

3. Identify the total number of discharge points from the MS4 and their identification numbers (e.g., "001") for the discharges identified in No. 2, above. Attach an additional sheet if necessary. A map may also be used to identify the discharge points.

4. List the title of the applicable TMDL(s) (as the name appears on the TMDL report):

5. Identify the Watershed name(s) and 8-digit Hydrologic Unit Code(s) (HUC) (see instructions):

6. List the name(s) of all municipalities subject to the TMDL(s) within the area of the same 8-digit HUC:

7. List the pollutant(s) and wasteload allocations (WLAs) (including units) that are identified in the TMDL(s) for the MS4:

8. What is the estimated current load(s) discharged by the MS4 for the pollutant(s) identified in the TMDL(s), and the percent reduction(s) necessary in order to achieve the WLA(s) assigned to the MS4?

9. Explain in the space below (or an attached sheet) how the current load(s) in No. 8, above, were estimated:

10. In the space provided, or on additional sheets, provide a list of all control measures or Best Management Practices (BMPs) that will be implemented to achieve the required pollutant reduction(s). Identify each BMP and indicate (1) the location(s) of the BMP (latitude/longitude, street name(s) or other locational information), (2) a timeline for implementation with interim milestones as appropriate, (3) how each BMP is expected to reduce the TMDL pollutant(s) in the receiving waters, (4) an estimate of the pollutant load entering the BMP, (5) the reduction (in lbs/year or %) of the TMDL pollutant(s) that are expected and how the estimate(s) were derived, (6) the rationale for selecting the BMP, and (7) a description of the planned inspection, operation and maintenance for the BMP.

SECTION B: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

1. Provide a narrative description of the drainage area of the MS4 within the UA that discharges to the Chesapeake Bay Watershed. The description should discuss pervious and impervious cover.

See attached

2. Identify areas where municipal infrastructure upgrades are planned and include an evaluation of the suitability of green infrastructure, low impact development (LID) or Environmental Site Design (ESD) BMPs.

See attached

3. Optional – Provide estimates of the current loads (lbs/year) of Nitrogen (N), Phosphorus (P) and Sediment being discharged annually to receiving waters in the Chesapeake Bay Watershed. Explain how the estimates were made.

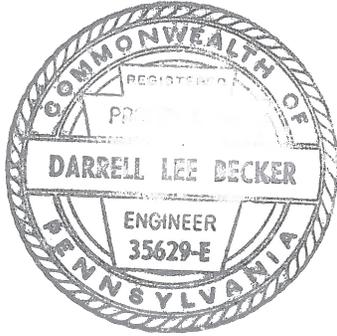
See attached.

4. In the space provided, identify the control measures from Section II F of the NOI Instructions (3800-PM-BPNPSM0100c), or others, which will be implemented in the MS4 to reduce pollutant load to the Chesapeake Bay Watershed. Attach additional sheets if necessary. Identify a name or number for each BMP and indicate (1) the location(s) of the BMP (latitude/longitude, street name(s) or other locational information), (2) a timeline for implementation with interim milestones as appropriate, (3) how each BMP is expected to reduce N, P and/or Sediment in the receiving waters, (4) the rationale for selecting the BMP, and (5) a description of the planned inspection, operation and maintenance for the BMP. Optionally, for each BMP you may provide an estimate of the reduction (in lbs/year or %) of N, P and Sediment that are expected and how the estimate(s) were derived.

See attached

ENGINEER CERTIFICATION

I, being a Registered Professional Engineer in Pennsylvania, do hereby certify to the best of my knowledge and belief, that the TMDL and/or Chesapeake Bay Pollutant Reduction Plans are designed to achieve pollutant reductions consistent with the WLA(s) in the TMDL and/or the goals in the Chesapeake Bay Watershed Implementation Plan.



Professional Engineer Name: Darrell L. Becker

Signature

Date: July 28, 2014

License No.: PE035629E

License Expiration Date: 9/30/15

Company: ARRO Consulting, Inc.

Telephone: 717-560-6065

RESPONSIBLE OFFICIAL CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowledge of violations. See 18 Pa. C.S. § 4904 (relating to unsworn falsification).

Phil Wolgemuth

Name of Responsible Official

Signature

717-261-3232

Telephone No.

July 28, 2014

Date

SECTION B: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

Page 1 of 13

- 1. Provide a narrative of the drainage area of the MS4 within the urbanized area (UA) that discharges to the Chesapeake Bay Watershed. The description should discuss pervious and impervious cover.**

The Borough of Chambersburg MS4 operates under the NPDES General Permit No. PAG 133704, of which coverage commenced on August 1, 2013 and will expire at midnight on July 31, 2018.

The Borough – located in the Conococheague Creek Watershed – regulates stormwater according to a Borough of Chambersburg Stormwater Management Ordinance adopted by Town Council on June 20, 2004 and amended on July 14, 2014. The Ordinance was originally drafted and adopted according to the Act 167 Conococheague Creek Watershed Plan as approved by the Pennsylvania Department of Environmental Protection Agency on November 10, 2003.

The Borough is located in United States Census Bureau Urbanized Area Code No. 15184.

The Borough storm sewer system is comprised of the following:

Number of catch basins: 1,983

Total length (feet or miles) of storm sewer pipes: 276,612 feet or 52.39 miles

Total length (feet or miles) of storm sewer open channels: 77,109 feet or 14.60 miles

Number of detention basins: 55

Number of subsurface detention areas: 13

Number of outfalls to Conococheague Creek and Falling Spring Creek: 103

The Borough of Chambersburg encompasses 4,434.99 acres with approximately 2,555.47 acres (57.62%) of pervious area and approximately 1,879.52 acres (42.38%) of impervious cover. Of the impervious cover, approximately 571.67 acres (30.42%) is covered with buildings, approximately 401.62 acres (21.36%) is covered with streets (Borough, State Routes and private) and approximately 417.11 acres (22.19%) is covered with parking lots. The remaining 489.12 acres (26.03%) is covered with items such as sidewalks, concrete slabs, swimming pools and decks that were not incorporated into the previously noted categories.

The following rationale was used to create the pervious and impervious cover calculations:

- Impervious street areas were calculated using street centerline GIS layer and assuming an average street width of 36 feet.
- Impervious alley areas were calculated using alley centerline GIS layer and assuming an average alley width of 12 feet.
- Structure area was calculated using the digitized structure layer made available with the 2013 Aerial Photography update.

SECTION B: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

- Parking lot area and in part total pervious and impervious areas – with the exception of areas described above – were calculated using the zoning map. An area within each zoning district which best represents what type of development it is comprised of was calculated to what percentage of impervious area it is made up of. Then that percentage was applied to the entire area of each zoning district to come up with a final area.

A copy of the Borough storm sewer system map is included as Exhibit A.

2. Identify areas where municipal infrastructure upgrades are planned and include an evaluation of the suitability of green infrastructure, low impact development (LID) or Environmental Site Design (ESD) BMPs.

The Borough of Chambersburg municipal operation already incorporates Structural BMP’s, as identified in the Pennsylvania Stormwater BMP Manual.

Structural BMP’s, for example, were incorporated in 2013 to address stormwater flooding by installing a subsurface infiltration facility similar to the Infiltration Trench, as identified in the Pennsylvania Stormwater BMP Manual as Structural BMP 6.4.4.

To remedy longstanding public alley flooding during large rain events the Borough designed subsurface infiltration facilities for Carolina Court and Belvidere Court that included the installation of a 48 inch perforated pipe, 20 feet in length, on a bed of clean coarse aggregate wrapped in geotextile fabric. Two inlets with metal grates collect stormwater from the cartway to be stored in the perforated pipe that allows water to infiltrate into the ground under the alley.

BMP 6.4.4: Infiltration Trench

Nutrient and sediment reduction:

TSS	85%	Source: Pennsylvania Stormwater BMP Manual
TP	85%	
TN	30%	

Maintenance: The Borough will inspect the inlets at least twice annually and clear the inlets of debris when necessary.

Exhibit B depicts the location of Carolina Court and Belvidere Court.

SECTION B: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

Page 3 of 13

Before MS4 Permit coverage expires on July 31, 2018, the Borough will incorporate Nonstructural and Structural BMP's, as identified in the Pennsylvania Stormwater BMP Manual, for the following projects:

North Chambersburg Improvements Project – The project will construct Parkwood Drive from its terminus in the Borough to connect to Grand Point Road in Greene Township, re-construct the private street between Norland Avenue and Parkwood Drive to be accepted by the Borough as a public street and expand the Norland Avenue and Fifth Avenue intersection. Parkwood Drive will be constructed with a 38 foot cartway without curbs to allow stormwater to flow to a vegetated swale along both sides of the street to be located within the street right-of-way and/or within a drainage easement located on adjacent private property, as identified in the Pennsylvania Stormwater BMP Manual as Structural BMP 6.4.8. The 26 foot private street between Norland Avenue and Parkwood Drive will be re-constructed according to Borough pavement standards; however, the width of the cartway will be less than the 36 foot local street requirement to qualify as Nonstructural BMP 5.7.1. To qualify as Structural BMP 6.4.8, there will be no on-street parking and no curbs to allow stormwater to flow to a vegetated swale along both sides of the street to be located within the street right-of-way and/or within a drainage easement located on adjacent private property. Finally, to accommodate a re-located sidewalk, the existing vegetated swale along the south side of Norland Avenue to the east of Fifth Avenue will be re-constructed approximately 600 feet as a subsurface infiltration facility similar to the Infiltration Trench, as identified in the Pennsylvania Stormwater BMP Manual as Structural BMP 6.4.4, within the street right-of-way. It is expected that the North Chambersburg Improvements Project – including the identified BMP's – will be financed with Intermodal Transportation Funds administered by PennDOT.

BMP 5.7.1: Reduce Street Imperviousness

Nutrient and sediment reduction:

TSS	Preventive	Source: Pennsylvania Stormwater BMP Manual
TP	Preventive	
TN	Preventive	

Maintenance: None.

SECTION B: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

Page 4 of 13

BMP 6.4.4: Infiltration Trench

Nutrient and sediment reduction:

TSS	85%	Source: Pennsylvania Stormwater BMP Manual
TP	85%	
TN	30%	

Maintenance: The Borough will inspect the inlets at least twice annually and clear the inlets of debris when necessary.

BMP 6.4.8: Vegetated Swale

Nutrient and sediment reduction:

TSS	50%	Source: Pennsylvania Stormwater BMP Manual
TP	50%	
TN	20%	

Maintenance: Property owners adjacent to both Parkwood Drive and the private street to be re-constructed and accepted by the Borough will be responsible for trimming the vegetated cover within the swale. Within the Borough limits, the Borough will be responsible for replacing the vegetated cover when necessary. Within the Borough limits, the Borough through the Land Use Permitting process will ensure that no permanent structures are constructed in the vegetated swale. Also, the Borough will routinely inspect the vegetated swales to ensure they remain free of debris that would impede stormwater flow.

IMPLEMENTATION TIMELINE

Note: Implementation is subject to receipt of Intermodal Transportation Funds administered by PennDOT.

January 1 through December 31, 2015

- Hire engineer to design and prepare construction plans for the project.

January 1 through December 31, 2016

- Publicly bid project to secure construction contractor.
- Construct project.

Exhibit C depicts the location of the North Chambersburg Improvements Project.

SECTION B: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

Page 5 of 13

South Street Project – The project will re-construct South Street from Hollywell Avenue to an unnamed alley, re-construct Pine Street from South Street to its terminus and re-construct the unnamed alley from South Street to West Catherine Street. To collect stormwater created by this project, an Infiltration Trench, as identified in the Pennsylvania Stormwater BMP Manual as Structural BMP 6.4.4, will be constructed approximately 130 feet between Pine Street and Buchanan Street within a drainage easement located on adjacent private property. Community Development Block Grant funding has been allocated to this project.

BMP 6.4.4: Infiltration Trench

Nutrient and sediment reduction:

TSS	85%	Source: Pennsylvania Stormwater BMP Manual
TP	85%	
TN	30%	

Maintenance: The property owner will be responsible for trimming the vegetated cover along the surface of the trench. The Borough will inspect the inlets at least twice annually and clear the inlets of debris when necessary.

IMPLEMENTATION TIMELINE

January 1 through December 31, 2015

- Publicly bid project to secure construction contractor.
- Construct project.

Exhibit D depicts the location of the South Street Project.

Pine Woods Park – This Borough-owned 4 acre parcel is located adjacent to the Conococheague Creek within the Floodway. The site was once an active recreation area; however, is now maintained by the Borough as a passive recreation/forested/open space area. The site may be suitable for both Non-Structural and Structural BMP's, specifically BMP 5.4.2 and BMP 6.7.1. According to the Pennsylvania Stormwater BMP Manual, the Chesapeake Bay Program's Riparian Handbook will be used as a guide to analyze existing conditions and to develop a plan for riparian buffer restoration at this location. An engineering firm experienced in riparian buffer conservation and restoration within the Chesapeake Bay Watershed will be hired to assist with this effort. In addition to meeting the Chesapeake Bay Pollutant Reduction Plan BMP requirement, establishing a riparian buffer at this location will provide a public education opportunity for the Borough, DEP and the Chesapeake Bay Foundation. It is expected that the Pine Woods Park project will be financed by the forthcoming Borough stormwater utility and/or with applicable federal or state grant funding.

SECTION B: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

BMP 5.4.2: Protect/Conserve/Enhance Riparian Areas

Nutrient and sediment reduction:

TSS	Preventive	Source: Pennsylvania Stormwater BMP Manual
TP	Preventive	
TN	Preventive	

Maintenance: None.

BMP 6.7.1: Riparian Buffer Restoration

Nutrient and sediment reduction:

TSS	65%	Source: Pennsylvania Stormwater BMP Manual
TP	50%	
TN	50%	

Maintenance: Before establishing the riparian buffer, the engineering firm hired for the project – in consultation with the Borough Shade Tree Commission – will prepare a maintenance plan to be implemented by the Borough. Most notably, the plan will provide guidance for care of the newly planted trees during canopy closure as well as the necessary watering, mulching and weed control schedules to be kept by the Borough.

IMPLEMENTATION TIMELINE

January 1, 2015 through December 31, 2016

- Establish stormwater utility.
- Hire stormwater utility staff and begin operation.

January 1 through December 31, 2017

- Hire engineering firm to help Borough staff analyze existing conditions and to develop a plan for riparian buffer restoration at this location.

January 1 through July 31, 2018

- Begin riparian buffer restoration at this location.

Exhibit E depicts the location of the Pine Woods Park project.

SECTION B: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

Page 7 of 13

- 3. Optional – Provide estimates of the current loads (lbs/year) of Nitrogen (N), Phosphorus (P) and Sediment being discharged annually to receiving waters in the Chesapeake Bay Watershed. Explain how the estimates were made.**

The Borough of Chambersburg's adopted 2014 budget calls on the Borough Manager to begin a process that will result in a separate stormwater utility being established by 2015. Planning is underway to develop the goals and objectives for the utility, the appropriate revenue collection methods and staffing levels to begin operation, per approval by Town Council as part of the 2015 budget. In addition to managing the municipal separate storm sewer system and floodplain management program, it is envisioned that the utility will implement the Chesapeake Bay Pollutant Reduction Plan.

SECTION B: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

Page 8 of 13

- 4. In the space provided, identify the control measures from Section II F of the NOI Instructions (3800-PM-BPNPS0100c), or others, which will be implemented in the MS4 to reduce pollutant load to the Chesapeake Bay Watershed. Attach additional sheets if necessary. Identify a name or number for each BMP and indicate (1) the location(s) of the BMP (latitude/longitude, street name(s) or other locational information), (2) a timeline for implementation with interim milestones as appropriate, (3) how each BMP is expected to reduce N, P and/or Sediment in the receiving waters, (4) the rationale for selecting the BMP, and (5) a description of the planned inspection, operation and maintenance for the BMP. Optionally, for each BMP you may provide an estimate of the reduction (in lbs/year or %) of N, P and Sediment that are expected and how the estimate(s) were derived.**

The Borough of Chambersburg municipal operation – as well as private property owners – already incorporate Nonstructural and Structural BMP's as identified in the Pennsylvania Stormwater BMP Manual.

For example, according Nonstructural BMP 5.9.1, a municipality is encouraged to use street sweeping equipment on a programmed basis to remove larger debris material and smaller particulate pollutants, preventing this material from clogging the stormwater management system and washing into receiving waterways/waterbodies.

The Borough maintains approximately 67 miles of streets, not counting state roads, private streets and alleys. All 67 miles are swept at least twice per year using a 2011 Elgin Pelican street sweeper. There is no street sweeping schedule, as mechanical breakdowns or employee illness will change whatever schedule we attempt to keep. The Street Department supervisor directs the street sweeper on a daily basis to which area of the Borough to address. Particular attention is paid to keeping storm sewer system inlets cleared of debris. In 2013 the street sweeper collected 222 tons of material.

Street sweeping begins "informally" in April and "formally" in May. The difference between the two is that we do not ticket cars that aren't moved from public street parking lanes until May. Street sweeping generally continues through the end of October. Since the sweeper sprays water, we generally do not run the sweeper during the cold months when there is potential for the water to freeze. However, if the weather stays unseasonably warm through November we can continue to operate.

In the fall, after the leaves start coming down, the Borough uses an ODB Vacuum Leaf Loader to collect leaves by the side of the street. This operation continues throughout the fall until all leaves are picked up. Last year, the vacuum leaf loader collected 20.8 tons of leaves.

SECTION B: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

BMP 5.9.1: Street Sweeping

Nutrient and sediment reduction:

TSS	85%	Source: Pennsylvania Stormwater BMP Manual
TP	85%	
TN	50%	

Since 2004 the Borough of Chambersburg has regulated stormwater management according to the Stormwater Management Ordinance adopted in Compliance with Act 167 and incorporating Best Management Practices as identified in the Pennsylvania Stormwater BMP Manual, which is referenced in the Ordinance.

Over the past ten years, approximately 350 acres of pervious land has been developed with residential, commercial and manufacturing land uses as well as associated public street networks according to approved Subdivision and Land Development Plans and associated Stormwater Management Plans, as prepared by Pennsylvania Registered Professional Engineers. As such, many Structural BMP's have been constructed as part of private property development – for example, those identified in the Pennsylvania Stormwater BMP Manual listed below – and are being maintained by private property owners:

BMP 6.4.1: Pervious Pavement with Infiltration Bed

Nutrient and sediment reduction:

TSS	85%	Source: Pennsylvania Stormwater BMP Manual
TP	85%	
TN	30%	

BMP 6.4.2: Infiltration Basin

Nutrient and sediment reduction:

TSS	85%	Source: Pennsylvania Stormwater BMP Manual
TP	85%	
TN	30%	

SECTION B: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

BMP 6.4.5: Rain Garden/Bioretention

Nutrient and sediment reduction:

TSS	85%	Source: Pennsylvania Stormwater BMP Manual
TP	85%	
TN	30%	

BMP 6.4.8: Vegetated Swale

Nutrient and sediment reduction:

TSS	50%	Source: Pennsylvania Stormwater BMP Manual
TP	50%	
TN	20%	

BMP 6.6.3: Dry Extended Detention Basin

Nutrient and sediment reduction:

TSS	60%	Source: Pennsylvania Stormwater BMP Manual
TP	40%	
TN	20%	

BMP 6.8.1: Level Spreader

Nutrient and sediment reduction:

TSS	20%	Source: Pennsylvania Stormwater BMP Manual
TP	10%	
TN	5%	

According to the Borough Zoning Code, Section 300-98A(1), no building or structure shall be erected, constructed, reconstructed, altered, moved, extended, expanded, enlarged, demolished or razed in the municipality until a Land Use Permit has been issued by the Zoning Officer certifying that the plans and intended use are in conformity with the Zoning Code and other Code of the Borough of Chambersburg regulations. While Land Use Permits are secured for many land uses that create impervious cover – such as new dwellings,

SECTION B: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

Page 11 of 13

commercial and manufacturing establishments – Land Use Permits have not been specifically required for new standalone parking lot or driveway construction projects. Requiring Land Use Permits for new standalone parking lot or driveway construction projects will allow the Borough the opportunity to analyze the proposed project to determine whether a Drainage Plan is required according to the Stormwater Management Ordinance exemption criteria.

If the exemption criteria is met, a Drainage Plan is not required; however, the project must comply with the Stormwater Management Ordinance groundwater recharge and water quality requirements.

If the exemption criteria is not met, a professional engineer or land surveyor registered by the Commonwealth of Pennsylvania must be hired to prepare a Drainage Plan, in addition to complying with the groundwater recharge and water quality requirements. The plan will be reviewed/approved by ARRO Consulting, Inc. with the applicant being invoiced for all associated plan review costs incurred by the Borough and consulting engineer according to the Master Fee Schedule, as approved by Town Council.

In addition, the Borough Zoning Code provides two provisions that can encourage low impact development (LID), Environmental Site Design (ESD) BMPs as well as Nonstructural and Structural BMP's, as identified by the Pennsylvania Stormwater BMP Manual.

First, the Zoning Code parking lot regulations encourage implementation of Nonstructural BMP 5.7.2 (Reduce Parking Imperviousness), as identified by the Pennsylvania Stormwater BMP Manual.

According to Section 300-77C, in the case of developments such as shopping centers or other commercial centers which would be required to provide more than 50 off-street parking spaces, the developer must set aside space to accommodate 100% of the area necessary to provide the parking requirements, but, upon the request of the developer, if agreed by the Borough, the developer may be permitted to set aside space to accommodate 100% of the area necessary to provide the parking requirements established by this chapter but not be required to construct more than 80% of the required parking spaces. In the event the developer is permitted to construct fewer than the required parking spaces, the remainder of the parking area set aside must be kept free of all construction and be planted and maintained as a grassy area. The Borough may require construction of the remaining parking spaces at any time by the then owner of the premises upon giving the owner not less than six months' advance written notice.

In 2007 Town Council approved a Land Development Plan for the Chambersburg Area Senior High School where Section 300-77C provisions were applied for the construction of 62% of the required parking stalls with 38% remaining in grass. In addition, the Zoning Hearing Board granted variances for lot coverage up to 31.31%, off-street parking spaces totaling 2,081 (2,822 spaces required). To date the Borough has not required construction of the remaining parking spaces.

SECTION B: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

For future development, the Borough will more aggressively encourage developers to apply the Zoning Code, Section 300-77C provisions in conjunction with new parking lots constructed as part of a shopping center or other commercial centers where existing parking lots are retrofitted. In these instances, developers will be encouraged to apply Nonstructural BMP 5.7.2 along with other Structural BMP's frequently associated with parking lot construction.

BMP 5.7.2: Reduce Parking Imperviousness

Nutrient and sediment reduction:

TSS	Preventive	Source: Pennsylvania Stormwater BMP Manual
TP	Preventive	
TN	Preventive	

Maintenance: None.

Exhibit F depicts the Zoning Map to identify the Central Core, Distributed Commercial Highway, Medium Manufacturing and Heavy Manufacturing zoning districts where shopping centers or other commercial centers which would be required to provide more than 50 off-street parking spaces are permitted.

Second, the Zoning Code provides regulations for Planned Residential Development pursuant to Article VII of the Pennsylvania Municipalities Planning Code. In the case of planned projects consisting of 10 acres or more, the regulations provide an added degree of variety and flexibility in the placement, bulk and interrelationship of the buildings and uses within the planned project and the implementation of new design concepts while, at the same time, maintaining the overall intensity of use, density of population and amounts of light, air, access and open space as specified by the Zoning Code. As such, the regulations can be used to encourage implementation of Nonstructural BMP 5.5.1 (Cluster Uses at Each Site; Build on the Smallest Area Possible), as identified by the Pennsylvania Stormwater BMP Manual.

In the Borough there is one 93 acre parcel of land (Franklin County Tax Parcel No. 04-1G01-001) bordered on three sides by the Conococheague Creek where the Planned Residential Development regulations as well as Low Impact Development and Environmental Site Design concepts and Nonstructural BMP 5.5.1 could be effectively applied. The entire parcel is located in a Moderate Density Residential zoning district with land adjacent to the Conococheague Creek being located in the 100 Year Floodplain.

Since no Subdivision and Land Development Plans have been submitted for this parcel, it is an opportune time for the Borough to meet with the property owner to discuss Nonstructural BMP 5.5.1, the Planned Residential Development regulations and the opportunity for the property owner and future developer/builder to embrace Low Impact Development and

SECTION B: CHESAPEAKE BAY POLLUTANT REDUCTION PLAN

Page 13 of 13

Environmental Site Design concepts and Nonstructural BMP 5.5.1 from the start of the site planning and development process.

BMP 5.5.1: Cluster Uses at Each Site; Build on the Smallest Area Possible

Nutrient and sediment reduction:

TSS	Preventive	Source: Pennsylvania Stormwater BMP Manual
TP	Preventive	
TN	Preventive	

Maintenance: None.

Exhibit G depicts the Franklin County Tax Parcel No. 04-1G01-001 location.

IMPLEMENTATION TIMELINE

August 1, 2014 through July 31, 2018

- Require Land Use Permits for new standalone parking lot or driveway construction projects.
- Apply the Borough Zoning Code, Section 300-77C provisions and associated Nonstructural and Structural BMP's.
- Meet with the owner of the 93 acre parcel of land to discuss Nonstructural BMP 5.5.1, the Planned Residential Development regulations and the opportunity for the property owner and future developer/builder to embrace Low Impact Development and Environmental Site Design concepts and Nonstructural BMP 5.5.1 from the start of the site planning and development process.

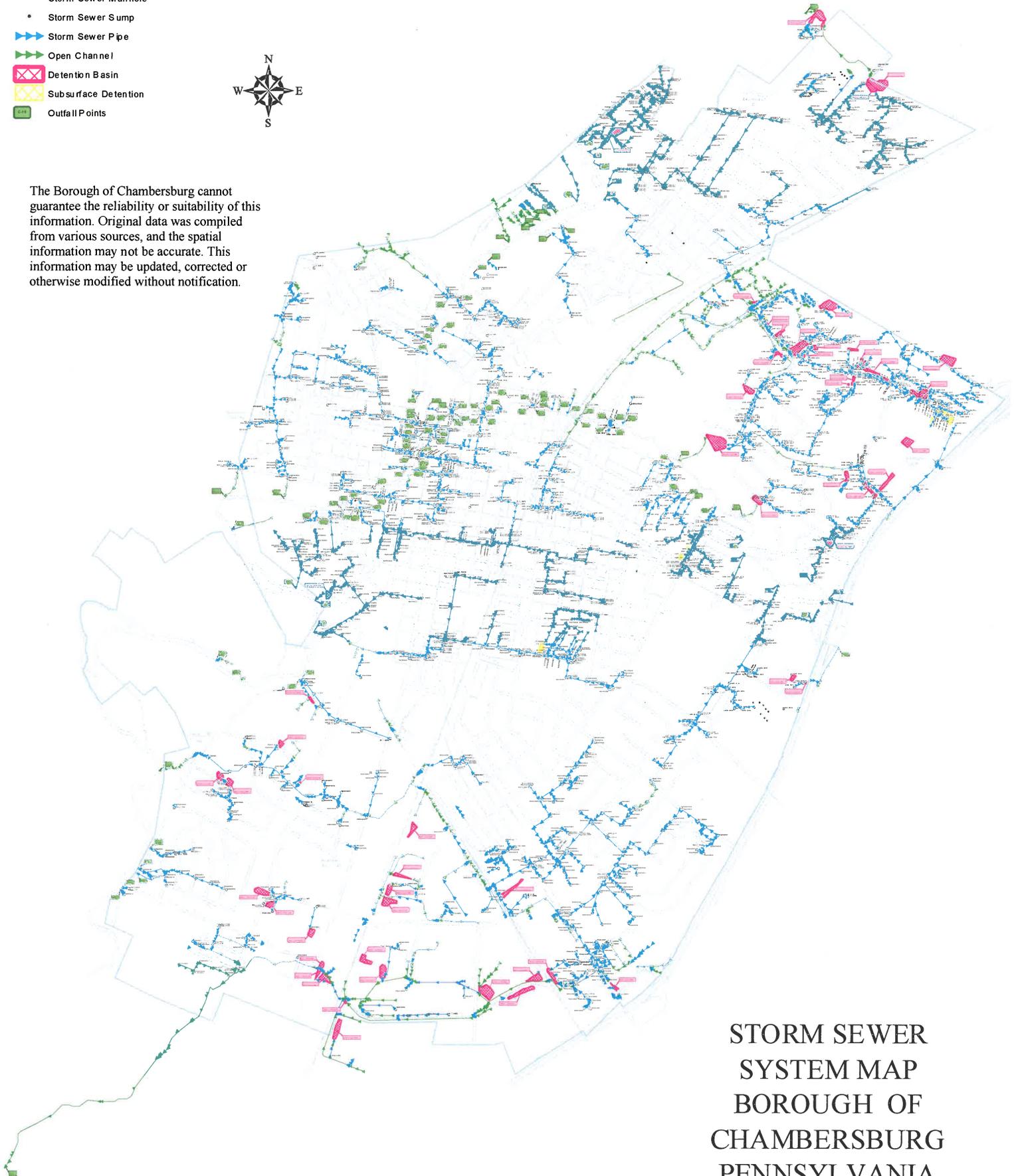
LEGEND

- ◻ Inlet
- ◻ Catch Basin
- Storm Sewer Manhole
- Storm Sewer Sump
- ▶▶▶ Storm Sewer Pipe
- ▶▶▶ Open Channel
- ◻ Detention Basin
- ◻ Subsurface Detention
- ◻ Outfall Points



EXHIBIT "A"

The Borough of Chambersburg cannot guarantee the reliability or suitability of this information. Original data was compiled from various sources, and the spatial information may not be accurate. This information may be updated, corrected or otherwise modified without notification.



**STORM SEWER
SYSTEM MAP
BOROUGH OF
CHAMBERSBURG
PENNSYLVANIA**



EXHIBIT "B"

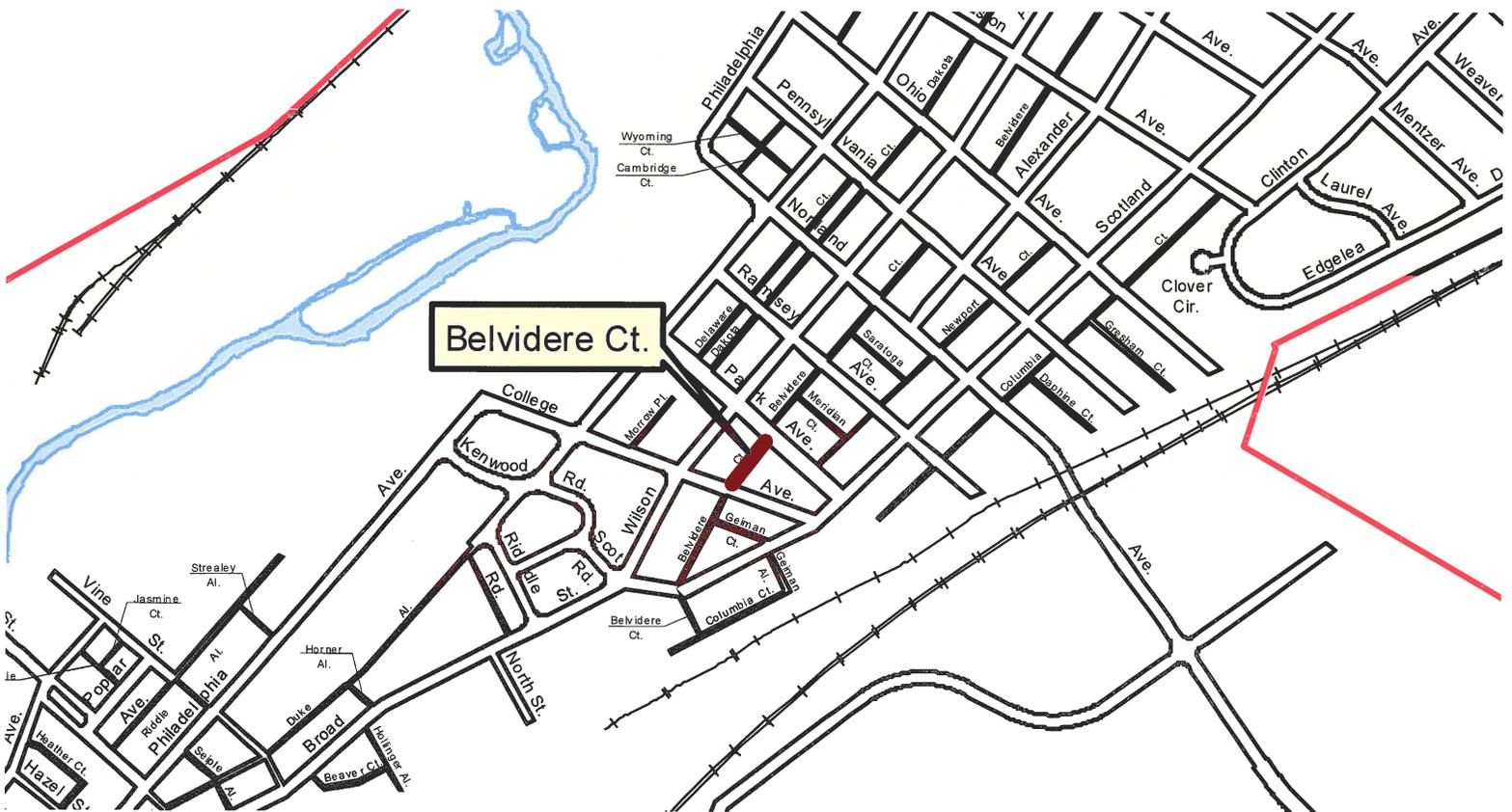


EXHIBIT "C"

North Chambersburg Improvements Project



(6)
Improvements To Intersection Of
Fifth and Norland Avenue
Three Traffic Lanes and
Stormwater Drainage

(9)
St. Paul Drive
Extension

(8)
Parkwood Drive
Extension



EXHIBIT "D"

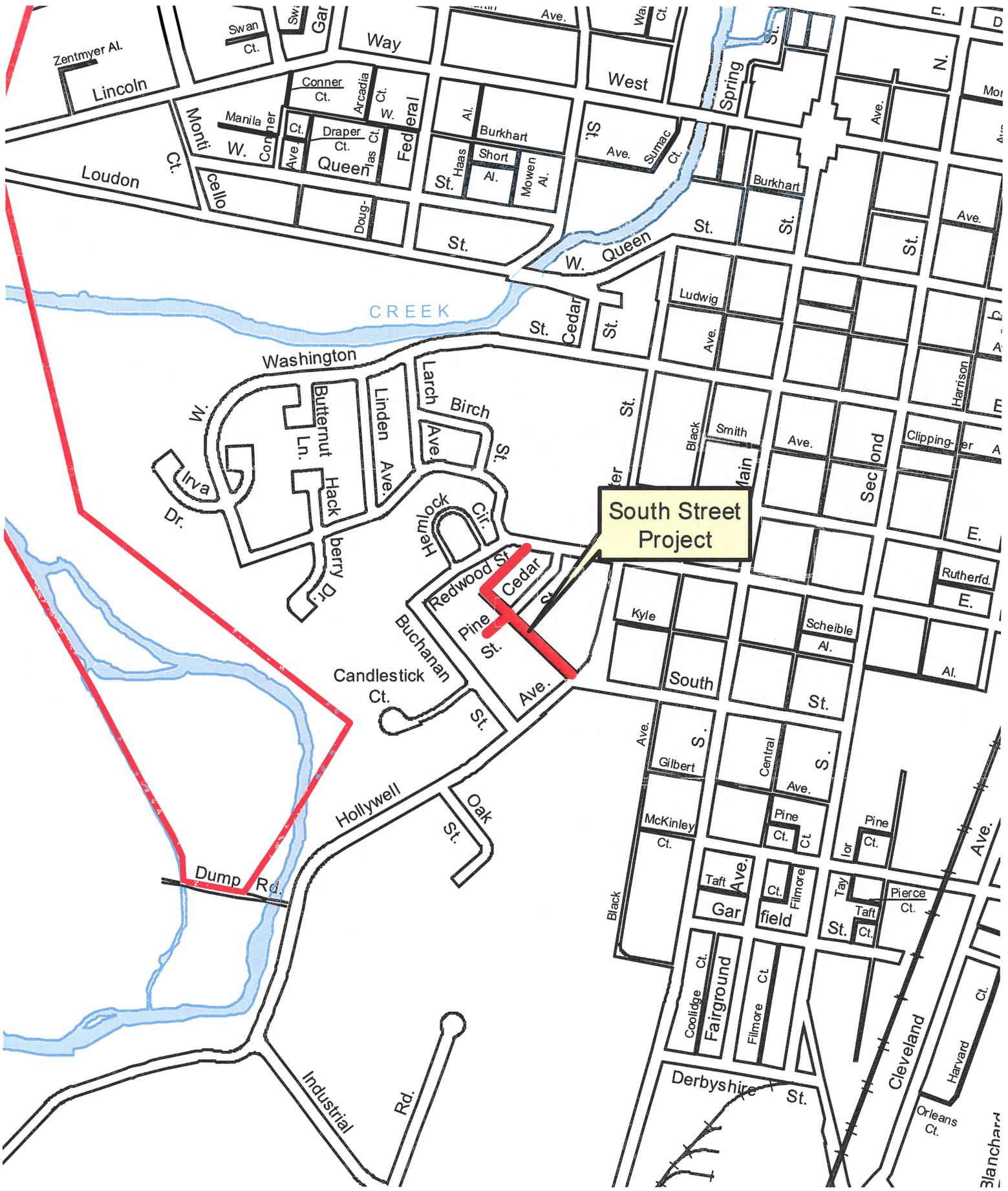




EXHIBIT "E"



EXHIBIT "F"

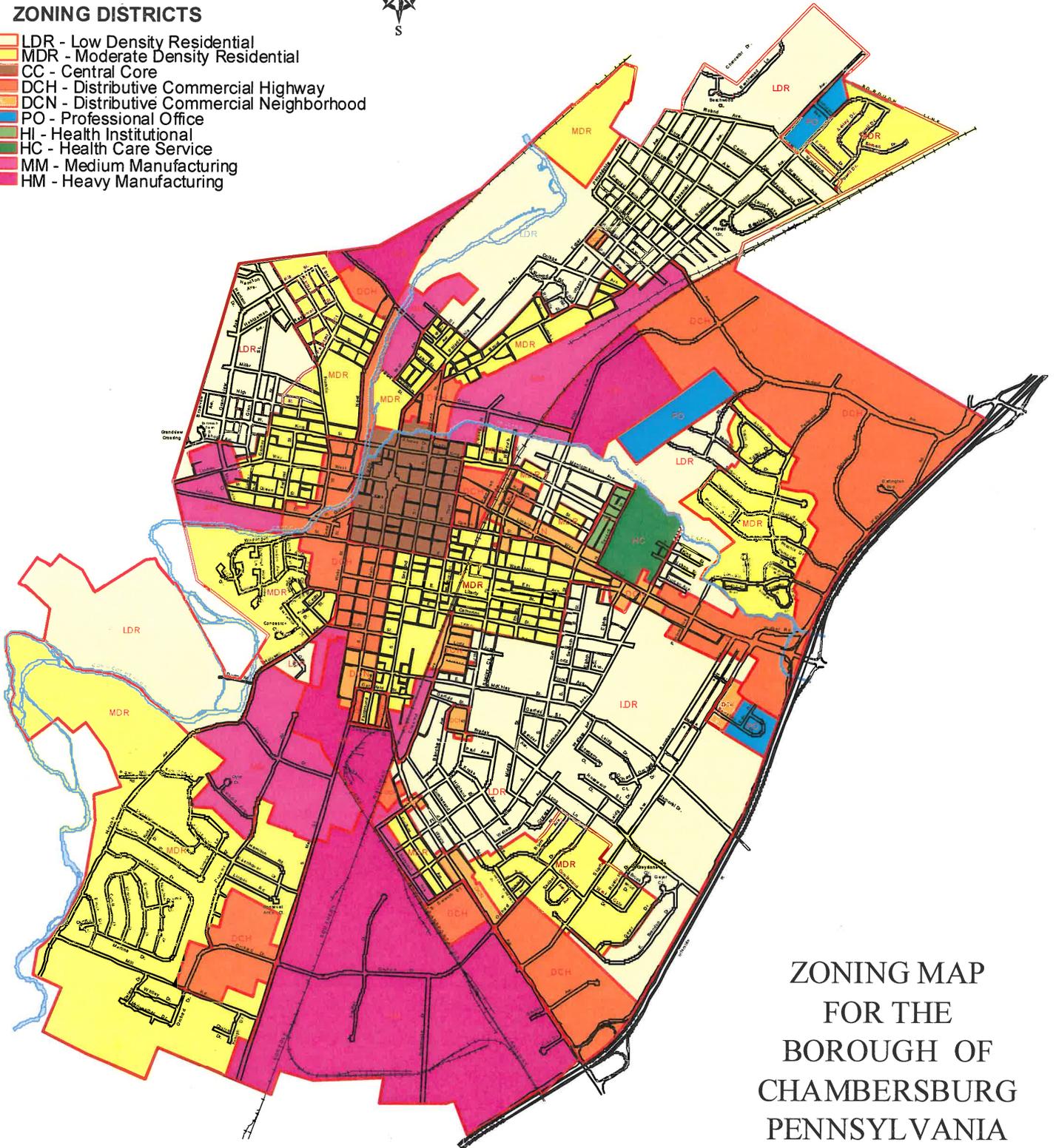
LEGEND

— Borough Boundary Line



ZONING DISTRICTS

- LDR - Low Density Residential
- MDR - Moderate Density Residential
- CC - Central Core
- DCH - Distributive Commercial Highway
- DCN - Distributive Commercial Neighborhood
- PO - Professional Office
- HI - Health Institutional
- HC - Health Care Service
- MM - Medium Manufacturing
- HM - Heavy Manufacturing



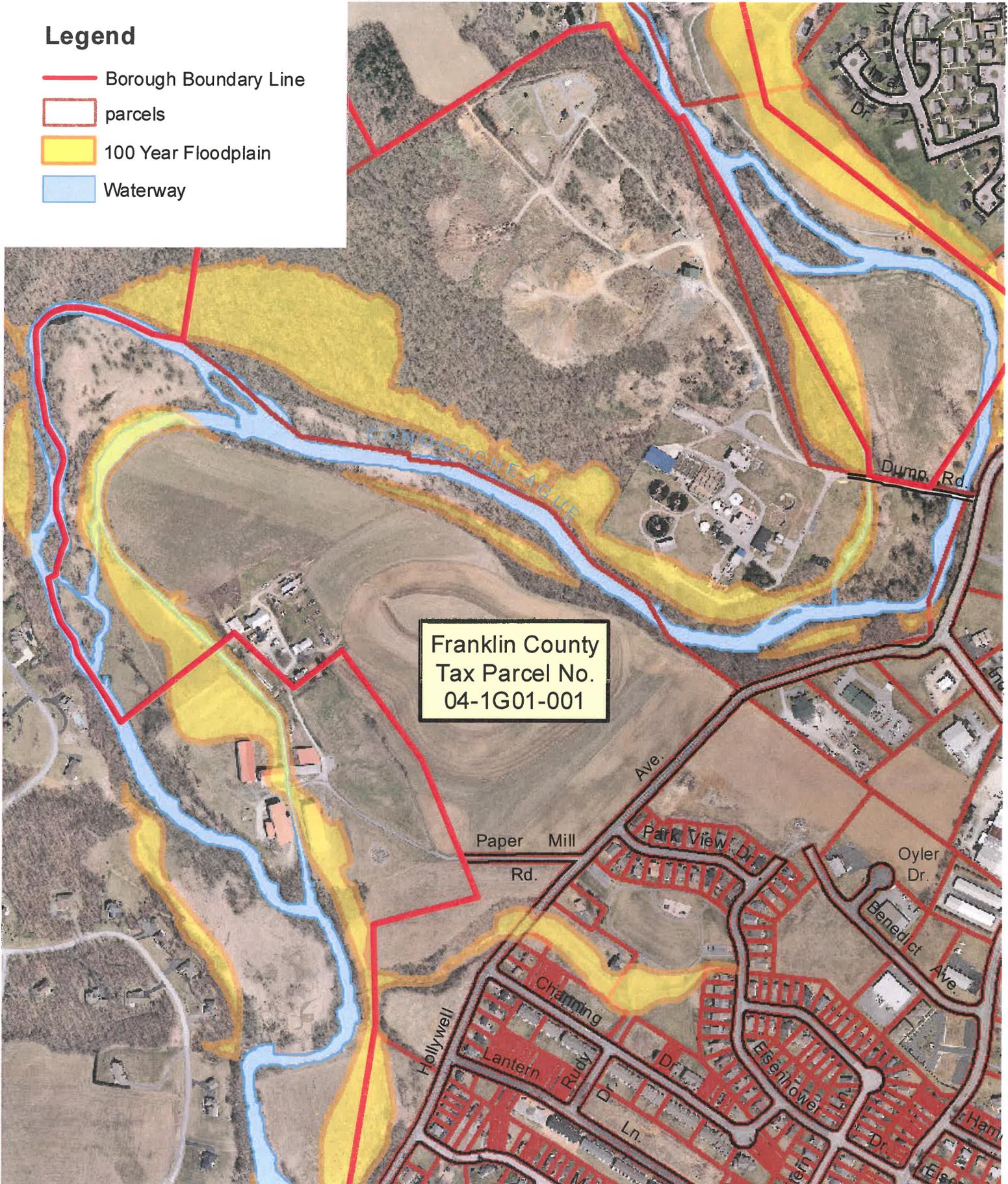
ZONING MAP
FOR THE
BOROUGH OF
CHAMBERSBURG
PENNSYLVANIA



EXHIBIT "G"

Legend

-  Borough Boundary Line
-  parcels
-  100 Year Floodplain
-  Waterway



Franklin County
Tax Parcel No.
04-1G01-001