



HanoverEngineering

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February 27, 2026

Mr. Mark Hudson
Township Manager
Hanover Township
Northampton County
3630 Jacksonville Road
Bethlehem, PA 18017-9302

RE: Jaindl Land Company – HCC2 Lot 11
Proposed Industrial Development
6990 Steuben Road
Preliminary Land Development Plan
Received February 9, 2026
Hanover Project H25-29

Dear Mark:

We have reviewed the above-referenced Preliminary Land Development Plan submission, as distributed by our letter of February 19, 2026, for conformance to the Hanover Township Zoning Ordinance, Subdivision and Land Development Ordinance and other appropriate Ordinances as found in the code of the Township of Hanover, adopted February 12, 2020, as amended. We offer the following comments for the Township's consideration.

All planning issues are indicated by an asterisk (*).

A. GENERAL COMMENTS

1. This is the first submission and consists of a twenty-five (25) sheet Preliminary Land Development Plan, seven (7) sheet Soil Erosion and Sedimentation Control Plan and three (3) sheet Post-Construction Stormwater Management Plan for the approximately 14.62-acre site zoned Planned Industrial/Business Park District (PIBD). The Applicant is proposing a 102,700 s.f. warehouse building. Warehousing is a permitted use within the PIBD.
2. The site is located at the northeastern corner of Hanover Township. The site is bordered on the north by Steuben Road, on the west by an existing residence, on the east by Township Line Road and the Lower Nazareth Township line, and on the south by Hanover Corporate Center 1. The site is currently an undeveloped lot being used for agriculture.

B. SUBDIVISION AND LAND DEVELOPMENT ORDINANCE – CHAPTER 159

Sections 67-13– All proposed fencing shall be installed in accordance with the specifications in this section. The proposed fencing shall be subject to approval by the Board of Supervisors.

Sections 159-10.B and 67-3 – The Applicant shall provide roadway cross sections for Steuben Road and Township Line Road. The Applicant shall also clarify what roadway improvements are to be constructed and if they are going to construct improvements to both sides of the aforementioned roads.

Sections 159-15.I.(5) and 73-7.E – Driveways for all nonresidential subdivisions shall not be less than 15 feet in width and shall not exceed 30 feet in width. The access driveway that is being proposed is a non-standard design.

Sections 159-15.I and 73-7.D – The minimum radius for a driveway entrance curb is 20 feet, maximum 55 feet. The driveway curb radius shall be identified at the driveway entrance.

Sections 159-15.L – All lot corner markers shall be permanently located and shall be at least three-quarter-inch metal pin or pipe with a minimum length of 30 inches, located in the ground to existing grade. All existing lot corner markers shall be identified on the plans or new ones shall be identified as to be set.

Sections 159-17.E and 159-29.C.(6)(c) – Before any tree removal, earthwork or construction work shall commence, fencing or guards shall be placed around all existing trees, shade trees or street trees to be protected. A tree protection fence construction detail shall be provided.

Sections 159-17.F – The replacement trees to be planted shall be labeled with their proposed species so quantities and locations of proposed replacement trees can be verified.

Sections 159-20, 159-29.D.(8) and 67-10 – The following comments regarding the existing and proposed sanitary sewage service shall be satisfactorily addressed:

1. The project is located within the Hanover Corporate Center 2, with sanitary sewer allocation of 3,577 gallons per day per the Planning Module dated February 14, 2007. The applicant shall provide an updated projected sanitary sewage flows for the property, to ensure the use does not exceed the allocation with the planning module approval for the subdivision.
2. The calculations for the grinder lift station design shall be provided and consistent with the projected sanitary sewage flows for the proposed use for the property.
3. The General Sanitary Sewer Notes shown on General Notes (Sheet 3) shall include a statement, “No floor drains shall be connected to the sanitary sewer collection system.”
4. The Existing Conditions Plan 1 (Sheet 7) should be revised to depict the existing sanitary sewer lateral for Lot 11 that is shown on the Utility Plan.
5. The Grading and Drainage Plan (Sheet 9) should be revised to provide the rim elevation for the Grinder Lift Station. Also, it should be labeled in the plan view.

6. The Utility Plan (Sheet 10) comments:
 - a. The plan shall be revised to provide a curb stop and backflow valve at the connection to the existing sanitary sewer lateral stub.
 - b. The slope and length of the gravity sanitary sewer lateral shall be provided.
 - c. The pipe material for the gravity sanitary sewer lateral shall be labeled as SDR-26.
 - d. The pipe material for the low-pressure force main shall be provided and be consistent with the calculations for the lift station and appurtenances.
7. The distance between the force main and the storm sewer at the crossing shall be provided on Storm Profiles 2 (Sheet 14).
8. The distance between the force main and the storm sewer at the crossing shall be provided on Storm Profiles 4 (Sheet 16).
9. The Plan and Profile Sanitary Sewer (Sheet 17) comments.
 - a. The plan shall be revised to provide a curb stop and backflow valve at the connection to the existing lateral stub.
 - b. The slope, length of the gravity sanitary sewer lateral shall be provided.
 - c. The pipe material for the gravity sanitary sewer lateral shall be labeled as SDR-26.
10. The force main crossing shall be shown on the Fire Loop Plan and Profile Plan.
11. Construction details for the sanitary sewer improvements shall be provided.

Sections 159-21– The Applicant shall satisfactorily address all comments from the City of Bethlehem Water Department including the following comments:

1. The valve at the building should be a “post indicating valve” or a “wall indicating valve.”
2. The domestic line needs to be tapped off outside the building with a separate shut-off.
3. Where the water main crosses the 24” storm sewer, Field Lok Gaskets should be used 2 lengths each side of crossing.

Sections 159-21– Please note that the proposed waterline is not proposed to be extended along Steuben Road.

- * Sections 159-24 and 159-11.W – Streetlights shall be provided on the plan and be proposed to the satisfaction and approval of the Township.
- * Sections 159-28.B and 159-29.D.(14) – No parking fire zones and emergency vehicle turning templates shall be provided to the satisfaction of the Township Fire Marshall. The Applicant shall satisfactorily address any comments from the Township Fire Marshall.

Section 159-29.C.(2) – All elevations shall be based on the USGS sea level datum. A vertical datum reference shall be provided on the plan.

Section 159-29.C.(2) – The proposed grading and drainage plan is difficult to read and should be updated to remove the unnecessary existing contours for increased legibility.

- * Section 159-29.C.(6) – The plan shall be submitted to and reviewed by the Township Shade Tree Commission. Any comments from the Township Shade Tree Commission shall be considered.

Section 159-29.D.(4) – A retaining wall construction detail, with notes specifying retaining wall design calculations and construction plans shall be submitted to the Township for review and approval prior to construction.

- * Section 159-29.D.(12) – A cross section shall be provided for the proposed emergency access drive, and the proposed emergency access drive shall be subject to Township EMS review and approval.

Section 159-29.E.(1) – The Applicant shall provide service certifications from the City of Bethlehem for the proposed sanitary sewer and water supply services.

Sections 159-29.F.(1), and 159-40.(G) – The owners shall sign and notarize the Owner's Statement.

Sections 159-29.F.(2) and 159-30.E.(1) – The design professionals shall sign and seal the Engineer's and Surveyor's Certifications.

Section 159-29.F.(7) and 159-40.F – An owner's signed acknowledgement of a list of dedications, maintenance for a period of eighteen (18) months, and completion date shall be added to the Plans.

Section 159-33.B – A copy of the Lehigh Valley Planning Commission review letter shall be submitted upon receipt.

Section 159-44 – Upon approval by the Board of Supervisors, a note shall be added to the Plan listing all waivers and deferrals, along with any conditions and the meeting date of the Board of Supervisors action.

C. STORMWATER MANAGEMENT ORDINANCE – CHAPTER 152, ORDINANCE NO. 19-1

Sections 152-6.1.A and 152-16.D – No Regulated Earth Disturbance Activities within the Township shall commence until approval by the Township of an Erosion and Sediment Control Plan for construction activities. Written approval by DEP or the Northampton County Conservation District shall satisfy this requirement.

Sections 152-6.1.A – The work within natural drainageways are subject to permit by DEP under 25 PA Code Chapter 102 and 105. A copy of any necessary permits from DEP shall be provided to the Township before the commencement of any earth disturbance activity.

Sections 152-6.1.C and D and 152-16.D – A DEP NPDES Stormwater Discharges Associated with Construction Activities Permit is required for Regulated Earth Disturbance Activities of one acre or greater under PA. Code Chapter 92, and a copy of the NPDES Permit must be provided to the Township before the commencement of an Earth Disturbance Activity.

Section 152-8.E – The total runoff from the site shall meet the applicable release rate criteria of the Monocacy Creek Watershed subarea that it is contained in. The “Pre-Development Act 167 Peak Runoff Rate 50% Release Rate District” column on page 14 of the storm report does not appear to show the correct 50% allowable release rate relative to the pre-development runoff rates contained in the adjacent column. Please check and revise as necessary.

Section 152-8.I – Off-site areas which drain through a proposed development site are not subject to release rate criteria when determining allowable peak runoff rates. However, on-site drainage facilities shall be designed to safely convey off-site flows through the development site using capacity criteria in Chapter 152-8.D. Expand the drainage plans to the South to ensure that all off-site drainage is accounted for.

Section 152-8.H – The design release rate for the area that drains to the existing quarry shall be calculated in accordance with this section. The stormwater report states the design excludes the quarry to be more conservative, however, calculations for all methods in this section shall be provided to show the lesser design release rate is utilized.

Section 152-9.H – Emergency spillway calculations for the underground detention basin shall be provided in accordance with this section.

Section 152-9.L – Runoff curve numbers (CNs) to be used in the SCS method shall be based upon the matrix presented in Appendix C of this chapter. Clarify what type of Cult is being used in the calculations. The CN for woods appears to be incorrect.

Section 152-9.N – Ensure that the time of concentration calculations are prepared based on the longest flow path within the drainage area. Also, the Tc line on the drainage plans shall be labeled.

The following comments regarding the Stormwater Infiltration & Carbonate Assessment Report and associated details on the land development plan shall be satisfactorily addressed:

1. Chapter 152-9.1.E: The applicant shall conduct a preliminary site investigation per the requirements of this section. The testing reported addresses this requirement.
2. Chapter 152-9.1.F: The applicant shall demonstrate compliance with horizontal and vertical setback criteria specified in this section.

3. Chapter 152-9.1.G: The applicant shall conduct the Additional Site Investigation and Testing as outlined in Appendix G per the testing density table. It is noted that the geotechnical consultant states in the Stormwater Infiltration Report, Section 5.4, that "Once the spray irrigation areas and basin locations are finalized, additional auger probes or geophysics will need to be performed". All additional site investigation and testing shall be coordinated with this office for witnessing.
4. The Stormwater Infiltration Report contains Figure 7, Typical Sinkhole Mitigation Details. The figure shows only a portion of details, which are not scaled to fit on the page. Provide the entire details. The detail(s) on the plan should match the detail(s) provided by the geotechnical consultant in the report.
5. Provide plan view and cross section details of the proposed surface detention basin.
6. Provide a full set of spray irrigation design plans, including all details, specifications, charts, and calculations.
7. All spray irrigation components shall be clearly depicted and labeled on the land development plans, including the location of all spray heads and the designed spray pattern from each head.
8. Provide the design infiltration rate for each spray irrigation area and demonstrate how it was calculated.
9. Provide at least two (2) perpendicular cross sections through the existing quarry showing existing grades and proposed grades and improvements, including the building foundation and slab. Elevation data indicates that the quarry bottom is approximately thirty-seven feet (37') below the proposed building finished floor elevation. The Stormwater Infiltration Report states that the quarry bottom was dry at the time of field work conducted in December of 2025. Confirm that the quarry bottom remains dry during the wet season in the Spring of 2026. Provide measures to achieve a stable quarry bottom and to fill the quarry to subgrade elevations suitable for construction. Specify the composition of material to be used for fill, maximum lift thickness, acceptable compaction method(s), minimum required degree of compaction, and onsite testing methods to ensure that the building subgrade is stable and has adequate bearing capacity.
10. Plan Sheet 3, Land Development Note 5 references the approved sewage facilities planning module for the subdivision, states that Lot 11 was approved for a project flow of 3,577 gallons per day, and states that the approved flow is consistent with the proposed development. Document the design flows from the proposed project. It is noted that the project shall include truck driver lounge facilities with restroom facilities (Land Development Note 26).
11. Plan Sheet 3, Land Development Note 22 states that basin liner specifications and installation procedure shall be provided to the Township for review and approval prior to land development approval. It is noted that specifications and installation procedures are provided on Plan Sheet 3, Grading and Utility Note 23. The project geotechnical consultant shall review and approve this note or provide revised information. This note shall be included along with the basin details or referenced.
12. Plan Sheet 3, Land Development Note 23 states that all retaining wall designs shall be submitted to the Township for review and approval prior to construction. This shall be a requirement for building permit issuance.

13. Plan Sheet 24 contains an Underdrain Detail. Provide a full plan view detail of the proposed underdrain network with all critical dimensions, pipe sizes, material of construction, etc.

Section 152-9.2.D – Vegetated/surface BMPs shall be employed “first” for the site to capture the equivalent of a minimum of 0.38 inches of runoff for each square foot of impervious area, unless proven not feasible by the applicant. Calculations documenting compliance with this requirement shall be provided.

Section 152-10.B – The Applicant shall provide easements in accordance with this section.

Section 152-10.E – The Applicant shall provide the Township with a notarized statement satisfactory to the Township Solicitor, stating that the Township shall be held harmless against any claim of damage from the downstream property owners that may result from the proposed development.

Section 152-10.I.(6) – Basins shall be designed to avoid the need for safety fencing. The max depth of detained runoff required per this section does not appear to be met.

Section 152-10.I.(9) – The basin liner specifications, in accordance with this section, shall be included on the plan.

Section 152-10.I.(10) – The Applicant shall ensure that the minimum slope of 2% of the proposed detention basin bottom is met.

Section 152-10.M – The Developer shall provide a covenant running with the land to identify the property owner’s responsibilities for the ownership and maintenance of the private stormwater collection, conveyance, control, and BMP facilities.

Section 152-11.G.(12) and 67-9.D – All pipe end walls or wings walls shall be protected from frost-related movement and scour activity by the construction of a concrete footer with a minimum depth of 30-inches below ground level. All proposed stormwater management structure details shall be added to the plan and shall comply with this requirement.

Section 152-12.B and C – The developer is required to install or improve the Township interceptor system, by the value of at least \$1.80 per square yard of impervious cover.

Section 152-15.D – A statement must be included on the Plans, signed by the landowner, acknowledging that the stormwater BMPs are fixtures that cannot be altered or removed without approval by the Township.

Section 152-15.E – An environmental resources site design assessment shall be provided for the existing, undeveloped portions of the site.

Section 152-16.A.(4)(b) – A copy of the Lehigh Valley Planning Commission stormwater management consistency letter shall be submitted to the Township and our office.

Section 152-24.3 – The property owner shall sign a Declaration of Covenant and Agreement for Maintenance of Stormwater Management Facilities and BMP(s) (the “Maintenance Agreement”) with the Township covering all stormwater BMPs that are to be privately owned. The Maintenance Agreement shall be substantially the same as the agreement in Appendix E of this Chapter. Other items may be included in the Maintenance Agreement where determined by the Township to be reasonable or necessary to guarantee the satisfactory operations and maintenance of all permanent stormwater BMPs. The Maintenance Agreement shall be subject to the review and approval of the Township.

Section 152-24.5 - The Owner/Developer of any land upon which permanent BMPs will be placed, constructed or implemented as described in the BMP operations and maintenance plan, shall record the following documents in the Office of the Recorder of Deeds for Northampton County, as applicable, within ninety (90) days of approval of the BMP operations and maintenance plan by the Township: the Operations and Maintenance Plan or a summary thereof, Maintenance Agreements under Section 152-24.3 of this Chapter and Easements under Section 152-24.4 of this Chapter.

Section 152-24.6 – Persons installing stormwater BMPs shall be required to pay a specific amount (\$5,000.00) to the Township Stormwater BMP Operations and Maintenance Fund to help defray costs of operations and maintenance activities. If the BMP is to be privately-owned and maintained, the amount shall cover the cost of periodic inspections by the municipality in perpetuity, as determined by the Township. The amount shall then be converted to present worth of the annual series values.

The following general comments regarding the PCSM plans and the Stormwater Management Report shall be addressed:

1. Dimensions shall be provided for the underground detention basin on the PCSM plan view.
2. Inlet 352 top elevation is inconsistent between the outlet control structure detail and the storm profile.
3. Inlet and Manhole details shall be included on the plan.
4. The ADS StormTech volume worksheet has two different minimum areas of the system listed, 19,843 sf and 18,866 sf. It is unclear why both of these are included on this worksheet.
5. The top elevation of the system for the underground basin is different between the pond report and the ADS StormTech volume worksheet. Additionally, the top of the stone elevation for the underground basin could not be found on the plans.

6. There does not appear to be a profile provided for the proposed pipe run from inlet 352 to the underground basin.
7. The profile for pipe runs from inlet 385 to inlet 387 specify 30-inch RCP, but the report specifies 18-inch RCP.
8. The construction detail for the proposed anti-seep collar is missing information in the data table.
9. Justification shall be provided for the flow rate used in the EW314 riprap calculations.
10. There is data missing in the tables for the sedimentation basin lining detail, skimmer detail, and the sedimentation basin embankment and spillway details.
11. Provide calculations for channel A. Also, show matting location for channel A in plan view.
12. The filter sock data table does not contain any data.
13. The proposed fence associated with the stormwater BMPs shall be identified with the proper line type on the plan.
14. The riprap aprons should be flat per the detail but does not appear to be on flat ground in plan view.
15. Show the existing features, including the drainage systems, on areas around the off-site boundary.
16. Clarify the diversion 1 and diversion 2 hydrographs provided in the stormwater report, as they contain the same peak flows.
17. Clarify why the area C-East states 100% discharge when the majority of this drainage area is disturbed.
18. A hydrograph for the quarry drainage area could not be located.
19. The contributing drainage area to the detention basin appears to be underestimated.
20. Detention basin details shall be on a plan to be recorded.
21. PCSM plans, including the operation and maintenance of BMPs shall be designated as plans to be recorded.

B. ZONING ORDINANCE – CHAPTER 185

- * Sections 185-14.C.(3) and G – No structures shall be placed between the setback line and the existing highway right-of-way line, except lamp posts, driveways, mailboxes, sidewalks, and utility lines, or such incidental items as may be agreed to by the Board of Supervisors during the site or land development plan review. The Applicant proposes a portion of the southern retaining wall within the front setback line.
- * Section 185-15.D.(2) – To the greatest extent possible, structures and buildings shall not be constructed in portions of a site affected by soil limitations or natural characteristics which reduce the ability of a lot to sustain development in a safe, aesthetic, or healthful manner. The Applicant proposes portions of the building, parking lot, and drive aisles within Special Conservation District (SCD) areas on the site.
- * Section 185-17.A.(1) – Additional signage and pavement markings shall be provided to direct and prohibit truck and other employee/visitor traffic throughout the site. Additionally, specifications and/or details shall be provided for all proposed signs and pavement markings.
- * Section 185-17. F – All parking areas of more than twenty-five (25) spaces shall be landscaped subject to review by the Planning Commission and approval of the Board of Supervisors.

Section 185-18 – We are unable to verify the proposed loading spaces and dock door quantities presented in the Parking Tabulation section on sheet 4. Please check these quantities and revise as necessary.

- * Section 185-18.A.(1)– The following comments regarding the truck access through the site and Truck Turning Plans shall be satisfactorily addressed:

1. Any proposed gates or other restrictions affecting traffic movements and stacking shall be clearly identified on the Plans.
2. Truck queuing areas shall be identified on the Plans via signage and pavement markings.
3. Turning templates for ingress and egress shall be provided for the largest anticipated vehicle for all areas of parking and maneuvering throughout the site.
4. Truck turning templates shall be provided to show trucks can adequately enter and exit the parking area without using the emergency access lane.
5. Turning templates shall be provided for any other truck/delivery traffic throughout the site.

Section 185-18.A.(3) – An off-street loading space or berth shall be at least 12 feet by 40 feet in area. The proposed off-street loading spaces away from the building are proposed at 11 feet by 55 feet.

- * Sections 185-20 and 185-35.A.(1) – The Applicant shall submit evidence to the satisfaction of the Board of Supervisors that the proposed use will be in compliance with the performance standards of this Section. Lighting fixtures and on-building lighting details shall designate full cut-off shielding and shall be provided on the plan.

Sections 185-22.C.(1)(e), 185-33.E, 185-35.A.(2) and 185-39.C – Architectural elevations and sections of the proposed building shall be provided.

Section 185-22.E.(4) – The Trip Generation summary submitted by the applicant documents proposed trip generation of 31 PM Peak Hour trips, 29 vehicles and 2 trucks, which is below the 91 PM Peak Hour trips allotted to Lot 11 in the approved HCC2 Traffic Impact Study.

* Section 185-22.E.(6) – The applicant shall address the following comments related to the recommended/proposed access improvements:

1. The applicant shall provide documentation, methodology and calculations for all proposed lanes and transition areas, including additional dimensions and labels on a plan to be recorded.
2. The applicant shall provide/document on-site queuing of trucks.
3. The applicant shall provide stop control for all egress movements.
4. The applicant shall provide additional signage and/or pavement markings for internal circulation of traffic as well as any restricted movements.

* Section 185-22.F – The table listing the tree species and trunk diameter on sheet 8 should identify which of those trees are to be removed.

Section 185-22.F.(2) – The required lot coverage shall be updated to 35.7% to reflect both the SCD and the woodlands lot coverage reductions. ($70\% \text{ PIBD} \times 0.6 \text{ SCD} \times 0.85 \text{ woodlands}$).

Section 185-22.G.(2) – The following comments regarding the Proposed Site Landscaping credits shall be satisfactorily addressed:

1. The replacement trees section lists 872 trees were located on site and of those trees, 445 are proposed to be removed and 429 are proposed to be removed. $445 + 429$ adds up to 874 trees on site. Please clarify.
2. The planting schedule lists only 4 Sawtooth Oak “SO” trees but there are many more than 4 trees labeled “SO” on the landscaping plan that are not included anywhere else on the planting schedule. Please clarify
3. The proposed replacement trees shall be identified/labeled on the landscaping plan.

Section 185-35.F.(3) – The proposed setback distances listed in the zoning requirements table shall be dimensioned on the plan.

Section 185-39.B – The total Special Conservation District area and percentage of the lot area shall be identified on the Plans.

* Section 185-39.B.(4) – Buildings and structures should be so sited on the lot to avoid land area situated in a Special Conservation District. The Applicant proposes portions of the building, parking lot, and drive aisles within Special Conservation District (SCD) areas on the site.

E. TECHNICAL COMMENTS

1. The Applicant shall meet with our office to review various plan features, labels and dimensions needed on a plan to be recorded.

F. IMPACT FEE – CHAPTER 102

The applicant shall document whether this land development is entitled to any Traffic Impact Fee credits as part of the Hanover Corporate Center 2 Subdivision Improvements Agreement. Pending this determination, Traffic Impact Fee (\$343.00/per PM peak hour trip) shall be calculated upon Township concurrence with the Applicant's Impact Fee credit assessment.

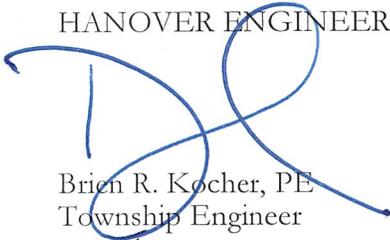
G. TAPPING AND CONNECTION FEE – CHAPTER 140

The Applicant will be required to pay a Tapping fee in the amount of \$8.10/GPD, a Connection fee (\$472.50 each) and a Customer Facilities fee (\$330.00 each) at the time of building permit issuance.

If you have any questions concerning this matter, please contact the undersigned.

Respectfully,

HANOVER ENGINEERING



Brian R. Kocher, PE
Township Engineer

brk:jcn/jam

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Enclosure

cc: Hanover Township Board of Supervisors
Hanover Township Planning Commission
Ms. Tracy Luisser, Zoning Administrator (via email)
James L. Broughal, Esquire (via email)
Ms. Nicole Galio, Jaindl Land Company (via email)
Mr. John M. McRoberts, PE, The Pidcock Company (via email)
Joseph A. Zator, Esquire, KingSpry (via email)