

MIDDLESEX TOWNSHIP

350 N. MIDDLESEX ROAD, SUITE 1, CARLISLE, PA 17013

Phone Number 717-249-4409 or 844-256-7024 - Fax Number 249-8564

Board of Supervisors: Donald S. Geistwhite Jr., Philip A. Neiderer, William H. Goodhart

Date: May 6, 2026

To: Applicant for Plan Approval:
Petri Ottavainen, by email for
Carlisle Development Partners, LLC
1660 International Drive, Suite 500
McLean, VA 22102

Re: Notification of Conditional Plan Approval of
Preliminary Land Development Plan for Pennsylvania Digital 1 (PAX-1) Phase 1-B
Plan prepared by: Livic Civil
Plan dates: 11/21/2025; last revised 04/14/2026
Township File No. 25-25

Dear Applicant,

I write to you on behalf of the Board of Supervisors of Middlesex Township in my capacity as Township Zoning Officer.

This letter will notify you that, at their meeting on May 6, 2026, the Board of Supervisors of Middlesex Township approved relief from the following sections of the Middlesex Township Subdivision and Land Development Ordinance No. 8-2017 (SALDO), and the Middlesex Township Stormwater Management Ordinance No. 6-2011 (SWMO), for the Preliminary Land Development Plan for Pennsylvania Digital 1 (PAX-1) Phase 1-B, subject to providing written request and justification for each relief sought and listing the relief sought on the cover sheet of the plan set.

1. SALDO § 501.A.2. Modification of requirement for plan scale not smaller than one inch to one hundred feet (1"=100').
2. SALDO § 501.A.6. Modification of requirement for location map scale not smaller than one inch to one thousand feet (1"=1000').
3. SALDO § 501.C.19., § 303.J.12., § 303.K.12. Deferral until final plan of requirements for metes and bounds descriptions of easements.
4. SALDO § 703.A.10. Waiver of requirements for curbing and sidewalk along Country Club Road and PA Data Drive abutting the development property, with required note on plan.

This waiver does not include requirements for roadway drainage facilities including road pavement base drains along abutting portions of Country Club Road and PA Data Drive.

5. SALDO § 703.I.4. Waiver of requirement for depressed curb at driveway entrance openings along PA Data Drive.
6. [SLDO § 707.] – Waiver of requirements for installation of sidewalks and pedestrian paths along both sides of new interior streets, with required note on plan.
7. [SALDO § 718.D.3.A., § 718.D.4.A., § 718.D.4.B., § 718.D.4.C., § 718.D.4.D.] Modification of requirements for minimum plan scale of not more than one inch to one hundred feet (1"=100') for required maps of physical resources within the Environmental Impact Assessment Report.
8. [SWMO § 302.A.13.] – Deferral until final plan of requirements to provide construction details for stormwater inlets.
9. [SWMO § 303.H.12.] – Deferral until final plan of requirements for to provide Geotechnical Engineer certification of stormwater management Managed Released Concept (MRC) design.
10. [SWMO § 303.J.3.] – Modification of requirement for stormwater detention basin side slopes to not be steeper than four (4) units horizontal to one (1) unit vertical and for stormwater detention basin bottom slopes not to be less than two percent (2%).
11. [SWMO § 303.H.17.] – Modification of requirement for all stormwater infiltration practices to infiltrate the stored volume within forty-eight (48) hours.
12. [SWMO § 303.B.2.] – Modification of requirement for infiltration of surface water runoff at its source as the primary mechanism for stormwater management.
13. [SWMO § 719.B.2., § 719.B.3.] – Deferral until final plan of requirements to provide final landscaping plan.

This letter will further notify you that, at their meeting on May 6, 2026, the Board of Supervisors of Middlesex Township approved the Preliminary Land Development Plan for Pennsylvania Digital 1 (PAX-1) Phase 1-B, subject to the following conditions:

1. That the applicant satisfies all comments and conditions of the Township Engineer, Bud Grove, P.E. in written review letter #3 of J. Michael Hess, PE of Herbert, Rowland & Grubic, Inc. dated 04/09/2026 and 04/10/2026 (copies enclosed) in a manner acceptable to the Township Engineer, subject to his final review.

2. That the applicant satisfies all comments and conditions of the Township Engineer, Bud Grove, P.E. in written sound study review letter #1 of J. Michael Hess, PE of Herbert, Rowland & Grubic, Inc. dated 04/23/2026 (copy enclosed) in a manner acceptable to the Township Engineer, subject to his final review.
3. That the applicant satisfies all comments of the Cumberland County Planning Department, in written report dated 01/02/2025 for Plan Number P25-1134 (copy enclosed), subject to final review by the Township Zoning Officer.
4. That a restrictive covenant be added to the plan by note stating that no water wells will be drilled on the property and that all existing water wells on the property will be properly abandoned and sealed in accordance with PA DEP regulations.
5. That per Section 710.E.2.b. of the Subdivision and Land Development Ordinance No. 8-2017, as amended, the applicant pays to Middlesex Township the required fee in lieu of dedication of park and recreation areas for the subdivision of \$1,000 per disturbed acre of development area, prior to the final plans being signed by the Township and released for recording.
6. That the applicant enters into a developer's agreement with Middlesex Township regarding required public improvements and posts financial security for required public improvements, as-built plans and engineering inspection fees for this plan with the Township in an amount acceptable to the Township Engineer and form acceptable to the Township Solicitor, prior to the final plans being signed by the Township and released for recording.

The above referenced waivers and conditions of plan approval were agreed upon by your representative, Charles M. Courtney, Esquire at the meeting on May 6, 2026, and must be verified in writing upon receipt of this notification of conditional plan approval.

Sincerely,



Mark D. Carpenter
Middlesex Township Zoning Officer

cc: Board of Supervisors
Township Solicitor
Township Engineer
Nick Long, Livic Civil, by email
Justin Ross, Livic Civil, by email
Mike Hess, HRG
Charles M. Courtney, Esquire, by email



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PHASE 1B PRELIMINARY LAND DEVELOPMENT PLAN REVIEW LETTER #3

MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PA

Attn: Mr. Bud Grove, Township Engineer

Preliminary Land Development Plan for Pennsylvania Digital 1 (PAX-1) Phase 1-B

Middlesex Twp. Plan No. TPF 25-25

April 9, 2026

We have completed our review of the following information for the above-referenced project:

Submission:	Dated:	Last Revised:
Plan Set for Phase 1B (111 sheets)	11/26/2026	03/27/2026
Post Construction Stormwater Management Report for Phase 1B (SWM Report)	November 2025	3/27/2026
Utility Needs Assessment	Not Dated	
Response to Comments	3/27/2026	
Response to Comments – Infiltration	3/6/2026	
Waiver Request Letter	3/27/2026	

The applicant has submitted the following requests for relief:

Requested Waiver(s):	Ordinance Section:	Relief Requested:
Plan Size and Scale	SALDO 501.A.2	Modification
Location Map Scale	SALDO 501.A.6	Modification
Provide metes and bounds for easements	SALDO 501.C.19, 303.J.12, 303.K.12	Deferral (until Final Plan)

Curb and Sidewalk along Country Club Road and PA Data Drive (See Waiver Note 1)	SALDO 703.A.10	Waiver
Depressed Curb at Driveway Entrance	SALDO 703.I.4	Waiver
Provide Sidewalk (See Waiver Note 1)	SALDO 707	Waiver
Scale of maps and exhibits within the EIA	SALDO 718.D.3.a, 718.D.4, 718.D.4.b, 718.D.4.c, 718.D.4.d	Modification
Detention Basin Side Slopes > 4:1	SWM 303.J.3	Modification
Dewatering time > 48 Hrs.	SWM 303.H.17	Modification
Infiltration of Stormwater	SWM 303.B.2	Modification
Provide Construction Details for Inlets	SWM 302.A.13	Deferral to Final Plan
Provide a Final Landscaping Plan	SALDO 719.B.2 and 3	Deferral to Final Plan
Provide Geotechnical Engineer Certification for MRC Design	SWM 303.H.12	Deferral to Final Plan

We offer the following comments (* - Indicates comments not addressed from previous review letters):

WAIVER NOTES

1. A sidewalk note which reads, "The Owners of these lots, upon notification by Middlesex Township, shall be responsible for the construction of sidewalks to Township Specifications within six (6) months of the date of such notification." The applicant should clarify the applicability of the sidewalk waiver requests (703.A.10 and 707) and this note as they relate to PA Data Drive and Country Club Road.

ZONING

1. A minimum lot width of 200 feet is required [24.03].* Because it does not have roadway frontage, lot 1B does not meet this requirement. As discussed, an alternative arrangement is to establish financial security for the construction of PA Data Drive before any approvals of the Phase 1B Land Development plan are requested (1/22/26). *This comment will be removed when the financial security for PA Data Drive is in place.*
2. Provide the Parking Analysis Report to support the parking requirements (sheet 2) [Table 4.15.1 & 4.15(D)2].* Confirm the parking analysis report, parking data (sheet 3) and site plans (sheets 21-27) are consistent with one another. The February 2026 parking analysis report notes 258 spaces are required and 280 spaces are proposed. The parking data (sheet 3) notes 258 spaces are required and 324 spaces are proposed. The site plans (sheets 21-27) appear to show 309 spaces +/- being provided. While adequate spaces appear to be provided the references should be revised for consistency.

3. *It is not clear if/where curbing is proposed. It appears curbing is needed for stormwater conveyance, parking area definition, landscape delineation/protection and pedestrian/vehicle separation. Show and label proposed curbing (sheets 21-27). [4.15(F)4]. Curbing appears to have been added along the outer drive perimeter and is noted on the curb between data centers on sheet 23. Confirm curb is provided for parking area definition, landscape delineation/protection and pedestrian/vehicle separation. Additional labels are needed since the site is relatively flat and the contours do not clearly depict curb lines. (The curb approach appears to differ from Phase 2, where no curb is proposed between data centers.)

NOISE

1. *Because Phase 1B was submitted under the 2025 Zoning Ordinance instead of the prior zoning ordinance with a data center overlay, updated noise standards apply. Specifically, the performance standards section has been updated from prohibiting "dangerous, injurious, noxious, or otherwise objectionable...noise or vibration" to the quantitative standards described in article 4.19 and table 4.19.2. Section 304.G.2.g presents a standard of 70dBA at the property line but specifies that this requirement does not apply during a time of power outage. During times of power outage, when 304.G.2.g does not apply, the ordinance requirement defaults to the performance standards as outlined in article 4.19. The noise study should therefore demonstrate compliance with the ordinance under 3 scenarios:
 - a. No Power Outage, no generators running – 70dBA at the property line
 - b. No Power Outage, generators running – 70dBA at the property line
 - c. Power Outage, generators running – Performance standards in section 4.19 and Table 4.19.2
 - d. Power Outage, no generators running – the applicant can assume that this scenario generates less sound than scenarios A through C and therefore omit it from the analysis.
2. *Regarding the submitted noise study, we have the following technical comments:
 - a. **Comment 1, Page 5, Noise Regulations** – As currently shown in the noise memo, octave levels are not presented at each modeled site location. Provide the octave levels at each modeled site location, in a table format, to ensure compliance with Table 4.19.2 under the applicable conditions described in Noise Comment #1.
 - b. **Comment 3, Page 6, Noise Regulations** – The noise memo indicates that it is recommended to aim for lower operational noise levels. Are there additional mitigation measures and strategies planned to meet this recommendation? If so, include them in the noise study.
 - c. **Comment 4, Page 6, Noise Analysis** – Based on the information provided, it is unclear if the proposed grading plans were incorporated into the surface used in the noise model build condition. Elevation changes as well as other elements such as sound source, facility layout, buildings, etc. can significantly alter modeling outcomes and corresponding sound levels.

- d. **Comment 5, Page 6, Noise Analysis** – To help thoroughly validate the predicted sound levels as presented in the memo, provide a table with the proposed equipment models, operational settings, and sound power. In addition, provide the number of individual pieces of equipment.
- e. **Comment 6, Page 6, Noise Analysis** – It is unclear if the parapet wall is only on one building or if it was included on all proposed buildings. To clarify, provide a figure (heat map of sound levels or similar) for the unmitigated as well as mitigated scenarios.
- f. **Comment 8, Page 7, Results** – Clarify the methodology used to determine the worst-case points along the property line. Since predicted noise levels are just below the impact threshold of 70dBA at the property line, include a more refined grid spacing to ensure there are no impacts predicted. Include additional modeling locations at a max 250 foot spacing in those areas to ensure noise levels don't exceed the 70dBA limit at the property line.
- g. **Comment 9, Page 7, Results** – In order to validate the results of the noise study, provide additional information in Table 2 including ambient/monitored levels, normal operation levels, normal operation with testing generators, and emergency generator(s) operations.
- h. **General Comment 10, Results** – Representative noise receptor modeling typically includes a height of five feet about ground, which represents the average height of the human ear. For each of the modeling receptor locations included in this study, what receptor height was used?
- i. **Comment 11, Page 8, Figure 3** – Provide site plans and facility layout on Figure 3 so the orientation of the facility can be referenced while reviewing the proposed sound levels along the property line.
- j. **Comment 12, Page 9, Figure 4** – What height above ground are these contours calculated? In addition, what grid spacing was used to develop the contours? The heat map on Figure 4 appears to have used a large grid spacing. Provide a smaller grid size to create more precise contours.
- k. **Comment 13, Page 6, Figure 4** – Include site plans on this figure to depict how these contours are oriented around the equipment and sound sources on the parcel.
- l. **Comment 14, Page 10, Conclusions** – Provide an appendix that includes equipment acoustic test sheets so the results of the noise study can be verified.
- m. **Comment 15, Page 10, General Comment** – For noise modeling purposes, which ISO standard was used in the modeling calculations? The ISO9613-2:2024 is more conservative with barrier attenuation when compared to the 1996 edition. The 2024 standard is therefore recommended. If the 1996 edition is used, provide a justification for this choice.

SUBDIVISION AND LAND DEVELOPMENT

1. All street profiles shall be drawn at a minimum vertical scale of 1" = 5'. *The scale of profiles I-5.11 to I-5.1, ``Basin K MRC Cell Profile, Basin R1 MRC Cell Profile do not appear to be consistent with the scale identified on the provide scale bar. Please reconcile. The scale of multiple profiles on sheets C1B 508, 512, 514, and 515 do not appear to be consistent with scales identified on the plan sheets [501.C.12].*

2. Provide a completed PADEP Sewage Planning Module [503.A.3].
3. Provide a report from the Middlesex Township Municipal Authority confirming that proposed water and sewer designs meet their technical requirements [503.A.9].
4. It appears that the temporary construction access will be installed with a 1:1 fill slope which is not acceptable. Revise such that the fill slope is proposed at a 3:1 minimum fill slope [1101].
5. It appears that there is a 1:1 fill slope proposed on Sheet C1B 302 between Data Center Building 1 and PA Data Drive on the southern side of the double security fence. Revise such that the fill slope is proposed at a 3:1 minimum fill slope [1101].
6. Where driveways access a curbed street, the driveway opening shall contain a depressed curb with a minimum of 1.5-inch curb reveal across the required width of the driveway (703.I.4) – **Applicant has requested a waiver**
7. Non-residential developments shall dedicate a minimum of ten percent (10%) of gross land area for park or recreation use. The developer is electing to provide a fee-in-lieu of dedication, per Section 710.E. The developer has offered a fee-in-lieu of dedication in the amount of \$1,000 per disturbed acre as stated in SALDO Section 710.E.2.b [710.A.3.b] *This comment will be removed when the fee-in-lieu is provided and accepted by Middlesex Twp.*
8. The Middlesex Township Municipal Authority shall have the responsibility to ensure compliance with requirements of the Ordinance that pertain to public water and/or sanitary sewerage facilities [712].
9. Provide a Preliminary Landscape Plan that contains all requirements set forth in Section 719.B.1.a-h. Depict the location of all utilities and all grading in excess of 3:1 [719.B.1.a-h]. *On Sheet C1B 603, there appears to be a conflict with proposed trees and the water system near the access drive entrance.*

ENVIRONMENTAL IMPACT ASSESSMENT

1. Provide a Geological Plan at a scale of no more than one inch to one-hundred feet (1" = 100'). (Note the provided plan scale is 1" = 500'). **A waiver has been requested for this requirement [§718.D.4].**
2. Provide a Site Development Plan at a scale of not more than one inch to one-hundred feet (1" = 100'). **A waiver has been requested for this requirement [718.D.3.a].**
3. Provide a Topographical Plan at a scale of no more than one inch to one-hundred feet (1" = 100'). (Note the provided plan scale is 1" = 500') **A waiver has been requested for this requirement [718.D.4.b].**
4. Provide Soil Plan at a scale of no more than one inch to one-hundred feet (1" = 100'). (Note the provided plan scale is 1" = 500'.) **A waiver has been requested for this requirement [718.D.4.c].**
5. Provide the Hydrogeological Plan and Wetlands Exhibit at a scale of no more than one inch to one-hundred feet (1" = 100'). (Note the provided plan scales are 1" = 500'.) **A waiver has been requested for this requirement [718.D.4.d].**

STORMWATER MANAGEMENT

1. Demonstrate that an NPDES permit has been secured for the proposed site disturbance.* [109] *The Applicant states that the NPDES permit for 1A/1B is under review by the Conservation District.*
2. Provide a min. 20' wide drainage easement with metes and bounds along all stormwater management facilities, channels and inlets [303.J.12 & 303.K.12].* *Provide a drainage easement around IB-9.1 to FES-5 and extend the easement around FES-K1 and FES-R1.*
3. IB-3.3 and MHB-3.2 plan view labels are covered by the legend on sheet C1B 305. Revise accordingly [302.A.12].
4. The minimum inside side slopes for a detention basin is 4:1 and the bottom of the basin shall be sloped at a minimum of 2% [303.J.3]. **A waiver has been requested for this requirement.**
5. Pipe inverts into a detention basin shall be a minimum of six (6) inches above the bottom of the basin. Revise accordingly. [303.J.4].* *FES-R1.2, FES-R1.4 and FES-R1.6 are not located 6" above the bottom of the basin. Basins K1 and F1 have been adequately addressed.*
6. Provide documentation that all infiltration practices or alternative volume mitigation measures such as MRC Cells move all surface ponding sub-surface within 48 hours. [303.H.17]. **A modification has been requested for this requirement to allow a dewatering time of 72 hours which is consistent with PADEP standards.**
7. Infiltration of surface water is to be the primary mechanism for meeting stormwater management requirements [303.B.2]. **A waiver has been requested to utilize MRC cells as an alternative approach to meeting volume and water quality requirements.**
8. Ensure the FES-F1 to OS-F1 profile, FES-K1 to OS-K1 profile and FES-R1 to OS-R1 profile are consistent with the MRC/Infiltration Basin detail, Basin Outlet Structure details, and the routing calculations [302.A.12].* *The profile and calculations have the 18" invert for OS-F1 at 423.90' whereas the Basin F1 Outlet Structure detail has the invert at 423.40'.*
9. Revise the Invert Out elevations on the MRC Cell Outlet Structure detail to be consistent with the profiles as it appears the MRC design has the outlet pipe located lower than the underdrain invert for all MRC cells [302.A.13].* *Revise the MRC Cell Outlet Structure detail top of structure, basin underdrain invert, basin underdrain invert in, and MRC cell bottom for Basin K1 to be consistent with the MRC Cell profile and calculations.*
10. Revise the Basin R1 Flow Splitter Structure FS-R10 detail to be consistent with the profile. According to the profiles, all of the pipes enter the structure are at elevation 415.00' [302.A.13].* *The Basin R1 Flow Splitter Structure detail is still inconsistent with the profile for FS-6.1.*
11. Revise the Infiltration Basin Forebay detail to be consistent with the basin elevations (430.00' basin and forebay bottom elevation and 430.50' pipe inflow invert) [302.A.10].
12. Ensure that the riprap apron details are consistent with the plans and PCSM report for the following structures: [302.A.13 & 302.D]
 - a. EWB-3. Detail indicates 30" SLCPP while plans, profile, and report indicate 36" SLCPP.

13. Provide clarification of review status of MRC designs with PaDEP. Some conditions in the spreadsheet appear to be out of compliance with DEP guidance. DEP cautions against marking approved spreadsheets in correspondence and indicates that the designs comply with the "intent" of the SCM but states it does not constitute an approval of the PCSM plan. [303.D.1]* This comment will remain as an administrative item until NPDES and DEP approval is received. A final PCSM report and plan should be submitted to the Township with any revisions from outside agency comments [302.D].
14. Basin K - *Provide hydraulic routing documentation that MRC forebays do not require emergency spillways or provide emergency spillway calculations. Applicants' response conflicts with grading and spot elevations C1B 306. Provide clarification via additional spot elevations and grading where the overflows for the MRC cells are located and how flow is directed back into the SCM.*
 - a. *The grading is still unclear where the overflow for the MRC cells will be directed. The forebay emergency spillway calculations have the peak elevation at 423.86' which may result in a ponding depth greater than 6" above the principal outlet within the MRC cells. Additionally, the south eastern tie-in grading by the MRC Cell (FES-K1.5) has a top of berm elevation of 423.50' which would allow water to overflow directly to the Conodoguinet Creek rather than into the rate basin. Revise the grading accordingly so that no more than 6" of ponding can occur above the principal outlets of the MRC cells and so that there is no potential for flow to bypass the downstream rate basin.*
 - b. *Callout the forebay K1 spillway matting on the plan.*
15. Revise the Basin K MRC Cell Profile to depict the MRC Cell outlet structure correctly. Additionally, the spillway/grate elevation on the profile is labeled at 424.00', however, the plan depicts a 425.00' contour at the spillway [302.A.13].* Refer to comment above.
16. MRC Basin K appears to have a drainage area of 58.60 acres in the DEP spreadsheets which aligns with the total drainage area including the peak rate basin applicants comments indicated similar to phase 1A it would be include volume only to the MRC cells. Please clarify MRC design spreadsheet is updated please update incremental SCM drainage in PCSM worksheet to be consistent with MRC design.
17. MRC Basin R1 appears to have a drainage area of 21.08 acres in the DEP spreadsheets which aligns with the total drainage area including the peak rate basin applicants comments indicated similar to phase 1A it would be include volume only to the MRC cells. Please clarify. MRC design spreadsheet is updated please update incremental SCM drainage area and volume in PCSM worksheet to be consistent with MRC design.
18. With the submission of infiltration testing locations and test pit locations a complete review has been completed, and the following items require additional clarification [303.H.12].*
 - a. With use of PaDEPs MRC guidance please provide documentation that DEP has accepted the number of test pits and infiltration test as adequate. PaDEP MRC guidance August 15, 2025 indicates that a minimum of 1 test per 40,000 sf of disturbed area is required.
Based on the Applicant's response on Phase 1A on 02.06.26 it appears that combination of updated guidance and 2006 DEP guidance are being used to determine infiltration rates. Either option is acceptable to the Township it should be clarified which method ECS and Livic are proposing to use. If double ring infiltration testing and traditional factors of safety are proposed 4 to 6 test per acre of infiltration surface shall be provided in accordance with DEP PCSM Spreadsheet Instruction rev. 01-26-

26. Or if basin flood test and other future guidance methods are proposed Ksat calculations and the associated adjustments shall be followed.

At the coordination meeting on 4/8/2026, the Engineer stated that post-construction infiltration testing will be completed prior to installation of the amended soils to verify the as-built infiltration rate. The designer is encouraged to utilize a more conservative factor of safety for the design infiltration rates in case post-development infiltration tests are less favorable than anticipated.

ITEMS TO BE INCLUDED IN THE DEVELOPER'S AGREEMENT

1. Include a Stormwater Management Operation and Maintenance (SWM O&M) Agreement.
2. Demonstrate that a deed restriction has been established to require SWM O&M by any future owners of the affected properties.
3. Establish an Operation and Maintenance agreement for PA Data Drive.
4. Establish financial security for on-site improvements. Provide a cost estimate of these improvements for review [Section 1301].

ITEMS TO BE ADDRESSED IN THE FINAL LAND DEVELOPMENT PLAN

1. If/when the project advances to a Final Land Development plan, provide a signed and executed O&M agreement. The O&M agreement shall be recorded within fifteen (15) days of approval of the O&M Plan by the Middlesex Township [502].
2. If/when the project advances to a Final Land Development plan, the deed of each lot shall contain a covenant binding the grantee and all successors title and interest designating the responsibility for operation and maintenance of the stormwater management facilities. Reference to this covenant shall be noted on the cover of the Plans [501.B.1.a].
3. Prior to construction of storm sewer facilities, specifications and/or details shall be submitted to the Township for review and approval, including but not limited to, pipes, inlets and tops, catch basins, head and end walls, stone bedding, and backfill material, as applicable [1406.A.6].
4. Provide a Final Landscape Plan (719.B.2 and 3)
5. Submit Architectural Plans documenting compliance with the building façade requirements [2.18(G)1].
6. Provide the required foundation plantings at the main entrances for each building and each applicable building facade [2.18(G)1.c.(1)(a)ii].*
7. Ground level and roof mounted mechanical equipment requires screening. Generator yards are deemed as mechanical equipment. The generator yard west of Building 1 & 2 shall include screening along the west side (sheets 52 & 56) [2.18(G)2.b].*
8. Provide design calculations for the proposed retaining wall, prepared and certified by a Professional Engineer in the Commonwealth of Pennsylvania experienced in structural design and geotechnical engineering principles [716.B].

9. Specify on the storm profiles where a non-standard inlet box is required. For example, Inlet I-4.2 is not constructable utilizing a standard box [302.A.12 & 302.A.13].
10. Storm run I-8.1 to FES-3 is located below the security entrance and the security building which would require the entrance and building to be located within the 20' wide drainage easement. Address accordingly [303.K.12]* *The Applicant states that the security entrance will be modified contingent upon the final end user. The storm sewer system will be modified appropriately during the final plan so that all pipes are located outside of any permanent security entrance structures.*

This review is based solely on the documents referenced above and does not relieve the design professional of any responsibility, nor does it imply any design responsibility by Herbert, Rowland & Grubic, Inc. HRG reserves the right to make additional comments in the future based on newly-supplied or revised information as provided by the applicant or their representative(s).

Sincerely,

Herbert, Rowland & Grubic, Inc.



J. Michael Hess, PE
Team Leader



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PHASE 1B PRELIMINARY LAND DEVELOPMENT PLAN SOUND STUDY REVIEW LETTER #1

MIDDLESEX TOWNSHIP, CUMBERLAND COUNTY, PA

Attn: Mr. Bud Grove, Township Engineer

Preliminary Land Development Plan for Pennsylvania Digital 1 (PAX-1) Phase 1-B

Middlesex Twp. Plan No. TPF 25-25

April 23, 2026

We have completed our review of the following information for the above-referenced project:

Submission:	Dated:	Last Revised:
Sound Study	4/13/2026	--

We offer the following comments (* - Indicates comments not addressed from previous review letters):

SOUND

Background Information

As requested by Herbert, Rowland & Grubic, Inc., (HRG) and in conjunction with Middlesex Township, ATCS, Inc. (ATCS) has performed a thorough review of the draft *PAX1 Noise Memo 041326*, recommendations and findings for compliance with the Township Noise Ordinance. As part of this effort, ATCS has generated a list of comments to ensure the citizens of the township are protected, and the goals of the noise portion of the ordinance are met. The following sections of the memo outline our comments for your consideration.

1.0 Comments and suggestions for PAX1 – Noise Study, Middlesex Township, Pennsylvania

ATCS reviewed PAX-1 – Noise Study, primarily focusing on the technical noise portions of the report. ATCS offers the following comments and suggestions for your consideration:

Comment 1, Figure 3, Site Layout – It would be beneficial to have an additional figure showing the locations of the proposed noise walls to document their positioning for the township. This will allow the township to easily understand the mitigation locations, as well as once developed, confirm the developer has installed all the necessary mitigation as shown and documented in the technical noise analysis. In addition to the figure,

it would be beneficial to have a table that has the recommended heights and lengths of proposed noise barriers as well as the NRC/STC minimum standards of the material being used.

Comment 2, Table 2, Modeled Equipment Noise Levels – The noise study appears to rely on assumed equipment performance and mitigation measures; however, it is unclear whether the specific site equipment has already been selected. Please clarify whether the modeled equipment reflects actual specified units to be installed at the proposed facility. If equipment has not yet been finalized, describe how the developer will ensure that the installed equipment meets or exceeds the sound performance levels used in the analysis.

Additionally, please provide the source data and supporting documentation for the assumed noise reduction performance of the proposed louvers. In the absence of referenced manufacturer data or other verifiable sources, it is difficult to confirm that the modeled attenuation is achievable.

Finally, additional documentation is needed to demonstrate that the as-built condition will be consistent with the assumptions used in the noise model.

Comment 3, Ambient Monitored Noise Levels – While not a requirement of the Ordinance, there are significant issues with the field collection techniques. In several areas, snow is present during the testing duration, which can create a reflective or absorptive ground cover, depending on the characteristics of the snow, thus not accurately representing the typical ambient environment. Furthermore, review of weather data for the dates where noise levels were collected indicate rain was prevalent in the area, which causes wet roads, road spray and can magnify the effect of roadway noise on the ambient environment, thus not accurately representing the ambient acoustic environment.

2.0 Conclusion

Based on the information provided, the developer has demonstrated that the proposed site is expected to operate in compliance with the Township's Noise Ordinance. However, additional supporting documentation would be beneficial to enable the Township to verify that the as-built installation is consistent with the assumptions and standards used in the noise modeling analysis.

The observations and comments contained herein are intended to assist in confirming and maintaining compliance and should be taken into consideration, as appropriate, for future submissions and final design documentation.

PAX-1 Data Center Phase 1B
Middlesex Township, Cumberland County
April 23, 2026
Page 3

This review is based solely on the documents referenced above and does not relieve the design professional of any responsibility, nor does it imply any design responsibility by Herbert, Rowland & Grubic, Inc. HRG reserves the right to make additional comments in the future based on newly-supplied or revised information as provided by the applicant or their representative(s).

Sincerely,

Herbert, Rowland & Grubic, Inc.

A handwritten signature in blue ink, appearing to read "J. Michael Hess".

J. Michael Hess, PE
Team Leader

JMH/ARK

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PLANNING DEPARTMENT

Cumberland County

Cumberland County Subdivision and Land Development Review Report

Cumberland County Planning Department
310 Allen Road, Suite 101
Carlisle, PA 17013
Telephone: (717) 240-5362

Municipality:	Date Received:	Date Reviewed:	Reviewed By:	Plan Number:
Middlesex Township	12/5/2025	1/2/2025	SH, EG, KS	P25-1134
Plan Title:				
Pennsylvania Digital 1 – (PAX-1) Phase 1B				
Plan Status:		Plan Type:		
Preliminary		Land Development Plan		
Comments and Recommendations:				

1. The submission should be accompanied by architectural renderings of the building exterior (zoning 2.18.G.1).
2. Each of the data center buildings include an adjoining 'generator yard'. The plan should include a typical layout of the generator yard. The type of generator should be provided. The details should include any proposed screening, buffering or fencing proposed around the generators (zoning 2.18.G.1.b).

In addition, the layout of the generator yard and building 5 should be revised. It appears that the generator yard will face residential land uses to the west. The applicant should consider revising the layout to reduce the noise impacts.
3. The main entrance(s) and any secondary entrance(s) to each building should be labeled on the plan (zoning 2.18.G.1.c.1). A handicapped accessible sidewalk should be provided for employees and visitors.
4. An acoustic barrier may be required for mechanical equipment that abuts a residential use or zoning district (zoning 2.18.G.2.b.1.d). The township should review the location of the proposed 'generator yards'.
5. A traffic impact study should accompany the submission (zoning 3.04.G.2.d).
6. A water feasibility study should accompany the submission (zoning 3.04.G.2.e).
7. An electric interconnection agreement should be provided (zoning 3.04.G.2.f).
8. A noise study should be provided (zoning 3.04.G.2.g).
9. A parking analysis report is required to determine the number of parking spaces required for a data center. The report should be provided to the township (zoning table 4.15.1 and 4.15.D).
10. The township engineer should determine whether curbing is required throughout the proposed development (zoning 4.15.F.4). Curb detail is provided on sheet C1B 801. If applicable, curbing should be shown on the plan.

In addition, if curbing is not required, parking stops should be provided to prevent vehicles from encroaching into landscaped areas.

11. Loading spaces should be in the rear of the property (zoning 4.15.G.4.d).
12. A recycling and trash dumpster should be provided for each building (zoning 4.27.A).
13. A small key map should be provided on each sheet. The appropriate match lines should be highlighted to depict the area shown on the sheet (SLDO 501.A.2).
14. The following refer to the request of waiver block on the cover sheet (SLDO 501.A.8):
 - a. Section 303 J.3 (detention basin slopes) indicates that stormwater basin bottoms will be flat and landscaped with wetland vegetation that will not be mowed. The township should verify whether the basins should be mowed for maintenance of the stormwater management facilities.
 - b. Section 303 B.2 (infiltration of stormwater) indicates that a majority of the stormwater produced will discharge laterally to the adjacent floodplain of the creek and mimic existing runoff characteristics of the site. Will the post-construction runoff mimic the rate, volume and concentration of the existing stormwater runoff?
 - i. The applicant should consider the feasibility of installing tanks to hold the excess stormwater to be used for cooling the data center.
 - ii. The existing conditions plan indicates that many areas along the floodplain include steep banks and sensitive features that may be susceptible to erosion from increased stormwater flow. The township should require methods to limit erosion prior to approval of the waiver.
 - iii. The PNDI results found on sheet 2 indicate that no known conflicts are identified on the project site. It appears that the requested waiver will create impacts beyond the project disturbed area. Two of the identified species are identified as 'extensive' and 'small' floodplain populations. The applicant should address impacts to threatened and rare populations in the floodplain prior to approval of the waiver.
 - iv. In addition, the PA Natural Heritage Program identified the area of the Conodoguinet Creek at Bernheisel Bridge as supporting habitat for two plant species of concern and one animal species of concern of regional significance. The program also identified the area of the Conodoguinet Creek at Wolf's Bridge as supporting aquatic species of concern. The habitat conservation recommendations in their report should be observed and followed in development of this project site.
 1. Maintaining water quality in the Conodoguinet will benefit these species, which also occur downstream at several locations along the creek. The plant species of concern will benefit from minimizing disturbance on the floodplain and by allowing a wider forested buffer to grow along the creek.
15. The legends provided on sheet 4 (general information) should be reviewed. It appears that there is a spacing error (SLDO 501.A.14).

16. The instrument and parcel number should be provided in the site data on sheet 2 (SLDO 501.A.15.e.1).
17. This property is enrolled in the Cumberland County Clean and Green Program and may be subject to roll-back taxes. Contact the Cumberland County Tax Assessment Office for information (SLDO 501.A.18).
18. Adjoining property owner information should be provided (SLDO 501.A.19).
19. Sheet 2, general note 11 should be clarified as the township has recently adopted a new zoning ordinance. The zoning regulations block (sheet 2) indicates that the September 3, 2025 ordinance applies (SLDO 501.A.21).
20. A phasing plan should accompany the submission. The plan should identify each phase and a schedule for completion (SLDO 501.B.3).
21. A hydro-geologic study and water quality testing report should accompany the submission (SLDO 503.A.6).
22. Emergency service providers should review and comment on the plan (SLDO 602.M).
23. Each watercourse, drainageway, channel or stream should be provided with a drainage easement (SLDO 704.I).
24. The applicant has requested a waiver (deferral) of sidewalk requirements. The township should consider requesting pedestrian pathways in the floodplains and riparian buffer areas adjacent to the Conodoguinet Creek (SLDO 707.C).
25. Surveying monuments and / or markers should be identified or placed at each corner of the property line (SLDO 709).
26. The plan should address a dedication of recreation land or a fee in lieu of dedication (SLDO 710).
27. Fire hydrants should be shown on the utility plan (SLDO 712.C.5).
28. The applicant should consider traffic control signage at intersections throughout the proposed development (SLDO 715.A.1). In addition, clear sight triangles should be shown and the required / provided sight distances should be provided (zoning 4.14 and SLDO 703.K).
29. An environmental impact assessment report should accompany the submission (SLDO 718).
30. Existing trees with a trunk diameter of 20 inches or more should be identified on the landscape plan (SLDO 719.B.2.d).
31. The landscape plan should be certified by a registered landscape architect (SLDO 719.B.3).
32. Sheet C1B 602 includes a small 'reforestation area.' Sheet C1B 601 includes a tree schedule for reforestation areas. The tree reforestation schedule proposes almost 6,000 trees placed 10 feet on center. The landscaping plan should be reviewed by a registered landscape architect to verify the spacing proposed and the goal for these planting areas. (SLDO 719.B.3). The township should consider a forestry professional review of the plan as the concentration of trees in the limited proposed reforestation areas will require extensive thinning over time. CCPD recommends that all proposed trees are spread out to a larger defined area that will support the trees at full maturity (SLDO 719.C.2).

33. Phase 3 of the Pennsylvania Digital 1 (PAX-1) project includes a reforestation area and a riparian buffer enhancement area. The applicant should include a riparian buffer enhancement area for each phase of the project.
34. In addition to other landscape requirements, the plan should provide one tree for every 1,000 square feet of gross floor area of building (SLDO 719.C.15.a). The landscape plan should provide a total square footage of gross floor area and proposed trees to meet this requirement.
35. At least 10% of the gross area of the parking lots should be landscaped and include a deciduous tree per 20 parking spaces (SLDO 719.C.16.f). The landscape plan should include proof of compliance including the area of each parking lot and the area of landscaping provided in each lot.
36. The applicant should coordinate a visual impact analysis with the Appalachian Trail Conservancy and the National Park Service. The Appalachian Trail Conservancy has provided the following concerns:
 - a. The character of the landscape along the entire Cumberland Valley stretch of the Appalachian Trail is historically agricultural, pastoral, and rural. Several landowners hold special use permits to maintain this landscape character in this area. The proposed development will fundamentally change the character of the landscape everywhere they are visible. The proposed structures will be visible for approximately 800 feet of the Appalachian Trail. Native, non-invasive, tall evergreen plantings should be considered to block the buildings between the trail and the eastern border of the subject property.
 - b. The applicant and the township should consider the view from the Appalachian Trail when the development area is viewed from above, for example at the Cumberland Valley Overlook. The roofs of the buildings will be geometric, with straight lines, on landscape full of organic shapes and curving lines. If the roof, and the accessories on the roof, are white, light or reflective, it will stand out in terms of color, line and landscape character. The applicant should consider planting a green roof on the buildings, and/or having the roofs and any roof-top infrastructure painted a darker, muted/natural color.
 - c. Given the proximity to the Appalachian Trail, the applicant should consider impacts from habitat loss and noise.
 - d. The applicant and the township should verify that dark sky standards are used to ensure minimal impacts. Lighting should be minimized to limit disruption to migratory and endemic species that rely on the Conodoguinet Creek corridor for forage and cover.
37. A “master plan” is referenced throughout the land development plan. The master plan should accompany the submission.
38. Sheet 2, general note 22.3 and 22.15 should be clarified.
39. Please work with the municipal addressing authority to determine addresses as soon as possible. Providing complete and accurate addressing information to Cumberland County GIS when plans are finalized, but before construction, ensures that they can be added to the Master Street Address Guide (MSAG). An up-to-date MSAG is critical to ensuring that addresses validate in the 9-1-1 system. Other utility providers also depend on the MSAG to validate installations in new developments. If you have any questions regarding addressing or the MSAG, please contact

Garrett McKinney, MSAG Coordinator, at (717)240-6418 or ghmckinney@cumberlandcountypa.gov.

40. Cumberland County strives to create the most accurate public records possible. The following electronic AutoCAD files (.dwg) are **required** by the Planning Department prior to or at the time of recording any plan. Please note that the Planning Department **will not sign the plan for recording** until this information is emailed to planningreviews@cumberlandcountypa.gov. Links to online file downloads are acceptable. Applicants are required to provide the following information:

- a. **Parcel boundaries**
- b. **Lot lines**
- c. **Building footprints**
- d. **Road rights-of-ways**
- e. **Edge of pavement**
- f. **Declaration of planned communities/condominiums documents (including amendments)**