

LOWER CHARTIERS CREEK POLLUTANT REDUCTION PLAN

**SUBMITTED AS PART OF THE MUNICIPAL SEPARATE
STORMWATER SYSTEM INDIVIDUAL PERMIT APPLICATION**

FOR

THE MUNICIPALITY OF BETHEL PARK, PENNSYLVANIA



SUBMITTED BY

**THE MUNICIPALITY OF BETHEL PARK
5100 WEST LIBRARY AVENUE
BEHEL PARK, PA 15102**

SEPTEMBER 14, 2017

LOWER CHARTIERS CREEK POLLUTANT REDUCTION PLAN FOR THE MUNICIPALITY OF BETHEL PARK, PA

Introduction

The Lower Chartiers Creek Watershed is located in Allegheny County, Pennsylvania. A portion of the watershed (1,828 acres) is located in the western section of the Municipality of Bethel Park and is considered to be urbanized area. Areas that do not drain into Bethel Park's stormwater collection system were parsed out of the total acreage leaving 1,404 acres within the Bethel Park Municipal Separate Stormwater Sewer System (MS4).

This Pollutant Reduction Plan is a planning level document. Specific Best Management listed in the document may be altered as technology changes or the feasibility of projects change. Bethel Park's goal will be to achieve the 10% reduction of sediment within the first 5 year permit term.

A. Public Participation.

The Pollutant Reduction Plan (PRP) was publically advertised for 30 calendar days beginning on July 26, 2017 in the Pittsburgh Post-Gazette. A proof of publication of the advertisement can be found in Appendix A. Copies of the plan were available for public review at the Bethel Park Municipal Office. Public comments and the Municipality's responses can be found in Appendix A. ~~OR~~ No public comments were received.

B. Watershed Maps

A Bethel Park Overall Watershed Map and a Lower Chartiers Creek Watershed Map can be found in Appendix B. The Lower Chartiers Creek Watershed Map presents the separate stormwater collection system, elevation contours, roads and areas that were parsed out. Parsing was performed on areas that do not drain into the Municipality's storm sewer system, including County and State owned stormwater collection systems and areas that drain directly into a surface water.

Bethel Park plans to implement a stream restoration project to achieve the required load reductions. The location of the stream restoration project is presented on the Lower Chartiers Creek Watershed Map in Appendix B.

C. Pollutant(s) of Concern.

The pollutants of concern for this watershed are total phosphorus and sediment. Bethel Park has chosen to utilize the presumptive approach wherein a load reduction of 10% for sediment may be used as the objective in lieu of a 5% reduction in total phosphorus. Therefore, this PRP will focus on sediment reduction.

D. Existing Load for Pollutant(s) of Concern.

The baseload for this watershed was determined using the MapShed and GWLF-E models. This watershed contains 23,395 LF of stream length in Bethel Park. Hardened streams that will not contribute to sedimentation equate to 7,565 LF. The GWLF-E Model and BMP Editor were run using this information. The resulting parsed sediment baseload is 833,479 lbs./year.

A 2,920 LF stream restoration project was completed in Graeser's Run circa 2003. The drainage area to this project was not parsed out, and, the baseload was reduced in consideration of this project as follows.

$$2,920 \text{ LF Stream Restoration} \times 115 \text{ lbs./LF/year Reduction Effectiveness} = \\ 335,800 \text{ lbs./year Baseload Credit}$$

The resulting revised sediment baseload is

$$833,479 \text{ lbs./year} - 335,800 \text{ lbs./year} = 497,679 \text{ lbs./year}$$

The resulting 10% reduction requirement in the first permitting cycle is 49,768 lbs./year.

E. Select BMPs To Achieve the Minimum Required Reductions in Pollutant Loading

Bethel Park plans to implement a stormwater system solids removal practice and a stream restoration project and to achieve the required load reductions. The Pennsylvania Department of Environmental Protection (PADEP) BMP Effectiveness Table indicates a reduction effectiveness of 115 lbs./yr. for stream restoration when using the MapShed Model. The PA DEP BMP Effectiveness Table also indicates that the dry weight measurement of the sediment removed from the stormwater system may be used for the BMP effectiveness after refuse, debris, and floatables are removed. It is anticipated that each stormwater catch basin will have approximately one half inch of sediment accumulation resulting in an estimated 40 lbs. of sediment removed from each stormwater catch basin. The Municipality plans to remove sediment from 100 storm water catch basins annually in this watershed, decreasing the sediment load by 4,000 lbs./year. The remaining sediment load will be accomplished via 398 linear feet of stream restoration. The stream restoration project location is presented on the Lower Chartiers Creek Watershed Map found in Appendix B.

F. Identify Funding Mechanism(s).

Using a Design & Construction Cost of \$250/LF results in a Total Cost of \$99,495 for 398 LF of stream restoration. The Municipality of Bethel Park will fund this project out of our capital budget with supplemental funding from grant opportunities from PA DEP, DCNR, and other County, State, Federal, and private grants.

Bethel Park will utilize public work employees and equipment to remove sediment from stormwater catch basins. Bethel Park is currently in the process of constructing facilities to dry sediment. The dried sediment will then be loaded into dumpsters, weighed, and disposed of properly.

G. Identify Responsible Parties for Operation and Maintenance (O&M) of BMPs.

Bethel Park will perform annual inspections of the stream restoration project to ensure that it is functioning properly. Bethel Park will create a standard operating procedure to determine the total amount of sediment removed the stormwater catch basins.

APPENDIX A

ADVERTISEMENT AND PUBLIC COMMENTS

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Legal Notices

The Family Court Building, 550 Fifth Avenue, Pittsburgh, PA 15219, on Friday August 18, 2017, at 1:00 p.m. prevailing time, before the Honorable Kim Berkeley Clark.

You are warned that if you fail to appear at the scheduled hearing, the hearing will go on without you and your rights to your child may be ended by the court without your being present. You have a right to be represented at the hearing by a lawyer. You should take this paper to your lawyer at once. If you do not afford one, go to the telephone the office set forth below to find out where you can get legal help.

This is also to inform you of an important option that may be available to you under Pennsylvania law. Act 101 of 2010 allows for an enforceable voluntary agreement for continuing contact of an adoption following an adoption between an adoptive parent, a child, a birth parent, and/or a birth relative of the child; if all parties agree and the voluntary agreement is approved by the court. If you are interested in learning more about this option for a voluntary agreement, contact your attorney or Lawyer Referral Service.

The Allegheny County Bar Association, Koppers Building, 11th Floor, Pittsburgh, PA 15219, Telephone: (412) 261-5555.

Andrew F. Szefi, County Solicitor, Jillian A. Adk, Attorney at Law, Children, Youth and Families, 445 Fifth Boulevard, Pittsburgh, PA 15219, (412) 350-4720.

Attorneys for Petitioner:

NOTICE OF HEARING ON PETITION TO INVOLUNTARILY TERMINATE PARENTAL RIGHTS

In Re: Raymond Todd Best aka Raymond Best, a minor, No. CP-02-A-P-095-2017, in the Orphans' Court Division of the County of Allegheny, Pennsylvania.

To: Raynell S. Hoffman

Legal Notices

Heir of Mary Hammer Fogarty, With Notice to Heirs & Assigns; IDA DAR, KNOWN HEIR OF MARGARET HAMMER NOA, With Notice to Heirs & Assigns; REX REALTY COMPANY; PHILOMENA HAMMER HESS, with Notice to Heirs & Assigns; CHRISTINA HAMMER WAGNER, with Notice to Heirs & Assigns; FRANCES HAMMER KINNEY, with Notice to Heirs & Assigns; ELIZABETH HAMMER HESS, with Notice to Heirs & Assigns; and GEORGE HAMMER, with Notice to Heirs & Assigns; Defendants).

CIVIL DIVISION No. GD-16-002216

NOTICE TO JOHN W. HAMMER, With Notice to Heirs & Assigns; SOPHIA HAMMER KUNZELMAN, With Notice to Heirs & Assigns; GEORGE FOGARTY, Known Heir of Mary Hammer Fogarty, With Notice to Heirs & Assigns; WILLIAM FOGARTY, Known Heir of Mary Hammer Fogarty, With Notice to Heirs & Assigns; IDA DAR, KNOWN HEIR OF MARGARET HAMMER NOA, With Notice to Heirs & Assigns; REX REALTY COMPANY; PHILOMENA HAMMER HESS, with Notice to Heirs & Assigns; CHRISTINA HAMMER WAGNER, with Notice to Heirs & Assigns; FRANCES HAMMER KINNEY, with Notice to Heirs & Assigns; ELIZABETH HAMMER HESS, with Notice to Heirs & Assigns; and GEORGE HAMMER, with Notice to Heirs & Assigns.

You are hereby notified that on May 12, 2017, Plaintiff, COUNTY OF ALLEGHENY, filed an Amended and Reissued writ of Scire Facias Clas Sur Tax Lien and Statement against you in the County of Common Pleas of Allegheny County, Pennsylvania, docketed to No. GD-16-002216.

Wherein, Plaintiff seeks to collect delinquent real estate taxes lawfully levied and assessed against that certain property situated within the Township of Kennedy, Commonwealth of Pennsylvania, described as follows: Block and Lot 11B-R-89, known as Midletown Road, McKees Rocks, PA 15136.

Legal Notices

Charter School Board of Trustees will hold a Special Meeting on Monday, July 31, 2017 at 7:15 p.m. telephonically by dialing 584.1874 for general purposes pursuant to 24-P.S. Sec 4-423.

Alan C. Kessler, Esquire, Counsel to the Board of Trustees, Duane Morris LLP, Tel.: 215-979-1117.

OFFICIAL MUNICIPALITY OF BETHEL PARK

The Municipality of Bethel Park is required to submit Pollutant Reduction Plans (PRP) and Total Maximum Daily Load (TMDL) reduction plans for sediment and total phosphorus to the Pennsylvania Department of Environmental Protection as part of their Municipal Separate Storm Sewer System National Pollutant Discharge Elimination system Permit requirements. The Municipality's PRP and TMDL plans will be on display for public review at the Bethel Park Library on the Bethel Park website (www.bethelpark.org) starting July 26, 2017. Comments shall be sent to: John.M.Quinlan@bethelpark.org near at 9100 West Liberty Avenue, Bethel Park, PA 15102 prior to August 2, 2017.

By: Shawn Alexander, Municipal Manager

ORDINANCE NO. 17-013 CORRECTION changing to 35 to 36. The following ordinance was approved by the Mayor 7-26-2017.

No. 36 directing the Allegheny County Board of Elections to place before the qualified voters of the City of Pittsburgh at the 2017 November General Election a referendum question amending and supplementing the Pittsburgh Home Rule Charter, Article VII - Personnel, Section 707 - Multiple Employment Prohibited, by adding new subsections, &g, which will allow City employees to be scheduled to work as coaches in part-time positions with the Pittsburgh Public Schools.

Legal Notices

2017, adopted a resolution titled and summarized as follows:

AUTHORIZING THE INCURRING OF NON-LEGAL DEBT BY THE ISSUANCE OF GENERAL OBLIGATION BONDS IN AN AMOUNT NOT TO EXCEED EIGHTY-FIVE MILLION DOLLARS (\$85,000,000) COVENANTING TO PAY, AND PLEDGING ALL AVAILABLE LOGAL GOVERNMENT UNIT TAXING POWER OF THE BONDS, ESTABLISHING A SINKING FUND AND APPOINTING A SINKING FUND DEPOSITORY, FIXING THE FORM, MAXIMUM INTEREST RATES, MATURITY DATES AND OTHER PROVISIONS FOR THE PAYMENT THEREOF, AUTHORIZING THE ACCEPTANCE OF A PROPOSAL FOR THE PURCHASE OF THE BONDS; AUTHORIZING THE FILING OF REQUIRED DOCUMENTS WITH THE COUNTY AND ECONOMIC DEVELOPMENT, PLANNING AND DISTRICTING DEPARTMENTS OF THE RES AND NEGOTIATING CERTAIN OTHER GOVERNMENTAL PROVISIONS IN RESPECT OF THE BONDS.

The Resolution was amended from its proposed form upon final passage to reduce the maximum principal amount of the bonds to \$85,000,000 and to substitute a revised exhibit A (Not to exceed) Debt Service and Principal Amortization Schedule and Wap Schedule.

The maximum interest rate on the bonds, if issued, is 6.00%.

The Bonds will be purchased by RBC Capital Markets, LLC at a purchase price of not less than 95.00%, inclusive of a discount/premium, if any, together with accrued interest to the date of delivery.

The full text of the Resolution as enacted may be examined by any citizen between the hours of 9:00 AM and 3:00 PM on regular school business days at the Woodland Hills School.

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Robert 724-433-3292

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Wilson, Tanera Monet; Dominguez, Alexandra Miguelina, Pittsburgh

Zoldos, Daniel Taylor; McKees Rocks; Marababko, Jessica Marie, Pittsburgh

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Bedroom set Mid-Century Modern Mil. Century Modern Bed room dresser \$500 HI Boy \$300 end tables pair \$400 \$1,650 703-582-5645

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AQUARIUMS New and used. Fish, reptiles, critters.

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(2) LOTS FOR SALE IN THE GOOD SHEPHERD CEMETERY IN MONROEVILLE \$300. 412-793-9071

(4) CONSECUTIVE LOTS IN MT LEBANON CEMETERY. Section 1, Lot 171, \$3500 each. 717-359-4343

Cemetery Lots Jefferson Memorial Park, Two grave sites. Garden of Gethsemane section Block 9 Lot 180A. Spaces 3-4. Current value \$3500/pair. Asking \$2,500 412-445-7349

SOUTH SIDE CEMETERY Complete pkg. for 2. Valued at \$14,000. asking \$7,000 OBO. 412-922-5284 AM Best

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Wanted To Buy AMERICAN FLYER & LIONEL TRAINS

Boats & Motors

YACHT 43 FT MOTOR YACHT SILVERTON 2001 14 FT BEAM, ONLY 98 HOURS, MARINE SURVEY \$125,000 (2013) DUAL V8 ENGINES, 2 BEDROOMS, 2 BATH, LIVING ROOM, KITCHEN/DINING, 2 DECKS, \$99,000 724-470-8607

Campers & RV's

2002 Keystone Rivercrest 3021 wheel class, toasty camper w/3 slide-outs. Clean, no children, smoking or pets. Lots of storage, well maintained. New awnings this spring. Must see. Negotiable. Best Offer. 412-759-0747

Reduced Price - 09 Sunnyside Camper Two beds, sleeps 10 ppl. One bedroom with 4 bunk; other bedroom with queen, sofa opens to sleep two, and table sleeps two. A lot of storage spaces. Asking \$11,000. Contact: 814-443-8109 or 814-442-7499 814-443-6109

RELOCATING, MUST SELL 2017 ROCKWOOD HARD POP-UP Sleepers 4, BA seller motivated, \$14,000. 412-444-1233 or 412-425-2847

TRAVEL TRAILER 2014, 36 FT, LIKE NEW COND., \$11,000. CALL 281-370-8022

Motor Home Sale

2003 COACHMAN 2100R MILES, 35 FEET, 2 SLIDERS, FORD V10, \$5,800 IN REPAIRS TO INSURE THERE ARE NO PROBLEMS! MUST SELL. \$21,000 724-470-8607

Motorcycles

2003 100th Anniversary Edition V-twin Beautiful bike and a blast to ride with 115 hp. Well maintained and in very good condition. XEN air filter. Security system. 10,000 miles. Recently inspected and ready to go. Millvale area. 412-718-9155

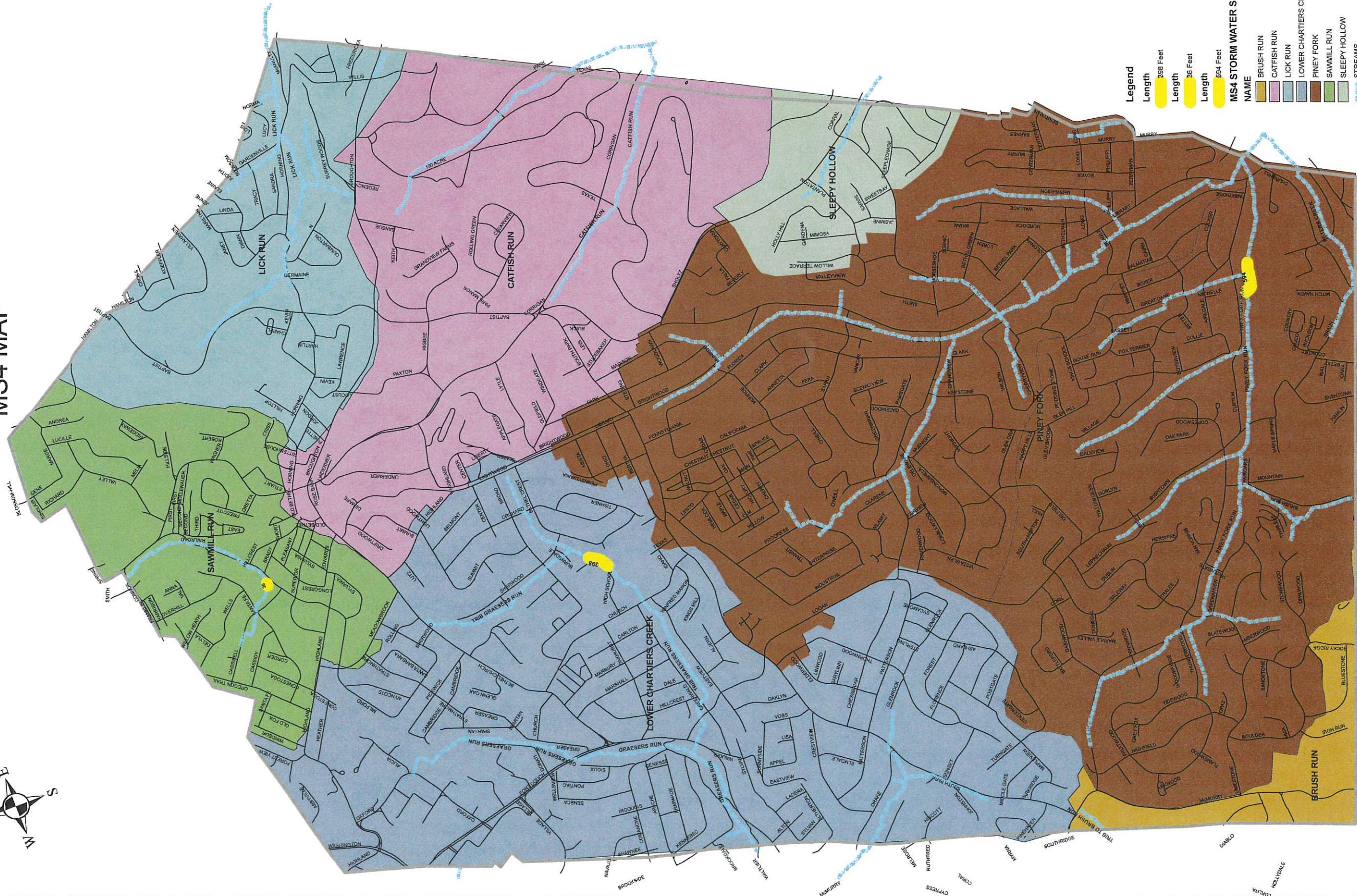
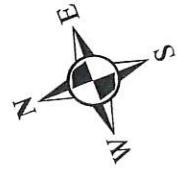
Wanted To Buy AMERICAN FLYER & LIONEL TRAINS

APPENDIX B

WATERSHED MAPS

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MUNICIPALITY OF BETHEL PARK STORM WATER SHED MS4 MAP



Legend

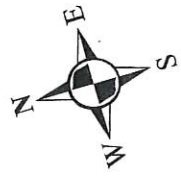
Length 398 Feet
Length 36 Feet
Length 594 Feet

MS4 STORM WATER SHEDS

NAME	COLOR
BRUSH RUN	Yellow
CATFISH RUN	Pink
LICK RUN	Light Blue
LOWER CHARTIERS CREEK	Light Blue
PINEY FORK	Brown
SAWMILL RUN	Green
SLEEPY HOLLOW	Light Green
STREAMS	Blue




MUNICIPALITY OF BETHEL PARK
Lower Chartiers Creek Water Shed
LAND USE MAP



Legend

Length

 398 Feet of Stream Restoration

 STREAMS

 Parks

398 Feet of Stream Restoration



MUNICIPALITY OF BETHEL PARK
 Lower Chartiers Creek Water Shed
 MS4 MAP



Legend

MS4 OUTFALLS

OWNER

☆ Bethel Park

INLET

FEATURE

- CATCHBASIN
- ▲ ENDWALL
- ▲ HEADWALL
- MANHOLE
- OPEN PIPE

Length

398 Feet of Stream Restoration

STREAMS

Storm Det Structures

STORM SEWER

OWNER

- BETHEL
- BPSD
- COUNTY
- PAT
- PENDOT
- PVT
- SWALE
- 2 Foot Contours

Parsed Area Lower Chartiers Creek

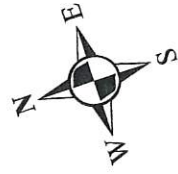
Total Acreage 463

- 7
- 9
- 16
- 40
- 51
- 111
- 229

Lower Chartiers Creek Water Shed Acres

1771

Total Area of Lower Chartiers Creek Water Shed after Parsing 1,307 Acres
 398 Feet of Stream Restoration Project



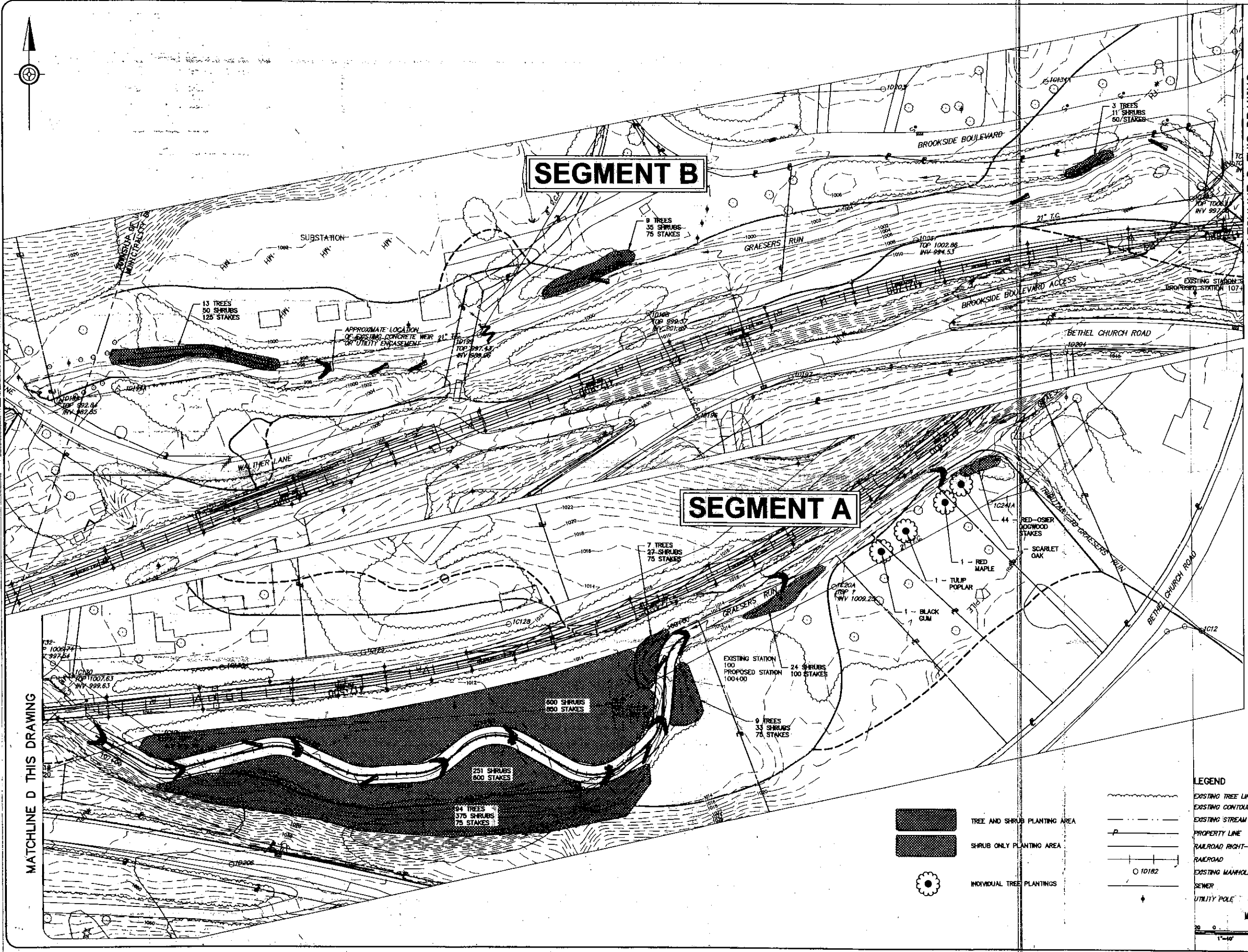





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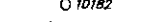
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SEGMENT B

SEGMENT A



-  TREE AND SHRUB PLANTING AREA
-  SHRUB ONLY PLANTING AREA
-  INDIVIDUAL TREE PLANTINGS

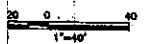
-  EXISTING TREE LINE
-  EXISTING CONTOUR INTERVAL
-  EXISTING STREAM
-  PROPERTY LINE
-  RAILROAD RIGHT-OF-WAY
-  RAILROAD
-  EXISTING MANHOLE
-  SEWER
-  UTILITY POLE

LEGEND

RECEIVED

JAN 10 2005

MUNICIPALITY OF BETHEL PARK



DRAWING NO. **15**

**McLAUGHLIN RUN, PHASE IV
STREAM RESTORATION**
MUNICIPALITY OF BETHEL PARK
ALLEGHENY COUNTY, PA.
PLANTING PLAN

DATE	
DESIGN	
CHECK	
SCALE	

REV	DESCRIPTION	DATE

SKELLY AND LOY, INC.
ENGINEERS-CONSULTANTS
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1599269004
MARCH, 2003

2-1599269004-0066 Final Design\Final 1-15.DWG

APPENDIX C

WATERSHED MODELING OUTPUT

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Watershed Totals Municipality Loads Regulated Loads Unregulated Loads

View loads for municipality: Bethel Park Boro (06064)

Source	Source Area (ac)	Sediment		Nitrogen		Phosphorus	
		Total Load (lb)	Loading Rate (lb/ac)	Total Load (lb)	Loading Rate (lb/ac)	Total Load (lb)	Loading Rate (lb/ac)
Hay/Pasture	0	0.00	0.00	0.00	0.00	0.00	0.00
Cropland	0	0.00	0.00	0.00	0.00	0.00	0.00
Forest	79	1453.60	18.40	6.30	0.08	0.80	0.01
Wetland	0	0.00	0.00	0.00	0.00	0.00	0.00
Disturbed	0	0.00	0.00	0.00	0.00	0.00	0.00
Turfgrass	0	0.00	0.00	0.00	0.00	0.00	0.00
Open Land	178	51228.40	287.80	185.10	1.04	14.20	0.08
Bare Rock	0	0.00	0.00	0.00	0.00	0.00	0.00
Sandy Areas	0	0.00	0.00	0.00	0.00	0.00	0.00
Unpaved Roads	0	0.00	0.00	0.00	0.00	0.00	0.00
LD Mixed	42	415.80	9.90	11.30	0.27	1.30	0.03
MD Mixed	49	2587.20	52.80	54.90	1.12	6.40	0.13
HD Mixed	425	22482.50	52.90	480.30	1.13	55.30	0.13
LD Residential	128	1280.00	10.00	34.60	0.27	3.80	0.03
MD Residential	927	49038.30	52.90	1047.50	1.13	120.50	0.13
HD Residential	0	0.00	0.00	0.00	0.00	0.00	0.00
Water	0						
Farm Animals				0.0		0.0	0.000
Tile Drainage		0.00		0.0		0.0	0.000
Stream Bank		956668.02		478.1		55.4	0.255
Groundwater				4207.9		96.5	0.260
Point Sources				0.0		0.0	0.000
Septic Systems				1176.3		0.0	0.473
Totals	1828	1085153.8		7682.3		354.2	

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