

August 22, 2019

Borough of Phoenixville  
351 Bridge Street  
Phoenixville, PA 19460

**Attn: Mr. E. Jean Krack  
Borough Manager**

**Re: Land Development Application – 2<sup>nd</sup> Review  
Black Rock Sanctuary  
Borough of Phoenixville  
RVE File # PCPBP103**

Dear Jean:

**Remington & Vernick Engineers (RVE)**, on behalf of the Borough of Phoenixville (Borough), has reviewed the following submission materials in connection with the application referenced above:

- Plans entitled “Preliminary / Final Land Development Plan for Black Rock Sanctuary” (21 sheets), dated 5/9/2019 and last revised 8/8/2019, as prepared by Navarro & Wright Consulting Engineers, Inc. of New Cumberland, PA.
- Post Construction Stormwater Management Report, dated 5/9/2019 and last revised 8/7/2019, as prepared by Navarro & Wright Consulting Engineers, Inc. of New Cumberland, PA.
- Transmittal Letter, dated 8/8/2019, as prepared by Navarro & Wright Consulting Engineers, Inc. of New Cumberland, PA.
- Response Letter, dated 8/8/2019, as prepared by Navarro & Wright Consulting Engineers, Inc. of New Cumberland, PA.
- Subdivision & Land Development Checklist, dated 8/8/2019.
- Waiver Request Letter, dated 8/8/2019, as submitted by Navarro & Wright Consulting Engineers, Inc. of New Cumberland, PA.
- Specification and Preliminary Shop Drawing for Skyscraper Wall, dated 5/24/2019, as manufactured and prepared by Techo-Bloc.
- Specification for Solar Flood Light (Model OMA9-SOL-FL), as manufactured by Omni Imagine Inc.

## **I. GENERAL INFORMATION**

Applicant & Owner:	The County of Chester Department of Facilities & Parks 313 West Market Street West Chester, PA 19380-0991 610-344-6445 Contact: David Stauffer dstauffer@chesco.org
-----------------------	--

Engineer & Surveyor: Navarro & Wright Consulting Engineers, Inc.  
151 Reno Avenue  
New Cumberland, PA 17070  
717-441-2216  
Fax: 717-441-2218  
Contact: Craig Bachik, RLA  
cbachik@navarrowright.com

Attorney: Buckley Brion McGuire & Morris LLP  
118 West Market Street  
West Chester, PA 19382-2928  
484-887-7530  
Fax: 610-436-8305  
Contact: Kristin S. Camp, Esq.  
kcamp@buckleyllp.com

Proposal: The applicant proposes to demolish an existing building, construct a twenty-nine (29) vehicle parking lot off Black Rock Road with a retaining wall and ADA access to the existing sanctuary trail system. Additionally, the access to the existing fish ladder will be paved. A future phase containing five (5) vehicle parking and drop-off area close to the fish ladder and Schuylkill River Trail is also shown.

## II. COMMENTS

Upon review of this submission, RVE has the following comments. Any underlined comments must be addressed by the applicant prior to approval.

1. On the Existing Conditions Plan (C300) and the Layout Plan (C500), show the floodway boundary (§8-304.3). *Item satisfied.*
2. Number all plan sheets relative to the total number of sheets (§22-304.2.A). *Item satisfied.*
3. On the Overall Site Plan (Sheet C200) or another overall plan of the tract, clearly delineate the entire tract boundary with weighted property lines, bearings and distances (including UPI Nos. 15-3-10, 15-3A-14 & 15-3-12). *A waiver is being requested for this item.*
4. On the Erosion & Sedimentation Pollution Control Plan (Sheet ES-2), provide a north arrow and graphic scale (§22-304.2.A). *Item satisfied.*
5. On the Post Construction Stormwater Management Plan (Sheet PCSM-2), provide a north arrow and graphic scale (§22-304.2.A). *Item satisfied.*
6. Dimension the width of the existing cartway for Black Rock Road (S.R. 113) (§22-304.2.A). *Item satisfied.*

7. Provide a location map at 1"=200' scale (§22-304.2.A). Several maps are shown on the Cover Sheet but none are at the required scale. *Item satisfied.*
8. Provide the emergency contact phone numbers for the list of utility owners (§22-304.2.A). *Item satisfied.*
9. On the Existing Conditions Plan (Sheet C300), show the location of existing water mains and storm sewers (§22-304.2.A). A water valve and inlets are shown along Black Rock Road, but no piping information is shown. *Item satisfied.*
10. Provide permanent concrete monuments at intersections of all lines forming angles and at changes in direction of the boundary perimeter (§22-406.1). *A partial waiver is being requested for this item.*
11. Re-draw the proposed clear sight triangle following General Layout Note 11 on Plan Sheet C500. (§22-414.2.A; §22-414.10.A; PennDOT §441.8(h)(1) Table 1 for 40 MPH)
  - A. Clear Sight Triangle is measure from ten (10) feet back of Rte. 113 pavement edge in the middle of the Sanctuary exit lane (§414.10.B).
  - B. Clear sight distance to the left is 538 feet.
  - C. Clear sight distance to the right is 460 feet.*Item satisfied.*
12. After the twenty (20) foot driveway stopping distance, the maximum driveway grade is ten (10) percent (§22-414.8). *Item satisfied.*
13. Provide a profile for the Sanctuary driveway from Rte. 113 to the existing bridge showing a maximum four (4) percent stopping area for a distance of twenty (20) feet from Rte. 113 (§22-414.9.C). *Item satisfied.*
14. A non-residential driveway has a minimum required width of twenty-two (22) feet (§22-414.11.D). *The concern was not the driveway width from Rte. 113 to the main parking lot but the width from the main parking lot down to the future trailer drop-off lot. The 230-foot-long, 12-foot-wide driveway does not allow passing of vehicles. Vehicles with trailers are very difficult to maneuver in a reverse direction to get out of the way of opposing traffic.*
15. The Phase II driveway with perpendicular parking requires a minimum aisle width of twenty-two (22) feet (§22-417.2.E.2)). *Item satisfied.*
16. The Phoenixville Fire Department must review and comment on the proposed plan (§22-425.4). A new fire hydrant may be required in the vicinity of this development. *The Applicant states that plans have been submitted to Chief Buckwalter for his review.*
17. Show a detail and location for tree protection fencing for individual trees, tree masses and woodlands to be saved (§22-428.1.C.4)a). *Item satisfied.*
18. Floodplains are classified as environmentally sensitive features and shall be preserved at a rate of 100%. Preserved floodplain areas shall not be altered, regraded, filled or built upon (§22-500.2).

Considering this requirement, a waiver would be required for the proposed project. A waiver is being requested for this item.

19. Provide dust control for grading and excavation operations (§22-506.4.C.2)). *Dust control provisions had been noted on the previous submission. Item satisfied.*
20. A Highway Occupancy Permit must be obtained from PennDOT for the work proposed in the State Right-of-Way along Black Rock Road (S.R. 113). *The Applicant states that they are coordinating with PennDOT to obtain the necessary permit. A copy of the permit will be forwarded to the Borough.*
21. Provide copies of a PA DEP joint permit for work impacting the wetland and floodway area (§23-302.B). *The Applicant will comply.*
22. Provide copies of an NPDES permit for the earth disturbance (§23-303.A.2). *The Applicant will comply.*
23. Provide field infiltration testing for infiltration BMP's (§23-306.I.2). *A Field Infiltration Study was performed on June 27, 2019 by Seth Bacon, Certified Professional Soil Scientist. The field results are shown in Appendix I of the Post Construction Stormwater Management Report (SWMR). At Test Pit #4, which is located within the footprint of the proposed Infiltration Basin for Phase I, infiltration testing was not conducted due to the shallow depth to drainage restrictions. At Test Pit #5, which is located within the footprint of the proposed Rain Garden for Phase II, infiltration was measured at 0.12" per hour, without a factor of safety.*
24. Provide a lighting plan showing outdoor lighting to protect public places for the new parking areas (§27-601.1.A(1)). *The Applicant states that the facility will operate from dawn to dusk. A gate at the main driveway will be unlocked and locked accordingly by Park personnel. Item satisfied.*
25. On Plan Sheet C100 - Borough Council Signature Block – change Borough Secretary to Borough Manager. *Item satisfied.*
26. On Plan Sheet C100 – Public Utility List – add the emergency phone numbers for each utility. *Item Satisfied.*
27. On Plan Sheet C100- Conditional Use Approval – says ‘a parking lot’ – does it include the Phase II parking lot also? *The Conditional Use Approval note has been expanded to include both parking lots. Item satisfied.*
28. On Plan Sheet C100 – General Note 11 – remove one of the word ‘sight’. *Item satisfied.*
29. On Plan Sheet C100- General Note 15 – this note can be removed if the Requested Waivers 5 and 7, listed below, are granted. *The Applicant states that this note will be revised prior to plan recording based on the outcome of the waiver requests.*
30. On Plan Sheet C400 – show tree protection fencing. *Item satisfied.*

31. On the Layout Plan (C500), the call-out for the Phase line driveway paving should use a capital I and not a 1 (one). *Item satisfied.*
32. On the Layout Plan (C500), is the Wetland Mitigation Area adjacent to the turnaround included in Phase I when the existing wetlands in Phase I are being disturbed? *The Applicant states that the extent of mitigation will be finalized upon issuance of various U.S. Army Corps , PA DEP and County Conservation District permits.*
33. On the Layout Plan (C500), should a bike rack be included in Phase I? *Yes. Item satisfied.*
34. On the Layout Plan (C500), General Layout Note 9 – add ‘AND PENNDOT’ after the word Borough. *Item satisfied.*
35. On the Layout Plan (C500), provide a detectable warning surface along the depressed curb adjoining the ADA parking access aisle. *Item satisfied.*
36. On the Layout Plan (C500), provide curb ramps with detectable warning surfaces at each end of the proposed crosswalk on the north end of the Phase 1 parking lot. *The applicant has added curb ramps to the plan. A detailed grading plan for the area of the curb ramps is necessary to demonstrate ADA compliant layout and slopes will be provided.*
37. On the Layout Plan (C500), provide a width dimension for the upper main driveway. *Item satisfied.*
38. On the Layout Plan (C500), Proposed Legend – add a symbol for proposed curb. *Item satisfied.*
39. On the Layout Plan (C500), change the name, above retaining wall 1, from Guardrail to Guide Rail. *Item satisfied.*
40. On the Layout Plan (C500), revise all three (3) wall call-outs to reference sheet C803 (not C802). *Item satisfied.*
41. On the Layout Plan (C500), remove one of the ‘DO NOT ENTER’ leaders. *Item satisfied.*
42. On the Layout Plan (C500), the “One Way” sign shown along the driveway near Sta. 1+00 should be relocated opposite of the intersection leading to the existing garage. *Item satisfied.*
43. On the Layout Plan (C500), provide a “Begin One Way” sign facing traffic near Sta. 1+00. *Item satisfied.*
44. On the Layout Plan (C500), provide new gate across the entrance to Black Rock Road. *Item satisfied.*
45. On the Layout & Grading Plan (C600), adjust the rim elevation of the existing sanitary manhole in the driveway to match the new surface grading. *Item satisfied.*

46. On the Layout & Grading Plan (C600), adjust incorrect proposed grading contours along the proposed trail connection to the north of the Phase 1 parking lot (109', 114' & 119'). *Item satisfied.*
47. On the Layout & Grading Plan (C600), Grading Note 17 18 – add 'AND PENNDOT' after the word Phoenixville. *Item satisfied.*
48. On the Layout & Grading Plan (C600), Proposed Legend – add a symbol for proposed curb. *Item satisfied.*
49. On the Layout & Grading Plan (C600), label the emergency spillways for both the Infiltration Basin and the Rain Garden. *Item satisfied.*
50. On the Layout & Grading Plan (~~C600~~ C601), provide a profile for the proposed driveway from Rte. 113 to the existing bridge. *Item satisfied.*
51. On Plan Sheet C800 – Wood Guide Rail Detail – remove this detail or show where it is being used on the plans. *Wood guide rail is being used along retaining walls 2 and 3. Item satisfied.*
52. On Plan Sheet C800 – Stop Sign Detail – call out the size of the stop sign. *Item satisfied.*
53. On Plan Sheet C801 – provide a detail for Tree Protection Fencing. *Item satisfied.*
54. On Plan Sheet C802 – provide a detail for OS-2. *Item satisfied.*
55. On Plan Sheet C802 – OS-1 Outlet Structure Detail – update the top of structure elevation to match the profile.
56. On Plan Sheet C802 – Rain Garden Cross Section – revise the number of the outlet structure to OS-2 (not OS-1). *Item satisfied.*
57. On Plan Sheet C802 – ~~Infiltration Basin~~ Wet Pond Emergency Spillway Detail – update the elevation for this project. *Item satisfied.*
58. On Plan Sheet C802 – Emergency Spillway Detail – revise the width of the spillway to ten (10) feet to agree with the plan views. *Item satisfied.*
59. On Plan Sheet C802 – Emergency Spillway Detail – update the elevations for this project. *Item satisfied.*
60. On Plan Sheet C803 – show fall protection for the walls and provide a detail. *Item satisfied.*
61. On Plan Sheet C803 – label the Wall numbers for the corresponding wall details. *Item satisfied.*
62. On Plan Sheet C803 – ~~Allen Block~~ Techo-Bloc Typical Section – complete the missing height in the text. *Item satisfied.*

63. On Plan Sheet C803 – Gravity Wall Detail – provide additional details for the wall – block E information, manufacturer cut-sheets for this wall design. *Item Satisfied.*
64. On Plan Sheet C803 – provide a blow-up of the handicap parking spaces for Phase I showing the pinched minimum stall width. *Item satisfied.*
65. On Plan Sheet PCSM-2 – label the emergency spillways for both the ~~Infiltration Basin~~ Permanent Pool Detention Pond and the Rain Garden. *Item satisfied.*
66. On Plan Sheet PCSM-3 – make the requested revisions from Plan Sheet C802.
67. Retaining wall calculations and details need to be prepared by a Pennsylvania Professional Engineer and need to be reviewed and approved prior to project approval. The Applicant states that these items will be provided at a future time.
68. In the SWMR the proposed Infiltration Basin has been revised to a Permanent Pool Detention Pond and the calculations have been revised accordingly. The Grading and Utility Plan (C600), Erosion & Sediment Control Plan (ES-1; Sequence of Construction), Erosion & Sediment Control Plan (ES-2), Post Construction Stormwater Management Plan (PCSM-1; Infiltration Maintenance Notes, Sequence of Construction), and Post Construction Stormwater Management Plan (PCSM-2) must be revised to describe the new Permanent Pool Detention Pond.
69. On the Construction Details (C802) and Post Construction Stormwater Management Details (PCSM-3), provide details for the Permanent Pool Detention Pond embankment section and anti-seep collar.
70. The measured infiltration rate at the proposed Rain Garden is 0.12” per hour, without a factor of safety being applied. In light of the minimal infiltration capacity, consider incorporating an underdrain into the design with a slow release control valve located in the outfall structure.
71. On the Post Construction Stormwater Management Plan (PCSM-2), indicate the total drainage area tributary to each proposed BMP and the volume permanently managed by each proposed BMP.

### III. REQUESTED WAIVERS

The Applicant has indicated that they are requesting waivers from the following requirements:

1. Section §22-301.1.B – to allow a concurrent submission of preliminary and final land development plans. RVE does not believe any waiver is necessary. RVE does not recommend this waiver be granted.
2. Section §22-601 – to not require an Environmental Impact Analysis because the land development plans depict existing slopes, soils, floodplains, vegetation, wetlands and other environmentally sensitive areas. RVE does not recommend this waiver be granted. *The applicant indicates that a waiver would have not have any adverse impact given the extend of environmental permitting required for the project. The applicant also states that a Phase 1*

*Environmental Report has been included, but this information was not found in the materials submitted.*

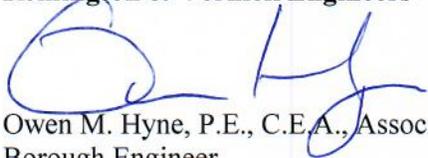
3. Section §22-602 – to not provide a Traffic Impact Study because the projected traffic is minimal and will not coincide with the standard weekday AM and PM peak traffic flows. RVE has no objection to this waiver being granted.
4. Section §22-702 – to not provide Financial Security because the project is a Chester County government project with appropriate public funding.
5. Section §22-704 – to not have Borough Inspections of Work and Materials because the County will conduct routine inspections of the construction by qualified professionals. The County Facilities & Parks Department will assure that the project is properly constructed and completed in conformance with the approved land development plans, all permits and the contract documents.
6. Section §22-802.2 – to not establish an Escrow for the project because the County is requesting to be invoiced directly by the Borough for its consultant review fees.
7. Section §22-802.4 – to not establish a Second Escrow for inspections, testing or maintenance costs because the County proposes that inspections, testing and maintenance will be conducted by the Chester County Department of Facilities & Parks.
8. *NEW – Section §22-406.1 – a partial waiver is being requested to not provide concrete monuments for the County's entire tract. Four (4) concrete monuments are being provided for this project. RVE has no objection to this waiver being granted.*
9. *NEW – Section §22-500.2 – a waiver is being requested from the requirement to conserve 100% of floodplain areas for this project. The Applicant states that there are no adverse impacts to the floodplain as a result of this project. RVE notes that the applicant may desire to extend their request for relief to include watercourses, wetlands and stream buffers (also required to be conserved at 100%). RVE has no objection to this waiver being granted.*
10. *NEW – Section §22-303.1.C – Preliminary Plan Checklist - to not show weighted property lines, including dimensions shown in feet and decimals, and bearings shown in degrees, minutes and seconds. The Applicant states that they have previously prepared Subdivision Plans and Deeds for the properties. The Applicant feels that the information provided adequately establishes the property without a detailed survey of the entire tracts. RVE has no objection to this waiver being granted.*
11. *NEW – Section §22-304.1.A – Final Plan Checklist - to not show weighted property lines, including dimensions shown in feet and decimals, and bearings shown in degrees, minutes and seconds. The Applicant states that they have previously prepared Subdivision Plans and Deeds for the properties. The Applicant feels that the information provided adequately establishes the property without a detailed survey of the entire tracts. RVE has no objection to this waiver being granted.*

RVE's recommendation for approval is contingent upon the applicant satisfactorily addressing each underlined comment and submitting revised plans and other materials. In conjunction with any resubmission, the applicant must provide a response letter using the same numbering system and explaining how each underlined comment has been satisfactorily addressed.

Should you have any questions, please feel free to contact our Conshohocken office at (610) 940-1050.

Very truly yours,

**Remington & Vernick Engineers**



Owen M. Hyne, P.E., C.E.A., Associate  
Borough Engineer

cc: The County of Chester Department of Facilities & Parks, Owner and Applicant  
Navarro & Wright Consulting Engineers, Inc., Plan Preparer  
Buckley Brion McGuire & Morris LLP, Attorney  
David Boelker, Borough of Phoenixville, Dir. of Planning & Code Enforcement (via e-mail)  
Thomas F. Beach, P.E., C.M.E., Executive Vice President  
Christopher J. Fazio, P.E., C.M.E., Executive Vice President  
Elizabeth Colletti, E.I.T.