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October 12, 2023
Ref: #11539

East Vincent Township
262 Ridge Road
Spring City, PA 19475

Attention: Robert Zienkowski, Township Manager

Reference: 190 S. Wall Street – UPI #21-6-17.1
Spring City Elementary School Building Additions & Parking Expansion
Land Development - Preliminary Plan Review

Dear Bob:

We have received the Land Development application pertaining to the above-referenced property that was forwarded to our office by the Township for review. The submission consists of the following items as prepared by Chester Valley Engineers, Inc.:

- Preliminary Land Development Plans for Spring City Elementary School Building Additions & Renovations for Spring Ford Area School District, 17 sheets, dated September 15, 2023, with no revisions.
- Post-Construction Stormwater Management Report dated September 15, 2023, with no revisions.

We also received the following items prepared by Evans Mill Environmental, LLC:

- Preliminary Design Report for Wastewater Pump Station dated September 15, 2023, with no revisions.
- Spring City Elementary School Proposed Wastewater Pump Station Site Plan, Section & Notes, one sheet, dated September 12, 2023.

Relative to this matter, the applicant proposes improvements to an existing public school facility located on the southwest side of South Wall Street (State Route 1041) on a 10.0 acre (gross)/9.24 acre (net) lot in the HR High-Density Residential zoning district. The scope of work includes demolition of certain site improvements including the northwest playground and existing 41-space parking lot and its driveway connection to the bus loop, construction of a new 55-space parking lot, including three accessible spaces and a new two-way driveway access to S. Main Street, a 2,363-s.f. infill addition to the building's interior courtyard, and a 4,725-s.f. addition at the northwest end of the building. The building is served by existing public water and sewer service; however, as part of the proposal, a new pump

station and sanitary force main will be installed. Proposed stormwater facilities include two new infiltrations beds; one bed is 70 ft. x 202.5 ft. x 2.33 ft. in a lawn area east of existing geothermal wells, and the other bed is 36 ft. x 39 ft. x 2.5 ft. in an existing paved area northwest of the larger building addition. The smaller bed discharges to an existing aboveground stormwater basin that has an existing outfall pipe that discharges to land noted to be owned by Spring City Borough.

As per your request, we have reviewed the preliminary plans and supporting documents submitted for the proposed land development in conjunction with the requirements of Chapter 27: East Vincent Township Zoning Ordinance (ZO); Chapter 22 East Vincent Township Subdivision and Land Development Ordinance (SLDO); Chapter 23: East Vincent Stormwater Management Ordinance (SMO) and thereby offer the following comments for consideration by Township Officials:

I. ZONING ORDINANCE

The following comments are based upon the provisions of the East Vincent Township Zoning Ordinance (“ZO”):

1. The existing public school use is a permitted by-right use in the HR zoning district. The applicant shall explain the proposed use of the two building additions. (ZO Section 27-802.1.I)
2. The existing lot is noted to have 28.24% impervious cover; we defer to the Township Zoning Officer to confirm if this condition is an existing nonconformity or if there was prior zoning relief granted as it exceeds the 20% maximum allowable for this use. If determined to be non-conforming, no alteration or enlargement may increase any existing nonconformity. Sheet 2 states that the proposed impervious cover for the site will be 28.22%, which is a reduction. (ZO Sections 27-803.2.A7 and 27-1804.1.A)
3. The applicant must provide an itemized tabulation on the plans of all proposed reductions in impervious cover so that net changes in each type of cover may be further evaluated. The Impervious Coverage Summary on Sheet 4 will need to be expanded to document existing conditions. (ZO Section 27-202)
4. Existing and proposed building heights are omitted from the Zoning Tabulation on Sheet 4 and should be listed, even if compliant. (ZO Section 27-803.2.A.9)
5. The plan should clarify whether a loading area is provided for deliveries by trucks. It is unclear if a loading area exists and if proposed improvements will cause elimination or relocation of the same. Any loading area shall be 14 feet wide by 66 feet long with a 16 foot vertical clearance. (ZO Section 27-1711)
6. While Sheet 16 provides a comprehensive lighting plan for the parking lot, it does not illustrate if there will be any lighting for architectural, landscaping, or signage elements. The plan must be revised, as needed, to address illumination for these other features, if any. (ZO Section 27-1715)

II. SUBDIVISION AND LAND DEVELOPMENT ORDINANCE

The following comments are based upon the requirements of the East Vincent Township Subdivision and Land Development Ordinance (“SLDO”):

1. Note 3 on Sheet 4 states that Wall Street is a Township Road. Per PennDOT Liquid Fuel Maps, South Wall Street is noted to be State Route (SR1041); therefore, if this section of South Wall Street is a PennDOT Road, a Highway Occupancy Permit will be required for the new driveway access and other improvements within the right-of-way. The note on Sheet 4 will need to be revised accordingly and the PennDOT SR1041 label added to the plans, and a PennDOT Permit acquired. (SLDO Section 22-306.2.G)
2. Any missing or damaged monuments shall be added or replaced at changes in direction of the property line and noted on the plans with any future Final Plan submission. Concrete monuments shall be placed at all changes in direction in the property lines. (SLDO Section 22-404)
3. The road classification and ultimate right-of-way for South Wall Street shall be depicted on the plan. The minimum required half-width of a minor collector is 40 feet. The depicted front yard setback shall be revised on the plans to be measured from the ultimate right-of-way. Additionally, the legal and ultimate right-of-way lines along South Wall Street will need to be labeled on the plans. (SLDO Section 22-406.1)
4. An offer of dedication of the area between the title line and ultimate right-of-way of South Wall Street is required to be noted on the plans. This offer shall be made first to PennDOT, then the Township if not accepted by PennDOT. (SLDO Section 22-406.5)
5. We offer the following comments pertaining to site lighting (SLDO Section 22-414):
 - a. Sidewalks require a minimum lighting level of 0.5 footcandles. We recommend decorative post lights, similar to those existing at the bus loop, be provided along the proposed on-site sidewalk connecting S. Wall Street to the parking lot.
 - b. The building entrance must be maintained at 5.0 footcandles; however, no lighting is shown.
 - c. We recommend one additional post light be installed along the row of 17 parking spaces at the southwestern end of the parking lot.
 - d. All pole lighting is required to be IESNA full cutoff and the pole height and mounting height of the lighting fixture should be reviewed by the Township Planner. (SLDO Section 22-414.3.D.3)
 - e. For consistent appearance with other street lights at the bus loop, we recommend the applicant provide a decorative post light at the driveway access

street frontage in-lieu of the proposed industrial style fixture. (SLDO Section 22-414.6.A)

- f. Underground utilities must be shown on the lighting plan to confirm no conflicts.
6. We offer the following comments pertaining to landscaping:
 - a. Proposed lighting should be shown on the landscaping plan to confirm no conflicts existing between proposed plantings at initial planting and upon maturation.
 - b. Notes "D" and "E" referenced for shrubs in the Planting Schedule on Sheet 17 should be defined as they are assumed to indicate "deciduous" or "evergreen".
 - c. The quantities of Pin Oaks and Red Oaks shown in the plan on Sheet 15 conflict with the Planting Schedule on Sheet 17 and must be confirmed.
 - d. The proposed type of ground cover for the area of paved walk to be removed from the interior of the bus loop shall be defined on the plans.
 7. An island is required between abutting rows of parking. Additionally, a pedestrian sidewalk should be provided through the required island at the center row of spaces to keep pedestrians out of the one-way drive aisles. (SLDO Sections 22-422.5.L.3.B and 22-422.5.L.5)
 8. Accessible parking spaces require users to traverse the driveway aisle behind vehicles. The plans should be revised to provide a sidewalk, as mentioned above, and realign the crosswalk to the building entrance as needed. (SLDO Section 22-431.1.C.5.c)
 9. The Fire Marshal must confirm site access and circulation is acceptable and that fire hydrant placement is satisfactory.
 10. Fire apparatus and waste hauler movements must be illustrated on a truck turning plan in subsequent submissions. We recommend these templates be depicted on a new sheet.
 11. We defer to the Township Traffic Engineer regarding the parking lot and driveway access.
 12. We estimate the proposed driveway will allow for approximately 18 to 20 stacked vehicles queued for drop-off from the cartway edge to the entrance crosswalk. We recommend the Planning Commission discuss if there will be any need for an expanded loop on the lot or if a deceleration lane is needed along South Wall Street to accommodate vehicular spillover onto South Wall Street. The Applicant should comment on current and future enrollment of the school and indicate if the proposed additions will create additional classrooms.

13. All existing features within 100 feet of any part of the property shall be depicted on the plans. The existing features south of the subject tract shall be provided on the plans. (SLDO Section 22-305.B.2.k)
14. The vertical design of the proposed driveway should be revised to provide a minimum 150 ft. vertical curve (with a K value of 25), based on the driveway grades.
15. The location of the proposed infiltration beds shall be dimensioned from the property lines on the plans.
16. The width of the proposed driveway shall be dimensioned on the plans.
17. The plans shall clarify the limits of removal of the existing playground in the westerly area of the lot.
18. The plans show the removal of the existing driveway and parking lot that currently access the property from an existing driveway access on lands of Spring City Borough from South Wall Street. It appears that the removal extends to the common property line with lands of Spring City Borough. Will bollards or a chain-link fence be provided to deter vehicular access from the remaining driveway onto the school property? Would the Fire Marshal prefer to keep this connection, for emergency access, with bollards and a chain? We recommend that the Fire Marshal review this layout.
19. The applicant shall submit a copy of the wetlands report, referenced Survey Note #8 on Sheet 2. (SLDO Section 22-305.B.2.m)
20. Per Township policy, all plan sheets are to be recorded, and this shall be noted on the plans.
21. Sheet 1 of the plans shall list all supporting documents and plans for the project.
22. The Recording Signature Blocks on Sheet 1 shall be revised to conform to Appendix B in the SLDO.

III. GRADING, STORMWATER MANAGEMENT, DRAINAGE AND EROSION AND SEDIMENTATION CONTROL

The following comments pertain to the grading, stormwater management, drainage and erosion and sedimentation control aspects of the preliminary plan submission and are based upon the requirements of the East Vincent Township Stormwater Management Ordinance ("SMO") and the Subdivision and Land Development Ordinance ("SLDO"):

1. Approval from Chester County Conservation District and the PADEP is required. Due to the 3.48 acre proposed limit of disturbance (LOD) area, an NPDES Permit will be required. (SMO Sections 23-301.3.B and 23-303.1.A)
2. The applicant must demonstrate that the size and orientation of Infiltration Bed SW #200 minimizes earth disturbance as its footprint is nearly one-third of an acre. Additionally, this infiltration bed is shown on the plans to be located less than 10 feet

from the geothermal wells on the property and the applicant shall confirm that there will not be a negative impact due to the close proximity. We recommend that the applicant's engineer modify the design of the infiltration bed, if possible, in order to reduce the overall footprint. In the PCSM Narrative, the designer must justify how surface and subsurface disturbances were minimized. (SMO Section 23-304.1.C.2)

3. The percolation test pits in both proposed infiltration beds produced very low infiltration rates; therefore, further justification/calculations must be provided to support the current design as meeting all Ordinance requirements.
4. The plans shall be revised to include a note requiring protection of all infiltration areas from compaction by heavy equipment during construction. The construction sequences on Sheet 10 must indicate how such protection will be achieved. We recommend construction fence be installed at the perimeters and shown on Sheet 9 at the subject areas. (SMO Sections 23-306.1.L and 23-306.1.Q)
5. We recommend the grate elevation of inlet SW202, located in the southeast corner of the parking lot, be sumped to allow for settlement of sediment and other debris to maintain water quality before stormwater enters the infiltration bed. (SMO Section 23-306.1.M)
6. Cleanouts must be provided where each roof drain ties in with the main drain line unless gutter protection or a leaf trap is installed upstream of basin SW100. (SMO Section 23-306.1.N)
7. The applicant must furnish evidence that discharge from the existing basin to UPI No. 21-6-16 was previously authorized by easement or similar executed agreement. It is unclear why the plan references Spring City Borough for this area as they are not the legal owners of the parcel where the outfall exists and will remain.
8. The discharge end of the existing basin outlet pipe must be confirmed as being clear of debris and provided with a riprap apron or other energy dissipating device.
9. The 50 foot by 10 foot broad crested weir referenced in the pond report of facility SW200 is unclear.
10. The proposed 6-in. underdrain pipe in infiltration bed SW100 shall be depicted in plan view and Section A-A on Sheet 14.
11. A section detail of basin SW200's inlet structure, SW201, shall be added to the plans.
12. The plans shall indicate the finished floor elevation of each addition.
13. The SW206 to SW201 storm profile on Sheet 8 must be revised to specify the minimum required clearance dimension that must be achieved to the existing waterline for the 71 LF section of 15-in. HDPE between SW206 and SW205.
14. Final plans must include spot elevations for all ADA curb ramps, accessible parking stalls, and their associated access aisles.

15. The individual inlet sheds to inlets SW202 and SW203 must be clarified on the Post-Development Drainage Area Plan. While Storm Drainage Calculations in Chapter 4 of the PCSM report model all flow reaching Inlet SW203, this is not realistic.
16. A note is required on the plans stating that the roof drains from the building addition shall be directly connected to SWM100 infiltration bed.
17. An Operations and Maintenance Agreement shall be prepared to the satisfaction of the Township Solicitor for execution and recording after any plan approval. (SMO 23-703.1)

IV. WAIVER REQUESTS

We note that no waivers have been requested by the Applicant. However, should it be determined that any waivers will be required, the request must be made in writing stating justification for the needed modification and listed on Sheet 1 of the plans. (SLDO Section 22-305.B.2.e)

V. GENERAL ENGINEERING COMMENTS

The following are general engineering comments pertaining to the project:

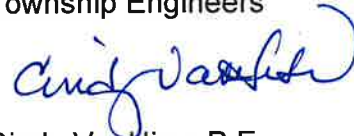
1. We recommend the proposed sidewalk configuration from the west side of the proposed driveway to the northerly side of the proposed parking area be revised to not border the driveway or potentially encourage crossings before reaching the crosswalk.
2. We recommend that the applicant discuss with the Township the need to extend the sidewalk along South Wall Street easterly to the intersection with Parkview Boulevard to provide a direct connection to the Stoney Run subdivision. This will reduce the number of roadway crossings made by students residing to the east. (SLDO Section 22-421.1)
3. We recommend detectable warning surfaces be provided at all ramps along the South Wall Street frontage sidewalk, or any ramps not in compliance with ADA standards be made fully compliant at this time.
4. Review and/or approval from the following agencies is required:
 - Township Traffic Engineer
 - Township Wastewater Engineer
 - Township Planner
 - Chester County Planning Commission
 - Chester County Conservation District
 - PADEP
 - Fire Marshal

We note that additional comments related to the above comments, or in addition to the above comments, will be provided with future plan submissions.

A cover letter, which addresses each of the above-noted comments and includes the review comments in this letter, should be included by the Applicant's engineer with the resubmission of the revised plans.

If you should have any questions concerning the comments as outlined above, please do not hesitate to contact this office.

Very truly yours,
CKS ENGINEERS
Township Engineers



Cindy VanHise, P.E.

CVH/klk

cc: Patrick McKenna, Esq., Township Solicitor
Haley Baer, Township Zoning Officer
Bill Brown, Township Sewer Engineer
Thomas Comitta Associates, Inc., Township Land Planner
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Jeremy R. Maziarz, P.E., Chester Valley Engineers (jmaziarz@chesterv.com)
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George DiPersio, CKS Engineers
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