



Herbert, Rowland & Grubic, Inc.
369 East Park Drive
Harrisburg, PA 17111
717.564.1121
www.hrg-inc.com

PHASE 1C PRELIMINARY LAND DEVELOPMENT PLAN 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-C

Middlesex Twp. Plan No. TPF 26-10

May 8, 2026

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

Submission:	Dated:	Last Revised:
Plan Set for Phase 1C (45 sheets)	04/17/2026	--
Post Construction Stormwater Management Report for Phase 1C (SWM Report)	April 2026	--
Geotechnical Engineer Report for Stormwater Management	10/24/2025	01/23/2026
Middlesex Twp Application and Checklist	04/17/2026	--

The applicant has submitted the following requests for relief:

Requested Waiver(s):	Ordinance Section:
Plan Size and Scale	SALDO 501.A.2
Location Map Scale	SALDO 501.A.6
Sidewalk Requirements	SALDO 707.A.1
Detention Basin Side Slopes > 4:1	SWM 303.J.3
Dewatering	SWM 303.H.17
Infiltration of Stormwater	SWM 303.B.2

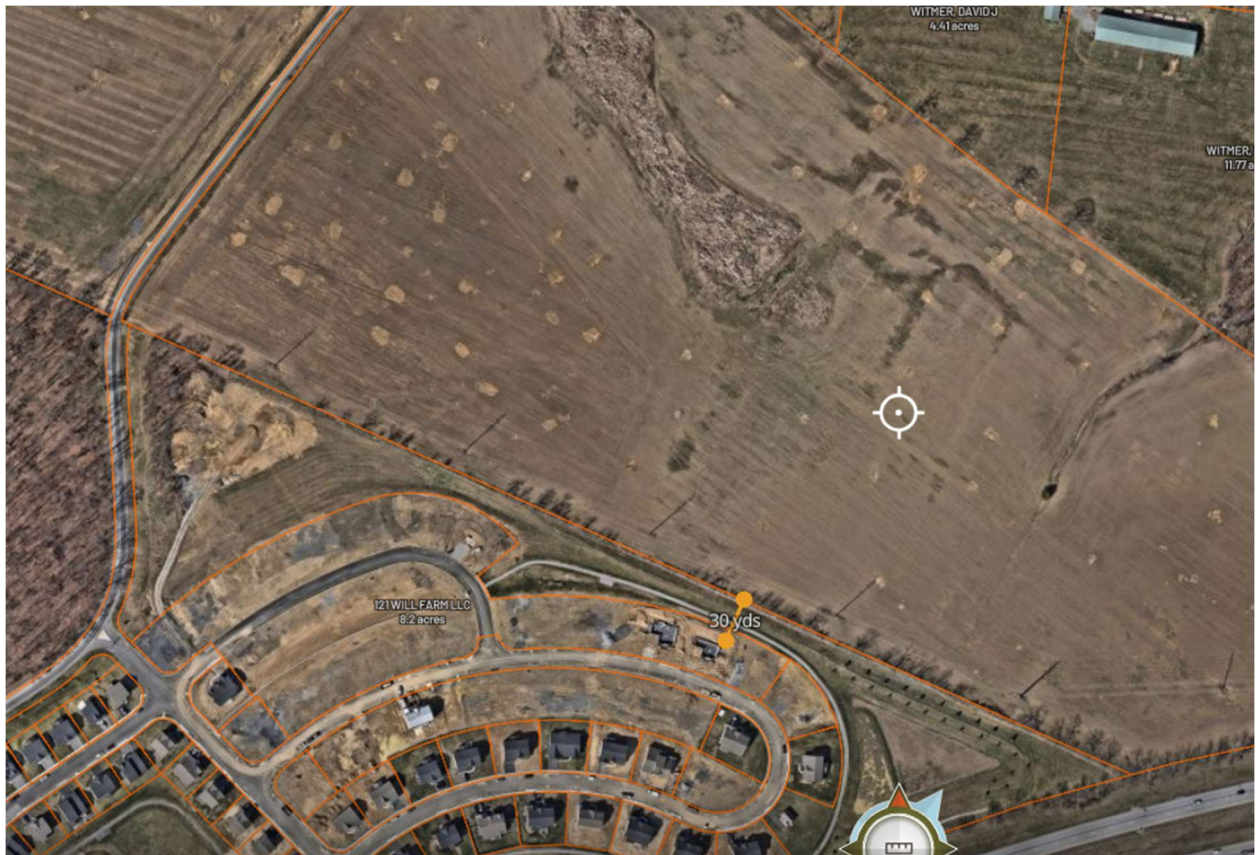
We offer the following comments (* - Indicates comments not addressed from previous review letters):

ZONING

1. Confirm the Lot 1C impervious coverage and percentage, Zoning regulations (sheet 3) and the existing/proposed conditions (sheet 4) differ [2.18(F)]. Revise sheets for consistency.
2. Include setback dimension labels (sheets 8 & 13-16), similar to previous Plans [2.18.F & 2.18.G.2.c].
3. Within the Zoning Regulations, change the proposed Phase 1C use as no data center is proposed on this lot. The Zoning office should advise as to whether the proposed use is an Outdoor Storage Yard, Temporary Construction Site Trailer, Construction Trade and Contractor, or another use as described in the zoning ordinance (Section 3.04 and 3.05). Additional zoning requirements may apply depending upon the use determination.
4. The buffering, landscaping and screening Section [4.03] references the Subdivision and Land Development Ordinance Section 719. Street trees shall be provided [719.C.6.a.3)]. A screen buffer shall be provided [719.C.14.a.1)]. A buffer appears to be provided along the south side of the lot (adjacent to the residential use). A buffer shall be provided along the north side of the lot adjacent to the residential use.
5. The Cover Sheet drawing index includes sheet numbers (C1C 001-805 and ES1 001-304). Confirm the sheet numbers in the index. C1C 801-805 is shown as 26-40, these appear to be 29-33. Confirm the other sheets.
6. Provide a sound study for Phase 1C, or an update to the previously submitted sound study. In doing so, provide a list, summary table, or similar means to identify changes or updates made to the prior study in association with Phase 1C [419.F]
7. Clarify whether or not outdoor lighting is to be installed on the subject lot. If so, demonstrate compliance with the applicable lighting requirements. [4.10 and 711]

SUBDIVISION AND LAND DEVELOPMENT

1. The numbering on sheet index does not appear to be consistent with the plan sheets for the Profile Plan, Landscaping Plan, and Civil Details/Operation and Maint. Plan. Please reconcile [501.A. 12].
2. Based on recent aerial imagery it appears that there may be existing man-made structures within 100' of the southern property boundary that are not shown on the plan. Please revise as necessary [501.A.26]



3. Based on discussions at the 5/06/2026 job site meeting, HRG understands that Phase 1C will be used in part to accommodate job trailers. Depict and identify the use of all proposed buildings on the plan [501.C.2.b].
4. Address the requirement to provide elevations of the bottom of box for all stormwater inlets & manholes shown on all drawing sheets [501.C.10.c & d]
5. Provide a listing of all local, state, federal and other agency permits and approvals which are ultimately required for Final Plan approval and construction [503.A.8].
6. Clarify whether or not the geotechnical report submitted with Phase 1A is intended to cover Phase 1C. If not, provide a geotechnical report for Phase 1C. [503.A.13.a & b].
7. All driveways shall be located, designed and constructed in such a manner as not to interfere or be inconsistent with the design, maintenance and drainage of the streets. Provide drainage design for the driveway crossing [703.I.5].
8. All new private driveways must be paved for a minimum distance of fifty feet (50') from the street right-of-way line with bituminous surface material, concrete, brick pavers or other material acceptable to the Township [703.I.8].
9. Cut slopes shall begin a minimum distance of two feet (2') behind the right-of-way line to allow for the proper placement of the shoulder or sidewalk and for rounding of the slope. Where site drainage

conditions dictate, additional area behind the right-of-way line shall be provided to accommodate the placement of drainage facilities [703.M.a.2].

10. Sidewalks must be installed along both sides of all new interior streets in all commercial and industrial land developments within the Township unless otherwise waived by the Township. Sidewalks must also be constructed along the side of all exterior streets upon which the land development fronts [707.A.1]. **A waiver of this section has been requested**
11. Non-residential developments shall dedicate a minimum of ten percent (10%) of gross land area for park or recreation use [710.A.3.b].
12. Provide Landscape Plan [719.B.1]
 - a. All trees shall have a minimum trunk diameter of two and one-half inches (2.5") at a height of six inches (6") above finished grade [719.C.11]
 - b. Requirements for the measurement, branching, grading, quality, and burlapping of all shrubbery shall follow the code of standards recommended by the American Association of Nurserymen, Inc. in the American Standard Nursery Stock, ANSIZ60, 1-1973, as amended [719.C.13]
 - c. All newly planted landscaping trees shall have a minimum two and one-half-inch (2.5") caliper at the time of planting [719.D.2]
13. Note: It appears there is disturbance within the PPL Right-of-Way shown on Sheet C1C 010. Revise the proposed grading or provide documentation that approval was granted by PPL [General]
14. Ensure that all proposed grading along Country Club Road ties smoothly into the existing contours along the western edge, as applicable [1101]:
15. It appears that surface water runoff will become concentrated at the eastern edge along Country Club Road, the western edge of the laydown yard, and the southeastern edge of the laydown yard where proposed contours tie into existing; please reconcile by means of stormwater conveyance techniques as shown in other areas of the laydown yard, or label this section as a channel and design as required [1102.A.2 / 1102.A.3].
16. Site grading shall be a financially secured site improvement and shall be included in the construction cost estimate for site improvements required by Article XIII of the SALDO [1104.B].
17. Existing stream valleys and other wetland areas shall remain as designated open space [1202.C.2].
18. The Township Engineer shall be present, unless indicated otherwise, during storm sewer construction to perform material checks and to observe for proper construction. Storm sewer trenches shall not be backfilled and closed without prior approval of the Township Engineer. Failure to adhere to these requirements shall render storm sewer construction defective and shall be removed and replaced at the Applicant's sole expense. Prior to construction, specifications and/or details (shop drawings) shall be submitted to the Township or the Township Engineer for review and approval so as to ascertain compliance with the approved plans. [1406.A.5/6].

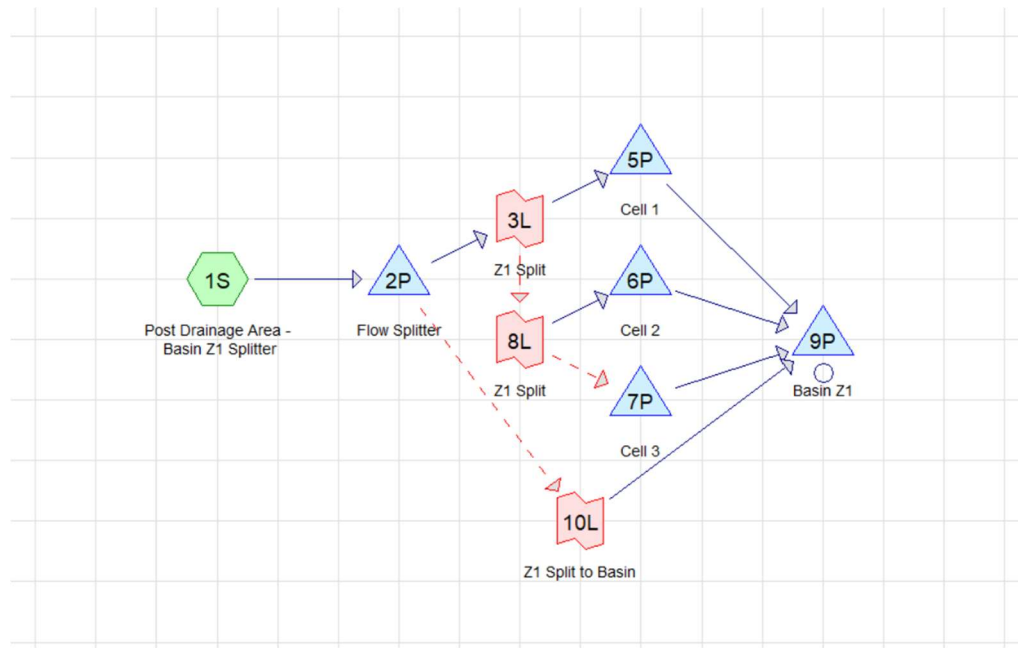
ENVIRONMENTAL IMPACT ASSESSMENT

1. Provide an environmental impact assessment for Phase 1C [718].

STORMWATER MANAGEMENT

1. Demonstrate that an NPDES permit has been secured for the proposed site disturbance. [109] Provide copy of the E&S plan and any other submitted documents for reference [103.J & 301.Q]
2. 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.**
3. 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.**
4. 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.**
5. Provide soil boundaries and their HSG on the SWM Plan [302.A.7].
6. Provide additional existing conditions contour labels on the Grading & Stormwater Plan and E&S plan sheets [302.A.6].
7. It is recommended that all inlets provide a minimum 2" drop between the lowest inlet pipe invert elevation and the outlet pipe invert elevation [1401.B].
8. Provide the acreage of the limit of disturbance on the Grading & Stormwater Plan [302.A.18].
9. A sediment forebay with a hardened bottom shall be provided at each inlet into detention basins. Similar to what was done for Phases IA and IB, depict the location of the water quality snouts and their sump depth on the plan/stormwater profiles. Once the snouts are added to the plan/profiles, this comment will be considered addressed. [303.J.11].
10. Provide spot elevations on the top of the 11' wide berm [302.A.19].
11. Storm run from IC-2.3 to IC-2.4 is negatively sloped towards inlet IC-2.3 and storm run from IC-1.3 to IC-1.2 is negatively sloped towards inlet IC-1.3. Revise accordingly [302.A.12].
12. Confirm that there is sufficient cover over the pipe for storm runs I-1C.4 to I-1C.5 and IC-3.1 to IC-3.2 [302.A.12].
13. The manifold system for the Basin Z1 MRC cells appears to be at varying elevations rather than a flat elevation from each MRC cell to the flow splitter structure. Additionally, the invert of the 18" SLCPP into each SCM varies. Confirm that this is the intended design or revise accordingly [302.A.12].
14. Ensure that the flow splitter structure FS-Z1-1.1 detail is consistent with the profile depending on the revisions per the comment above [302.A.13].

15. MH-Z2-1.1 has an invert out of 427.25' which is higher than the invert in. This may cause reduced flow getting to the MRC cell. Revise accordingly [302.A.12].
16. The invert out to the rate basin of flow splitter structure FS-Z2-1.1 is inconsistent between the plan and profile. Revise accordingly and ensure that the invert out to the rate basin is at the same invert elevation or lower than the inverts to the MRC cells [302.12].
17. It is recommended to lower the invert elevation of the inflow pipe at both flow splitter structures to reduce the potential of flow to 'arch over' the weir and bypass the MRC cells.
18. Revise structure MFLD-Z1-1.1, MFLD-Z1-1.2, MFLD-Z2-1.1, MFLD-Z2-1.2 and MH-Z2-1.1 to have a T/G elevation at the proposed grade elevation [302.A.12].
19. Revise the T/G elevation for the MRC cell outlet structures to be consistent with the routing calculations and details for both basins [302.A.12 & 302.A.13].
20. The storm profile for OS-Z1-1.4 to FES-Z1-1.8 is inconsistent between the routing calculations and the Basin Z1 outlet structure detail. Revise accordingly [302.A.12 & 302.A.13].
21. The storm profile for OS-Z2-1.4 to FES-Z2-1.8 is inconsistent between the routing calculations and the Basin Z2 outlet structure detail. Revise accordingly [302.A.12 & 302.A.13].
22. Provide riprap apron and supporting calculations for FES-Z2-1.5 and FES-Z1-1.3 [303.J.9].
23. Confirm that the flows utilized in sizing the riprap aprons for FES Z2-1.1, FES-Z2-1.3 and FES-Z2-1.6 are correct as the hydroCAD outputs have a peak inflow to these MRC cells as ~6.3 cfs [302.D].
24. Provide clarification of review status of MRC designs with PaDEP [303.D.1]
25. Provide quantification of planting totals for MRC plantings as described on sheet C1C 802 [302.G].
26. Review scale on DA map, POST-DA LOD, in the PCSM Report. The scale shown (1" = 200 ft) is inconsistent with the scales of other DA maps (1" = 150 ft). [302.A]
27. Confirm the storm events being captured and treated in the Z2 MRC Overflow cells in the Post-development condition. The HydroCAD output indicates little overflow from the cells for the 10-year and 25-year events. This is inconsistent with the POA Z2 MRC Worksheet that indicates a maximum 2-year event is being treated in the MRC cells. [303.C.11]
28. The HydroCAD routing diagram utilizes a link to split the MRC inflow hydrographs into the three MRC cells. It appears that this may be better modeled as the inflow hydrograph going to a single MRC overflow structure and then split using the link. This would eliminate the need to model three separate flow splitter structures when there is only one proposed. This may also address the comment above. See diagram below for clarity [302.D].



29. Provide documentation of the ponding times provided in the POA Z1 and POA Z2 MRC worksheets. [303.C.11 & 303.H.17]
30. Provide documentation that PADEP or a delegated conservation district has approved the use of MRCs on the site or an NPDES permit has been obtained [302.D]

COUNTRY CLUB ROADWAY IMPROVEMENTS

1. The applicant has indicated that improvements to Country Club Road along the Phase 2 frontage are to be designed and constructed in association with Phase 1C. Generally, HRG does not object to this approach as long as the Final Phase 1C plan is approved before, or simultaneously with the Final Phase 2 plan. Several aspects of this proposal are unclear:
 - a. Separate plan sheets for Country Club Roadway Plans were not included with the 1C plan submission. Will a stand-alone plan set be provided similar to what was done with Phase 1A, or is it the applicant's intent to describe the Country Club Roadway design on the other land development plans (layout, grading, etc.)?
 - b. The applicant should confirm that this arrangement includes the roughly 325' long portion of Country Club Road from the eastern boundary of Phase 2 to the Eastern boundary of Phase 1C. [703.A.10]. Currently, the limit of disturbance shown in the Phase 1C plan does not include this area.

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. Update the Phase 1A developers agreement to include any proposed offsite improvements to Country Club Road such as widening west of the property to accommodate construction traffic, or additional ROW to accommodate communications lines or other utilities.

ITEMS TO BE ADDRESSED IN THE FINAL LAND DEVELOPMENT PLAN

1. 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. 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. Specify on the storm profiles where a non-standard inlet box is required. Provide a construction detail and labeling for any type of box utilized [302.A.13].
4. Provide a min. 20' wide drainage easement with metes and bounds along all stormwater management facilities, channels and inlets [SALDO 501.C.19, SWM 303.J.12 & 303.K.12].
5. 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].
6. Provide a Final Landscape Plan (719.B.2 and 3)
7. Establish financial security for on-site improvements. Provide a cost estimate of these improvements for review [Section 1301].
8. Provide an updated Final Environmental Impact Assessment, including any changes to the plan associated with the final design. Provide a summary table, list, or similar means to identify any changes made to the document from when it was submitted with the preliminary plan. [§718].
9. Provide an updated Final Sound Study, including any changes to the plan associated with the final design. Provide a summary table, list, or similar means to identify any changes made to the document from when it was submitted with the preliminary plan. [§419.F].

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