requirements and any other requirements relating to sewage management programs. (Reference-Title 25, §71.21.a.2.i.C).

ENT -None

6. Disposal areas, if other than stream discharge, and any applicable groundwater limitations. (Reference-Title 25, §71.21.a.4.i & ii).

DEP Use Only	Plan Page No.	Item Required

B. Using DEP's manual titled "Sewage Disposal Needs Identification Guidance," identify, map and describe areas that utilize individual and community on-lot sewage disposal and, unpermitted collection and disposal systems ("wildcat" sewers, borehole disposal, etc.) and retaining tank systems in the planning area including:

_____ ENT-A, Tbl 3.1

1. The types of systems in use. (Reference-Title 25, §71.21.a.2.ii.A).

_____ ENT, 3.5-6

2. A sanitary survey complete with a description of documented and potential public health pollution, and operational problems (including malfunctioning systems) with the systems, including violations of local ordinances, the Sewage Facilities Act, the Clean Stream Law or regulations promulgated thereunder. (Reference-Title 25, §71.21.a.2.ii.B).

_____ ENT, 2.6-10, Fig 1.2

3. A comparison of the types of on-lot sewage systems installed in an area with the types of systems which are appropriate for the area according to soil, geologic conditions, topographic limitations sewage flows, and Title 25 Chapter 73 (relating to standards for sewage disposal facilities). (Reference-Title 25, §71.21.a.2.ii.C).

_____ ENT, 3.5

4. An individual water supply survey to identify possible contamination by malfunctioning on-lot sewage disposal systems consistent with the DEP Sewage Disposal Needs Identification Guidance manual. (Reference-Title 25 §71.21.a.2.ii.B).

This activity by ENPWJSA

C. Identify wastewater sludge and septage generation, transport and disposal methods. Include this information in the sewage facilities alternative analysis including:

_____ ENT-ENPWJSA

1. Location of sources of wastewater sludge or septage (Septic tanks, holding tanks, wastewater treatment facilities). (Reference-Title 25 §71.71).

_____ ENT-ENPWJSA

2. Quantities of the types of sludges or septage generated. (Reference-Title 25 §71.71).

_____ ENT-ENPWJSA

3. Present disposal methods, locations, capacities and transportation methods. (Reference-Title 25 §71.71).

IV. Future Growth and Land Development

A. Delineate and describe the following through map, text and analysis:

_____ ENT, Tbl 4.2, Fig 3.2

1. Areas with existing development or plotted subdivisions. Include the name, location, description, total number of EDU's in development, total number of EDU's currently developed and total number of EDUs remaining to be developed (include time schedule for EDU's remaining to be developed). (Reference-Title 25, §71.21.a.3.i).

_____ ENT,Tbl 4.1

2. Land use designations established under the Pennsylvania Municipalities Planning Code (35 P.S. 10101-11202), including residential, commercial and industrial areas. (Reference-Title 25,§71.21.a.3.ii). Include a comparison of proposed land use as allowed by zoning and existing sewage facility planning. (Reference-Title 25, §71.21.a.3.iv).

_____ ENT, 4.1-2, Fig 3.2, Tbl 4.3, App B

3. Future growth areas with population and EDU projections for these areas using historical, current and future population figures and projections of the municipality. Discuss and evaluate discrepancies between local, county, state and federal projections as they relate to sewage facilities. (Reference-Title 25, §71.21.a.1.iv). (Reference-Title 25, §71.21.a.3.iii).

DEP Use	Plan Page No.	Item Required
_____	ENT, Fig 1.2	4. Zoning, and/or subdivision regulations; local, county or regional comprehensive plans; and existing plans of a Commonwealth agency relating to the development, use and protection of land and water resources with special attention to: (Reference-Title 25, §71.21.a.3.iv). --public ground/surface water supplies --recreational water use areas --groundwater recharge areas --industrial water use --wetlands
_____	ENT4.1-2, Tbl 4.1, App B	5. Sewage planning to provide adequate wastewater treatment for the municipality. This planning must be related to both the five and ten year future planning periods and be based on growth impacts on existing and proposed wastewater collection and treatment facilities. (Reference-Title 25, §71.21.a.3.v).
		V. Identify Alternatives to Provide New or Improved Wastewater Disposal Facilities
		A. Conventional collection, conveyance, treatment and discharge alternatives including:
_____	---------, 5.5	1. The potential for regional wastewater treatment. (Reference-Title 25, §71.21.a.4).
_____	ENT, 5.1, Fig 3.2	2. The potential for extension of existing municipal or non-municipal sewage facilities to areas in need of new or improved sewage facilities. (Reference-Title 25, §71.21.a.4.i).
_____	ENT, 5.5	3. The potential for the continued use of existing municipal or non-municipal sewage facilities through one or more of the following: (Reference-Title 25, §71.21.a.4.ii).
_____	ENT, 5.1-5	a. Repair. (Reference-Title 25, §71.21.a.4.ii.A).
_____	ENT, 3.2, 5.4-5	b. Upgrading. (Reference-Title 25, §71.21.a.4.ii.B).
_____	ENT, 5.4-5	c. Reduction of hydraulic or organic loading to existing facilities. (Reference-Title 25, §71.71).
_____	ENT, 5.4-5	d. Improved operation and maintenance. (Reference-Title 25, §71.21.a.4.ii.C).
_____	ENT, 5.4-5	e. Other applicable actions that will resolve or abate the identified problems. (Reference-Title 25, §71.21.a.4.ii.D).
_____	ENT-ENPWJSA, 3.4	4. The need for construction of new community sewage systems including sewer systems and/or treatment facilities. (Reference-Title 25, §71.21.a.4.iii).
_____	ENT, 5.1-3	5. Repair or replacement of collection and conveyance system components. (Reference-Title 25, §71.21.a.4.ii.A).
_____	ENT, 5.5	6. Use of innovative/alternative methods of collection/conveyance to serve needs areas using existing wastewater treatment facilities. (Reference-Title 25, §71.21.a.4.ii.B).

DEP Use ly	Plan Page No.	Item Required
		B. The use of individual sewage disposal systems including individual residential spray irrigation systems based on:
_____	_____	1. Soil and slope suitability. (Reference-Title 25, 71.21.a.2.ii.C).
_____	_____	2. Preliminary hydrogeologic evaluation. (Reference-Title 25, §71.21.a.2.ii.C).
_____	_____	3. The establishment of a sewage management program. (Reference-Title 25, §71.21.a.4.iv). See also Part "F" below.
_____	_____	4. The repair, replacement or upgrading of existing malfunctioning systems in areas suitable for on-lot disposal considering: (Reference-Title 25, §71.21.a.4).
_____	_____	a. Existing technology and sizing requirements of Title 25 Chapter 73. (Reference-Title 25, §73.31-73.72).
_____	_____	b. Use of expanded absorption areas or alternating absorption areas. (Reference-Title 25, §73.16).
_____	_____	c. Use of water conservation devices. (Reference-Title 25, §71.73.b.2.iii).
		C. The use of small flow sewage treatment facilities or package treatment facilities to serve individual homes or clusters of homes based on: (Reference-Title 25, §71.64.d).
_____	_____	1. Treatment and discharge requirements. (Reference-Title 25, §71.64.d).
_____	_____	2. Soil suitability. (Reference-Title 25, §71.64.c.l).
_____	_____	3. Preliminary hydrogeologic evaluation. (Reference-Title 25, §71.64.c.2).
_____	_____	4. Agency or other controls over operation and maintenance requirements. (Reference-Title 25, §71.64.d). See Part "F" below.
		D. The use of community land disposal alternatives including:
_____	**ENT-A, 2.6, Fig 1.2**	1. Soil and site suitability. (Reference-Title 25, 71.21.a.2.ii.C).
_____	**ENT-A, 2.6**	2. Preliminary hydrogeologic evaluation. (Reference-Title 25, 71.21.a.2.ii.C).
_____	**ENT, 3.5-6**	3. Controls over operation and maintenance requirements through a Sewage Management Program (Reference-Title25, 71.21.a.2.ii.C). See Part "F" below.
_____	**ENT, 2.9**	4. The rehabilitation or replacement of existing malfunctioning community land disposal systems. (See Part V, B, 4, a, b, c above). See also Part "F" below.

DEP Use Only	Plan Page No.	Item Required
		E. The use of retaining tank alternatives on a temporary or permanent basis including: (Reference- Title 25, §71.21.a.4).
_____	_____	1. Commercial, residential and industrial use. (Reference-Title 25, §71.63.e).
_____	_____	2 Designated conveyance facilities (pumper trucks). (Reference-Title 25, §71.63.b.2).
_____	_____	3. Designated treatment facilities or disposal site. (Reference-Title 25, 71.63.b.2).
_____	_____	4. Implementation of a retaining tank ordinance by the municipality. (Reference-Title 25, §71.63.b.2). See Part "F" below.
_____	_____	5. Financial guarantees when retaining tanks are used as an interim sewage disposal measure. (Reference-Title 25, §71.63.c.2).
		F. Sewage management programs to assure the future operation and maintenance of existing and proposed sewage facilities through:
_____	ENT, 3.5	1. Municipal ownership or control over the operation and maintenance of individual on-lot sewage disposal systems, small flow treatment facilities, or other traditionally non-municipal treatment facilities. (Reference-Title 25, §71.21.a.4.iv).
_____	ENT, 3.5-6	2. Required inspection of sewage disposal systems on a schedule established by the municipality. (Reference-Title 25, §71.73.b.1.).
_____	ENT, 3.5-6	3. Required maintenance of sewage disposal systems including septic and aerobic treatment tanks and other system components on a schedule established by the municipality. (Reference-Title 25, §71.73.b.2).
_____	ENT, 3.5-6	4. Repair, replacement or upgrading of malfunctioning on-lot sewage systems. (Reference-Title 25, §71.21.a.4.iv) through:
		a. Aggressive pro-active enforcement of ordinances which require operation and maintenance and prohibit malfunctioning systems. (Reference-Title 25, §71.73.b.5).
		b. Public education programs to encourage proper operation and maintenance and repair of sewage disposal systems.
_____	N/A	5. Establishment of joint municipal sewage management programs. (Reference-Title 25, §71.73.b.8).
_____	N/A	6. Requirements for bonding, escrow accounts, management agencies or associations to assure operation and maintenance for non-municipal facilities. (Reference-Title 25, §71.71).

DEP Use Only	Plan Page No.	Item Required

G. Non-structural comprehensive planning alternatives that can be undertaken to assist in meeting existing and future sewage disposal needs including: (Reference-Title 25, §71.21.a.4).

1. Modification of existing comprehensive plans involving:

ENT-A, 1.1-7 a. Land use designations. (Reference-Title 25, §71.21.a.4).

ENT-A, 1.1-7 b. Densities. (Reference-Title 25, §71.21.a.4).

ENT-A, 1.1-7 c. Municipal ordinances and regulations. (Reference-Title 25, §71.21.a.4).

ENT-A, 1.1-7 d. Improved enforcement. (Reference-Title 25, §71.21.a.4).

ENT-A, 1.1-7 e. Protection of drinking water sources. (Reference-Title 25, §71.21.a.4).

ENT-A, 1.1-7 2. Consideration of a local comprehensive plan to assist in producing sound economic and consistent land development. (Reference-Title 25, §71.21.a.4).

ENT-A, 1.1-7 3. Alternatives for creating or changing municipal subdivision regulations to assure long-term use of on-site sewage disposal which consider lot sizes and protection of replacement areas. (Reference-Title 25, §71.21.a.4).

ENT-A, 1.1-7 4. Evaluation of existing local agency programs and the need for technical or administrative training. (Reference-Title 25, §71.21.a.4).

H. A no-action alternative which includes discussion of both short-term and long-term impacts on: (Reference-Title 25, §71.21.a.4).

_____ 1. Water Quality/Public Health. (Reference-Title 25, §71.21.a.4).

_____ 2. Growth potential (residential, commercial, industrial). (Reference-Title 25, 71.21.a.4).

_____ 3. Community economic conditions. (Reference-Title 25, 71.21.a.4).

_____ 4. Recreational opportunities. (Reference-Title 25, §71.21.a.4).

_____ 5. Drinking water sources. (Reference-Title 25, §71.21.a.4).

_____ 6. Other environmental concerns. (Reference-Title 25, 71.21.a.4).

VI. Evaluation of Alternatives

A. Technically feasible alternatives identified in Section V of this check-list must be evaluated for consistency with respect to the following: (Reference-Title 25, §71.21.a.5.i.A).

_____ 1. Applicable plans developed and approved under Sections 4 and 5 of the Clean Streams Law or Section 208 of the Clean Water Act (33 U.S.C.A. 1288). (Reference-Title 25, §71.21.a.5.i.A). Appendix B, Section II.A of the Planning Guide.

DEP Use	Plan Page No.	Item Required

2. Municipal wasteload management plans developed under PA Code, Title 25, Chapter 94. (Reference-Title 25, §71.21.a.5.i.B). The municipality's recent Wasteload Management (Chapter 94) Reports should be examined to determine if the proposed alternative is consistent with the recommendations and findings of the report. Appendix B, Section II.B of the Planning Guide.

3. Plans developed under Title II of the Clean Water Act (33 U.S.C.A. 1281-1299) or Titles II and VI of the Water Quality Act of 1987 (33 U.S.C.A 1251-1376). (Reference-Title 25, §71.21.a.5.i.C). Appendix B, Section II.E of the Planning Guide.

4. Comprehensive plans developed under the Pennsylvania Municipalities Planning Code. (Reference-Title 25, §71.21.a.5.i.D). The municipality's comprehensive plan must be examined to assure that the proposed wastewater disposal alternative is consistent with land use and all other requirements stated in the comprehensive plan. Appendix B, Section II.D of the Planning Guide.

5. Antidegradation requirements as contained in PA Code, Title 25, Chapters 93, 95 and 102 (relating to water quality standards, wastewater treatment requirements and erosion control) and the Clean Water Act. (Reference-Title 25, §71.21.a.5.i.E). Appendix B, Section II.F of the Planning Guide.

6. State Water Plans developed under the Water Resources Planning Act (42 U.S.C.A. 1962-1962 d-18). (Reference-Title 25, §71.21.a.5.i.F). Appendix B, Section II.C of the Planning Guide.

7. Pennsylvania Prime Agricultural Land Policy contained in Title 4 of the Pennsylvania Code, Chapter 7, Subchapter W. Provide narrative on local municipal policy and an overlay map on prime agricultural soils. (Reference-Title 25, §71.21.a.5.i.G). Appendix B, Section II.G of the Planning Guide.

8. County Stormwater Management Plans approved by DEP under the Storm Water Management Act (32 P.S. 680.1-680.17). (Reference-Title 25, §71.21.a.5.i.H). Conflicts created by the implementation of the proposed wastewater alternative and the existing recommendations for the management of stormwater in the county Stormwater Management Plan must be evaluated and mitigated. If no plan exists, no conflict exists. Appendix B, Section II.H of the Planning Guide.

9. Using wetland mapping developed under Section II.A.7, identify and discuss mitigative measures including the need to obtain permits for any encroachments on wetlands from the construction or operation of any proposed wastewater facilities. Appendix B, Section II.I of the Planning Guide.

10. Protection of rare, endangered or threatened plant and animal species as identified by the Pennsylvania Natural Diversity Inventory (PNDI). (Reference-Title 25, §71.21.a.5.i.J). Provide the department with a copy of the completed Request For PNDI Search document. Also provide a copy of the response letter from the Department of Conservation and Natural Resources' Bureau of Forestry regarding the findings of the PNDI search. Appendix B, II.J.

DEP Use	Plan Page No.	Item Required
		11. Historical and archaeological resource protection under P.C.S. Title 37, Section 507 relating to cooperation by public officials with the Pennsylvania Historical and Museum Commission. (Reference-Title 25, §71.21.a.5.i.K). Provide the department with a completed copy of a Cultural Resource Notice request to the Bureau of Historic Preservation (BHP) to provide a listing of known historical sites and potential impacts on known archaeological and historical sites. Also provide a copy of the response letter from the BHP. Appendix B, Section II.K of the Planning Guide.
		B. Provide for the resolution of any inconsistencies in any of the points identified in Section VI.A. of this checklist by submitting a letter from the appropriate agency stating that the agency has received, reviewed and concurred with the resolution of identified inconsistencies. (Reference-Title 25, §71.21.a.5.ii). Appendix B of the Planning Guide.
		C. Evaluate alternatives identified in Section V of this checklist with respect to applicable water quality standards, effluent limitations or other technical, legislative or legal requirements. (Reference-Title 25, §71.21.a.5.iii).
ENT, 5.7		D. Provide cost estimates using present worth analysis for construction, financing, on going administration, operation and maintenance and user fees for alternatives identified in Section V of this checklist. Estimates shall be limited to areas identified in the plan as needing improved sewage facilities within five years from the date of plan submission. (Reference-Title 25, §71.21.a.5.iv).
		E. Provide an analysis of the funding methods available to finance the proposed alternatives evaluated in Section V of this checklist. Also provide documentation to demonstrate which alternative and financing scheme combination is the most cost-effective; and a contingency financial plan to be used if the preferred method of financing cannot be implemented. The funding analysis shall be limited to areas identified in the plan as needing improved sewage facilities within five years from the date of the plan submission. (Reference-Title 25, §71.21.a.5.v).
		F. Analyze the need for immediate or phased implementation of each alternative proposed in Section V of this checklist including: (Reference-Title 25, §71.21.a.5.vi).
		1. A description of any activities necessary to abate critical public health hazards pending completion of sewage facilities or implementation of sewage management programs. (Reference-Title 25, §71.21.a.5.vi.A).
		2. A description of the advantages, if any, in phasing construction of the facilities or implementation of a sewage management program justifying time schedules for each phase. (Reference-Title 25, §71.21.a.5.vi.B).
		G. Evaluate administrative organizations and legal authority necessary for plan implementation. (Reference - Title 25, §71.21.a.5.vi.D.).

DEP Use	Plan Page No.	Item Required

VII. Institutional Evaluation

A. Provide an analysis of all existing wastewater treatment authorities, their past actions and present performance including:

1. Financial and debt status. (Reference-Title 25, §71.61.d.2).

2. Available staff and administrative resources. (Reference-Title 25, §71.61.d.2).

3. Existing legal authority to:

   a. Implement wastewater planning recommendations. (Reference-Title 25, §71.61.d.2).

   b. Implement system-wide operation and maintenance activities. (Reference-Title 25, §71.61.d.2).

   c. Set user fees and take purchasing actions. (Referernce-Title 25, §71.61.d.2).

   d. Take enforcement actions against ordinance violators. (Reference-Title 25, §71.61.d.2).

   e. Negotiate agreements with other parties. (Reference-Title 25, §71.61.d.2).

   f. Raise capital for construction and operation and maintenance of facilities. (Reference-Title 25,§71.61.d.2).

B. Provide an analysis and description of the various institutional alternatives necessary to implement the proposed technical alternatives including:

1. Need for new municipal departments or municipal authorities. (Reference-Title 25, §71.61.d.2).

2. Functions of existing and proposed organizations (sewer authorities, on-lot maintenance agencies, etc.). (Reference-Title 25, §71.61.d.2).

3. Cost of administration, implementability, and the capability of the authority/agency to react to future needs. (Reference-Title 25, §71.61.d.2).

C. Describe all necessary administrative and legal activities to be completed and adopted to ensure the implementation of the recommended alternative including:

1. Incorporation of authorities or agencies. (Reference-Title 25, §71.61.d.2).

2. Development of all required ordinances, regulations, standards and inter-municipal agreements. (Reference-Title 25, §71.61.d.2).

3. Description of activities to provide rights-of-way, easements and land transfers. (Reference-Title 25, §71.61.d.2).

4. Adoption of other municipal sewage facilities plans. (Reference-Title 25, §71.61.d.2).

5. Any other legal documents. (Reference-Title 25, §71.61.d.2).

6. Dates or timeframes for items 1-5 above on the project's implementation schedule.

DEP Use Only	Plan Page No.	Item Required
_____	_____	D. Identify the proposed institutional alternative for implementing the chosen technical wastewater disposal alternative. Provide justification for choosing the specific institutional alternative considering administrative issues, organizational needs and enabling legal authority. (Reference-Title 25, §71.61.d.2).

VIII. Justification for Selected Technical & Institutional Alternatives

		A. Identify the technical wastewater disposal alternative which best meets the wastewater treatment needs of each study area of the municipality. Justify the choice by providing documentation which shows that it is the best alternative based on:
_____	_____	1. Existing wastewater disposal needs. (Reference-Title 25, §71.21.a.6).
_____	_____	2. Future wastewater disposal needs. (5 and 10 years growth areas). (Reference-Title 25, §71.21.a.6).
_____	_____	3. Operation and maintenance considerations. (Reference-Title 25, §71.21.a.6).
_____	_____	4. Cost-effectiveness. (Reference-Title 25, §71.21.a.6).
_____	_____	5. Available management and administrative systems. (Reference-Title 25, §71.21.a.6).
_____	_____	6. Available financing methods. (Reference-Title 25, §71.21.a.6).
_____	_____	7. Environmental soundness and compliance with natural resource planning and preservation programs. (Reference-Title 25, §71.21.a.6).
_____	_____	B. Designate and describe the capital financing plan chosen to implement the selected alternative(s). Designate and describe the chosen back-up financing plan.

East Norriton Township
2501 STANBRIDGE STREET
EAST NORRITON, PA 19401-1616, U.S.A.
(610) 275-2800 FAX (610) 277-1879
www.eastnorritontwp.org
enorr2501@aol.com

February 26, 2003

RECEIVED
FEB 28 2003
EDM CONSULTANTS

Stanley J. Endlich, P.E.
EDM Consultants, Inc.
1101 South Broad Street, P.O. Box 1545
Lansdale, PA 19446

Re: Act 537 Plan Update - Plan of Study

Dear Mr. Endlich:

The Board of Supervisors have reviewed the draft plan of study which you forwarded with your letter, dated February 12, 2003. Please be advised that the Board approved the plan of study as proposed at the regular meeting of February 25, 2003.

Please finalize the plan of study and Task Activity Report and forward same to DEP for review and approval. A finalized copy should also be sent to Bill Bohner of ARRO Consulting Inc. at 649 N. Lewis Rd., Suite 100, Limerick, PA 19468.

Thank you for your attention to this matter.

Sincerely yours,

Helmuth J.H. Baerwald

/hjhb

Cc: Board of Supervisors
Bill Bohner, Arro, Consulting, Inc.
Roman Pronczak, Chairman, ENPWJSA

EDM CONSULTANTS, INC.
1101 South Broad Street, Suite 200, P. O. Box 1545, Lansdale, PA 19446
Phone (215) 393-0670 Fax (215) 393-0652

February 12, 2003

Mr. Helmuth Baerwald, Manager
East Norriton Township
2501 Stanbridge Street
East Norriton, PA 19401-1616

RE: Act 537 Plan Update
Plan of Study

FILE: 158-037 (1.00)

Dear Mr. Baerwald:

Enclosed is a revised draft copy of the Act 537 Plan Update, Plan of Study in connection with the ENPWJSA Act 537 planning effort. The Plan of Study has been revised to include flow monitoring on the major interceptors and televising laterals and storm sewers to identify I/I sources and quantities.

A draft Task Activity Report is also enclosed which indicates the estimated cost of the Act 537 Plan Update is $66,000. PaDEP provides 50% reimbursement of the cost for Act 537 plans and updates. Please note a budget cost of $15,000 has been included for the Township's televising activities. If you expect this cost to be higher, please let us know so the amount can be revised accordingly. A subcontract budget cost of $20,000 is included for flow monitoring.

We will finalize the Plan of Study and Task Activity Report after Township input and comments are received.

The documents will then be forwarded to PaDEP for approval prior to work being initiated.

Very truly yours,

EDM CONSULTANTS, INC.

Stanley J. Endlich

SJE/khr

Enclosures

pc: Richard S. Smith, P.E.

\037_537let

East Norriton Township
Act 537 Plan Update
Task Activity Report

East Noriton Township	Montogmery	Entire Township	2/5/2003
(Municipality)	*(County)*	*(Planning Area)*	*(Date of Report)*

EDM Consultants, Inc. — *(Consultant)*

Anticipated Date of Plan Submittal: Dec-03

Estimated Cost of Plan: **$66,000**

Planning Activity	Labor Costs								Expenses	Costs Totals
	Principal Engineer		Senior Project Engineer		Project Engineer		Secretary			
	Rate: Hours	$84 Cost	Rate: Hours	$63 Cost	Rate: Hours	$55 Cost	Rate: Hours	$34 Cost		
I. Previous Wastewater Planning										
A Analyze Past Planning	2	$168	8	$672	8	$672	2	$168		$1,680
B Summarize Land Use Planning	2	$168	4	$336	8	$672	1	$84		$1,260
II. Physical and Demographic Analysis										
A Planning Area Identification	1	$84	4	$336	8	$672	2	$168		$1,260
B Planning Area Physical Characteristics	1	$84	2	$168			1	$84		$336
C Soils - Analysis I/c/w on-lot systems			2	$168			1	$84		$252
D Geologic Features			2	$168						$168
E Topography			2	$168						$168
F Potable Water Supplies			2	$168						$168
G Wetlands			2	$168						$168
III. Existing Sewage Facilities										
A Existing Facilities & Needs	4	$336	16	$1,344	24	$2,016	8	$672		$2,352
TV - Laterals & Storm Sewer					24	$2,016	Twp =	$15,000		$17,016
I/I Flow Monitoring					16	$1,344	Subcontract =		$20,000	$21,344
B On-Lot Disposal Systems	2	$168	4	$336			1	$84		$588
C Wastewater Sludge/Septage	2	$168	4	$336			1	$84		$588
IV. Future Growth										
A Dvlpmnt/Land Use/Zoning/Sewage Plan	2	$168	8	$672			3	$252		$1,092

East Norriton Township
Act 537 Plan Update
Task Activity Report

East Noriton Township	Montogmery	Entire Township	2/5/2003
(Municipality)	*(County)*	*(Planning Area)*	*(Date of Report)*

EDM Consultants, Inc. *(Consultant)*

Anticipated Date of Plan Submittal: Dec-03

Estimated Cost of Plan: **$66,000**

Planning Activity	Labor Costs								Expenses	Costs Totals
	Principal Engineer		Senior Project Engineer		Project Engineer		Secretary			
	Rate: Hours	$84 Cost	Rate: Hours	$63 Cost	Rate: Hours	$55 Cost	Rate: Hours	$34 Cost		
V. Identify Alternatives										
A Conv. collection, conveyance, treatment	2	$168	8	$672	8	$672	3	$252		$1,764
D Community Land Disposal	1	$84	4	$336			2	$168		$588
F Sewage Management Programs	2	$168	8	$672			2	$168		$1,008
G Non-structural Planning Alternatives	2	$168	2	$168			1	$84		$420
VI. Evaluation of Alternatives										
D Cost Estimates for Section V Alternatives	8	$672	40	$3,360			4	$336		$4,368
VII. Institutional Evaluation										
VIII. Justification of Selected Alternatives										
Report Preparation	8	$672	40	$3,360	16	$1,344	40	$3,360	$676	$9,412
Project Totals	31	$3,276	122	$13,608	96	$9,408	32	$21,048	$20,676	$66,000

Stanley J. Endlich, P.E.
(Name of Person Completing Report)

(Signature)

(Municipal Manager Signature)

Consulting Engineer
(Title)

Helmuth J. Baerwald, Township Manager
(Name of Person Signing Report

x:/158/T-537-Task-Act-Rpt.xls

EAST NORRITON TOWNSHIP

ACT 537 PLAN

UPDATE

EAST NORRITON TOWNSHIP

MONTGOMERY COUNTY, PA

NOVEMBER 2005
Final Draft January 2006
Adopted April 2006

CONSULTANTS, INC.

EAST NORRITON TOWNSHIP

ACT 537 PLAN

UPDATE

EAST NORRITON TOWNSHIP

MONTGOMERY COUNTY, PA

November 2005
Final Draft January 2006

EDM CONSULTANTS, INC.
1101 South Broad Street, Suite 200
P.O. Box 1545
Lansdale, PA 19446
(215) 393-0670

East Norriton Township
Act 537 Plan

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APPENDICES

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East Norriton Township
Act 537 Plan Update
November 2005
Final Draft January 2006

Executive Summary

The purpose of this Act 537 Plan Update report is to update East Norriton Township's current Sewage Facilities Plan (Act 537) previously approved in 1992. The 1992 Act 537 plan provided for a revision of the planned sewer service area, expansion of collection and conveyance facilities and an increase in the Township's allocated capacity at the East Norriton Plymouth Whitpain Joint Sewer Authority (ENPWJSA) Treatment Facility. Since 1992 East Norriton Township has been allocated 2.7 mgd of Average Annual Capacity and 3.1 mgd of Maximum Three Month Capacity at the ENPWJSA Treatment Facility. The Act 537 Plan Update reviewed the sanitary sewage needs of East Norriton Township in conjunction with the ENPWJSA Sewage Facilities Plan Update. The Update included the sanitary sewer system, wastewater treatment, potential future growth and the identification of a selected alternate.

Sanitary Sewer System

The East Norriton Township sewage system, shown on Figure 3-1, includes approximately 58 miles of pipes ranging from 8 inches to 24 inches in diameter, three major pumping stations (Germantown, Timberlake and Norris City Avenue), four minor pumping stations (Sandra Lane, Burnside, Shultz Road and Whitehall Road) and two limited service area pump stations (Marion Avenue and Felton Road). The Germantown Pumping Station serves the western area of the township and discharges to the Timberlake Pumping. The central area of the township discharges to the Timberlake Pumping Station which conveys sewage to the Norris City Avenue Pumping Station. The Norris City Avenue Pumping Station serves the eastern area of the township and receives the sewage discharge from the Timberlake Pumping Station. The Norris

City Avenue Pumping Station also receives gravity sewage flow and pumps to the ENPWJSA Sawmill Pump Station.

A part of the Act 537 Sewage Facilities Planning Report update included an investigation of the sanitary sewer collection system to identify and prioritize drainage areas which exhibit extraneous inflow and/or infiltration. The flow monitoring study was conducted throughout the Township utilizing portable meters installed in manholes which segregated several specific drainage areas. The infiltration/inflow (I/I) investigation indicated areas tributary to the Sandra Lane and Germantown Pump Stations experience surcharge conditions.

East Norriton Township has developed a Corrective Action Plan (CAP) to address the I/I situation. The plan discusses the recent and proposed efforts of the Township to reduce I&I contributions into the sanitary sewer system. In addition to implementing the CAP, the Township will continue to monitor, investigate and remediate the sanitary collection and conveyance system to remove and prevent additional extraneous inflow/infiltration to ensure current permitted system capacities are not exceeded.

Wastewater Treatment

East Norriton Township has wastewater treatment capacity at the ENPWJSA Wastewater Treatment Facility. The facility is located in the southwestern corner of Plymouth Township adjacent to the Schuylkill River. It is owned by the ENPWJSA Authority. The ENPWJSA Wastewater Treatment Plant is authorized to discharge to the Schuylkill River under the NPDES Sewage Permit No. PA0026816. The plant presently provides advanced secondary treatment levels through the use two (2) types of treatment processes consisting of trickling filtration and activated sludge. A treatment process upgrade is being investigated to improve treatment efficiency to address more stringent stream discharge limits.

The ENPWJSA Wastewater Treatment Plant has a permitted maximum monthly discharge capacity of 9.3 million gallons per day (mgd) with an annual average flow rating of 8.1 mgd. The 2004 annual average daily flow was 6.45 mgd and the maximum monthly flow was 7.75 mgd. A review of the ENPWJSA Chapter 94 (2004) report projects that the treatment plant will operate within permitted limits for the next 5 years.

Potential Future Growth

There are 209 existing parcels in East Norriton Township utilizing on-lot sewage disposal systems. The Act 537 Plan Update anticipates 170 on-lot systems being connected to the public sewer system leaving 39 on-lot systems. These remaining on-lot systems are located in the western section of the Township in the Trooper Road and Township Line Road area.

The growth areas proposed for this update of the East Norriton Township Act 537 Sewage Facilities Plan, as shown on Figure 3-2, include all tracts of land not currently served by public sewers in all zoning districts. Potential future growth was established based on zoning, a review of the draft Comprehensive Plan Update, areas presently identified for development and the connection of on-lot systems. It is estimated that East Norriton Township's future sewage needs will require an average annual capacity of 2.7 mgd and a maximum monthly capacity of 3.3 mgd.

East Norriton Township has sufficient annual average capacity at the ENPWJSA Wastewater Treatment Facility for the ultimate build out of the remaining land in the growth areas. Additional maximum monthly capacity is, however, needed.

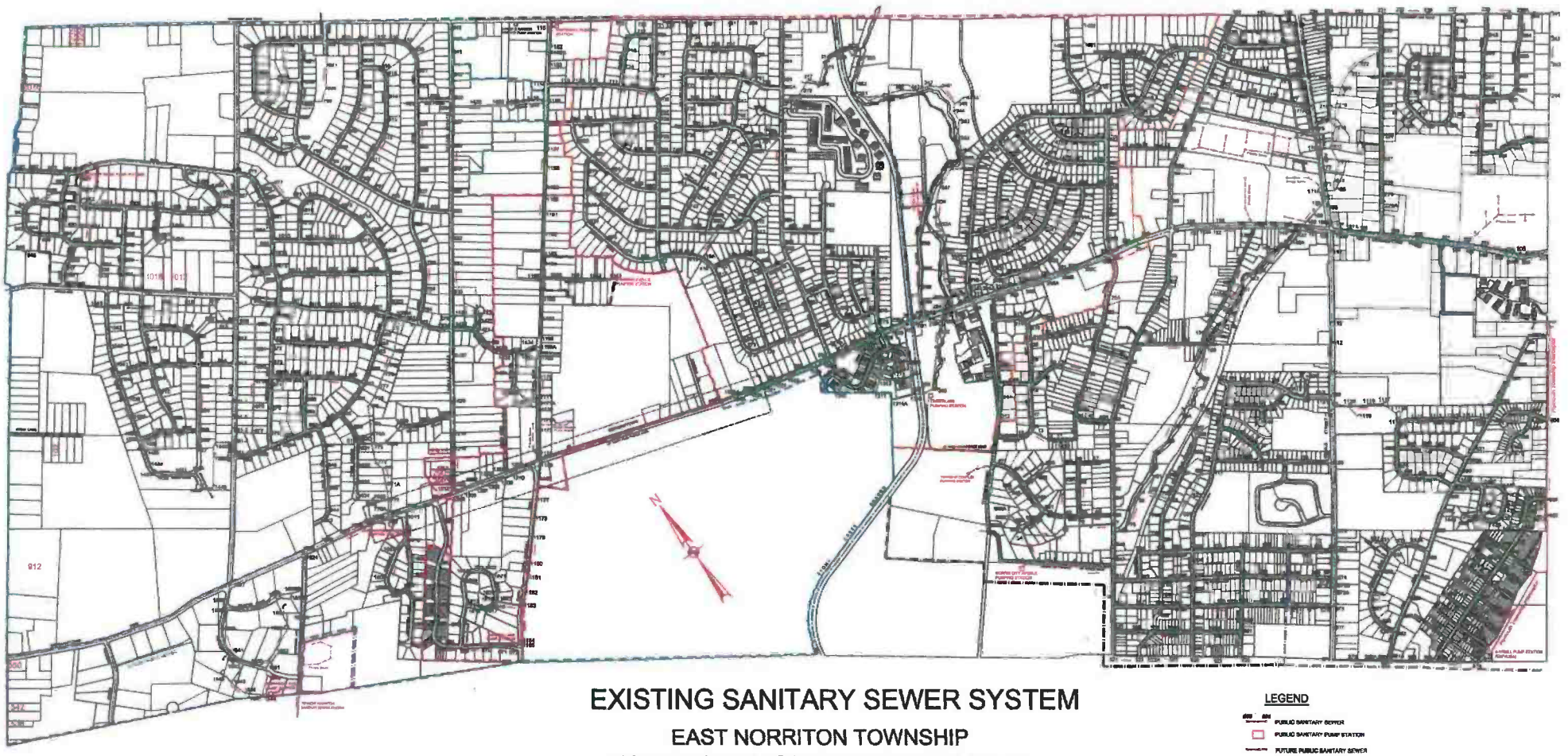
East Norriton Township anticipates the current planned developments to be completed within the next 10 years. Major capital expenditures by the Township are not anticipated for the future sewer system expansion as developers will generally be required to extend sewers to serve their proposed projects.

Selected Alternate

It is proposed East Norriton Township secure additional maximum monthly treatment capacity by participating, on a one-third proportionate share, in the upgrade and expansion of the ENPWJSA treatment facility. Based on a proposed annual average expansion to 8.7 mgd (11.1 mgd maximum monthly) at the ENPWJSA facility, East Norriton Township would acquire the projected needed additional maximum monthly flow capacity to accommodated projected future sewage flows. East Norriton Township's 2003 cost for their share of the 2003 conceptual upgrade/expansion scenario is estimated at $4.8 million. This equates to a capital cost of about $500/EDU. The selected Act 537 Plan Alternate also includes:

1) *Continued implementation of the Corrective Action Plan (CAP) to address sewer system I/I.*
3) *Continued I/I program monitoring, investigation and remediation.*
4) *Continued investigation of alternatives to reduce the peak flows at the Germantown and Sandra Lane Pumping Stations.*
5) *Continued implementation of the Township's OLDS Management program.*
6) *Securing financing for the Township's share of the ENPWJSA upgrade/expansion costs.*

FIGURE 3-1



EXISTING SANITARY SEWER SYSTEM

EAST NORRITON TOWNSHIP
MONTGOMERY COUNTY,PENNSYLVANIA

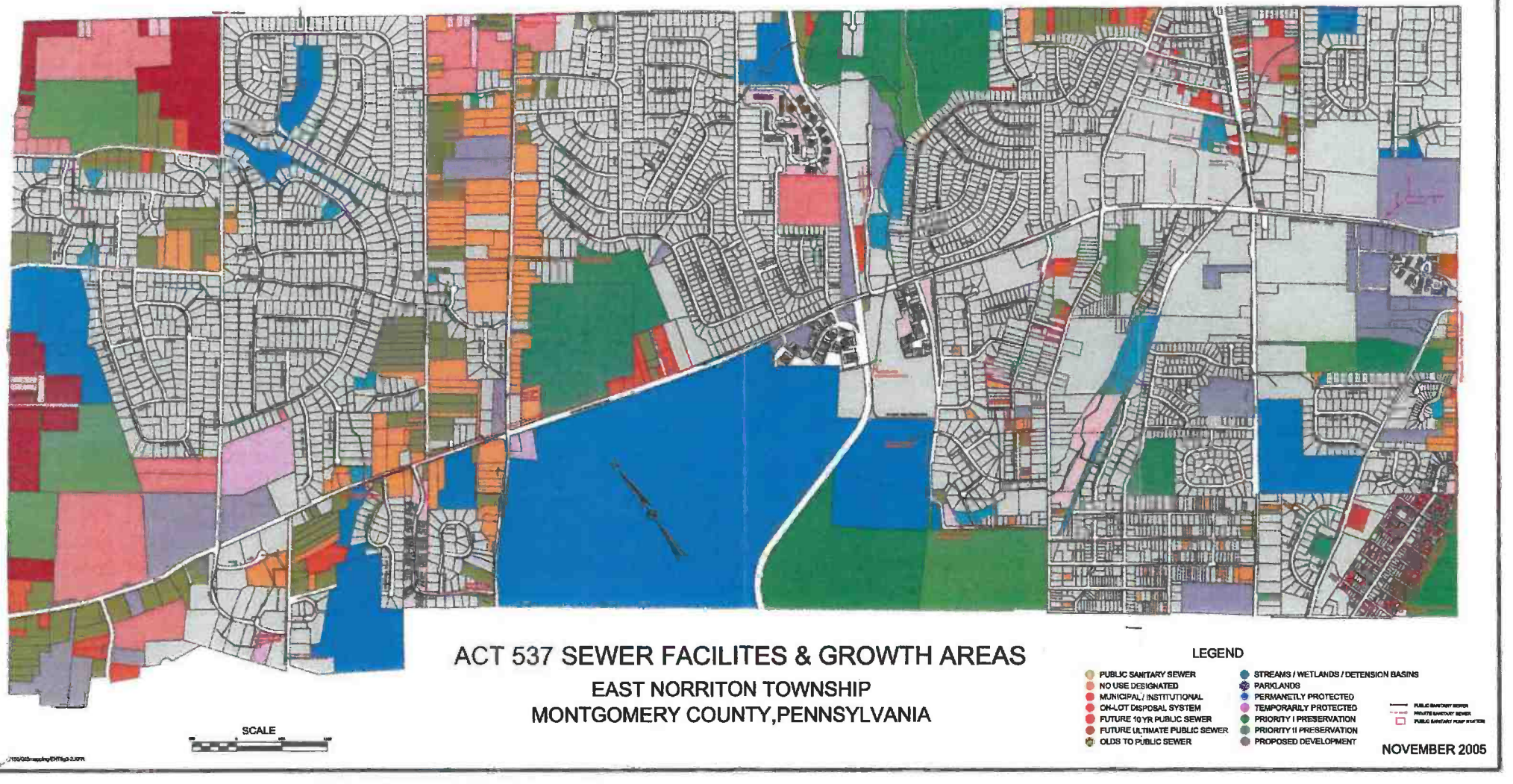
SCALE

LEGEND

PUBLIC SANITARY SEWER
PUBLIC SANITARY PUMP STATION
FUTURE PUBLIC SANITARY SEWER
PRIVATE SANITARY SEWER
O.L.D.S. Investigation By MCHD
PUMP STATION DRAINAGE BOUNDRY

NOVEMBER 2005

FIGURE 3-2


ACT 537 SEWER FACILITES & GROWTH AREAS
EAST NORRITON TOWNSHIP
MONTGOMERY COUNTY,PENNSYLVANIA
SCALE
LEGEND
PUBLIC SANITARY SEWER
NO USE DESIGNATED
MUNICIPAL / INSTITUTIONAL
ON-LOT DISPOSAL SYSTEM
FUTURE 10 YR PUBLIC SEWER
FUTURE ULTIMATE PUBLIC SEWER
OLDS TO PUBLIC SEWER
STREAMS / WETLANDS / DETENSION BASINS
PARKLANDS
PERMANETLY PROTECTED
TEMPORARILY PROTECTED
PRIORITY I PRESERVATION
PRIORITY II PRESERVATION
PROPOSED DEVELOPMENT
NOVEMBER 2005

SECTION 1 - INTRODUCTION

1.01 Purpose and Objective

The purpose of this report is to update East Norriton Township's current Sewage Facilities Plan (Act 537) previously approved in 1992.

1.02 Background

East Norriton Township's current Act 537 Plan was approved on July 18, 1992. A copy of the approval letter from the Pennsylvania Department of Environmental Protection is provided in Appendix A. The Act 537 plan provided for a revision of the planned sewer service area, expansion of collection and conveyance facilities and an increase in the Township's allocated capacity at the East Norriton Plymouth Whitpain Joint Sewer Authority (ENPWJSA) Treatment Facility. Since 1992 East Norriton Township has been allocated 2.7 mgd of Average Annual Capacity and 3.1 mgd of Maximum Three Month Capacity at the ENPWJSA Treatment Facility. The original Sewage Facilities Plan was adopted in accordance with Act 537 and Act 247 in 1972 and updated in 1978. The sanitary sewage needs of East Norriton Township were reviewed and evaluated in conjunction with the ENPWJSA Sewage Facilities Plan Update.

1.03 Municipal Planning

East Norriton Township Zoning and Subdivision ordinances provide the guidance for the development of land and the re-development of properties with existing structures. The potential needs for sanitary sewer service for the vacant and existing developed parcels is estimated based on current zoning regulations. EDUs are estimated based on the size of the parcel and the estimated sanitary sewer generation rate per acre as regulated by each zoning

district. The current East Norriton Township Zoning Districts are shown on Figure 1-1 and described as follows:

The East Norriton Township Zoning Ordinance includes twenty two (22) districts generally segregated as: eight (8) residential districts; one (1) institutional district; five (5) commercial districts; five (5) office/professional districts; two (2) industrial districts; and one (1) floodplain district.

AR & ARC Residential Districts - These districts are designed to provide for controlled expansion of low—density development. Single—family detached dwellings, a municipal use or fire house, and a number of accessory uses are the only permitted uses. The minimum lot size vary between the districts. The minimum lot size is 20,000 square feet if public sewer service is provided. To estimate sewage needs, a 3.0 EDU/acre rate for the AR District and 2.5 EDU/acre for the ARC District have been developed based on an average lot size of 20,000 SF with 20% of the gross land area reserved for non-lot uses such as right-of-way and open space.

BP Business and Professional District — This district provides opportunity for a variety of office uses. The permitted uses include offices for administration, sales, insurance, and real estate offices; studios for music and art instruction, and financial institutions. To estimate sewage needs, a 11.0 EDU/acre rate is used for wastewater flow projections based on a minimum lot size of 30,000 SF.

BR & BR1 Residential Districts - These districts are similar to the AR and ARC Districts as they are designed to provide for controlled expansion of low density development. Single family detached dwellings, a municipal use or fire house, and a number of accessory uses are the only permitted uses. The minimum lot size is 10,000 square feet

if public sewer service is provided. To estimate sewage needs, a 2.5 EDU/acre rate for the BR District and 3.5 EDU/acre for the BR1 District have been developed based on an average lot size of 10,000 SF with 20% of the gross land area reserved for non-lot uses such as right-of-way and open space.

C & C1 Commercial Districts - These districts are designed to encourage the development of a variety of commercial uses within certain areas of the Township along major roads to minimize traffic congestion. To estimate sewage needs, a 7.0 EDU/acre rate for the C District and 8.0 EDU/acre for the C1 District have been developed.

EC & EC2 Executive Campus Districts - These districts are designed to encourage the development of a variety of medical, financial and communication office uses within certain areas of the Township. To estimate sewage needs, a 4.0 EDU/acre rate for the EC District and 5.0 EDU/acre for the EC2 District have been developed.

HR High Rise Residential District - This district was established to provide high density residential developments. This type of development shall be designed as a unified architectural unit with appropriate landscaping. The permitted uses include apartment houses, commercial and office uses, and playgrounds. All buildings within the high rise apartment development are to be served by a public sanitary sewage disposal system and public water supply. To estimate sewage needs, a 16.0 EDU/acre rate is based on multi-level structures with an average foot print of 30,000 SF, a 20% open space reserve and a 30% non-housing use.

I Industrial District — This district includes a variety of industrial uses that promotes the general welfare of the Township. The permitted uses include storage, warehousing, distribution and heavy commercial uses. The method of sewage and industrial waste treatment and disposal must be approved by the Board of Supervisors. To estimate sewage needs, a 2.5 EDU/acre rate is used for wastewater flow projections with a maximum building coverage of 20%.

IN Institutional District — The primary purpose of this district is to provide institutional uses, which may include places of worship; public and private schools; mental, medical and surgical hospitals and clinics. To estimate sewage needs a 5.0 EDU/acre is used for wastewater flow projections based on a 20% open space reserve and a 30% non-housing use.

LI Limited Industrial District - This district is designed to encourage non-polluting light industry, office, storage, warehousing and certain light manufacturing operations. To estimate sewage needs, a 1.5 EDU/acre rate is used for wastewater flow projections with a maximum building coverage of 20%.

MR Medium Density Residential – The primary purpose of this district is to provide for townhouse and duplex residential dwellings. To estimate sewage needs, a 5.5 EDU/acre rate for this district have has been developed based on an average lot size of 2,500 SF with 40% of the gross land area reserved for non-lot uses such as right-of-way and open space.

RO Residential Office District - This district is designed to accommodate up-scale professional and business offices adjacent to and within residential areas. To estimate sewage needs, a 2.0 EDU/acre rate is used for wastewater flow projections based on a minimum lot size of 10,000 SF.

RP Residential & Professional District — This district is designed to accommodate small scale professional and business offices adjacent to and within residential areas. To estimate sewage needs a 3.5 EDU/acre rate is used for wastewater flow projections based on a maximum building coverage of 65%.

RR Retirement Residential – The primary purpose of this district is to provide for age restricted retirement residential dwellings. To estimate sewage needs, an 8.5 EDU/acre rate for this district has been developed based on 40% of the gross land area reserved for non-lot uses such as right-of-way and open space.

FP Floodplain Conservation District - The primary purpose of this district is to protect the floodplain areas of the Township and to encourage the retention of open space land uses. The district is utilized as an overlay district for all applicable locations in the Township. The district boundaries as delineated on the Floodplain Overlay Map of East Norriton Township were established by the Flood Insurance Study for the Township of East Norriton, Montgomery County, Pennsylvania, as prepared by the Federal Insurance Administration.

The zoning classifications and sewer and water needs are summarized as follows:

Zoning Classification	EDU/Gross Acre
AR	3.0
ARC	2.5
BP	11.0
BR	2.5
BR1	3.5
C	7.0
C1	8.0
EC	4.0
EC2	5.0
HR	16.0
I	2.5
IN	5.0
LI	1.5
MR	5.5
RO	2.0
RP	3.5
RR	8.5

1.04 Floodplain Protection Areas

The most significant floodplain areas and wetlands in East Norriton Township are those along the Stoney Creek and the East and West branches of the Stoney Creek, as shown on Figure 1-2 - "Natural Features Plan". Smaller floodplains parallel minor tributaries to these streams. East Norriton Township participates in the National Flood Insurance Program, and has enacted a floodplain ordinance to regulate the type and extent of development in flood-prone areas. While some development that occurred prior to these ordinances exist in the floodplain, there is an awareness of the dangers in this area, and new development is controlled in flood-prone land.

SECTION 2 - PHYSICAL AND DEMOGRAPHC CONDITIONS

2.01 Regional Location

East Norriton was established as a Second Class Township in 1924. Located in Montgomery County, and situated adjacent to the Borough of Norristown it comprises approximately 6.1 square miles. Adjacent communities include: Borough of Norristown to the south; Plymouth Township to the east; West Norriton Township to the west, Worcester Township to the west and north and Whitpain Township to the north.

2.02 Demographic Conditions

The most detailed characteristics of population and housing have been produced by the Bureau of the Census. These figures reflect the results of the decennial census, last compiled in 2000. According to the 2000 census data there are 13,211 residents in East Norriton Township, which represents a decrease of 0.8% since the 1990 population of 13,324.

Owner occupied housing units comprise approximately 77% of all housing in East Norriton Township and renter occupied housing units comprise approximately 23%. The average owner occupied household size in East Norriton Township is 2.63 persons per household, a drop of 0.11 from the 1990 figure of 2.74 persons per household. This is slightly less than the Montgomery County average of 2.74 persons per household for owner occupied units.

2.03 Demographic Projections

The Montgomery County Planning Commission (MCPC) has projected the total Township population over the next 25 years to be as follows:

YEAR	POPLUATION	CHANGE %
2000	13,211	
2005	13,620	+ 1.03%
2010	13,600	- 0.001%
2015	13,570	- 0.002%
2020	13,550	- 0.001%
2025	13,530	- 0.001%
2030	13,500	- 0.002%
	Overall 25 year change	- 0.009%

There are approximately 170 new single family residential units and 140 apartment or age restricted units planned in East Norriton Township. At 2.63 persons per household for owner occupied units and 1.84 persons per household for renter occupied units the total increase in the resident population is estimated at 705 persons. The number of residential units added from 1994 to 2005 is approximately 210 EDU's or 510 people. If all currently proposed development is completed by the next census in 2010, the projected increase in population would be approximately 2,400 people for a total of 15,611 people. Barring any significant slowing of the economy in the Township, the population can be expected to increase by 10% to 15% from 2000 rather than remain relatively stable as forecasted by the MCPC.

Most of the commercial areas within the Township are located along transportation corridors of Germantown Pike and DeKalb Pike. Industrial areas are located adjacent to the Stoney Creek Railway in the center of the Township and at the Southwest corner of the Township bounded by Germantown Pike, Foundry Road and Burnside Avenue.

2.04 Geologic Features

East Norriton Township is underlain by sedimentary and associated igneous rocks of Triassic Age which are part of the Newark Group. These rocks form a series of disconnected, down-faulted basins which extend from Nova Scotia to North Carolina. In southeastern Pennsylvania, the Triassic rocks have been divided into the Stockton, Lockatong and Brunswick Formations. Both the Stockton Formation and Lockatong Formation underlie portions of East Norriton Township.

The Stockton Formation is composed chiefly of very fine to course grained Arkosic sandstone and Arkosic conglomerates, inter—bedded red shale and siltstone. The Stockton Formation is divided into three (3) members which include the following: (1) Lower Arkose Member; (2) Middle Arkose Member; and (3) Upper Shale Member.

The Lockatong Formation lies beneath the Stockton Formation and consists of thick bedded argillite (very dense shale and mudstone). The Lockatong Formation is resistant to erosion and forms low ridges. Thinner beds of the Lockatong Formation are interbedded with the overlying Brunswick Formation. Plate IV from the 1992 Act 537 Sewage Facilities Plan (Appendix E) identifies the geology of East Norriton Township. The Lockatong Formation underlies the northeast and northwest portions of the Township. The Middle Arkose Member of the Stockton Formation underlies the greatest portion of the Township. The Upper Shale Member inter-beds the Arkose striking east to west across the Township.

2.05 Potable Water Resources

Surface water from the PA American Water Company is the sole source for public water supply in the East Norriton Township/ENPWJSA Area. The rural parts of the planning area are currently served by on-site wells. The source of water for the system is the Schuylkill River.

The existing potable water distribution system throughout East Norriton Township is shown on Figure 2-1.

2.06 Soils

The soils in East Norriton Township vary greatly in characteristics such as slope, depth, stoniness, and natural drainage. The Soil Survey of Montgomery County delineates four (4) soil associations in the Township. Each association, as a rule, contains a few major soils and several minor soils in a pattern that is characteristic but not uniform. Descriptions of these soil associations follows:

Abbottstown / Readington / Croton Association

Soils of the Abbottstown / Readington / Croton Association cover a small portion of the Township along the northeastern and northwestern boundaries. The soils of this association are formed from material weathered from shale and generally contain a moderate number of coarse fragments. The soils of the Abbottstown series are deep and somewhat poorly drained and mottling is common at a depth of 12 to 20 inches. The soils of the Readington series are deep and moderately well drained, mottling is common at a depth of 28 inches and soil permeability is moderately slow. The soils of the Croton series are deep, poorly drained with some mottling at 12 to 14 inches. Generally, the soils of this association have limitations for development because the slow permeability and shallow depth to mottling preventing onlot sewage disposal systems (OLDS) from operating efficiently.

Reaville / Penn / Klinesville Association

The soils of the Reaville / Penn / Klinesville Association occupy a small portion of the northeastern and northwestern sections of the Township. These soils are located on rolling

uplands. The soils of the Reaville series are moderately deep, moderately well drained containing 15% to 25% shale fragments in the 8" surface layer. These soils have a thin, slowly permeable subsoil restricting downward movement of water. The soils of the Penn series are moderately deep to shallow and have moderately rapid permeability with shallow depth to bedrock. The soils of the Klinesville series are located on steep slopes and on narrow ridge tops. They are well drained soils with shale fragments comprising 50% to 90% of the 10" thick surface layer and depth to bedrock is generally 12 to 18 inches.

The soils of this association have many limitations for land development. The most significant limitation is the variable nature of the soils characteristics. Their drainage ranges from good to poor; their slopes range from nearly level to steep; and the depth to bedrock ranges from 12 inches to more than 3 feet. The ability of these soils to properly treat effluent from septic tanks is limited because of the slow permeability of the subsoil or substratum in the Reaville soils, and the shallow depth to bedrock of the Penn and Klinesville soils.

Lawrenceville / Chalfont / Doylestown Association

The soils of the Lawrenceville / Chalfont / Doylestown Association are situated in the midsection of the Township. The principle soils in this association have formed a thick mantle of silt, deposited by wind. The soils of the Lawrenceville series are deep, moderately well drained with some mottling common in the lower part of the subsoil. The soils of the Chalfont series are located on the lower lying valleys. They are deep, somewhat poorly drained and have very slow permeability in the subsoil restricting downward movement of water. The soils of the Doylestown series are deep, poorly drained with a thick, slowly permeable subsoil restricting downward movement of water. The soils of this association have limitations for land development since they experience severe erosion after the soils are disturbed. The low permeability of these soils represent a limitation for on-lot disposal of wastewater.

Lansdale / Penn Association

The soils of the Lansdale / Penn Association underlie a large part of the eastern section of the Township. The soils of the Lansdale series are moderately deep, well drained with a sandy subsoil generally 3 feet thick. The soils of the Penn series are moderately deep to shallow and moderately rapid permeability. The soils of this association have moderate limitations for land development. The main limitations are steep eroded slopes and shallow depth to bedrock. Although some of the soils have moderately slow permeability in the subsoil, these soils are moderately suitable for onlot disposal of wastewater.

Soil Suitability for On-Site Sewage Disposal

The suitability of the planning area soils for subsurface, on-site sewage disposal systems varies with location, soil type and soil characteristics. Soil geologic characteristics can change abruptly, sometimes varying within a foot. Site soil permeability and depth to the limiting zone must be determined by site investigation to determine final soil suitability because of the shale and sandstone geology of the region. Figure 1-2 indicates the areas where the soil type has limitations for on-lot disposal systems to operate efficiently.

On-Lot Disposal Systems (OLDS), which are of proven technologies, can be classified as individual or community systems:

Individual Sewage Systems

According to PA Code Title 25, Chapter 81, 7.1.1(l) individual sewage systems are defined as "... a system of piping, tanks or other facilities serving a single lot and collecting and disposing of sewage in whole or in part into the soil or waters of this Commonwealth or by means of conveyance to another site for final disposal." Under this broad definition, there are

several means of accomplishing the necessary treatment and disposal which include Individual On-Lot Sewage System(s) and Individual Sewerage System(s).

Individual On-Lot Sewage Systems - Chapter 73 of Act 537 PA Code Title 25 defines those systems which are considered for standard use permitting for individual on-lot sewage disposal.

Soil based disposal of sewage effluent requires certain criteria within the subsurface profile be met. For various technologies, certain limiting factors (zones) must not be encountered to a specified depth. These criteria vary based on the technology to be applied and are generally as follows:

- Inground systems require a minimum of 60 inches to a limiting zone, and a suitable percolation rate.
- Elevated Sand Mounds require 20 inches to a limiting condition as well as a passing rate of percolation.
- Individual Residential Spray Irrigation (IRSIS) necessitates at least 10 inches to the presence, or indications of a high water table or zone of seasonal saturation. A minimum of 16 inches to rock is necessary for IRSIS as well.
- Drip Irrigation On-Lot Disposal Systems require 20 inches to a limiting condition similar to sand mound systems, however, the Drip Irrigation System utilizes an advanced filter or aerobic treatment unit, which precludes the use of a large sand mound.
- Retaining tanks have no specified restriction based on soil conditions.

Individual Sewerage Systems - This type is a form of disposal other than methods which apply soil renovation or retaining tanks. Such methods typically apply high levels of treatment followed by direct discharge to Waters of the Commonwealth or the surface of the ground. Each residence might be equipped with an individual mechanical treatment and disinfection facility discharging to any available point, stream, swale, ditch, etc.

Community Sewage Systems

PA Code Title 25, Chapter 71, 781.1.1(ii) define a community sewage system as "a sewage facility, whether publicly or privately owned, for the collection of sewage from two or more lots... ". This differs from Individual Sewage Systems in that more than one dwelling, or equivalent dwelling unit, is serviced by one system. Final treatment and disposal can also occur on any lot(s), or in a separate location entirely. These types of systems can be distinguished as Community On-Lot Sewage System(s) and Community Sewerage System(s).

Community On-Lot Sewerage Systems, as with Individual On-Lot Systems, must comply with various soil criteria to accommodate the use of certain accepted technologies. Generally, due to the volume of sewage flows, a hydrogeologic analysis and more extensive soils testing is required by the Pennsylvania Department of Environmental Protection (PaDEP). Due to PaDEP acting as the permitting entity for these community systems which exceed 10,000 gallons per day, Chapter 73 is utilized as a guidance rather than strictly governing the testing and design processes.

Technologies that are commonly accepted for Community on-lot disposal include, in-ground absorption areas, elevated sand mound(s), spray irrigation of treated effluent to the surface of the ground, drip irrigation and rapid infiltration through overland flow or basin absorption.

Community Sewerage Systems - These systems can be publicly or privately owned facilities which treat and dispose of sewage other than through soil renovation or retaining tanks. These methods include large scale conveyance and treatment facilities or site specific collection and treatment facilities. Following treatment, the effluent is discharged to the Waters

of the Commonwealth. Currently there are no community on-lot disposal systems located within East Norriton Township.

Retaining tanks as a method of long term sewage disposal, either for individual lots, or on a community-wide basis, are not acceptable. Retaining tanks can accommodate the most challenging site conditions, but are maintenance intensive and prone to malfunction due to overloading or inappropriate pumping schedules. Therefore, this method is an unfeasible alternative, as a long term method.

Individual on-lot sewage disposal via elevated sand mounds or drip irrigation systems are options for the areas designated for on-lot disposal systems as shown on Figure 3-2. Based on the general soil type characteristics, land in these areas meet the minimum limiting zone requirement; however, other conditions such as slope, slowly permeable layers (fragipans), and proximity to property boundaries may inhibit successful percolation or permeability testing. An on-lot disposal system utilizing an elevated sand mound was installed at 550 North Trooper Road and a drip irrigation system was installed at 912 North Trooper Road (see the October 25, 2005 letter from the MCHD in Appendix D).

Individual Residential Spray Irrigation System (IRSIS) generally requires a lot size of at least three acres. To accommodate the Township's desire for open space preservation, and reasonably utilize the properties zoning potential, IRSIS is not a feasible approach.

Drip Irrigation On-Lot Disposal Systems have recently been approved by the PaDEP for use on individual on-lot systems. These systems require 20 inches to a limiting condition similar to sand mound systems, however, the Drip Irrigation System utilizes an advanced filter

tank of sand or peat to complete the biological stabilization of the waste. An alternative to the filter tank is the use of an aerobic treatment tank. The effluent from the filter tank or aerobic tank is collected in a hydraulic pump tank which is sized to deliver the proper rate of liquid waste to one of two drip irrigation zones, which generally consist of ½" diameter tubing placed 6" to 12" deep. The pump unit and delivery system are designed to automatically alternate the dosing between the two irrigation zones. The lateral tubing consists of emitters which deliver the waste at a rate of 0.34 gallons per lineal foot utilizing a pressurized system, which has in-line filters to prevent clogging of the emitter ports. The advantage of this system compared to the elevated sand mound system is that a large volume of soil or sand is not required. However, the disadvantage is the need to replace the sand or peat in the filter unit and higher more frequent operating and maintenance inspections to maintain the pump and in-line filters.

SECTION 3 - EXISTING SEWAGE FACILITIES

3.01 Gravity Collection and Interceptors

The existing sanitary sewers in East Norriton Township consist of approximately 58 miles of pipes ranging from 8 inches to 24 inches in diameter. Figure 3-1 shows existing sanitary collection and conveyance sewers, pumping stations, drainage basins and force mains.

The Germantown Avenue Pump Station located adjacent to the West Branch of the Stony Creek at Germantown Pike collects sewage from the northwestern section of the Township up to the Worcester Township border. The station, upgraded in 1997, consists of three (3) vertically mounted, centrifugal, dry well pumps, with an existing station capacity of 2.9 mgd. The station discharges flow through a 4,900 feet 12 inch force main, which conveys sewage to the sanitary sewer system along Germantown Pike and eventually to the Timberlake Pump Station.

The Timberlake Pump Station, located adjacent to the Stony Creek and the Briar Glenn Apartments, was upgraded in 1997. The station consists of three (3) vertically mounted, centrifugal, dry well pumps, with an existing station capacity of 4.0 mgd. The station discharges flow through a 2,130 feet 12 inch force main, which conveys sewage to the sanitary sewer system in Stanbridge Street and eventually to the Norris City Avenue Pump Station.

The Norris City Avenue Pump Station is located adjacent to the East Branch of the Stony Creek at the southeastern section of the Township. The station consists of three (3) horizontally mounted, centrifugal, dry well pumps, with an existing station capacity of 7.5 mgd. The station discharges flow through a 3,505 feet 16 inch force main to a gravity sewer in

Hartranft Avenue. The discharge from this station along with the gravity flows from the southeastern section of the East Norriton Township, adjacent to Plymouth Township, are conveyed to the Sawmill Pump Station, which is owned and operated by the East Norriton Plymouth Whitpain Joint Sewer Authority (ENPWJSA).

The Sandra Lane Pump Station is located at Sandra Lane and Whitehall Road. The station collects sewage from the western central section of the Township generally parallel to Whitehall Road. The station was replaced in 2003 and consists of two (2) submersible wet well pumps, with an existing station capacity of 0.50 mgd. The station discharges flow through a 1,900 feet 6 inch force main, which conveys sewage to the sanitary sewer system along Germantown Pike and eventually into the Germantown Pump Station.

The Burnside Avenue Pump Station is located on Potshop Lane near Burnside Avenue. The station collects sewage from the western corner of East Norriton Township adjacent to West Norriton Township. The station consists of two (2) submersible wet well pumps, with an existing station capacity of 0.22 mgd. The station discharges flow through a 1,500 feet 6 inch force main, which conveys sewage to the sanitary sewer system along Germantown Pike and eventually into the Germantown Pump Station.

The Shultz Road Pump Station is located on Shultz Road near Singer Lane. The station collects sewage from the northwestern corner of East Norriton Township adjacent to West Norriton Township. The station consists of two (2), submersible wet well pumps, with an existing station capacity of 0.14 mgd. The station discharges flow through a 1,850 feet 4 inch force main, which conveys sewage to the sanitary sewer system along Woodland Drive and eventually into the Germantown Pump Station.

The Whitehall Road Pump Station is located on Whitehall Road at Township Line Road. The station collects sewage from the north central section of East Norriton Township adjacent to Worcester Norriton Township. The station consists of two (2) submersible wet well pumps, with an existing station capacity of 0.07 mgd. The station discharges flow through a 1,100 feet 4 inch force main, which conveys sewage to the sanitary sewer system along Township Line Road and eventually into the Timberlake Pump Station.

The Felton Road Pump Station is an ejector pumping station that serves the northern area of Felton Road. The station pumps to a gravity sewer on Felton Road via a 500 feet 4 inch diameter force main.

The Marion Avenue Pump Station serves properties located on Marion Avenue. This grinder pump station pumps to a gravity sewer on Whitehall Road via a 1,000 feet 2 inch diameter force main.

Expansion of the collection system is occurring in areas of development, with new collection sewer construction by private developers and landowners.

East Norriton Township has wastewater treatment capacity at the ENPWJSA Wastewater Treatment Facility. The facility is located in the southwestern corner of Plymouth Township adjacent to the Schuylkill River. It is owned and operated by the ENPWJSA Authority. The ENPWJSA Wastewater Treatment Plant is authorized to discharge to the Schuylkill River under the NPDES Sewage Permit No. PA0026816. The plant presently provides advanced secondary treatment levels through the use two (2) types of treatment

processes consisting of trickling filtration and activated sludge. East Norriton Township's present allocated capacity at the ENPWJSA is 2.7 mgd (annual average) and 3.1 mgd (maximum monthly).

The ENPWJSA Wastewater Treatment Plant has a permitted maximum monthly discharge capacity of 9.3 million gallons per day (mgd) with an annual average flow rating of 8.1 mgd. The 2004 annual average daily flow was 6.45 mgd and the maximum monthly flow was 7.75 mgd. A review of the ENPWJSA Chapter 94 (2004) report projects that the treatment plant will operate within permitted limits for the next 5 years. The ENPWJSA is presently investigating a facility upgrade and expansion to address more stringent discharge limits and to accommodate additional sewage contributions. Various expansion scenarios are under consideration. A 2003 upgrade/expansion scenario considered a capacity increase to an annual average flow of 8.7 mgd with a maximum monthly capacity of 11.1 mgd. Based on capacity being apportioned equally between the three townships, East Norriton Township would realize an annual average capacity of 2.9 mgd and a maximum monthly capacity of 3.7 mgd. The estimated 2003 cost for the ENPWJSA conceptual upgrade/expansion is expected to range from $10.8 million to $12.6 million. When soft costs at 15% are included, the total project cost would approach about $14.5 million. When shared equally by the three municipalities, East Norriton Township's share would be about $4.8 million.

3.02 On Lot Disposal Systems (OLDS)

There are 209 existing parcels in East Norriton Township utilizing on-lot sewage disposal systems, as summarized in Table 3-1. The Act 537 Plan Update anticipates 170 on-lot systems being connected to the public sewer system leaving 39 on-lot systems in service. These

remaining on-lot systems are located in the western section of the Township in the Trooper Road and Township Line Road area.

3.03 Septage Generation and Disposal

Telephone inquiries were conducted with local septage collection and disposal companies which are located in the East Norriton Township service area. There are three companies which regularly serve properties in the Township on a weekly basis. Accurate records of septage generation in the Township were not available from septage haulers. An average quantity of septage collected from the three companies ranges from 5,000 to 10,000 gallons per quarter. All three companies indicated that they dispose of septage primarily at the Valley Forge Treatment Plant.

3.04 Water Well Testing

The Montgomery County Health Department (MCHD) was requested to research their records regarding water samples obtained from private properties located in East Norriton Township. As of the date of this plan no reports have been submitted by the MCHD.

3.05 OLDS Management

MCHD reported in their October 28, 2003 and October 25, 2005 letters (see Appendix D) that there were 8 complaints investigated for possible malfunctions of existing systems. Corrective action was competed on all noted systems. There were 7 active site investigations conducted by the MCHD. The location of these fifteen (15) sites is shown on Figure 3-1. The MCHD reported that 6 of the 7 site investigations have not been satisfactorily resolved and no further action was taken. All 6 parcels have been identified to be connected into the public sanitary sewer system in the future. In their October 25, 2005 MCHD identified 5 parcels that

have been issued permits for the repair or replacement of an existing system or the installation of a new system.

Although there are problem areas in East Norriton Township and while the MCHD is currently responsible for permitting of new systems and resolution of complaints and problems, the Township does recognize its responsibilities to prevent possible detrimental health impacts to the public by improper operation and maintenance of OLDS. To this extent, the Township will continue their OLDS inventory system and community education program which provides current best management practice information to all property owners which have an existing OLDS. Technical questions have been directed to either the MCHD or the PaDEP.

3.06 Inflow & Infiltration Flow Monitoring

A part of the Act 537 Sewage Facilities Planning Report update is the investigation of the sanitary sewer collection system to identify and prioritize drainage areas which exhibit extraneous inflow and/or infiltration. The flow monitoring study was conducted throughout the Township utilizing portable meters installed in manholes which segregated several specific drainage areas. The flow monitoring has resulted in inflow & infiltration rehabilitation, which is discussed in Section 5.

SECTION 4 - FUTURE GROWTH AND DEVELOPMENT

4.01 Growth Area

The growth areas proposed for this update of the East Norriton Township Act 537 Sewage Facilities Plan include all tracts of land not currently served by public sewers in all zoning districts. A review of the zoning and the draft Comprehensive Plan Update were used as guidance in establishing the forecast of growth.

Table 4-1 provides a tabulation of EDUs that have been purchased for proposed and existing land developments throughout the Township. The general acceptability of the major soils in the non-growth areas to OLDS was also reviewed for consistency. The existing sewered areas and the sewer growth areas are indicated on Figure 3-2 (Act 537 Sewer Facilities & Growth Areas). To determine the potential sewage flow from the growth area, the total acreage of developable land was estimated and classified by zoning district. The growth area acres for each applicable zoning district in each of the four major pump station drainage basins was multiplied by an average EDU/acre rate, based on current zoning, to determine the number of potential additional EDUs needed to serve the growth area. The total potential EDUs required to serve the growth area is estimated at 1,856 EDUs (0.510 mgd), as shown on Table 4-1. The anticipated growth for each major pump station drainage basin is as follows:

Area	EDU	Flow
Germantown Pump Station Drainage Basin Area	1,034	0.284 mgd
Timberlake Pump Station Drainage Basin Area	203	0.056 mgd
Norris City Pump Station Drainage Basin Area	324	0.089 mgd
Sawmill Pump Station Drainage Basin Area	295	0.081 mgd
Totals	1,856	0.510 mgd

A consistency review with the Montgomery County Facilities Plan and Land Use Plan was conducted. The growth areas for public sanitary sewage within the Township are not consistent with the Montgomery County Facilities and Land Use plans. The area at the northwest corner of the Township is indicated to be connected to public sanitary sewers. This update proposes to maintain the sanitary disposal method for these properties as on-lot disposal systems in the Trooper Road and Township Line Road area.

SECTION 5 - PLANNING AND FACILITIES ALTERNATIVES, TREATMENT FACILITIES, EVALUATION AND RECOMMENDATION

5.01 Collection, Conveyance and Treatment

Growth areas which develop are expected to connect to public sewers within the next 10 years are indicated on Figure 3-2. Parcels which are planned for ultimate connection to the public sanitary sewer system are also indicated on Figure 3-2. Areas not identified as being served by public sewers on the map are planned to be served by on-site systems. The growth areas are consistent with the Township's comprehensive plan and the Township zoning map.

The ongoing sanitary sewer collection and conveyance system maintenance program consists of several activities. The major projects include:

Sewer Line Reconstruction and Replacement

East Norriton Township has completed several I/I rehabilitation repairs to existing sewer lines utilizing remote controlled re-lining of sewers and excavated replacement. The following is a summary of recent projects:

- Performed twenty-seven (27) spot repairs of 8" sewer main from six (6) feet in length to fourteen (14') feet in length.
- Slip lined approximately 620 LF of 8" sewer on Lawton Road.
- Slip lined approximately 350 LF of 8" sewer on Fourth Avenue.
- Slip lined approximately 450 LF of 8" sewer at the East Norriton Middle School.
- Installed approximately 400 plastic inserts in manholes to capture inflow.
- Replaced approximately 480 LF of 10' interceptor at the East Norriton shopping center.
- Replaced approximately 150 LF of 8" sewer in Butcher's Mill Road.
- Replaced approximately 250 LF of 15" interceptor between MH Nos. 88 and 87.

- Approximately 120 LF of 8" sewer main and 100 LF of 12" interceptor was replaced during the construction of the McDonald's and MRA Carwash projects.
- Approximately 250 LF of 8" sewer was replaced at the Mercy Suburban Hospital.

Collection Line Televising and Grouting

Work during the 1990's included the internal televising inspection of approximately 264,000 feet of sewers, testing of 54,000 joints, sealing of 35,000 joints utilizing 36,000 gallons of chemical grout. In 1998 the Township adopted more stringent standards for sanitary sewer construction. Also, the Township purchased a remotely controlled closed circuit camera system and high pressure hydraulic sewer cleaner truck to continue internal inspection of sewer mains by Township personnel.

Sewage Flow Metering

East Norriton Township utilizes flow meters at the Germantown, Timberlake, Norris City and Sandra Lane Pumping Stations which records all flows. In addition to these meters, the Township has utilized portable open channel flow meters for installation at various locations in the Township sewer system. During 2003 and 2004 the Township placed meters in several key locations in the Germantown and Sandra Lane Pump Station Drainage Areas to identify and prioritize the sections of each area exhibiting the most severe infiltration and inflow problems. Several letters from ARRO Consulting, Inc. regarding the progress of the investigation are included in Appendix F1. The Germantown Pump Station Area was subdivided into eight (8) sub-drainage basins, as shown in Appendix F2, which had open channel flow meters installed to simultaneously record flows during an eight week period. Sewer flows during dry and wet weather periods were recorded and evaluated to determine the sub-areas with the highest I/I problems. The results of the flow monitoring of these areas is included in Appendix F2. Three (3) of the sub-basin areas were identified with the highest I/I

rates, contributing an estimated two-thirds of the total I/I flows entering the Germantown Pump Station. More extensive investigation of the sanitary sewer mains within this area included manhole inspections, storm sewer cross connection investigations, smoke and dye testing and sump pump connection inspections. A comprehensive sewer main and lateral internal televising inspection work has concluded that the overall condition of sewer mains to be good, however, approximately 98% of the laterals have been observed with root intrusion, incomplete pipe connections, and cracked pipes visibly exhibiting ground water intrusion. Internal televising inspection of approximately 50% of these laterals has been completed. The locations and quantity of properties inspected are included in Appendix F3.

Unauthorized Connections to Sanitary Sewers

In March 2000 East Norriton Township adopted Ordinance No. 419 which established requirements for the control of storm water to prevent discharge from sump pumps, floor drains, roof downspouts and storm sewer pipes into the sanitary sewer system. Building sewer cleanout vents on several commercial properties were inspected and found to be located in parking areas, which allowed surface water to enter the collection system. These properties (Appendix F4 summary listing) were notified by mail to correct the deficiency.

Within the West End Investigation Area residential properties were inspected to determine the location of the discharge of sump pumps. Appendix F5 is a tabulation of 307 properties that were investigated. A form letter (sample in Appendix F6) was sent to those properties to which access to the interior of the home was not initially obtained.

Code Enforcement and Inspection

During code enforcement activities, Township inspectors have been looking for wastewater related problems such as illegally connected sump pumps and roof drains and sewer laterals in disrepair. A checklist (Appendix F7) is utilized to verify compliance with Township rules and regulations prior to the sale of a property with a structure. The question regarding illegal sump pump or down-spout connections to the sanitary sewer is included on the form for the inspector.

5.02 Corrective Action Plan

East Norriton Township has developed a Corrective Action Plan (CAP) to address the I/I situation. The plan discusses the recent and proposed efforts of the Township to reduce I/I contributions into the sanitary sewer system. The portion of the system located in the western side of the Township includes the Germantown Pump Station Drainage Area, which has been identified as having the highest rate of extraneous I/I flows. The Corrective Action Plan states that for every ten (10) gallons per day (gpd) of documented I/I flows removed from the system one (1) gpd of connected flow would be available for new sewer connections. The proposed activities of the Corrective Action Plan are as follows:

1 The Township will complete sewer lateral televising within the noted subdrainage areas upstream of the Germantown Pumping Station. Concurrent with this fieldwork, the Township will develop specifications and bid a lateral repair and replacement project for the affected area.

2. The Township will prepare and pass an amendment to the existing ordinances requiring that when a property within the Township is sold the sewer lateral will be televised to determine condition. If a lateral is in unacceptable condition, the lateral will need to be replace or repaired prior to the completion of the sale.

3. The Township wastewater engineer will undertake a hydraulic analysis in connection with removing flow from the Germantown Pumping Station drainage area by redirecting that flow from the Sandra Lane Pumping Station directly to the larger Timberlake Pumping Station. This will assist in reducing surcharges and overflows at the Germantown Pumping Station.

5.02 Alternate Evaluation

Based on the present availability of treatment capacity for East Norriton Township at the ENPWJSA Treatment Facility and the Authority's present efforts to upgrade and expand the facility, an extensive investigation of treatment alternatives was not undertaken. Three alternates were considered:

- Continued Sewage Treatment at the ENPWJSA facility and participation in the upgrade/expansion.
- Diversion of Flow to West Norriton Township and treatment at a proposed facility to be constructed.
- No Action

Continued Sewage Treatment at the ENPWJSA

East Norriton Township's current average annual capacity of 2.7 mgd provides for sufficient sewage treatment capacity for the projected ultimate build out of the Township. The maximum monthly flow is anticipated to be 3.3 mgd based on the average annual daily flow rate of 2.7 mgd and a peaking factor of 1.32. The estimated additional maximum monthly capacity required by East Norriton Township at the ENPWJSA is 0.2 mgd greater than the present 3.1 mgd allocated capacity. With the proposed ENPWJSA facility 2003 conceptual scenario upgrade/expansion to an annual average flow capacity of 8.7 mgd (East Norriton capacity 2.9 mgd) and a maximum monthly flow capacity to 11.1 mgd (East Norriton capacity 3.7 mgd) adequate annual average and maximum monthly capacity will be available to accommodate future projected sewage contributions from East Norriton Township. The 2003 cost for East Norriton Township's share of the 2003 conceptual scenario upgrade/expansion is estimated at $4.8 million.

Diversion of Flow to West Norriton Township

West Norriton Township has inquired whether East Norriton Township would be interested in acquiring sewage capacity from West Norriton Township. This alternative would require the diversion of existing and future flows from the Sandra Lane and Burnside Avenue pump stations to West Norriton Township. An estimated average annual present and future flow of 0.2 mgd from these areas could be diverted to West Norriton Township's proposed Barbadoes Wastewater Treatment Facility. The estimated cost per gallon at the West Norriton facility is $ 7 per gallon for a 3.0 mgd plant (Appendix C). For 0.2 mgd of treatment capacity the East Norriton Township cost would be about $1.4 million. When the cost to construct conveyance facilities to divert sewage to West Norriton Township, estimated to be at least $0.2 million, is considered the total expected capital cost would be at least $1.6 million.

Presently it is proposed the ENPWJSA upgrade/expansion cost be shared equally between the three participating township's. Therefore if East Norriton Township were to divert flow to West Norriton Township to obtain an additional 0.2 mgd of capacity at the ENPWJSA facility the total cost would be $6.4 million ($4.8 million plus $1.6 million = $6.4 million). Since the proposed upgrade/expansion at the ENPWJSA facility would provide East Norriton Township adequate annual average and maximum monthly capacity to accommodate projected future sewage contributions, purchasing additional capacity from West Norriton Township is not necessary and is not economically justified.

No Action

The no action alternative would include East Norriton Township not participating in the ENPWJSA plant expansion to secure additional maximum monthly capacity at the facility. If East Norriton Township would be able to sufficiently reduce the I/I flows entering the collection

system, the additional 0.2 mgd of maximum monthly capacity may not be required. However, in accordance with the existing inter-municipal agreement it would still be necessary for East Norriton Township to participate in the plant upgrade associated with improving the organic treatment efficiency to meet the revised stream discharge limits.

Historically the permanent removal of I/I has been difficult. I/I removal has been documented in many municipalities only to be recorded in sewer reaches that were not rehabilitated. East Norriton Township's previous I/I rehabilitation efforts have been successful only to have I/I reappear as demonstrated by observed surcharges in the Germantown Pump Station area. Therefore since the Township will be involved with the plant upgrade the dual approach of securing additional maximum monthly treatment capacity at the ENPWJSA facility as well as aggressively pursuing I/I removal would seem to be the prudent approach to avoid the potential of a building moratorium due to the lack of maximum monthly capacity.

Recommended Alternative

It is recommended East Norriton Township participate in the ENPWJSA upgrade/expansion pursuant to the existing inter-municipal agreement. The 2003 cost share for East Norriton is estimated at about $4.8 million. Based on a 2.7 mgd annual average flow and 275 gpd/EDU, the calculated capital cost per EDU is $500/EDU ($4.8M/2.7mgd x 275gpd/EDU = $488.89/EDU, rounded $500/EDU). In addition I/I rehabilitation efforts should be continued as well as the management of on-lot sewage disposal systems. An outline of the recommended alternate follows:

1) Participate in the ENPWJSA wastewater treatment upgrade/expansion.
2) Continue to implement the Corrective Action Plan (CAP).
3) Continue the I/I program of monitoring, investigation and remediation.

4) Continue investigation of alternatives to reducing the peak flows at the Germantown and Sandra Lane Pumping Stations.

5) Continue to implement the Township's OLDS Management program.

6) Secure financing for the Township's share of the ENPWJSA upgrade/expansion costs.

SECTION 6 - INSTITUTIONAL EVALUATION AND RECOMMENDED ALTERNATIVE

6.01 East Norriton Township Organization

The ENPWJSA owns and maintains the wastewater treatment plant. The collection and conveyance systems in the Township are owned and maintained by the East Norriton Township.

6.02 Township Structure

East Norriton Township is in good financial standing. The East Norriton Township has a bonded debt which includes the Series 2002 and Series 2004 Guaranteed General Obligation Bonds which were the refinancing of prior general sewer revenue bonds and a Series 2003 Sewer Revenue Note. The Series 2002 bonds issued for $1,552,000 (of which 20.77% or $332,350 is related to sanitary sewer expenses) will mature in 2014. The Series 2004 bonds issued for $4,905,000 (of which 66.95% or $3,283,898 is related to sanitary sewer expenses) will mature in 2017. The Series 2003 note issued for $1,000,000 will mature in 2013. The proceeds of the Series 2002 bonds, the Series 2004 bonds and the Series 2003 note were invested. Annual operating expenses, exclusive of depreciation, totaled $2,763,000 for 2004. Revenues from user charges and connection fees totaled $2,276,000 in 2004.

The Township's public works department provides the staffing and resources for the maintenance of the conveyance and collection systems. Operation, maintenance, inspection and testing of the sanitary sewer system is conducted by East Norriton Township through the Public Works Department.

East Norriton Township has the existing legal authority to revise the Act 537 Plan. East Norriton Township has the legal authority to set rates and user fees through rules and regulations. East Norriton Township has the existing authority to take enforcement action for violations of adopted ordinances or regulations, negotiate agreement for wastewater treatment and raise capital for construction, operation and maintenance of the sewer system.

6.03 Institutional Alternatives

An update to the Township's Act 537 Plan has been prepared for East Norriton Township. Additional organizations or authorities will not be required to implement the revision. The ENPWJSA Treatment Facility provides the Township's treatment capacity through an Intermunicipal Sewage Treatment Agreement dated May 13, 1991.

6.04 Chosen Alternative

East Norriton Township has updated their Act 537 Plan in order to delineate sewer growth areas and the areas designated to use on-lot sewage disposal, to be consistent with the Township's Comprehensive Plan and zoning ordinances.

The Township should implement the Act 537 Plan Update and continue to monitor, investigate and remediate the sanitary collection and conveyance system to remove and prevent additional extraneous inflow/infiltration to ensure current permitted system capacities are not exceeded.

6.05 Administrative and Legal Activities

East Norriton Township has the legal authority to revise the Act 537 Plan with approval of the PaDEP. Prior to submission of the Act 537 Plan to PaDEP, East Norriton Township will

convene a public meeting after publishing a notice stating the purpose of the meeting, its date, time, and location to hear comments on the proposed plan. This notice is included in Appendix G. The proposed Act 537 Plan will also be forwarded to the Montgomery County Planning Commission (Appendix H), the Montgomery County Health Department (Appendix I) and the East Norriton Township Planning Commission (Appendix J) for review and comment.

East Norriton Township will, after consideration of all comments received by Montgomery County, Pennsylvania and Township agencies and the public, provide a written response which will be included with the Act 537 Plan in Appendix K.

The final adoption of the Act 537 Sewage Facilities Plan must be approved by resolution at a public meeting of the East Norriton Township Board of Supervisors. This resolution is included as Appendix L.

SECTION 7 - SELECTED TREATMENT AND INSTITUTIONAL ALTERNATIVES

7.01 Institutional and Technical Alternatives

East Norriton Township has sufficient annual average capacity at the ENPWJSA Wastewater Treatment Facility for the ultimate build out of the remaining land in the growth areas. Capacity is necessary to accommodate the projected future maximum monthly flow. Participation in the proposed ENPWJSA plant upgrade/expansion will provide East Norriton Township the necessary annual average and maximum monthly capacity to accommodate projected future sewage needs. Expansion of the sanitary collection system is anticipated by private developers for each tract of land. The existing pump stations and conveyance system have sufficient average annual flow capacity for the additional sewerage flows anticipated. Since the plan does not propose extending the existing sanitary sewer collection system by East Norriton Township, a request to review a construction area plan was not sent to the Pennsylvania Natural Diversity Inventory (PNDI) nor the Pennsylvania Historical and Museum Commission.

SECTION 8 - IMPLEMENTATION

8.01 Schedule of Implementation

East Norriton Township anticipates the current planned developments to be completed within the next 10 years. Major capital expenditures by the Township are not anticipated for the future sanitary sewer system expansion as developers will generally be required to extend sewers to serve their proposed projects.

East Norriton Township will participate on a one-third proportionate share of the upgrade and expansion of the ENPWJSA treatment facility. Based on a proposed expansion to 8.7 mgd at the ENPWJSA facility, East Norriton Township would acquire an additional 0.2 mgd of capacity for a total average annual capacity of 2.9 mgd and maximum monthly capacity of 3.7 mgd. The Township will follow the implementation schedule developed by the ENPWJSA in regards to the plant upgrade/expansion.

The proposed schedule for implementing the East Norriton Act 537 Plan Update follows:

No.	Task	Milestone
1	Submit Plan to Township for Review	December 2005
2	Finalize Draft Plan	January 2006
3	Advertise Plan for 30 day Public Comment Period	January 27, 2006
4	Forward Plan for Municipal Agency Reviews	January 27, 2006
5	Public Hearing to Review Plan and Receive Public Comments	February 28, 2006
6	60-Day Municipal/County Review Completion	March 29, 2006
7	Incorporate Public/Municipal/County Comments in Report*	April 18,2006
8	Issue Report for Municipal Adoption	April 18, 2006
9	Execute Municipal Adoption Resolution	April 18, 2006
10	Submit Act 537 Plan Update to PaDEP	April 19, 2006

No.	Task	Milestone
11	Forward Plan to ENPWJSA for incorporation into Authority Plan	April 2006
12	Receive PaDEP Approval	September 2006
13	Apply for Plan Preparation 50% Reimbursement	September 2006
14	Implement Plan Regarding Collection and Conveyance System	September 2006
15	Continue to participate in the ENPWJSA Act 537 Plan Update	2006-2007

*Note: If significant comments are received from municipal agencies, another 30 day public comment period would be appropriate.

TABLES

TABLE 3-1

East Norriton Township
Existing On-Lot Disposal Systems

	OWNER	PARCEL_ADDRESS	Parcel Tax Map Identification
1	GIAIMO JOHN A & PHYLLIS S	2402 ALAN RD	Blk. 010 / Unit 012
2	FLY MARGARET T	2412 ALAN RD	Blk. 010 / Unit 027
3	MOON JAMES E. & ANN L.	322 BRISTOL ST	Blk. 031 / Unit 130
4	GRIFFIN JOSEPH F & CYNTHIA	512 BURNSIDE AVE	Blk. 003D / Unit 001
5	DETWILER WILLIAM H & HELEN D	532 BURNSIDE AVE	Blk. 003D / Unit 003
6	SIEGLE JOHN H 2ND & ESTHER V	530 BURNSIDE AVE	Blk. 003D / Unit 004
7	ROYDS RALPH W & ISABELLE A	536 BURNSIDE AVE	Blk. 003C / Unit 014
8	BEADLE HERBERT R & JEAN M	540 BURNSIDE AVE	Blk. 003C / Unit 013
9	WOLFROM ANNA R	546 BURNSIDE AVE	Blk. 003C / Unit 010
10	STRINGER HARRY & BARBARA T	548 BURNSIDE AVE	Blk. 003C / Unit 009
11	THE RAYMOND J GALULLO TRUST	550 BURNSIDE AVE	Blk. 003C / Unit 008
12	DETWILER & SIEGLE & O'NEILL & VANLA	520 BURNSIDE AVE	Blk. 003C / Unit 001
13	REIGNER RONALD	3208 BUTCHERS LN	Blk. 026 / Unit 024
14	CARBONE BRUNO M	90 CIRAK LANE	Blk. 002B / Unit 129
15	KAYNE PAUL S & LAURIE H	111 CIRAK AVE	Blk. 002B / Unit 016
16	ROBBINS JOSEPH E & JULIA M	109 CIRAK AVE	Blk. 002B / Unit 017
17	GORDON JAMES A JR & THERESA M	107 CIRAK AVE	Blk. 002B / Unit 018
18	ROBBINS BEATRICE D	105 CIRAK AVE	Blk. 002B / Unit 019
19	PETRILLO CARLO & MARIA	103 CIRAK AVE	Blk. 002B / Unit 020
20	ROACH JOHN H & KATHRYN M LIVING TRUST	101 CIRAK LN	Blk. 002B / Unit 021
21	SMITH STEVEN R & MARGARET D	108 CIRAK AVE	Blk. 002B / Unit 015
22	BARDAS RALPH F	106 CIRAK AVE	Blk. 002B / Unit 014
23	JORDAN JOHN P & GEORGEANN T	104 CIRAK AVE	Blk. 002B / Unit 013
24	CASSEL TROY	102 CIRAK LN	Blk. 002B / Unit 012
25	NUTTALL JOHN P & DORIS L	100 CIRAK AVE	Blk. 002B / Unit 011
26	BRADY WILLIAM P & DOLORES M	3200 DEKALB PK	Blk. 025 / Unit 014
27	CHOI SA H & KWUI R	2950 DEKALB PK	Blk. 026 / Unit 019
28	DELAURENTIS JOSEPH & JENNIFER	2008 DEKALB PK	Blk. 028 / Unit 003
29	GAMBONE GEORGE & JANE	2944 DEKALB PK	Blk. 026 / Unit 003
30	GAMBONE JAMES	3208 DEKALB PK	Blk. 025 / Unit 011
31	MAUL ELMER W & LEAH A	3002 DEKALB PK	Blk. 025 / Unit 022
32	DEGNAN JAMES H & MADELINE	2302 DEKALB PK	Blk. 028 / Unit 010
33	ROSS DANIEL M & PAULINE M	2231 DEKALB PK	Blk. 023 / Unit 044
34	GAMBONE SALVATORE & SUSAN	545 FOUNDRY RD	Blk. 002A / Unit 033
35	PROVIDENCE BUSINESS PARK,LLC	553 FOUNDRY RD	Blk. 002A / Unit 024
36	CROWLEYS MILK CO INC	550 FOUNDRY RD	Blk. 002A / Unit 025
37	VILARDO CHRISTINE	200 FRANCIS AVE	Blk. 021 / Unit 020
38	GAMBONE JOHN D	2927 HANNAH AVE	Blk. 026 / Unit 010
39	LEVINS ROBERT & STACEY	2931 HANNAH AVE	Blk. 026 / Unit 027
40	MIDDLETON JOHN MICHAEL &	2935 HANNAH AVE	Blk. 026 / Unit 035
41	YACOVELLI WILLIAM C & CHARLOTTE A	2957 HANNAH AVE	Blk. 026 / Unit 023
42	DIRADO RALPH C & JOAN A	2936 HANNAH AVE	Blk. 026 / Unit 142
43	STANSBERRY SYLVIA & IRMA	2933 HANNAH AVE	Blk. 026 / Unit 024
44	ALOIA JAMES T JR & KAREN J	2951 HANNAH AVE	Blk. 026 / Unit 025
45	WADSET LTD	549 INDUSTRY LN	Blk. 002 / Unit 043
46	MAXWELL JAMES & LEIDY BARBARA	11 JEFFERSON AVE	Blk. 012 / Unit 020
47	LEWSI JAMES J JR. & JANET	102 LAWNTON RD	Blk. 018A / Unit 116
48	NESTER EDWARD & HELEN	550 N TROOPER RD	Blk. 002A / Unit 005

TABLE 3-1

East Norriton Township
Existing On-Lot Disposal Systems

	OWNER	PARCEL_ADDRESS	Parcel Tax Map Identification
49	GEORGE MICHAEL & JODI	2022 N TROOPER RD	Blk. 001 / Unit 035
50	WHITE EDWARD R & BEVERLY J	2020 N TROOPER RD	Blk. 001 / Unit 034
51	KRAUS ADAM R & NICOLE M	2018 N TROOPER RD	Blk. 001 / Unit 033
52	SMITH THOMAS E & ROBERTA E	2016 N TROOPER RD	Blk. 001 / Unit 043
53	BECK GARY A & SUSAN A	2014 N TROOPER RD	Blk. 001 / Unit 032
54	PEEPLES ADAM & BARBARA	2012 N TROOPER RD	Blk. 001 / Unit 031
55	DeCICCO LAURA, JOSEPH N JR & MICHAEL A	2010 N TROOPER RD	Blk. 001 / Unit 030
56	BOSIO JEFFREY & LORI	1218 N TROOPER RD	Blk. 002B / Unit 030
57	CRAVEN WM J & RANDALL T	1216 N TROOPER RD	Blk. 002B / Unit 029
58	MURDOCK CELESTE M & JOHN E SORTOR	1214 N TROOPER RD	Blk. 002B / Unit 028
59	DEPAUL JOSEPH V & ANNA MARIE	1212 N TROOPER RD	Blk. 002B / Unit 027
60	LESHER FRANK M TRUSTEE	1206 N TROOPER RD	Blk. 002B / Unit 025
61	PAESANI DANIEL J & JANE SHARP	1210 N TROOPER RD	Blk. 002B / Unit 026
62	TAUGNER NICHOLAS W & WHITE MARILYN	1200 N TROOPER RD	Blk. 002B / Unit 022
63	LUBAR JASON E & CLARE L BILLETT-LUBAR	912 N TROOPER RD	Blk. 002A / Unit 010
64	HILLSINGER KEVIN D & DONNA R	906 N TROOPER RD	Blk. 002B / Unit 130
65	GUSZ ELIZABETH A	904 N TROOPER RD	Blk. 002B / Unit 131
66	LEPO JOSEPH F JR ROSALIE C	900 N TROOPER RD	Blk. 002B / Unit 100
67	MILLER LUKE	550 N TROOPER RD	Blk. 002A / Unit 005
68	ROSENBERGER ANGIE N & ROBERT P	546 N TROOPER RD	Blk. 002A / Unit 008
69	DELANEY WILLIAM & SUSAN	542 N TROOPER RD	Blk. 002A / Unit 009
70	BUCCI CARMEN A & ELEANOR	540 N TROOPER RD	Blk. 002A / Unit 010
71	J & J PROPERTIES	548 N TROOPER RD	Blk. 002A / Unit 007
72	GAMBONE JOHN	538 N TROOPER RD	Blk. 002A / Unit 011
73	PRESBYTERY OF PHILA TRUST	608 N TROOPER RD	Blk. 002A / Unit 002
74	BATEMAN JOHN G &	2024 N TROOPER RD	Blk. 001 / Unit 036
75	BIERMAAS KEVIN	3114 N WHITEHALL RD	Blk. 004D / Unit 025
76	WARDELL JOHNSON & MARIAN	3028 N WHITEHALL RD	Blk. 004D / Unit 028
77	120 CHURCH ROAD, LP	3029 N WHITEHALL RD	Blk. 004D / Unit 020
78	120 CHURCH ROAD, LP	3025 N WHITEHALL RD	Blk. 004D / Unit 009
79	WHITEHALL VENEZIP, LP c/o GAMBONE DEV. CO	3021 N WHITEHALL RD	Blk. 004D / Unit 010
80	PALLADINO DANIEL C & RUTH G	541 N WHITEHALL RD	Blk. 003A / Unit 011
81	MUGLIA ORESTE & BARBARA	527 N WHITEHALL RD	Blk. 003B / Unit 004
82	EGERTER FREDERICK G & JEAN C	523 N WHITEHALL RD	Blk. 003B / Unit 006
83	DUFFY JAMES F & ANNA M	3104 N WHITEHALL RD	Blk. 004D / Unit 026
84	FRANGIOSO SALVATORE G & BEVERLY ANN	2325 NEW HOPE ST	Blk. 027C / Unit 011
85	TOMCZAK RAYMOND & KATHLEEN	2323 NEW HOPE ST	Blk. 027C / Unit 027
86	DiCIURCIO RICHARD	2219-C NEW HOPE ST	Blk. 027B / Unit 019
87	MITCHELL JOHN F	3223 NOTTINGHAM RD	Blk. 004D / Unit 046
88	KRUSE WILLIAM F & LOIS CAROL	3222 NOTTINGHAM RD	Blk. 004D / Unit 045
89	GOLDBLATT MARSHA W & STEVEN G	3219 NOTTINGHAM RD	Blk. 004D / Unit 037
90	HUMAY EUGENE & JANE	507 OVERHILL RD	Blk. 010 / Unit 034
91	LAWRENCE CHRISTOPHER F & DIANE	3105 POTSHOP RD	Blk. 001 / Unit 008
92	PARKER BARBARA EDELMAN & JAMES	3120 POTSHOP RD	Blk. 003M / Unit 083
93	GILL QUARRIES INC	3201 POTSHOP RD	Blk. 001 / Unit 003
94	MERCANTE PHILIP J	3103 POTSHOP RD	Blk. 001 / Unit 060
95	CIPPERLY ALVIN R & YVONNE C	3107 POTSHOP RD	Blk. 001 / Unit 053
96	PERSEO ANTHONY P & MARISA C	3111 POTSHOP RD	Blk. 001 / Unit 051

TABLE 3-1

East Norriton Township
Existing On-Lot Disposal Systems

	OWNER	PARCEL_ADDRESS	Parcel Tax Map Identification
97	BROUSE FRANK W	2915 POTSHOP RD	Blk. 02B / Unit 008
98	BROUSE FREDERICK W & SALLY B	2917 POTSHOP RD	Blk. 02B / Unit 007
99	CORBO PETER A & HELENE M	2 RICHFIELD RD	Blk. 004 / Unit 038
100	WOODS GOLF CENTER INC	4 RICHFIELD RD	Blk. 004 / Unit 037
101	REESE ROBERT D & JOYCE N	1016 SCHULTZ RD	Blk. 001 / Unit 052
102	MILLER HARRY G & DWAYNE C MILER	1018 SCHULTZ RD	Blk. 001 / Unit 011
103	TUTURICE SALVATORE F & MARY G	1017 SCHULTZ RD	Blk. 001 / Unit 042
104	CAPPARELL JAMES V & MARY T	1021 SCHULTZ RD	Blk. 001 / Unit 017
105	ZIEMBICKI PAUL B & RUTH R	1023 SCHULTZ RD	Blk. 001 / Unit 018
106	NEVE JOS A & MAUREEN	1025 SCHULTZ RD	Blk. 001 / Unit 019
107	MCCLOSKEY JOSEPH E & BRENDA J	1027 SCHULTZ RD	Blk. 001 / Unit 020
108	SZCZEPKOWICZ VICTOR S & THERESA A	1029 SCHULTZ RD	Blk. 001 / Unit 021
109	MENDELSOHN JENNIFER	319 SHAMOKIN ST	Blk. 031 / Unit 106
110	CHRISTMAN REGINALD & NORMAN	331 SHAMOKIN ST	Blk. 031 / Unit 110
111	HEUR GEORGE W & SUSAN M	2400 STANBRIDGE ST	Blk. 005D / Unit 041
112	FALLEN JOSEPH & RENA	3105 SUNSET AVE	Blk. 003G / Unit 069
113	NAVE RALPH T & TANYA	3206 SUNSET AVE	Blk. 04D / Unit 048
114	PAOLUCCI JOHN & JOANNE	2900 SUNSET AVE	Blk. 004 / Unit 019
115	DEAN JAMES S & FRANCES H	2943 SUNSET AVE	Blk. 003F / Unit 010
116	ORDWAY ANTHONY, CECIL, FAY &	2941 SUNSET AVE	Blk. 003F / Unit 009
117	BAIRD NELSON M JR & IRENE	2939 SUNSET AVE	Blk. 003F / Unit 008
118	BAIRD HARRY L AS TRUSTEE - H BAIRD TRUST	2937 SUNSET AVE	Blk. 003F / Unit 007
119	HSU FU-CHUN & CHE-HSIANG WANG	2935 SUNSET AVE	Blk. 003F / Unit 006
120	TESTA CHAS J JR & CHRISTINE J	2933 SUNSET AVE	Blk. 003F / Unit 005
121	SMYTH WILLIAM J & JANET L	2931 SUNSET AVE	Blk. 003F / Unit 004
122	GOTTSHALL HOMER & LOIS W	2929 SUNSET AVE	Blk. 003F / Unit 003
123	SANTANGELO JAMES B &	2921 SUNSET AVE	Blk. 003F / Unit 001
124	SIRAVO MARK & AMIE	2917 SUNSET AVE	Blk. 003E / Unit 006
125	KEN-CREST HOUSING PA	2915 SUNSET AVE	Blk. 003E / Unit 008
126	MACDONALD JOSEPH & JANET L	2913 SUNSET AVE	Blk. 003E / Unit 008
127	BUTTERFIELD AMY J & JASON L	2907 SUNSET AVE	Blk. 003E / Unit 004
128	POWER MICHAEL F & SCHMIDT KIMBERLY	2905 SUNSET AVE	Blk. 003E / Unit 003
129	CROWLE BENJAMINI & DOREEN C	2903 SUNSET AVE	Blk. 003E / Unit 002
130	GRANESE GERARDO & ROSA & LIODORO I	3226 SUNSET AVE	Blk. 004D / Unit 011
131	HAND & HARMAN TUBE CO INC	SUNSET AVE	Blk. 004D / Unit 003
132	CHILSON PATRICK	3216 SUNSET AVE	Blk. 004D / Unit 013
133	KORKUS ANDREW J & MICHELE GALANTI	3214 SUNSET AVE	Blk. 004D / Unit 014
134	KLINE JAMES BRADFORD & KRISTY P	3210 SUNSET AVE	Blk. 004D / Unit 016
135	MASTROCOLA ROBERTO	3212 SUNSET AVE	Blk. 004D / Unit 015
136	SHOULBERG RICHARD W & MARY LOU	3208 SUNSET AVE	Blk. 004D / Unit 049
137	SCHMITZ WILLIAM J JR & JOAN M	3202 SUNSET AVE	Blk. 004D / Unit 017
138	O'CONNOR THOMAS S & JULIE ANN	3200 SUNSET AVE	Blk. 004D / Unit 018
139	IANACONE JOHN J & CYNTHIA D'AMBROSI	3176 SUNSET AVE	Blk. 004D / Unit 056
140	MANUOLA COLLEEN	3174 SUNSET AVE	Blk. 004D / Unit 057
141	HOUSEAL GEORGE I & JANET R	3170 SUNSET AVE	Blk. 004 / Unit 001
142	DIGIOVANNANTONIO JAMES & MARIE	3168 SUNSET AVE	Blk. 004 / Unit 011
143	ABBETT GERALD M & VIVIAN B	3154 SUNSET AVE	Blk. 004 / Unit 008
144	LAW STEVEN R	3152 SUNSET AVE	Blk. 004 / Unit 077

TABLE 3-1

East Norriton Township
Existing On-Lot Disposal Systems

	OWNER	PARCEL_ADDRESS	Parcel Tax Map Identification
145	LUGO DAVID	3148 SUNSET AVE	Blk. 004 / Unit 082
146	JAMES THERESA A	2936 SUNSET AVE	Blk. 004H / Unit 016
147	JONES PATRICIA N	2932 SUNSET AVE	Blk. 004 / Unit 095
148	NATALE ANTONIO & MARIA	2928 SUNSET AVE	Blk. 004 / Unit 015
149	CAIN ALICE B	2914 SUNSET AVE	Blk. 004 / Unit 051
150	ELKO MARK M & LANCE M ECHTERNACH	2918 SUNSET AVE	Blk. 004 / Unit 045
151	HENDEL ROBERT J & PATRICIA M	2910 SUNSET AVE	Blk. 004 / Unit 043
152	GROW THOMAS PAUL	2904 SUNSET AVE	Blk. 004 / Unit 084
153	ZAFFARANO FRANK A & FRANCES A	2803 SWEDE RD	Blk. 005B / Unit 027
154	DECARME WILLIAM C & JEAN R	2206 SWEDE RD	Blk. 019 / Unit 004
155	BARRINGTON SAMUEL H & DORIS H	W TOWNSHIP LINE RD	Blk. 006 / Unit 006 (Priority I Preservation)
156	BARTEK JOSEPH J & MARIETTS A	123 W TOWNSHIP LINE RD	Blk. 006 / Unit 073
157	DOERNER JOHN M & SYLVIA A	113 W TOWNSHIP LINE RD	Blk. 006 / Unit 015
158	FILORETO JOHN A	115 W TOWNSHIP LINE RD	Blk. 006 / Unit 018
159	GILL QUARRIES INC	1211 W TOWNSHIP LINE RD	Blk. 001 / Unit 057
160	KNIGHT KENNETH J	109 W TOWNSHIP LINE RD	Blk. 006 / Unit 019
161	LEPOLD AGNES G	129 W TOWNSHIP LINE RD	Blk. 006 / Unit 036
162	OLIVET REFORMED CHURCH OF PHILA	619 W TOWNSHIP LINE RD	Blk. 004D / Unit 030 (Priority I Preservation)
163	ROGERS THOMAS W & MARY ANN	121 W TOWNSHIP LINE RD	Blk. 006 / Unit 071
164	SCHULTZ BERNARD J & BELLA	117 W TOWNSHIP LINE RD	Blk. 006 / Unit 017
165	SEGAL STANLEY J & ADELE	127 W TOWNSHIP LINE RD	Blk. 006 / Unit 035
166	SEIDERS THERESA F / WATERMAN SUSANNE	419 W TOWNSHIP LINE RD	Blk. 006 / Unit 004
167	SIEGLE FREDERICK C JR & T MARION	417 W TOWNSHIP LINE RD	Blk. 006 / Unit 049
168	STACK MATTHEW R	411 W TOWNSHIP LINE RD	Blk. 006 / Unit 028
169	TRANKLE KENNETH P & PAULETTE	617 W TOWNSHIP LINE RD	Blk. 004G / Unit 039 (Priority I Preservation)
170	KLEM PATRICK & TAMI	1241 W TOWNSHIP LINE RD	Blk. 001 / Unit 037
171	BOYLE HIGH W & SANDRA L	1239 W TOWNSHIP LINE RD	Blk. 001 / Unit 038
172	MARTIN DAVID N	1237 W TOWNSHIP LINE RD	Blk. 001 / Unit 039
173	NEWMAN CHARLES L & SHIRLEY S	1235 W TOWNSHIP LINE RD	Blk. 001 / Unit 047
174	NEWMAN ROBERT & CATHERINE F	1233 W TOWNSHIP LINE RD	Blk. 001 / Unit 040
175	PUMO JOHN P & KATHLEEN D	1229 W TOWNSHIP LINE RD	Blk. 001 / Unit 0
176	GILL QUARRIES INC	1215 W TOWNSHIP LINE RD	Blk. 001 / Unit 055
177	BANKO RONALD C	613 W TOWNSHIP LINE RD	Blk. 004G / Unit 021
178	ZUCK DALE A & RAY A	421 W TOWNSHIP LINE RD	Blk. 006 / Unit 061
179	SEIDERS THERESA F / WATERMAN	111 W TOWNSHIP LINE RD	Blk. 006 / Unit 020
180	BISHOP FRANK R & SUSAN C	541 W GERMANTOWN PK	Blk. 004 / Unit 040
181	DAVIS WILLIAM JR & JANE E	334 W GERMANTOWN PK	Blk. 005 / Unit 012
182	TURANO DANTE A & CHRISTINE N	1052 W GERMANTOWN PK	Blk. 002A / Unit 013
183	MAXI GROUP & GAMBONE BROS	1044 W GERMANTOWN PK	Blk. 002A / Unit 017
184	GAMBONE BROS DEV CORP	1036 W GERMANTOWN PK	Blk. 002A / Unit 020
185	SHARON G CORP	1030 W GERMANTOWN PK	Blk. 002A / Unit 026
186	GORMAN GEORGE J JR & EVELYN C	1026 W GERMANTOWN PK	Blk. 002A / Unit 027
187	VENTO PHILIP A	1022 W GERMANTOWN PK	Blk. 002A / Unit 028
188	BONGIOVI FRANK & JEAN	1018 W GERMANTOWN PK	Blk. 002A / Unit 029
189	1010 GERMANTOWN PIKE ASSOCIATES	1012 W GERMANTOWN PK	Blk. 002A / Unit 030
190	ENIP-5, A PENNA LIMITED PARTNERSHIP	1008 W GERMANTOWN PK	Blk. 002 / Unit 031
191	GRISAFI JOSEPH & SUSAN	834 W GERMANTOWN PK	Blk. 003C / Unit 005
192	SHEARN VICTOR F & PATRICIA MORETTI	832 W GERMANTOWN PK	Blk. 003C / Unit 004

TABLE 3-1

East Norriton Township
Existing On-Lot Disposal Systems

	OWNER	PARCEL_ADDRESS	Parcel Tax Map Identification
193	KRANICH RALPH & LUCINDA	824 W GERMANTOWN PK	Blk. 003C / Unit 002
194	GREATER NORRISTOWN ART LEAGUE	800 W GERMANTOWN PK	Blk. 003B / Unit 003
195	SKROLLING STONE INVESTMENTS LLC	716 W GERMANTOWN PK	Blk. 003A / Unit 038
196	ALFONSE JOHN T JR	1055 W GERMANTOWN PK	Blk. 002A / Unit 015
197	GLENN FARM, LP	1005 W GERMANTOWN PK	Blk. 002A / Unit 019
198	LFT REALTY	911 W GERMANTOWN PK	Blk. 003 / Unit 005
199	WOODS GOLF CENTER INC	549 W GERMANTOWN PK	Blk. 004 / Unit 024
200	BEYER RUTH M	117 W HARTRANFT BLVD	Blk. 023 / Unit 032
201	THOMAS CHARLES & JULIE	218 WARSAW ST	Blk. 030 / Unit 010
202	BOSLER JOHN R JR & DOROTHY	3032 N WHITEHALL RD	Blk. 004D / Unit 008
203	KEITH TORNETTA	N WHITEHALL RD	Blk. 004D / Unit 021
204	WOOD S GOLF CENTER INC	N WHITEHALL RD	Blk. 004D / Unit 020
205	KUMPF ROBERT E & ROSEANN F	1102 WOODLAND AVE	Blk. 001 / Unit 054
206	FAIRVIEW VILLAGE CONGREGATION OF	1120 WOODLAND AVE	Blk. 001 / Unit 062
207	PAULIN H DOUGLAS	1018 WOODLAND AVE	Blk. 001 / Unit 061
208	SAPOVITS STEVEN R & SUSAN	1012 WOODLAND AVE	Blk. 001 / Unit 046
209	WOLFE JAMES L & PATRICIA E	1008 WOODLAND AVE	Blk. 001 / Unit 049

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
1/1/2002		3191054	1.172							
1/2/2002		3192226	1.212							
1/3/2002		3193438	1.218							
1/4/2002		3194656	1.160							
1/5/2002		3195816	1.217							
1/6/2002	1.10	3197033	1.802							
1/7/2002	0.15	3198835	1.612							
1/8/2002		3200447	1.378							
1/9/2002	0.05	3201825	1.367							
1/10/2002		3203192	1.554							
1/11/2002	0.35	3204746	2.355							
1/12/2002		3207101	1.728							
1/13/2002		3208829	1.476							
1/14/2002		3210305	1.321							
1/15/2002		3211626	1.272							
1/16/2002		3212898	1.247							
1/17/2002		3214145	1.277							
1/18/2002		3215422	1.170							
1/19/2002	0.60	3216592	1.416							
1/20/2002		3218008	1.298							
1/21/2002		3219306	1.214							
1/22/2002		3220520	1.298							
1/23/2002		3221818	1.497							
1/24/2002	0.85	3223315	2.898							
1/25/2002		3226213	1.930							
1/26/2002		3228143	1.620							
1/27/2002		3229763	1.313							
1/28/2002		3231076	1.368							
1/29/2002		3232444	1.309							
1/30/2002		3233753	1.612							
1/31/2002		3235365	1.815							
2/1/2002	0.10	3237180	1.858							
2/2/2002		3239038	1.652							
2/3/2002		3240690	1.459							
2/4/2002		3242149	1.421							
2/5/2002		3243570	1.386							
2/6/2002		3244956	1.334							
2/7/2002	0.05	3246290	1.416							
2/8/2002		3247706	1.331							
2/9/2002		3249037	1.399							
2/10/2002	0.10	3250436	1.459							
2/11/2002		3251895	1.365							
2/12/2002		3253260	1.295							
2/13/2002		3254555	1.244							
2/14/2002		3255799	1.233							
2/15/2002		3257032	1.351							
2/16/2002		3258383	1.507							
2/17/2002		3259890	0.954							
2/18/2002		3260844	1.355							
2/19/2002		3262199	1.159							
2/20/2002	0.15	3263358	1.280							
2/21/2002		3264638	1.362							
2/22/2002		3266000	1.132							
2/23/2002		3267132	1.289							
2/24/2002		3268421	1.226							
2/25/2002		3269647	1.202							
2/26/2002		3270849	1.197							
2/27/2002		3272046	1.166							
2/28/2002		3273212	1.169							
3/1/2002		3274381	1.206							

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
3/2/2002		3275587	2.120							
3/3/2002	1.25	3277707	2.001							
3/4/2002		3279708	1.586							
3/5/2002		3281294	1.448							
3/6/2002		3282742	1.369							
3/7/2002		3284111	1.741							
3/8/2002		3285852	0.957							
3/9/2002		3286809	1.490							
3/10/2002	0.10	3288299	1.292							
3/11/2002		3289591	1.312							
3/12/2002		3290903	1.258							
3/13/2002	0.25	3292161	1.536							
3/14/2002		3293697	1.397							
3/15/2002		3295094	1.307							
3/16/2002		3296401	1.375							
3/17/2002	0.70	3297776	1.819							
3/18/2002		3299595	2.552							
3/19/2002		3302147	1.920							
3/20/2002	1.10	3304067	4.290							
3/21/2002		3308357	2.583							
3/22/2002		3310940	2.028							
3/23/2002		3312968	1.834							
3/24/2002		3314802	1.807							
3/25/2002		3316609	1.592							
3/26/2002	0.60	3318201	2.075							
3/27/2002		3320276	2.193							
3/28/2002		3322469	2.098							
3/29/2002		3324567	1.638							
3/30/2002		3326205	1.798							
3/31/2002	0.25	3328003	1.688							
4/1/2002		3329691	1.809							
4/2/2002		3331500	1.557							
4/3/2002		3333057	1.654							
4/4/2002		3334711	1.508							
4/5/2002		3336219	1.488							
4/6/2002		3337707	1.726							
4/7/2002		3339433	1.200							
4/8/2002		3340633	1.622							
4/9/2002	0.10	3342255	1.268							
4/10/2002		3343523	1.409							
4/11/2002		3344932	1.359							
4/12/2002	0.20	3346291	2.139							
4/13/2002		3348430	1.065							
4/14/2002	0.10	3349495	1.343							
4/15/2002		3350838	1.438							
4/16/2002		3352276	1.419							
4/17/2002		3353695	1.312							
4/18/2002		3355007	1.342							
4/19/2002	0.30	3356349	1.340							
4/20/2002		3357689	1.471							
4/21/2002	0.30	3359160	1.474							
4/22/2002	0.10	3360634	1.598							
4/23/2002		3362232	1.424							
4/24/2002		3363656	1.372							
4/25/2002	0.20	3365028	1.503							
4/26/2002		3366531	1.336							
4/27/2002		3367867	2.067							
4/28/2002	1.10	3369934	2.236							
4/29/2002		3372170	1.851							
4/30/2002	0.20	3374021	1.838							

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
5/1/2002		3375859	1.722							
5/2/2002	0.45	3377581	2.164							
5/3/2002		3379745	1.838							
5/4/2002		3381583	2.068							
5/5/2002		3383651	1.279							
5/6/2002		3384930	1.556							
5/7/2002		3386486	1.491							
5/8/2002		3387977	1.470							
5/9/2002	0.70	3389447	1.914							
5/10/2002		3391361	1.849							
5/11/2002		3393210	1.980							
5/12/2002	0.65	3395190	1.089							
5/13/2002	0.95	3396279	2.820							
5/14/2002		3399099	2.442							
5/15/2002		3401541	2.030							
5/16/2002		3403571	1.796							
5/17/2002		3405367	2.526							
5/18/2002	1.70	3407893	4.407							
5/19/2002		3412300	2.452							
5/20/2002		3414752	2.266							
5/21/2002		3417018	2.031							
5/22/2002		3419049	1.878							
5/23/2002		3420927	1.819							
5/24/2002		3422746	1.836							
5/25/2002		3424582	1.557							
5/26/2002	0.10	3426139	1.647							
5/27/2002	0.10	3427786	1.671							
5/28/2002		3429457	1.619							
5/29/2002		3431076	1.560							
5/30/2002		3432636	1.497							
5/31/2002		3434133	1.330							
6/1/2002		3435463	1.614							
6/2/2002		3437077	1.586							
6/3/2002		3438663	1.375							
6/4/2002		3440038	1.388							
6/5/2002		3441426	1.405							
6/6/2002	2.50	3442831	2.615							
6/7/2002		3445446	2.271							
6/8/2002		3447717	1.839							
6/9/2002		3449556	1.396							
6/10/2002		3450952	1.613							
6/11/2002	0.20	3452565	1.680							
6/12/2002		3454245	1.573							
6/13/2002	0.20	3455818	1.571							
6/14/2002	0.50	3457389	2.051							
6/15/2002	0.10	3459440	2.106							
6/16/2002		3461546	1.551							
6/17/2002		3463097	1.634							
6/18/2002	0.20	3464731	1.633							
6/19/2002	0.25	3466364	1.672							
6/20/2002		3468036	1.578							
6/21/2002		3469614	1.690							
6/22/2002		3471304	1.473							
6/23/2002		3472777	1.392							
6/24/2002	0.30	3474169	1.535							
6/25/2002		3475704	1.442							
6/26/2002		3477146	1.443							
6/27/2002	0.80	3478589	1.764							
6/28/2002		3480353	1.627							
6/29/2002		3481980	1.521							

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
6/30/2002		3483501	1.552							
7/1/2002		3485053	1.466							
7/2/2002		3486519	1.425							
7/3/2002		3487944	1.437							
7/4/2002		3489381	1.438							
7/5/2002		3490819	1.313							
7/6/2002		3492132	1.382							
7/7/2002		3493514	1.192							
7/8/2002		3494706	1.384							
7/9/2002	0.80	3496090	1.468							
7/10/2002		3497558	1.406							
7/11/2002		3498964	1.354							
7/12/2002		3500318	1.450							
7/13/2002		3501768	1.407							
7/14/2002		3503175	1.189							
7/15/2002		3504364	1.342							
7/16/2002		3505706	1.256							
7/17/2002		3506962	1.295							
7/18/2002		3508257	1.248							
7/19/2002	0.20	3509505	1.428							
7/20/2002		3510933	1.359							
7/21/2002		3512292	1.171							
7/22/2002		3513463	1.238							
7/23/2002	0.20	3514701	1.301							
7/24/2002		3516002	1.285							
7/25/2002		3517287	1.232							
7/26/2002		3518519	1.228							
7/27/2002		3519747	1.253							
7/28/2002		3521000	1.316							
7/29/2002		3522316	1.276							
7/30/2002		3523592	1.238							
7/31/2002		3524830	1.381							
8/1/2002	0.10	3526211	1.058							
8/2/2002	0.20	3527269	0.945							
8/3/2002	0.20	3528214	1.705							
8/4/2002		3529919	1.266							
8/5/2002	0.10	3531185	1.288							
8/6/2002		3532473	1.221							
8/7/2002		3533694	0.708							
8/8/2002		3534402	1.716							
8/9/2002		3536118	1.197							
8/10/2002		3537315	1.212							
8/11/2002		3538527	1.262							
8/12/2002		3539789	1.193							
8/13/2002		3540982	1.188							
8/14/2002		3542170	1.239							
8/15/2002		3543409	1.175							
8/16/2002		3544584	1.383							
8/17/2002		3545967	1.336							
8/18/2002		3547303	0.997							
8/19/2002	0.10	3548300	1.197							
8/20/2002		3549497	1.218							
8/21/2002		3550715	1.177							
8/22/2002		3551892	1.168							
8/23/2002		3553060	1.196							
8/24/2002	1.10	3554256	1.631							
8/25/2002		3555887	1.038							
8/26/2002		3556925	1.378							
8/27/2002		3558303	1.021							
8/28/2002		3559324	1.376							

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
8/29/2002		3560700	1.522							
8/30/2002	1.15	3562222	1.245							
8/31/2002		3563467	1.308							
9/1/2002	0.80	3564775	1.808							
9/2/2002		3566583	1.456							
9/3/2002		3568039	1.342							
9/4/2002		3569381	1.231							
9/5/2002		3570612	1.268							
9/6/2002		3571880	1.160							
9/7/2002		3573040	1.351							
9/8/2002		3574391	1.225							
9/9/2002		3575616	1.213							
9/10/2002		3576829	1.145							
9/11/2002		3577974	1.229							
9/12/2002		3579203	1.517							
9/13/2002		3580720	0.952							
9/14/2002		3581672	1.223							
9/15/2002	0.50	3582895	1.447							
9/16/2002		3584342	1.139							
9/17/2002		3585481	1.196							
9/18/2002		3586677	1.159							
9/19/2002		3587836	1.153							
9/20/2002		3588989	1.130							
9/21/2002		3590119	1.293							
9/22/2002		3591412	1.326							
9/23/2002		3592738	1.214							
9/24/2002		3593952	1.181							
9/25/2002		3595133	1.174							
9/26/2002	2.00	3596307	1.950							
9/27/2002	0.50	3598257	2.037							
9/28/2002		3600294	1.679							
9/29/2002		3601973	1.363							
9/30/2002		3603336	1.309							
10/1/2002		3604645	1.258							
10/2/2002		3605903	1.249							
10/3/2002	0.10	3607152	1.312							
10/4/2002		3608464	1.355							
10/5/2002		3609819	1.378							
10/6/2002		3611197	1.297							
10/7/2002		3612494	1.239							
10/8/2002		3613733	1.239							
10/9/2002		3614972	1.253							
10/10/2002	1.00	3616225	1.714							
10/11/2002	0.90	3617939	2.916							
10/12/2002		3620855	1.983							
10/13/2002		3622838	1.455							
10/14/2002		3624293	1.478							
10/15/2002		3625771	1.369							
10/16/2002	1.15	3627140	2.646							
10/17/2002	0.05	3629786	1.794							
10/18/2002		3631580	1.858							
10/19/2002		3633438	1.597							
10/20/2002		3635035	1.051							
10/21/2002		3636086	1.368							
10/22/2002		3637454	1.387							
10/23/2002		3638841	1.256							
10/24/2002		3640097	1.323							
10/25/2002		3641420	1.962							
10/26/2002	0.90	3643382	2.047							
10/27/2002		3645429	1.482							

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
10/28/2002		3646911	1.520							
10/29/2002	0.80	3648431	2.188							
10/30/2002	0.80	3650619	3.475							
10/31/2002		3654094	2.285							
11/1/2002	0.10	3656379	2.059							
11/2/2002		3658438	1.825							
11/3/2002		3660263	1.737							
11/4/2002		3662000	1.633							
11/5/2002	0.50	3663633	1.927							
11/6/2002		3665560	2.044							
11/7/2002		3667604	1.780							
11/8/2002		3669384	1.752							
11/9/2002		3671136	1.742							
11/10/2002		3672878	1.593							
11/11/2002	0.10	3674471	1.541							
11/12/2002	1.00	3676012	3.296							
11/13/2002		3679308	2.518							
11/14/2002		3681826	2.006							
11/15/2002		3683832	2.116							
11/16/2002	1.10	3685948	4.776							
11/17/2002	1.00	3690724	4.053							
11/18/2002		3694777	3.671							
11/19/2002		3698448	2.631							
11/20/2002		3701079	2.293							
11/21/2002	0.10	3703372	2.196							
11/22/2002	0.25	3705568	2.515							
11/23/2002		3708083	2.131							
11/24/2002		3710214	2.059							
11/25/2002		3712273	1.929							
11/26/2002	0.40	3714202	1.923							
11/27/2002		3716125	2.418							
11/28/2002		3718543	1.947							
11/29/2002		3720490	2.137							
11/30/2002		3722627	1.714							
12/1/2002		3724341	1.756							
12/2/2002		3726097	1.683							
12/3/2002		3727780	1.611							
12/4/2002		3729391	1.502							
12/5/2002	0.80	3730893	1.641							
12/6/2002		3732534	1.624							
12/7/2002		3734158	1.612							
12/8/2002		3735770	1.706							
12/9/2002		3737476	1.568							
12/10/2002		3739044	1.535							
12/11/2002	1.70	3740579	4.491							
12/12/2002		3745070	4.603							
12/13/2002	0.60	3749673	4.709							
12/14/2002	0.10	3754382	5.117							
12/15/2002		3759499	2.676							
12/16/2002		3762175	2.687							
12/17/2002		3764862	2.317							
12/18/2002		3767179	2.168							
12/19/2002		3769347	2.108							
12/20/2002	0.60	3771455	3.726							
12/21/2002		3775181	3.126							
12/22/2002		3778307	1.720							
12/23/2002		3780027	2.641							
12/24/2002		3782668	1.862							
12/25/2002	1.50	3784530	4.408							
12/26/2002		3788938	3.599							

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
12/27/2002		3792537	3.203							
12/28/2002		3795740	2.772							
12/29/2002		3798512	2.319							
12/30/2002		3800831	2.468							
12/31/2002	43.55	3803299	2.503							
Annual Avg.	**2002**		**1.684**							
	Gravity to Sawmill PS		0.060							
	Total ENT annual ADF		**1.744**							
1/1/2003	1.10	3805802	4.659	2249564	3.529	1007834	1.835	0.2087		
1/2/2003		3810461	3.888	2253093	2.524	1009669	1.387	0.0052		
1/3/2003	0.40	3814349	4.552	2255617	2.858	1011056	1.502			
1/4/2003		3818901	3.359	2258475	2.150	1012558	1.061			
1/5/2003	0.40	3822260	2.660	2260625	1.666	1013619	0.804			
1/6/2003		3824920	2.984	2262291	1.969	1014423	0.882			
1/7/2003		3827904	2.656	2264260	1.599	1015305	0.739			
1/8/2003		3830560	2.699	2265859	1.573	1016044	0.771			
1/9/2003		3833259	2.501	2267432	1.585	1016815	0.697			
1/10/2003		3835760	2.362	2269017	1.278	1017512	0.609			
1/11/2003		3838122	2.260	2270295	1.332	1018121	0.580			
1/12/2003		3840382	2.301	2271627	2.362	1018701	0.551			
1/13/2003		3842683	1.842	2273989	0.170	1019252	0.538			
1/14/2003		3844525	1.904	2274159	1.037	1019790	0.440			
1/15/2003		3846429	1.802	2275196	0.995	1020230	0.366			
1/16/2003	0.10	3848231	1.759	2276191	0.986	1020596	0.373			
1/17/2003		3849990	1.759	2277177	0.826	1020969	0.337			
1/18/2003		3851749	1.957	2278003	1.077	1021306	0.421			
1/19/2003		3853706	1.642	2279080	0.893	1021727	0.340			
1/20/2003		3855348	1.629	2279973	0.999	1022067	0.371			
1/21/2003		3856977	1.605	2280972	0.868	1022438	0.326			
1/22/2003		3858582	1.534	2281840	0.780	1022764	0.285			
1/23/2003		3860116	1.559	2282620	0.833	1023049	0.308			
1/24/2003		3861675	2.118	2283453	0.984	1023357	0.369			
1/25/2003		3863793	1.102	2284437	0.582	1023726	0.215			
1/26/2003		3864895	1.522	2285019	0.889	1023941	0.332			
1/27/2003		3866417	1.488	2285908	0.763	1024273	0.280			
1/28/2003		3867905	1.568	2286671	0.781	1024553	0.275			
1/29/2003	0.20	3869473	1.261	2287452	0.712	1024828	0.272			
1/30/2003		3870734	1.423	2288164	0.712	1025100	0.242			
1/31/2003		3872157	1.544	2288876	0.766	1025342	0.284			
2/1/2003		3873701	1.602	2289642	0.868	1025626	0.326			
2/2/2003		3875303	1.380	2290510	0.879	1025952	0.332			
2/3/2003		3876683	1.495	2291389	0.808	1026284	0.320			
2/4/2003	0.25	3878178	1.784	2292197	1.191	1026604	0.462			
2/5/2003		3879962	1.479	2293388	0.677	1027066	0.294			
2/6/2003		3881441	1.840	2294065	0.905	1027360	0.383			
2/7/2003	0.90	3883281	1.419	2294970	0.833	1027743	0.297			
2/8/2003		3884700	1.300	2295803	0.647	1028040	0.248			
2/9/2003		3886000	1.449	2296450	0.870	1028288	0.341			
2/10/2003	0.10	3887449	1.473	2297320	0.816	1028629	0.326			
2/11/2003		3888922	1.597	2298136	0.843	1028955	0.322			
2/12/2003		3890519	1.279	2298979	0.736	1029277	0.264			
2/13/2003		3891798	1.372	2299715	0.747	1029541	0.272			
2/14/2003		3893170	1.371	2300462	0.688	1029813	0.253			
2/15/2003		3894541	1.440	2301150	0.746	1030066	0.293			
2/16/2003	1.00	3895981	1.479	2301896	0.846	1030359	0.351			
2/17/2003	1.50	-	1.479		0.846		0.351			
2/18/2003		3898939	1.211	2303588	0.833	1031060	0.218			

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
2/19/2003		3900150	1.362	2304421	0.685	1031278	0.301			
2/20/2003		3901512	1.621	2305106	0.930	1031579	0.393			
2/21/2003	0.30	3903133	2.152	2306036	1.220	1031972	0.572			
2/22/2003	2.20	3905285	7.106	2307256	4.576	1032544	2.259	0.2413		
2/23/2003		3912391	5.285	2311832	3.538	1034803	1.919			
2/24/2003		3917676	3.090	2315370	2.247	1036722	1.186			
2/25/2003		3920766	2.745	2317617	1.732	1037908	0.791			
2/26/2003		3923511	2.365	2319349	1.298	1038699	0.618			
2/27/2003		3925876	2.119	2320647	1.241	1039317	0.495			
2/28/2003	0.20	3927995	2.469	2321888	1.324	1039812	0.613			
3/1/2003		3930464	2.293	2323212	1.328	1040425	0.572			
3/2/2003	0.70	3932757	4.418	2324540	3.600	1040997	1.708	0.2897		
3/3/2003		3937175	3.737	2328140	1.961	1042705	1.141			
3/4/2003		3940912	2.590	2330101	1.669	1043846	0.845			
3/5/2003	0.30	3943502	5.227	2331770	3.354	1044691	1.723	0.0382		
3/6/2003	0.80	3948729	4.915	2335124	3.617	1046414	1.929	0.2066		
3/7/2003		3953644	4.232	2338741	2.527	1048343	1.222			
3/8/2003		3957876	3.773	2341268	2.446	1049565	1.234			
3/9/2003		3961649	4.299	2343714	2.973	1050799	1.551	0.0507		
3/10/2003		3965948	3.252	2346687	2.044	1052350	0.932			
3/11/2003		3969200	2.823	2348731	1.658	1053282	0.752			
3/12/2003		3972023	3.116	2350389	2.158	1054034	0.896			
3/13/2003		3975139	3.209	2352547	1.737	1054930	0.952			
3/14/2003		3978348	3.153	2354284	1.892	1055882	0.856			
3/15/2003		3981501	2.837	2356176	1.737	1056738	0.787			
3/16/2003		3984338	2.587	2357913	1.621	1057525	0.750			
3/17/2003		3986925	2.730	2359534	1.754	1058275	0.799			
3/18/2003		3989655	2.422	2361288	1.503	1059074	0.655			
3/19/2003		3992077	2.231	2362791	1.173	1059729	0.515			
3/20/2003	1.30	3994308	4.899	2363964	3.530	1060244	1.665	0.0977		
3/21/2003		3999207	4.400	2367494	2.621	1061909	1.459	0.1128		
3/22/2003		4003607	3.378	2370115	2.131	1063368	0.991			
3/23/2003		4006985	2.866	2372246	1.682	1064359	0.770			
3/24/2003		4009851	2.531	2373928	1.530	1065129	0.620			
3/25/2003		4012382	2.311	2375458	1.315	1065749	0.557			
3/26/2003	0.30	4014693	2.514	2376773	1.490	1066306	0.652			
3/27/2003		4017207	2.306	2378263	1.327	1066958	0.569			
3/28/2003		4019513	2.103	2379590	1.046	1067527	0.454			
3/29/2003	0.30	4021616	2.614	2380636	1.595	1067981	0.755			
3/30/2003	0.30	4024230	3.025	2382231	2.196	1068736	1.108			
3/31/2003		4027255	2.574	2384427	1.676	1069844	0.815			
4/1/2003	0.15	4029829	2.440	2386103	1.621	1070659	0.790			
4/2/2003		4032269	2.421	2387724	1.430	1071449	0.696			
4/3/2003		4034690	2.161	2389154	1.259	1072145	0.574			
4/4/2003		4036851	2.013	2390413	1.191	1072719	0.511			
4/5/2003			2.013		1.191		0.511			
4/6/2003			2.013		1.191		0.511			
4/7/2003	0.50	4042891	2.491	2393985	1.632	1074251	0.781			
4/8/2003		4045382	2.407	2395617	1.546	1075032	0.736			
4/9/2003	0.35	4047789	3.315	2397163	2.296	1075768	1.261			
4/10/2003		4051104	2.772	2399459	1.856	1077029	0.918			
4/11/2003	0.80	4053876	3.765	2401315	2.536	1077947	1.349	0.0224		
4/12/2003			3.765		2.536		1.349			
4/13/2003			3.765		2.536		1.349			
4/14/2003		4065171	2.626	2408923	1.565	1081993	0.728			
4/15/2003		4067797	2.418	2410488	1.444	1082721	0.617			
4/16/2003		4070215	2.175	2411932	1.242	1083338	0.532			
4/17/2003		4072390	2.016	2413174	1.146	1083870	0.458			
4/18/2003			2.016		1.146		0.458			
4/19/2003	0.20		2.016		1.146		0.458			

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
4/20/2003			2.016		1.146		0.458			
4/21/2003		4080454	1.969	2417759	1.054	1085703	0.409			
4/22/2003		4082423	1.903	2418813	1.100	1086112	0.434			
4/23/2003		4084326	1.790	2419913	0.937	1086546	0.382			
4/24/2003		4086116	1.746	2420850	0.943	1086928	0.354			
4/25/2003		4087862	1.906	2421793	1.075	1087282	0.457			
4/26/2003	0.30		1.906		1.075		0.457			
4/27/2003			1.906		1.075		0.457			
4/28/2003		4093581	1.738	2425019	0.986	1088652	0.397			
4/29/2003		4095319	1.652	2426005	0.905	1089049	0.354			
4/30/2003		4096971	1.635	2426910	0.887	1089403	0.310			
5/1/2003		4098606	1.617	2427797	0.858	1089713	0.330			
5/2/2003		4100223	1.592	2428655	0.843	1090043	0.324			
5/3/2003			1.592		0.843		0.324			
5/4/2003			1.592		0.843		0.324			
5/5/2003	0.10	4105000	1.583	2431184	0.828	1091015	0.313			
5/6/2003		4106583	1.541	2432012	0.870	1091328	0.324			
5/7/2003	0.50	4108124	1.668	2432882	0.894	1091652	0.352			
5/8/2003	0.05	4109792	1.707	2433776	0.889	1092004	0.382			
5/9/2003	0.05	4111499	1.611	2434665	0.873	1092386	0.345			
5/10/2003			1.611		0.873		0.345			
5/11/2003			1.611		0.873		0.345			
5/12/2003		4116333	1.924	2437285	0.961	1093420	0.372			
5/13/2003		4118257	1.096	2438246	0.658	1093792	0.255			
5/14/2003		4119353	1.489	2438904	0.794	1094047	0.274			
5/15/2003		4120842	1.434	2439698	0.721	1094321	0.282			
5/16/2003	0.40	4122276	1.586	2440419	0.850	1094603	0.368			
5/17/2003			1.586		0.850		0.368			
5/18/2003			1.586		0.850		0.368			
5/19/2003		4127034	1.475	2442970	0.890	1095706	0.293			
5/20/2003		4128509	1.699	2443860	0.782	1095999	0.291			
5/21/2003		4130208	1.364	2444642	0.889	1096290	0.391			
5/22/2003		4131572	1.473	2445531	0.798	1096681	0.317			
5/23/2003	0.30	4133045	2.256	2446329	1.419	1096998	0.718			
5/24/2003	0.20		2.256		1.419		0.718			
5/25/2003			2.256		1.419		0.718			
5/26/2003	1.50		2.256		1.419		0.718	0.0392		
5/27/2003		4142069	2.330	2452004	1.443	1099871	0.822			
5/28/2003	0.05	4144399	2.072	2453447	1.152	1100693	0.603			
5/29/2003		4146471	1.976	2454599	1.132	1101296	0.483			
5/30/2003		4148447	2.044	2455731	1.221	1101779	0.597			
5/31/2003	0.50		2.044		1.221		0.597			
6/1/2003			2.044		1.221		0.597			
6/2/2003		4154580	1.994	2459393	1.212	1103569	0.574			
6/3/2003	1.00	4156574	2.846	2460605	1.732	1104143	0.904			
6/4/2003	1.20	4159420	5.425	2462337	4.320	1105047	2.409	0.2142		
6/5/2003		4164845	4.376	2466657	2.899	1107456	1.621	0.013		
6/6/2003		4169221	3.777	2469556	2.536	1109077	1.351			
6/7/2003	0.90		3.777		2.536		1.351	0.0435		
6/8/2003			3.777		2.536		1.351			
6/9/2003		4180552	2.956	2477164	1.775	1113129	0.864			
6/10/2003		4183508	2.606	2478939	1.533	1113993	0.724			
6/11/2003		4186114	2.344	2480472	1.238	1114717	0.518			
6/12/2003	0.20	4188458	2.206	2481710	1.260	1115235	0.528			
6/13/2003	1.00	4190664	3.310	2482970	2.154	1115763	1.117			
6/14/2003	0.30		3.310		2.154		1.117			
6/15/2003			3.310		2.154		1.117			
6/16/2003		4200594	2.381	2489432	1.378	1119115	0.554			
6/17/2003	0.60	4202975	2.473	2490810	1.604	1119669	0.702			
6/18/2003		4205448	2.123	2492414	1.609	1120371	0.781			

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
6/19/2003	0.30	4207571	3.286	2494023	1.508	1121152	0.649			
6/20/2003	2.60	4210857	5.305	2495531	3.359	1121801	1.677	0.194		
6/21/2003			5.305		3.359		1.677	0.1156		
6/22/2003			5.305		3.359		1.677			
6/23/2003		4226773	3.645	2505607	2.064	1126833	0.865			
6/24/2003		4230418	2.853	2507671	1.509	1127698	0.542			
6/25/2003		4233271	2.111	2509180	1.313	1128240	0.516			
6/26/2003		4235382	2.329	2510493	1.346	1128756	0.454			
6/27/2003		4237711	2.084	2511839	1.164	1129210	0.402			
6/28/2003			2.084		1.164		0.402			
6/29/2003			2.084		1.164		0.402			
6/30/2003		4243962	1.951	2515332	0.799	1130417	0.257			
7/1/2003		4245913	1.811	2516131	0.963	1130674	0.304			
7/2/2003		4247724	1.773	2517094	0.884	1130978	0.304			
7/3/2003		4249497	1.735	2517978	0.932	1131282	0.315			
7/4/2003			1.735		0.932		0.315			
7/5/2003			1.735		0.932		0.315			
7/6/2003	0.20		1.735		0.932		0.315			
7/7/2003	0.40	4256435	1.739	2521707	1.042	1132543	0.330			
7/8/2003		4258174	1.640	2522749	0.793	1132873	0.334			
7/9/2003		4259814	1.592	2523542	0.768	1133207	0.260			
7/10/2003	0.10	4261406	1.602	2524310	0.849	1133467	0.290			
7/11/2003		4263008	1.726	2525159	0.903	1133757	0.332			
7/12/2003			1.811		0.963		0.304			
7/13/2003			1.811		0.963		0.304			
7/14/2003		4268186	1.101	2527867	0.616	1134752	0.201			
7/15/2003		4269287	1.519	2528483	0.873	1134953	0.262			
7/16/2003		4270806	1.495	2529356	0.660	1135215	0.253			
7/17/2003		4272301	1.492	2530016	0.887	1135468	0.271			
7/18/2003	0.30	4273793	1.519	2530903	0.758	1135739	0.295			
7/19/2003			1.519		0.758		0.295			
7/20/2003			1.519		0.758		0.295			
7/21/2003	0.90	4278351	1.655	2533177	1.144	1136625	0.369			
7/22/2003	0.05	4280006	1.585	2534321	0.678	1136994	0.363			
7/23/2003	0.20	4281591	1.549	2534999	0.911	1137357	0.367			
7/24/2003		4283140	1.560	2535910	0.810	1137724	0.413			
7/25/2003		4284700	1.445	2536720	0.763	1138137	0.273			
7/26/2003			1.445		0.763		0.273			
7/27/2003			1.445		0.763		0.273			
7/28/2003		4289034	1.381	2539010	0.766	1138955	0.290			
7/29/2003		4290415	1.351	2539776	0.677	1139245	0.265			
7/30/2003		4291766	1.369	2540453	0.686	1139510	0.241			
7/31/2003		4293135	1.356	2541139	0.714	1139751	0.235			
8/1/2003	0.20	4294491	1.462	2541853	0.816	1139986	0.343			
8/2/2003			1.462		0.816		0.343			
8/3/2003			1.462		0.816		0.343			
8/4/2003	0.95	4298877	1.857	2544300	1.095	1141016	0.595			
8/5/2003	2.40	4300734	3.403	2545395	2.383	1141611	1.349			
8/6/2003		4304137	2.224	2547778	1.316	1142960	0.761			
8/7/2003	0.50	4306361	2.078	2549094	1.255	1143721	0.663			
8/8/2003		4308439	2.949	2550349	1.968	1144384	1.062			
8/9/2003	0.50		2.949		1.968		1.062			
8/10/2003	1.70		2.949		1.968		1.062	0.1171		
8/11/2003	0.10	4317285	2.639	2556254	1.625	1147569	0.874			
8/12/2003		4319924	2.192	2557879	1.329	1148443	0.623			
8/13/2003		4322116	1.952	2559208	1.098	1149066	0.464			
8/14/2003		4324068	1.849	2560306	1.087	1149530	0.443			
8/15/2003		4325917	1.755	2561393	0.952	1149973	0.382		START-UP	
8/16/2003			1.755		0.952		0.382			
8/17/2003			1.755		0.952		0.382			

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
8/18/2003		4331182	1.599	2564250	0.841	1151118	0.327			
8/19/2003		4332781	1.507	2565091	0.848	1151445	0.322		148419	0.026
8/20/2003		4334288	1.520	2565939	0.761	1151767	0.257		174489	0.024
8/21/2003		4335808	1.515	2566700	0.841	1152024	0.283			0.024
8/22/2003		4337323	1.503	2567541	0.764	1152307	0.297		246465	0.034
8/23/2003			1.503		0.764		0.297			0.034
8/24/2003			1.503		0.764		0.297			0.034
8/25/2003		4341831	1.414	2569833	0.758	1153197	0.251		348676	0.035
8/26/2003		4343245	1.406	2570591	0.771	1153448	0.263		383537	0.034
8/27/2003	0.25	4344651	2.268	2571362	0.789	1153711	0.293		417279	0.034
8/28/2003		4346919	1.601	2572151	0.713	1154004	0.243		451709	0.035
8/29/2003		4348520	1.239	2572864	0.829	1154247	0.318		486419	0.037
8/30/2003	0.50		1.239		0.829		0.318			0.037
8/31/2003			1.239		0.829		0.318			0.037
9/1/2003	0.40		1.239		0.829		0.318			0.037
9/2/2003		4353477	1.948	2576181	1.280	1155518	0.577		633733	0.064
9/3/2003		4355425	1.853	2577461	0.998	1156095	0.517		697681	0.063
9/4/2003		4357278	2.127	2578459	1.294	1156612	0.656		761029	0.072
9/5/2003		4359405	1.651	2579753	0.930	1157268	0.401		832791	0.044
9/6/2003			1.651		0.930		0.401			0.044
9/7/2003			1.651		0.930		0.401			0.044
9/8/2003		4364358	1.498	2582543	0.795	1158472	0.322		963808	0.038
9/9/2003	0.50	4365856	1.446	2583338	0.783	1158794	0.301		1001412	0.040
9/10/2003	0.10	4367302	1.435	2584121	0.779	1159095	0.286		1041176	0.037
9/11/2003	0.35	4368737	1.432	2584900	0.846	1159381	0.324		1078647	0.044
9/12/2003		4370169	1.734	2585746	1.009	1159705	0.451		1122171	0.050
9/13/2003	0.70		1.734		1.009		0.451			0.050
9/14/2003	0.40		1.734		1.009		0.451			0.050
9/15/2003	2.20	4375370	3.861	2588773	2.814	1161059	1.619	0.1434	1272092	0.249
9/16/2003		4379231	2.737	2591587	1.812	1162678	1.088		1521359	0.130
9/17/2003		4381968	1.976	2593399	1.210	1163766	0.591		1650946	0.066
9/18/2003	1.00	4383944	2.688	2594609	1.779	1164357	1.280		1716714	0.151
9/19/2003		4386632	2.391	2596388	1.499	1165637	0.684		1867299	0.077
9/20/2003			2.391		1.499		0.684			0.077
9/21/2003			2.391		1.499		0.684			0.077
9/22/2003		4393806	1.972	2600886	1.510	1167688	0.507		2099648	0.057
9/23/2003	1.30	4395778	3.994	2602396	2.568	1168195	1.687	0.0356	2156481	0.205
9/24/2003		4399772	2.490	2604964	1.374	1169882	0.686		2361358	0.085
9/25/2003		4402262	2.147	2606338	1.274	1170568	0.582		2446668	0.062
9/26/2003		4404409	2.650	2607612	1.729	1171150	0.865		2509023	0.099
9/27/2003	0.25		2.650		1.729		0.865			0.099
9/28/2003	1.25		2.650		1.729		0.865			0.099
9/29/2003		4412359	2.346	2612798	1.453	1173746	0.717		2807338	0.080
9/30/2003		4414705	2.121	2614251	1.264	1174463	0.615		2887380	0.060
10/1/2003		4416826	1.944	2615515	1.109	1175078	0.415		2947645	0.048
10/2/2003		4418770	1.837	2616624	1.045	1175493	0.441		2995215	0.044
10/3/2003		4420607	1.791	2617669	1.011	1175934	0.405		3038734	0.040
10/4/2003	0.10		1.791		1.011		0.405			0.040
10/5/2003			1.791		1.011		0.405			0.040
10/6/2003		4425979	1.698	2620702	0.878	1177149	0.362		3159995	0.044
10/7/2003		4427677	1.604	2621580	0.852	1177511	0.329		3203670	0.040
10/8/2003		4429281	1.541	2622432	0.844	1177840	0.323		3243707	0.034
10/9/2003		4430822	1.602	2623276	0.845	1178163	0.320		3277812	0.035
10/10/2003		4432424	1.531	2624121	0.836	1178483	0.312		3312525	0.039
10/11/2003			1.531		0.836		0.312			0.039
10/12/2003			1.531		0.836		0.312			0.039
10/13/2003			1.531		0.836		0.312			0.039
10/14/2003	1.40	4438548	2.348	2627465	1.545	1179730	0.806		3467419	0.103
10/15/2003		4440896	2.508	2629010	1.449	1180536	0.739		3570338	0.099
10/16/2003	0.10	4443404	1.593	2630459	1.076	1181275	0.520		3669765	0.060

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
10/17/2003	0.30	4444997	1.986	2631535	1.190	1181795	0.567		3729721	0.062
10/18/2003			1.986		1.190		0.567			0.062
10/19/2003			1.986		1.190		0.567			0.062
10/20/2003		4450956	1.698	2635104	0.993	1183497	0.432		3915439	0.042
10/21/2003		4452654	1.650	2636097	0.894	1183929	0.389		3956997	0.040
10/22/2003		4454304	1.641	2636991	1.001	1184318	0.377		3997214	0.036
10/23/2003		4455945	1.750	2637992	0.851	1184695	0.393		4033450	0.040
10/24/2003		4457695	1.892	2638843	1.261	1185088	0.571		4073157	0.074
10/25/2003			1.892		1.261		0.571			0.074
10/26/2003	1.40		1.892		1.261		0.571	0.0502		0.074
10/27/2003	1.50	4463371	5.731	2642625	3.838	1186801	2.424	0.2875	4293925	0.425
10/28/2003		4469102	4.960	2646463	3.406	1189225	1.766	0.0592	4718977	0.289
10/29/2003	1.70	4474062	5.680	2649869	4.158	1190991	2.022	0.3934	5008299	0.296
10/30/2003		4479742	3.576	2654027	2.465	1193013	1.134		5304590	0.124
10/31/2003		4483318	2.655	2656492	1.512	1194147	0.716		5428982	0.076
11/1/2003			2.655		1.512		0.716			0.076
11/2/2003			2.655		1.512		0.716			0.076
11/3/2003		4491284	2.228	2661029	1.255	1196295	0.519		5656629	0.052
11/4/2003		4493512	2.065	2662284	1.247	1196814	0.486		5708367	0.047
11/5/2003		4495577	4.129	2663531	3.072	1197300	1.594	0.1066	5755181	0.217
11/6/2003		4499706	4.630	2666603	2.807	1198894	1.653		5971695	0.189
11/7/2003		4504336	3.115	2669410	2.060	1200547	0.936		6161060	0.105
11/8/2003			3.115		2.060		0.936			0.105
11/9/2003			3.115		2.060		0.936			0.105
11/10/2003		4513680	2.470	2675590	1.547	1203356	0.651		6475608	0.068
11/11/2003			2.470		1.547		0.651			0.068
11/12/2003		4518620	2.943	2678683	1.744	1204658	0.836		6611148	0.096
11/13/2003		4521563	2.501	2680427	1.522	1205494	0.705		6706934	0.080
11/14/2003		4524064	2.200	2681949	1.289	1206199	0.534		6786492	0.055
11/15/2003			2.200		1.289		0.534			0.055
11/16/2003			2.200		1.289		0.534			0.055
11/17/2003		4530663	2.024	2685816	1.143	1207802	0.473		6951968	0.049
11/18/2003		4532687	1.893	2686959	1.098	1208275	0.425		7000523	0.044
11/19/2003		4534580	4.627	2688057	3.349	1208700	1.636		7044205	0.286
11/20/2003		4539207	4.320	2691406	2.841	1210336	1.600		7330340	0.189
11/21/2003		4543527	2.818	2694247	1.739	1211936	0.806		7518852	0.087
11/22/2003			2.818		1.739		0.806			0.087
11/23/2003			2.818		1.739		0.806			0.087
11/24/2003		4551981	2.524	2699463	1.533	1214353	0.670		7780778	0.067
11/25/2003		4554505	2.361	2700996	1.406	1215023	0.605		7847776	0.065
11/26/2003		4556866	2.902	2702402	1.853	1215628	0.906		7912424	0.107
11/27/2003			2.902		1.853		0.906			0.107
11/28/2003			2.902		1.853		0.906	0.0386		0.107
11/29/2003			2.902		1.853		0.906	0.0064		0.107
11/30/2003			2.902		1.853		0.906			0.107
12/1/2003		4571378	2.436	2711669	1.460	1220156	0.646		8445406	0.067
12/2/2003		4573814	2.267	2713129	1.342	1220802	0.576		8512246	0.058
12/3/2003		4576081	2.099	2714471	1.174	1221378	0.471		8569898	0.046
12/4/2003		4578180	2.306	2715645	1.229	1221849	0.513		8615654	0.050
12/5/2003	0.50	4580486	2.137	2716874	1.241	1222362	0.501		8665202	0.052
12/6/2003	0.30		2.137		1.241		0.501			0.052
12/7/2003			2.137		1.241		0.501			0.052
12/8/2003		4586897	1.696	2720596	1.011	1223865	0.383		8822262	0.044
12/9/2003		4588593	1.922	2721607	1.262	1224248	0.468		8865956	0.048
12/10/2003	1.20	4590515	4.426	2724869	3.057	1225716	1.155	0	8913710	0.283
12/11/2003	0.30	4594773	5.583	2725923	3.675	1226261	2.021	0.2936	9197134	0.274
12/12/2003		4600356	3.889	2729598	2.551	1228282	1.267		9471340	0.153
12/13/2003			3.889		2.551		1.267			0.153
12/14/2003	1.20		3.889		2.551		1.267	0.057		0.153
12/15/2003		4612024	4.050	2737252	2.640	1232084	1.398	0.0126	9931530	0.117

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
12/16/2003		4616074	3.294	2739892	2.215	1233482	0.929		10048775	0.156
12/17/2003	0.90	4619368	5.469	2742107	3.772	1234411	2.109	0.1115	10204773	0.258
12/18/2003		4624837	3.827	2745879	2.185	1236520	1.048		10462866	0.116
12/19/2003		4628664	2.931	2748064	1.812	1237568	0.769		10578829	0.080
12/20/2003			2.931		1.812		0.769			0.080
12/21/2003			2.931		1.812		0.769			0.080
12/22/2003		4637457	2.514	2753500	1.388	1239875	0.547		10820148	0.056
12/23/2003		4639971	2.610	2754888	1.430	1240422	0.767		10875687	0.084
12/24/2003	1.100	4642581	3.434	2756318	2.219	1241189	0.997		10959380	0.117
12/25/2003			3.434		2.219		0.997			0.117
12/26/2003			3.434		2.219		0.997			0.117
12/27/2003			3.434		2.219		0.997			0.117
12/28/2003			3.434		2.219		0.997			0.117
12/29/2003		4659751	2.482	2767412	1.450	1246173	0.568		11544197	0.054
12/30/2003	0.05	4662233	2.344	2768862	1.386	1246741	0.565		11598185	0.057
12/31/2003		4664577	2.344	2770248	1.386	1247306	0.565		11654742	0.057
Total	56.45									
Annual Avg. 2003			**2.360**		**1.431**		**0.657**			**0.085**
	Gravity to Sawmill PS		0.060							
	Total ENT annual ADF		**2.420**							
1/1/2004			2.181		1.208		0.445			0.050
1/2/2004		4668939	2.157	2772663	1.248	1248195	0.483		1744436	0.050
1/3/2004			2.157		1.248		0.483			0.050
1/4/2004			2.157		1.248		0.483			0.050
1/5/2004	0.60	4675411	2.991	2776406	1.964	1249643	0.980		1894456	0.121
1/6/2004		4678402	2.436	2778370	1.511	1250623	0.724		2015092	0.079
1/7/2004		4680838	2.197	2779881	1.226	1251347	0.516		2094425	0.063
1/8/2004		4683035	2.115	2781107	1.226	1251863	0.520		2157201	0.053
1/9/2004		4685150	2.016	2782333	1.150	1252383	0.457		2210527	0.047
1/10/2004			2.016		1.150		0.457			0.047
1/11/2004			2.016		1.150		0.457			0.047
1/12/2004		4691199	1.904	2785782	1.024	1253755	0.394		2350891	0.042
1/13/2004		4693103	1.804	2786806	1.011	1254149	0.362		2392526	0.041
1/14/2004		4694907	2.054	2787817	0.995	1254511	0.453		2433892	0.044
1/15/2004	0.20	4696961	1.513	2788812	0.918	1254964	0.304		2478252	0.040
1/16/2004		4698474	1.913	2789730	1.085	1255268	0.434		2518357	0.047
1/17/2004			1.913		1.085		0.434			0.047
1/18/2004	0.60		1.913		1.085		0.434			0.047
1/19/2004			1.913		1.085		0.434			0.047
1/20/2004		4706127	1.677	2794071	0.983	1257003	0.361		2705161	0.039
1/21/2004		4707804	1.715	2795054	0.883	1257364	0.331		2744623	0.034
1/22/2004		4709519	1.661	2795937	0.880	1257695	0.317		2779028	0.034
1/23/2004		4711180	1.738	2796817	0.924	1258012	0.341		2813467	0.038
1/24/2004			1.738		0.924		0.641			0.038
1/25/2004			1.738		0.924		0.341			0.038
1/26/2004	0.20	4716395	1.203	2799589	0.680	1259036	0.259		2928851	0.031
1/27/2004		4717598	1.737	2800269	0.908	1259295	0.325		2959999	0.039
1/28/2004	0.40	4719335	1.303	2801177	0.777	1259620	0.258		2999164	0.031
1/29/2004		4720638	1.531	2801954	0.766	1259878	0.296		3030120	0.032
1/30/2004		4722169	1.552	2802720	0.817	1260174	0.298		3062424	0.037
1/31/2004			1.552		0.817		0.298			0.037
2/1/2004			1.552		0.817		0.298			0.037
2/2/2004		4726825	1.478	2805171	0.677	1261068	0.300		3172055	0.037
2/3/2004	0.60	4728303	2.712	2805848	1.894	1261368	0.940		3209325	0.104
2/4/2004		4731015	2.418	2807742	1.484	1262308	0.804		3313300	0.100
2/5/2004		4733433	1.907	2809226	1.132	1263112	0.465		3413043	0.057
2/6/2004	1.80	4735340	4.046	2810358	2.664	1263577	1.440	YES ?? Mgd	3470350	0.191
2/7/2004			4.046		2.664		1.440			0.191
2/8/2004			4.046		2.664		1.440			0.191

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
2/9/2004		4747479	2.374	2818351	1.403	1267897	0.664		4042232	0.074
2/10/2004		4749853	2.614	2819754	1.681	1268561	0.860		4116153	0.090
2/11/2004		4752467	2.193	2821435	1.263	1269421	0.592		4206118	0.063
2/12/2004		4754660	1.991	2822698	1.111	1270013	0.464		4269071	0.047
2/13/2004		4756651	1.927	2823809	1.109	1270477	0.471		4316184	0.047
2/14/2004			1.927		1.109		0.471			0.047
2/15/2004			1.927		1.109		0.471			0.047
2/16/2004			1.927		1.109		0.471			0.047
2/17/2004		4764358	1.706	2828246	0.917	1272360	0.394		4504929	0.040
2/18/2004		4766064	1.691	2829163	0.938	1272754	0.343		4545070	0.037
2/19/2004		4767755	1.719	2830101	0.983	1273097	0.407		4581840	0.039
2/20/2004		4769474	1.785	2831084	1.020	1273504	0.428		4620345	0.041
2/21/2004			1.785		1.020		0.428			0.041
2/22/2004			1.785		1.020		0.428			0.041
2/23/2004		4774828	1.662	2834143	0.876	1274789	0.445		4743929	0.033
2/24/2004		4776490	1.714	2835019	0.871	1275234	0.342		4776676	0.041
2/25/2004	0.10	4778204	1.651	2835890	1.030	1275576	0.371		4817359	0.035
2/26/2004		4779855	1.594	2836920	0.868	1275947	0.345		4852610	0.036
2/27/2004		4781449	1.638	2837788	0.898	1276292	0.392		4888852	0.038
2/28/2004			1.638		0.898		0.392			0.038
2/29/2004			1.638		0.898		0.392			0.038
3/1/2004		4786364	1.590	2840482	0.887	1277467	0.333		5003381	0.038
3/2/2004		4787954	1.594	2841369	0.894	1277800	0.377		5041013	0.038
3/3/2004	0.10	4789548	1.620	2842263	0.920	1278177	0.432		5078545	0.041
3/4/2004		4791168	1.683	2843183	0.942	1278609	0.398		5119054	0.038
3/5/2004		4792851	2.302	2844125	1.489	1279007	0.752		5156761	0.084
3/6/2004	0.40		2.302		1.489		0.752			0.084
3/7/2004			2.302		1.489		0.752			0.084
3/8/2004	0.40	4799757	2.427	2848593	1.592	1281264	0.798		5408095	0.094
3/9/2004		4802184	2.191	2850185	1.445	1282062	0.744		5502409	0.085
3/10/2004		4804375	2.047	2851630	1.210	1282806	0.562		5587845	0.064
3/11/2004		4806422	1.955	2852840	1.159	1283368	0.557		5651878	0.061
3/12/2004		4808377	1.846	2853999	1.070	1283925	0.472		5712405	0.049
3/13/2004			1.846		1.070		0.472			0.049
3/14/2004			1.846		1.070		0.472			0.049
3/15/2004		4813916	1.723	2857210	0.923	1285340	0.415		5858699	0.039
3/16/2004	0.70	4815639	2.454	2858133	1.651	1285755	0.730		5897844	0.077
3/17/2004		4818093	2.302	2859784	1.433	1286485	0.707		5974724	0.079
3/18/2004		4820395	3.863	2861217	2.743	1287192	1.418		6053461	0.204
3/19/2004	0.30	4824258	3.689	2863960	2.539	1288610	1.365		6257321	0.171
3/20/2004			3.689		2.539		1.365			0.171
3/21/2004			3.689		2.539		1.365			0.171
3/22/2004		4835326	2.443	2871577	1.233	1292705	0.603		6769187	0.077
3/23/2004		4837769	2.327	2872810	1.342	1293308	0.663		6846586	0.077
3/24/2004		4840096	2.188	2874152	1.295	1293971	0.554		6923215	0.044
3/25/2004		4842284	2.015	2875447	1.121	1294525	0.492		6967469	0.046
3/26/2004		4844299	2.075	2876568	1.185	1295017	0.532		7013789	0.051
3/27/2004	0.10		2.075		1.185		0.532			0.051
3/28/2004			2.075		1.185		0.532			0.051
3/29/2004		4850525	1.839	2880123	1.031	1296613	0.403		7167709	0.040
3/30/2004	0.90	4852364	2.750	2881154	1.987	1297016	0.917		7207513	0.101
3/31/2004		4855114	3.053	2883141	1.822	1297933	0.845		7308398	0.117
4/1/2004	0.15	4858167	2.786	2884963	1.726	1298778	0.840		7425275	0.106
4/2/2004	0.20	4860953	3.847	2886689	2.618	1299618	1.375		7531258	0.180
4/3/2004			3.847		2.618		1.375			0.180
4/4/2004	0.80		3.847		2.618		1.375			0.180
4/5/2004		4872493	3.228	2894544	2.092	1303744	1.055		8070706	0.132
4/6/2004		4875721	2.723	2896636	1.647	1304799	0.795		8202652	0.084
4/7/2004		4878444	2.494	2898283	1.469	1305594	0.545		8287035	0.066
4/8/2004	0.10	4880938	2.254	2899752	1.298	1306139	0.551		8352939	0.056

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
4/9/2004			2.254		1.298		0.551			0.056
4/10/2004			2.254		1.298		0.551			0.056
4/11/2004			2.254		1.298		0.551			0.056
4/12/2004	1.10	4889953	3.651	2904942	2.738	1308343	1.374		8575150	0.169
4/13/2004	0.80	4893604	5.483	2907680	4.050	1309717	2.367	YES ?? Mgd	8744202	0.332
4/14/2004	1.00	4899087	6.082	2911730	3.752	1312084	2.060	YES ?? Mgd	9075826	0.313
4/15/2004		4905169	4.948	2915482	3.527	1314144	1.582		9388840	0.186
4/16/2004		4910117	3.317	2919009	1.932	1315726	0.824		9574420	0.088
4/17/2004			3.317		1.932		0.824			0.088
4/18/2004			3.317		1.932		0.824			0.088
4/19/2004		4920068	2.342	2924805	1.503	1318199	0.644		9837764	0.059
4/20/2004		4922410	2.392	2926308	1.408	1318843	0.502		9896672	0.048
4/21/2004		4924802	2.293	2927716	1.216	1319345	0.480		9944334	0.045
4/22/2004		4927095	2.180	2928932	1.220	1319825	0.399		9989816	0.036
4/23/2004	0.60	4929275	2.294	2930152	1.330	1320224	0.527		10026118	0.050
4/24/2004			2.294		1.330		0.527			0.050
4/25/2004	0.40		2.294		1.330		0.527			0.050
4/26/2004	0.80	4936158	4.117	2934142	2.976	1321806	1.450		10177320	0.185
4/27/2004	0.10	4940275	3.252	2937118	1.830	1323256	0.860		10362798	0.119
4/28/2004		4943527	2.650	2938948	1.514	1324116	0.645		10481512	0.076
4/29/2004		4946177	2.421	2940462	1.359	1324761	0.551		10557763	0.058
4/30/2004		4948598	2.280	2941821	1.296	1325312	0.498		10615909	0.051
5/1/2004			2.280		1.296		0.498			0.051
5/2/2004			2.280		1.296		0.498			0.051
5/3/2004	0.90	4955437	3.364	2945709	1.993	1326807	1.016		10769922	0.098
5/4/2004		4958801	2.229	2947702	1.566	1327823	0.717		10867459	0.082
5/5/2004	0.30	4961030	2.464	2949268	1.471	1328540	0.683		10949202	0.068
5/6/2004		4963494	2.271	2950739	1.248	1329223	0.533		11017389	0.055
5/7/2004		4965765	2.082	2951987	1.182	1329756	0.473		11072021	0.047
5/8/2004			2.082		1.182		0.473			0.047
5/9/2004			2.082		1.182		0.473			0.047
5/10/2004		4972012	1.978	2955534	1.082	1331176	0.412		11213324	0.039
5/11/2004		4973990	1.869	2956616	1.058	1331588	0.381		11252816	0.038
5/12/2004		4975859	1.819	2957674	0.937	1331969	0.365		11290777	0.039
5/13/2004		4977678	1.821	2958611	0.946	1332334	0.361		11330272	0.040
5/14/2004		4979499	1.839	2959557	1.009	1332695	0.394		11369774	0.041
5/15/2004	0.40		1.839		1.009		0.940			0.041
5/16/2004			1.839		1.009		0.394			0.041
5/17/2004		4985015	1.713	2962584	0.890	1333878	0.338		11493508	0.041
5/18/2004	0.20	4986728	1.788	2963474	1.004	1334216	0.383		11534770	0.040
5/19/2004	0.20	4988516	1.946	2964478	1.091	1334599	0.488		11574622	0.046
5/20/2004		4990462	1.758	2965569	0.981	1335087	0.384		11620756	0.038
5/21/2004	0.10	4992220	1.732	2966550	0.922	1335471	0.368		11659193	0.041
5/22/2004			1.732		0.922		0.368			0.041
5/23/2004			1.732		0.922		0.368			0.041
5/24/2004		4997416	1.616	2969315	0.854	1336575	0.328		11781613	0.036
5/25/2004	0.10	4999032	1.645	2970169	0.856	1336903	0.335		11817446	0.039
5/26/2004	0.20	5000677	1.682	2971025	0.907	1337238	0.372	YES ?? Mgd	11856096	0.036
5/27/2004		5002359	1.655	2971932	0.830	1337610	0.346		11892378	0.034
5/28/2004		5004014	1.639	2972762	0.895	1337956	0.365		11925992	0.040
5/29/2004			1.639		0.895		0.365			0.040
5/30/2004			1.639		0.895		0.365			0.040
5/31/2004	0.40		1.639		0.895		0.365			0.040
6/1/2004	0.30	5010569	1.662	2976342	0.874	1339414	0.354		12086033	0.039
6/2/2004		5012231	1.587	2977216	0.940	1339768	0.367		12125214	0.037
6/3/2004		5013818	1.546	2978156	0.725	1340135	0.299		12161739	0.036
6/4/2004		5015364	1.581	2978881	0.876	1340434	0.352	YES ?? Mgd	12197561	0.037
6/5/2004	0.10		1.581		0.876		0.352			0.037
6/6/2004			1.581		0.876		0.352			0.037
6/7/2004	0.30	5020108	1.539	2981510	0.843	1341491	0.332	YES ?? Mgd	12307471	0.040

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
6/8/2004		5021647	1.495	2982353	0.836	1341823	0.323		12347072	0.036
6/9/2004		5023142	1.515	2983189	0.776	1342146	0.301		12383234	0.036
6/10/2004		5024657	1.446	2983965	0.741	1342447	0.283		12418954	0.033
6/11/2004		5026103	1.506	2984706	0.816	1342730	0.332		12451469	0.040
6/12/2004	3.00		1.506		0.816		0.332			0.040
6/13/2004			1.506		0.816		0.332			0.040
6/14/2004	1.10	5030622	1.488	2987154	0.801	1343725	0.302		12570838	0.038
6/15/2004		5032110	1.475	2987955	0.823	1344027	0.364		12609077	0.038
6/16/2004		5033585	1.464	2988778	0.678	1344391	0.276		12646854	0.034
6/17/2004		5035049	1.452	2989456	0.840	1344667	0.275		12681148	0.034
6/18/2004	0.90	5036501	1.434	2990296	0.762	1344942	0.296		12715644	0.036
6/19/2004			1.434		0.762		0.296			0.036
6/20/2004			1.434		0.762		0.296			0.036
6/21/2004		5040804	1.374	2992583	0.757	1345831	0.292		12825064	0.037
6/22/2004		5042178	1.515	2993340	0.856	1346123	0.372		12861905	0.040
6/23/2004		5043693	1.432	2994196	0.772	1346495	0.303		12902100	0.037
6/24/2004	1.20	5045125	1.205	2994968	0.721	1346798	0.324		12939565	0.037
6/25/2004		5046330	1.507	2995689	0.769	1347122	0.316		12976269	0.035
6/26/2004			1.507		0.769		0.316			0.035
6/27/2004	2.00		1.507		0.769		0.316			0.035
6/28/2004	1.10	5050850	1.360	2997995	0.804	1348069	0.322		13081578	0.039
6/29/2004		5052210	1.419	2998799	0.884	1348391	0.411		13120756	0.046
6/30/2004	0.50	5053629	1.352	2999683	0.607	1348802	0.227		13166467	0.031
7/1/2004	0.30	5054981	1.387	3000290	0.760	1349029	0.308		13197051	0.031
7/2/2004		5056368	1.332	3001050	0.743	1349337	0.304		13228107	0.035
7/3/2004			1.332		0.743		0.304			0.035
7/4/2004			1.332		0.743		0.304			0.035
7/5/2004	0.10		1.332		0.743		0.304			0.035
7/6/2004		5061695	1.336	3004021	0.713	1350551	0.306		13366849	0.036
7/7/2004	0.30	5063031	1.406	3004734	0.797	1350857	0.328		13402357	0.032
7/8/2004		5064437	1.398	3005531	0.715	1351185	0.323		13434424	0.036
7/9/2004		5065835	1.353	3006246	0.722	1351508	0.318		13470614	0.037
7/10/2004			1.353		0.722		0.318			0.037
7/11/2004			1.353		0.722		0.318			0.037
7/12/2004	3.00	5069894	3.457	3008413	2.494	1352463	1.348	YES ?? Mgd	13580521	0.219
7/13/2004		5073351	1.866	3010907	1.097	1353811	0.578		13799353	0.078
7/14/2004	1.10	5075217	2.488	3012004	1.707	1354389	1.015		13876909	0.130
7/15/2004		5077705	2.043	3013711	2.244	1355404	0.601		14007066	0.083
7/16/2004		5079748	1.913	3015955	0.704	1356005	0.570		14089894	0.063
7/17/2004			1.913		0.704		0.570			0.063
7/18/2004	0.90		1.913		0.704		0.570			0.063
7/19/2004		5085486	2.006	3018066	1.277	1357716	0.642		14279134	0.084
7/20/2004		5087492	1.690	3019343	0.883	1358358	0.451		14363323	0.045
7/21/2004		5089182	1.642	3020226	0.869	1358809	0.390		14408440	0.039
7/22/2004		5090824	1.544	3021095	0.861	1359199	0.363		14447764	0.042
7/23/2004		5092368	2.382	3021956	1.606	1359562	0.981		14489402	0.092
7/24/2004	1.20		2.382		1.606		0.981	YES ?? Mgd		0.092
7/25/2004			2.382		1.606		0.981			0.092
7/26/2004		5099515	1.764	3026774	1.006	1362506	0.461		14765648	0.050
7/27/2004	2.00	5101279	3.982	3027780	2.602	1362967	1.303	YES ?? Mgd	14815153	0.206
7/28/2004	1.10	5105261	4.473	3030382	3.487	1364270	2.161	YES ?? Mgd	15021497	0.305
7/29/2004		5109734	3.451	3033869	2.046	1366431	1.276		15326434	0.154
7/30/2004		5113185	3.723	3035915	2.575	1367707	1.334		15480508	0.195
7/31/2004	0.50		3.723		2.575		1.334			0.195
8/1/2004	3.00		3.723		2.575		1.334	YES ?? Mgd		0.195
8/2/2004		5124354	3.440	3043639	2.232	1371709	1.087		16066957	0.134
8/3/2004		5127794	2.520	3045871	1.435	1372796	0.662		16200536	0.074
8/4/2004	0.10	5130314	2.354	3047306	1.358	1373458	0.616		16274902	0.057
8/5/2004		5132668	2.127	3048664	1.173	1374074	0.492		16331929	0.046
8/6/2004		5134795	1.869	3049837	1.027	1374566	0.407		16377549	0.040

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
8/7/2004			1.869		1.027		0.407			0.040
8/8/2004			1.869		1.027		0.407			0.040
8/9/2004		5140402	1.767	3052919	0.924	1375788	0.380		16497898	0.042
8/10/2004		5142169	1.649	3053843	0.899	1376168	0.313		16539997	0.036
8/11/2004	0.10	5143818	1.680	3054742	0.897	1376481	0.462		16575943	0.036
8/12/2004		5145498	1.667	3055639	0.863	1376943	0.351		16612225	0.037
8/13/2004	0.20	5147165	1.648	3056502	0.906	1377294	0.407		16648728	0.038
8/14/2004	0.10		1.648		0.906		0.407			0.038
8/15/2004			1.648		0.906		0.407			0.038
8/16/2004		5152108	1.643	3059220	0.898	1378514	0.290		16763402	0.036
8/17/2004		5153751	1.564	3060118	0.824	1378804	0.356		16799191	0.037
8/18/2004		5155315	1.470	3060942	0.729	1379160	0.299		16836293	0.033
8/19/2004		5156785	1.515	3061671	0.762	1379459	0.295		16869313	0.033
8/20/2004		5158300	1.619	3062433	0.898	1379754	0.368		16902587	0.039
8/21/2004	0.60		1.619		0.898		0.368			0.039
8/22/2004			1.619		0.898		0.368			0.039
8/23/2004		5163158	1.550	3065128	0.701	1380858	0.359		17019331	0.039
8/24/2004		5164708	1.809	3065829	0.981	1381217	0.357		17058800	0.040
8/25/2004		5166517	1.089	3066810	0.658	1381574	0.248		17098918	0.026
8/26/2004		5167606	1.406	3067468	0.807	1381822	0.269		17125051	0.030
8/27/2004		5169012	1.453	3068275	0.751	1382091	0.303		17155280	0.037
8/28/2004			1.453		0.751		0.303			0.037
8/29/2004			1.453		0.751		0.303			0.037
8/30/2004	1.20	5173372	1.838	3070527	2.166	1383001	0.522		17265501	0.054
8/31/2004		5175210	1.661	3072693	-	1383523	0.513		17319572	0.057
9/1/2004		5176871	1.533	3072693	0.751	1384036	0.316		17376078	0.042
9/2/2004		5178404	1.436	3073444	0.793	1384352	0.323		17418076	0.030
9/3/2004		5179840	1.420	3074237	0.767	1384675	0.320		17448076	0.037
9/4/2004			1.420		0.767		0.320			0.037
9/5/2004			1.420		0.767		0.320			0.037
9/6/2004			1.420		0.767		0.320			0.037
9/7/2004		5185521	1.386	3077305	0.750	1385955	0.323		17594914	0.036
9/8/2004	0.30	5186907	1.562	3078055	0.871	1386278	0.361		17631194	0.041
9/9/2004	0.05	5188469	1.482	3078926	0.810	1386639	0.344		17672354	0.034
9/10/2004		5189951	1.429	3079736	0.765	1386983	0.371		17706117	0.037
9/11/2004			1.429		0.765		0.371			0.037
9/12/2004			1.429		0.765		0.371			0.037
9/13/2004		5194238	1.386	3082031	0.764	1388097	0.296		17818360	0.036
9/14/2004		5195624	1.353	3082795	0.730	1388393	0.309		17854475	0.043
9/15/2004		5196977	1.365	3083525	0.727	1388702	0.290		17897847	0.030
9/16/2004		5198342	1.357	3084252	0.717	1388992	0.301		17928036	0.036
9/17/2004		5199699	2.651	3084969	1.778	1389293	0.967		17963865	0.143
9/18/2004	3.20		2.651		1.778		0.967			0.143
9/19/2004			2.651		1.778		0.967			0.143
9/20/2004		5207653	1.761	3090302	1.019	1392195	0.512		18392396	0.051
9/21/2004		5209414	1.662	3091321	0.967	1392707	0.460		18443014	0.046
9/22/2004		5211076	1.569	3092288	0.880	1393167	0.401		18488666	0.042
9/23/2004		5212645	1.535	3093168	0.854	1393568	0.371		18530264	0.040
9/24/2004		5214180	1.499	3094022	0.821	1393939	0.358		18569818	0.038
9/25/2004			1.499		0.821		0.358			0.038
9/26/2004			1.499		0.821		0.358			0.038
9/27/2004	0.10	5218678	1.452	3096485	0.793	1395013	0.332		18683324	0.035
9/28/2004	6.40	5220130	5.187	3097278	3.664	1395345	1.792	YES ?? Mgd	18718204	0.399
9/29/2004		5225317	4.883	3100942	3.279	1397137	1.770		19117212	0.241
9/30/2004	0.20	5230200	3.720	3104221	1.820	1398907	0.932		19358392	0.101
10/1/2004		5234305	3.591	3106041	1.356	1399839	0.684		19459432	0.063
10/2/2004			3.591		1.356		0.684			0.063
10/3/2004			3.591		1.356		0.684			0.063
10/4/2004		5245078	1.986	3110109	1.099	1401890	0.428		19648864	0.040
10/5/2004		5247064	1.871	3111208	1.012	1402318	0.441		19689222	0.042

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
10/6/2004		5248935	1.809	3112220	0.952	1402759	0.382		19731424	0.041
10/7/2004		5250744	1.694	3113172	0.842	1403141	0.337		19772068	0.038
10/8/2004		5252438	1.691	3114014	0.968	1403478	0.374		19809806	0.041
10/9/2004			1.691		0.968		0.374			0.041
10/10/2004			1.691		0.968		0.374			0.041
10/11/2004			1.691		0.968		0.374			0.041
10/12/2004		5259203	1.542	3117887	0.652	1404973	0.261		19975674	0.036
10/13/2004		5260745	1.613	3118539	0.996	1405234	0.403		20011919	0.035
10/14/2004	0.80	5262358	2.063	3119535	1.137	1405637	0.496		20046698	0.052
10/15/2004		5264421	1.763	3120672	0.998	1406133	0.400		20098832	0.044
10/16/2004	0.35		1.763		0.998		0.400			0.044
10/17/2004			1.763		0.998		0.400			0.044
10/18/2004		5269711	1.791	3123666	1.078	1407333	0.565		20230662	0.045
10/19/2004	0.70	5271502	2.216	3124744	1.389	1407898	0.703		20275746	0.072
10/20/2004		5273718	1.883	3126133	1.023	1408601	0.469		20347542	0.051
10/21/2004		5275601	1.778	3127156	1.018	1409070	0.454		20398724	0.045
10/22/2004		5277379	1.720	3128174	0.954	1409524	0.414		20443343	0.043
10/23/2004			1.720		0.954		0.414			0.043
10/24/2004			1.720		0.954		0.414			0.043
10/25/2004		5282539	1.605	3131036	0.888	1410765	0.366		20571047	0.039
10/26/2004		5284144	1.557	3131924	0.877	1411131	0.356		20609895	0.039
10/27/2004		5285701	1.544	3132801	0.847	1411487	0.341		20649288	0.035
10/28/2004		5287245	1.523	3133648	0.827	1411828	0.332		20684095	0.035
10/29/2004	0.40	5288768	1.705	3134475	0.984	1412160	0.430		20719375	0.043
10/30/2004			1.705		0.984		0.430			0.043
10/31/2004			1.705		0.984		0.430			0.043
11/1/2004		5293882	1.595	3137426	0.879	1413450	0.362		20848127	0.036
11/2/2004		5295477	1.525	3138305	0.873	1413812	0.364		20884502	0.039
11/3/2004		5297002	1.514	3139178	0.823	1414176	0.330		20923040	0.036
11/4/2004	1.20	5298516	3.152	3140001	2.177	1414506	1.157		20959072	0.147
11/5/2004		5301668	2.089	3142178	1.253	1415663	0.683		21105687	0.076
11/6/2004			2.089		1.253		0.683			0.076
11/7/2004			2.089		1.253		0.683			0.076
11/8/2004		5307934	1.754	3145936	1.051	1417711	0.446		21332922	0.047
11/9/2004		5309688	1.687	3146987	0.964	1418157	0.432		21380030	0.042
11/10/2004		5311375	1.646	3147951	0.900	1418589	0.372		21422479	0.041
11/11/2004			1.646		0.900		0.372			0.041
11/12/2004	1.30	5314667	3.218	3149751	2.171	1419332	1.234		21504366	0.155
11/13/2004			3.218		2.171		1.234			0.155
11/14/2004			3.218		2.171		1.234			0.155
11/15/2004		5324320	2.143	3156265	1.204	1423033	0.638		21967927	0.067
11/16/2004		5326463	1.958	3157469	1.192	1423671	0.582		22034862	0.057
11/17/2004		5328421	1.886	3158661	1.053	1424253	0.445		22092243	0.044
11/18/2004		5330307	1.819	3159714	1.007	1424698	0.460		22135998	0.043
11/19/2004		5332126	1.906	3160721	1.105	1425158	0.499		22179319	0.048
11/20/2004	0.30		1.906		1.105		0.499			0.048
11/21/2004			1.906		1.105		0.499			0.048
11/22/2004		5337845	1.800	3164036	1.010	1426656	0.460		22324422	0.048
11/23/2004		5339645	1.782	3165046	1.014	1427116	0.452		22372730	0.045
11/24/2004	0.30	5341427	2.917	3166060	1.944	1427568	1.005		22417697	0.143
11/25/2004			2.917		1.944		1.005			0.143
11/26/2004			2.917		1.944		1.005	YES ?? Mgd		0.143
11/27/2004			2.917		1.944		1.005			0.143
11/28/2004	2.75		2.917		1.944		1.005			0.143
11/29/2004		5356010	3.428	3175782	2.189	1432595	1.337		23133482	0.135
11/30/2004		5359438	3.172	3177971	1.802	1433932	0.850		23268370	0.093
12/1/2004	0.85	5362610	4.345	3179773	3.270	1434782	1.701	YES ?? Mgd	23361764	0.241
12/2/2004		5366955	3.116	3183043	1.783	1436483	0.954		23602833	0.111
12/3/2004		5370071	2.539	3184826	1.497	1437437	0.685		23714196	0.068
12/4/2004			2.539		1.497		0.685			0.068

TABLE 3-2

East Norriton Township

Pump Station Flows (mgd)

		Norris City Ave.		Timberlake		Germantown			Sandra Lane	
Date	Rainfall (in.)	Totalizer	Daily Flow	Totalizer	Daily Flow	Totalizer	Daily Flow	Overflow	Totalizer	Daily Flow
12/5/2004			2.539		1.497		0.685			0.068
12/6/2004		5377689	2.234	3189316	1.355	1439492	0.594		23916762	0.053
12/7/2004	0.75	5379923	3.575	3190671	2.499	1440086	1.306		23969999	0.163
12/8/2004		5383498	2.874	3193170	1.767	1441392	0.940		24132817	0.113
12/9/2004	0.80	5386372	4.067	3194937	2.906	1442332	1.564	YES ?? Mgd	24245665	0.195
12/10/2004	0.35	5390439	4.055	3197843	2.647	1443896	1.420	YES ?? Mgd	24440971	0.174
12/11/2004			4.055		2.647		1.420			0.174
12/12/2004			4.055		2.647		1.420			0.174
12/13/2004		5402605	2.691	3205784	1.631	1448155	0.731		24962206	0.074
12/14/2004		5405296	2.480	3207415	1.408	1448886	0.619		25035836	0.058
12/15/2004		5407776	2.265	3208823	1.299	1449505	0.531		25093585	0.051
12/16/2004		5410041	2.220	3210122	1.277	1450036	0.557		25144487	0.051
12/17/2004		5412261	2.123	3211399	1.202	1450593	0.494		25195251	0.046
12/18/2004			2.123		1.202		0.494			0.046
12/19/2004			2.123		1.202		0.494			0.046
12/20/2004		5418630	1.939	3215006	1.088	1452076	0.400		25332268	0.042
12/21/2004		5420569	1.870	3216094	1.033	1452476	0.431		25374349	0.040
12/22/2004		5422439	1.865	3217127	1.006	1452907	0.377		25414725	0.038
12/23/2004	0.90	5424304	2.780	3218133	1.788	1453284	0.935		25453059	0.108
12/24/2004			2.780		1.788		0.935			0.108
12/25/2004			2.780		1.788		0.935			0.108
12/26/2004	0.30		2.780		1.788		0.935			0.108
12/27/2004		5435422	1.908	3225286	1.155	1457025	0.548		25883125	0.053
12/28/2004		5437330	2.034	3226441	1.180	1457573	0.450		25935975	0.046
12/29/2004		5439364	1.979	3227621	1.107	1458023	0.470		25981639	0.047
12/30/2004		**5441343**	**1.900**	**3228728**	**1.100**	**1458493**	**0.400**		**26028921**	**0.040**
12/31/2004			**1.900**		**1.100**		**0.400**			**0.040**
Total	64.85									
Annual Avg. 2004			**2.126**		**1.255**		**0.580**			**0.067**
Max. Daily 2004		4/14/2004	**6.082**	4/13/2004	**4.050**	4/13/2004	**2.367**		9/28/2004	**0.399**
Peak Factor			**2.861**		**3.226**		**4.079**			**5.980**

Average annual ADF	2.126
Gravity to Sawmill PS	0.060
Total ENT annual ADF	**2.186**

TABLE 4-1

East Norriton Township

Sanitary Sewer Needs for Act 537 Growth Areas

Zoning District	Avg. EDU/ Gross Acre	Undeveloped Growth Area Gross Acres*	Undeveloped Growth Area Potential EDU**	Public Sewered Growth Area Planned EDU	Total Growth Area Total EDU**	Growth Area Potential GPD***
Germantown Pump Station Area:						
AR	3.0	181	543	17	560	154,000
ARC	2.5	1	3	-	3	825
BP	11.0	5	60	-	60	16,500
BR	2.5	-	0	35	35	9,625
C	7.0	23	164	10	174	47,850
I	2.5	24	59	5	64	17,600
IN	5.0	8	39	5	44	12,100
LI	1.5	5	8	10	18	4,950
RO	2.0	3	6	-	6	1,650
RP	3.5	4	14	-	14	3,850
RR	8.5	- - - -	0	56	56	15,400
	SUB TOTAL		896	138	1,034	284,350
Timberlake Pump Station Area:						
AR	3.0	28	84	1	85	23,375
ARC	2.5	8	19	28	47	12,925
BP	11.0	2	18	23	41	11,275
BR	2.5	0.4	1	-	1	275
BR1	3.5	-	0	8	8	2,200
I	2.5	4	11	10	21	5,775
	SUB TOTAL		133	70	203	55,825
Norris City Pump Station Area:						-
AR	3.0	23.7	71	-	71	19,525
BP	11.0	2.5	27	-	27	7,425
BR	11.0	3.5	39	2	41	11,275
C	7.0	4.7	33	6	39	10,725
C1	8.0	0.6	5	-	5	1,375
EC	4.0	- - - -	0	28	28	7,700
HR	16.0	- - - -	0	40	40	11,000
IN	5.0	- - - -	0	16	16	4,400
RP	3.5	2.0	7	-	7	1,925
RR	8.5	- - - -	0	50	50	13,750
	SUB TOTAL		182	142	324	89,100
Sawmill Pump Station Area:						
AR	3.0	10.7	32	-	32	8,800
BR	11.0	7.4	81	2	83	22,825
C	7.0	2.1	15	17	32	8,800
EC	4.0	- - - -	0	4	4	1,100
EC2	5.0	- - - -	0	64	64	17,600
IN	5.0	1.2	6	-	6	1,650
MR	5.5	0.4	2	-	2	550
RO	2.0	3.0	6	-	6	1,650
RR	8.5	- - - -	0	66	66	18,150
	SUB TOTAL		142	153	295	81,125
	TOTAL		1,353	503	1,856	

TOTAL GROWTH AREA POTENTIAL AVERAGE ANNUAL FLOW	510,400
HISTORICAL AVERAGE ANNUAL FLOW (2002-2004 TABLE 3-2)	2,116,700
TOTAL PROJECTED AVERAGE ANNUAL FLOW	2,627,100
TOTAL PROJECTED AVERAGE ANNUAL FLOW (ROUNDED mgd)	**2.70**

NOTES:

* Growth areas are indicated on the Official Act 537 Plan dated October 2005.
** Growth area potential EDU's based on respective zoning district's average EDU per gross acre.
*** Growth Area Potential gpd based on 275 gpd / EDU.

TABLE 4-2

Potential Growth of Land Connected to Public Sewer

11/7/05

Zoning	Block/Unit	Public Sanitary	Acres	EDU/Acre	Potential EDU	Drainage Area
AR	004D001	Connect -10 year	1.5	3	4.5	GERMANTOWN
AR	1046	Connect -10 year	2.3	3	6.9	GERMANTOWN
AR	1015	Connect -10 year	1.1	3	3.3	GERMANTOWN
AR	1048	Connect -10 year	2.3	3	7	GERMANTOWN
AR	004D007	Connect -10 year	0.6	3	1.8	GERMANTOWN
AR	1008	Connect -10 year	0.7	3	2.2	GERMANTOWN
AR	004D054	Connect -10 year	0.5	3	1.6	GERMANTOWN
AR	003M079	Connect -10 year	1.0	3	2.9	GERMANTOWN
AR	1007	Connect -10 year	1.1	3	3.4	GERMANTOWN
AR	004D012	Connect -10 year	1.1	3	3.3	GERMANTOWN
AR	004D022	Connect -10 year	1.3	3	3.9	GERMANTOWN
AR	004D048	Connect -10 year	0.8	3	2.5	GERMANTOWN
AR	004D019	Connect -10 year	0.4	3	1.3	GERMANTOWN
AR	4002	Connect -10 year	1.3	3	3.8	GERMANTOWN
AR	4078	Connect -10 year	3.0	3	9.1	SANDRA
AR	4003	Connect -10 year	1.5	3	4.5	GERMANTOWN
AR	4004	Connect -10 year	1.2	3	3.7	GERMANTOWN
AR	4086	Connect -10 year	1.5	3	4.3	SANDRA
AR	4005	Connect -10 year	1.2	3	3.5	GERMANTOWN
AR	4052	Connect -10 year	2.5	3	7.4	SANDRA
AR	4012	Connect -10 year	1.2	3	3.7	GERMANTOWN
AR	4006	Connect -10 year	1.2	3	3.7	GERMANTOWN
AR	4007	Connect -10 year	1.7	3	5	SANDRA
AR	4034	Connect -10 year	2.0	3	6.1	SANDRA
AR	4065	Connect -10 year	1.0	3	3	SANDRA
AR	4080	Connect -10 year	1.1	3	3.3	SANDRA
AR	4083	Connect -10 year	0.7	3	2.1	SANDRA
AR	4033	Connect -10 year	1.3	3	3.8	SANDRA
AR	4029	Connect -10 year	1.8	3	5.3	SANDRA
AR	4054	Connect -10 year	0.7	3	2.1	SANDRA
AR	4061	Connect -10 year	0.9	3	2.7	SANDRA
AR	4085	Connect -10 year	0.8	3	2.4	SANDRA
AR	4028	Connect -10 year	0.9	3	2.7	SANDRA
AR	4048	Connect -10 year	0.9	3	2.8	SANDRA
AR	4027	Connect -10 year	1.4	3	4.3	SANDRA
AR	4026	Connect -10 year	5.8	3	17.3	SANDRA
AR	4076	Connect -10 year	0.6	3	1.7	SANDRA
AR	003F002	Connect -10 year	1.6	3	4.7	GERMANTOWN
AR	4025	Connect -10 year	1.0	3	3	SANDRA
AR	4096	Connect -10 year	0.6	3	1.8	SANDRA
AR	4062	Connect -10 year	0.6	3	1.7	SANDRA
AR	4063	Connect -10 year	0.6	3	1.8	SANDRA
AR	4016	Connect -10 year	3.3	3	9.8	GERMANTOWN
AR	4067	Connect -10 year	0.6	3	1.7	SANDRA
AR	003E013	Connect -10 year	1.1	3	3.2	GERMANTOWN
AR	4068	Connect -10 year	0.6	3	1.7	SANDRA
AR	4017	Connect -10 year	1.7	3	5	GERMANTOWN
AR	4018	Connect -10 year	1.5	3	4.6	GERMANTOWN
AR	003E012	Connect -10 year	1.1	3	3.3	GERMANTOWN
AR	4070	Connect -10 year	0.7	3	2.2	SANDRA
AR	003E017	Connect -10 year	1.7	3	5	SANDRA
AR	4071	Connect -10 year	0.6	3	1.8	SANDRA
AR	003E005	Connect -10 year	0.3	3	1	SANDRA
AR	4072	Connect -10 year	0.4	3	1.1	SANDRA
AR	4044	Connect -10 year	1.0	3	2.9	SANDRA
AR	003E007	Connect -10 year	0.4	3	1.1	SANDRA
AR	4073	Connect -10 year	0.4	3	1.1	SANDRA

TABLE 4-2

Potential Growth of Land Connected to Public Sewer

11/7/05

Zoning	Block/Unit	Public Sanitary	Acres	EDU/Acre	Potential EDU	Drainage Area
AR	4000	Connect -10 year	0.8	3	2.4	SANDRA
AR	4075	Connect -10 year	0.3	3	1	SANDRA
AR	4023	Connect -10 year	0.4	3	1.1	SANDRA
AR	4090	Connect -10 year	0.4	3	1.1	SANDRA
AR	4079	Connect -10 year	0.4	3	1.3	SANDRA
AR	003B002	Connect -10 year	0.9	3	2.7	GERMANTOWN
AR	003C012	Connect -10 year	1.6	3	4.7	GERMANTOWN
AR	003C005	Connect -10 year	0.5	3	1.4	GERMANTOWN
AR	003A007	Connect -10 year	0.9	3	2.8	SANDRA
AR	003A008	Connect -10 year	0.9	3	2.7	SANDRA
AR	003A009	Connect -10 year	0.9	3	2.6	SANDRA
AR	003A010	Connect -10 year	0.8	3	2.5	SANDRA
AR	003A012	Connect -10 year	1.0	3	2.9	SANDRA
AR	003A013	Connect -10 year	0.4	3	1.3	SANDRA
AR	003A015	Connect -10 year	1.0	3	2.9	SANDRA
AR	003A014	Connect -10 year	0.5	3	1.6	SANDRA
AR	003E015	Connect -10 year	2.2	3	6.7	GERMANTOWN
AR	1000	Connect Ultimate	1.9	3	5.8	GERMANTOWN
AR	1044	Connect Ultimate	1.1	3	3.2	GERMANTOWN
AR	003C017	Connect Ultimate	3.5	3	10.5	GERMANTOWN
AR	26064	Connect Ultimate	0.2	3	1	GERMANTOWN
AR	26148	Connect Ultimate	1.1	3	3.4	GERMANTOWN
AR	1008	OLDS to Public	0.7	3	2.2	GERMANTOWN
AR	1011	OLDS to Public	2.5	3	7.5	GERMANTOWN
AR	1052	OLDS to Public	2.5	3	7.6	GERMANTOWN
AR	1021	OLDS to Public	1.1	3	3.4	GERMANTOWN
AR	1020	OLDS to Public	1.0	3	2.9	GERMANTOWN
AR	1019	OLDS to Public	1.1	3	3.4	GERMANTOWN
AR	1000	OLDS to Public	2.0	3	5.9	GERMANTOWN
AR	1018	OLDS to Public	1.1	3	3.3	GERMANTOWN
AR	1017	OLDS to Public	1.1	3	3.2	GERMANTOWN
AR	1054	OLDS to Public	3.1	3	9.2	GERMANTOWN
AR	1042	OLDS to Public	1.2	3	3.7	GERMANTOWN
AR	1051	OLDS to Public	3.0	3	8.9	GERMANTOWN
AR	1061	OLDS to Public	2.7	3	8	GERMANTOWN
AR	1053	OLDS to Public	2.4	3	7.2	GERMANTOWN
AR	1049	OLDS to Public	2.4	3	7.2	GERMANTOWN
AR	004D011	OLDS to Public	0.5	3	1.4	GERMANTOWN
AR	003M001	OLDS to Public	0.4	3	1.2	GERMANTOWN
AR	1060	OLDS to Public	1.0	3	2.9	GERMANTOWN
AR	004D013	OLDS to Public	1.1	3	3.3	GERMANTOWN
AR	004D014	OLDS to Public	1.7	3	5	GERMANTOWN
AR	004D015	OLDS to Public	1.7	3	5	GERMANTOWN
AR	004D016	OLDS to Public	1.1	3	3.2	GERMANTOWN
AR	004D048	OLDS to Public	0.8	3	2.5	GERMANTOWN
AR	004D049	OLDS to Public	0.8	3	2.5	GERMANTOWN
AR	004D017	OLDS to Public	0.4	3	1.3	GERMANTOWN
AR	004D018	OLDS to Public	0.4	3	1.2	GERMANTOWN
AR	004D056	OLDS to Public	0.4	3	1.3	GERMANTOWN
AR	004D057	OLDS to Public	0.4	3	1.2	GERMANTOWN
AR	4001	OLDS to Public	1.3	3	3.9	GERMANTOWN
AR	4011	OLDS to Public	1.9	3	5.8	GERMANTOWN
AR	4008	OLDS to Public	1.2	3	3.5	GERMANTOWN
AR	4077	OLDS to Public	1.2	3	3.5	GERMANTOWN
AR	4082	OLDS to Public	0.6	3	1.7	GERMANTOWN
AR	003F010	OLDS to Public	1.3	3	4	GERMANTOWN
AR	003F009	OLDS to Public	1.4	3	4.2	GERMANTOWN

TABLE 4-2

Potential Growth of Land Connected to Public Sewer

11/7/05

Zoning	Block/Unit	Public Sanitary	Acres	EDU/Acre	Potential EDU	Drainage Area
AR	003F008	OLDS to Public	1.1	3	3.3	GERMANTOWN
AR	003F007	OLDS to Public	1.1	3	3.3	GERMANTOWN
AR	003F006	OLDS to Public	1.6	3	4.8	GERMANTOWN
AR	003F005	OLDS to Public	1.6	3	4.9	GERMANTOWN
AR	003F004	OLDS to Public	1.7	3	5.1	GERMANTOWN
AR	003F003	OLDS to Public	1.8	3	5.3	GERMANTOWN
AR	004H016	OLDS to Public	1.3	3	4	GERMANTOWN
AR	4095	OLDS to Public	1.4	3	4.3	GERMANTOWN
AR	4015	OLDS to Public	2.1	3	6.4	GERMANTOWN
AR	4019	OLDS to Public	0.5	3	1.5	SANDRA
AR	003E008	OLDS to Public	1.7	3	5.1	SANDRA
AR	003F001	OLDS to Public	0.3	3	1	GERMANTOWN
AR	4045	OLDS to Public	2.0	3	6.1	GERMANTOWN
AR	003E006	OLDS to Public	0.6	3	1.8	SANDRA
AR	4051	OLDS to Public	1.9	3	5.6	GERMANTOWN
AR	003E004	OLDS to Public	0.5	3	1.6	SANDRA
AR	4043	OLDS to Public	1.0	3	3	SANDRA
AR	003C005	OLDS to Public	0.3	3	1	GERMANTOWN
AR	003C004	OLDS to Public	0.4	3	1.2	GERMANTOWN
AR	3.00E+03	OLDS to Public	0.5	3	1.5	SANDRA
AR	4084	OLDS to Public	1.6	3	4.7	SANDRA
AR	003C002	OLDS to Public	1.4	3	4.2	GERMANTOWN
AR	003C008	OLDS to Public	1.0	3	3.1	GERMANTOWN
AR	003E002	OLDS to Public	0.6	3	1.7	SANDRA
AR	003C009	OLDS to Public	1.5	3	4.6	GERMANTOWN
AR	003C010	OLDS to Public	1.8	3	5.4	GERMANTOWN
AR	003C011	OLDS to Public	1.2	3	3.5	GERMANTOWN
AR	003C013	OLDS to Public	0.6	3	1.7	GERMANTOWN
AR	003C014	OLDS to Public	0.5	3	1.5	GERMANTOWN
AR	003A003	OLDS to Public	0.5	3	1.5	SANDRA
AR	003C003	OLDS to Public	1.1	3	3.4	GERMANTOWN
AR	003C004	OLDS to Public	1.5	3	4.5	GERMANTOWN
AR	003A011	OLDS to Public	1.4	3	4.1	SANDRA
AR	003B004	OLDS to Public	2.0	3	6	SANDRA
AR	003B006	OLDS to Public	0.9	3	2.8	SANDRA
				SUB TOTAL	542.7	
ARC	003G069	OLDS to Public	0.5	2.5	1.2	GERMANTOWN
ARC	003C018	OLDS to Public	0.5	2.5	1.3	GERMANTOWN
				SUB TOTAL	2.5	
BP	003A002	Connect -10 year	2.6	11	28.5	SANDRA
BP	002A015	OLDS to Public	2.9	11	31.5	GERMANTOWN
				SUB TOTAL	60	
C	4087	Connect -10 year	3.1	7	21.9	SANDRA
C	002A006	Connect Ultimate	0.6	7	3.9	BURNSIDE
C	002A014	Connect Ultimate	0.7	7	5	BURNSIDE
C	4039	Connect Ultimate	0.254	7	1.8	SANDRA
C	4041	Connect Ultimate	1.48	7	10.4	SANDRA
C	4036	Connect Ultimate	1.333	7	9.3	SANDRA
C	4042	Connect Ultimate	1.045	7	7.3	SANDRA
C	4088	Connect Ultimate	1.043	7	7.3	SANDRA
C	4035	Connect Ultimate	1.511	7	10.6	SANDRA
C	4089	Connect Ultimate	0.519	7	3.6	SANDRA
C	4040	Connect Ultimate	0.453	7	3.2	SANDRA
C	002A005	OLDS to Public	0.8	7	5.7	BURNSIDE

TABLE 4-2

Potential Growth of Land Connected to Public Sewer

11/7/05

Zoning	Block/Unit	Public Sanitary	Acres	EDU/Acre	Potential EDU	Drainage Area
C	002A013	OLDS to Public	1.6	7	10.9	BURNSIDE
C	4037	OLDS to Public	1.7	7	11.5	BURNSIDE
C	4038	OLDS to Public	0.5	7	3.3	BURNSIDE
C	4040	OLDS to Public	0.5	7	3.2	BURNSIDE
C	002A008	OLDS to Public	2.1	7	14.7	BURNSIDE
C	002A009	OLDS to Public	1.0	7	6.8	BURNSIDE
C	002A010	OLDS to Public	1.2	7	8.2	BURNSIDE
C	002A011	OLDS to Public	0.6	7	4.1	BURNSIDE
C	002A007	OLDS to Public	1.6	7	10.9	BURNSIDE
				SUB TOTAL	163.6	
I	002A023	Connect Ultimate	1.5	2.5	3.7	BURNSIDE
I	002A022	Connect Ultimate	1.4	2.5	3.6	BURNSIDE
I	002A034	Connect Ultimate	2.0	2.5	5	BURNSIDE
I	002A033	OLDS to Public	1.0	2.5	2.6	BURNSIDE
I	002A017	OLDS to Public	3.0	2.5	7.4	BURNSIDE
I	002A020	OLDS to Public	2.6	2.5	6.4	BURNSIDE
I	002A026	OLDS to Public	2.3	2.5	5.7	BURNSIDE
I	002A024	OLDS to Public	2.0	2.5	5.1	BURNSIDE
I	002A028	OLDS to Public	1.9	2.5	4.7	BURNSIDE
I	002A029	OLDS to Public	1.9	2.5	4.8	BURNSIDE
I	002A030	OLDS to Public	2.0	2.5	5	BURNSIDE
I	002A031	OLDS to Public	2.1	2.5	5.4	BURNSIDE
				SUB TOTAL	59.4	
IN	003C015	Connect -10 year	1.9	5	9.4	GERMANTOWN
IN	002A003	Connect Ultimate	1.9	5	9.5	GERMANTOWN
IN	002A004	Connect Ultimate	1.0	5	5.1	GERMANTOWN
IN	1062	OLDS to Public	2.7	5	13.3	GERMANTOWN
IN	003B003	OLDS to Public	0.4	5	2	SANDRA
				SUB TOTAL	39.3	
LI	2057	Connect -10 year	2.2	1.5	3.3	BURNSIDE
LI	2056	Connect -10 year	2.8	1.5	4.2	BURNSIDE
				SUB TOTAL	7.5	
RO	003A006	Connect -10 year	2.0	2	4.1	SANDRA
RO	003A005	Connect -10 year	1.0	2	2.1	SANDRA
				SUB TOTAL	6.2	
RP	003E011	Connect -10 year	1.9	3.5	6.5	GERMANTOWN
RP	003E010	Connect -10 year	1.6	3.5	5.8	GERMANTOWN
RP	003E001	Connect -10 year	0.6	3.5	2.1	SANDRA
				SUB TOTAL	14.4	
				TOTAL GERMANTOWN	895.6	

TABLE 4-2

Potential Growth of Land Connected to Public Sewer

11/7/05

Zoning	Block/Unit	Public Sanitary	Acres	EDU/Acre	Potential EDU	Drainage Area
AR	004D025	Connect -10 year	0.451	3	1.4	WHITEHALL
AR	004D047	Connect -10 year	0.521	3	1.6	WHITEHALL
AR	004D023	Connect -10 year	0.48	3	1.4	WHITEHALL
AR	004D042	Connect -10 year	0.511	3	1.5	WHITEHALL
AR	004D040	Connect -10 year	0.484	3	1.5	WHITEHALL
AR	004D041	Connect -10 year	0.602	3	1.8	WHITEHALL
AR	004D046	Connect -10 year	0.69	3	2.1	WHITEHALL
AR	004D027	Connect -10 year	0.51	3	1.5	WHITEHALL
AR	004D028	Connect -10 year	0.876	3	2.6	WHITEHALL
AR	004D029	Connect -10 year	2.968	3	8.9	WHITEHALL
AR	6058	Connect -10 year	2.228	3	6.7	TIMBERLAKE
AR	6004	Connect Ultimate	2.293	3	6.9	TIMBERLAKE
AR	6082	Connect Ultimate	0.676	3	2.0	TIMBERLAKE
AR	6049	Connect Ultimate	0.387	3	1.2	TIMBERLAKE
AR	6036	Connect Ultimate	1.619	3	4.9	TIMBERLAKE
AR	6035	Connect Ultimate	0.849	3	2.5	TIMBERLAKE
AR	6016	Connect Ultimate	0.835	3	2.5	TIMBERLAKE
AR	6073	Connect Ultimate	0.865	3	2.6	TIMBERLAKE
AR	6071	Connect Ultimate	1.301	3	3.9	TIMBERLAKE
AR	6017	Connect Ultimate	1.897	3	5.7	TIMBERLAKE
AR	6018	Connect Ultimate	0.504	3	1.5	TIMBERLAKE
AR	006G000	Connect Ultimate	0.442	3	1.3	TIMBERLAKE
AR	6015	Connect Ultimate	0.621	3	1.9	TIMBERLAKE
AR	6020	Connect Ultimate	0.771	3	2.3	TIMBERLAKE
AR	6019	Connect Ultimate	0.585	3	1.8	TIMBERLAKE
AR	6029	Connect Ultimate	0.966	3	2.9	TIMBERLAKE
AR	6046	Connect Ultimate	0.834	3	2.5	TIMBERLAKE
AR	004D045	OLDS to Public	0.663	3	2.0	WHITEHALL
AR	004D026	OLDS to Public	0.479	3	1.4	WHITEHALL
AR	004D037	OLDS to Public	1.034	3	3.1	TIMBERLAKE
				SUBTOTAL	83.9	
ARC	004G039	Connect -10 year	0.548	2.5	1.4	TIMBERLAKE
ARC	004D021	Connect -10 year	2.139	2.5	5.3	WHITEHALL
ARC	004D066	Connect -10 year	0.865	2.5	2.2	WHITEHALL
ARC	004D020	Connect -10 year	1.845	2.5	4.6	WHITEHALL
ARC	004D008	Connect -10 year	1.071	2.5	2.7	WHITEHALL
ARC	004D038	Connect -10 year	0.435	2.5	1.1	WHITEHALL
ARC	004G021	OLDS to Public	0.52	2.5	1.3	TIMBERLAKE
				SUBTOTAL	18.6	
BP	6008	Connect -10 year	0.682	11	7.5	TIMBERLAKE
BP	006D009	Connect -10 year	0.248	11	2.7	TIMBERLAKE
BP	006D008	Connect -10 year	0.255	11	2.8	TIMBERLAKE
BP	5012	Connect Ultimate	0.41	11	4.5	TIMBERLAKE
				SUBTOTAL	17.5	
BR	6061	OLDS to Public	0.515	2.5	1.3	TIMBERLAKE
I	6068	Connect Ultimate	1.955	2.5	4.9	TIMBERLAKE
I	004D003	OLDS to Public	2.505	2.5	6.3	WHITEHALL
				SUBTOTAL	11.2	
				TOTAL TIMBERLAKE	132.5	

TABLE 4-2

Potential Growth of Land Connected to Public Sewer

11/7/05

Zoning	Block/Unit	Public Sanitary	Acres	EDU/Acre	Potential EDU	Drainage Area
AR	4000	Connect -10 year	0.087	3	1	NORRIS
AR	005A016	Connect -10 year	0.406	3	1.2	NORRIS
AR	26029	Connect -10 year	0.192	3	1	NORRIS
AR	26000	Connect -10 year	0.065	3	1	NORRIS
AR	005A000	Connect -10 year	0.504	3	1.5	NORRIS
AR	10039	Connect -10 year	0.399	3	1.2	NORRIS
AR	10011	Connect -10 year	0.193	3	1	NORRIS
AR	10036	Connect -10 year	0.217	3	1	NORRIS
AR	10000	Connect -10 year	0.21	3	1	NORRIS
AR	11021	Connect Ultimate	0.153	3	1	NORRIS
AR	13033	Connect Ultimate	0.206	3	1	NORRIS
AR	12022	Connect Ultimate	0.296	3	1	NORRIS
AR	12024	Connect Ultimate	0.075	3	1	NORRIS
AR	13032	Connect Ultimate	0.195	3	1	NORRIS
AR	25010	Connect Ultimate	0.277	3	1	NORRIS
AR	26064	Connect Ultimate	0.198	3	1	NORRIS
AR	25012	Connect Ultimate	0.374	3	1.1	NORRIS
AR	13037	Connect Ultimate	0.283	3	1	NORRIS
AR	26148	Connect Ultimate	1.121	3	3.4	NORRIS
AR	25013	Connect Ultimate	0.252	3	1	NORRIS
AR	13030	Connect Ultimate	0.613	3	1.8	NORRIS
AR	13002	Connect Ultimate	0.935	3	2.8	NORRIS
AR	25015	Connect Ultimate	0.24	3	1	NORRIS
AR	13020	Connect Ultimate	0.456	3	1.4	NORRIS
AR	26026	Connect Ultimate	0.331	3	1	NORRIS
AR	25023	Connect Ultimate	0.21	3	1	NORRIS
AR	26065	Connect Ultimate	0.176	3	1	NORRIS
AR	9049	Connect Ultimate	0.221	3	1	NORRIS
AR	005B035	Connect Ultimate	0.281	3	1	NORRIS
AR	9036	Connect Ultimate	0.166	3	1	NORRIS
AR	26043	Connect Ultimate	0.395	3	1.2	NORRIS
AR	9035	Connect Ultimate	0.242	3	1	NORRIS
AR	9039	Connect Ultimate	0.269	3	1	NORRIS
AR	9010	Connect Ultimate	0.291	3	1	NORRIS
AR	9060	Connect Ultimate	0.118	3	1	NORRIS
AR	10035	Connect Ultimate	0.279	3	1	NORRIS
AR	9004	Connect Ultimate	0.286	3	1	NORRIS
AR	10028	Connect Ultimate	0.429	3	1.3	NORRIS
AR	10026	Connect Ultimate	0.22	3	1	NORRIS
AR	12020	OLDS to Public	0.217	3	1	NORRIS
AR	003G069	OLDS to Public	0.4	3	1.2	NORRIS
AR	25011	OLDS to Public	0.29	3	1	NORRIS
AR	25014	OLDS to Public	0.25	3	1	NORRIS
AR	26019	OLDS to Public	0.16	3	1	NORRIS
AR	26023	OLDS to Public	0.991	3	3	NORRIS
AR	25022	OLDS to Public	0.233	3	1	NORRIS
AR	26025	OLDS to Public	0.588	3	1.8	NORRIS
AR	26024	OLDS to Public	0.165	3	1	NORRIS
AR	26035	OLDS to Public	0.556	3	1.7	NORRIS
AR	26027	OLDS to Public	0.346	3	1	NORRIS
AR	005B027	OLDS to Public	0.866	3	2.6	NORRIS
AR	005D041	OLDS to Public	0.69	3	2.1	NORRIS
AR	26142	OLDS to Public	0.383	3	1.1	NORRIS
AR	26010	OLDS to Public	0.358	3	1.1	NORRIS
AR	10034	OLDS to Public	0.275	3	1	NORRIS
AR	10027	OLDS to Public	0.264	3	1	NORRIS
AR	10012	OLDS to Public	0.153	3	1	NORRIS
				SUBTOTAL	70.5	

TABLE 4-2

Potential Growth of Land Connected to Public Sewer

11/7/05

Zoning	Block/Unit	Public Sanitary	Acres	EDU/Acre	Potential EDU	Drainage Area
BP	006D007	Connect -10 year	0.238	11	2.6	NORRIS
BP	005B038	Connect Ultimate	2.218	11	24.4	NORRIS
					27	
BR	005A026	Connect -10 year	0.13	2.5	1	NORRIS
BR	9000	Connect -10 year	0.646	2.5	1.6	NORRIS
BR	10020	Connect -10 year	0.337	2.5	1	NORRIS
BR	19067	Connect -10 year	0.296	2.5	1	NORRIS
BR	027G025	Connect -10 year	0.437	2.5	1.1	NORRIS
BR	19063	Connect -10 year	0.17	2.5	1	NORRIS
BR	20056	Connect -10 year	0.332	2.5	1	NORRIS
BR	22020	Connect -10 year	0.046	2.5	1	NORRIS
BR	23062	Connect -10 year	0.182	2.5	1	NORRIS
BR	23067	Connect -10 year	0.188	2.5	1	NORRIS
BR	23069	Connect -10 year	0.364	2.5	1	NORRIS
BR	23074	Connect -10 year	0.177	2.5	1	NORRIS
BR	20032	Connect -10 year	0.128	2.5	1	NORRIS
BR	23033	Connect -10 year	0.139	2.5	1	NORRIS
BR	23034	Connect -10 year	0.135	2.5	1	NORRIS
BR	21034	Connect -10 year	0.187	2.5	1	NORRIS
BR	22023	Connect -10 year	0.038	2.5	1	NORRIS
BR	21038	Connect -10 year	0.063	2.5	1	NORRIS
BR	23027	Connect -10 year	0.283	2.5	1	NORRIS
BR	23002	Connect -10 year	0.139	2.5	1	NORRIS
BR	21024	Connect -10 year	0.077	2.5	1	NORRIS
BR	21023	Connect -10 year	0.126	2.5	1	NORRIS
BR	23003	Connect -10 year	0.139	2.5	1	NORRIS
BR	21041	Connect -10 year	0.034	2.5	1	NORRIS
BR	21051	Connect -10 year	0.255	2.5	1	NORRIS
BR	21030	Connect -10 year	0.093	2.5	1	NORRIS
BR	23007	Connect -10 year	0.07	2.5	1	NORRIS
BR	23084	Connect -10 year	0.069	2.5	1	NORRIS
BR	21021	Connect -10 year	0.141	2.5	1	NORRIS
BR	21012	Connect -10 year	0.135	2.5	1	NORRIS
BR	24010	Connect -10 year	0.193	2.5	1	NORRIS
BR	21032	Connect -10 year	0.139	2.5	1	NORRIS
BR	005A025	Connect Ultimate	0.152	2.5	1	NORRIS
BR	9026	Connect Ultimate	0.361	2.5	1	NORRIS
BR	9056	Connect Ultimate	0.456	2.5	1.1	NORRIS
BR	23032	OLDS to Public	0.14	2.5	1	NORRIS
BR	19004	OLDS to Public	0.284	2.5	1	NORRIS
BR	21020	OLDS to Public	0.127	2.5	1	NORRIS
				SUBTOTAL	38.8	
C	26003	Connect -10 year	1.712	7	12	NORRIS
C	20060	Connect -10 year	0.144	7	1	NORRIS
C	14000	Connect Ultimate	0.319	7	2.2	NORRIS
C	14015	Connect Ultimate	0.572	7	4	NORRIS
C	26028	Connect Ultimate	0.221	7	1.5	NORRIS
C	26003	Connect Ultimate	1.7	7	12	NORRIS
				SUBTOTAL	32.7	
C1	20061	Connect -10 year	0.33	8	2.6	NORRIS
C1	21050	Connect -10 year	0.137	8	1.1	NORRIS
C1	21045	Connect -10 year	0.164	8	1.3	NORRIS
				SUBTOTAL	5	

TABLE 4-2

Potential Growth of Land Connected to Public Sewer

11/7/05

Zoning	Block/Unit	Public Sanitary	Acres	EDU/Acre	Potential EDU	Drainage Area
RP	027C017	Connect Ultimate	0.589	3.5	2.1	NORRIS
RP	027C016	Connect Ultimate	1.26	3.5	4.4	NORRIS
				SUBTOTAL	6.5	
				TOTAL NORRIS	180.5	

TABLE 4-2

Potential Growth of Land Connected to Public Sewer

11/7/05

Zoning	Block/Unit	Public Sanitary	Acres	EDU/Acre	Potential EDU	Drainage Area
AR	027C014	Connect -10 year	0.477	3	1.4	SAWMILL
AR	027C013	Connect -10 year	0.333	3	1.0	SAWMILL
AR	027C011	Connect -10 year	1.419	3	4.3	SAWMILL
AR	027C012	Connect -10 year	0.342	3	1.0	SAWMILL
AR	027C000	Connect -10 year	0.469	3	1.4	SAWMILL
AR	027C010	Connect -10 year	0.467	3	1.4	SAWMILL
AR	027C009	Connect -10 year	0.469	3	1.4	SAWMILL
AR	027B017	Connect -10 year	0.621	3	1.9	SAWMILL
AR	027B025	Connect -10 year	0.328	3	1.0	SAWMILL
AR	027B020	Connect -10 year	0.269	3	1.0	SAWMILL
AR	027B022	Connect -10 year	0.999	3	3.0	SAWMILL
AR	027B021	Connect -10 year	0.678	3	2.0	SAWMILL
AR	027B023	Connect -10 year	1.066	3	3.2	SAWMILL
AR	02C011	OLDS to Public	1.4	3	4.3	SAWMILL
AR	027C027	OLDS to Public	0.47	3	1.4	SAWMILL
AR	027B019	OLDS to Public	0.611	3	1.8	SAWMILL
				SUBTOTAL	31.5	
BR	23020	Connect -10 year	0.285	2.5	1.0	SAWMILL
BR	24016	Connect -10 year	0.202	2.5	1.0	SAWMILL
BR	24017	Connect -10 year	0.206	2.5	1.0	SAWMILL
BR	24020	Connect -10 year	0.41	2.5	1.0	SAWMILL
BR	30016	Connect -10 year	0.091	2.5	1.0	SAWMILL
BR	30078	Connect -10 year	0.091	2.5	1.0	SAWMILL
BR	31074	Connect -10 year	0.09	2.5	1.0	SAWMILL
BR	31075	Connect -10 year	0.093	2.5	1.0	SAWMILL
BR	31076	Connect -10 year	0.09	2.5	1.0	SAWMILL
BR	30101	Connect -10 year	0.091	2.5	1.0	SAWMILL
BR	30085	Connect -10 year	0.047	2.5	1.0	SAWMILL
BR	30103	Connect -10 year	0.048	2.5	1.0	SAWMILL
BR	29100	Connect Ultimate	0.048	2.5	1.0	SAWMILL
BR	29105	Connect Ultimate	0.085	2.5	1.0	SAWMILL
BR	29032	Connect Ultimate	0.137	2.5	1.0	SAWMILL
BR	29040	Connect Ultimate	0.067	2.5	1.0	SAWMILL
BR	29041	Connect Ultimate	0.056	2.5	1.0	SAWMILL
BR	29033	Connect Ultimate	0.055	2.5	1.0	SAWMILL
BR	29104	Connect Ultimate	0.054	2.5	1.0	SAWMILL
BR	29037	Connect Ultimate	0.049	2.5	1.0	SAWMILL
BR	30075	Connect Ultimate	0.091	2.5	1.0	SAWMILL
BR	29016	Connect Ultimate	0.096	2.5	1.0	SAWMILL
BR	29014	Connect Ultimate	0.048	2.5	1.0	SAWMILL
BR	29071	Connect Ultimate	0.075	2.5	1.0	SAWMILL
BR	30009	Connect Ultimate	0.089	2.5	1.0	SAWMILL
BR	29133	Connect Ultimate	0.065	2.5	1.0	SAWMILL
BR	29123	Connect Ultimate	0.05	2.5	1.0	SAWMILL
BR	30122	Connect Ultimate	0.095	2.5	1.0	SAWMILL
BR	30006	Connect Ultimate	0.092	2.5	1.0	SAWMILL
BR	30005	Connect Ultimate	0.091	2.5	1.0	SAWMILL
BR	29120	Connect Ultimate	0.046	2.5	1.0	SAWMILL
BR	30003	Connect Ultimate	0.136	2.5	1.0	SAWMILL
BR	30121	Connect Ultimate	0.093	2.5	1.0	SAWMILL
BR	29080	Connect Ultimate	0.048	2.5	1.0	SAWMILL
BR	29079	Connect Ultimate	0.046	2.5	1.0	SAWMILL
BR	30127	Connect Ultimate	0.092	2.5	1.0	SAWMILL
BR	29130	Connect Ultimate	0.046	2.5	1.0	SAWMILL
BR	30063	Connect Ultimate	0.092	2.5	1.0	SAWMILL
BR	29129	Connect Ultimate	0.047	2.5	1.0	SAWMILL
BR	30062	Connect Ultimate	0.094	2.5	1.0	SAWMILL
BR	30119	Connect Ultimate	0.091	2.5	1.0	SAWMILL

TABLE 4-2

Potential Growth of Land Connected to Public Sewer

11/7/05

Zoning	Block/Unit	Public Sanitary	Acres	EDU/Acre	Potential EDU	Drainage Area
BR	31084	Connect Ultimate	0.091	2.5	1.0	SAWMILL
BR	31072	Connect Ultimate	0.095	2.5	1.0	SAWMILL
BR	31083	Connect Ultimate	0.092	2.5	1.0	SAWMILL
BR	30117	Connect Ultimate	0.091	2.5	1.0	SAWMILL
BR	31004	Connect Ultimate	0.154	2.5	1.0	SAWMILL
BR	31071	Connect Ultimate	0.09	2.5	1.0	SAWMILL
BR	31002	Connect Ultimate	0.089	2.5	1.0	SAWMILL
BR	30114	Connect Ultimate	0.093	2.5	1.0	SAWMILL
BR	31003	Connect Ultimate	0.047	2.5	1.0	SAWMILL
BR	30083	Connect Ultimate	0.09	2.5	1.0	SAWMILL
BR	29048	Connect Ultimate	0.047	2.5	1.0	SAWMILL
BR	31080	Connect Ultimate	0.093	2.5	1.0	SAWMILL
BR	30051	Connect Ultimate	0.048	2.5	1.0	SAWMILL
BR	31065	Connect Ultimate	0.092	2.5	1.0	SAWMILL
BR	29117	Connect Ultimate	0.048	2.5	1.0	SAWMILL
BR	29062	Connect Ultimate	0.048	2.5	1.0	SAWMILL
BR	31009	Connect Ultimate	0.09	2.5	1.0	SAWMILL
BR	31012	Connect Ultimate	0.11	2.5	1.0	SAWMILL
BR	30104	Connect Ultimate	0.043	2.5	1.0	SAWMILL
BR	30105	Connect Ultimate	0.047	2.5	1.0	SAWMILL
BR	30059	Connect Ultimate	0.052	2.5	1.0	SAWMILL
BR	30155	Connect Ultimate	0.049	2.5	1.0	SAWMILL
BR	31028	Connect Ultimate	0.093	2.5	1.0	SAWMILL
BR	30157	Connect Ultimate	0.049	2.5	1.0	SAWMILL
BR	31026	Connect Ultimate	0.137	2.5	1.0	SAWMILL
BR	31107	Connect Ultimate	0.093	2.5	1.0	SAWMILL
BR	30160	Connect Ultimate	0.048	2.5	1.0	SAWMILL
BR	31108	Connect Ultimate	0.047	2.5	1.0	SAWMILL
BR	30167	Connect Ultimate	0.047	2.5	1.0	SAWMILL
BR	31135	Connect Ultimate	0.071	2.5	1.0	SAWMILL
BR	30164	Connect Ultimate	0.047	2.5	1.0	SAWMILL
BR	30165	Connect Ultimate	0.056	2.5	1.0	SAWMILL
BR	31033	Connect Ultimate	0.091	2.5	1.0	SAWMILL
BR	31049	Connect Ultimate	0.047	2.5	1.0	SAWMILL
BR	31034	Connect Ultimate	0.093	2.5	1.0	SAWMILL
BR	31046	Connect Ultimate	0.047	2.5	1.0	SAWMILL
BR	31130	OLDS to Public	0.09	2.5	1.0	SAWMILL
BR	31110	OLDS to Public	0.09	2.5	1.0	SAWMILL
BR	30010	OLDS to Public	0.092	2.5	1.0	SAWMILL
BR	31106	OLDS to Public	0.091	2.5	1.0	SAWMILL
				SUBTOTAL	81.0	
C	027F009	Connect Ultimate	1.996	7	14.0	SAWMILL
C	027H044	Connect Ultimate	0.081	7	1.0	SAWMILL
					15.0	
IN	24024	Connect -10 year	0.832	5	4.2	SAWMILL
IN	24021	Connect -10 year	0.274	5	1.4	SAWMILL
				SUBTOTAL	5.6	
MR	027J046	Connect Ultimate	0.292	5.5	1.6	SAWMILL
RO	28011	Connect -10 year	0.371	2	1.0	SAWMILL
RO	23045	Connect -10 year	0.379	2	1.0	SAWMILL
RO	28014	Connect -10 year	0.143	2	1.0	SAWMILL
RO	28003	OLDS to Public	0.73	2	1.5	SAWMILL
RO	28010	OLDS to Public	0.369	2	1.0	SAWMILL
RO	23044	OLDS to Public	0.36	2	1.0	SAWMILL
				SUBTOTAL	6.5	

TABLE 4-2

Potential Growth of Land Connected to Public Sewer

11/7/05

Zoning	Block/Unit	Public Sanitary	Acres	EDU/Acre	Potential EDU	Drainage Area
				TOTAL SAWMILL	141.2	

TABLE 4-3

East Norriton Township Connection Management

Last Revised: 06/25/05

PMA - Planning Module Approved
PHR - Pump & Haul Request
E - Exception Requested -Replacement Flow

Development	DEP CODE	EDUs Required	Planning Module Approved - Exception # EDU's	Subdivision or Land Development Plan Approved	EDU's Paid	Permits Issued or Existing EDU's or Replacement Flows	EDUs Needed	Pump Station Drainage Area	Priority
Reserve @ Penn Crossing - Cutler - 78 EDU's Approved 2003 Paid In Full	ENPWJSA	78	78 PMA	Y	78	9 Permits	39	Saw Mill	1
Mercy Suburban Hospital - **Requesting Exemption - Facility Public Need**	ENPWJSA	16	16 E	Y	N	-	16	Norris City	1
Pimlico Farms - Gambone - **35 EDU's Approved 1998** Paid for 46 - 5/24/05	ENPWJSA	46	35 PMA	Y	Y	-	35	Germantown	1
Jefferson Crossing - Philomeno/Salamone - **Replacing existing 34 EDU's**	1-46926-130-3J	84	34 E	Y	N	34 Replacement	50	Norris City	1
from Jefferson House Rest.									
Heatherwood - Erb/Mascio/Gambone	1-46926-118-3J	28	N	Y	N	-	28	Timberlake	1
Dr Valenza - Germantown Pike/N Wales Road	ENPWJSA	8	N	Y	N	-	8	Timberlake	1
MRA Carwash - Germantown Pike - 2EDU's Present	1-46926-127-3J	8	N	Y	N	2 Replacement	6	Norris City	1
Evergreen Terrace Calamia - Erb/Mascio - 3 EDU's present connection	ENPWJSA	10	N	N	N	3 Replacement	8	Timberlake	1
Eric Winchester - **117 Hancock Ave - Single Home on last remaining vacant lot**	1-46926-129-X	1	N	Y	N	-	1	Norris City	1
DeStefano - Bristol Ave - Single Home on vacant lot	ENPWJSA	1	N	Y	N	-	1	Saw Mill	1
Crowley Foods - Gambone	ENPWJSA	5	N	Y	N	-	5	Germantown	1
Pat Bradley - Barbara Drive - Single Home on Vacant Lot	ENPWJSA	1	N	Y	N	-	1	Timberlake	1
Kinder Care - Tornetta **Bentwood - 236 EDU's Approved 1998 - 58 EDU's Paid 1998**	1-46926-J04-E	4	236 PMA	Y	58	5 Permits	4	Saw Mill	1
Norriton Business Campus - 58 EDU's Approved in 1988	ENPWJSA	10	58 PMA	Y	58	28 Permits	10	Germantown	1
Moreland Dev. - Bank - Whitehall/Germantown - Last pad of 3 pad site	ENPWJSA	10	25 PMA	Y	N	2 Permits	10	Germantown	1
Northwood - Tornetta **(request transfer 30 EDU's (5 EDU's existing) of approved 58 EDU's**	ENPWJSA	30	N	N	N	5 Replacement	25	Saw Mill	1
paid for for in 1998. The Bentwood Project received approval for 236 EDU's in 1998)									
Anderson's - Rahway Ave - Single Home on vacant lot	ENPWJSA	1	N	Y	N		1	Saw Mill	
Carol Mobile - Butchers Lane - Single Home on vacant lot - ejector pump	ENPWJSA	1	N	Y	N		1	Norris City	
TOTAL REQUESTED PRIORITY NO. 1		342					249		
Reserve @ Penn Crossing - Cutler - Remaining Connection	ENPWJSA	30	30 PMA	Y	78	-	30	Norris City	2
Pimlico Farms - Gambone - Remaining Connections	ENPWJSA	11	35 PMA	Y	N	-	11	Germantown	2
Norriton Business Campus - **58 EDU's Approved in 1988**	ENPWJSA	20	58 PMA	Y	Y	28 Permits	20	Germantown	2
Gorman Welding	ENPWJSA	5	N	N	N	-	5	Germantown	2
DeKalb Apartments - DeKalb Pike	ENPWJSA	40	N	N	N	-	40	Norris City	2
Waterworks - DeKalb Pike & Johnson Highway	ENPWJSA	40	N	N	N	-	40	Saw Mill	2
Northwood - Tornetta - **Request to transfer from Bentwood Project approved EDU's**	ENPWJSA	120	N	N	N	-	120	Norris City	2
Del Markward - 911 W. Germantown Pike	ENPWJSA	56	N	N	N		56	Germantown	

TABLE 4-3

East Norriton Township Connection Management

Last Revised: 06/25/05

PMA - Planning Module Approved
PHR - Pump & Haul Request
E - Exception Requested -Replacement Flow

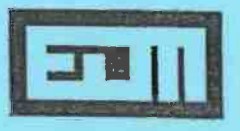
Development	DEP CODE	EDUs Required	Planning Module Approved - Exception # EDU's	Subdivision or Land Development Plan Approved	EDU's Paid	Permits Issued or Existing EDU's or Replacement Flows	EDUs Needed	Pump Station Drainage Area	Priority
TOTAL REQUESTED PRIORITY NO. 2		322					322		
Waterworks - DeKalb Pike & Johnson Highway	ENPWJSA	26	N	N	N	-	26	Saw Mill	3
DeKalb Apartments - DeKalb Pike	ENPWJSA	40	N	N	N	-	40	Norris City	3
Miller Electric - End of Felton Rd	ENPWJSA	10	N	N	N	-	10	Timberlake	3
Piantone/Brance - Whitehall Road	ENPWJSA	20	N	N	N	3 Replacement	17	Germantown	3
Del Markward - 911 W. Germantown Pk	ENPWJSA	55	N	N	N	-	55	Germantown	3
Bentwood Flex Development - **Remaining Project EDU's**	ENPWJSA	28	Y	Y	N	-	28	Norris City	3
District Court Office Building	ENPWJSA	15	N	N	N		15	Timberlake	3
Clements Meat Market - Old Arch Road	ENPWJSA	20	N	N	N	3 Replacement	17	Saw Mill	3
FAILED SEPTIC SYSTEMS THROUGHOUT TWP	ENPWJSA	20	NA	NA	NA	-	20		3
NORTHWOODS - 150 CREDITED BACK TO BENTWOOD	ENPWJSA	240	N	N	N		240		3
TOTAL REQUESTED PRIORITY NO. 3		474				-	468		

Priority 1	342	**249**
Priority 2	322	322
Priority 3	474	468
	1138	1,039

Definitions:

Priority 1 - Connections desired ASAP	**249**
Priority 2 - Connections desired between 6 months and 1 year	322
Priority 3 - Connections desired beyond first year	468

APPENDICES



APPENDIX A

PaDEP Approval Letter (1990 537 Plan Update)

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

Lee Park, Suite 6010
555 North Lane
Conshohocken, PA 19428

September 26, 1994

SEP 27 1994

Southeast Regional Office

(610) 832-6130
FAX: (610) 832-6259

Helmuth Baerwald
East Norriton Township
2501 Stanbridge Street
Norristown, PA 19401-1616

Re: Act 537 Update
East Norriton Township
Montgomery County

Dear Mr. Baerwald:

We have completed our review of your municipality's updated official sewage facilities plan entitled East Norriton Township Act 537 Official Sewage Facilities Plan Update as prepared by EDM Consultants, dated July 1993. The review was conducted in accordance with the provisions of the Pennsylvania Sewage Facilities Act.

Approval of the update is hereby granted.

The plan provides for:

1. The rehabilitation and upgrade of the existing sewerage collection and conveyance system.

2. The rehabilitation and upgrade of the three major pump stations (Germantown, Timberlake, and Norris City Avenue) consistent with Table X.

3. The development of an on-lot management program.

4. Adequate capacity under its current allocation in East Norriton-Plymouth-Whitpain Joint Sewer Authority's sewage treatment plant.

Please note that East Norriton Township may delay the implementation of the on-lot management program and corresponding ordinance until the pending legislation (HB No. 2146) resolves questions of transferring this responsibility to County Health Departments.

If you have any questions regarding this matter, please feel free to contact me at the above number.

Sincerely,

Joseph A. Feola

Joseph A. Feola
Water Management Program Manager

cc: Montgomery County Health Department
Montgomery County Planning Commission
EDM Consultants, Inc.
Planning Section
Ms. Moore
Division of Municipal Facilities and Grants
Re 30 (RN)252.1

APPENDIX B

East Norriton Township Sewage Needs Approval

East Norriton Township
2501 STANBRIDGE STREET
EAST NORRITON, PA 19401-1616, U.S.A.
(610) 275-2800 FAX (610) 277-1879
www.eastnorritontwp.org
info@eastnorritontwp.org

RECEIVED
MAY 26 2005
EDM CONSULTANTS

May 24, 2005

Stanley J. Endlich, P.E.
EDM Consultants, Inc.
1101 South Broad St., Suite 200
Lansdale, PA 19446

Re: East Norriton Township Act 537 Plan Update

Dear Stanley:

Please be advised that the Board of Supervisors have approved the identified sewage needs for East Norriton Township per your letter to Mr. William Bohner, dated May 13, 2005.

Should you require any additional information, please contact us.

Sincerely,

Helmuth J.H.Baerwald
Township Manager

cc: Board of Supervisors

/saj

EDM CONSULTANTS, INC.
1101 South Broad Street, Suite 200, P. O. Box 1545, Lansdale, PA 19446
Phone (215) 393-0670 Fax (215) 393-0652

May 13, 2005

Mr. William L. Bohner, Jr. P.E.
ARRO Consulting, Inc.
649 N. Lewis Road, Suite 100
Limerick, PA 19468-1234

RE: East Norriton Township
Act 537 Plan Update
Revised Preliminary Sewage Needs

FILE: 158-037 (1.00)

Dear Bill:

Following the ENPWJSA Regional Act 537 Plan meeting on April 27, 2005, the sewage needs for East Norriton Township were revisited.

The evaluation included a review of year 2004 flows to establish existing sewage flow and projected future development based on existing Parcel zoning.

The evaluation indicated the following sewage needs for East Norriton Township:

Projected average 3-month maximum: 3.3 mgd

Projected average annual flow: 2.7 mgd.

Please note the average annual flow need is consistent with East Norriton Township's existing capacity of 2.7 mgd at the ENPWJSA. An additional 0.2 mgd of average 3-month maximum capacity is projected to be required.

The identified sewage needs has been discussed with the Township staff but has not been reviewed or approved by the Board of Supervisors.

Very truly yours,

EDM CONSULTANTS, INC.

Stanley J. Endlich, P.E.

pc: Helmuth Baerwald, Manager, East Norriton Township
Mr. Bruce Shoupe, East Norriton Township
Mr. Ed White, East Norriton Township

\037_arro-ENTSewageNeeds-05.doc

APPENDIX C

Gannett Fleming West Norriton Barbadoes Plant Cost Estimates

Gannett Fleming

GANNETT FLEMING, INC.
P.O. Box 80794
Valley Forge, PA 19484-0794
Location:
Valley Forge Corporate Center
1010 Adams Avenue
Audubon, PA 19403-2402
Office: (610) 650-8101
Fax: (610) 650-8190
www.gannettfleming.com

September 21, 2004

Stanley J. Endlich, P.E.
Vice President
EDM Consultants, Inc.
P.O. Box 1545
Lansdale, PA 19446

Re: West Norriton
Barbadoes Plant
Cost Estimates

Dear Stan:

As per our discussion, I am forwarding a copy of the cost information that has been developed to date for the proposed treatment plant. The tables were prepared and provided to West Norriton in May 2002.

Please let me know if you have any questions about the enclosures.

Very truly yours,
GANNETT FLEMING, INC.

Thomas S. Brown, P.E.

Table 1
West Norriton Township
Wastewater Treatment Plant Options
Estimated Capital and Annual Costs
(Financing Interest @ 5 %)

	2.5 mgd Plant [1]	3.0 mgd Plant [2]	8.0 mgd Plant [3]	10.0 mgd Plant [4]
Project Cost for New Treatment Plant	$18,000,000	$21,000,000	$33,500,000	$39,000,000
Annual Debt Service & Coverage (New Plant) [5]				
* West Norriton	$1,288,800	$1,253,000	$749,600	$698,100
* East Norriton	n.a.	$250,600	$149,900	$139,600
* Norristown	n.a.	n.a.	$1,499,100	$1,954,700
Total	$1,288,800	$1,503,600	$2,398,600	$2,792,400
Annual O & M Cost				
* West Norriton (2.1 mgd)[6]	$1,000,000	$973,900	$881,600	$843,100
* East Norriton (0.3 mgd)[6]	n.a.	$139,100	$126,000	$120,500
* Norristown (3.6 mgd)[6]	n.a.	n.a.	$1,511,400	$1,445,400
Total	$1,000,000	$1,113,000	$2,519,000	$2,409,000
Total Annual Cost (Debt Service and O&M)				
* West Norriton	$2,288,800	$2,226,900	$1,631,200	$1,541,200
* East Norriton	n.a.	$389,700	$275,900	$260,100
* Norristown	n.a.	n.a.	$3,010,500	$3,400,100
Total	$2,288,800	$2,616,600	$4,917,600	$5,201,400

(1) West Norriton (2.5 mgd) only

(2) West Norriton (2.5 mgd) plus western portion of East Norriton (0.5mgd).

(3) West Norriton (2.5 mgd), western portion of East Norriton (0.5 mgd), and Norristown (5.0 mgd).

(4) West Norriton (2.5 mgd), western portion of East Norriton (0.5 mgd), and Norristown (7.0 mgd).
(This is the approximate capacity of the current Norristown Treatment Plant.)

(5) Financing: 5 % interest, 10% coverage, 30 years

(6) Approximate current flows.

APPENDIX D

MCHD OLDS Complaints

COUNTY OF MONTGOMERY

COMMISSIONERS
MICHAEL D. MARINO, Esq.
CHAIRMAN
JAMES R. MATTHEWS RUTH S. DAMSKER

DIRECTOR OF HEALTH
DR. JOSEPH M. DIMINO

DEPARTMENT OF HEALTH
MONTGOMERY COUNTY HUMAN SERVICES CENTER
1430 DeKALB STREET
P.O. BOX 311
NORRISTOWN, PENNSYLVANIA 19404-0311

TEL: (610) 278-5117
TDD: (610) 631-1211
FAX: (610) 278-5167

NOV 01 2005

October 25, 2005

George Rigley, P.E.
EDM Consultants, Inc.
1101 South Broad Street, Suite 200
P.O. Box 1545
Lansdale, PA 19446

Re: East Norriton Township Act 537 Plan Update

Dear Mr. Rigley:

As per your request, MCHD has put together a list of properties in East Norriton Township between the October 2003 and October 2005. The following contains information on complaints/malfunctioning systems, active site investigations due to malfunctioning systems and any corrective actions implemented. These sites are in addendum to the Act 537 Plan Update information I sent you in October 2005.

Complaints/Malfunctioning Systems:

1. Location: 102 Lawnton Road
   Action taken: System pumped, no subsequent discharge.

Active Site Investigations:

1. Location: 912 North Trooper Road
   General Information: Site testing is currently being performed for two-lot subdivision.

Permits issued:

1. Location: 102 Ciral Lane
   General Information: Permit issued due to septic tank failure, new tank installed

2. Location: 111 West Township Line road
   General Information: Permit issued due to septic tank failure, new tank and building sewer installed

3. Location: 550 North Trooper Road
   General Information: System (cesspool) malfunction, Permit issued for elevated sand mound, system installed

4. Location: 2016 North Trooper Road
   General Information: Permit issued due to septic tank failure, new tank installed

5. Location: North Trooper Road Lot 2 (912)
   General Information: Permit issued for Drip Irrigation system, property sub-divided, system installed

We hope this information will be helpful to you. If you have any questions or concerns regarding this information, please contact me at (610) 278-5117 extension 6730.

Sincerely,

Mark John Radatti
Sewage Enforcement Officer
Division of Water Quality Management

cc: Helmuth J. Baerwald, Manager, East Norriton Township

COUNTY OF MONTGOMERY

COMMISSIONERS
MICHAEL D. MARINO, Esq.
CHAIRMAN
JAMES R. MATTHEWS RUTH S. DAMSKER

DIRECTOR OF HEALTH
DR. JOSEPH M. DIMINO

DEPARTMENT OF HEALTH
MONTGOMERY COUNTY HUMAN SERVICES CENTER
1430 DeKALB STREET
P.O. BOX 311
NORRISTOWN, PENNSYLVANIA 19404-0311

TEL: (610) 278-5117
TDD: (610) 631-1211
FAX: (610) 278-5167

October 28, 2003

Stanley J. Endlich, P.E.
EDM Consultants, Inc.
1101 South Broad Street, Suite 200
P.O. Box 1545
Lansdale, PA 19446

Re: East Norriton Township Act 537 Plan Update

Dear Mr. Endlich:

As per your request, MCHD has put together a list of properties in East Norriton Township. The following contains information on complaints/malfunctioning systems, active site investigations due to malfunctioning systems and any corrective actions implemented. Because you requested information regarding areas not currently serviced by public sewers, any site that resulted in connection to public sewer was omitted from the list.

Complaints/Malfunctioning Systems:

1. Location: 512 Burnside Road
   Action taken: System pumped, no subsequent discharge.

2. Location: 2300 Old Arch Road
   Action taken: House abandoned and demolished.

3. Location: 2905 Sunset Ave.
   Action taken: System pumped, no subsequent discharge.

4. Location: 1229 Township Line Road
   Action taken: Suitable site found, new septic system installed.

5. Location: 1235 Township Line Road
   Action taken: Suitable site found, new septic system installed.

6. Location: 119 Hancock Ave.
   Action taken: Existing septic system repaired.

7. Location: 550 North Trooper Road
   Action Taken: Suitable area found, new system installed. Curtain drain installed upslope of sand mound to alleviate surfacing groundwater. Toe-drain installed down slope of sand mound to alleviate surfacing groundwater on neighboring property.

Active Site Investigations:

1. Location: 2915 Sunset Ave
   General Information: No suitable area found, no other action taken.

2. Location: ~~3903~~ Sunset Ave. (2903)
   General Information: No suitable area found, no other action taken.

3. Location: 1012 Woodland Ave.
   Type of System: Cesspool with trenches
   General Information: No suitable area found. Easement for public sewer was obtained.

4. Location: 538 North Trooper Road
   General Information: No suitable area found, no other action taken.

5. Location: 542 North Trooper Road
   General Information: No suitable area found, re-use of existing septic system approved only for existing average daily sewage flow.

6. Location: 1018 Woodland Ave.
   General Information: No suitable area found, no other action taken.

We hope this information will be helpful to you. If you have any questions or concerns regarding this information, please contact me at (610) 278-5117 extension 130.

Sincerely,

Mark John Radatti
Environmental Health Specialist/Sewage Enforcement Officer
Division of Water Quality Management

cc: Helmuth J. Baerwald, Manager, East Norriton Township
Bruce Shoupe, Director of Public Works, East Norriton Township

NORRISTOWN HEALTH CENTER
1430 DEKALB STREET, PO BOX 311
NORRISTOWN, PA 19404-0311
PHONE: (610) 278-5145 FAX: (610) 278-5166

POTTSTOWN HEALTH CENTER
364 KING STREET
POTTSTOWN, PA 19464
PHONE: (610) 970-5040 FAX: (610) 970-5048

EASTERN COURT HOUSE ANNEX
102 YORK ROAD, SUITE 401
WILLOW GROVE, PA 19090
PHONE: (215) 784-5415 FAX: (215) 784-5524

APPENDIX E

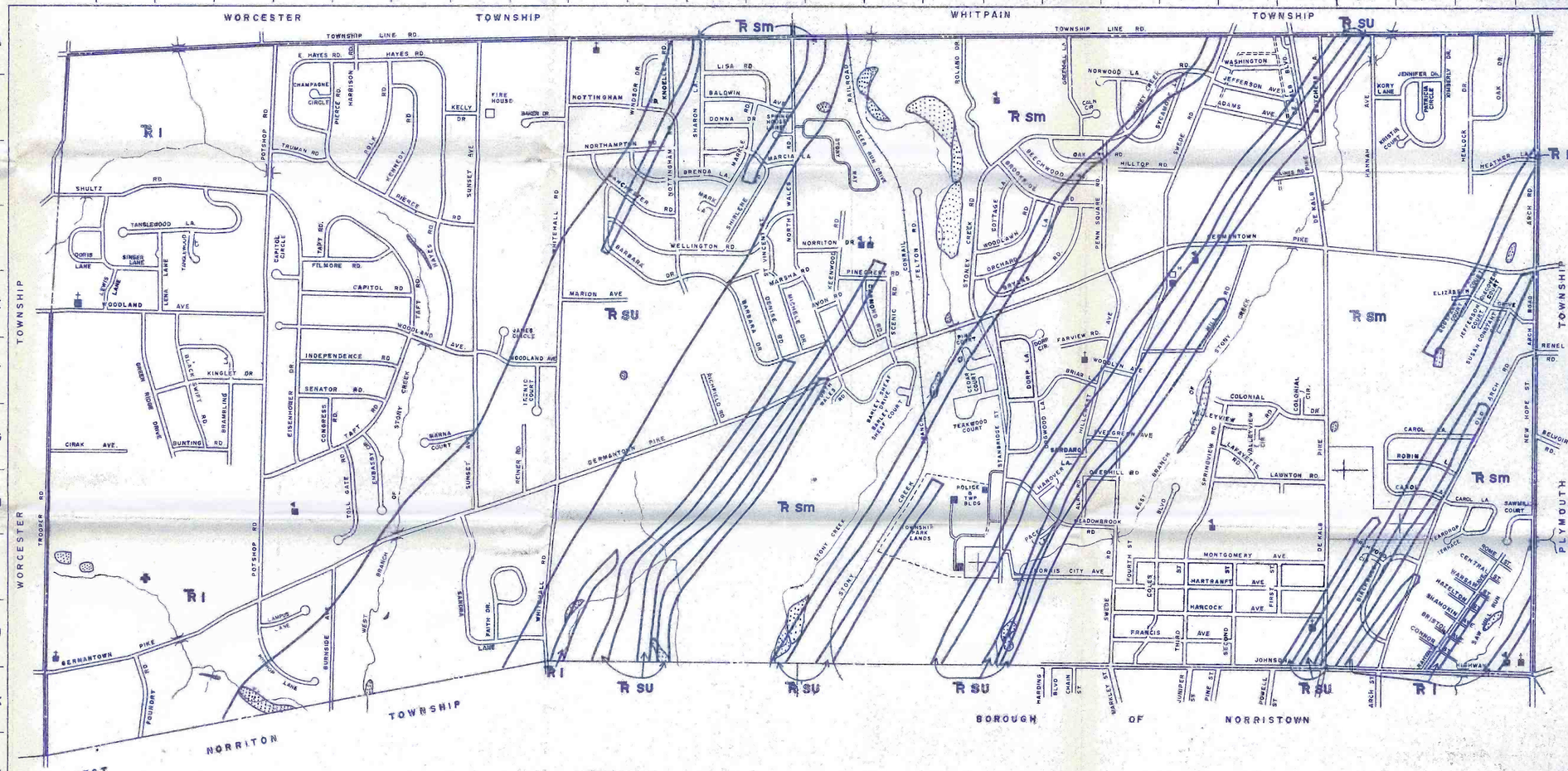
Plate IV – Geologic Map (PSC Engineers & Consultants, Inc.)

EAST NORRITON TOWNSHIP STREET LIST

ADAMS AVE.	B20-B22	LAFAYETTE RD.	G21
ALAN RD.	H18	LAWNTON RD.	H20-H22
AVON RD.	E14	LISA RD.	B12 -B13
ARCH RD.	F26-A26	LEWIS LA.	D2 -E2
		LENA LA.	D3 -E3
BAKER DR.	B6		
BALDWIN AVE.	B12 -B13	MANCHESTER RD.	C10 -D11
BARBARA DR.	C10 -F14	MARCIA LA.	C13
BEECHWOOD RD.	B17 -C19	MARION AVE.	E10 -E11
BIRCHWOOD CIR.	I23	MARK LA.	D13
BIRCHWOOD DR.	I24-J23	MARKLE RD.	B13 -D18
BLACK SWIFT RD.	E3 -G3	MARSHA RD.	E13
BRAMBLING LA.	F3 -G4	MEADOWBROOK RD.	H17-H19
BRENDA LA.	C11 -C12	MICHELE DR.	E12-F13
BRIAR LA.	F17 -F18	MILL RD.	F19 -D21
BROOKSIDE RD.	C17 -D19	MONTGOMERY AVE.	I19 -I 22
BRYANS RD.	E16 -C18	MARNA COURT	G7
BUNTING RD.	G3 -G4		
BURNSIDE AVE.	I 9 -K5		
BUTCHERS LA.	A22-C22	NEW HOPE ST	F26-K26
BARLEY SHEAF DR.	F14 -F18	NORRIS CITY AVE	I 17 -I 19
BARLEY SHEAF CIR.	F15	NORRITON DR.	D13 -D14
CHAMBERLANE CIRCLE	B5	NORTH WALES RD.	A13 -G14
CAPITOL CIR.	E5	NORTHAMPTON RD.	C10 -C11
CAPITOL DR.	E6 - E7	NORWOOD LA.	B15
CAROL LA.	G25 -H24	NOTTINGHAM RD.	B11 -E11
COLES BLVD.	H20-K19		
COLONIAL CIR.	F22		
COLONIAL DR.	G21-G22		
CONGRESS RD.	F6 -G6		
COTTAGE LA.	C17 -D17	OAK DR.	A25-B25
CRAB CIR.	B18	OAK TREE RD.	C15
CAMPUS LA.	J5 - J6	OLD ARCH RD.	F26-K24
CIRAK AVE.	G1 - G2	ORCHARD LA.	E16 -D18
DE KALB BLVD.	A22-B22	OVERHILL RD.	H15 H19
DE KALB PIKE	A22-K22		
DENISE RD.	E13-F13	PERCY CT.	E25
DERMOND RD.	E15 -F15	PINE CT.	E16
DOGWOOD LA.	G17	PACER LA.	I 17 -I 18
DONNA DR.	B12 -B13	PENN SQUARE RD.	C19, D19
DORP LA.	F17	PIERCE RD.	C6 -D8
DORIS LA.	D1	PINECREST RD	E14 -E15
DORP CIRCLE	F17	POLK RD.	A6 -C6
DEER RUN DR	B14	POTSHOP RD.	A6 -J 4
DISCOVERY CT.	E25	PATRICIA CIR.	B24
EISENHOWER DR.	F3 - H3	POTSHOP LA.	J 4 -K5
EMBASSY CIR.	G6 - H6		
EVERGREEN RD.	G18 -G19		
E. HAYES RD.	A5 - B5	RAHWAY AVE.	I 25-K24
ELIZABETH DR.	E24	ROBIN LA.	H23-H25
		ROLAND DR.	A18 -C17
FAITH DR.	J9	REINER RD.	H9
PARVIEW RD	F18 -F19	RICHFIELD RD.	F12
FELTON RD.	C16 -E16		
		SANDRA LA.	H8 -J9
FIRST ST.	I 22-J22	ST. VINCENT ST.	E13
FILMORE RD.	D5 -D6	SCENIC RD.	E15 -F15
FOURTH ST.	E19	SCHULTZ RD.	E1 - E4
FOUNDRY RD.	K2	SECOND ST.	I 21 -K21
FRANCIS AVE.	J19- J20	SENATOR RD.	F5 -F6
		SHARON LA.	A12 -C12
		SHIRLENE RD.	C12 -E12
GERMANTOWN PIKE	D26-K1	SPRINGVIEW RD.	F21 -I20
GREENHILL LA.	C18	STANBRIDGE ST.	E17 -I 17
GREEN RIDGE DRIVE	E2 -G3	STONEY CREEK RD.	B20-E16
GOODSPEED CT.	E25	SUNSET AVE.	A8 H8
HAINES ROAD	C21-C22	SWEDE RD.	A21 -K19
HANCOCK AVE.	J18 -J22	SYCAMORE LA.	B19 -B20
HANNAH AVE.	A23-D23	SINGER LA.	D2 -D3
HANOVER LA.	H18	SAWMILL COURT	H26- I25
HARRISON RD.	A6	STONY WAY	B14
HARTRANFT AVE.	I 19 - I22	SAW MILL RUN	I 26
HAYES RD.	A6 - F7	SUSAN CONSTANT CT.	E25
HEATHER LA.	C25-C26	TOLL GATE RD.	I 20-K20
HEBLOCK DR.	A25-C25	TOWNSHIP LINE RD.	G6 -I 6
HILLCREST AVE.	E18 -G18	TROOPER RD.	A1 -A26
HILLTOP RD.	C19 -C20	TANGLEWOOD LA.	E1 -L1
		TANGLEWOOD CT.	D2 - D4
		TRUMAN RD.	D3
		TEABROP TERRACE	C5
		TEAKWOOD CT.	I24 - H25
INDEPENDENCE RD.	F5 -F7	TAFT RD.	F16
INENIC CT.	F9	THIRD ST.	D7 -H5
		VALLEY VIEW CIR.	I20-K20
JAMES CIRCLE	F8 -F9	VALLEY VIEW RD.	G21
JEFFERSON AVE.	B21 - B22		G21
JOHNSON HIGHWAY	K18 -K26	WASHINGTON AVE	A21 - A22
JENNIFER DR.	B24	WELLINGTON RD.	D10 -D13
JUNIPER COURT	E25	WHITEHALL RD.	H9 - K9
		WINDSOR DR.	A11 -B11
KEENWOOD RD.	D14 -F13	WOODLAND AVE.	E1 - F8
KELLY DR.	A7 - B7	WOODLAWN RD.	D16 -D17
KENNEDY RD.	B7 - C7	WOODLYN AVE.	F19
KINGLET DR.	F3 - F4		
KNOELLER RD.	B12 - B13		
KENNEDY DR.	A24 - C24		
KORY LANE	B23 - B24		
KRISTIN COURT	B24 - C24		

LEGEND

- TOWNSHIP BUILDING
- CHURCH
- SCHOOL
- PUBLIC ROAD
- TOWNSHIP LINE
- FIRE HOUSE
- HOSPITAL
- STREETS OPENED FOR TRAFFIC-NOT YET ACCEPTED BY THE TOWNSHIP
- CEMETERY



LEGEND

STOCKTON FORMATION
- R SU — Upper Shale Member– Red Shale and Siltstone
- R Sm — Middle Arkose Member– Fine and Medium Grained Arkosic Sandstone

LOCKATONG FORMATION
- R I — Dark Grey To Black Argillite– Interfingered With Beds of Impure Limestone and Shale

Approximate Location Of Wetlands Taken From The National Wetlands Inventory Map

0 400 1000 2000

BASE MAP BY:
F.X. BALL ASSOCIATES, INC.
CONSULTING ENGINEERS & SURVEYORS
SCHWENKSVILLE, PENNA.
Revised 6/1990

ACT 537 PLAN
EAST NORRITON TOWNSHIP
MONTGOMERY COUNTY, PENNSYLVANIA

PLATE IV
GEOLOGIC MAP

PSC Engineers & Consultants, Inc.
P.O. BOX 3012 (717) 569-7021
LANCASTER, PENNSYLVANIA

SCALE:	DATE:	DWG. NO.
1"=800'		

APPENDIX F

West End Flow Monitoring

APPENDIX F1

ARRO Consulting, Inc. Correspondence (7/22/04 to 9/22/05)

ARRO CONSULTING, INC.

MEMORANDUM

TO: Mr. Helmuth Baerwald, Township Manager
East Norriton Township

July 22, 2004

FROM: Matthew Brown

RE: Infiltration/Inflow Analysis

Pursuant to your authorization to initiate the referenced project, the following is a summary of our progress to date.

ARRO had previously identified the sewershed areas served by the Germantown and Sandra Lane Pumping Stations as the most problematic regarding Infiltration/Inflow (I/I). Therefore, these areas were divided into eight (8) subareas. Flow meters were installed in critical manholes in each of the subareas in which all of the flow from that subarea passed. The attached "rough sketch" illustrates the subareas and the locations of the critical manholes. The monitoring began on June 30 and data has been assimilated through July 20. Fortunately for this analysis, dry weather base flows were easily established and several significant rainfall events occurred, giving a comparison under wet weather conditions. While minor infiltration was noted in all eight (8) subareas, significant inflow problems were recorded at several of the metering sites. These problems started immediately (within one to two hours of precipitation event) and remained for as long as 24 hours following the event.

Flow Meter #1: No significant infiltration or inflow problems recorded during the monitoring period.

Flow Meter #2: Base infiltration of 20 to 25 gallons per minute (gpm) recorded; peak inflow of 300 gpm noted.

Flow Meter #3: Base infiltration of 15 to 20 gpm recorded; peak inflow of 640 gpm noted.

Flow Meter #4: Base infiltration of 15 to 20 gpm recorded; peak inflow of 260 gpm noted.

Flow Meter #5: Base infiltration of 10 to 15 gpm recorded; peak inflow of 450 gpm noted.

Flow Meter #6: Base infiltration of 60 to 65 gpm recorded; peak inflow of 350 gpm noted.

Flow Meter #7: Base infiltration of 100 to 120 gpm recorded; peak inflow of 1700 gpm noted.

Flow Meter #8: Base infiltration of 5 to 10 gpm recorded; peak inflow of 90 gpm noted.

Subareas #1 through #6 are sewer customer service areas discharging to the Germantown Pump Station. Subarea #7 consists of the interceptor receiving flow from the customer service areas and discharging to the Germantown Pump Station. Flow information at this meter should summarize the discharge from Subareas #1 through #6. This meter will also serve as a "check" on the accuracy of the upstream metering. Subarea #8 is the customer service area discharging to the Sandra Lane Pump Station.

Based upon the information collected to date, Subareas #3, #5 and #6 show substantive inflow. It is our preliminary estimate that these three areas alone contribute as much as 1.5 million gallons per day of flow during a substantial rain event.

It is our intent to continue metering through the end of the month, after which detailed examination of Subareas #3, #5 and #6 will commence.

If you have questions or wish to discuss the above in greater detail, please contact me.

ARRO CONSULTING, INC.

MEMORANDUM

TO: Mr. Helmuth Baerwald, Township Manager
East Norriton Township

October 21, 2004

FROM: Matthew Brown

RE: Infiltration / Inflow Analysis
5947.00

The following is a summary of our progress to date for the referenced project since my last memorandum to you, dated July 22, 2004.

ARRO proceeded with an investigation of the dry weather and wet weather flows in Subareas #3, #5, and #6. Dry weather flow measurements were taken between the hours of 8:00 a.m. and 12:00 noon on September 1, 2 and 3, 2004. Wet weather flow measurements were taken after approximately 6 inches of rain fell on the area from Hurricane Jeanne on September 28, 2004. Flow measurements were taken on September 29, 2004 between the hours of 8:00 a.m. and 3:00 p.m. The following is a summary of the dry and wet weather flows by street within the subareas.

Subarea #3

Subarea #3 includes Hayes Road, Pierce Road, Kennedy Road, Polk Road, Harrison Road, E. Hayes Road, Champagne Circle, Truman Road, Sunset Avenue, Kelly Drive and James Circle. The sewer is 8" diameter, except in the lower reaches of Pierce Road west of Hayes Road and Hayes Road south of Pierce Road, which is 10" diameter.

1. **Pierce Road – Manhole #828 to #789 (Hayes Road intersection)**
   Flow takes in James Circle, Sunset Avenue, Kelly Drive and Pierce Road east of Hayes Road to Manhole #789 at the Pierce Road / Hayes Road intersection.
   a. Wet Weather Flow = 111,000 gpd
   b. Dry Weather Flow = 20,000 gpd
   c. Inflow = 91,000 gpd

2. **Hayes Road – Manhole #827 to #789 (Pierce Road intersection)**
   Flow takes in Hayes Road north of Pierce Road between Manholes #818 and #789.
   a. Wet Weather Flow = 257,000 gpd
   b. Dry Weather Flow = 23,000 gpd
   c. Inflow = 234,000 gpd

3. **Kennedy Road – Manhole #810 to #792 (Pierce Road intersection)**
   Flow takes in Kennedy Road north of Pierce Road between Manholes #816 and #792.
   a. Wet Weather Flow = 70,000 gpd
   b. Dry Weather Flow = 25,000 gpd
   c. Inflow = 45,000 gpd

4. **Hayes Road – Manhole #803 to #802 (Harrison Road intersection)**
   Flow takes in Hayes Road east of Harrison Road ROW between Manholes #817 and #802.
   a. Wet Weather Flow = 17,000 gpd
   b. Dry Weather Flow = 4,000 gpd
   c. Inflow = 13,000 gpd

5. **Harrison Road – Manhole #D to #802 (Harrison Road intersection)**
   Flow takes in Harrison Road west of Harrison Road ROW between Manholes #G and #802.
   a. Wet Weather Flow = 17,000 gpd
   b. Dry Weather Flow = 5,000 gpd
   c. Inflow = 12,000 gpd

6. **E. Hayes Road – To Manhole #C (Pierce Road intersection)**
   Flow takes in all of E. Hayes Road to Manhole #C at the Pierce Road intersection.
   a. Wet Weather Flow = 16,000 gpd
   b. Dry Weather Flow = 2,000 gpd
   c. Inflow = 14,000 gpd

7. **Pierce Road – To Manhole #792 (Kennedy Road intersection)**
   The flows measured in the 10" diameter sewer are from Polk Road and the upper reaches of Pierce Road, which includes flow from Hayes Road, Harrison Road and E. Hayes Road as identified in line items No. 4, 5 and 6 above. ARRO could not calculate the wet weather flow in Harrison Road ROW sewer due to a lack of information of sewer length and slope.
   a. Wet Weather Flow = 247,000 gpd
   b. Dry Weather Flow = 60,000 gpd
   c. Inflow = 187,000 gpd

8. **Hayes Road – At Manhole #785 (Meter #3 location)**
   The flows measured in the 10" diameter sewer are from Subarea #3. ARRO could only conduct a visual estimate of dry weather flow depth on each of the three days of the dry weather flow survey due to an insufficient oxygen level in Manhole #785, even after ventilation attempts; therefore, no dry weather flow at this manhole was calculated from actual survey data. The dry weather flow upstream of Manhole #785 was calculated to be 128,000 gpd using dry weather flows identified in line items No. 1, 2, 3 and 7 above, which appears reasonable for the size of the drainage area.

   a. Wet Weather Flow = 702,000 gpd

   b. Dry Weather Flow = 128,000 gpd

   c. Inflow = 574,000 gpd

Subarea #3 is experiencing approximately 574,000 gallons per day of inflow. The major contributors to the inflow occur on Hayes Road north of Pierce Road and Pierce Road above Kennedy Road.

Subarea #5

Subarea #5 includes Independence Road, Senator Road and a portion of Taft Road from Embassy Circle to Independence Road. The sewer is 8" diameter.

1. **Independence Road – Manhole #866 to #863 (Taft Road intersection)**
   Flow takes in Independence Road west of Taft Road between Manholes #870 and #863.

   a. Wet Weather Flow = 39,000 gpd

   b. Dry Weather Flow = 2,000 gpd

   c. Inflow = 37,000 gpd

2. **Senator Road – Manhole #889 to #861 (Pierce Road intersection)**
   Flow takes in Senator Road west of Taft Road between Manholes #886A and #861.

   a. Wet Weather Flow = 100,000 gpd

   b. Dry Weather Flow = 2,000 gpd

   c. Inflow = 98,000 gpd

3. **Taft Road – Manhole #860 to #861 (Senator Road intersection)**
   Flow takes in Taft Road from a dead end sewer near Embassy Circle to Senator Road Manhole #861.

   a. Wet Weather Flow = 54,000 gpd

   b. Dry Weather Flow = 6,000 gpd

   c. Inflow = 48,000 gpd

Subarea #5 is experiencing approximately 183,000 gallons per day of inflow. The major contributor to the inflow occurs on Senator Road.

Subarea #6

Subarea #6 includes Eisenhower Drive ROW between Potshop Road and Eisenhower Drive, Eisenhower Drive, Congress Road, Toll Gate Road, Embassy Circle and a portion of Taft Road from Potshop Road to Embassy Circle. The sewer is 8" diameter.

1. **Eisenhower Drive ROW – Manhole #877 to #853 (Taft Road intersection)**
   Flow takes in from Eisenhower Drive ROW between Potshop Road and Eisenhower Drive and subdrainage areas west of Potshop Road to Manhole #853. ARRO could not accurately measure the wet weather flow depth in the sewer due to surcharging in Manhole #853 in Taft Road. ARRO believes that the wet weather flow may be more than the estimated flow.
   a. Wet Weather Flow = 232,000 gpd
   b. Dry Weather Flow = 134,000 gpd
   c. Inflow = 98,000 gpd

2. **Eisenhower Drive – Manhole #876 to #854 (Taft Road intersection)**
   Flow takes in Eisenhower Drive north of Taft Road between Manholes #871 and #854. ARRO could not accurately measure the wet weather flow depth in the sewer due to surcharging in Manhole #854 in Taft Road. Manhole #854 was surcharged to 50" below the top of the manhole frame and cover, creating a 29" water depth in the manhole. The wet weather flow was actually recorded in Manhole #875, two manholes above the Taft Road intersection.
   a. Wet Weather Flow = 107,000 gpd
   b. Dry Weather Flow = 6,000 gpd
   c. Inflow = 101,000 gpd

3. **Congress Road – Manhole #884 to #856 (Taft Road intersection)**
   Flow takes in Congress Road north of Taft Road between Manholes #885 and #856. ARRO could not accurately measure the wet weather flow depth in the sewer due to surcharging in Manhole #856 in Taft Road and Manhole #884 in Congress Road. Manhole #856 was surcharged to 32 ½" below the top of the manhole frame and cover, creating an 89" water depth in the manhole. Manhole #884 in Congress Road was surcharged to 9" below the top of the manhole frame and cover. Utilizing a submerged flow condition calculation, ARRO determined that there was no significant increase in wet weather flow from Congress Road.
   a. Wet Weather Flow = 0 gpd
   b. Dry Weather Flow = 0 gpd
   c. Inflow = 0 gpd

4. **Taft Road – Manhole #854 to #856 (Eisenhower Road intersection to Congress Road intersection)**
   Flow takes in Eisenhower Drive ROW and subdrainage areas west of Potshop Road, Eisenhower Drive, Taft Road from Potshop Road to Congress Road and Potshop Road south of Taft Road to Manhole #856. ARRO could not accurately measure the wet weather flow down Taft Road due to surcharging in the Taft Road manholes. ARRO determined the wet weather flow utilizing a submerged flow condition calculation from Manhole #854 to #856.

   a. Wet Weather Flow = 866,000 gpd

   b. Dry Weather Flow = 288,000 gpd

   c. Inflow = 578,000 gpd

Subarea #6 is experiencing an estimated 578,000 gallons per day of inflow based on the survey data taken. There is a 3" force main from the hospital that may have contributed to fluctuations in dry weather flows down Taft Road during survey flow depth data collection. Therefore, ARRO calculated the dry weather flow at Manhole #856 based on the average of the flows in Manholes #853, #854 and #856. While Eisenhower Drive ROW and subdrainage areas west of Potshop Road and Eisenhower Drive contributed a significant wet weather inflow, ARRO considers that the major contributor to the inflow occurs south on Potshop Road from Taft Road. Subtracting out the wet and dry weather flows from the Eisenhower Drive ROW and Eisenhower Drive from the Taft Road Manhole #856 values ARRO estimates that there is approximately 379,000 gpd of wet weather inflow from Potshop Road.

In conclusion, ARRO estimates that that there is approximately 1,300,000 gallons per day of combined inflow into Subareas #3, #5 and #6. ARRO may conduct another wet weather flow survey to verify these initial findings and to quantify the estimated inflow in the Eisenhower Drive ROW and south on Potshop Road, then plan for televising of the most significant inflow areas in Subareas #3, #5 and #6.

ARRO CONSULTING, INC.

MEMORANDUM

DATE: September 22, 2005

TO: Helmuth Baerwald, Township Manager
East Norristown Township

FROM: G. Matthew Brown, P.E., DEE
President

RE: East Norriton Township I/I Report
6282

The following report summarizes progress to date, on the Infiltration/Inflow (I/I) study for Subareas # 3, # 5 and # 6 upstream of the Germantown Pumping Station in the East Norriton Township sewer collection service area, sump pump and roof drains inspections in subareas, sewer lateral televising in subareas, sewer lateral repair and replacement estimated costs, sewer lateral repair and replacement plans and specifications and conclusions.

INFILTRATION/INFLOW (I/I) STUDY FOR SUBAREAS # 3, # 5 and # 6

Sewage Surcharge on Taft Road (Manhole #854 to #856) Between Eisenhower Drive Intersection to Congress Road Intersection

In the past year, wet weather peaked sewage flows have reached as high as 866,000 Gallons Per Day (GPD) (from submerged flow condition calculation) in the 8"sewer line on Taft Road. During a wet weather event in 2004 there was sewage surcharging between manholes # 854 to # 856 (this area is a subdrainage area for west of Potshop Road and Eisenhower Drive, Taft Road from Potshop Road to Congress Road and Potshop Road south of Taft Road to Manhole # 856. Dry weather flow is 288,000 GPD.

ARRO has determined that the 8" sewer line on Taft Road between manholes # 854 to # 856 is surcharging above 578,000 (GPD) in wet weather flows. It has also been determined that the surcharging is a result of insufficient slope in the 8"sewer line between manhole # 854 to # 856.

To eliminate the majority of surcharge in the manholes/sewer lines, the most cost effective solution is to utilize a cured-in-place liner within the restrictive sewer capacity sections of pipe. Such a liner would slightly decrease pipe diameter; however, this is offset by the decrease in Manning's roughness coefficient with a net capacity gain. The pipe sections requiring the lining would be from manhole # 855 to manhole # 859A, which is a total lining of approximately 900 feet.

It should be noted that the installation of a cured-in-place liner in these sections of pipe will only provide a sewer line conveyance in the service area which is just capable of conveying the calculated peak flow of 866,000 gallons per day. With the lining, there would still be some surcharging between manholes # 856 and # 859A. From manhole # 857 to # 859A, the surcharge would be less than 1-foot above the top of the pipe. At the upstream end of the pipe between manhole # 856 and # 857 the surcharge would reach a depth of approximately two and one half feet above the top of the pipe; this surcharge would not extend above manhole # 856 due to the drop manhole at that location. It should be investigated why manhole # 856 is a drop manhole to clarify as to whether the calculated surcharging of the upstream pipe section from the installation of the cured-in-place liner would affect laterals of connected homes or that the manhole was needed to accommodate a downstream pipe which had to be lower to pick up a possible low house lateral, or it may have been installed to avoid conflicts with other utilities.

- The opinion of probable construction cost for the relining of 900 feet of the 8" pipe is $59,000.00.

SUMP PUMP AND ROOF DRAINS INSPECTIONS IN SUBAREAS

In early 2005, a sump pump/roof drain inspection was conducted in the Subareas to investigate whether there were any illegal connections to the sewer laterals from the homes. The total amount of homes inspected was 302. The result of the investigation revealed that there were (3) three verified (sump pumps/roof drains) connections to the home's sewer laterals, which have since been disconnected from the sewer system. There were 26 homes that had roof drain connections that were questionable; however, from dye testing conducted on a representative sampling of homes, ARRO is confident that the questionable connections are connected to the storm sewer network.

SEWER LATERAL TELEVISING IN SUBAREAS

As of July 2005, 37 sewer laterals have been televised in Subarea # 3 (Pierce, Kennedy, Hayes, etc.). The remaining laterals in Subareas # 3, # 5, and # 6 (approximately 263) will be televised when groundwater levels rise to the point that infiltration that would enter any laterals that have offset joints, broken lateral pipes, or tree roots would be readily identifiable. No significant infiltration of groundwater was observed in July due to the low water table, but considerable root infestation and a number of separated joints and a broken pipe were observed during the televising that would contribute to considerable infiltration when groundwater rises. It is estimated that a rain event of 1+ inches of rain would be needed to raise groundwater levels for detection of infiltration into the system.

ARRO will continue to update the Township on the progress of the televising of the laterals as the project proceeds.

SEWER LATERAL REPAIR AND REPLACEMENT ESTIMATED COSTS

The following estimated costs include excavation, fittings, sewer pipes, backfill and restoration of areas affected by repair or replacement of laterals.

Estimated costs: $2,000 to $5,000 per sewer lateral

- The difference in the wide range of costs reflect variables which include, but not limited to, removal and replacement of trees, shrubs, excavating around other utilities, driveway (paved or concrete), road or highway excavation and restoration.
- If minor repairs were only needed to the laterals, the costs would be lower than the estimated minimum cost of $2,000.
- All repairs and replacement of sewer laterals shall meet all current Township Sewer Plumbing Ordinances or Codes.

SEWER LATERAL REPAIR AND REPLACEMENT PLANS AND SPECIFICATIONS

At the direction of the Township, ARRO will prepare Plans and Specifications for the project and present them to the Township for approval.

CONCLUSIONS

The primary cause of the overloading of the sewer collection/conveyance system in the Township sewer service area is a result of infiltration from sewer laterals. Once the groundwater rises to a point of detection, televising of sewer laterals will be performed to verify the above. A possible scenario for a Corrective Action Plan (CAP) for the area upstream of the Germantown Pumping Station could include the following:

A. Milestone 1 – Execute a Consent Order and Agreement with PADEP – December 1, 2005. I/I identified and removed to date to be quantified and a request for connections will be requested commensurate to 1 gallon of discharge for 10 gallons of I/I removed.

B. Milestone 2 – Complete sewer lateral televising within the noted subareas upstream of the Germantown Pumping Station. Concurrent with the fieldwork, develop specifications and bid a lateral replacement and repair project for the affected area. Estimated completion date (weather dependent) – April 1, 2006.

C. Milestone 3 – Ongoing lateral replacement and repair work to be completed June 30, 2007. On a quarterly basis, beginning July 2006, the Township will quantify the I/I removed through reports to PADEP and will request a release of connections commensurate to 1 gallon of discharge for the connections for every 10 gallons of I/I removed.

D. Milestone 4 – Complete main lining of identified problem areas and main replacement of hydraulic restrictions within the collection system. Estimated completion date December 31, 2007.

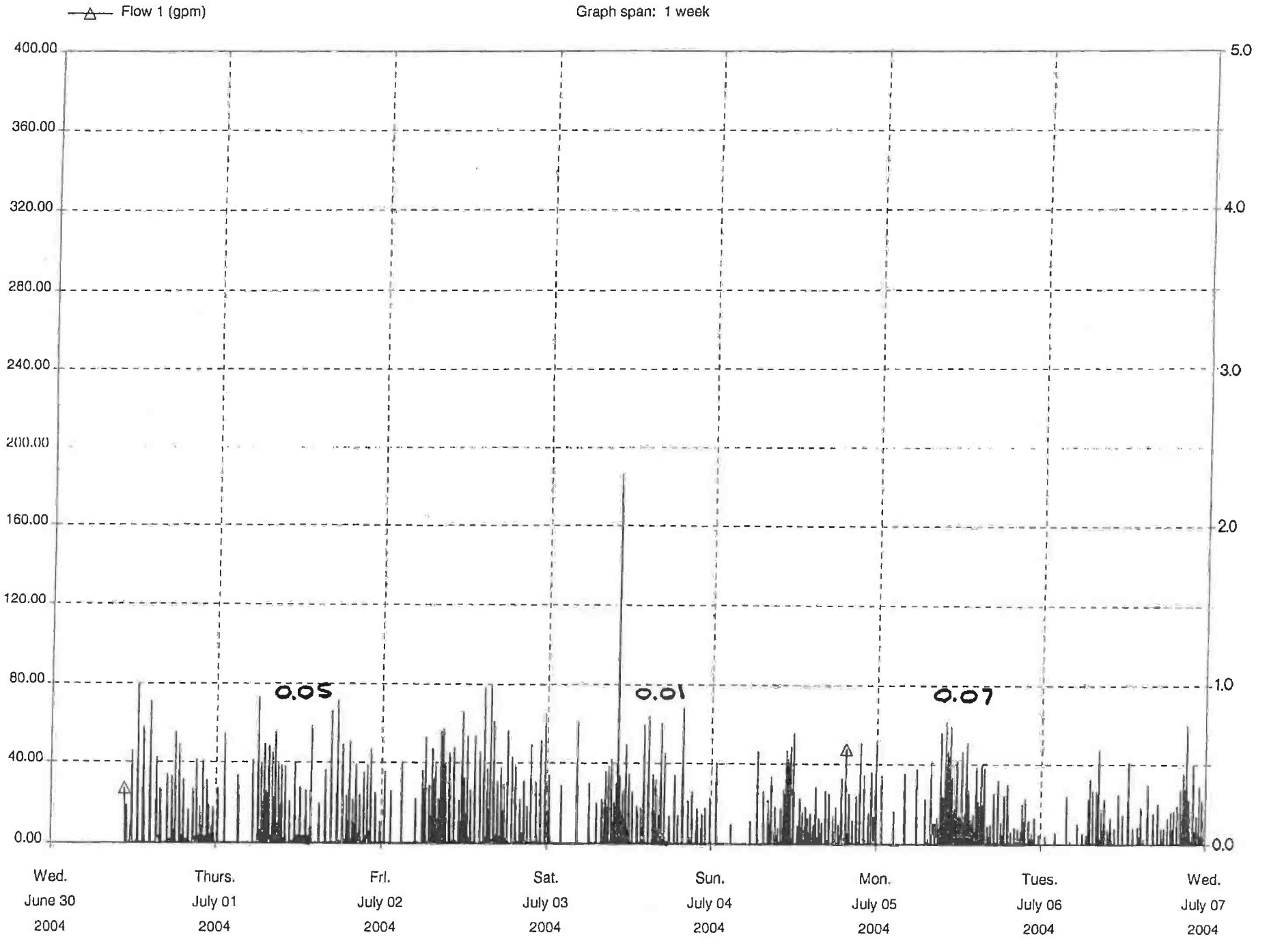
While additional interim milestones can be included, our conversations with PADEP to date have indicated that the release of connections will be solely based upon our quantifying the amount of I/I removed. Therefore, we believe the above-discussed quarterly reports are key to obtaining connections within the Germantown Pumping Station drainage area. Coupling this with the release of connections in the remainder of the Township accomplished through the milestones of the Authority, we can hopefully accommodate building plans within the community while satisfying the regulators. The frustration of identifying the location of I/I is emphasized by the lack of precipitation necessary for testing...pray for rain!

APPENDIX F2

Flow Monitoring Reports and Metering Sub-Area Map

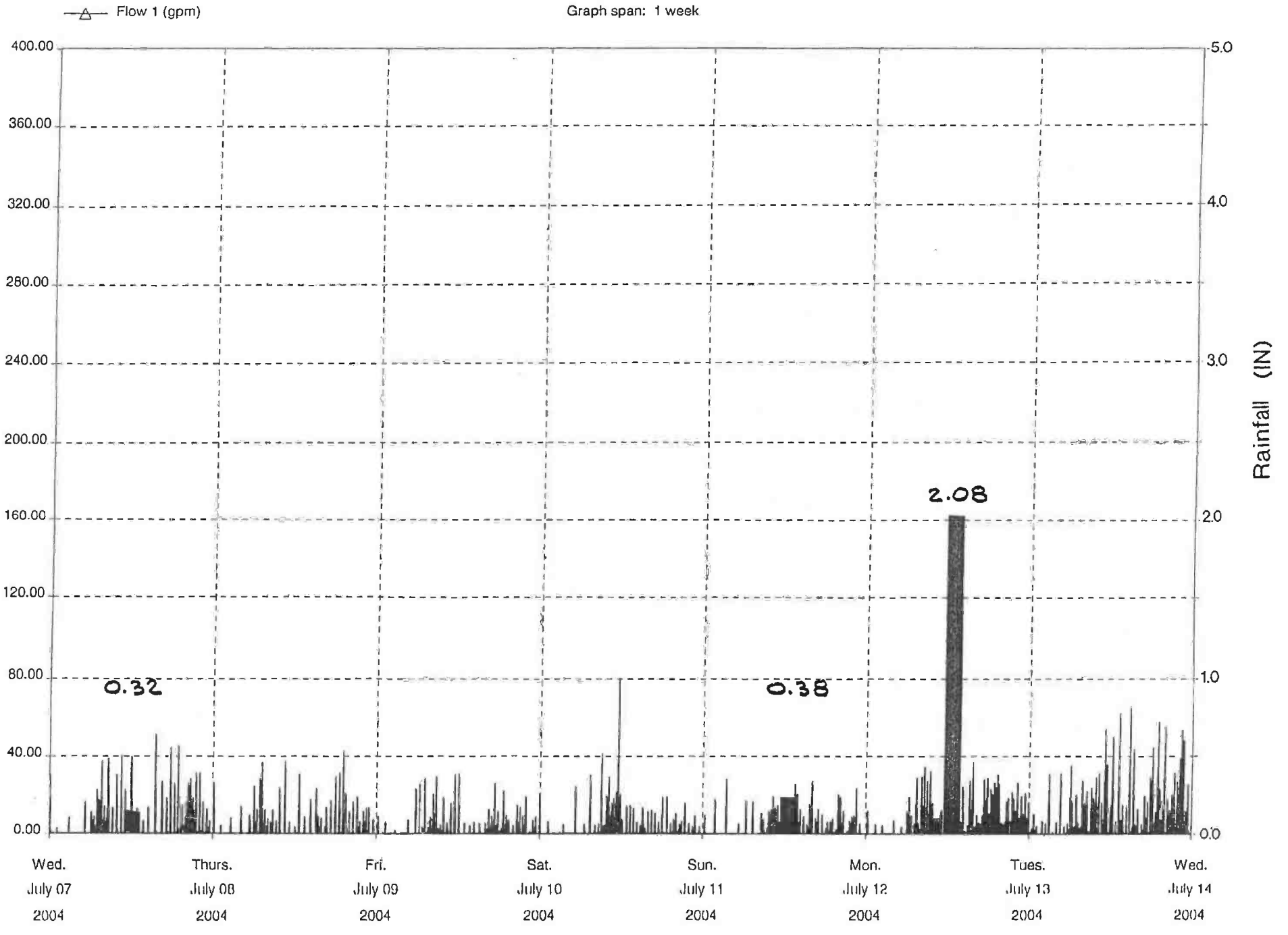
SITE #1 - 302 Black Swift Road

Site Id: 00000001 File name: 00000001.000



SITE #1 - 302 Black Swift Road

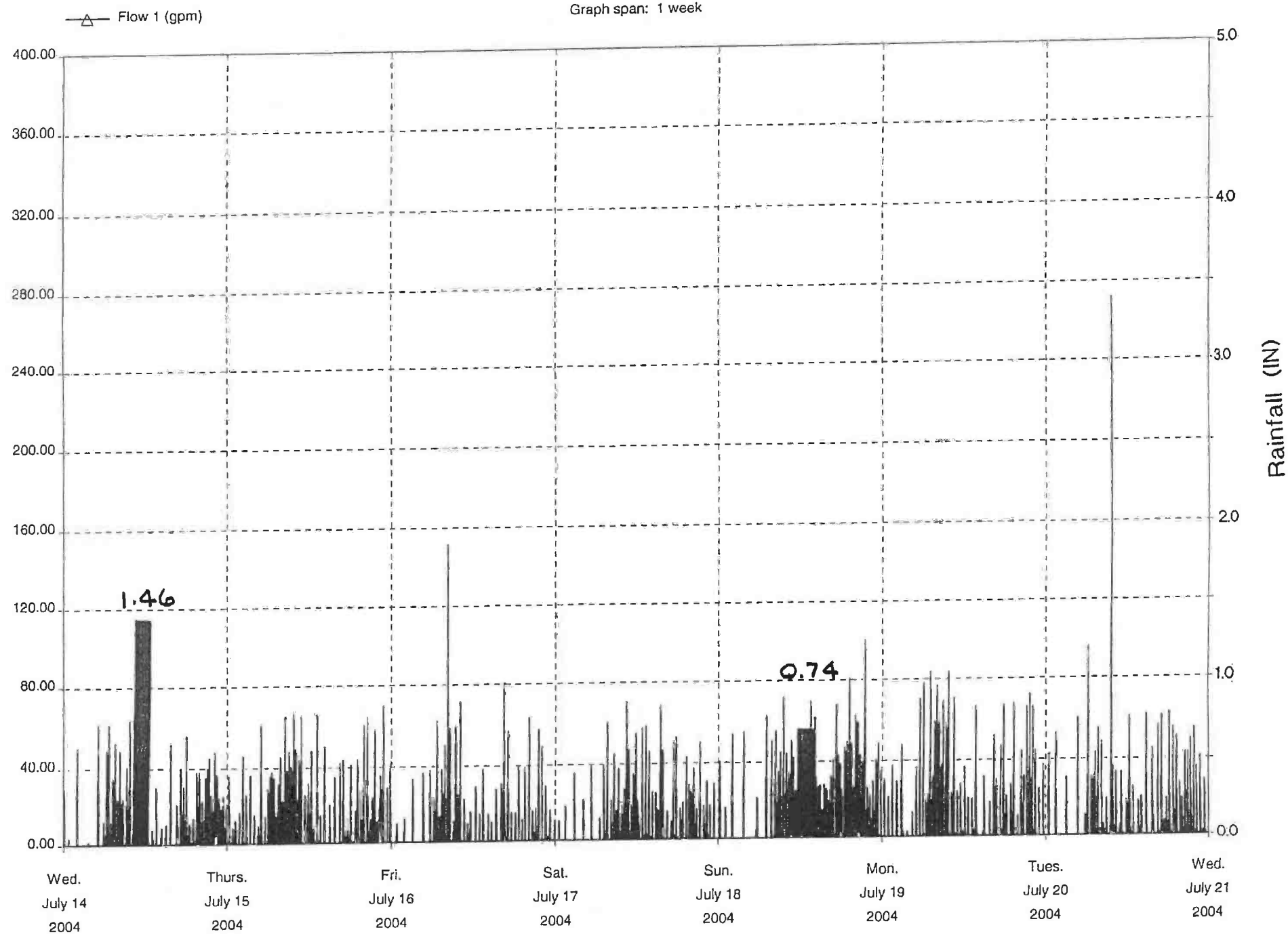
Site Id: 00000001 File name: 00000001.000



SITE #1 - 302 Black Swift Road

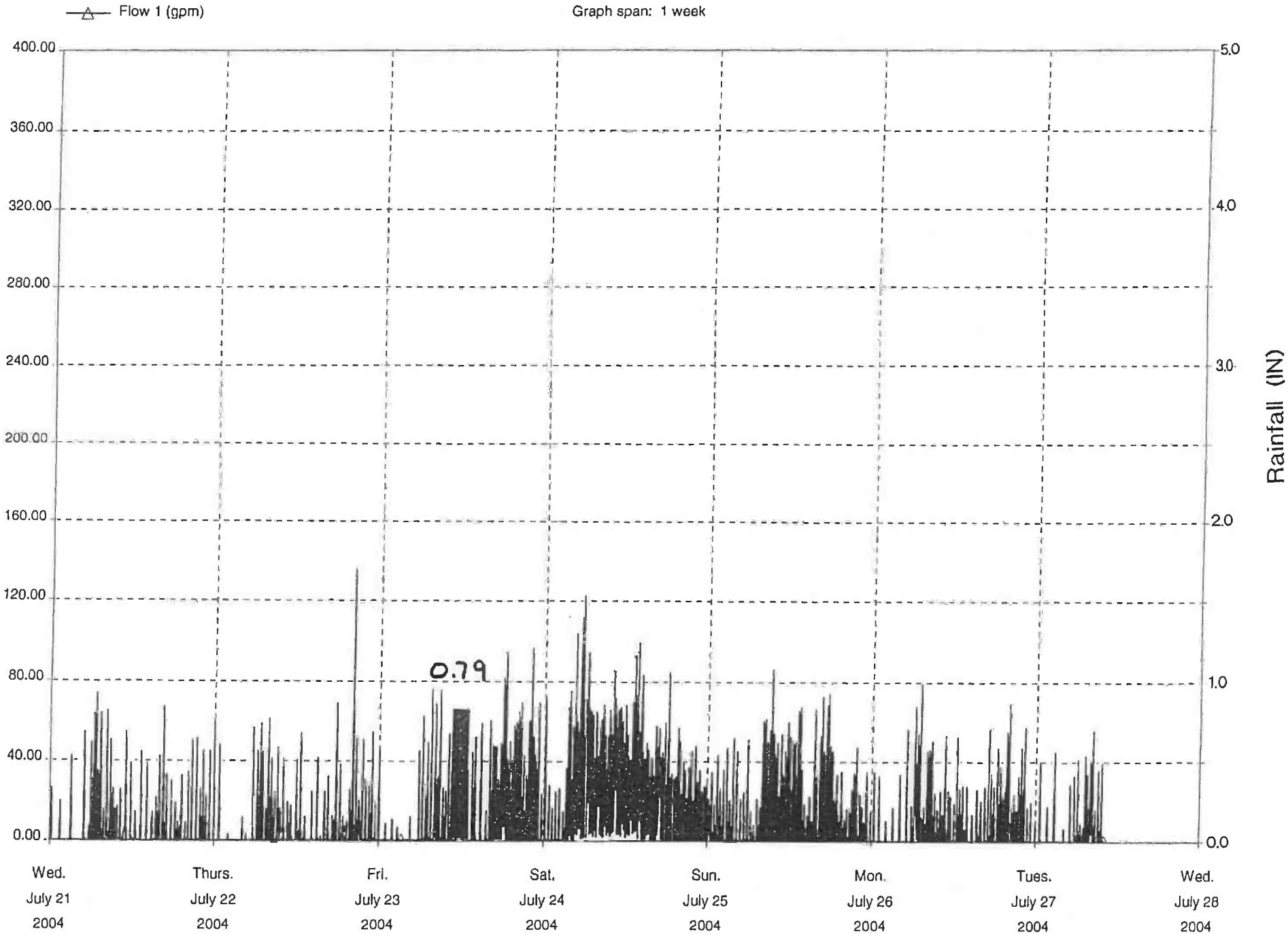
Site Id: 00000001 File name: 00000001.000

Graph span: 1 week



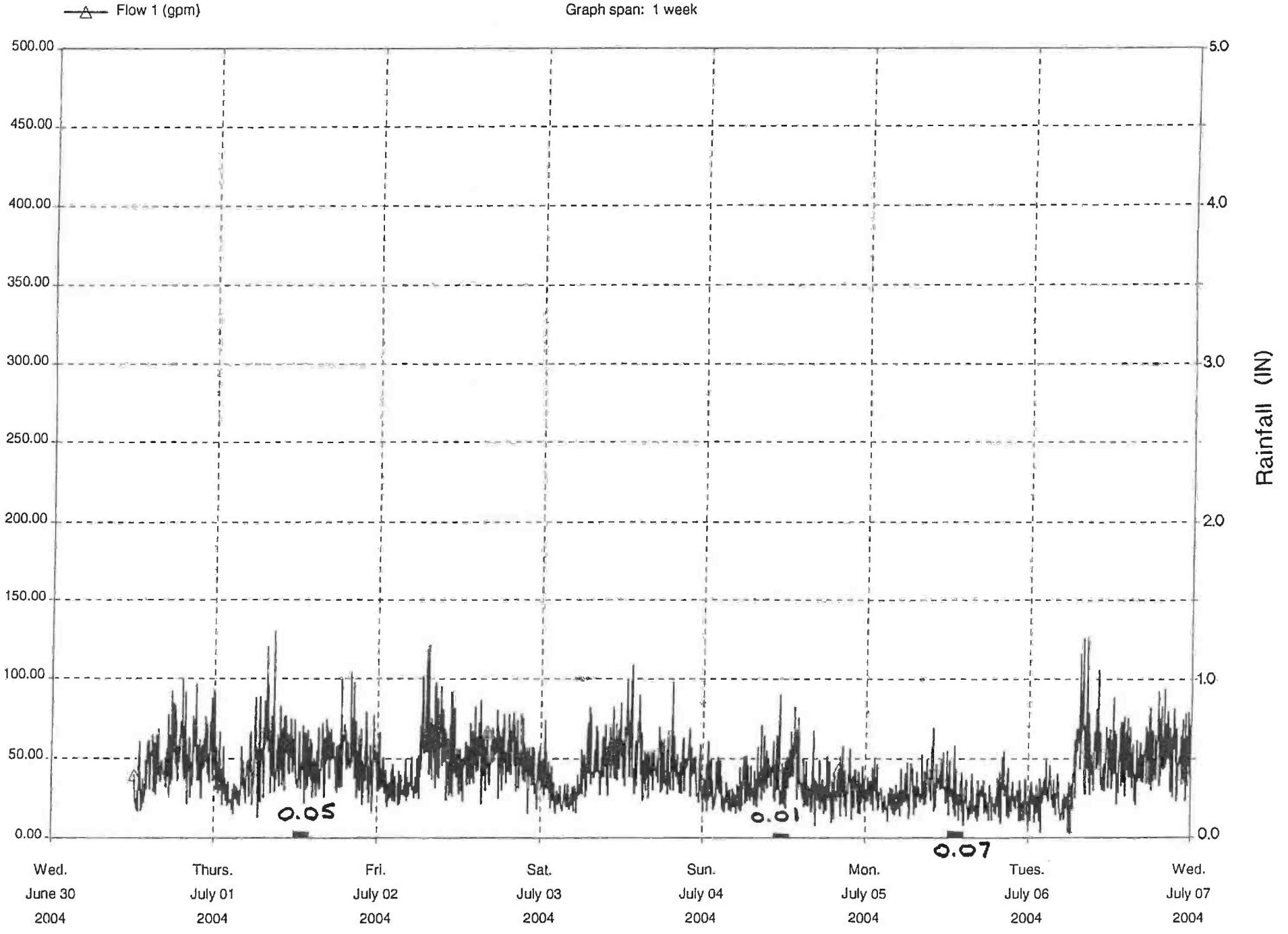
SITE #1 - 302 Black Swift Road

Site Id: 00000001 File name: 00000001.000



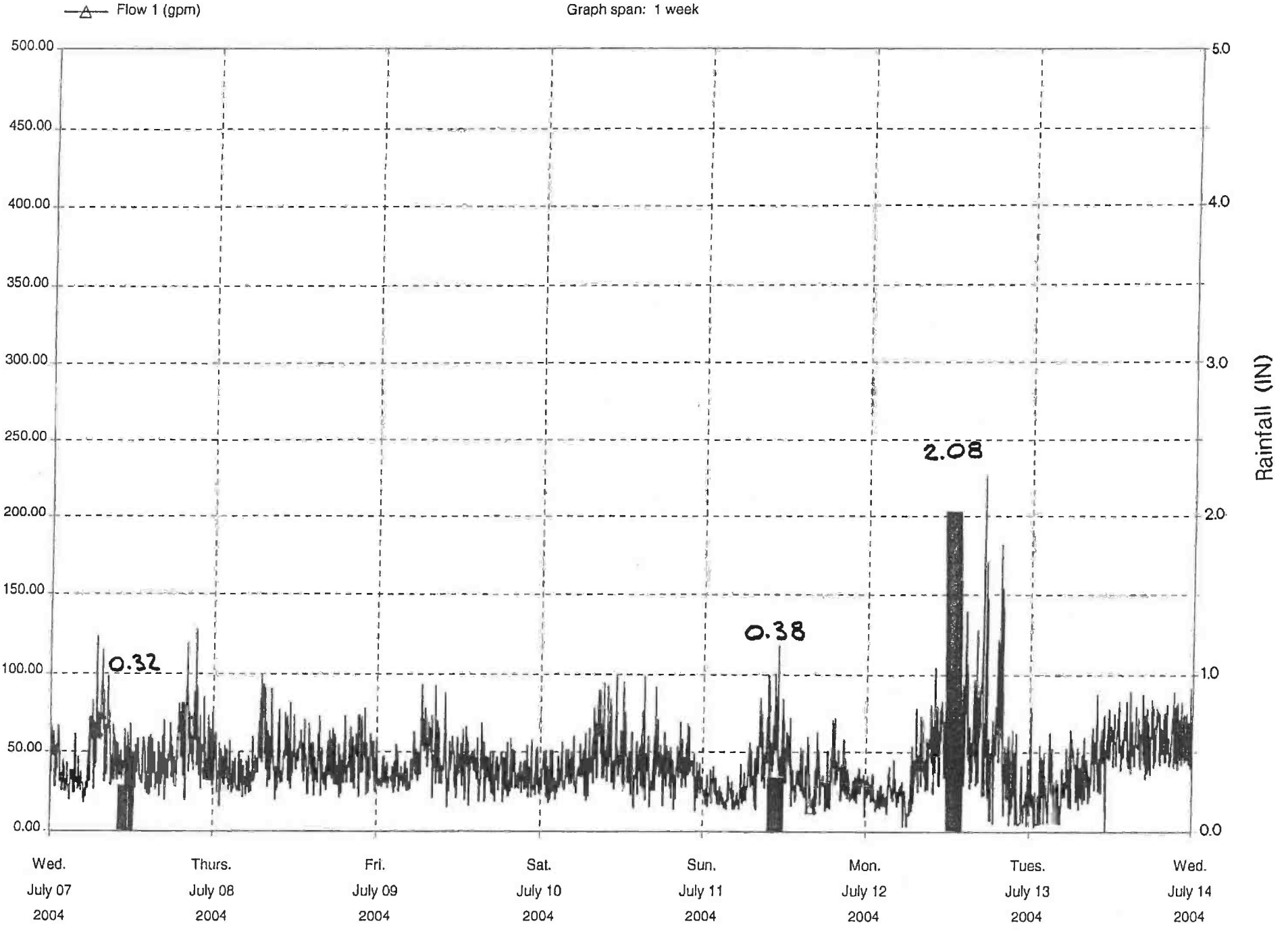
SITE #2 - 813 Woodland (Near Bridge)

Site Id: 00000002 File name: 00000002.000



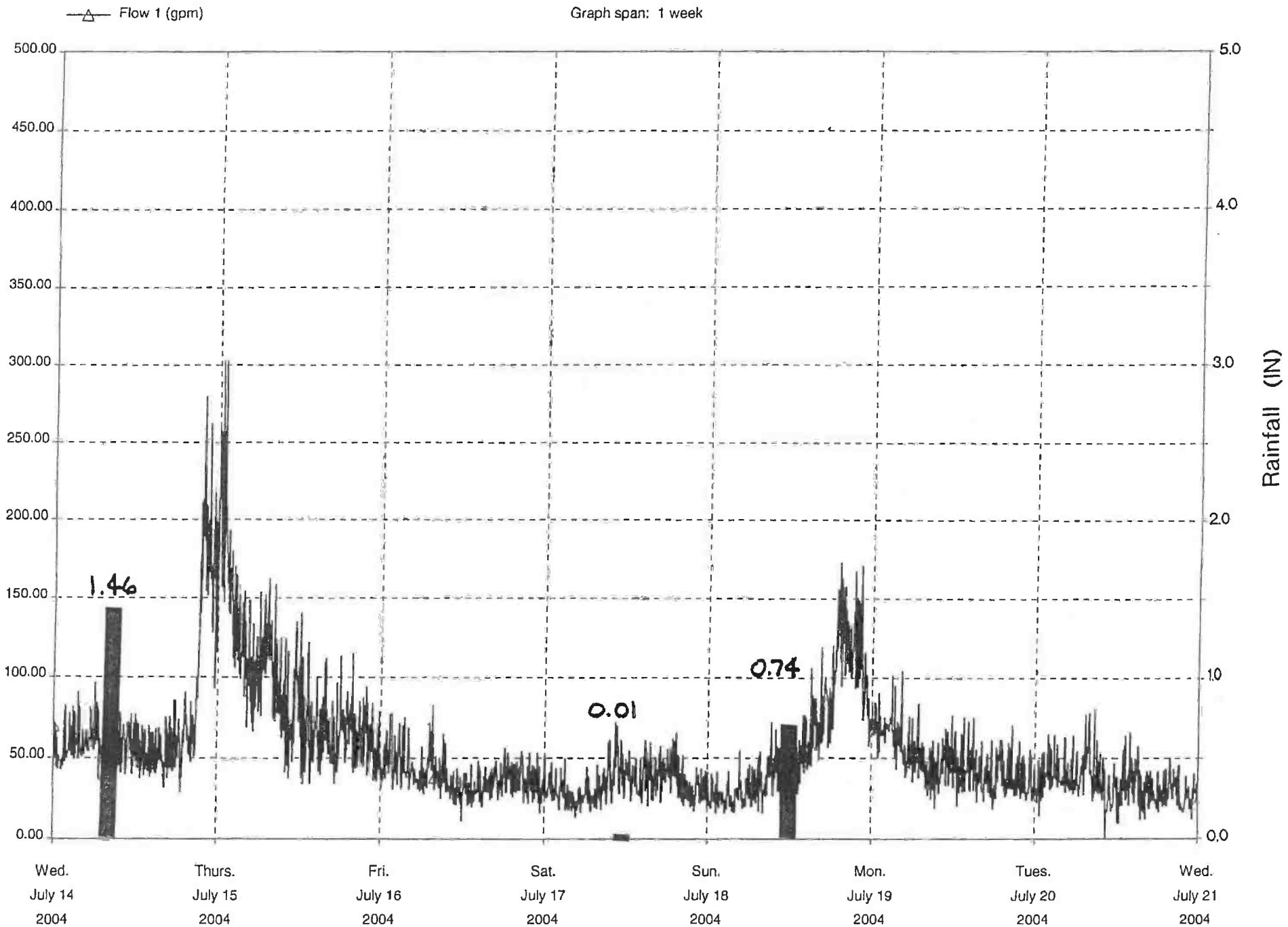
SITE #2 - 813 Woodland (Near Bridge)

Site Id: 00000002 File name: 00000002.000



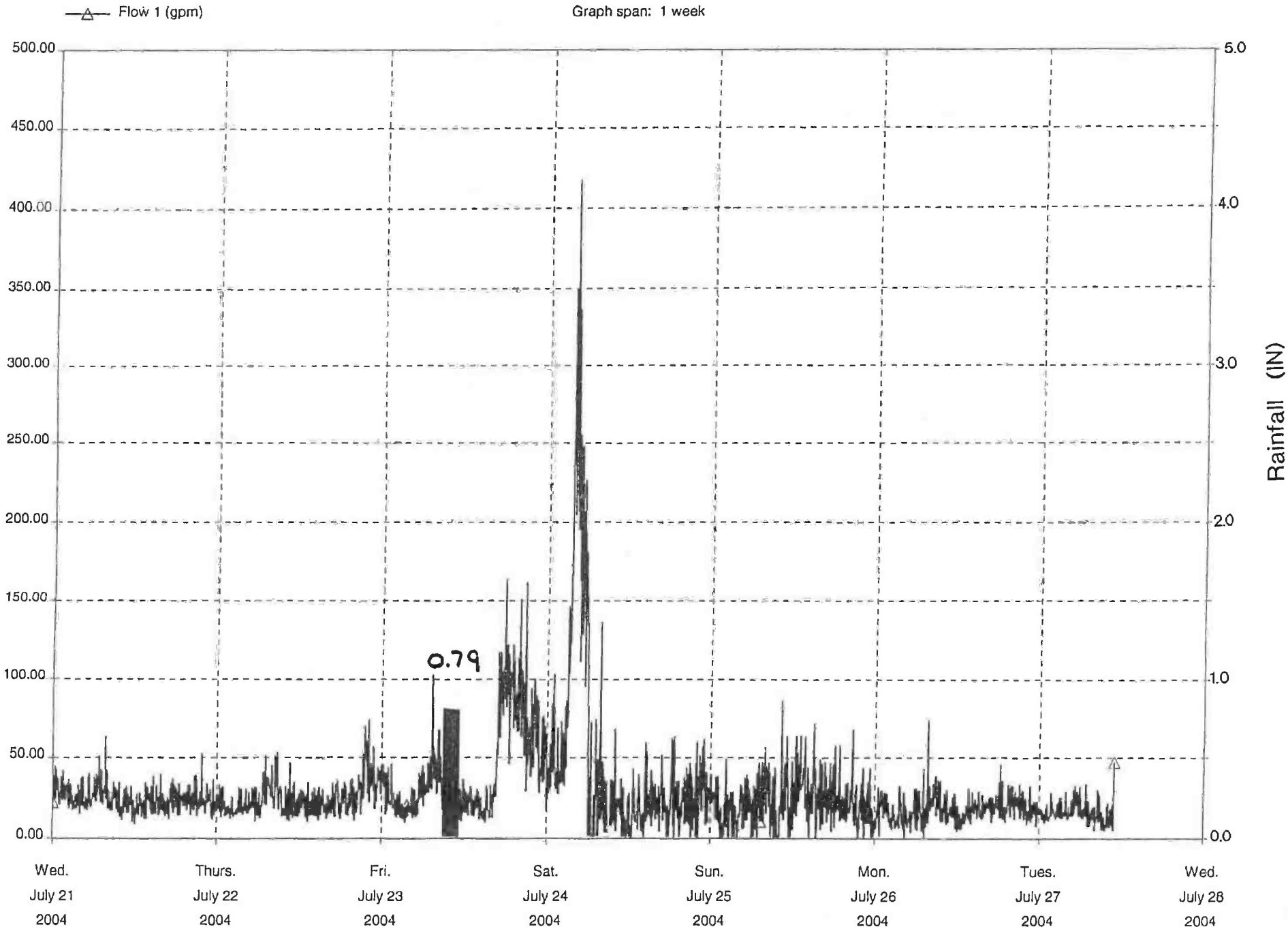
SITE #2 - 813 Woodland (Near Bridge)

Site Id: 00000002 File name: 00000002.000



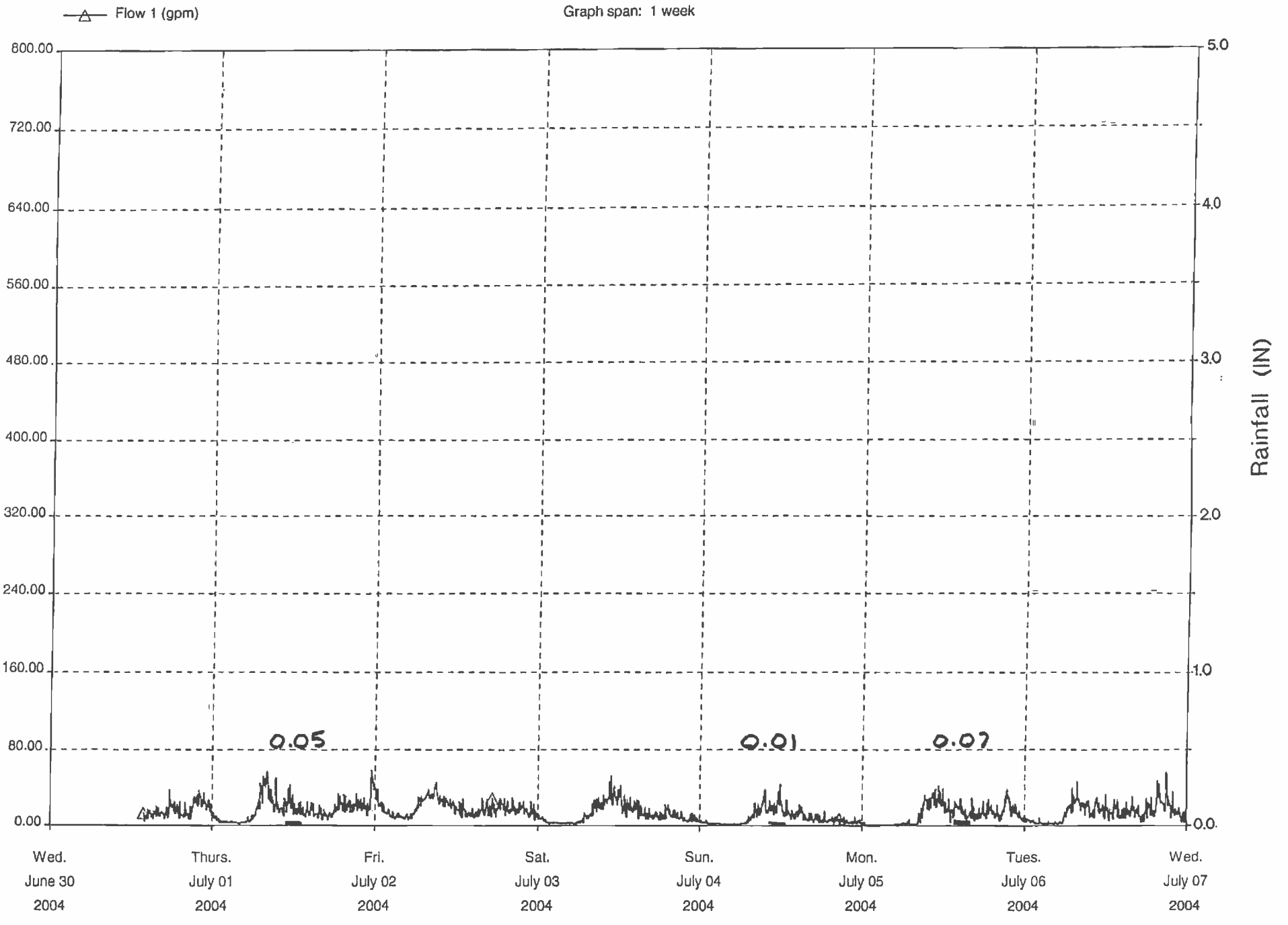
SITE #2 - 813 Woodland (Near Bridge)

Site Id: 00000002 File name: 00000002.000



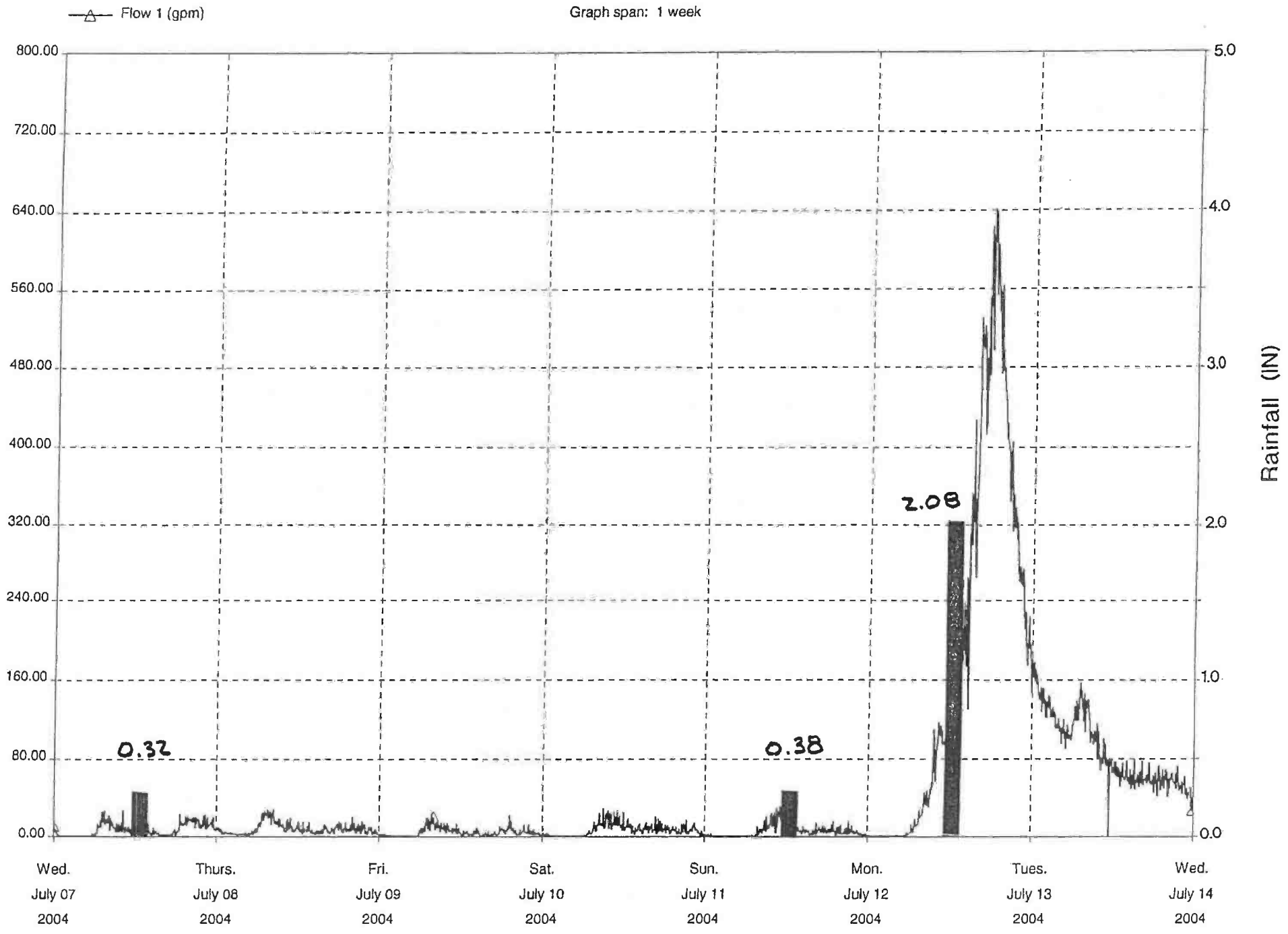
SITE #3 - 3101 Hayes Rd

Site Id: 00000003 File name: 00000003.000



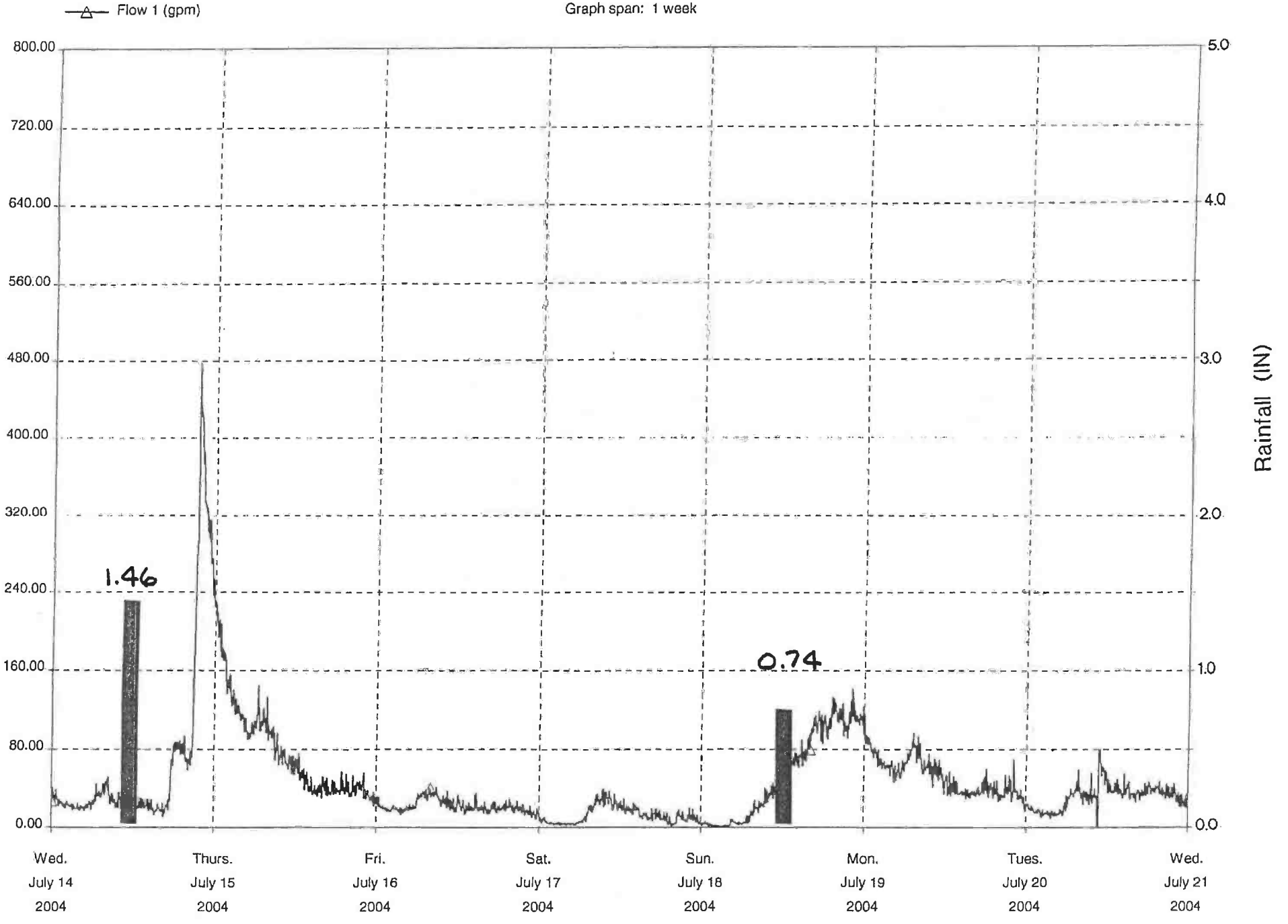
SITE #3 - 3101 Hayes Rd

Site Id: 00000003 File name: 00000003.000



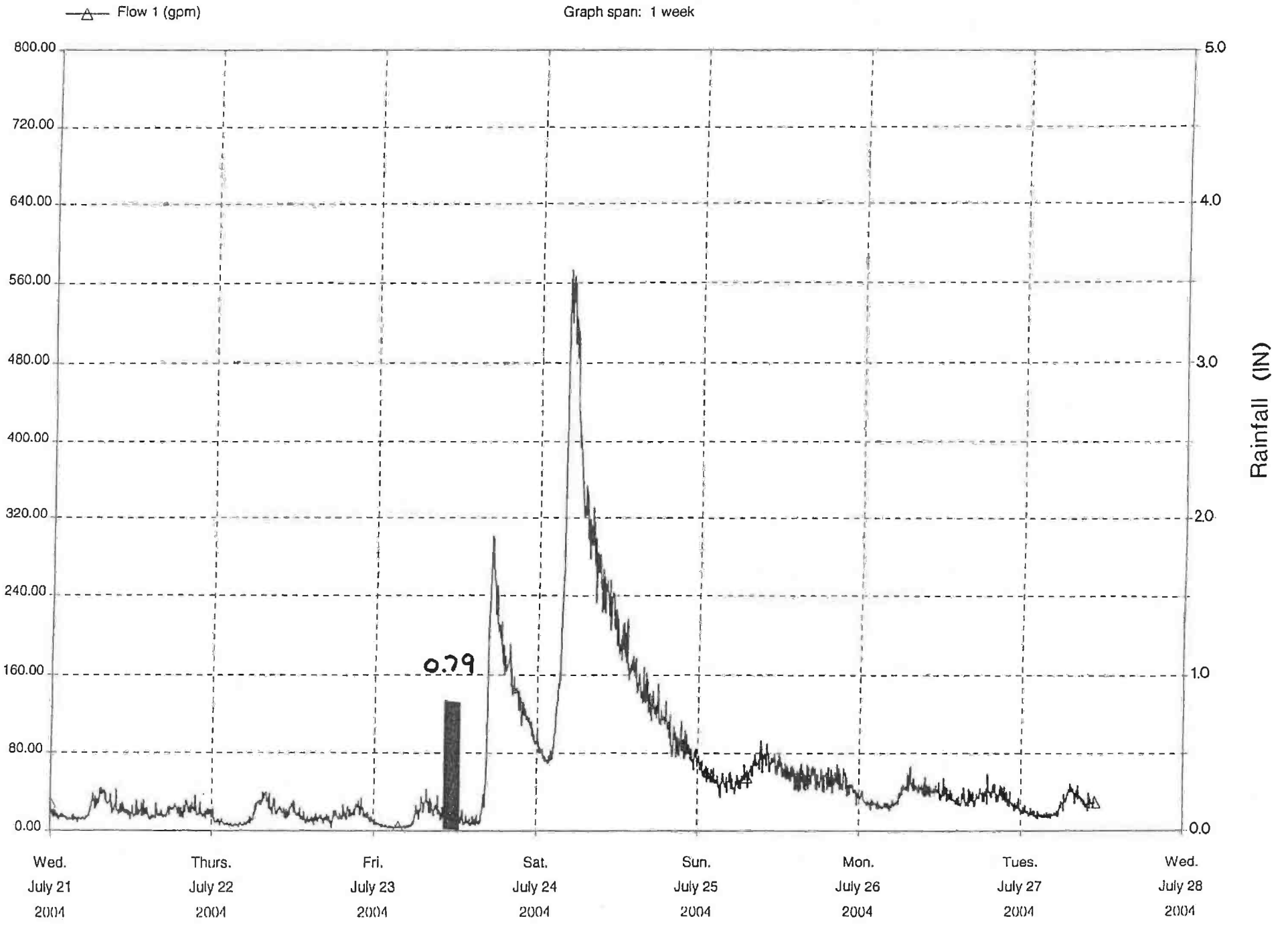
SITE #3 - 3101 Hayes Rd

Site Id: 00000003 File name: 00000003.000



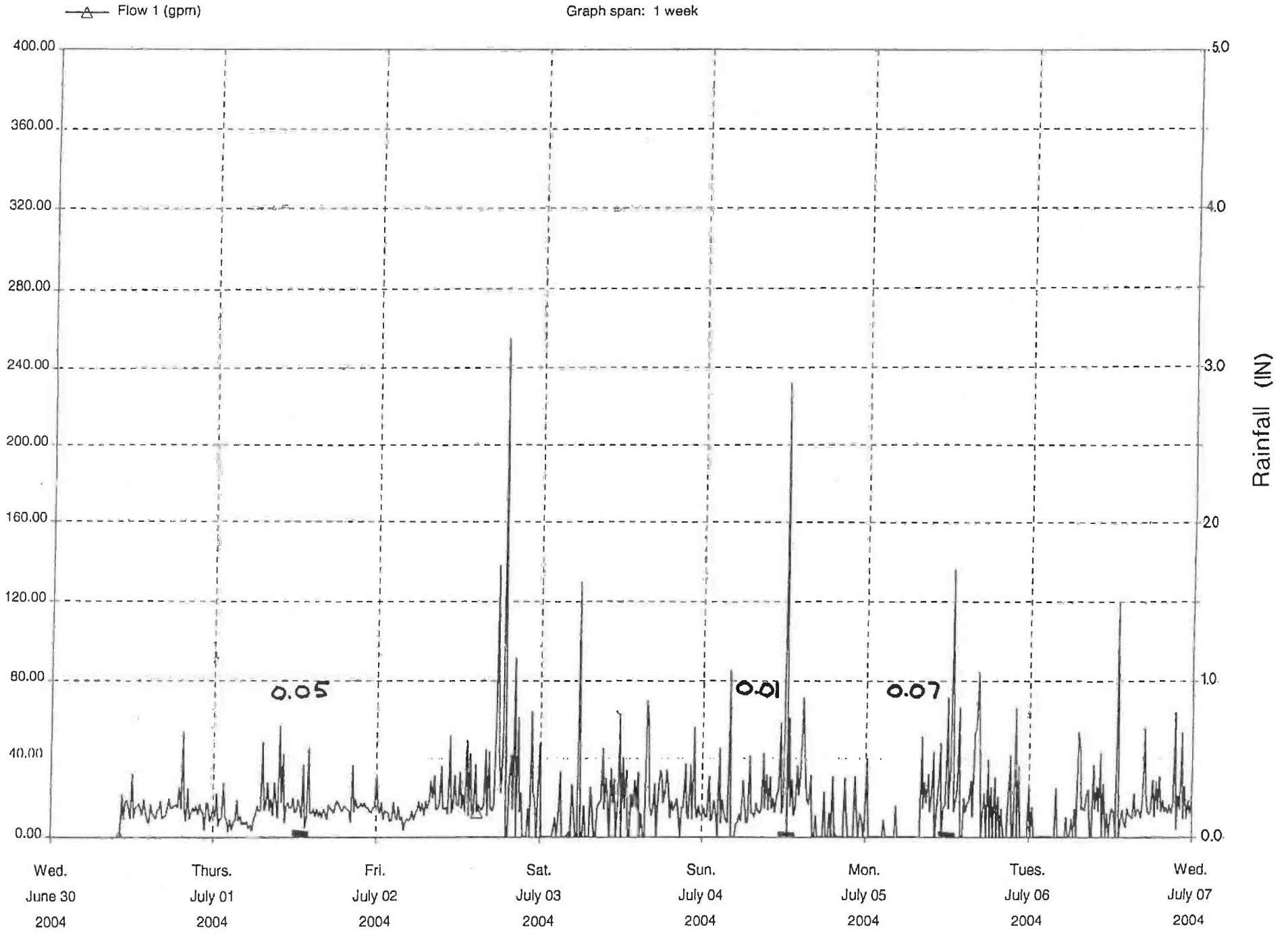
SITE #3 - 3101 Hayes Rd

Site Id: 00000003 File name: 00000003.000



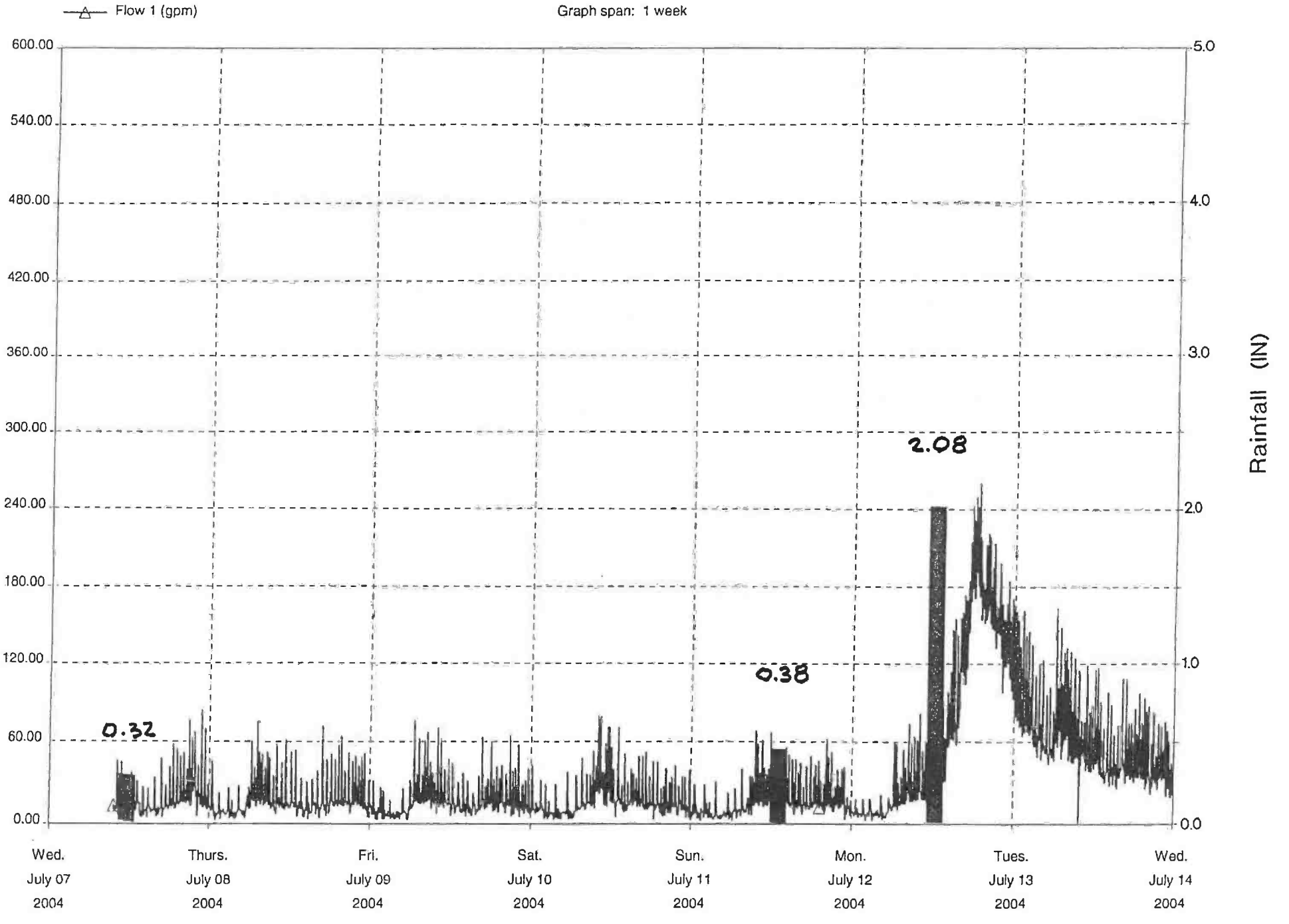
SITE #4 - Behind 3005 Taft Road

Site Id: 00000004 File name: 00000004.000



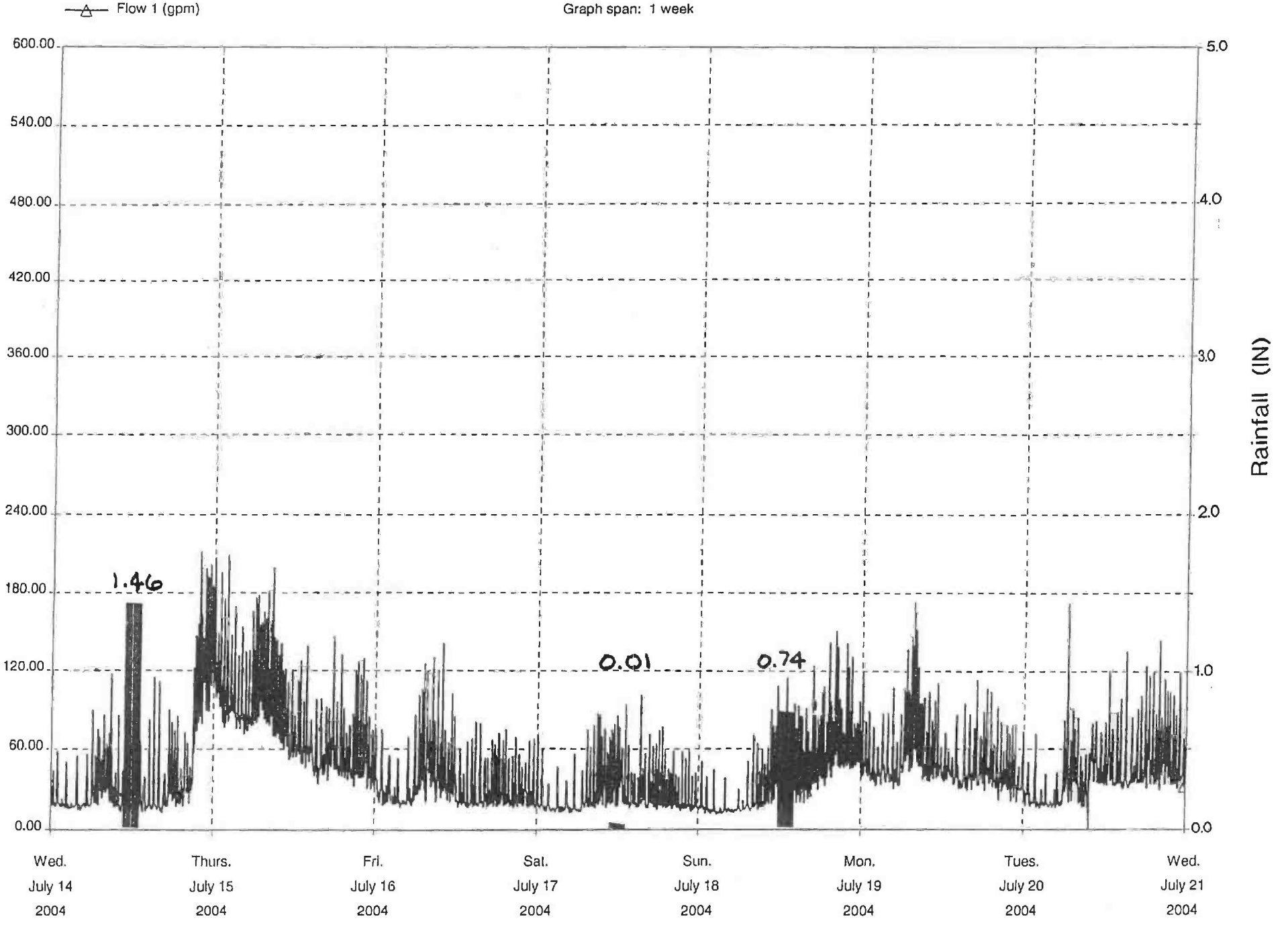
SITE #4 - Behind 3005 Taft Road

Site Id: 00000004 File name: 00000004.001



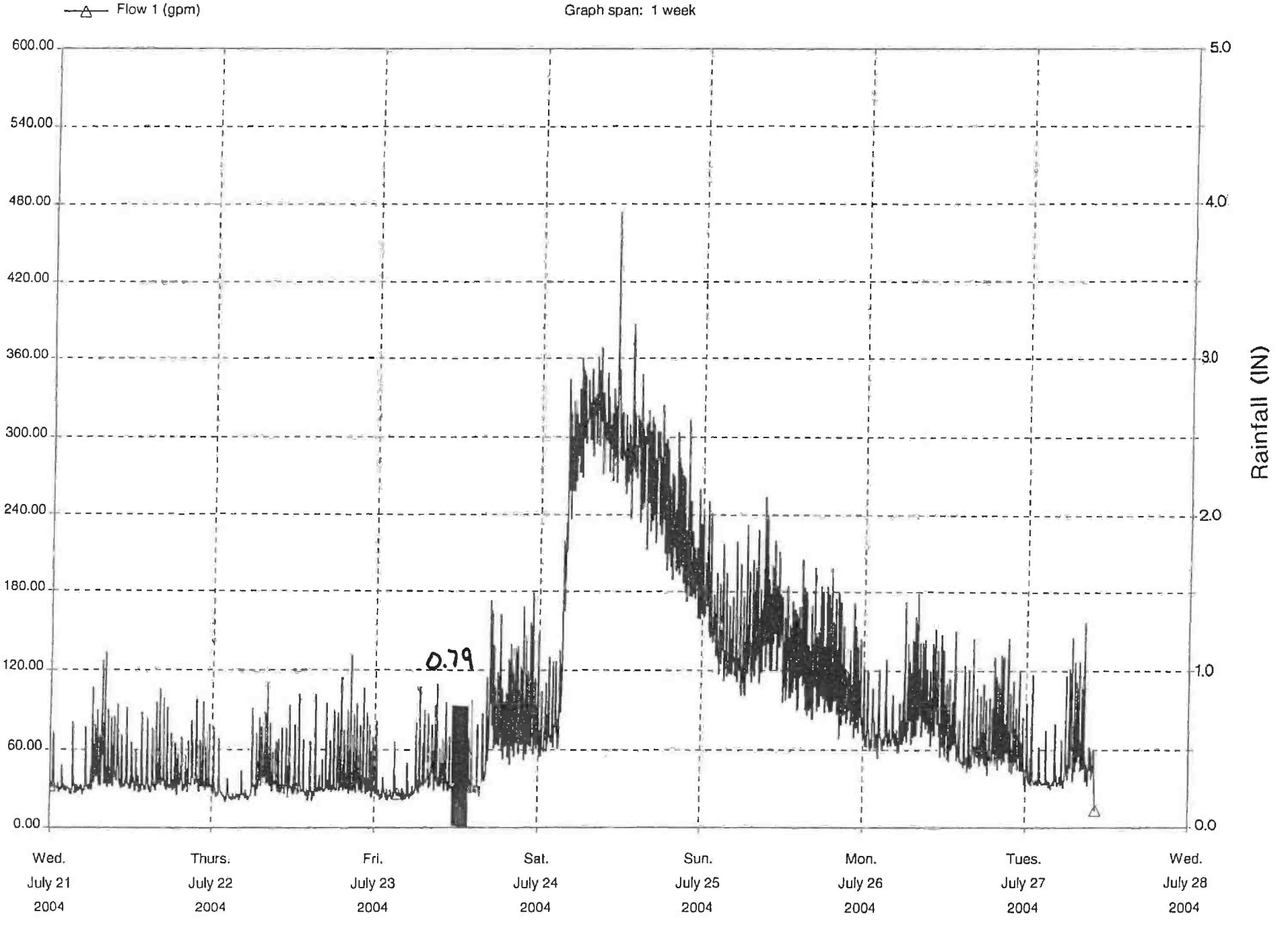
SITE #4 - Behind 3005 Taft Road

Site Id: 00000004 File name: 00000004.001



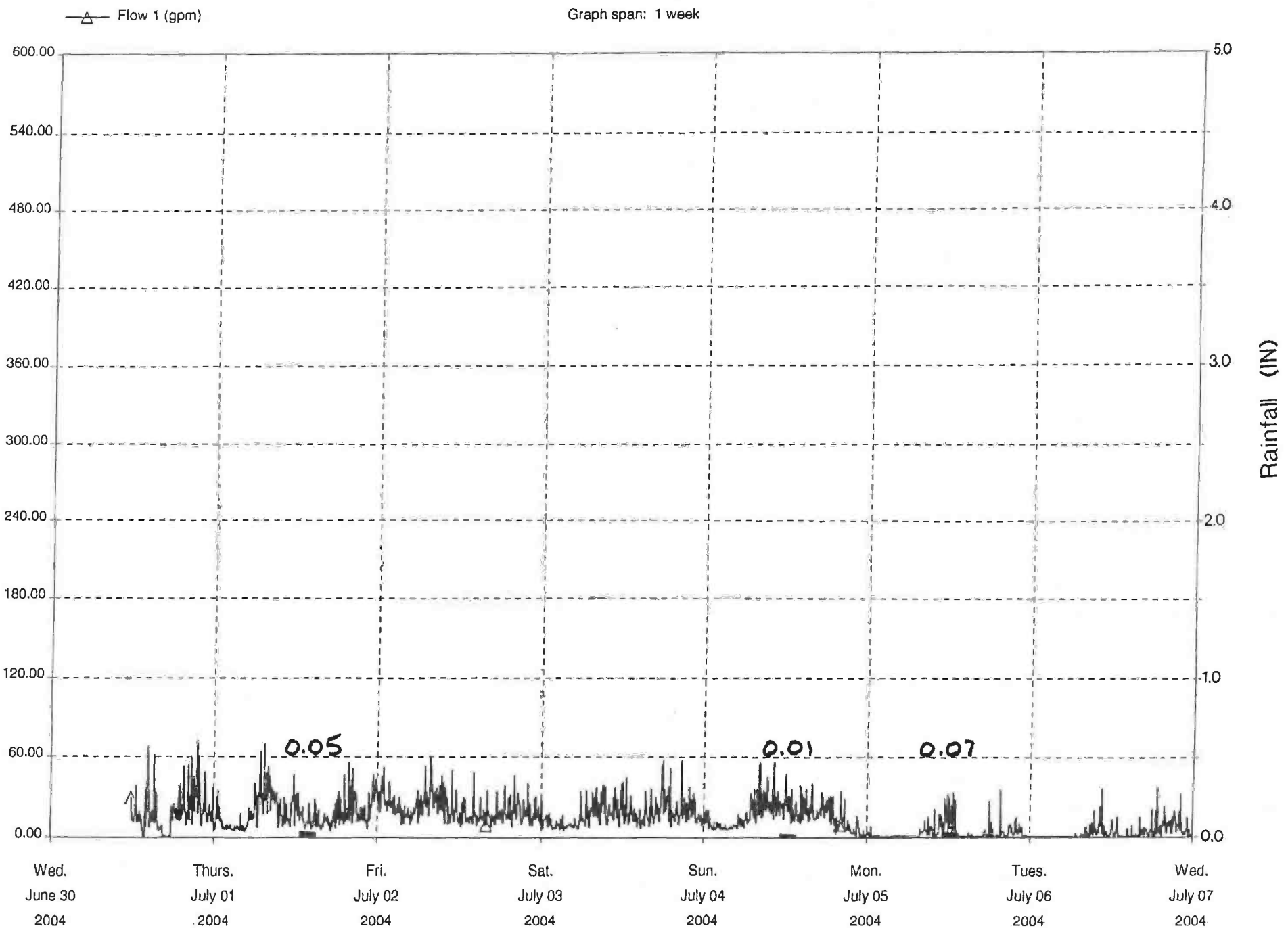
SITE #4 - Behind 3005 Taft Road

Site Id: 00000004 File name: 00000004.001



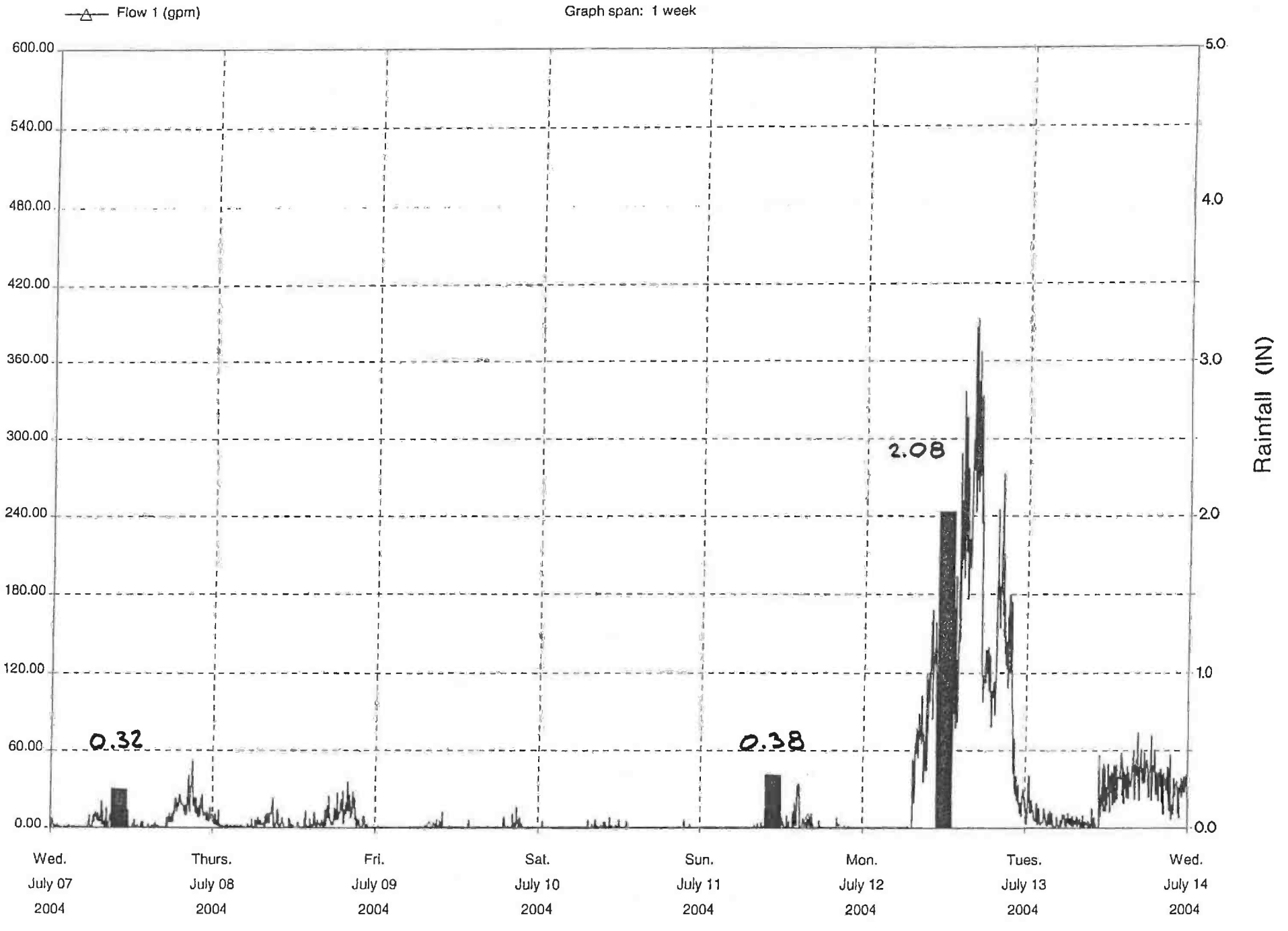
SITE #5 - Under Tree behind 3048 Taft Rd

Site Id: 00000005 File name: 00000005.000



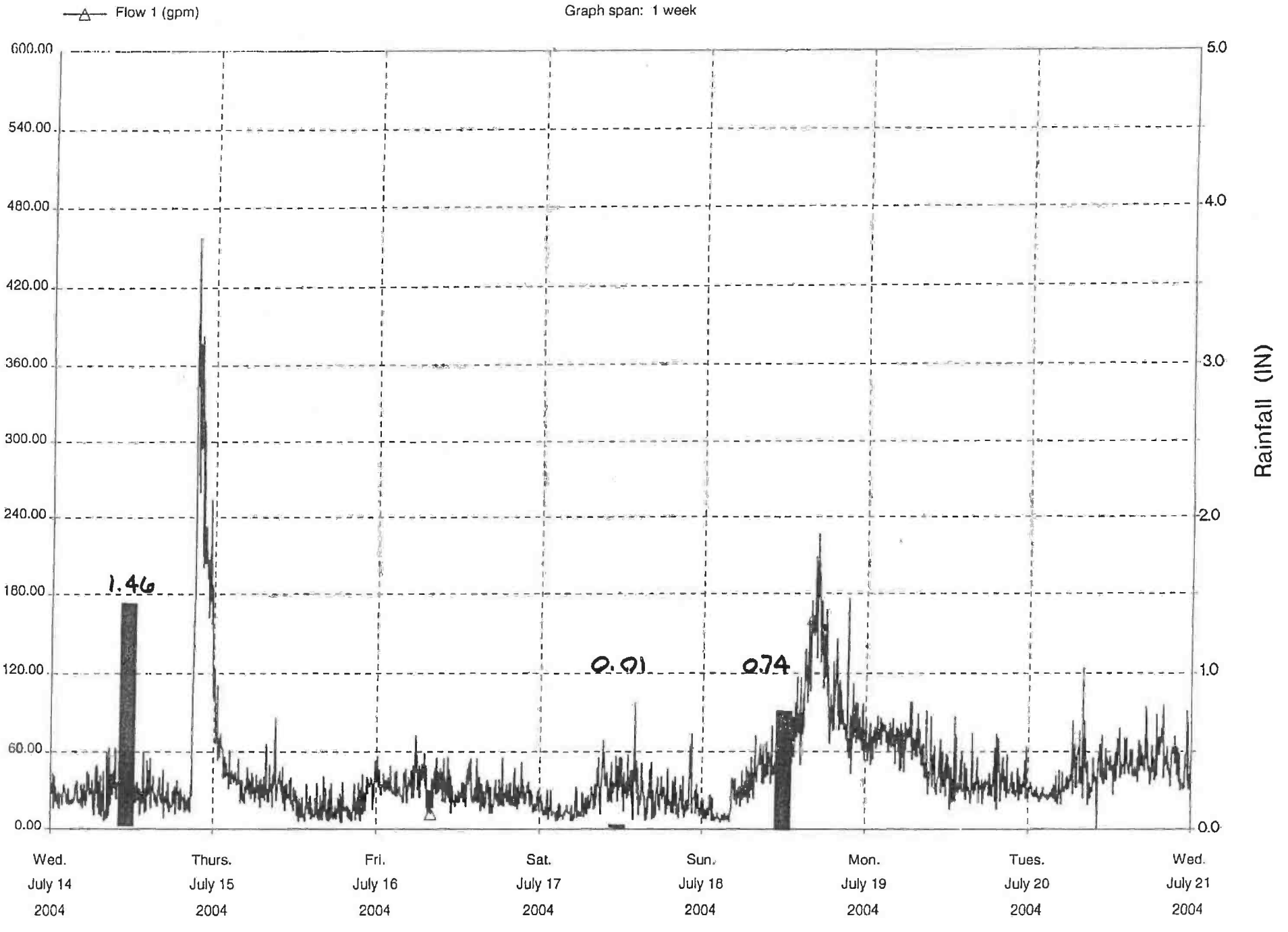
SITE #5 - Under Tree behind 3048 Taft Rd

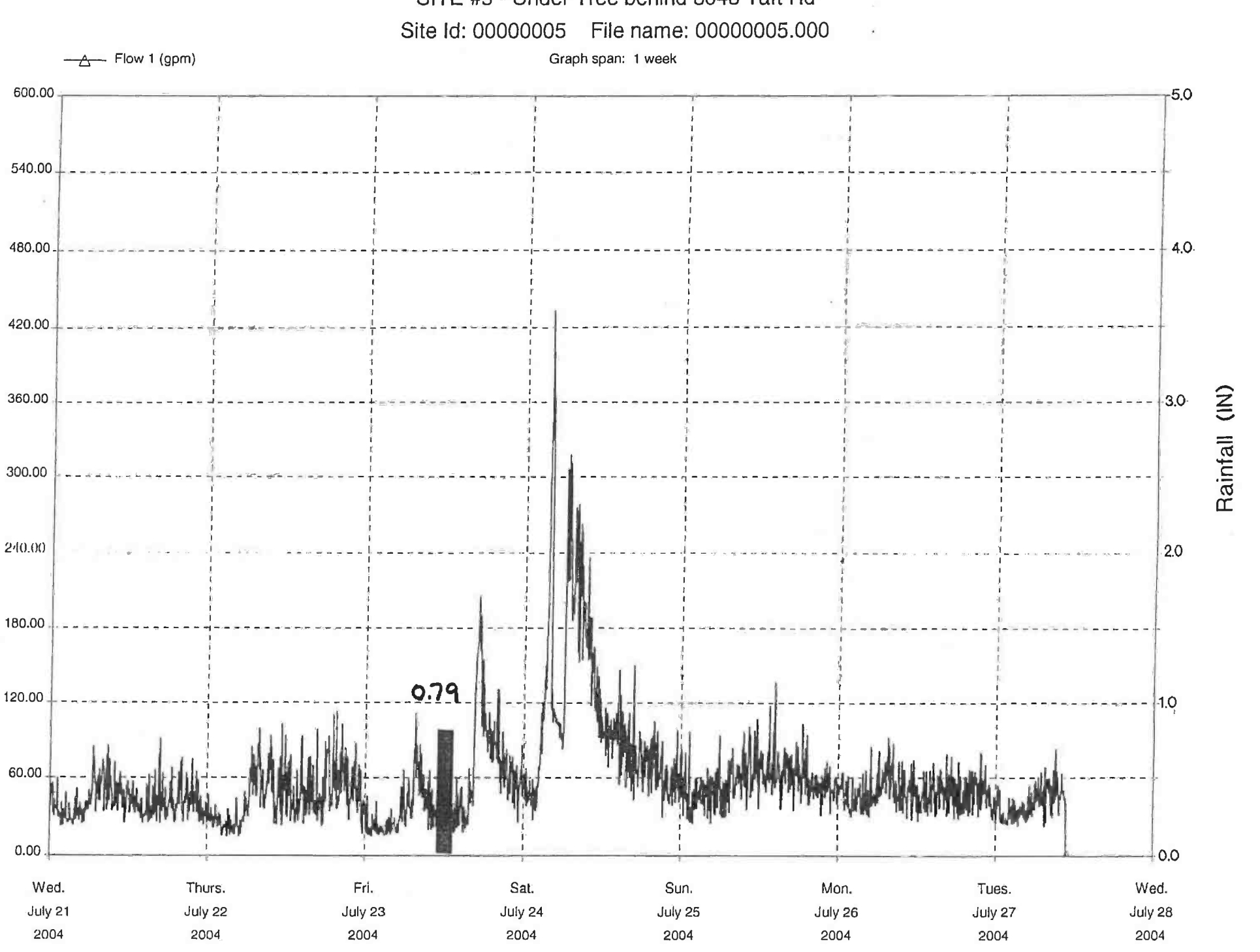
Site Id: 00000005 File name: 00000005.000



SITE #5 - Under Tree behind 3048 Taft Rd

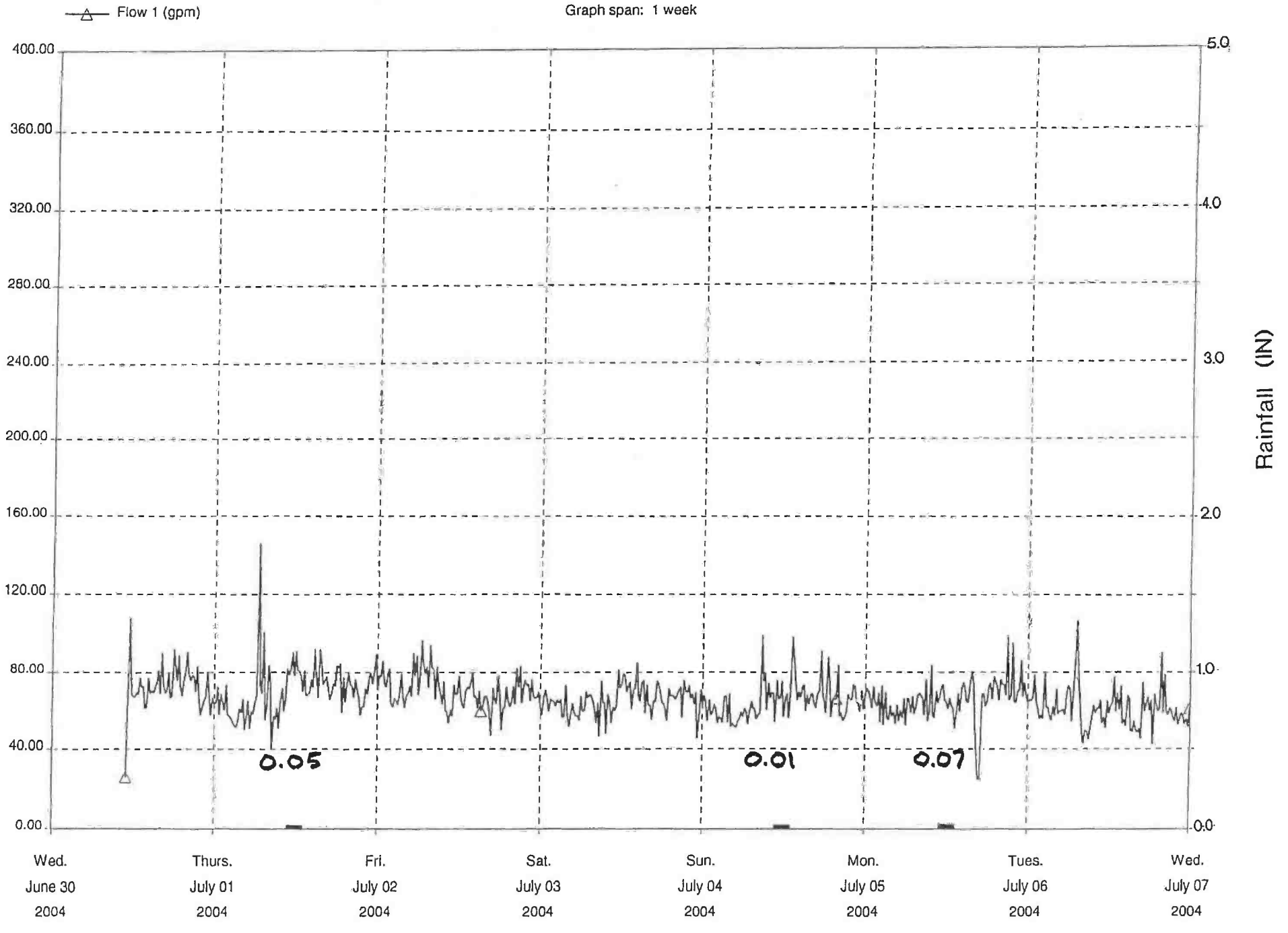
Site Id: 00000005 File name: 00000005.000




SITE #5 - Under Tree behind 3048 Taft Rd
Site Id: 00000005 File name: 00000005.000
Flow 1 (gpm)
Graph span: 1 week
600.00
540.00
480.00
420.00
360.00
300.00
240.00
180.00
120.00
60.00
0.00
5.0
4.0
3.0
2.0
1.0
0.0
Rainfall (IN)
0.79
Wed. July 21 2004
Thurs. July 22 2004
Fri. July 23 2004
Sat. July 24 2004
Sun. July 25 2004
Mon. July 26 2004
Tues. July 27 2004
Wed. July 28 2004

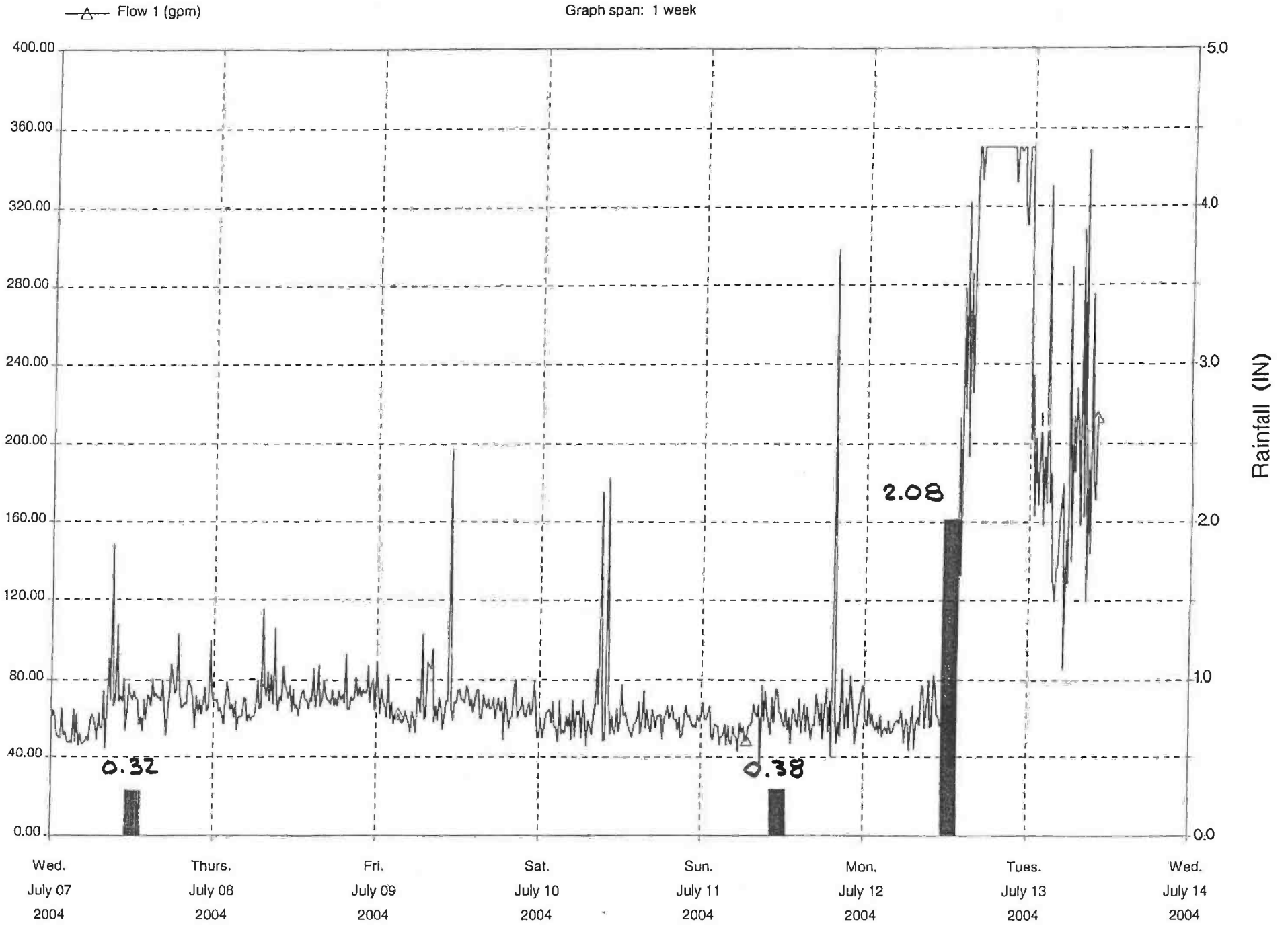
SITE #6 - Behind 8 Embassy

Site Id: 00000006 File name: 00000006.000



SITE #6 - Behind 8 Embassy

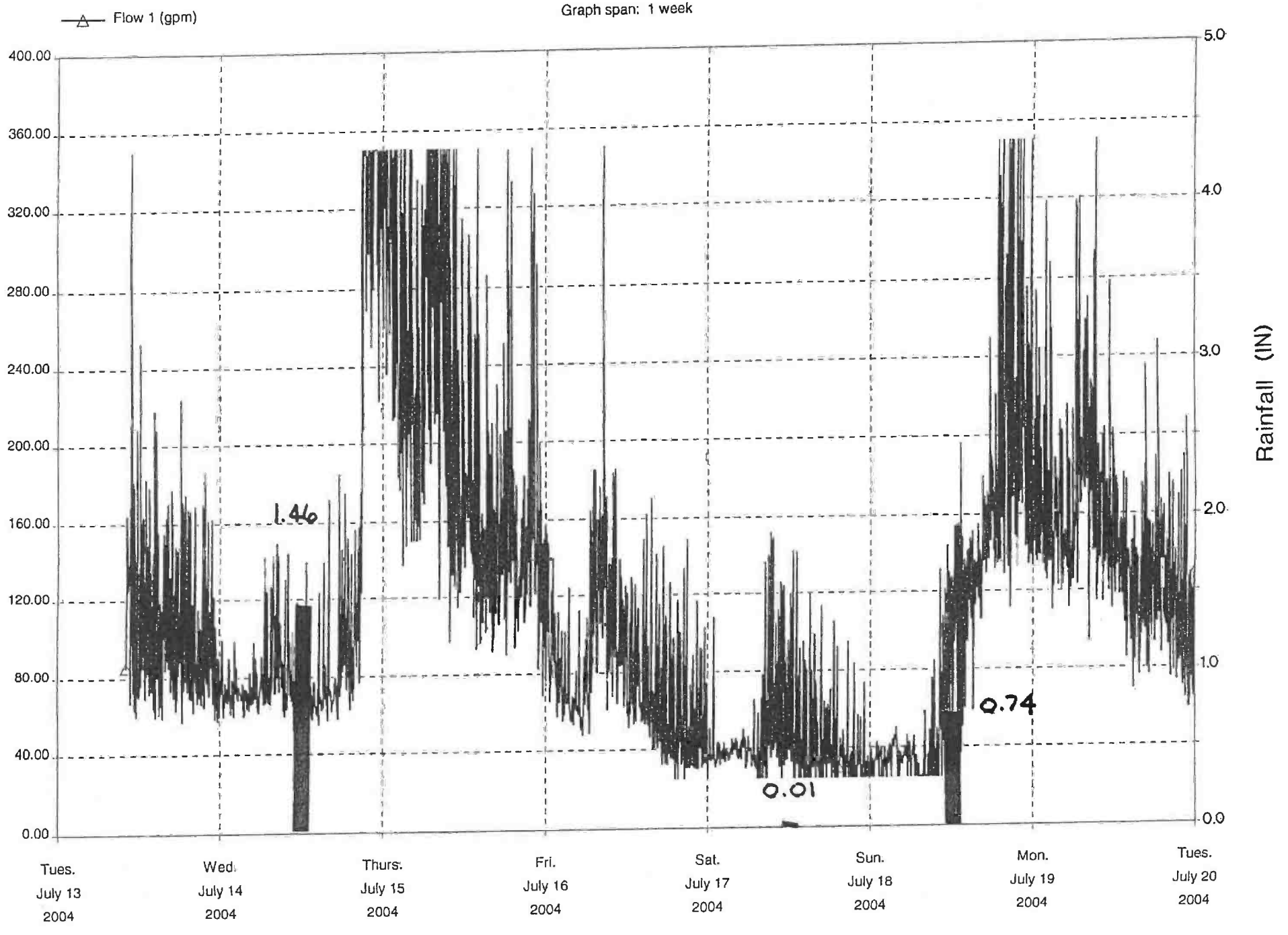
Site Id: 00000006 File name: 00000006.000



SITE #6 - Behind 8 Embassy

Site Id: 00000006 File name: 00000006.001

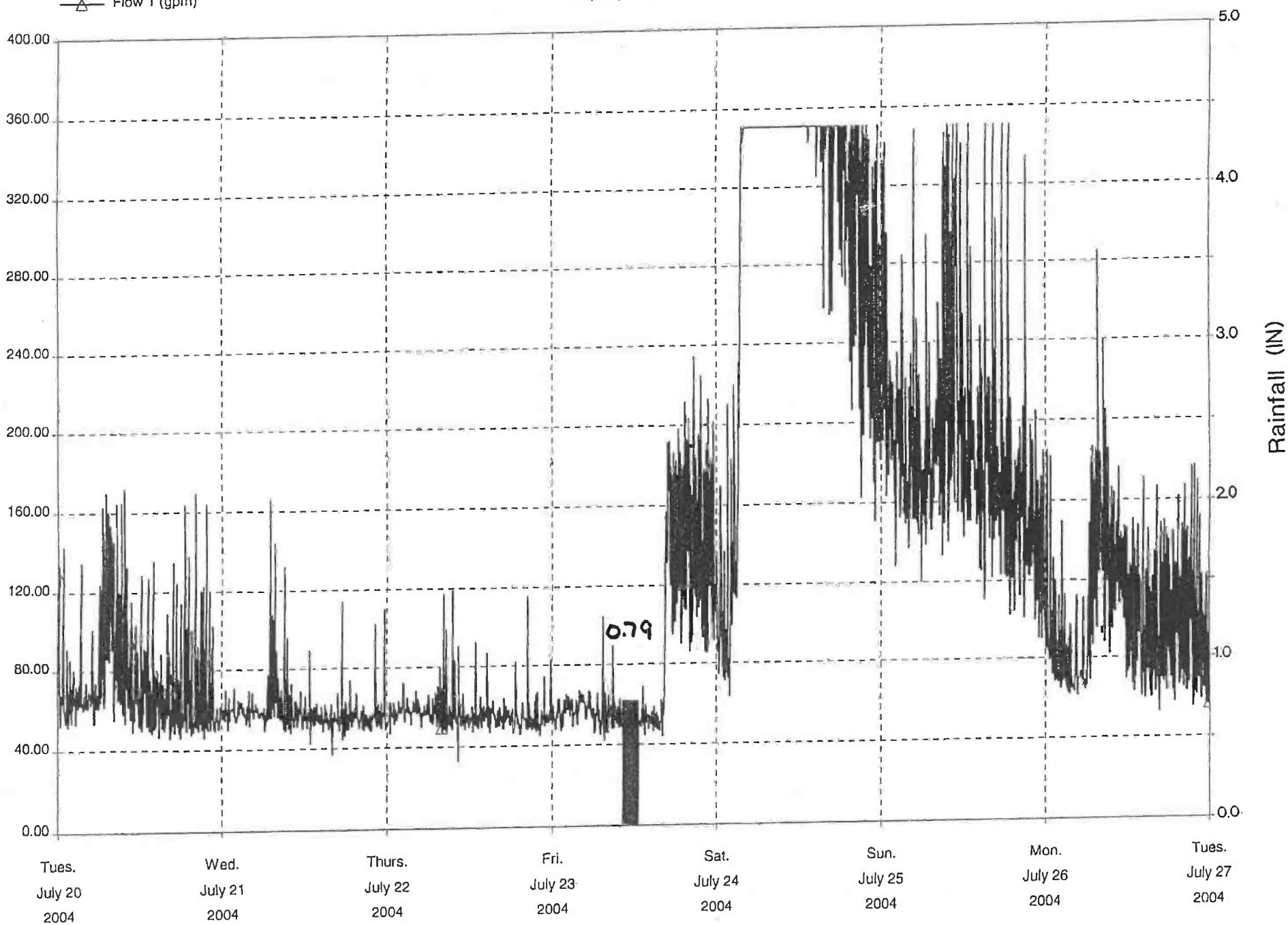
Graph span: 1 week



SITE #6 - Behind 8 Embassy

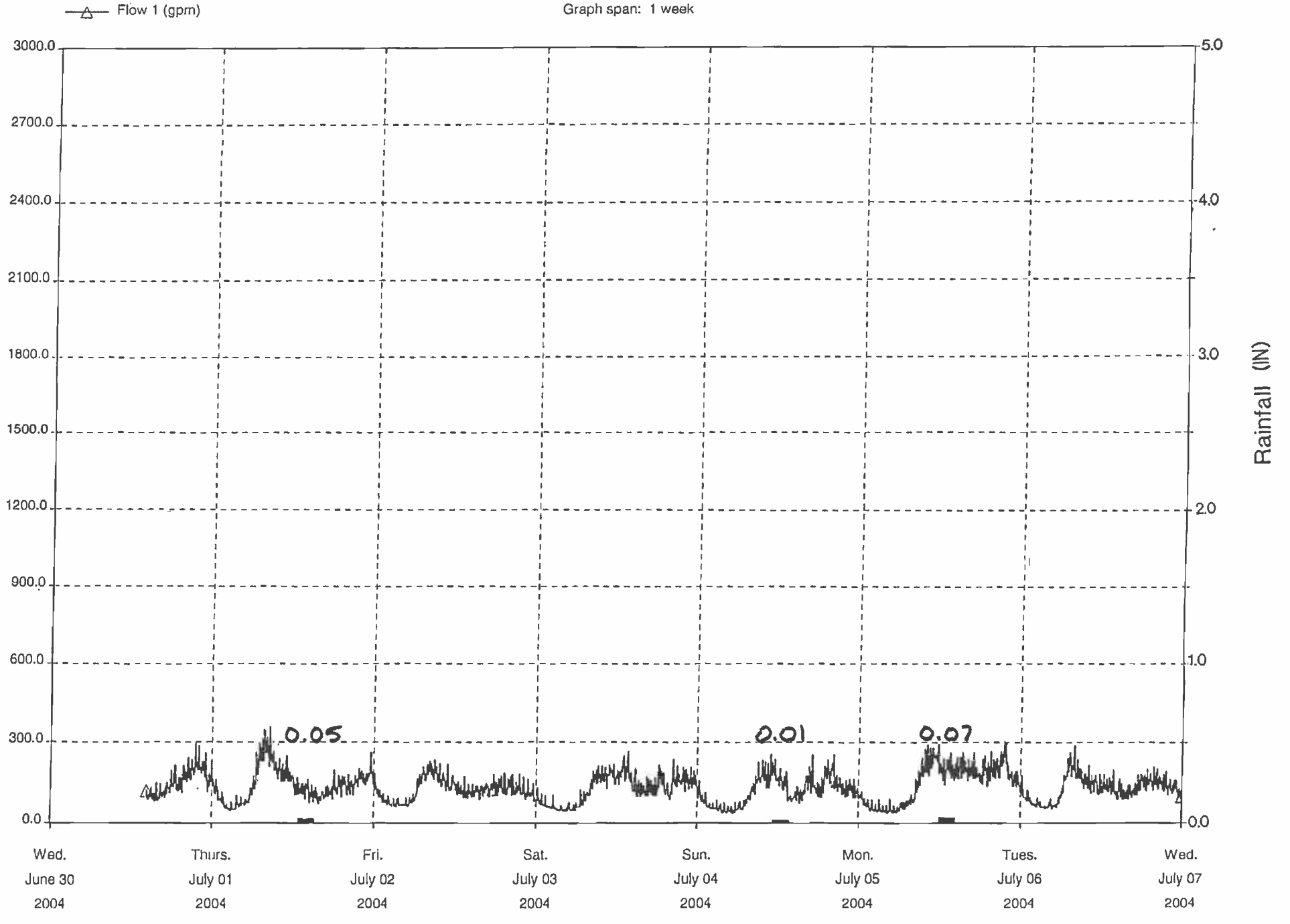
Site Id: 00000006 File name: 00000006.001

Graph span: 1 week



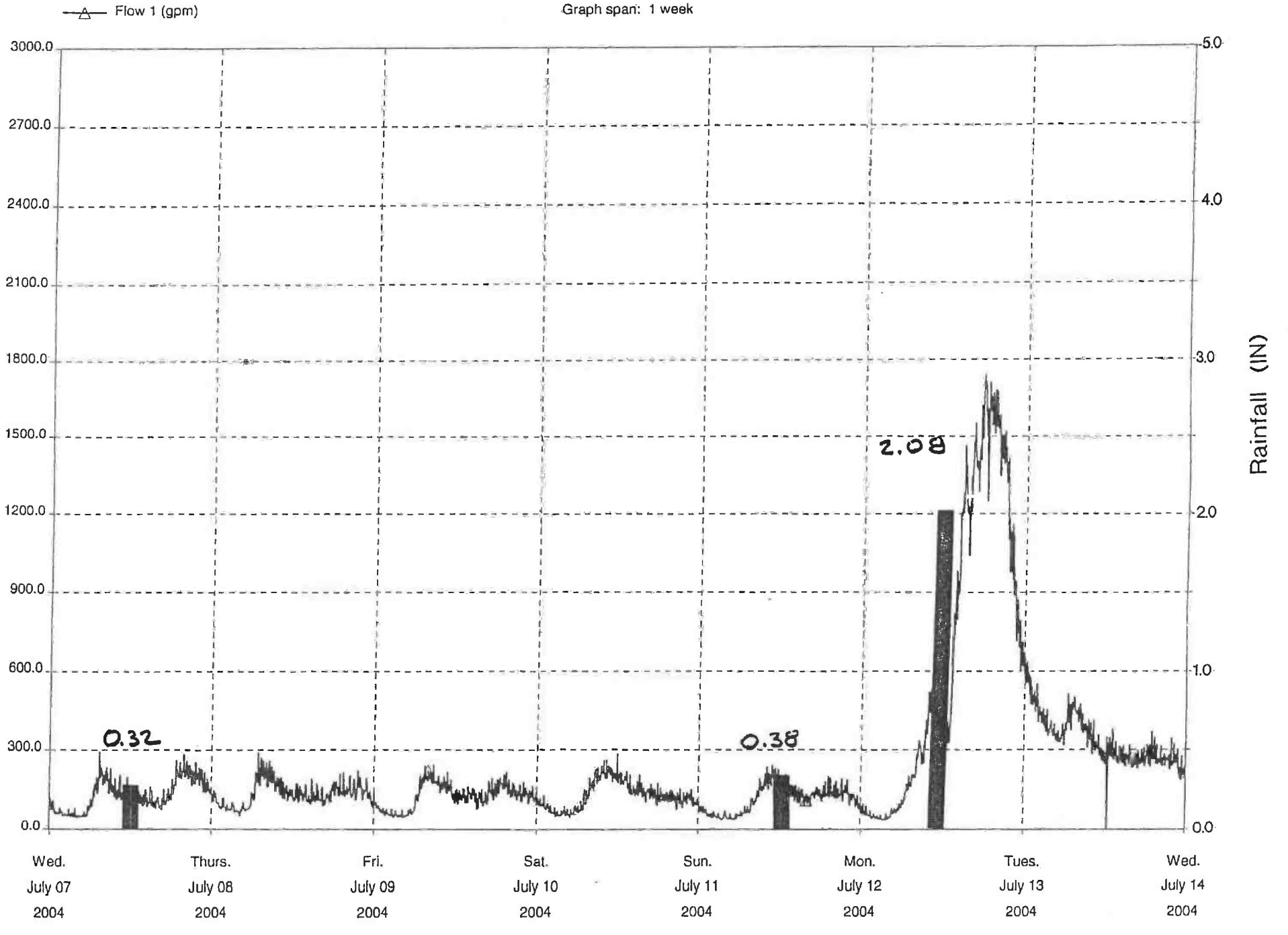
SITE #7 - North of PS mark on guiderail

Site Id: 00000007 File name: 00000007.000



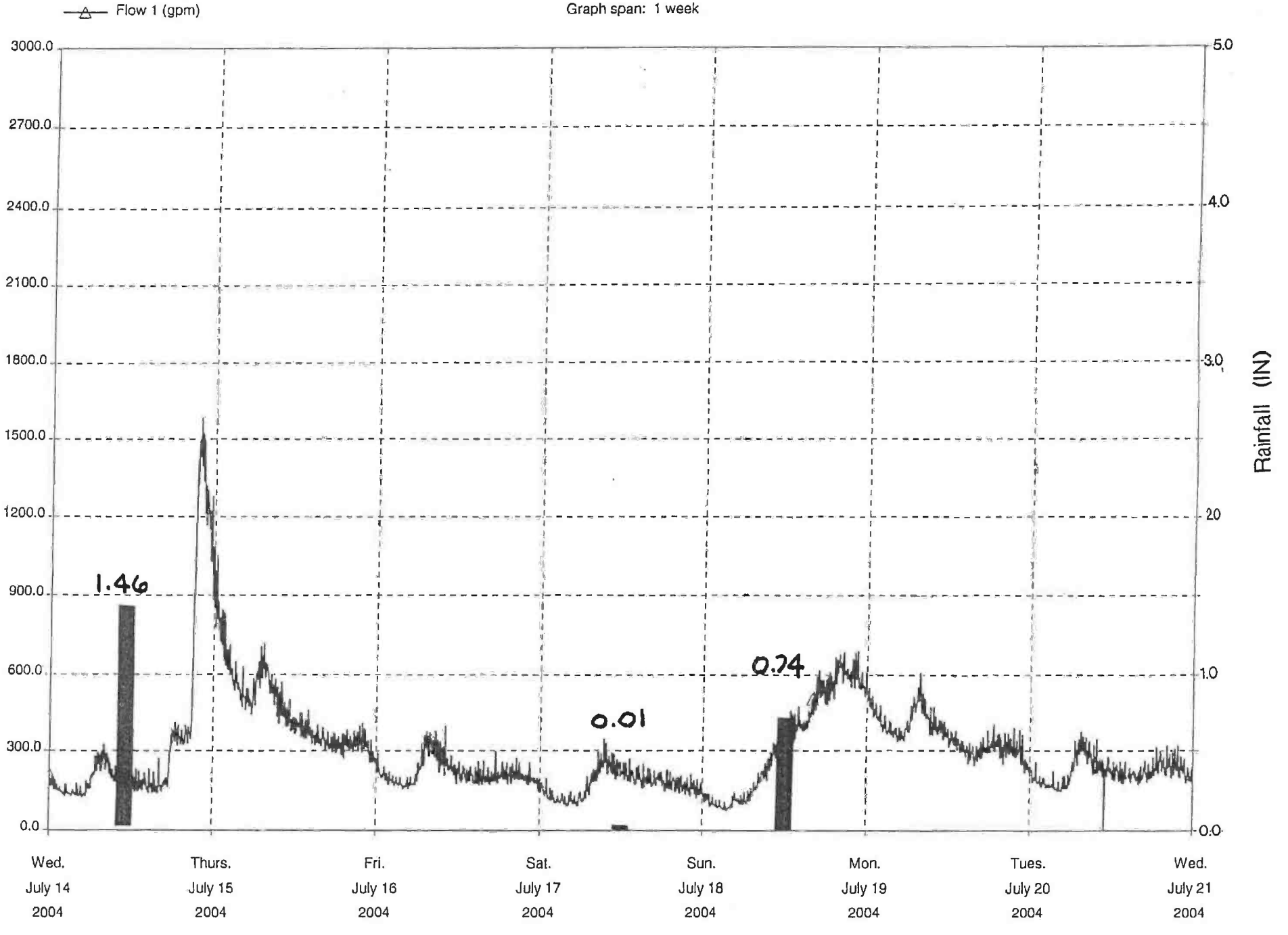
SITE #7 - North of PS mark on guiderail

Site Id: 00000007 File name: 00000007.000



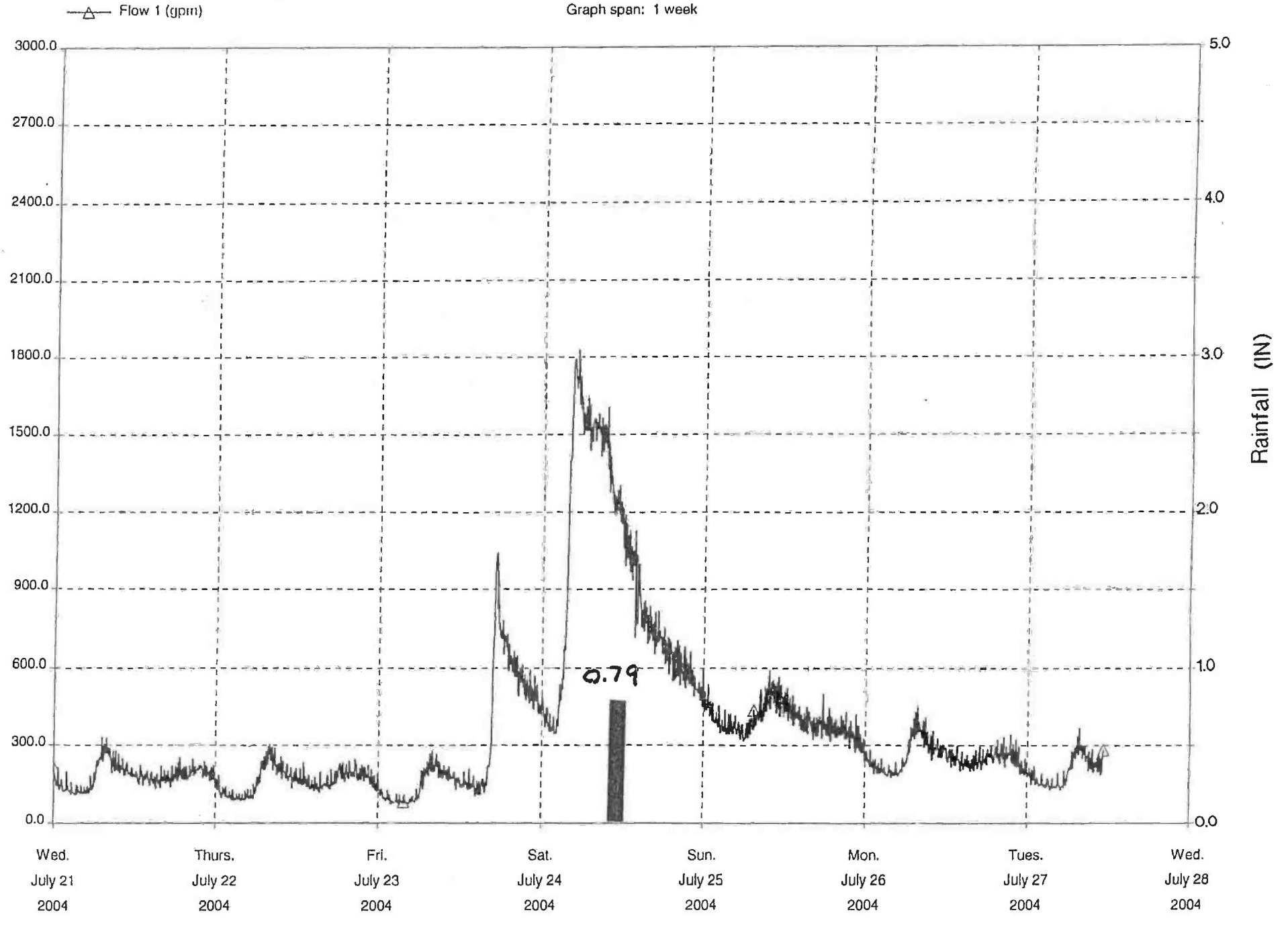
SITE #7 - North of PS mark on guiderail

Site Id: 00000007 File name: 00000007.000



SITE #7 - North of PS mark on guiderail

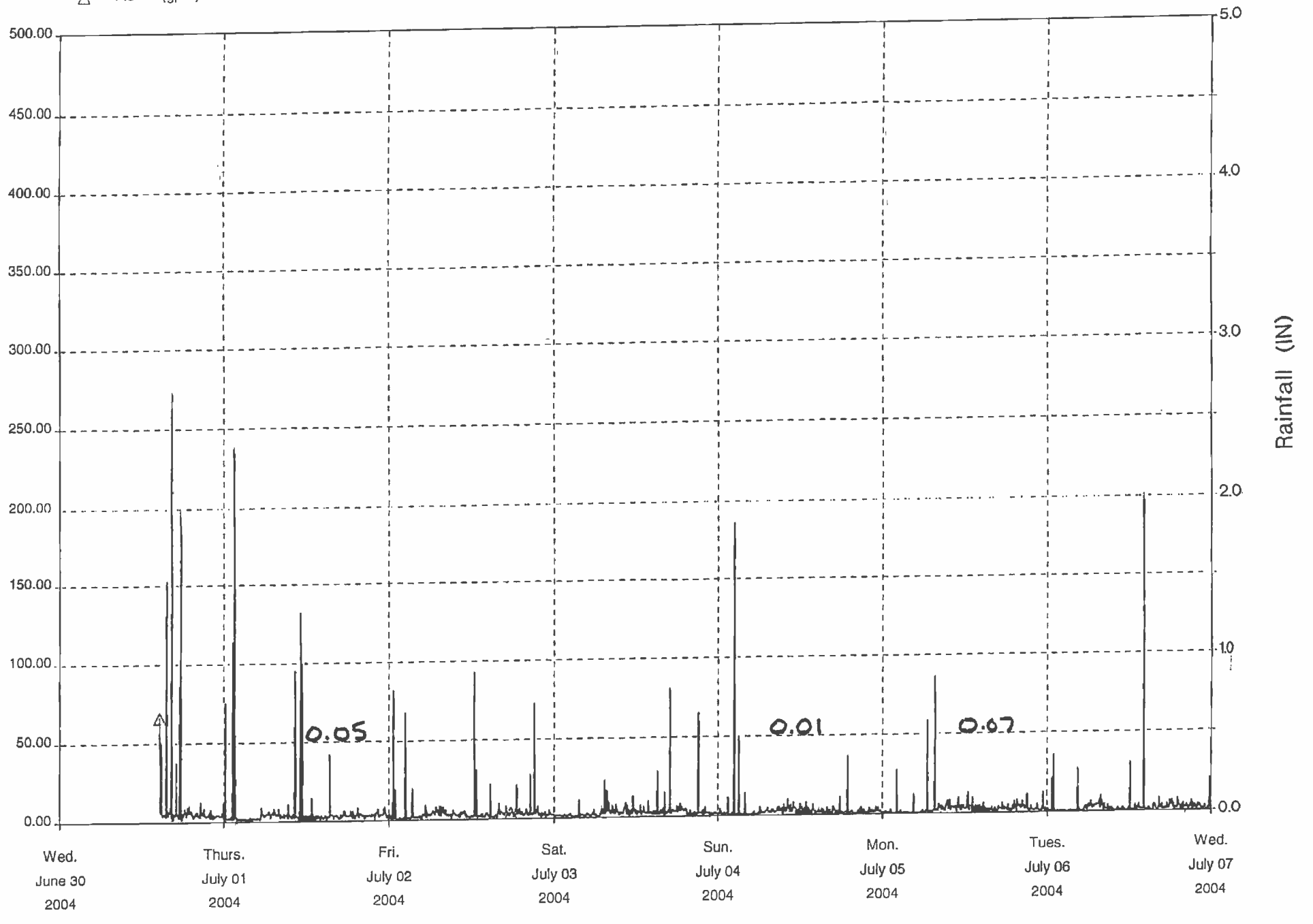
Site Id: 00000007 File name: 00000007.000



SITE #8 - Discharge from Sandra Lane

Site Id: 00000008 File name: 00000008.000

Graph span: 1 week

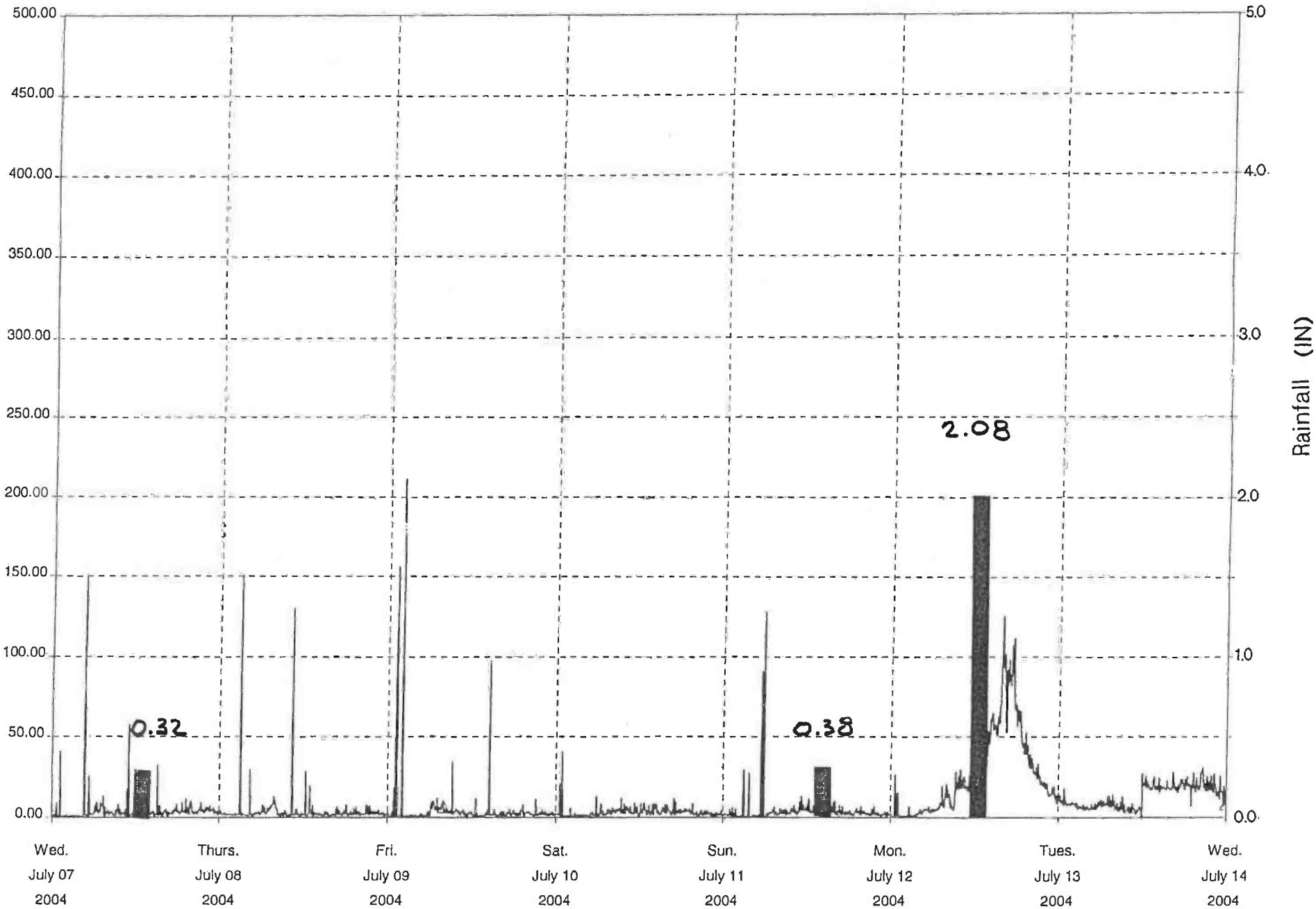


SITE #8 - Discharge from Sandra Lane

Site Id: 00000008 File name: 00000008.000

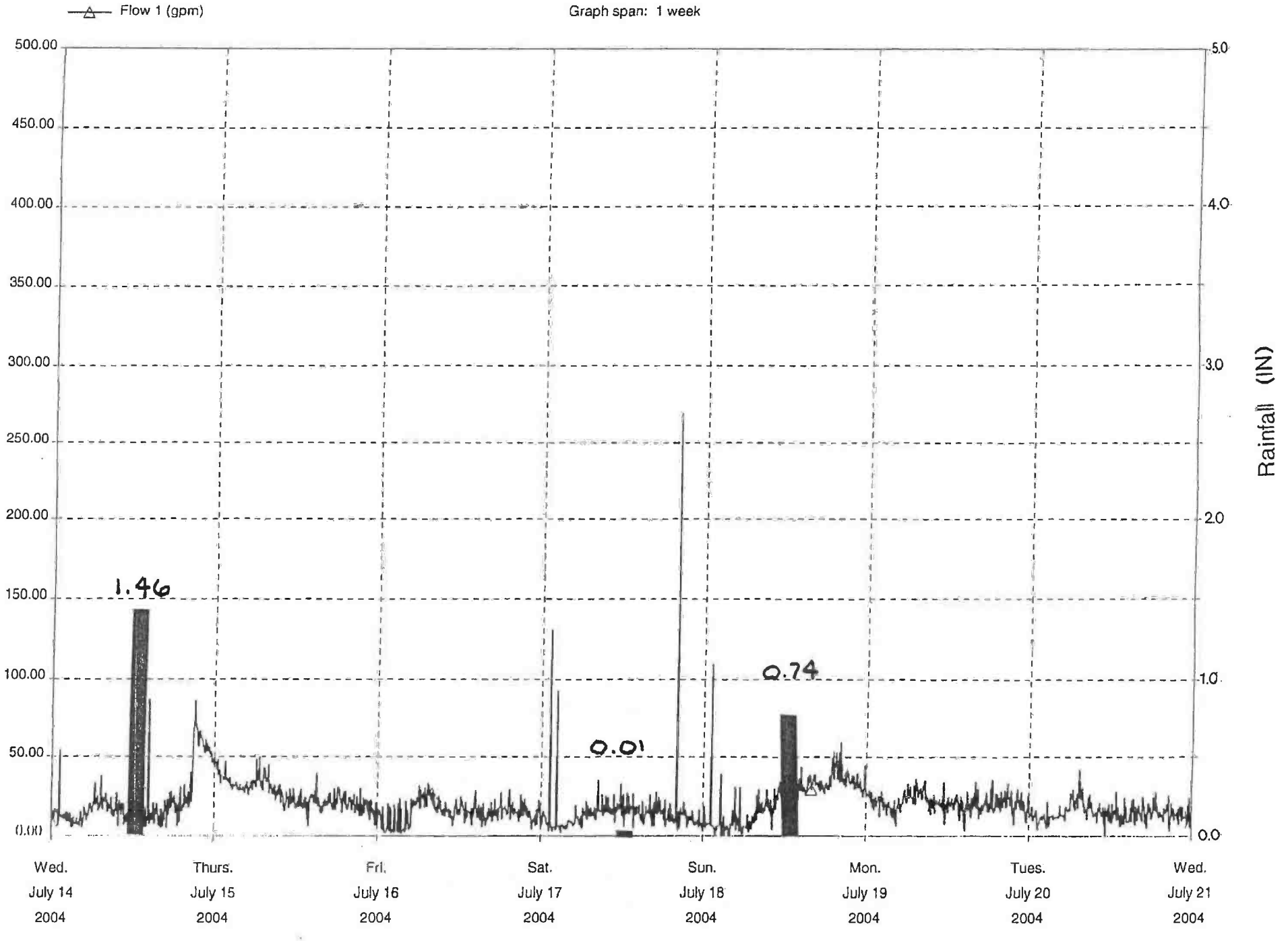
Flow 1 (gpm)

Graph span: 1 week



SITE #8 - Discharge from Sandra Lane

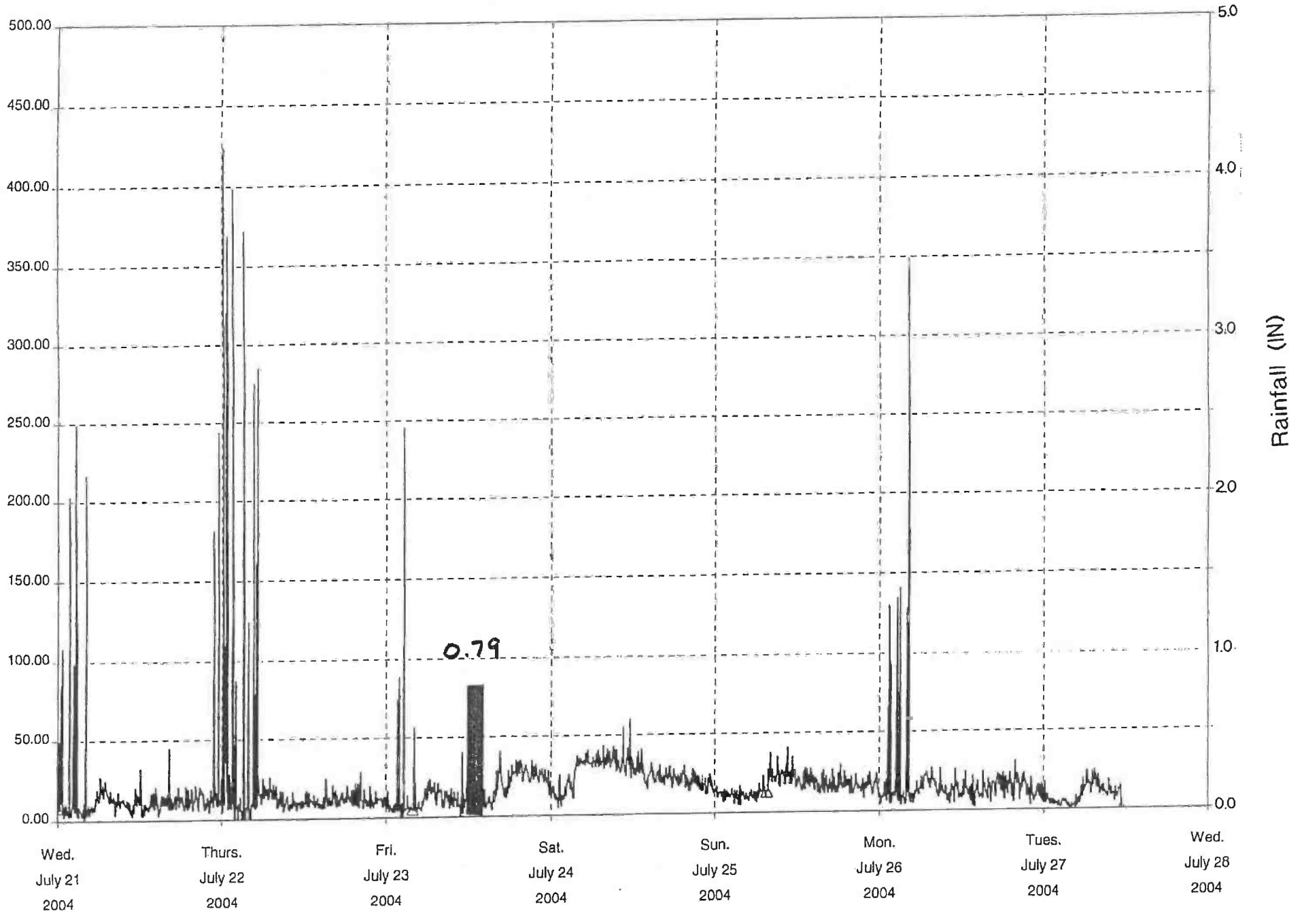
Site Id: 00000008 File name: 00000008.000



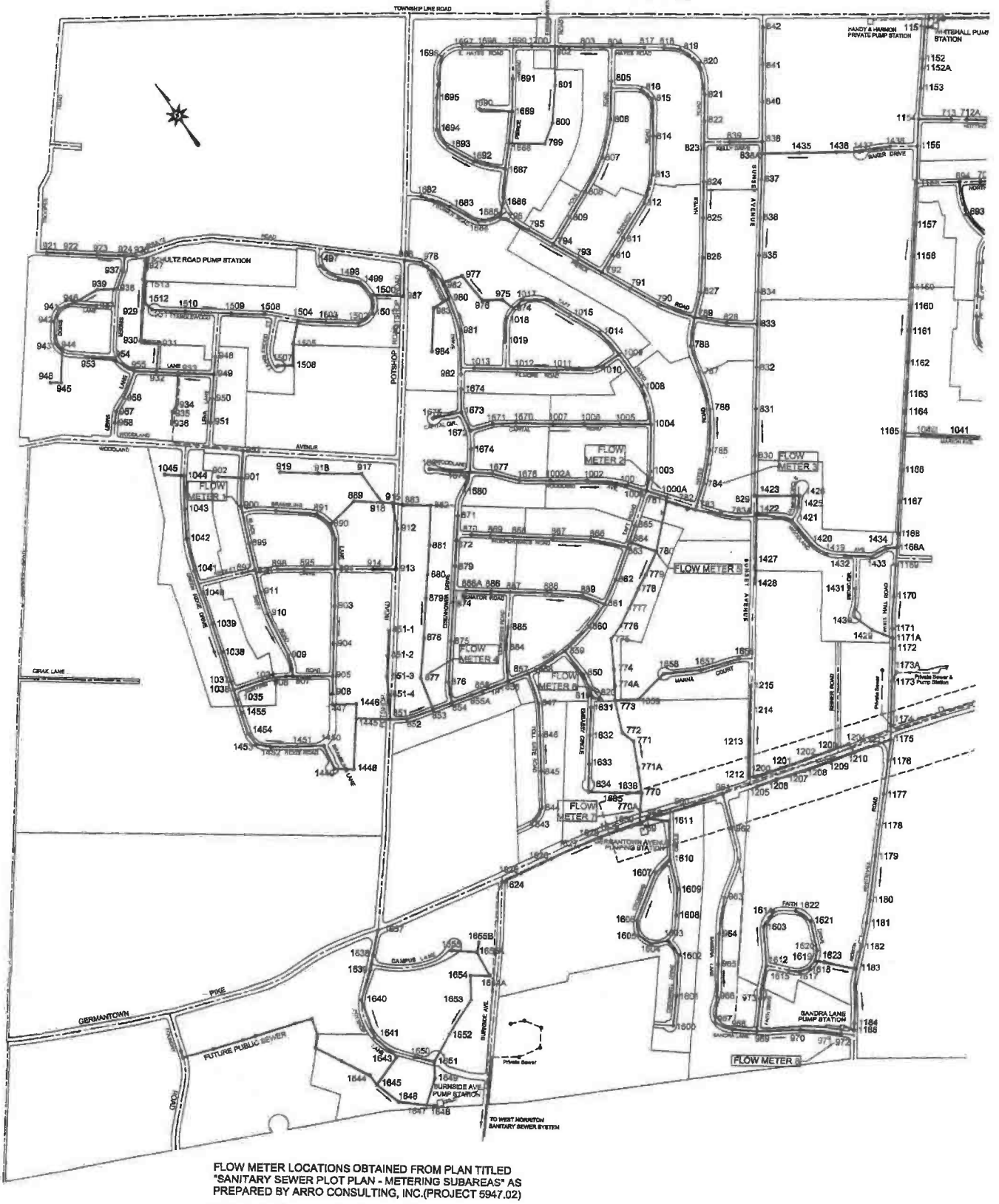
SITE #8 - Discharge from Sandra Lane

Site Id: 00000008 File name: 00000008.000

Graph span: 1 week



SUBAREA FLOW METER LOCATIONS



FLOW METER LOCATIONS OBTAINED FROM PLAN TITLED "SANITARY SEWER PLOT PLAN - METERING SUBAREAS" AS PREPARED BY ARRO CONSULTING, INC.(PROJECT 5947.02)

FLOW METER # INDICATES FLOW METER

APPENDIX F3

Sewer Specialty Services Co., Inc. Lateral Televising Summary

SEWER SPECIALTY SERVICES COMPANY, INC.

2462 New Road, Leicester, NY 14481 585-382-3111

ARRO Engineering	
East Norriton	

MONDAY

Date-	7/11/2005
Truck#	A-23
Job#	

PIPE SIZE	STREET Name	Manhole#	Manhole#	Main Clean	Main Tv	Lateral's Cleaned	Lateral's Tved
8"	Kennedy	815	816				3
8"	Kennedy	814	815				4
8"	Kennedy	813	814				5
	Daily Totals						12

Moved A-23 and A-18 to East Norriton to TV Laterals.

Problems with ECU on TV truck, DOWN TIME 3 HRS.

Lat. TV 135 Each $ 1,620.00

Totals- $ 1,620.00

Randy Burdick

Michael Mott

Signature & Title(Contractor)

Signature & Title (Inspector)

SEWER SPECIALTY SERVICES COMPANY, INC.

2462 New Road, Leicester, NY 14481 585-382-3111

East Norriton

ARRO Engineers

MONDAY

Date- 10/10/2005
Truck# A-23
Job#

PIPE SIZE	STREET Name	Manhole#	Manhole#			LATS Tved	Feet TVED In Lats
8"	Hayes Road	827	826			5	
8"	Hayes Road	826	825			7	
8"	Hayes Road	827	789			1	
8"	Hayes Road	825	824			5	
8"	Hayes Road	824	823			4	
8"	Hayes Road	823	~~822~~ 821			8	
			SJB 10/10/2005				
	Daily Totals					30	

Lats TVED @ $ 135 Each $ 4,050.00

Randy Burdick *Totals-* $ 4,050.00

Michael Mott

Signature & Title(Contractor) Signature & Title (Inspector)

SEWER SPECIALTY SERVICES COMPANY, INC.

2462 New Road, Leicester, NY 14481 585-382-3111

East Norriton

ARRO Engineers

TUESDAY

Date- 10/11/2005
Truck# A-23
Job#

PIPE SIZE	STREET Name	Manhole#	Manhole#			LATS Tved	Feet TVED In Lats
8"	Hayes Road	~~822~~ 821	~~821~~ 820			4	
8"	Hayes Road	~~821~~ 820	~~820~~ 819	TB/10/12/05		4	
8"	Hayes Road	~~820~~ 819	~~819~~ 818			4	
8"	Pierce Road	789	828			3	
8"	Pierce Road	828	833			3	
8"	Eisenhower Drive	876	875			4	
8"	Eisenhower Drive	875	874			6	
	Daily Totals					28	

Randy Burdick
Michael Mott

Signature & Title(Contractor)

Signature & Title (Inspector)

SEWER SPECIALTY SERVICES COMPANY, INC.

2462 New Road, Leicester, NY 14481 585-382-3111

East Norriton

ARRO Engineers

WEDNESDAY

Date- 10/12/2005
Truck# A-23
Job#

PIPE SIZE	STREET Name	Manhole#	Manhole#			LATS Tved	Feet TVED In Lats
8"	Eisenhower Drive ROW	853	877			1	
8"	Eisenhower Drive ROW	877	878			4	
8"	Senator Road	889	888			3	
8"	Senator Road	888	887			7	
8"	Senator Road	889	861			2	
8"	Independence Road	863	866			3	
8"	Independence Road	866	867			6	
	Daily Totals					26	

Randy Burdick
Michael Mott

Signature & Title(Contractor)

Signature & Title (Inspector)

SEWER SPECIALTY SERVICES COMPANY, INC.

2462 New Road, Leicester, NY 14481 585-382-3111

East Norriton

ARRO Engineers

THURSDAY

Date- 10/13/2005
Truck# A-23
Job#

PIPE SIZE	STREET Name	Manhole#	Manhole#			LATS Tved	Feet TVED In Lats
8"	Independence Road	867	868			6	
8"	Independence Road	868	869			4	
10"	Pierce Road	792	793			4	
10"	Pierce Road	793	794			3	
	Daily Totals					17	

Randy Burdick
Michael Mott

Signature & Title(Contractor)

Signature & Title (Inspector)

SEWER SPECIALTY SERVICES COMPANY, INC.

2462 New Road, Leicester, NY 14481 585-382-3111

East Norriton

ARRO Engineers

WEDNESDAY

Date- 10/26/2005
Truck# A-23
Job#

PIPE SIZE	STREET Name	Manhole#	Manhole#			LATS Tved	Feet TVED In Lats
10"	Pierce Road	794	795			4	
10"	Pierce Road	795	796			2	
8"	Taft Road	861	860			4	
8"	Taft Road	860	860A			3	
8"	Taft Road	863	862			5	
8"	Taft Road	862	861			3	
8"	Taft Road	864	863			1	
8"	Taft Road	864	865			4	
	Daily Totals					26	

Randy Burdick
Michael Mott

Signature & Title(Contractor)

Signature & Title (Inspector)

SEWER SPECIALTY SERVICES COMPANY, INC.

2462 New Road, Leicester, NY 14481 585-382-3111

East Norriton

ARRO Engineers

THURSDAY

Date- 10/27/2005
Truck# A-23
Job#

PIPE SIZE	STREET Name	Manhole#	Manhole#			LATS Tved	Feet TVED In Lats
8"	Taft Road	853	852			4	
8"	Taft Road	852	851			1	
8"	Taft Road	856	855			3	
8"	Taft Road	855A	854			1	
8"	Senator Road	887	886			6	
8"	Senator Road	886	886A			2	
	Daily Totals					17	

Randy Burdick
Michael Mott

Signature & Title(Contractor)

Signature & Title (Inspector)

APPENDIX F4

Commercial Vent Repair Non-complying Connections (10/19/05)

MEMO

To: Helmuth J. Baerwald, Township Manger

From: Edward R. White, Sewer Supervisor

Subj: Noncomplying Connections

Date: October 19, 2005

A letter was draft to send to various commercial properties that have a flush type vent cap on their sewer line in a parking lot or a paved area. The letter required the owner to adjust and replace the flush cap with an approved traffic bearing fixture. The list is as follows.

NONCOMPLYING CONNECTIONS

First Republic Bank	75 W. Germantown Pike	REPAIRED OK/9-29-05
Wal Mart	53 W. Germantown Pike	Met contractor /will schedule repair
Facenda-Whitaker	2912 Swede Road	REPAIRED OK/9-23-05
Coldwell Bank real-estate	2924 Swede Road	
Commonwealth Tag	2833 Swede Road	
Estetica Hair Salon	2835 Swede Road	OK/ 9-21-05 RAISED ABOVE GRADE
Just Tires	Swede Rd	REPAIRED OK/9-23-05
Insurance Co.	2000 Swede Road	
OFFICE Building	1910 Swede Road	Met owner will call plumber
National Bank	402 Johnson Highway	REPAIRED 9-9-05
Office Building	302 Johnson Highway	
Penn Square Shopping Center	9 TOTAL	
Wendys Hamburger	2811 Dekalb Pike 3 TOTAL	2REPAIRED/ 9-5-05
Kentucky Fried Chicken	2720 Dekalb Pike	OK /9-19-05 Clean out/ Not Trap
Jacobs Center	60 W. Germantown Pike	REPAIRED /NEEDS FINAL PAVING
Flower Shop	46 W. Germantown Pike	
Pantry One North Wales Road	3310 North Wales Road	
Penn Square Dental	228 Bryans Road	REPAIRED OK/10-6-05
Lavanda Hair Salon	3309 Dekalb Pike	REPAIRED OK/10-3-05

APPENDIX F5

East Norriton Township Sump Pump Inspection Summary

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
3202	E. Hayes Road	Kozel, George & Delores	02-Feb-05	9:00AM	No	Sump pump discharge to storm sewer inlet on Pierce Rd. Roof drains to grade.
3204	E. Hayes Road	Mueller, Mark R. & Mary B.	01-Feb-05	8:00 AM	No	Sump pump discharge to storm sewer in rear of property. Roof drains to grade.
3206	E. Hayes Road	Erhard, D. Thomas & Susan	01-Feb-05	7:00AM	No	Sump pump discharge to tile field & storm sewer in rear of property per Twp. Same for roof drains.
3208	E. Hayes Road	Kunzman, Irvin A. Jr. & Virginia R.	01-Feb-05	7:15AM	No	Sump pump discharge to grade. Same for roof drains.
3210	E. Hayes Road	Tomko, Robert J. & Nancy	09-Feb-05	12:00PM	No	Sump pump discharge to grade. Roof drains tie w/ sump pump piping to grade in rear yard.
3212	E. Hayes Road	Masakowski, Glenn J. & Shirley J.	04-Apr-05	7:15AM	??	Sump pump discharge to pond in rear yard. Roof drain pipe into ground at garage. Residence to grade
3214	E. Hayes Road	Winder, William R. & Bettye D.	04-Apr-05	7:30AM	No	Sump pump discharge to grade. Same for roof drains.
3216	E. Hayes Road	Kampmeier, Susan M.	09-Feb-05	5:45PM	No	Sump pump discharge to grade. Same for roof drains.
3218	E. Hayes Road	Miller, Donald J. & Gail M.	01-Feb-05	7:30AM	No	Sump pump discharge to grade. Roof drains to grade & to a pipe at driveway into ground that discharges to side yard.
3220	E. Hayes Road	Diebold, James L. & Arlene R.	01-Feb-05	7:45AM	No	Sump pump discharge to grade. Same for roof drains.
3226	E. Hayes Road	Casals, Cirilo V. & Rosalinda T.	11-Apr-05	6:30PM	No	Sump pump discharge to grade at street and valved to surface discharge at side of house.
3228	E. Hayes Road	Green, Robert E. & Gayle P.	01-Feb-05	8:15AM	No	Sump pump discharge to grade. Same for roof drains.
3230	E. Hayes Road	Eidman, Frederick Ernest Jr.	01-Feb-05	8:30AM	No	Sump pump discharge to grade. Same for roof drains.
3232	E. Hayes Road	Fazio, Peter A. & Joy A.	01-Feb-05	8:45AM	No	No sump pump. Roof drains to grade.
3234	E. Hayes Road	Bilynsky, Bogdan S. & Regina M.	04-Feb-05	7:00AM	No	Sump pump discharge to grade. Same for roof drains.
3236	E. Hayes Road	Cody, Robert E. & Sophie L.	11-Feb-05	8:15AM	No	Sump pump discharge to grade. Same for roof drains.
3238	E. Hayes Road	Zuberecz, Zoltan & Bernadette	04-Apr-05	8:15AM	??	Sump pump discharge to pipe into ground. Roof drains to grade.
3240	E. Hayes Road	Klink, William M. & Christine	04-Apr-05	8:45AM	No	Sump pump discharge to grade. Same for roof drains.

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
3242	E. Hayes Road	Fatow, Jerry & Gail E.	17-Feb-05	7:00AM	No	Sump pump discharge to grade. Same for roof drains.
3244	E. Hayes Road	Hober, John E. & Mary Helen	01-Feb-05	9.:00AM	No	Sump pump discharge to grade. Same for roof drains.
3246	E. Hayes Road	Evan, Sylvester J. & Rosemary C.	01-Feb-05	9:15AM	No	Sump pump discharge to grade. Same for roof drains.
3248	E. Hayes Road	Bono, Russel J. & Linda A. /Dana Bono	05-Apr-05	9:15AM	??	Sump pump discharge to grade. Same for roof drains of residence. Into pvc pipe into ground @ garage.
3250	E. Hayes Road	O'Connor, John & Joan	07-Feb-05	7:45AM	No	Sump pump discharge to grade. Same for roof drains.
3252	E. Hayes Road	Sinclair, Bonnie A.	09-Feb-05	9:30AM	No	Sump pump discharge to grade. Same for roof drains.
3254	E. Hayes Road	Fondi, Louis A. & Susan M.	10-Feb-05	8:00AM	No	Sump pump discharge to grade. Same for roof drains.
3256	E. Hayes Road	Campana, Lois M.	04-Apr-05	9:30AM	No	Sump pump discharge to curb. Roof drains to grade.
3258	E. Hayes Road	Butler, A. Grant & Deborah L.	04-Feb-05	11:00AM	No	Sump pump discharge to grade. Same for roof drains.
900	Pierce Road	Monteleone, Thomas & Christine	03-Feb-05	8:15AM	No	Sump pump discharge to grade. Same for roof drains.
3203	E. Hayes Road	Aiello, Edward & Lynn	04-Apr-05	7:00AM	No	Sump pump discharge to grade. Same for roof drains.
3205	E. Hayes Road	Garvey, Joseph H. & Roberta L.	02-Feb-05	9:30AM	No	Sump pump discharge to grade. Same for roof drains.
3207	E. Hayes Road	Forbes, William J. & Marguerite A.	03-Feb-05	7:45AM	No	Sump pump discharge to grade. Same for roof drains.
3209	E. Hayes Road	Russo, Charles P. & Elaine M.	09-Feb-05	5:00PM	No	Sump pump discharge to grade. Same for roof drains.
3211	E. Hayes Road	Vierling, Ronald J. & Rita Ann	03-Feb-05	12:30PM	No	Sump pump discharge to grade. Same for roof drains.
3213	E. Hayes Road	Wisner, Harry E. & Phyllis A.	01-Feb-05	9:30AM	No	Sump pump discharge to grade. Same for roof drains.
3215	E. Hayes Road	Derosier, John V. Jr. & Joanne F.	15-Feb-05	10:45AM	No	Sump pump discharge to curb. Roof drains to pvc pipe into ground and discharges to grade.
3217	E. Hayes Road	DelBuono, Harry	04-Apr-05	7:45AM	No	Sump pump discharge to grade. Same for roof drains.
3219	E. Hayes Road	Martorelli, Michael A. & Hedwig m.	09-Feb-05	6:45PM	No	Sump pump discharge to grade. Same for roof drains.
3221	E. Hayes Road	Bello, Genarro & Annita	21-Feb-05	12:15PM		Sump pump discharge to grade. Same for roof drains.
3223	E. Hayes Road	Otto, Charles A. & Heidy E.	01-Feb-05	9:45AM	No	Sump pump discharge to grade. Same for roof drains.
3225	E. Hayes Road	Prinzo, P. John & Norma	14-Feb-05	7:30AM	No	Sump pump discharge to grade. Same for roof drains.

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
3227	E. Hayes Road	Dellangelo, Richard L. & Marilyn J.	02-Feb-05	11:45AM	No	Sump pump discharge to grade. Same for roof drains.
3229	E. Hayes Road	Minardi, Silvio J. & Dorothy D.	01-Feb-05	10:00AM	No	Sump pump discharge to grade. Same for roof drains.
3231	E. Hayes Road	Kittel, Gordon R. & Jeanne K.	01-Feb-05	10:15AM	No	Sump pump discharge to grade. Same for roof drains.
3233	E. Hayes Road	Hylinski, Eugene F. & Delores F.	07-Feb-05	1:00PM	No	Sump pump discharge to grade. Same for roof drains.
3235	E. Hayes Road	Woodward, Allen & Theresa A.	09-Feb-05	10:00AM	No	Sump pump discharge to grade. Same for roof drains.
3239	E. Hayes Road	Harrington, Brian C. & Mary Margaret	04-Apr-05	12:00PM	??	Sump pump discharge to grade. Roof drains for residence to grade, side of garage to pvc into ground.
3245	E. Hayes Road	Johnson, Edward A. & Mary	04-Feb-05	7:30AM	No	Sump pump discharge to grade. Same for roof drains.
3247	E. Hayes Road	Jupin, Beverly A.	04-Feb-05	8:00AM	No	Sump pump discharge to grade. Same for roof drains.
3249	E. Hayes Road	Fornace, John W.	03-Feb-05	8:30AM	No	Sump pump discharge to grade. Same for roof drains.
3255	E. Hayes Road	Raieta, Fred & Donna Morgan	05-Apr-05	4:15PM	No	Sump pump discharge to grade. Same for roof drains.
3259	E. Hayes Road	Rozecki, Edward A. & Marlene	01-Feb-05	10:30AM	No	Sump pump discharge to grade. Same for roof drains.
3257	E. Hayes Road	Trejo, Ramon (Debra Quade ?)	04-Apr-05	9:45AM	No	Sump pump discharge to grade. Same for roof drains.
3226	Eisenhower Drive	Hoover, Frederic S. & Heidi J.			??	Owner stated that they are tied to inlet and at the lowest point in development. Would not permit inspection to be made.
805	Kelly Drive	Lee, Kwang Young & Kyeong Sook	06-Apr-05	12:15PM	No	No sump pump. Roof drains to grade.
808	Pierce Road	England, Teresa M.	05-Apr-05	4:00PM	??	Sump pump discharge to grade. Roof drains to grade and into pvc into ground.
3200	Kennedy Road	Pierce, Jay B.	04-Feb-05	11:15AM	No	Sump pump discharge to grade. Same for roof drains.
3204	Kennedy Road	Muscara, John A. & Margaret A.	01-Feb-05	10:45AM	No	Sump pump discharge to grade. Same for roof drains.
3206	Kennedy Road	Hoffman, Jerome & Violet	02-Feb-05	8:00AM	No	Sump pump discharge to grade. Same for roof drains.
3208	Kennedy Road	Maier, David M. & Colleen M.	02-Feb-05	12:45PM	No	Sump pump discharge to grade. Same for roof drains.
3210	Kennedy Road	Breznicky, Michael & Katherine	01-Feb-05	11:00AM	No	Sump pump discharge to grade. Same for roof drains.

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
3212	Kennedy Road	Kirkpatrick, Robert P. & Helen C.	07-Feb-05	3:45PM	No	No sump pump. Gravity line discharge to grade. Roof drains to grade.
3218	Kennedy Road	Lowe, Harold S.	07-Feb-05	2:00PM	No	Sump pump discharge to curb w/ house roof drain. Other roof drains to grade.
3214	Kennedy Road	McLafferty, Charles J. & Patricia A.	11-Apr-05	11:15AM	No	Sump pump discharge to curb. Roof drains to grade.
3216	Kennedy Road	Schonfeld, Arnold & Helene	01-Feb-05	11:15AM	No	Sump pump discharge to grade. Same for roof drains.
3220	Kennedy Road	Graham, Carol M.	07-Feb-05	2:15PM	No	Sump pump discharge to grade. Same for roof drains.
3222	Kennedy Road	Coppola, Gregory P. & Diane	07-Feb-05	2:30PM	No	Sump pump discharge to grade. Same for roof drains.
3224	Kennedy Road	Weaver, Norma J. & Silas				
3226	Kennedy Road	Jamison, Thomas E. & Dorothy A.	01-Feb-05	2:45PM	No	Sump pump discharge to grade. Same for roof drains.
3228	Kennedy Road	Jones, Robert C.	05-Apr-05	12:00PM	No	Sump pump discharge to grade. Same for roof drains.
3230	Kennedy Road	Carpenter, Jason C.	01-Feb-05	11:30AM	No	Sump pump discharge through curb. Roof drains to grade.
3232	Kennedy Road	Storti, Daniel J. & Susan T.	01-Feb-05	1:00PM	No	No sump pump. Roof drains to grade.
3203	Kennedy Road	Husar, Kenneth & Paula A.	08-Feb-05	9:00AM	No	No sump pump. Roof drains to grade.
3205	Kennedy Road	Gustin, Eric J. & Mary Eileen	01-Feb-05	11:45AM	No	Sump pump discharge to grade. Same for roof drains.
3207	Kennedy Road	Vaughn, Donald & Florine B.	04-Feb-05	10:45AM	No	Sump pump discharge to curb. Roof drains to grade.
3209	Kennedy Road	Cravetz, Janet J.	01-Feb-05	12:30PM	No	Sump pump discharge to grade. Same for roof drains.
3211	Kennedy Road	Florkowski, Joseph & Kathleen C.	05-Apr-05	11:00AM	No	Sump pump discharge to street. Roof drains to grade.
3213	Kennedy Road	Keller, Aaron & Kelly Stangul	01-Feb-05	12:45PM	No	Sump pump discharge to curb. Roof drains to grade.
3215	Kennedy Road	Strowhouser, Thos. J. & Gertrude Ann	02-Feb-05	1:00PM	No	Sump pump discharge to curb. Roof drains to grade.
3217	Kennedy Road	Steiner, Daniel P. & Elizabeth J.	11-Apr-05	4:45PM	No	Sump pump discharge to curb. Roof drains to grade.
3219	Kennedy Road	Birog, Arturo B. & Lorna G.	07-Feb-05	9:15AM	No	Sump pump discharge to grade. Same for roof drains.
3221	Kennedy Road	Jones, Kenneth E. & Linda S.	03-Feb-05	2:45PM	No	Sump pump discharge to grade. Same for roof drains.
3225	Kennedy Road	Cassel, James A. & Diana L.	08-Feb-05	7:00AM	No	Sump pump discharge to grade. Same for roof drains.

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
3229	Kennedy Road	Kostenbader, Robert M. & Rebecca J.	01-Feb-05	1:30PM	No	Sump pump discharge to grade. Same for roof drains.
3202	Polk Road	Babe, Herbert R. & Dorothy S.	11-Apr-05	5:45PM	No	Sump pump discharge to curb. Roof drains to grade.
3204	Polk Road	Heckman, Paul E. Jr. & Karen M.	02-Feb-05	1:15PM	No	Sump pump discharge to grade. Same for roof drains.
3206	Polk Road	Vincent, France	04-Apr-05	2:15PM	No	Sump pump discharge to grade. Same for roof drains.
3208	Polk Road	Lamson, Richard H. Jr. & Teresa J.	02-Feb-05	7:30AM	No	Sump pump discharge to grade. Same for roof drains.
3210	Polk Road	Altemus, Valeria Ann & Sek, John	04-Apr-05	3:00PM	No	Sump pump discharge to grade. Same for roof drains.
3212	Polk Road	Duff, John P. & Theresa C.	04-Apr-05	3:15PM	No	Sump pump discharge to grade. Same for roof drains.
3214	Polk Road	Dougan, Donald W. & Mary T.	01-Feb-05	1:45PM	No	Sump pump discharge to grade. Same for roof drains.
3216	Polk Road	Pishock, James M. & Carol A.	09-Feb-05	4:45PM	No	Sump pump discharge to grade. Same for roof drains.
3218	Polk Road	McCoy, Walter D. & Eileen W.	01-Feb-05	2:00PM	No	Sump pump discharge to grade. Same for roof drains.
3203	Polk Road	Randall, William J. & Rosemarie	02-Feb-05	1:30PM	No	Sump pump discharge to grade. Same for roof drains.
3205	Polk Road	Nordmeyer, Ronald L. & Elisa B.	03-Feb-05	7:00AM	No	Sump pump discharge to grade. Same for roof drains.
3207	Polk Road	Davis, Lucia M.	04-Apr-05	2:30PM	No	Sump pump discharge to grade. Same for roof drains.
3209	Polk Road	Kolb, Louis J. Sr. & Kathleen J.	11-Apr-05	5:30PM	No	Sump pump discharge to curb. Roof drains to grade.
3211	Polk Road	Doherty, Jas. T. & Marie V. Evanick	07-Feb-05	3:15PM	No	Sump pump discharge to grade. Same for roof drains.
3213	Polk Road	Ronan, Gerald D. Jr. & Joyce	08-Feb-05	7:45AM	No	Sump pump discharge to grade. Same for roof drains.
3215	Polk Road	Wiesinger, James A. & Carol M.	02-Feb-05	1:45PM	No	Sump pump discharge to grade. Same for roof drains.
3217	Polk Road	Cohen, Robert A. & Linda S.	07-Feb-05	8:00AM	??	Sump pump discharge to grade. Same for roof drains. Garage roof drain into pvc pipe into ground.
3219	Polk Road	Schoettle, Charles J. III & Michelle M.	07-Feb-05	12:30PM	No	Sump pump discharge to grade. Same for roof drains.
3221	Polk Road	Winsey, Michael & Nancy	03-Feb-05	1:45PM	No	Sump pump discharge to grade. Same for roof drains.
3223	Polk Road	Farrell, Michael F. & Carol Ann	01-Feb-05	2:15PM	No	Sump pump discharge to pipe to rear yard. Roof drains to grade.
3225	Polk Road	Jaworski, Anthony R. & Betty Lou	07-Feb-05	3:00PM	No	Sump pump discharge to grade. Same for roof drains.

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
1003	Pierce Road	Sexton, John M. & Sharon L.	01-Feb-05	2:30PM	No	Sump pump discharge to grade. Same for roof drains.
800	Pierce Road	Brown, Timothy J. & Toni Lynn	07-Feb-05	7:30AM	No	Sump pump discharge to grade. Same for roof drains.
804	Pierce Road	Sandler, David P. & Irena B.	01-Feb-05	3:00PM	??	Sump pump discharge to grade. Roof drains to pipe in ground.
902	Pierce Road	Bartholomew, J. & Carol A.	04-Feb-05	7:15AM	No	Sump pump discharge to grade. Same for roof drains.
904	Pierce Road	Ellick, David G. & Kathleen	04-Feb-05	11:45AM	No	Sump pump discharge to curb w/ neighbor. Roof drains to grade.
906	Pierce Road	Kessler, Henry H. & Gale A.	03-Feb-05	2:00PM	No	Sump pump discharge to grade. Same for roof drains.
908	Pierce Road	Conte, John S. & Theresa R.	05-Apr-05	7:45AM	No	Sump pump discharge to curb. Roof drains to grade.
910	Pierce Road	The Nine Ten Pierce Road Trust	07-Feb-05	3:30PM	No	Sump pump discharge to grade. Same for roof drains.
916	Pierce Road	Delucia, Michael T. & Cheryl A.	11-Apr-05	6:15PM	No	Sump pump discharge to curb. Roof drains to grade.
918	Pierce Road	Shields, Kevin & Karen	01-Feb-05	3:15PM	No	Sump pump discharge to grade. Same for roof drains.
920	Pierce Road	Wesley, Robert T. & Gloria J.	05-Apr-05	8:45AM	No	Owner did not answer door. I observed a 1 1/2" pipe in the front yard discharge several times during my wait. Roof drains to grade.
924	Pierce Road	Stewart, Robert 3rd & Mary Ann	05-Apr-05	9:00AM	No	Owner stated no sump pump, residence on slab. Roof drains to grade.
926	Pierce Road	Clinton, Carolle	02-Feb-05	2:00PM	No	Sump pump discharge to grade. Same for roof drains.
1100	Pierce Road	Zito, Salvatore	15-Feb-05	10:15AM	No	Sump pump discharge to grade. Same for roof drains.
1102	Pierce Road	Byerly, Chirstopher & Renee J. Wright	15-Feb-05	10:00AM	No	Sump pump discharge to grade. Same for roof drains.
1104	Pierce Road	McVey, James G. & Sarah E.	02-Feb-05	7:45AM	No	Sump pump discharge to grade. Same for roof drains.
1106	Pierce Road	O'Brien, John J. & Jeanne M.	02-Feb-05	7:15AM	No	Sump pump discharge underground to stream. Roof drains to grade.
1108	Pierce Road	Grohoski, Robert M. & Elaine M.	09-Feb-05	5:30PM	No	Sump pump discharge to grade to creek. Roof drains discharge to pipe.

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
1110	Pierce Road	Capaldo, Gerald F. & Andrea	05-Apr-05	4:30PM	No	Sump pump discharge and roof drains piped together to stream in rear yard.
1112	Pierce Road	Debus, paul C. & Marjorie J.	02-Feb-05	2:15PM	??	Sump pump discharge to grade. Roof drains to pipe into ground.
1114	Pierce Road	Adams, Richard E. & Debra A.	02-Feb-05	8:15AM	No	Sump pump discharge to grade. Same for roof drains.
1116	Pierce Road	Schmidt, Alyse & Steven O.	02-Feb-05	2:30PM	Yes?	Sump pump discharge to grade. Basm't wash sinks tie to reserve tank that ties to sewer & sump pump discharge. Roof drains to grade. See sketch on report.
1118	Pierce Road	Germacheid, Rowland & Lynne Marie	04-Apr-05	10:30AM	??	Sump pump discharge to grade. Roof drain into pvc into ground at garage, residence to grade.
1113	Pierce Road	Foster, Scott F. & Denise M.	05-Apr-05	10:15AM	??	Sump pump discharge to grade. Roof drain into pvc into ground at garage, residence to grade.
1111	Pierce Road	Jones, James & Eldora	02-Feb-05	8:30AM	??	Sump pump discharge to grade. Roof drains into pvc into ground.
1109	Pierce Road	Fontaine, Conrad O. & Janet M.	02-Feb-05	3:45PM	No	Sump pump discharge to curb. Roof drains to grade.
1103	Pierce Road	Greenlee, William D.	02-Feb-05	8:45AM	No	Sump pump discharge to grade. Same for roof drains.
1001	Pierce Road	Degrazio, Timothy J.	05-Apr-05	9:45AM	??	Sump pump discharge to storm sewer. Roof drain into pvc into ground @ garage, residence to grade.
3301	E. Hayes Road	Duglas, Carlos M. & Jacqueline M.	09-Feb-05	8:00AM	No	Sump pump discharge to grade. Same for roof drains.
803	Pierce Road	Mason, Donald J. & Jeanmarie Reese				
805	Pierce Road	Walsh, Patrick J. & Anna M.	02-Feb-05	9:15AM	Yes?	Homeowner stated that there was no sump pump inside, which there was not. They stated that there was one outside but it was not used because when it was used it backed up into their toilet inside the house.
903	Pierce Road	Callan, John G. Jr. & Elizabeth G.	03-Feb-05	7:45AM	No	Sump pump discharge to grade. Same for roof drains.
905	Pierce Road	Wendt, Jay G. & Christine M.	02-Feb-05	9:45AM	No	Sump pump discharge to grade. Same for roof drains.
907	Pierce Road	Luther, Bernard E. & Lois M.	05-Apr-05	7:30AM	No	Sump pump discharge to creek. Roof drains to grade.

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
909	Pierce Road	Cammisa, Joseph	03-Feb-05	8:45AM	No	No sump pump. Roof drains to grade.
911	Pierce Road	Rossiter, John J. & Patricia A.	29-Mar-05	9:15AM	Yes	Disconnected from sewer. Gray water to gray water pump to sewer. Roof drain at rear to grade and another to pipe into ground.
913	Pierce Road	Mullen, John J. & Jae Frances	02-Feb-05	10:00AM	No	Sump pump discharge to grade. Same for roof drains.
915	Pierce Road	Cogger, Linda J.	05-Apr-05	8:15AM	No	Sump pump discharge to grade. Same for roof drains.
917	Pierce Road	Alba, Harry J. Jr. & Lynne	15-Feb-05	10:30AM	No	Sump pump discharge to grade. Same for roof drains.
919	Pierce Road	Lohmeyer, John D. Jr. & Jill	02-Feb-05	2:45PM	No	Sump pump discharge to grade. Same for roof drains.
921	Pierce Road	Aspinall, Dennis M. & Kathleen M.	11-Feb-05	3:00PM	No	Sump pump discharge to grade. Same for roof drains.
923	Pierce Road	Marinari, Joseph A. & Rose A.	02-Feb-05	3:30PM	No	Sump pump discharge to grade. Same for roof drains.
925	Pierce Road	Alessandrini, John & Myers, Judy A.	02-Feb-05	3:00PM	No	Sump pump discharge to creek. Roof drains to grade.
927	Pierce Road	Russo, Michael & Elaine	05-Apr-05	8:00AM	No	Owner stated they did not have a sump pump, residence on slab.Roof drains to grade.
929	Pierce Road	Pishock, David & Dibello, Debbie	09-Feb-05	8:15AM		Did not enter residence. Owner stated that they were on a slab and did not have a sump pump. Roof drains to grade
1000	Pierce Road	Ward, Karen M. D. & Kevin M.	05-Apr-05	3:45PM	??	Sump pump discharge to pvc into ground. Roof drains into pvc into ground.
3114	Eisenhower Drive	Ziss, Marc	12-Apr-05	8:30AM	No	Unknown where sump pump discharges. To 1 1/2" pipe at 12" above basement floor.
3000	Eisenhower Drive	Distefano, Florence C.	09-Feb-05	10:45AM	No	Sump pump discharge to grade. Same for roof drains.
3004	Eisenhower Drive	Allmayer, Bernard & Eileen F.	04-Feb-05	9:30AM	No	Sump pump discharge to grade. Same for roof drains.
3008	Eisenhower Drive	Winship, Cheryll J.				
3010	Eisenhower Drive	Britton, G. Douglas & Laurie K.	09-Feb-05	1:00PM	No	Sump pump discharge to grade. Same for roof drains.
3012	Eisenhower Drive	Millman, Stewart & Thea I.	02-Feb-05	10:15AM	No	Sump pump discharge to grade. Same for roof drains.
3020	Eisenhower Drive	Robinson, Thomas A.	06-Apr-05	8:15AM	No	No sump pump. Roof drains to grade.

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
3028	Eisenhower Drive	Dadonna, Dominic J. & Deborah J.	22-Feb-05	9:00AM	No	Sump pump discharge to grade. Same for roof drains.
3030	Eisenhower Drive	Van Tranh, Nguyen & Gai Tran	08-Feb-05	9:15AM	No	Sump pump discharge to grade. Roof drains tied to piping in ground to grade.
3116	Eisenhower Drive	McCarthy, John & Janice	03-Feb-05	7:15AM	??	Sump pump discharge to grade.Roof drains into pvc into ground.
3122	Eisenhower Drive	Masterson, Eugene F. & Suzanne C.	04-Apr-05	4:15PM	No	Sump pump discharge to grade. Same for roof drains.
3124	Eisenhower Drive	Ciacco, Anthony J. & Grace M.	09-Feb-05	7:00AM	No	Sump pump discharge to grade. Same for roof drains.
3126	Eisenhower Drive	Barbine, Dino & Lori A.	03-Feb-05	11:30AM	No	Sump pump discharge to grade. Same for roof drains.
3128	Eisenhower Drive	Katch, Gregory P. & Carbone, Mirella	06-Apr-05	10:15AM	No	Sump pump discharge to grade. Same for roof drains.
3130	Eisenhower Drive	Januzelli, Leonard & Susanne	08-Feb-05	11:15AM	No	Sump pump discharge to grade. Same for roof drains.
3132	Eisenhower Drive	Smith, Clayton J. III	12-Apr-05	8:45AM	No	Sump pump discharge to grade. Same for roof drains.
3134	Eisenhower Drive	Reedy, Dennis M. & Joan E.	06-Apr-05	10:45AM	No	Sump pump discharge to grade. Same for roof drains.
3136	Eisenhower Drive	Ciccone, Joseph N. & Lori	07-Feb-05	7:00AM	No	Sump pump discharge to grade. Same for roof drains.
3138	Eisenhower Drive	Tornetta, Augustus A. & Diane E.	06-Apr-05	11:00AM	No	No sump pump. Roof drains to gade.
3001	Eisenhower Drive	Gracia, Donald J. & Cheryl S.	03-Feb-05	8:00AM	No	Sump pump discharge to curb. Roof drains to grade.
3003	Eisenhower Drive	Basla, Mark F. & Jeanne M.	02-Feb-05	10:30AM	No	Sump pump discharge to grade. Same for roof drains.
3005	Eisenhower Drive	Airey, John E. & Marianne E.	06-Apr-05	7:30AM	No	Sump pump discharge to grade. Same for roof drains.
3007	Eisenhower Drive	Fricke, Fred H. & Twila R.	02-Feb-05	10:45AM	No	Sump pump discharge to grade. Same for roof drains.
3009	Eisenhower Drive	Shemar, Joseph Jr. & Donna	15-Feb-05	11:30AM	No	Sump pump discharge to grade. Same for roof drains.
3011	Eisenhower Drive	McGuckin, Carl R. & Geraldine M.	08-Feb-05	8:00AM	No	Sump pump discharge to swale at grade. Roof drains piped with sump pump discharge.
3013	Eisenhower Drive	Yarbrough, Glenn & Marcia	06-Apr-05	4:45PM	No	Sump pump discharge to grade. Same for roof drains.
3015	Eisenhower Drive	Welsh, James J. & Patricia A	02-Feb-05	11:00AM	No	Sump pump discharge to storm sewer. Roof drains to grade.
3017	Eisenhower Drive	Neary, John F. & Mary Ann Trustees	02-Feb-05	11:15AM	No	Sump pump discharge to curb. Roof drains to grade.

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
3019	Eisenhower Drive	Kenny, Brian R. & Judith B.	04-Feb-05	8:30AM	No	Sump pump discharge to curb. Roof drains to grade.
3021	Eisenhower Drive	Martin, Stephen J. Jr. & Nancy E.	08-Feb-05	8:15AM	??	Sump pump discharge to grade. Roof drains to grade. Garage roof drain piped into ground.
3023	Eisenhower Drive	O'Neill, John F. & Gail M.	08-Feb-05	8:30AM	No	Sump pump discharge to grade. Same for roof drains.
3025	Eisenhower Drive	Martello, James P. & Marie A.	06-Apr-05	8:30AM	No	Sump pump discharge to grade. Same for roof drains.
3027	Eisenhower Drive	Fletcher, Steven J. & Kathleen L.	02-Feb-05	12:30PM	No	Sump pump discharge to grade. Same for roof drains.
3029	Eisenhower Drive	Damiano, Ronald D. & Theresa D.	08-Feb-05	8:45AM	No	Sump pump discharge to grade. Same for roof drains.
3031	Eisenhower Drive	Morasco, Derek C. & Lisa	06-Apr-05	8:45AM	No	Sump pump discharge to grade. Same for roof drains.
3113	Eisenhower Drive	McTamney, Michael R. & Bette R.	06-Apr-05	9:00AM	No	Sump pump discharge to grade. Same for roof drains.
3119	Eisenhower Drive	Lockard, William S. Jr. & Diane M.	06-Apr-05	9:30AM	No	Sump pump discharge to grade. Same for roof drains.
3121	Eisenhower Drive	Amatruda, Charles	07-Feb-05	8:30AM	No	Sump pump discharge and roof drains tied together to grade.
3123	Eisenhower Drive	Shaw, Wm. A. & Carol	06-Apr-05	10:00AM	No	Sump pump discharge to grade. Same for roof drains.
3125	Eisenhower Drive	Cochran, Robert L. Jr. & Rose M.	07-Feb-05	1:30PM	No	Sump pump discharge to grade. Same for roof drains.
3127	Eisenhower Drive	Doddona, Nicholas C. & Diane J.	07-Feb-05	1:45PM	No	Sump pump discharge to grade. Same for roof drains.
3129	Eisenhower Drive	Fritz, Elizabeth A.	11-Feb-05	1:00PM	No	Sump pump discharge to grade. Same for roof drains.
3131	Eisenhower Drive	Kok, Kenneth A. & Brenda G.	02-Feb-05	11:30AM	No	Sump pump discharge to grade. Same for roof drains.
3133	Eisenhower Drive	Vernacchio, Michael S. & Carol A.	02-Feb-05	3:15PM	No	Sump pump discharge to grade. Same for roof drains.
3135	Eisenhower Drive	Horizon House, Inc.	07-Feb-05	8:15AM	No	Sump pump discharge to grade. Same for roof drains.
3137	Eisenhower Drive	Niedosik, Arthur M. & Jayne A.	04-Feb-05	9:00AM	No	Sump pump discharge to grade. Same for roof drains.
3225	Eisenhower Drive	Couchara, John F. Sr. & Karen A.	12-Apr-05	9:30AM	No	Sump pump discharge to grade. Same for roof drains.
902	Senator Road	Neimeister, Ronald P. & Mary J.	08-Feb-05	11:45AM	??	Sump pump discharge to grade. Same for roof drains. Garage roof drain piped into ground.
904	Senator Road	Willans, George J. & Rosemary R.	08-Feb-05	7:30AM	No	Sump pump discharge to septic field @ side of house. Roof drains underground and at grade by garage.

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
906	Senator Road	Wahn, Stephen D. & Katherine	06-Apr-05	4:30PM	No	Sump pump discharge to grade. Same for roof drains.
908	Senator Road	Bisbing, Paul E. & Marian E.	06-Apr-05	2:00PM	No	Sump pump discharge to grade. Same for roof drains.
910	Senator Road	Kirk, David C. & Searle, Carol M.	06-Apr-05	4:15PM	No	Sump pump discharge to grade. Same for roof drains.
912	Senator Road	Sthalekar, Durganand & Maya	14-Feb-05	7:15AM	No	Sump pump discharge to grade. Same for roof drains.
914	Senator Road	Pileggi, James R. Jr. & Linda M.	14-Feb-05	7:00AM	No	Sump pump discharge to storm sewer. Roof drains to grade.
916	Senator Road	McLarnen, Donald J. & Judy L.	06-Apr-05	2:30PM	No	Sump pump discharge to grade. Same for roof drains.
918	Senator Road	Sweeney, Cornelius A. & Teresa S.	09-Feb-05	3:45PM	No	Sump pump discharge to grade. Same for roof drains.
905	Senator Road	Pistilli, Dominic P. & Dorothy W.	06-Apr-05	1:30PM	No	Sump pump discharge to grade. Same for roof drains.
907	Senator Road	Keen, Paul & Linda	07-Feb-05	10:00AM	No	Sump pump discharge to grade. Same for roof drains.
920	Senator Road	Carroll, John T. & Kim J.	06-Apr-05	5:00PM	No	Sump pump discharge to grade. Same for roof drains.
909	Senator Road	Schorle, William D. & Josefina	03-Feb-05	9:00AM	No	Sump pump discharge to creek. Roof drains to grade.
913	Senator Road	Ryan, Leon J. & Gabriella	07-Feb-05	9:15AM		
917	Senator Road	Benney, Terry L. & Sally Ann	07-Feb-05	9:00AM	No	Sump pump discharge to grade. Same for roof drains.
919	Senator Road	Price, George A. & Theresa M.	06-Apr-05	2:45PM	No	Sump pump discharge to grade. Same for roof drains.
902	Independence Road	Szymanski, Walter & Irene M.	06-Apr-05	11:45PM	No	Sump pump discharge to grade. Same for roof drains.
904	Independence Road	Central Penn Property Services, Inc.	08-Feb-05	10:45AM	??	Sump pump discharge to grade. Roof drains piped into ground.
906	Independence Road	Lieberum, Hubert P. Jr. & Donna L.	06-Apr-05	12:45PM	No	Sump pump discharge to grade. Same for roof drains.
908	Independence Road	Stropas, Anthony J. & Sandra E.	03-Feb-05	1:00PM	No	Sump pump discharge to curb. Roof drains to grade.
910	Independence Road	Morrone, Michael & Joyce	04-Feb-05	7:45 AM	No	Sump pump discharge to street. Roof drains to grade.
912	Independence Road	Sykes, Christina & Andreoni, John F.	06-Apr-05	1:15PM	No	Sump pump discharge to grade. Same for roof drains.
914	Independence Road	Uttti, Lucille & Fred	08-Feb-05	10:30AM	No	Sump pump discharge to grade. Same for roof drains.
916	Independence Road	Ivans, John F. & Christine	03-Feb-05	2:15PM	No	Sump pump discharge to grade. Same for roof drains.

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
918	Independence Road	Aldinger, Robert J. & Nancy D.	03-Feb-05	9:15AM	No	Sump pump discharge to grade. Same for roof drains.
920	Independence Road	Pitzer, Janyce L.	07-Feb-05	12:30PM	No	Sump pump discharge to grade. Same for roof drains.
922	Independence Road	Quinn, James J. Jr. & Genevieve E.	08-Feb-05	11:00AM	No	Sump pump discharge to grade. Same for roof drains.
903	Independence Road	Smith, Harold J. & Ann M.	03-Feb-05	9:30AM	No	Sump pump discharge piped to inlet in side yard (storm sewer to Taft Rd). Roof drains to grade.
905	Independence Road	Taverno, Anthony F.	06-Apr-05	12:30PM	No	Sump pump discharge to grade. Same for roof drains.
907	Independence Road	Zajick, Donald C. & Rachel A.	06-Apr-05	8:00AM	No	No sump pump. Roof drains to grade.
909	Independence Road	Stefanowicz, Theodore and Janet B.	03-Feb-05	11:45AM	No	Sump pump discharge to grade. Same for roof drains.
911	Independence Road	Delaney, Raymond P. & Ella M.	03-Feb-05	9:45AM	No	Sump pump discharge to storm sewer.Roof drains to grade.
913	Independence Road	Stolarczyk, Walter & Irene	08-Feb-05	10:15AM	No	Sump pump discharge to grade. Same for roof drains.
915	Independence Road	Leonard, Ronald D. & Lise Ann	14-Feb-05	9:30AM	No	Sump pump discharge to grade. Same for roof drains.
917	Independence Road	Ryan, Jere F.	04-Feb-05	9:15AM	No	Sump pump discharge to grade. Same for roof drains.
919	Independence Road	Mahoney, Shawn, E.	15-Feb=05	11:00AM	No	Sump pump discharge to grade. Same for roof drains.
923	Independence Road	Lenters, Theresa, M.	09-Feb-05	10:30AM	No	Sump pump discharge to grade. Same for roof drains.
3008	Congress Road	Miller, Christopher & Helen	06-Apr-05	7:00AM	No	Sump pump discharge to grade. Same for roof drains.
3001	Congress Road	Daw, Robert H. & Irene B.	07-Feb-05	8:45AM	No	Sump pump discharge to grade. Same for roof drains.
2	Embassy Circle	Pigeon, John A. Jr. & Anna L.	11-Feb-05	8:30AM	No	Sump pump discharge to grade. Same for roof drains.
1	Embassy Circle	Monfort, Alan & Eileen R.	03-Feb-05	10:00AM	No	Sump pump discharge to grade. Same for roof drains.
3000	Taft Road	Cheever, Frank W.	05-Apr-05	12:45PM	No	Sump pump discharge piped underground @ rear of residence. Roof drains to grade.
3002	Taft Road	Hendrickson, Theresa D. & N. Nagode	05-Apr-05	1:00PM	No	Sump pump discharge to grade. Same for roof drains.
3004	Taft Road	Richards, Elona & Hinkle, Cheryl	14-Feb-05	7:45AM	No	Sump pump discharge to grade. Same for roof drains.
3006	Taft Road	Dinolfi, Alexander & Catherine	05-Apr-05	1:15PM	No	3 sump pumps discharge to underground piping and tie with roof drains that discharge at curb.

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
3008	Taft Road	Benelli, Alfred T. & Kathryn A.	05-Apr-05	1:30PM	No	Sump pump discharge to aboveground splashblock (@ grade). Roof drains into pvc pipe to filtration bed in rear of residence. Other side of residence to grade.
3010	Taft Road	Romano, Robert	11-Apr-05	7:15PM	No	Sump pump discharge to grade; valved to discharge at front or back of residence. Roof drains to grade.
3012	Taft Road	Kosisher, Karen M.	07-Feb-05	1:15PM	No	Sump pump discharge to grade. Same for roof drains.
3014	Taft Road	Charles, M. & Toto, Marianne P.	14-Feb-05	8:15AM		Sump pump discharge to curb. Roof drains to grade.
3018	Taft Road	Smith, Richard C. & Natalie B.	05-Apr-05	2:30PM	No	Sump pump discharge and some roof drains into pvc pipe to yard drains & others to grade.
3032	Taft Road	Holt, Robert T. & Jean R.	08-Feb-05	7:15AM	No	No sump pump. Only floor trough around basement to drain by gravity to creek. Roof drains to grade.
3034	Taft Road	Kraft, Ronald M. & Linda L.	09-Feb-05	7:15AM	No	Sump pump discharge to grade. Same for roof drains.
3036	Taft Road	Carr, Dennis J. & Barbara S.	03-Feb-05	2:30PM	No	No sump pump. Roof drains to grade.
3038	Taft Road	Schmidt, Eli C. & Lillian J.	09-Feb-05	4:30PM	No	Sump pump discharge to grade. Same for roof drains.
3040	Taft Road	Smith, D. Mike & Patricia A.	05-Apr-05	3:00PM	No	Sump pump discharge to grade. Roof drains to grade & into pvc into ground.
3042	Taft Road	Fennimore, Robert C. & Ruth E.	03-Feb-05	10:15AM	No	Sump pump discharge to grade. Same for roof drains.
3044	Taft Road	Coates, Robert J. & Judith L.	03-Feb-05	10:30AM	No	Sump pump discharge to stream. Roof drains to grade.
3046	Taft Road	Redlich, George H. & Phyllis	04-Feb-05	9:45AM	No	Sump pump discharge to storm sewer. Roof drains to grade.
3048	Taft Road	Cerula, Peter R. & Anne C.	08-Feb-05	10:00AM	No	Sump pump discharge to grade. Same for roof drains.
3001	Taft Road	Snyder, Lawrence B. & Judith	07-Feb-05	1:45PM	No	Sump pump discharge to grade. Same for roof drains.
3005	Taft Road	Bello, Mario G. & Rosemarie M.	03-Feb-05	10:45AM	No	Sump pump discharge to grade. Same for roof drains.
3013	Taft Road	Novak, Edward K. & Regina h.	25-Apr-05	8:15PM	No	Sump pump discharge to grade. Same for roof drains.
3023	Taft Road	Baltrus, William & Burt, Laurie	08-Feb-05	12:30PM	No	Sump pump discharge to grade. Same for roof drains.

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
3025	Taft Road	Pergine, Salvatore J. & Gilda M.	14-Feb-05	8:00AM	??	Sump pump discharge to grade. Roof drains to pvc pipe into ground.
3027	Taft Road	Weber, Manfred F. & Jacquelynn F.	09-Feb-05	1:00PM	No	Sump pump discharge to grade. Same for roof drains.
3029	Taft Road	Fitzsimmons, James M. & Robyn L.	04-Feb-05	10:00AM	No	Sump pump discharge to grade. Same for roof drains.
3031	Taft Road	Haimbach, Anthony P. & Audrey S.	04-Feb-05	10:15AM	No	Sump pump discharge to grade. Same for roof drains.
3033	Taft Road	Burt, Payson W. & Beverly Jane	04-Feb-05	10:30AM	No	Sump pump discharge to grade into swale leading to storm sewer. Roof drains to grade.
3037	Taft Road	Skahan, Terrence P. & Karin K.	04-Feb-05	11:30AM	No	Sump pump discharge to grade towards sidewalk and roof drain at garage. Other roof drains to grade.
3039	Taft Road	Devincenzo, Anthony N. & Lorraine F.	05-Apr-05	2:45PM	No	Sump pump discharge and roof drains to underground pop-up relief vents. Roof drain @ garage to grade.
3043	Taft Road	Ey, William J. & Kathleen Z.	07-Feb-05	7:15AM	No	Sump pump discharge to grade. Same for roof drains.
3047	Taft Road	Hunt, Francis J. Jr.	21-Feb-05	12:00PM	No	Sump pump discharge to underground. Roof drains to grade.
2924	Toll Gate Drive	DeFranco, William & Maryanne	11-Apr-05	7:00PM	No	Sump pump discharge to grade. Same for roof drains.
2921	Toll Gate Drive	DiMino, William & Deborah	05-Apr-05	3:15PM	No	Sump pump discharge to grade. Same for roof drains.
3300	E. Hayes Road	Licata, Salvatore M. & Dorothy I.	04-Feb-05	8:15AM	No	Sump pump discharge to grade. Same for roof drains. Garage roof drain into pipe into ground.
3302	E. Hayes Road	Scholl, Karen	21-Feb-05	11:00AM	No	Sump pump discharge to grade. Roof drains into pvc into ground. Dye test shows water to flower bed in front yard (broken pipe).
3304	E. Hayes Road	Catagnus, Anthony S. & Donna M.	21-Feb-05	11:30AM	No	Sump pump discharge to grade. Roof drains into pvc into ground. Dye test shows dye to unknown, but maybe to flower bed in neighbor's yard and not to sanitary sewer.
3306	E. Hayes Road	Harris, Jeremy & Solis, Josephine	03-Feb-05	11:00AM	No	Sump pump discharge to outside. House roof drains to grade. Garage to pvc pipe into ground. Dye to storm sewer.
3308	E. Hayes Road	Craig, Marvin & Denise	09-Feb-05	6:30PM	No	Sump pump discharge to grade. Same for roof drains.

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
3310	E. Hayes Road	Caramencio, Justin V. Jr.	04-Apr-05	4:30PM	??	Sump pump discharge to grade. House roof drains to grade. Rear of garage to pvc pipe into ground.
3312	E. Hayes Road	Fulmer, Philip E. & Pamela E.	04-Apr-05	11:00AM	??	Sump pump discharge to pvc pipe into ground outside. Roof drains to pvc pipe into ground.
3314	E. Hayes Road	Zemanek, Todd R. & Carol A.	11-Feb-05	12:30PM	No	Sump pump discharge to underground. Roof drains to pvc into ground. Dye to storm sewer.
3316	E. Hayes Road	McClelland, Judith A.	03-Feb-05	11:15AM	No	Sump pump discharge to grade. Same for roof drains.
3318	E. Hayes Road	Debasio, Louis H. & Nancy K.	04-Apr-05	11:30AM	??	Sump pump discharge to outside (?). Roof drains to pvc into ground at garage, residence to grade.
3320	E. Hayes Road	Berry, John & Vallery	09-Feb-05	5:15PM	No	Sump pump discharge to grade. Same for roof drains.
3322	E. Hayes Road	Burke, Martin A. & Amy E.	04-Apr-05	12:30PM	??	Sump pump discharge to grade. Roof drains to pvc into ground.
3324	E. Hayes Road	Moul, Edward & Barbara & Hilda R.	06-Apr-05	3:45PM	No	Sump pump discharge to grade. Same for roof drains.
3326	E. Hayes Road	Kerins, Joseph L. & Donna M.	04-Apr-05	12:45PM	??	Sump pump discharge and roof drains into pvc pipe into ground
3328	E. Hayes Road	Stumpo, William A. & Marie E.	09-Feb-05	6:15PM	No	Sump pump discharge to grade. Same for roof drains.
3330	E. Hayes Road	Ferrante, James J. Jr.	06-Apr-05	4:00PM	No	Sump pump discharge to grade. Same for roof drains.
3332	E. Hayes Road	Mulvey, Terence O. & Ruth A.	09-Feb-05	6:00PM	No	Sump pump discharge to hole in ground. Roof drains to pipe. Dye to storm sewer.
3334	E. Hayes Road	Fisher, Francis Mark & Cheryll	04-Apr-05	1:00PM	??	Sump pump discharge to grade. Roof drains to pvc into ground.
3336	E. Hayes Road	Anderson, Trust & Mary Beth	03-Feb-05	12:45PM	No	No sump pump. Roof drains to grade.
3338	E. Hayes Road	Yenner, Gregory E. & Kimberly	04-Apr-05	8:30AM	??	Sump pump discharge to pvc pipe outside & roof drains to pvc into ground. Possible tie-in to storm sewer in rear of property.
3340	E. Hayes Road	Kotzer, Charles J. & Laureen	04-Apr-05	4:00PM	??	Sump pump discharge to grade. Roof drains to pvc into ground.

EAST NORRITON TOWNSHIP

SUMP PUMP INSPECTIONS

STATUS OF HOMES WITH SUMP PUMPS CONNECTED TO THE SANITARY SEWER

25-Apr-05

Address		Customer Name	Apointment Date	Time	Sump/Other to Sewer (Yes/No)	Comments
No.	Street					
3342	E. Hayes Road	Braak, William F. & Deborah L.	04-Feb-05	8:45AM	No	Sump pump discharge to grade. Same for roof drains.
3344	E. Hayes Road	Armstrong, Jerry A. & Weinegg, A. P.	04-Apr-05	1:45PM	??	Sump pump discharge and roof drains into pvc pipe into ground
3327	E. Hayes Road	Quinty, Mark L. & Cheryl R.	14-Feb-05	10:00AM	No	Sump pump discharge to outside of house. Possible hookup with roof drains. Roof drains connect to pvc into ground. Dye to storm sewer.
3325	E. Hayes Road	Graves, Robert J. & Patricia	03-Feb-05	1:15PM	No	Sump pump discharge to storm sewer system. Roof drains to grade.
3323	E. Hayes Road	Saponaro, Frank & Donna	03-Feb-05	1:30PM	No	Sump pump discharge to grade. Same for roof drains.
3321	E. Hayes Road	Pellechio, Robert & Maria	04-Apr-05	11:45PM	No	Sump pump discharge to grade. Same for roof drains.
3319	E. Hayes Road	Lane, Michael & Sherry	09-Feb-05	7:30AM	No	Sump pump discharge to grade. Same for roof drains.
3317	E. Hayes Road	McGowan, Gordon K. & Eileen M.	17-Apr-05	7:00PM	No	Sump pump discharge to grade. Same for roof drains.
3315	E. Hayes Road	Whalen, John D. & Elizabeth A.	04-Apr-05	3:45PM	??	Sump pump discharge to grade. Roof drains to pvc into ground.
3313	E. Hayes Road	Jackson, Michael & Yolanda	09-Feb-05	5:00PM	No	Sump pump discharge to grade. Same for roof drains.
3311	E. Hayes Road	Grillo, Mark S. & Suzanne	06-Apr-05	3:15PM	No	No sump pump or discharge piping. Roof drains to grade.
3309	E. Hayes Road	Emig, Ronald M. & Bonnie M. D.	04-Apr-05	3:30PM	No	No sump pump in sump pit. Stated they have not needed one. Discharge line to grade. Roof drains to grade.
3307	E. Hayes Road	Frederick, W. & Mary Jean				
3305	E. Hayes Road	Littel, Thomas & Christine T.	04-Apr-05	10:00AM	??	Sump pump discharge to outside that ties into roof drains underground that discharge to backyard. (Owner stated)
3329	E. Hayes Road	Custer, Gerard M. & Wendy J.	11-Feb-05	8:00AM	No	Sump pump discharge to storm sewer system. Roof drains to grade. Garage roof drain tied to pipe into ground. Dye to storm sewer.
	Totals	**307**	**302**			

APPENDIX F6

East Norriton Township Non-Complying Connection Form Letter

March 9, 2005

«Name1»
«Address1»
«Address2»

Dear «Name2»:

Representatives of Township have performed inspections of individual home plumbing connections to ensure that they complied with Federal and Local guidelines pertaining to non-complying connections. Non-complying connections, which are a source of inflow and are illegal, are connections to the sanitary sewer by downspouts, sump pumps, foundation drains, floor drains and outside area drains.

The Township's attempts at scheduling the inspection of your dwellings plumbing connection were unsuccessful. The Township in conjunction with ARRO Consulting, Inc., Lancaster, has scheduled a time to complete this inspection on **«Weekday», «Date» at «Time»**. Please make arrangements to have someone available to meet the inspectors from ARRO Consulting, Inc., at this time. You may reschedule this inspection up to 48 hours prior by calling ARRO Consulting, Inc. at 610-495-2104, Monday through Friday, 8:00 a.m. until 4:00 p.m. Rescheduled inspections must occur within fifteen (15) days of the above scheduled date.

If a non-complying connection exists, guidelines will be provided as to recommended methods to use to correct the non-compliance connection. Corrective measures must be completed within ninety (90) days of the date of this notification.

Failure to comply with this request will result in the Township taking action in accordance with Township Ordinance No. 456.

Thank you in advance for your cooperation in this matter.

Sincerely,

EDWARD R. WHITE

SEWER DEPARTMENT SUPERVISOR

Certified

c: ARRO Consulting, Inc.

APPENDIX F7

East Norriton Township Resale Use & Occupancy Inspection Checklist

EAST NORRITON RESALE USE & OCCUPANY INSPECTION CHECKLIST

ADDRESS_____ DATE_____

Requirement Met ?? **COMMON ITEMS FOUND DEFICIENT** **Last Updated 1/28/05**

YES	NO	NA	
☐	☐	☐	A four-**foot** high fence per code around swimming pool w/ approved self-locking gate, which open away from pool area. Doors alarms where applicable must sound for 30 sec. and be self reactivated per 2003 IRC Appendix G.
☐	☐	☐	The sewer vent must be watertight and be 6" above surrounding grade or in parking areas use approved cover.
☐	☐	☐	No trees over street (Min 18ft) or sidewalk (Min 8ft) or shrubs encroach sidewalk or grass along curb line.
☐	☐	☐	All sidewalks must be in good condition, free of large cracks, crevices, and tripping hazards.
☐	☐	☐	House numbers affixed to exterior with 3 inch contrasting color, which are visible from roadway.
☐	☐	☐	Step riser shall not be greater than 7 ¾ inch and tread shall not be less than 10 inches.
☐	☐	☐	Electric service inside/outside secure properly (not frayed in good condition).
☐	☐	☐	No loose mailboxes or extended beyond back face of curb line.
☐	☐	☐	No more than 2-layers of roof shingles allowed. ( ) # of Layers ( ) Unknown
☐	☐	☐	**In half-bath, powder room etc. a GFCI outlet must be installed.** All outlet(s) within 6 ft of any water source (baths, kitchen, half-bath, etc.) including outlets in **garage, unfinished basement and exterior outlets must be GFCI**. A single dedicated outlet for washers and sump pumps or a GFCI outlet.
☐	☐	☐	Electrical boxes and fixtures to be secure and covered. Each electrical breaker **must be labeled** w/ permanent marker, **blank breakers** must be blocked and wall around electrical box to be sound material.
☐	☐	☐	All doors leading to the **house** from the **garage** shall be a fire door (1 3/8" thick solid wood or Type "B") and frame.
☐	☐	☐	Garage walls and ceilings adjoining living space (horizontal or vertical) require a 1 hr. fire rating.
☐	☐	☐	No fireplace in bedroom unless manufactured (approved) for this type of installation.
☐	☐	☐	A smoke detector in **each bedroom** and on each level of dwelling including basement.
☐	☐	☐	A shut-off valve on all gas units (stove, water heater, heater, fire logs, etc.) within 6 ft of unit.
☐	☐	☐	Windows and doors must open easily (not painted shut or sticking doors).
☐	☐	☐	All walls and ceilings to be secure and in good shape (not falling off).
☐	☐	☐	A minimum of one (1) ABC fire extinguisher **5 lb. minimum** required.
☐	☐	☐	Bathroom and half-bath, etc. without window must have mechanical exhaust to exterior.
☐	☐	☐	Minimum of 6'- 8" headroom in living areas.
☐	☐	☐	**No Sleeping Areas below grade unless approved second means of egress is provided.**
☐	☐	☐	The **underside of basement** stairs must be fire protected w/ ½-inch drywall sealing all seams w/ **fire caulking**, finished basements require **proper fire stopping at top of wall.**
☐	☐	☐	**Heating oil tank piping must be black iron or copper w/ brazed (yellow color) fittings (Plastic Prohibited).** All other types of piping (water, sewer, gas, oil) must **have tight seals** and be sealed at exterior wall(s).
☐	☐	☐	No sump pump(s)/down spouts connected or discharge to sanitary sewer. **PLACE WARNING STICKER**
☐	☐	☐	Secured handrail/guardrail (**mid-rail**) required on all stairs and to be continuous between landings.
☐	☐	☐	All heater vents connections must have 6" clearance from combustibles and in good condition.
☐	☐	☐	The relief valve(s) for hot water heater/boiler must have drainpipe to be extended within 6" from floor.
☐	☐	☐	Dryer vent discharge to be no longer than 25-foot length and be of non-combustible material (no plastic).
☐	☐	☐	**No leaking fixtures or drain pipes, all shuts offs are to work properly.**
☐	☐	☐	A heater inspection certificate for all gas/oil fired units - **STATING UNIT IS IN SAFE WORKING ORDER...** Inspection must be performed no more than 45 days before settlement date.
☐	☐	☐	Decks w/ Hot tubs must be designed to carry weight and must have self-closing cover or other proper barrier.
☐	☐	☐	Steps or landing **30 inches or more** above EXISTING ground requires 36 inch high properly **installed** railing(s).
☐	☐	☐	**No down spouts/roof leaders/sump pumps, etc., shall be directly discharged onto adjacent property.**
☐	☐	☐	Inspection Certificate for on-site septic systems requires Third-Party Inspector.
☐	☐	☐	**Shall comply with all other ordinances, rules, and regulations of East Norriton Township.**

COMMENTS_____

_____

_____

_____

INSPECTOR **APPLICANT**

APPENDIX G

Newspaper Publication Notice

2501 STANBRIDGE STREET
EAST NORRITON, PA. 19401-1616, USA
610 275-2800 FAX 610 277-1879
www.eastnorritontwp.org
info@eastnorritontwp.org

February 14, 2006

The Times Herald
410 Markley Street
Norristown, PA 19401

Attention: Nancy: Legal Advertising Department

RE: East Norriton Township Public Hearing

Dear Madam:

Please advertise the enclosed notice in the Times Herald once on Friday, February 17, 2006 and forward Proof of Publication.

Very truly yours,

Helmuth J. H. Baerwald
Township Manager

HJHB/saj
Enclosure

NOTICE

The East Norriton Township Board of Supervisors gives notice of the initiation of the 30 day Public comment period with regard to the East Norriton Township Act 537 Plan Update dated November 2005. The Act 537 Plan Update has been prepared to comply with the Pennsylvania Department of Environmental Protection requirements regarding sewage facilities design and planning.

The Act 537 Plan Update Selected Alternative proposes East Norriton Township secure additional maximum monthly treatment capacity by participating, on a one-third proportionate share, in the upgrade and expansion of the East Norriton Plymouth Whitpain Joint Sewer Authority (ENPWJSA) treatment facility. Based on a proposed annual average expansion to 8.7 mgd (11.1 mgd maximum monthly) at the ENPWJSA facility, East Norriton Township would acquire the projected needed additional maximum monthly flow capacity to accommodated projected future sewage flows. East Norriton Township's 2003 cost for their share of the 2003 conceptual upgrade/expansion scenario is estimated at about $4.8 million. This equates to a capital cost of about $500/EDU. The selected Act 537 Plan Altemate also includes:

1) Continued implementation of the Corrective Action Plan (CAP) to address sewer system infiltration/Inflow.
3) Continued Infiltration/Inflow program monitoring, investigation and remediation.
4) Continued investigation of alternatives to reduce the peak flows at the Germantown and Sandra Lane Pumping Stations.
5) Continued implementation of the Township's OLDS Management program.
6) Securing financing for the Township's share of the ENPWJSA upgrade/expansion costs.

The proposed Act 537 Plan will, following receipt of public comment and approval by the Board of Supervisors, constitute the foundation for the Official Sewage Plan for East Norriton Township and shall function as a regulatory plan for addressing wastewater needs and treatment management issues.

Copies of the plan are available for review at the Township Municipal Offices during normal business hours. Written public comment and input will be received from interested and affected individuals. **A public hearing will be held on March 28, 2006 beginning at 6:00 PM at the East Norriton Township building located at 2501 Stanbridge St., East Norriton, PA 19401** concerning the proposed Act 537 Plan Update. Following receipt of public comment the Board of Supervisors shall consider adoption of the plan during its regularly scheduled business meeting on the evening of **March 28, 2006 beginning at 7:00 p.m.** The Board reserves the right to conduct such other business as may come before it at that time. Anyone with special needs who wishes to attend the public hearing and meeting should call the township at 610-275-2800 for assistance.

East Norriton Township Board of Supervisors

Helmuth J.H. Baerwald, Township Manager

The Times Herald

FEB 22 2006

(No.....Term, 20....

PROOF OF PUBLICATION NOTICE IN THE TIMES HERALD
Under Act No. 587, Approved May 16, 1929, P.L. 1784,
As Amended by Act. No. 520 of July 5, 1947

STATE OF PENNSYLVANIA)
SS.
COUNTY OF MONTGOMERY)

Shelley Meenan, Publisher of THE TIMES HERALD, of the County and State aforesaid, being duly sworn, deposes and says that THE TIMES HERALD, a Newspaper of general circulation published at Markley, Ann and Airy Streets, Borough of Norristown, County and State aforesaid, was established January 1, 1923, since which date THE TIMES HERALD has been regularly issued in said County, and that the printed notice or publication attached hereto, is exactly the Same as was printed and published in the regular edition and issues of THE TIMES HERALD on the following dates, viz: .....

.....and the

.....17.....day of .....February.....A.D. 2006

NOTICE

The East Norriton Township Board of Supervisors gives notice of the initiation of the 30 day Public comment period with regard to the East Norristown Township Act 537 Plan Update dated November 2005. The Act 537 Plan Update has been prepared to comply with the Pennsylvania Department of Environment Protection requirements regarding sewage facilities design and planing.

The ACt 537 Ian Update Selected Alternative proposes East Norriton Township secure additional maximum monthly treatment capacity by participating, on a one-third proportionate share, in the upgrade and expansion of the East Norriton Plymouth Whitpain Joint Sewer Authority (ENPWJSA) treatment facility. Based on a proposed annual average expansion to 8.7 mgd (11.1 mgd maximum monthly) at the ENPWJSA facility, East Norriton Township would acquire the projected needed additional maximum monthly flow capacity to accommodated projected future sewage flows. East Norriton Township's 2003 cost for their share of the 2003 conceptual upgrade/expansion scenario is estimated at about $4.8 million. This equates to a capital cost of about $500/EDU. The selected ACt 537 Plan Alternate also includes:

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3) Continued infiltration/inflow program monitoring, investigation and remediation.
4) Continued investigation of alternatives to reduce the peak flows at the Germantown and Sandra Lane Pumping Stations.
5) Continued implementation of the Township's OLDS Management program.
6) Securing financing for the Township's share of the ENPWJSA upgrade/expansion costs.

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Copies of the plan are available for review at the Township Municipal Offices during normal business hours. Written public comment and input will be received from interested and affected individuals. A public hearing will be held on March 28, 2006 beginning at 8:00 PM at the East Norriton Township building located at 2501 Stanbridge St., East Norriton, PA 19401 concerning the proposed ACt 537 Plan Update. Following receipt of public comment the Board of Supervisors shall consider adoption of the plan during its regularly scheduled business meting on the evening of March 28, 2006 beginning at 7:00 p.m. The Board reserves the right to conduct such other business as may come before it at that time. Anyone with special needs who wishes to attend the public hearing and meeting should call the Township at 610-276-2900 for assistance.

East Norriton Township, Board of Supervisors
Helmuth J.H. Baerwald, Township Manager

Affiant further deposes that she is an officer Duly authorized by THE TIMES HERALD PUBLISHING COMPANY, INC. a corporation, Publisher of THE TIMES HERALD, a newspaper Of general circulation, to verify the foregoing Statement under oath, and affiant is not interested In the subject matter of the aforesaid notice or Advertisement, and that all allegations in the Foregoing statements as to time, place and Character of publications are true.

Shelley S. Meenan
Publisher, The Times Herald

Sworn to and subscribed before me this.....21st.....

Day of .....February.....20.....06

Michele L. Lenzi

COMMONWEALTH OF PENNSYLVANIA
NOTARIAL SEAL
MICHELE L. LENZI, Notary Public
Norristown Boro, Montgomery County
My Commission Expires Oct. 10, 2009

APPENDIX H

Montgomery County Planning Commission Review Letter

MONTGOMERY COUNTY PLANNING COMMISSION

box 311 • norristown • pennsylvania • 19404-0311 • 610-278-3722
office location: suite 201 • one montgomery plaza • swede & airy streets • norristown pa
FAX 610-278-3941 • Website www.montcopa.org/plancom

SEWAGE FACILITIES PLANNING MODULE
COMPONENT 4b - COUNTY PLANNING AGENCY REVIEW

DEP Project Number:
MCPC Number: 05-1727
537 Update
East Norriton Township
Date revision received by the
County Planning Commission: 1/27/06

February 16, 2006

Helmuth J.H. Baerwald
East Norriton Township Manager
2501 Stanbridge Street
East Norriton PA 19401

Dear Mr. Baerwald:

We have reviewed this application for an update to the Township's Sewage Facilities Plan in accordance with regulations issued under Act 537, "The Pennsylvania Sewage Facilities Act," as requested.

BACKGROUND

The Township proposes an Act 537 update in order to delineate sewer growth areas and the areas designated to use on-lot sewage disposal, to be consistent with the Township's Comprehensive Plan and zoning ordinances, as well as to address future sewage disposal needs of East Norriton Township residents. East Norriton Township has wastewater treatment capacity at the ENPWJSA Wastewater Treatment Facility. The ENPWJSA is presently investigating a facility upgrade and expansion to address more stringent discharge limits and to accommodate additional sewage service needs in the near future. This 537 update addresses the need for expansion of the Township Authority's service area to include 170 of the 209 existing parcels in East Norriton Township utilizing on-lot sewage disposal systems. The remaining 39 on-lot systems are located in the western section of the Township in the Trooper Road and Township Line Road area.

The growth area proposed for this update includes all tracts of land not currently served by public sewers in all zoning districts, with the exception of those 39 on-lot systems in the western section of the Township. Potential future growth projections are based on zoning, a review of the Township's draft Comprehensive Plan Update, and areas presently identified for development and the connection of on-lot systems. Based on these projections, it is estimated that East Norriton Township's future sewage needs will require an average annual capacity of 2.7 mgd and a maximum monthly capacity of 3.3 mgd of the East Norriton Plymouth Whitpain Joint Sewer Authority (ENPWJSA). East Norriton has sufficient annual average capacity at the ENPWJSA Wastewater Treatment Facility for the ultimate build out of remaining land in the growth areas. However, the Township requires the additional maximum monthly capacity be increased from 3.1 mgd to 3.3 mgd. Expansion of the collection system is occurring in areas of development, with new collection sewer construction by private developers and landowners. The existing pump stations and conveyance system have sufficient average annual flow capacity for the additional sewerage flows anticipated. The existing average daily flow for East Norriton is 2,116,700 gallons per day (gpd).

An investigation of extraneous inflow and infiltration (I/I) within the sewer collection system was conducted as part of the Act 573 Update. The I/I investigation indicated areas tributary to the Sandra Lane and Germantown Pump Stations experience surcharge conditions. East Norriton has developed a Corrective Action Plan (CAP) to reduce I/I contributions into the sanitary sewer system. In addition to implementing the CAP, the Township will continue to monitor, investigate and remediate the sanitary collection and conveyance system to remove and prevent additional extraneous I/I to ensure current permitted system capacities are not exceeded. East Norriton Township's previous I/I rehabilitation efforts have been successful only to have I/I reappear as surcharges in the Germantown Pump Station area. Since the Township will be involved with the plant upgrade, the Township is choosing the twofold approach of securing additional maximum monthly treatment capacity at the ENPWJSA facility as well as aggressively pursuing I/I removal to avoid a potential building moratorium due to lack of maximum monthly capacity.

Comments/Issues

Capacity of WWTP

The ENPWJSA Wastewater Treatment Plant has a permitted maximum monthly discharge capacity of 9.3 million gallons per day (mgd) with an annual average flow rating of 8.1 mgd. The 2004 annual average daily flow was 6.45 mgd and the maximum monthly flow was 7.75 mgd. The Chapter 94 (2004) report indicates the treatment plant will operate within permitted limits for the next five years. A 2003 upgrade/expansion scenario considered a capacity increase to an annual average flow of 8.7 mgd with a maximum monthly capacity of 11.1 mgd. Based on capacity being apportioned equally between the three townships, East Norriton Township would realize an annual average capacity of 2.9 mgd and a maximum monthly capacity of 3.7 mgd. The total project cost would be roughly 14.5 million. East Norriton's share of the cost would be about 4.8 million. Based on a 2.7 mgd annual average flow and 275 gpd/EDU, the calculated capital cost per EDU is $500/EDU.

OLDS Management

The Montgomery County Health Department MCHD had 7 active site investigations of possible malfunctions in existing systems in addition to 8 complaints they received documented in their October 28, 2003 and October 25, 2005 letters attached to the module. Corrective action was completed on all of the 8 noted systems. The MCHD reported that 6 of the 7 referenced active site investigations had not been satisfactorily resolved and no further action taken. All 6 parcels have been identified to be connected into the public sanitary sewer system in the future. The Township will continue their OLDS inventory system and community education program which provides current best management practice information to all property owners which have existing OLDS.

Inflow & Infiltration Monitoring and Corrective Action Plan

The I & I flow monitoring study was conducted throughout the Township through the use of portable meters installed in manholes which segregated several specific drainage areas. Sewer flows during dry and wet weather periods were recorded and evaluated to determine the sub-areas with the highest I/I problems. The portion of the system located in the western side of the Township that includes the Germantown Pump Station Drainage Area has been identified as having the highest rate of extraneous I/I flows.

East Norriton Township has developed a Corrective Action Plan to address the I/I situation. The proposed activities of the CAP include the following:

- Sewer and lateral televising will be conducted within the noted sub-drainage areas upstream of the Germantown Pumping Station.
- The Township will pass an amendment requiring sewer laterals be televised to determine condition when a property within the Township is sold. If the lateral is in unacceptable condition, the lateral will need to be replaced or repaired prior to the completion of the sale.

- To reduce surcharges and overflows at the Germantown Pumping Station, the Township engineer will redirect flow to the larger Timberlake Pumping Station.

A comprehensive sewer main and lateral internal televising inspection work has concluded that the overall condition of sewer mains to be good. The Township has purchased a remotely controlled closed circuit camera system and high pressure hydraulic sewer cleaner truck to continue internal inspection of sewer mains by Township personnel.

Growth Area
The sewage facilities growth areas proposed for this update include all tracts of land not currently served by public sewers in all zoning districts. To determine the potential sewage flow from the growth area, the total acreage of developable land was estimated and classified by zoning district. The growth area acres for each applicable zoning district in each of the four major pump station drainage basins was multiplied by an average EDU/acre rate, based on current zoning to determine the number of potential additional EDUs needed to serve the growth area. The total potential EDUs required to serve the growth area is estimated at 1,856 EDUs (.510 mgd) as shown in table 4-1 of the module. The numbers of known development proposals that have been submitted to the Township make up 503 EDUs of the 1,856 EDU total. The total projected average annual flow is 2.70 mgd. This figure includes the current flows of 2,116,700 plus the additional 500,000 gpd in anticipated growth, indicating the Township has enough yearly capacity to provide for future known and anticipated development. It need only increase its monthly capacity and lower its I/I flow.

Consistency with County Comprehensive Plan and Regional Plan
The County's Growth and Preservation Map depicts the northwest corner of the Township as a growth area. The County's Existing and Future Sewer Service area map shows this area being a future public sewer service area. This area is not consistent with the Township's 537 sewer facilities and growth areas, which depicts this area predominantly as on-lot disposal system outside of their 10 year or ultimate public sewer area. It is our understanding that because of the topography and distance to sewage facilities, it would be very expensive to provide public sewerage to the individual lots in this area at this time. Additionally, the County Health department has been working in this area to make corrections to any failing on-lot systems.

RECOMMENDATION
Once the actual locations of the sewer lines are finalized, we would appreciate having a map of the existing and proposed sewer lines for our records. We recommend approval of the proposed Act 537 Sewage Facilities Plan Revision, provided it is in accordance with all applicable DEP rules and regulations.

Sincerely,

Julie Sergovic
Environmental Planner
(610) 278-3750
jsergovi@mail.montcopa.org

c: Clinton Cleaver, DEP, SERO
Stanley Endlich, EDM Consultants Inc.
East Norriton Plymouth Whitpain Joint Sewer Authority

EDM CONSULTANTS, INC.
1101 South Broad Street, Suite 200, P. O. Box 1545, Lansdale, PA 19446
Phone (215) 393-0670 Fax (215) 393-0652

January 26, 2006

CERTIFIED MAIL
Return Receipt Requested

Montgomery County Planning Commission
Montgomery County Courthouse
P.O. Box 311
Norristown, PA 19404

RE: Act 537 Sewage Facilities
Plan Update
East Norriton Township
Montgomery County

FILE: 158-037 (1.00)

Gentlemen:

On behalf of East Norriton Township, EDM Consultants, Inc. is forwarding the attached copy of the East Norriton Township Act 537 Sewage Facilities Plan Update dated November 2005. This Act 537 Sewage Facilities Plan Update is being submitted to you for your review and comment as per the requirements of the Pennsylvania Code, Title 25 Environmental Protection, Chapter 71, Paragraph 31. Based on the previously referenced chapter, you have sixty (60) days to complete your review and return your comments in writing to East Norriton Township at the following address:

East Norriton Township
2501 Stanbridge Street
East Norriton, PA 19401-1616

We would like to thank you in advance for your assistance in regard to expeditiously providing comments concerning the East Norriton Township Act 537 Plan Update.

Very truly yours,

EDM CONSULTANTS, INC.

Stanley J. Endlich, P.E.

Enclosure

pc: East Norriton Townsl

\037MCPC_title25letter

158-037

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:
Montgomery County Planning Commission
P.O. Box 311
Norristown, PA 19404

COMPLETE THIS SECTION ON DELIVERY
A. Signature
X MONTGOMERY COUNTY COURTHOUSE ☐ Agent
B. Received by (Printed Name) R. CANT C. Date of Delive
AUTHORIZED AGENT
D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

NORRISTOWN, PA 19401 JAN 27 2006

3. Service Type
☒ Certified Mail ☐ Express Mail
☐ Registered ☐ Return Receipt for Merchand
☐ Insured Mail ☐ C.O.D.
4. Restricted Delivery? (Extra Fee) ☐ Yes

2. Article Number 7005 0390 0001 9832 0472

Engin

APPENDIX I

Montgomery County Department of Health Review Letter

(58-05)

COUNTY OF MONTGOMERY

COMMISSIONERS
THOMAS JAY ELLIS, Esq.
CHAIRMAN
JAMES R. MATTHEWS RUTH S. DAMSKER

DIRECTOR OF HEALTH
DR. JOSEPH M. DIMINO

DEPARTMENT OF HEALTH
MONTGOMERY COUNTY HUMAN SERVICES CENTER
1430 DeKALB STREET
P.O. BOX 311
NORRISTOWN, PENNSYLVANIA 19404-0311

TEL: (610) 278-5117
TDD: (610) 631-1211
FAX: (610) 278-5167

RECEIVED

FEB 1 5 2006

EDM CONSULTANTS

February 14, 2006

Mr. Stanley Endlich
EDM Consultants, Inc.
1101 S. Broad Street
Suite 200, P. O. Box 1545
Lansdale, PA 19446

Re: PADEP Act 537 Sewage Facilities Plan Update
East Norriton Township, Montgomery County

Dear Mr. Endlich:

The Montgomery County Health Department (MCHD) has generally reviewed the Act 537 Sewage Facilities Plan Update for East Norriton Township, Montgomery County.

At time, MCHD has no objections to the proposed Act 537 Sewage Facilities Plan Update. If you have any questions, please contact me at (610) 278-5117 extension 6728.

Sincerely,

Michelle L. Moyer
Environmental Health Specialist
Division of Water Quality Management
mmoyer@mail.montcopa.org

cc: Department of Environmental Protection
Helmuth Baerwald, East Norriton Township
Kathy Jula, Field Supervisor

mlm

EDM CONSULTANTS, INC.
1101 South Broad Street, Suite 200, P. O. Box 1545, Lansdale, PA 19446
Phone (215) 393-0670 Fax (215) 393-0652

January 26, 2006

CERTIFIED MAIL
Return Receipt Requested

Department of Health
Montgomery County Human Services Center
1430 DeKalb Street
P.O. Box 311
Norristown, PA 19404-0311

RE: Act 537 Sewage Facilities
Plan Update
East Norriton Township
Montgomery County

FILE: 158-037 (1.00)

Gentlemen:

On behalf of East Norriton Township, EDM Consultants, Inc. is forwarding the attached copy of the East Norriton Township Act 537 Sewage Facilities Plan Update dated November 2005. This Act 537 Sewage Facilities Plan Update is being submitted to you for your review and comment as per the requirements of the Pennsylvania Code, Title 25 Environmental Protection, Chapter 71, Paragraph 31. Based on the previously referenced chapter, you have sixty (60) days to complete your review and return your comments in writing to East Norriton Township at the following address:

East Norriton Township
2501 Stanbridge Street
East Norriton, PA 19401-1616

We would like to thank you in advance for your assistance in regard to expeditiously providing comments concerning the East Norriton Township Act 537 Plan Update.

Very truly yours,

EDM CONSULTANTS, INC.

Stanley J. Endlich, P.E.

Enclosure

pc: East Norriton Townsi

Engi

158-037

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:
Department of Health
Montgomery County Human Services Ctr.
P.O. Box 311
Norristown, PA 19404-0311

COMPLETE THIS SECTION ON DELIVERY

A. Signature
X ☐ Agent ☐ Addressee

B. Received by (Printed Name) C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes
If YES, enter delivery address below: ☐ No

MONTGOMERY COUNTY COURTHOUSE
B. GANT
AUTHORIZED AGENT
NORRISTOWN, PA 19404
JAN 27 2006
USPS

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 (Transfer from service label) 7005 0390 0001 9832 0465

APPENDIX J

East Norriton Township Planning Commission Review Letter

EAST NORRITON TOWNSHIP
2501 Stanbridge Street, East Norriton, PA 19401-1616 U.S.A.
610-275-2800 • Fax: 610-277-1879
info@eastnorritontwp.org • www.eastnorritontwp.org

April 20, 2006

Donald Gracia, Chairman
East Norriton Township
2501 Stanbridge Street
East Norriton, PA 19401

Re: East Norriton Township – Act 537 Plan

Dear Mr. Gracia

The East Norriton Township Planning Commission reviewed the Township's Act 537 Plan update on February 21, 2006 and recommends approval.

Sincerely,

Keith Tornetta
Chairman

Cc: Township Manager

EDM CONSULTANTS, INC.
1101 South Broad Street, Suite 200, P. O. Box 1545, Lansdale, PA 19446
Phone (215) 393-0670 Fax (215) 393-0652

January 26, 2006

East Norriton Township
Planning Commission
2501 Stanbridge Street
East Norriton, PA 19401-1616

RE: Act 537 Sewage Facilities
Plan Update
East Norriton Township
Montgomery County

FILE: 158-037 (1.00)

Gentlemen:

On behalf of East Norriton Township, EDM Consultants, Inc. is forwarding the attached copy of the East Norriton Township Act 537 Sewage Facilities Plan Update dated November 2005. This Act 537 Sewage Facilities Plan Update is being submitted to you for your review and comment as per the requirements of the Pennsylvania Code, Title 25 Environmental Protection, Chapter 71, Paragraph 31. Based on the previously referenced chapter, you have sixty (60) days to complete your review and return your comments in writing to East Norriton Township at the following address:

East Norriton Township
2501 Stanbridge Street
East Norriton, PA 19401-1616

Also enclosed are nine (9) copies of the Plan's Executive Summary for distribution to each Planning Commission Member to facilitate comments and input. The entire Act 537 Update plan should also be made available so that a member can review the entire document.

We would like to thank you in advance for your assistance in regard to expeditiously providing comments concerning the East Norriton Township Act 537 Plan Update.

Very truly yours,
EDM CONSULTANTS, INC.

Stanley J. Endlich, P.E.

Received East Norriton Township
Date 1/26/06

Enclosure

pc: East Norriton Township

\037ENTPC_title25letter

APPENDIX K

Public Comments and East Norriton Township Response

East Norriton Township
Act 537 Plan Update
Public Hearing
March 28, 2006

A public hearing was conducted on March 28, 2006 in accordance with the attached agenda.

No public comments were provided at the public hearing.

No written comments were received in connection with the Act 537 Plan Update having been duly advertised.

AGENDA

PUBLIC HEARING – Act 537 Plan Update

March 28, 2006

6:00 P.M.

1. Call Public Hearing to Order
2. Roll Call
3. Prayer
4. Pledge of Allegiance
5. Sign-in Sheet (if appropriate)
6. Brief Introduction of this Public Hearing
7. Solicitor explains ground rules of meeting and lists Township Exhibits for the public record.
8. Presentation & Testimony by Township Engineer (EDM Consultants)
9. Close the Public Record
10. Audience Poll, if appropriate
11. Adjournment

APPENDIX L

Adoption Resolution

RESOLUTION NO. 2294
FOR ACT 537 PLAN REVISION

RESOLUTION OF THE SUPERVISORS OF EAST NORRITONTOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA (hereinafter "the municipality").

WHEREAS, Section 5 of the Act of January 24, 1966, P.L. 1535, No. 537, known as the "Pennsylvania Sewage Facilities Act," as amended, and the Rules and Regulations of the Department of Environmental Protection (Department) adopted there under, Chapter 71 of Title 25 of the **Pennsylvania Code**, requires the municipality to adopt an Official Sewage Facilities Plan providing for sewage services adequate to prevent contamination of waters and/or environmental health hazards with sewage wastes, and to revise said plan whenever it is necessary to meet the sewage disposal needs of the municipality, and

WHEREAS, EDM CONSULTANTS, INC. has prepared an Act 537 Plan Update, dated November 2005, Final Draft January 2006, which provides for sewage facilities in East Norriton Township, and

The alternative of choice to be implemented is to participate, on a one-third proportionate share, in the upgrade and expansion of the East Norriton Plymouth Whitpain Joint Sewer Authority (ENPWJSA) treatment facility to secure additional maximum monthly treatment capacity, continued implementation of the Township's Corrective Action Plan (CAP) to address sewer system I/I, continued I/I program monitoring, investigation and remediation, continued investigation of alternatives to reduce the peak flows at the Germantown and Sandra Lane Pumping Stations, continued implementation of the Township's OLDS (On-Lot Disposal System) Management program and Securing financing for the Township's share of the ENPWJSA upgrade/expansion costs. The key implementation activities/dates include Plan Submission to PaDEP on or about April 2006 and continued participation in the ENPWJSA plant upgrade and expansion in accordance with the Authority's schedule.

WHEREAS, East NorritonTownship finds that the Facility Plan described above conforms to applicable zoning, subdivision, other municipal ordinances and plans and to a comprehensive program of pollution control and water quality management.

NOW, THEREFORE, BE IT RESOLVED that the Supervisors of the Township of East Norriton hereby adopt and submit to the Department of Environmental Protection for its approval as a revision to the "Official Plan" of the municipality, the above referenced Facility Plan. The municipality hereby assures the Department of the complete and timely implementation of the said plan as required by law. (Section 5, Pennsylvania Sewage Facilities Act as amended).

Donald J. Gracia, Chairman, Board of Supervisors

I Helmuth J.H. Baerwald, Manager, East Norriton Township hereby certify that the foregoing is a true copy of the Township's Resolution No. 2294, adopted on Tuesday, April 18, 2006.

Helmuth J.H. Baerwald, Township Manager

SEAL
TOWNSHIP OF EAST NORRITON MONTGOMERY COUNTY PENNSYLVANIA INCORPORATE MARCH 9, 1909 PA

FIGURES