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Memo To: Ms. Cheryl Chrusz, Planning Board Secretary
Montgomery Township Planning Board
100 Community Drive
Skillman, NJ 08558

Date: December 1, 2023
55176 02

From: Rakesh R. Darji, PE, PP, CME
Environmental Resolutions, Inc.
Planning Board Engineer

RE: The Malvern School Properties
Preliminary and Final Site Plan with Bulk Variances
Application #PB-07-23
Engineering Review #2
Block 28010, Lots 57 and 58
982 Route 518
Township of Montgomery, Somerset County

Our office has reviewed the plans and documents submitted by the applicant for an applicant for the Preliminary Major Site Plan approval for the construction of a daycare facility. The subject tract consists of Block 28010, Lots 57 and 58, comprising approximately 2.046 acres. The applicant proposes to construct an 11,332 SF 2-story Malvern School building with site improvements consisting of amenities for a daycare setting, parking, lighting, landscaping, sanitary and storm sewer and sidewalks. An existing single-family dwelling is currently located on site. This structure, along with other existing site improvements, will be demolished in order to construct the proposed improvements.

The site is located on the Georgetown Franklin Turnpike (CR 518) at the corner with Brecknell Way. There is one proposed full-movement driveway proposed from Brecknell Way to access the site. The zoning district is Highway Commercial. A day care facility is a permitted use in this zoning district. The site is encumbered by critical area slopes.

The following information, submitted by the applicant in support of this application, has been reviewed by our office:

1. Montgomery Township Land Development Application, dated September 2023.
2. Checklist, Final Major Subdivision Plats and Final Major Site Plan, dated April 2023.
3. Cover Letter w/Variance request, prepared by Dynamic Engineering, dated August 28, 2023.
4. ALTA/NSPS Land Title Survey, prepared by Dynamic Survey, LLC, dated August 26, 2022, revised September 7, 2022.
5. Preliminary Site Plan for The Malvern School Properties, prepared by Dynamic Engineering, dated August 17, 2023, revised November 11, 2023, consisting of the following:
 - a. Cover Sheet, sheet 1 of 22.
 - b. Aerial Map, 2 of 22.

- c. Demolition and Tree Removal Plan, sheet 3 of 22.
 - d. Site Plan, sheet 4 of 22.
 - e. Grading Plan, sheet 5 of 22.
 - f. Drainage Plan, SU-30, sheet 6 of 22.
 - g. Utility Plan, sheet 7 of 22.
 - h. Landscape Plan, sheet 8 of 22.
 - i. Lighting Plan, sheet 9 of 22.
 - j. Soil Erosion and Sediment Control Plan, sheet 10 of 22.
 - k. Soil Management Plan, sheet 11 of 22.
 - l. Soil Erosion and Sediment Note and Details, sheet 12 of 22.
 - m. Construction Details, sheets 13 to 17 of 22.
 - n. Somerset County Construction Details, sheet 18 of 22.
 - o. Vehicle Circulation Plan, Fire Truck, sheet 19 of 22.
 - p. Vehicle Circulation Plan, SU-30, sheet 20 of 22.
 - q. Vehicle Circulation Plan, Refuse Truck, sheet 21 of 22.
 - r. Vehicle Circulation Plan, School Bus, sheet 22 of 22.
6. Sanitary Sewer Extension Plan, prepared by Dynamic Engineering, LLC, dated August 17, 2023, revised to November 7, 2023.
 7. Steep Slope Analysis Exhibit, prepared by Dynamic Engineering, LLC, dated August 17, 2023, revised to November 7, 2023.
 8. Traffic and Parking Assessment, prepared by Dynamic Traffic, LLC, dated August 25, 2023.
 9. Architectural Plans, The Malvern School, prepared by Raymond Klumb Architect, undated, consisting of 4 sheets.
 10. Stormwater Management, Groundwater Recharge and Water Quality Analysis, prepared by Dynamic Engineering, dated April 2023, last revised August 2023.
 11. Stormwater Management Operation and Maintenance Manual, prepared by Dynamic Engineering, dated April 2023, last revised August 2023.
 12. Water and Sanitary Sewer Engineer's Report, for Malvern School Properties, LP, prepared by Dynamic Engineering, dated August 2023.
 13. Report of Preliminary Geotechnical and Stormwater Basin Area Investigation, prepared by Dynamic Earth, dated September 29, 2022.

General Information

Applicant/ Owner:	Malvern School Properties, LP 20 Creek Drive Glen Mills, PA 19342 jascandone@malvernschool.com
Engineer:	Jeffrey Haberman, PE Dynamic Engineering Consultants, PC 1904 Main Street Lake Como, NJ 07719 jhaberman@dynamiccec.com
Architect:	Ray Klumb, AIA 571 North Frontage Road Pearce, AZ 85625 rkarch@vtc.net
Attorney:	Frank Petrino, Esq. Princeton Pike Corporate Center, Suite 203 2000 Lenox Drive Lawrence, NJ

Zoning

1. This parcel is within the Highway Commercial (HC) zoning district.
2. A child care center is a permitted use within this district (§16-4.12a7).
3. Area, yard, and coverage requirements are detailed in §16-4.12.d2.

	Required	Proposed	
Maximum Lot Area	1 Acres	2.046 Acres	Conforms
Minimum Lot Width	150 FT	242.7 FT	Conforms
Minimum Lot Frontage	150 FT	304.5 FT	Conforms
Minimum Lot Depth	150 FT	267.7 FT	Conforms
Setbacks			
Min Front Yard Setback (Brecknell, N/S)	50 FT	95.9 FT	Conforms
Min Front Yard Setback (Brecknell, E/W)	50 FT	86 FT	Conforms
Min Front Yard Setback (CR 518)	50 FT	146 FT	Conforms
Min Rear Yard Setback	50 FT	98 FT	Conforms
Setbacks (Accessory Structures)			
Min Front Yard (hotbox)	50 FT	34 FT	Variance
Min Front Yard (Brecknell, N/S, Play #1)	50 FT	67.9 FT	Conforms
Min Front Yard (Brecknell, E/W, Play #2)	50 FT	50.7 FT	Conforms
Min Rear Yard (Shade Structure)	20 FT	72.5 FT	Conforms
Min Rear Yard (Infant Play)	20 FT	74 FT	Conforms
Parking 16-4.12.g			
Min Parking Setback (Brecknell, N/S)	25 FT	25 FT	Conforms
Min Parking Setback (Brecknell, E/W)	25 FT	N/A	-
Min Parking Setback (CR 518)	25 FT	31 FT	Conforms
Min Parking Setback, Rear Yard	15 FT	43.6 FT	Conforms
Parking Space: 1 space per employee (25) + one space per every 8 children (155)	45 Spaces	51	Conforms
Coverage and Height			
Maximum Building Height (Malvern)	30 FT/2.5 stories	34.75 FT*	Testimony
Maximum Floor Area Ratio	0.2	0.13	Conforms
Maximum Lot Cover	55%	39.2%	Conforms

* §16-6.2b discusses height requirements which states that roof structures for the housing of stairways, tanks, ventilating fans, air conditions, etc. required for the operation and maintenance of the building may be erected above the height limits prescribed, but in no more than 20% the maximum height in the district.

Variances

1. Per §16-4.12.h, states that a minimum of one off-street loading at the side or rear of the building and the loading space shall be at least 15 FT in width. A loading area is proposed in the front of the building at 9 FT in width. A variance will be required.
2. Per §16-4.12.d, the minimum distance between a principal building and accessory building is 20 FT. The following variances will be required:
 - a. The infant play equipment is located 13.5 FT from the principal building.
 - b. Play Equipment #1 is located 15 FT from the principal building.
 - c. Play Equipment #2 is located 11.7 FT from the principal building.
3. Per §16-5.6d.3, a minimum of 14 trees per acre of gross tract shall be planted in open areas. The applicant is proposing to remove 98 trees per the Demolition and Tree Removal Plan. The applicant is proposing to provide 153 trees (shade, ornamental and evergreen) in addition to shrubs, ground cover and ornamental grasses. This project would be required to provide 28 trees. Trees required to meet street tree and/or buffer

requirements shall not be counted toward this minimum requirement. The applicant should discuss if these plans provide the required number of trees per gross area of tract or request a design waiver.

4. Per §16-6.4.e1, no steep slope shall be disturbed or developed, except as follows in specific situations where it is determined by the Board that soil erosion, land disturbance and other environmental concerns have been adequately addressed by the developer. The applicant should provide discussion regarding the need for a waiver from the disturbance of the steep slopes.
5. Our office defers to the Board planner for further comment regarding additional variances and waivers that may be required.

Waivers

1. Per §16-5.8f.3, requires that parking spaces shall be 9FT x 20FT, which can be reduced to 18 FT provided a 2-FT overhang is available (§16-2.1, definitions). The applicant is proposing parking spaces which are 9FT x 18FT with a 2-FT overhang.
2. Per §16-5.3, no fence or wall shall be erected over 4 feet in height in side, rear and front yard areas. A waiver will be required for the following:
 - a. A portion of the basin's retaining wall is greater than 4 FT in height and is located within the front yard setback.
 - b. A 6FT high white vinyl fence is proposed which extends into the front yard setback.

General

1. Per §16-5.6c, no soil shall be removed from or be imported to any site in excess of 20 CY per year without prior approval of the Planning Board. The applicant should discuss the anticipated CYs of soil proposed to be exported/imported for this project. A plan should be provided as described in §16-5.6c.
2. The applicant has indicated that Lots 57 and 58 will be consolidated. A lot consolidation plan should be provided, along with the legal description for review by the Board Professionals.
3. Our office recommends the applicant request Title 39.
4. The applicant should discuss:
 - c. Hours of Operation
 - d. Anticipated timing of deliveries
 - e. Anticipated timing of trash pickup
 - f. Anticipated number of employees

Site Plan

5. The limit of disturbance as well as the tree protection fence is depicted on the property to the east (Lot 59). The applicant should provide testimony regarding any temporary construction easement which may be required to support the proposed construction activities.
6. It is recommended that Brecknell Way be milled and resurfaced full width along the property frontage.
7. A sight triangle easement will be required as described in §16-5.3c. We defer to the Board's Landscape Architect for further comment regarding proposed landscaping within the proposed easement area.
8. The grass paver basin access should be dimensioned.
9. There is only one access to the site, a full movement driveway from Brecknell Way. Our office defers to the Fire Marshal regarding any need for a 2nd site access way.

10. The proposed wall along Georgetown Franklin Turnpike should be labeled.

Grading, Drainage and Utility

11. Per §16-5.6.d.12, in areas where topographic slopes greater than 15% are proposed to be disturbed or crated, the applicant shall revegetate the steep slope areas with ground cover, shrubs and trees to duplicate or enhance its original natural state and to stabilize the slopes and prevent soil erosion. Slopes in excess of 30% are proposed between the proposed retaining wall and the eastern property line. Testimony should be provided on the following:
 - a. Drainage pattern changes that may impact the property to the east.
 - b. Stabilization of the slope during construction. It may be necessary to provide a super silt fence in addition to the proposed tree fence.
 - c. Planting guidelines on steep slopes should be provided within the landscape details to provide further guidance so that root balls are planted deep enough to be covered and trees are vertical with no lean.
12. Additional spot grades should be provided on the sidewalks to demonstrate the proposed sidewalk is to be constructed in accordance with ADA requirements.
13. Additional spot grades should be provided at all ramps. It appears there is a ramp at either side of the front door to the facility. This area should be clearly labeled.
14. Inverts for the underdrain should be provided. All cleanouts/inspection ports should be identified for the underdrains.
15. A temporary construction easement may be required for construction of the stormwater pipe to the existing stormwater manhole #230.
 - a. It is recommended that the existing lines be televised to determine the condition of the line prior to any proposed connection.
 - b. Manhole #230 is located within a drainage easement. The easement should be depicted on the plan. The applicant should discuss if an investigation has been made to determine if this easement is a private easement or for public infrastructure and if a connection from the Malvern site can be accomplished at MH#230.
16. Sanitary Sewer:
 - a. Sewer demand calculations have been provided and appear to be consistent with NJ DEP calculation requirements. The applicant should discuss how the anticipated flow from the site meets what is permitted by the WWMP.
 - b. Discussion regarding the sanitary design should be provided, in addition, provide testimony regarding connection to the sanitary sewer system. An agreement with Sharbell will be required.
 - c. Downstream capacity analysis of the collection system and pump station should be included.
 - d. The proposed sanitary pipe will cross a stormwater pipe at 2 locations along Tamworth Drive prior to connecting to an existing MH (Sanitary MH #4) in Tamworth Drive. Details should be provided to determine if a concrete cradle is required at these crossings.

Stormwater Management

17. The project proposes to disturb more than 0.5 acres of land, creates greater than an additional 5,000 SF of regulated impervious surface, and creates greater than an additional 5,000 SF of regulated motor vehicle surface and thus is classified as a "major development" for the purposes of stormwater management and must comply with the requirements of NJAC 7:8 and the Township of Montgomery Ordinance §16-5.2. In addition, the project should meet the requirements of the July 2023 update to NJAC 7:8 which states that current and projected design storm events must be addressed. The project must, therefore, meet the following requirements:

- a. Address the rate and volume of runoff from the project site. This may be done in one of three ways as outlined in NJAC 7:8:
 - Reduce the peak rate of runoff from the project area by 50%, 25%, and 20% for the 2-year, 10-year, and 100-year storms, respectively; or
 - Demonstrate that the rate of runoff for the project is not increased from the pre-developed condition at any point along the post-developed condition hydrograph; or
 - Demonstrate that the peak rate of runoff is not increased and that the increase in volume and variation in timing will not have an adverse downstream impact.
 - ***The applicant proposes to attenuate the majority of the runoff such that the peak rates of runoff from the area of disturbance are reduced in accordance with the first method outlined above by proposing the bioretention basin. The outlet control structure will reduce runoff into the Brecknell Way ROW at a controlled rate to satisfy the 50%, 25% and 20% requirement above.***
 - b. Reduce the Total Suspended Solids (TSS) loading in stormwater by 80% for new impervious.
 - ***The proposed bioretention basin is designed to store and infiltrate the entire water quality storm, thus meeting the requirements of §16-6.5, Table 1, which state that the bioretention basins are approved as having an 80% total TSS removal rate.***
 - c. Demonstrate that the amount of groundwater recharge in the post-developed condition is equal to or greater than the pre-developed.
 - ***The applicant has provided the Groundwater Recharge spreadsheet to show that no recharge occurs in the existing condition.***
 - d. Green Infrastructure.
 - ***The applicant meets requirements for green infrastructure by proposing the bioretention basin.***
18. Regular and effective maintenance is crucial to ensure effected performance of the stormwater management measures. The applicant has submitted a stormwater maintenance report for review and approval. Our office offers the following general comments:
- a. The stormwater management maintenance plan and any future revisions should be recorded upon the deed of record for the property. This deed restriction should be prepared and forwarded to the Township Engineer for review and approval and should require the owner to maintain stormwater facilities in a manner satisfactory to the Township. A note indicating this should be placed on the plan. Further information on the deed records and dedications are found at §16-5.2u. The following restrictions should be incorporated.
 - i. The lot shall be “deed restricted” to require the perpetual maintenance of the stormwater management system in accordance with the approved Stormwater Management Maintenance Plan. The restriction shall reference the maintenance manual by title, preparer, and most recent revision date.
 - ii. The deed restriction should provide that in the event that the responsible party fails in its maintenance obligation, the Township has the right, but not the obligation, to enter upon the property to perform the necessary maintenance at the responsible party’s expense.

- iii. The deed restriction should provide that maintenance is required and must be documented. Completed checklists must be sent to the Township by December 31 annually, but if an item or items is/are identified as “urgent”, the checklist must be shared with the Township immediately.
19. The 1st paragraph of the Design Overview should be updated to reflect the stormwater threshold limits of the Montgomery Township Ordinance.
 20. In accordance with Chapter 9.7 of the NJ BMP Manual:
 - a. Soil tests are required within the exact location of the proposed basin. The test pits performed should be depicted on the grading plan.
 - b. A bioretention basin with underdrain should have filter fabric provided on the sides and bottoms. The detail shows filter fabric proposed between the soil layer and sand layer as well as the sand layer and the stone layer. This should be reviewed and the detail updated accordingly.
 21. The Test Location Plan should be updated to reflect the current plan which contains only the Malvern School building.
 22. Sheet 2 of 2 of the plans provided in the stormwater report should be titled “Proposed Drainage Area Map.”
 23. The drainage area maps should be updated to include both pervious and impervious areas for each drainage area.
 24. An inlet area map should be provided.
 25. It appears that the proposed basin ultimately discharges off-site to existing 4FT storm manhole #230. The location of this manhole should be further defined, extend the property line along Brecknell Way for Lot 59. It appears that this manhole is located on private property. The applicant should provide testimony regarding any discussions with the adjacent property owner as to whether a connection to this manhole is permitted.
 26. The pipe sizing chart should be reviewed and revised accordingly for the following:
 - a. Inlet #115 on the pipe sizing chart is Inlet #112 on the grading plan.
 - b. Pipe length between Inlet #115 and MH #1 and MH #1 and Inlet #100 do not reflect what is depicted on the grading plan.
 27. The soil logs should be appended to the Stormwater Report.
 28. NJDEP Tier A Attachment D – Major Development Stormwater Summary forms should be completed to detail the bioretention basin and be provided within the stormwater report and as a stand-alone electronic pdf to be utilized by Township staff.

Soil Erosion and Sediment Control

29. It is noted that grading is to the property line yet the proposed silt fence and tree protection fence are located approximately 3 FT from the property line, on the adjacent parcel. The applicant should discuss its intent for grading activities at the property line to the east as it appears that steep slopes will be created along the property line and location of the silt fence and tree protection fence will not allow grading at the property line.

Details

30. Note #2 on the Schematic Modular Block Retaining Wall detail should be updated to reflect that designs should be provided prior to final “signature on the plans.”

- a. There is no depth of footing shown on the detail for the retaining wall. It is noted that the invert of the 12" pipe crossing under the wall is 133, where the bottom of the wall at this crossing is approximately 136. Significant clearance for the pipe should be provided or the design should include the pipe through the wall's footing.

Administrative

31. The applicant shall pay all taxes, fees and required escrow due and owing.
32. This office reserves the opportunity to make further comment if additional information is presented.
33. All future resubmissions of the plans shall clearly indicate a revision date and be accompanied by a point-by-point response letter to the comments of the Board's professional staff.

Should you or the applicant have any questions, please do not hesitate to contact this office.

RRD/mbs

Cc: The Malvern School Properties, LP, applicant (jascadone@malvernschool.com)
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