# Municipal GIS for Storm Water Inventory

Chester County

East Goshen Township

East Goshen Township

**Legend**
- Streams
- Edge of Pavement
- 5 Foot Contour
- Township Boundary
- Parcels

Feet
01,500  3,000  4,500  6,000

**Legend**
- StormDrain
- End Pipe
- Riser Pipe
- End Wall
- Storm Pipe
- Streams
- Edge of Paving
- 5 Foot Contour

BOW TREE DR

BEAUMONT DR

ACHOM WY

0  100  200  400  600  800 Feet
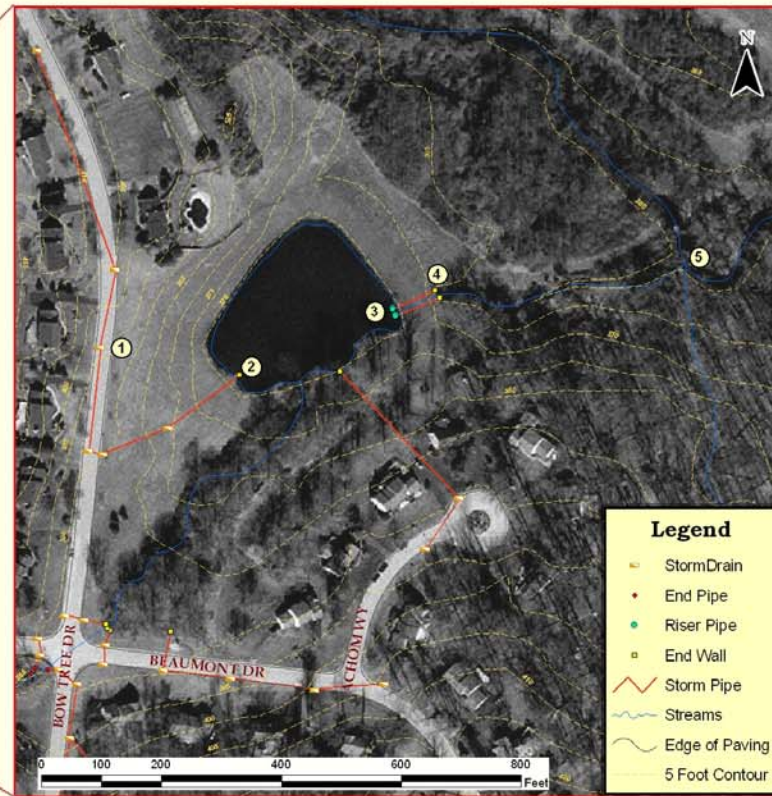

1 Storm water containing sediments, motor oil, fertilizers and other surface pollutants from the roads, residential, industrial and commercial properties wash into the municipal storm system through the storm drains.


2 Storm water enters retention pond through this endwall.


3 Riser Pipes discharge water from the retention pond after sediments and heavier pollutants settle to the bottom.


4 End Wall discharges to waters of the Commonwealth of Pennsylvania.


5 Storm Water Runoff meets Ridley Creek

Department of Geography and Planning

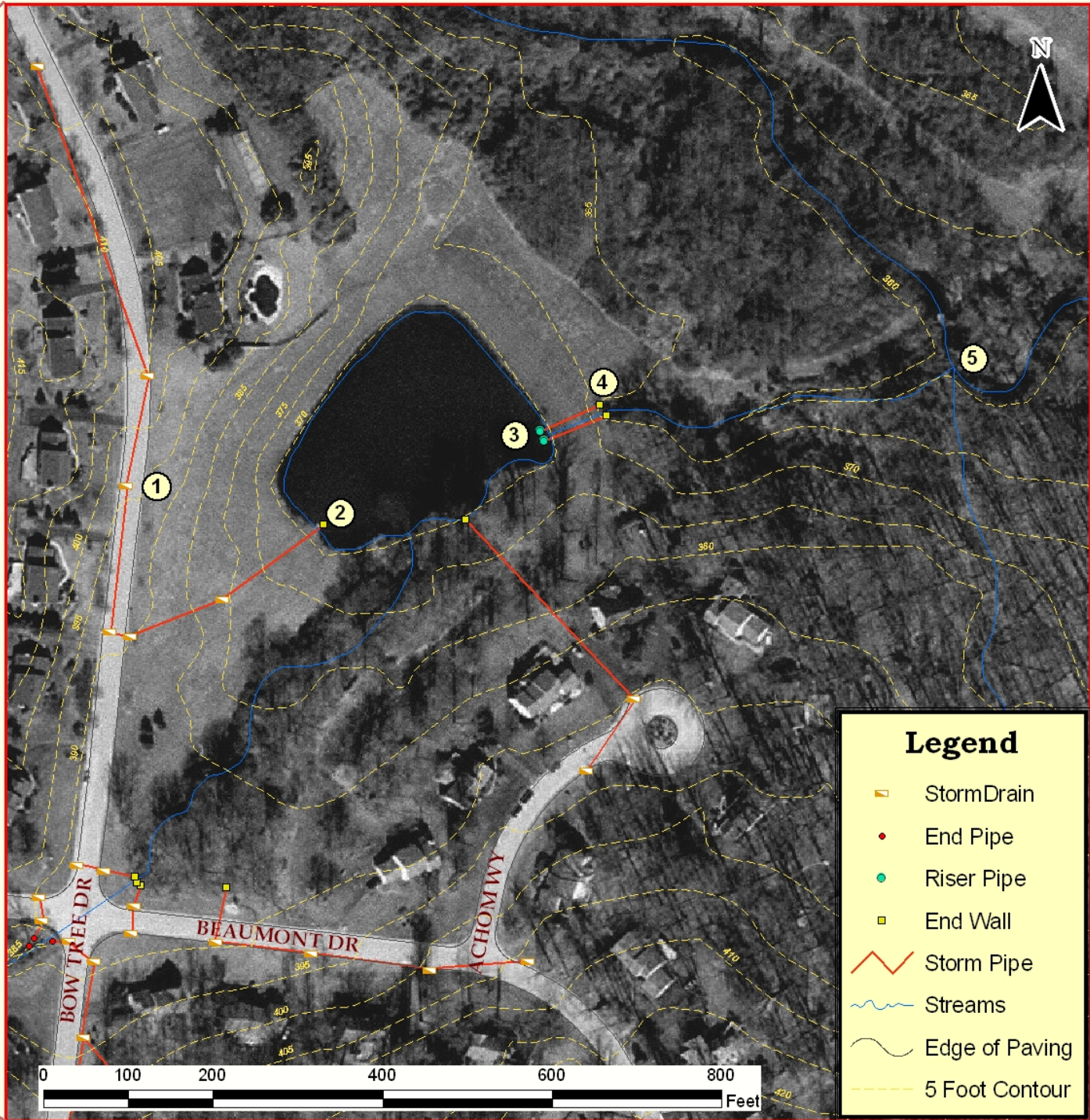Produced by Matthew Convery - December 8, 2005
GEO 534 Introdution to GIS
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References:
Chester County GIS, East Goshen Township GPS data (2001-2004) Pennsylvania Spatial Data Access (PASDA).

West Chester University

**Objective:**

This project is a demonstration of local municipalities incorporating GIS technology to map storm water infrastructure. Most of the municipalities within Chester County are required to complete a NPDES permit application. One major objective of the NPDES permit is to monitor water quality for storm run-off at the point it enters the stream network of the watershed. East Goshen Township used a Trimble backpack GPS unit to inventory it's storm water structures. The attribute data concerning the structures included – depth, material, pipe size and condition. My goal is to use this base information to calculate the drainage areas that outfall into the stream network of the watershed.

**Legend**

| | |
|---|---|
| 🔶 | StormDrain |
| 🔴 | End Pipe |
| 🟢 | Riser Pipe |
| 🟨 | End Wall |
| ∿ | Storm Pipe |
| ∿ | Streams |
| ∿ | Edge of Paving |
| ----- | 5 Foot Contour |

BOW TREE DR

BEAUMONT DR

ACHOM WY

N

0   100   200      400         600         800
Feet

# End Wall

# Retention Pond

# Riser Pipes / Outlet

# Endwall / Outfall

# Storm Water Entering Waters Of the Commonwealth (Ridley Creek)