K&W
ENGINEERS • CONSULTANTS

RAID
AUG 26 2010
BY: Denise Miller

August 24, 2010

East Fallowfield Township
Attn: Board of Supervisors
2264 Strasburg Road
East Fallowfield, PA 19320

Re: Coatesville Area School District – South Brandywine Middle School
K&W Project No. 2041.004

Dear Board Members:

213 Granite Run Drive
Lancaster, PA 17601
(717) 735-9531
fax (717) 735-9532
www.kandwengineers.com

470 Friendship Road, Suite 100
Harrisburg, PA 17111
(717) 635-2835
fax (717) 635-2836
www.kandwengineers.com

We are in receipt of Della Penna Engineering, Inc.'s review letter dated July 12, 2010 for the above-referenced project. Accordingly, we have made the necessary revisions to address the comments contained therein and, on behalf of the Coatesville Area School District (CASD), offer responses to said comments below (original comments are in bold).

Report Comments

1. **There are sheets drainage area plan sheets 3 and 4 in the pocket in the report. Should there be sheets 1 and 2 also?**
   Response: The plan sheets 3 and 4 are from the Post-Construction Stormwater Management Plan. The sheets 1 and 2 were a Cover Sheet and a Existing Features Plan, similar to what is provided in the Land Development Plans.

2. **Hydrographs 3 and 4 in the report reference Post B – Detained with the elementary school and without the elementary school. Is this just carry over labeling from the old concept when the school was going to be rehabbed? Do the "w/ Elem. School" design account for the proposed design and impervious depicted on the current plans?**
   Response: Hydrograph 3 refers to the proposed condition assuming that a proposed elementary school will be added to the site in the future. Hydrograph 4 refers to what is depicted on the land development plans. Hydrograph 3 accounts for additional 5.30 acres of impervious cover (besides what is shown on the Land Development Plans), as noted on Page 3 of the Narrative.

3. **Several discrepancies were noted in the storm sewer design calculations: OSB to EW-C appears to be listed twice; the diagram for I65 to EX11 is not correct; OSB to Outfall is listed a third time. Calcs should be rechecked and appropriate diagrams included.**
   Response: The storm sewer design calculations have been updated as necessary in Appendix C.

4. **Need to include inlet report for I44-I30-I32, I31-Outfall.**
   Response: The inlet report of the requested storm sewer routing has been included in Appendix C.

5. **Handwritten Existing Pipe Analysis for existing culvert analyses is so light it is not legible.**
   Response: The existing pipe analysis in Appendix C has been updated so that it is legible.

Plan Comments

6. **Need to include basin cross-section details for each basin which should include elevations, berm widths, outlet pipe specifics, anti-seep collar locations, key trench, etc.**
   Response: Details for the basin cross-sections are included on the Utility Profiles.

7. **Add stone trenches to bottom of each of the basins and forebays. We have been requiring or retrofitting this in many of the basins in the township to help get the water through the surface layer. During construction, the bottom surface of the basins always seems to get a film of sediment and / or scum that prevents water from infiltrating. This usually seems to work. The trench is completely wrapped in fabric then the top is cut off after complete stabilization is achieved.**
   Response: Stone trenches have been added to the basins and forebays. Please see the Grading and Utility Plans.

8. **Make sure you go through the Township Stormwater Management Ordinance (No. 2004-04). Mainly deals with easements, O&M and agreements, not necessary design issues.**
   Response: Noted.

If you should have any questions or require any additional information regarding this submission, please do not hesitate to contact me. We look forward to discussing these plans with you in further detail. Thank you.

Sincerely,

Kurowski & Wilson, LLC

Brian Bingeman, RLA
Project Manager

Enclosures

cc: Mr. William Androwick – CASD
Mr. Kenneth R. Johnson – Gilbert Architects

1. **Development Information**

Name of Development South Brandywine Middle School

Developer Name Coatesville Area School District

Address 1029 E. Lincoln Highway

Coatesville, PA 19320

Telephone # (610) 466-2448

2. **Location of Development**

a. County Chester

b. Municipality East Fallowfield

c. Address or Coordinates 600 Doe Run Road, Coatesville PA 19320

d. Tax Parcel # 47-4-133

e. USGS Quad Name Coatesville

inches up 14.0 over 13.2

from bottom right corner of map.

3. **Type of Development Proposed**

(check appropriate box)

☐ Residential ☐ Multi-Residential

Describe

☐ Commercial ☒ Institutional

Describe New school building to replace existing middle school building located at same site

☐ Brownfield Site Redevelopment

☐ Other (specify)

4. **Size**

a. # of lots 1 # of EDUs 21

b. # of lots since 5/15/72 1

c. Development Acreage 47

d. Remaining Acreage 4.5

5. **Sewage Flows** 8,350 gpd

6. **Proposed Sewage Disposal Method**

(check appropriate boxes)

a. ☒ Sewerage System

☒ Existing (connection only) ☐ New (extension)

☒ Public ☐ Private

☐ Pump Station(s)/Force Main ☒ Gravity

Name of existing system being extended

Interceptor Name West End

Treatment Facility Name PA American Water Coatesville Wastewater Treatment Plant

NPDES Permit # PA 0026859

b. ☐ Construction of Treatment Facility

☐ With Stream Discharge

☐ With Land Application (not including IRSIS)

☐ Other

☐ Repair?

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

c. ☐ Onlot Sewage Disposal Systems

(check appropriate box)

☐ Individual onlot system(s) (including IRSIS)

☐ Community onlot system

☐ Large-Volume onlot system

d. ☐ Retaining tanks

Number of Holding Tanks

Number of Privies

7. ☒ **Request Sewage Facilities Planning Module forms in electronic format**

8. **Request for Planning Exemption**

a. Protection of rare, endangered or threatened species

Check one:

☒ The "PNDI Project Environmental Review Receipt" is attached.

or

☐ A completed "PNDI Project Planning & Environmental Review Form," (PNDI Form) is attached. I request DEP staff to complete the required PNDI search for my project. I realize that my planning exemption will be considered incomplete and that the DEP processing of my planning exemption request will be delayed, until a "PNDI Project Environmental Review Receipt" and all supporting documentation from jurisdictional agencies (when necessary) is/are received by DEP.

Applicant or Consultant Initials

b. ☒ Plot Plan Attached ☐ Site Reports Attached

c. Onlot Disposal Systems

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

(Signature of Municipal Official) / Date

Name (Print) / Title

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

Telephone #

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

(Signature of SEO) / Date

Name (Print) / Certification #

Telephone #

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

(Signature of Project Applicant/Agent) / Date

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

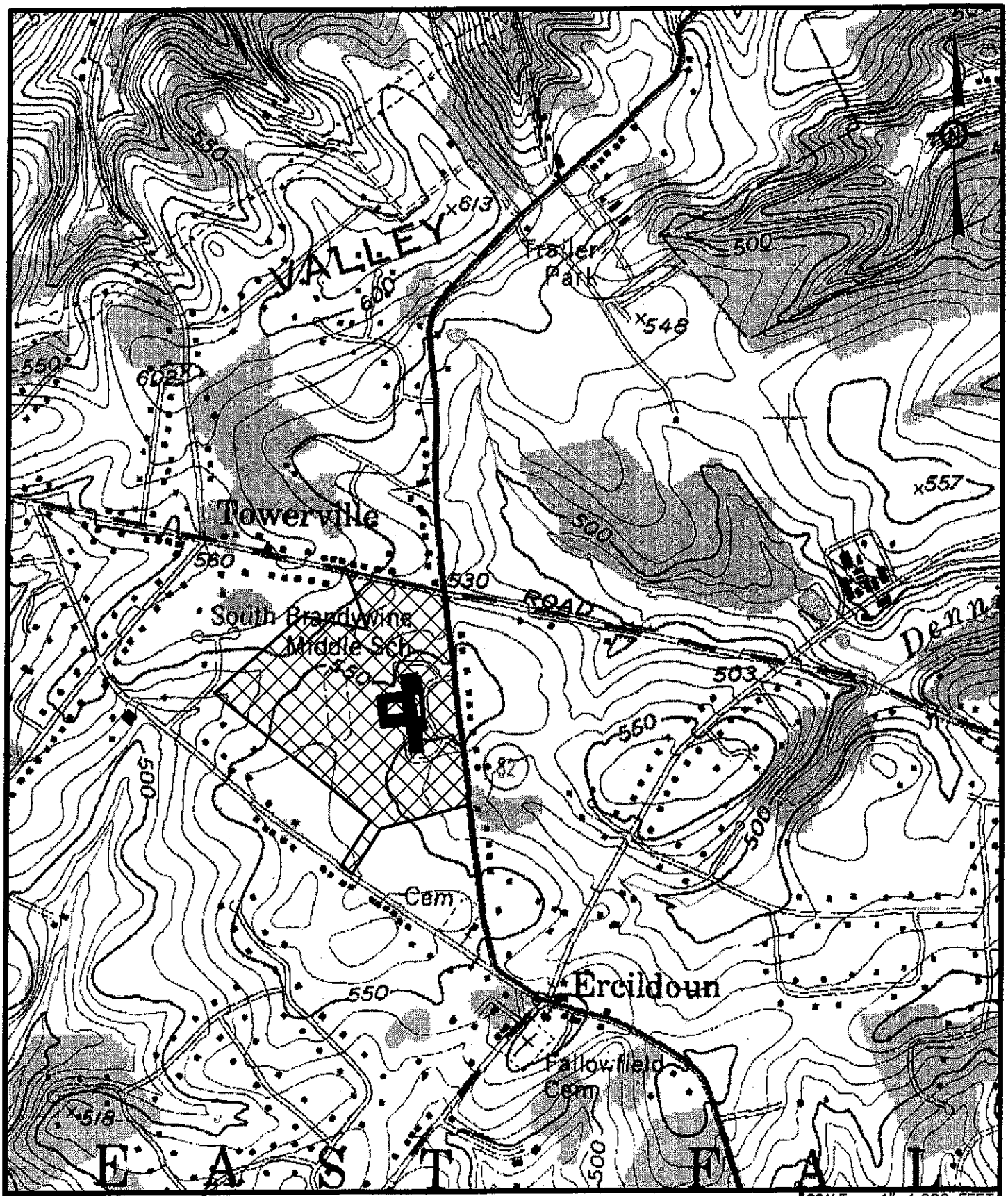
Based upon written documentation, I certify that the facilities proposed for use have capacity and that no overload exists or is projected within 5 years. (Attach documents.)

(Signature of Municipal Official) / Date

Name (Print) / Title

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

Telephone #



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213 Granite Run Drive
Lancaster, PA 17601
phone // 717.735.9531
fax // 717.735.9532

LOCATION MAP

SOUTH BRANDYWINE MIDDLE SCHOOL

COATESVILLE, PA USGS QUADRANGLE

EAST FALLOWFIELD TOWNSHIP — CHESTER COUNTY, PA

SCALE:	1"=1,000 FEET
DATE:	8-16-2010
K&W PROJECT:	2041.004
DRAWN BY:	KEG
CAD DRAWING:	2041002-A_pldCVR.dwg
SHEET:	1 OF 1

XRefs: P:\2000\2041\002 - South Brandywine MS - Additions and Renovations\Cad\dwg\Xrefs\2041002-01_xrpldTB.dwg
Images: G:\Maps\USGS\PA\Coatesville.tif

P:\2000\2041\002 - South Brandywine MS - Additions and Renovations\Cad\dwg\LDP\2041002-A_pldCVR.dwg 08-16-2010 8:37:29 AM BY: kgiffin

PROJECT NARRATIVE

SOUTH BRANDYWINE MIDDLE SCHOOL

K & W PROJECT NO. 2041.004

The Coatesville Area School District is in the design phase of developing the site of the existing South Brandywine Middle School. The project site is located at 600 Doe Run Road in East Fallowfield Township, Chester County, PA. The proposed school development consists of the demolition of the existing middle school and the construction of a new middle school building at the same site, and will be constructed with associated site improvements comprised of new access drives, stormwater management facilities, and utility connections. Of the 51.5 acres of project property, an estimated 47 acres will be developed.

The existing project site is currently used as a school with adjoining athletic fields. The surrounding land uses include single-family residential, commercial and open space (township parklands).

Currently, public sanitary sewer service is unavailable to the site. The school currently discharges to an on-lot system constructed in the 1950's. A tap-in to the existing collection system will need to be constructed. A sanitary sewer collection line is available for connection in the Brook Crossing Development, located approximately one-half mile to the north of the site. This line collects sewage from residences in the Brook Crossing Development and conveys flow to the PA American Water Coatesville Wastewater Treatment Plant. The existing line discharges into PA American Water Coatesville Wastewater Treatment Plant and then discharges to the West Branch Brandywine Creek.

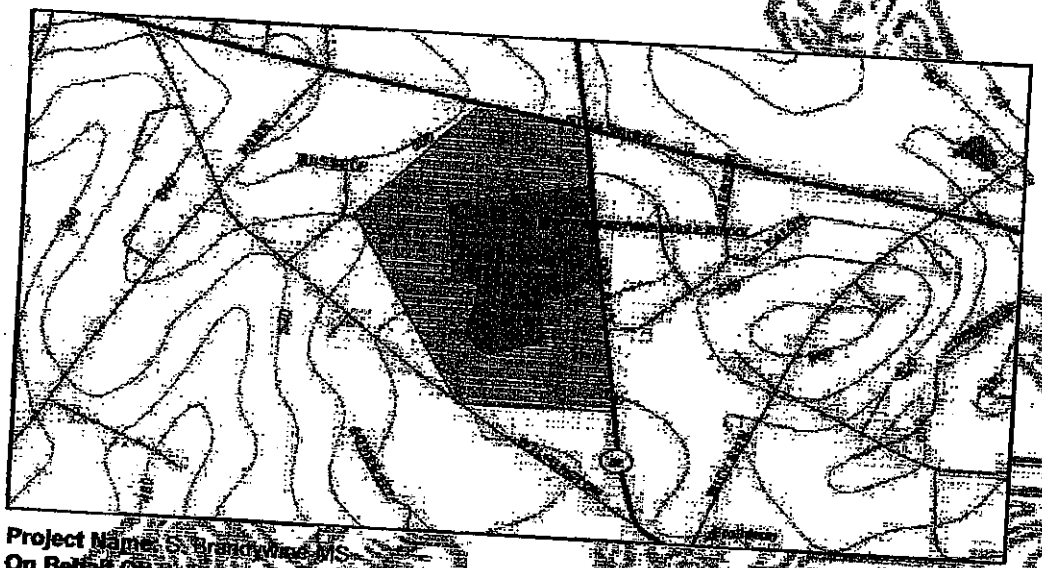
The Pennsylvania Department of Education maximum student capacity for the new school is 835 people (750 students and 85 staff). Based upon connecting to a public sanitary sewer system (10 GPD per person), the total projected sewer flow would be 8,350 GPD (21 EDU based on 400 GPD/EDU). Actual student projections for the facility are ±625 new students. Sewage will be conveyed from the project site via a pump station to be located on the school property and a force main to connect to the existing sanitary system in the Brook Crossing development.

East Fallowfield is currently in the process of updating their Act 537 Plan. Currently, the school property is not designated for public sewer.

PNDI Project Environmental Review Receipt

Project Search ID: 20090223180233
Project Name: S. Brandywine MS
Date: 2/23/2009 2:47:51 PM

Project Location



Location Accuracy

Project locations are assumed to be both precise and accurate for the purposes of environmental review. The agent/owner of the Project Review Receipt is solely responsible for the project location and thus the correctness of the Project Review Receipt content.

0 Known Impacts

Under the Following Agencies' Jurisdiction:

None

Project Name: S. Brandywine MS
On Behalf Of: Self
Project Search ID: 20090223180233
Date: 2/23/2009 2:47:43 PM
# of Potential Impacts: 0
Jurisdictional Agency:
Project Category: Development,New public/community development (school, library, church, museum)
Project Location
Decimal Degrees: 39.951600°N, -75.6[illegible]87°W
Degrees Minutes Seconds: 39° 57' 6.1[illegible]", -75° 36' 50.48[illegible]"W
Lambert: 604421.01[illegible]6143, 384336.7899[illegible]213 ft
ZIP Code: 19320
County: Chester
Township/Municipality: EAST FALLOWFIELD
USGS 7.5 Minute Quadrangle ID: 794
Quadrangle Name: COATESVILLE
Project Area: 65.1 acres

Pennsylvania State Programmatic General Permit (PASPGP)

Please note that ag uses of PNDI search results projects requiring a Chapter 105 DEP individual permit or GP 5, 6, 7, 8, 9 and 11 in certain counties (Adams, Berks, Bucks, Carbon, Chester, Cumberland, Delaware, Lancaster, Lebanon, Lehigh, Monroe, Montgomery, Northampton, Schuylkill and York) are required by DEP to comply with the bog turtle habitat screening requirements of the PASPGP.

APPLICANT INITIALS: PD

PNDI Project Environmental Review Receipt

Project Search ID: 20090223180233
Project Name: S. Brandywine MS
Date: 2/23/2009 2:47:51 PM

Pennsylvania Natural Diversity Inventory (PNDI) records do **NOT** indicate any known impacts on special concern species and resources within the project area. DEP requires a signed copy of this receipt with permit applications being submitted as indication that an environmental review has been conducted and completed. See DEP PNDI policy at www.naturalheritage.state.pa.us for more information.

Based on the information you provided, no further coordination is required by the Pennsylvania Game Commission, the Pennsylvania Fish and Boat Commission, or the Pennsylvania Department of Conservation and Natural Resources with regard to special concern species, natural plant communities, or outstanding geologic features. This response does not reflect potential agency concerns regarding impacts to other ecological resources, such as wetlands.

Based on the project-specific information you provided, no impacts to federally listed, proposed, or candidate species are anticipated. Therefore, no further consultation under the Endangered Species Act (87 Stat. 884, as amended; 16 U.S.C. 1531 *et seq.*) is required with the U.S. Fish and Wildlife Service. Because no take of federally listed species is anticipated, none is authorized. For a list of species that could occur in your project area (but have not been documented in PNDI), please see the county list of threatened, endangered, and candidate species. A field visit or survey may reveal previously undocumented populations of one or more threatened or endangered species with a project area. If it is determined that any federally listed species occur in your project area, the U.S. Fish and Wildlife Service requires that you initiate consultation to identify and resolve any conflicts. This response does not reflect potential Fish and Wildlife Service concerns under the Fish and Wildlife Coordination Act or other authorities.

These determinations were based on the project-specific information you provided, including the exact project location; the project type, description, and features; and any responses to questions that were generated during this search. If any of the information you provided does not accurately reflect this project, or if project plans change, DEP and the jurisdictional agencies require that another PNDI review be conducted.

This response represents the most up-to-date summary of the PNDI data files and is good for one(1) year from the date of this PNDI Project Environmental Review Receipt.

DISCLAIMER

The PNDI environmental review website is a preliminary environmental screening tool. It is not a substitute for information obtained from a field survey of the project area conducted by a biologist. Such surveys may reveal previously undocumented populations of species of special concern. In addition, the PNDI only contains information about species occurrences that have actually been reported to the Pennsylvania Natural Heritage Program.

TERMS OF USE

Upon signing into the PNDI environmental review website, and as a condition of using it, you agreed to certain terms of use. These are as follows:

The website is intended solely for the purpose of screening projects for potential impacts on resources of special concern in accordance with the instructions provided on the website. Use of the website for any other purpose or in any other way is prohibited and subject to criminal prosecution under federal and state law, including but not limited to the following: Computer Fraud and Abuse Act of 1986, as amended, 18 U.S.C. Â§ 1030; Pennsylvania Crimes Code, Â§ 4911 (tampering with public records or information), Â§ 7611 (unlawful use of computer and other computer crimes), Â§ 7612 (disruption of service), Â§ 7613 (computer theft), Â§ 7614 (unlawful duplication), and Â§ 7615 (computer trespass).

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Project Name: S. Brandywine MS
Date: 2/23/2009 2:47:51 PM

The PNHP reserves the right at any time and without notice to modify or suspend the web site and to terminate or restrict access to it.

The terms of use may be revised from time to time. By continuing to use the web site after changes to the terms have been posted, the user has agreed to accept such changes.

This review is based on the project information that was entered. The jurisdictional agencies and DEP require that the review be redone if the project area, location, or the type of project changes. If additional information on species of special concern becomes available, this review may be reconsidered by the jurisdictional agency.

PRIVACY and SECURITY

This web site operates on a Commonwealth of Pennsylvania computer system. It maintains a record of each environmental review search result as well as contact information for the project applicant. These records are maintained for internal tracking purposes. Information collected in this application will be made available only to the jurisdictional agencies and to the Department of Environmental Protection, except if required for law enforcement purposes. See paragraph below.

This system is monitored to ensure proper operation, to verify the functioning of applicable security features, and for other like purposes. Anyone using this system consents to such monitoring and is advised that if such monitoring reveals evidence of possible criminal activity, system personnel may provide the evidence to law enforcement officials. See Terms of Use.

Print this Project Review Receipt using your Internet browser's print function and keep it as a record of your search.

Signature: [signature]

Date: 2/23/2009

Project applicant on whose behalf this search was conducted:

APPLICANT

Contact Name: Bill Andrewlevich, CASD

Address: 1029 E. Lincoln Hwy

City, State, Zip: Coatesville, PA 19320

Phone: (610) 384-2419

Email: andrewlevich@downingtownasd.k12.pa.us

PERSON CONDUCTING SEARCH (if not applicant)

Contact Name: Patrick D. Nunedor

Address: K&W Engineers, 215 Granite Run Drive

City, State, Zip: Lancaster, PA 17602

Phone: 717-735-9500

Email: pdeverick@kandweng.com

The following contact information is for the agencies involved in this Pennsylvania Natural Diversity Inventory environmental review process. Please read this entire receipt carefully as it contains instructions for how to contact these agencies for further review of this particular project.

 APPLICANT INITIALS: PD

PNDI Project Environmental Review Receipt

Project Search ID: 20090223180233
Project Name: S. Brandywine MS
Date: 2/23/2009 2:47:51 PM

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