

September 27, 2023

Ms. Mila Carter Director of Planning and Zoning, Asst. Township Manager Westtown Township 1039 Wilmington Pike West Chester, PA 19382

RE: Westtown School – Oak Lane Project Preliminary/Final Land Development Application Waiver/Modification Requests

Dear Ms. Carter:

As part of the Land Development Application for the above referenced project, we are requesting waivers/modifications of several provisions of Westtown Township's *Subdivision of Land* (Chapter 149) and *Stormwater Management* (Chapter 144) Ordinances. The specific ordinance sections for which relief is being requested, as well as the accompanying justification, follows:

# §144-311.B(3) and §149-803.B(3)(c)

<u>Ordinance Requirement</u>: "All inlets shall be precast concrete, PennDOT type and shall have bicycle-safe-type grate."

Proposed Modification: Allow HDPE Drain Basins in lieu of concrete inlets in select locations.

<u>Justification</u>: The plan proposes several HDPE Nyloplast Drain Basins around the synthetic turf multipurpose fields to prevent runoff from flowing onto the field, which presents maintenance issues. The proposed drainage areas are minimal, and the inlets will not be subject to vehicular loading and thus concrete inlets are not necessary. The proposed inlets will provide adequate drainage capacity while being aesthetically favorable.

# §144-311.B(4) and §149-803.B(3)(d)

<u>Ordinance Requirement</u>: "Inlets shall have a minimum two-inch drop from all inlet pipe invert elevations to most shallow outlet pipe invert elevation"

<u>Proposed Modification</u>: To reduce the requirement of a two-inch drop from all inlet pipe invert elevations to most shallow outlet pipe invert elevation to a 1.2" drop in most cases and to zero inches of drop in the nine (9) structures along one pipe run where cover over the pipe is an issue (this pipe run is more fully described below).

Central PA Office 2013 Sandy Drive, Suite 103 State College, PA 16803 (814) 861-6328 Justification: The proposed pipe networks generally provide a minimum 1.2" drop across the inlet structures where the design allows. The pipe run from Inlet I-B14 to EW-2 is a relatively long run with limited drop, relative to the length of the run, and does not allow for a drop across the inlets.

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### §144-311.B(8) and §149-803.B(3)(g)

Ordinance Requirement: "Storm sewers shall have a minimum inside diameter of 15 inches."

Proposed Modification: Reduce the minimum storm sewer size to eight inches.

Justification: The proposed 8" pipes are to be connected to small, 12" diameter area drains that will receive limited runoff. Pipe capacity calculations are provided which show that the proposed pipe sizes are adequate for all storm events. Further, inlets I-B14 and I-B13 and the associated pipes provide minimal cover in order to drain to the necessary outlet location. Given the lack of available cover, providing larger pipes would not be feasible.

#### §144-311.B(9) and §149-803.B(3)(h)

Ordinance Requirement: "Storm sewers shall have a minimum cover of 24 inches, unless compliance with PennDOT and manufacturers' specifications can be demonstrated to the satisfaction of the Township Engineer."

Proposed Modification: Reduce the required cover for storm sewers in lawn areas from 24" to 12".

Justification: Based on the length of the proposed storm sewer runs it is not practical to provide 24" of cover at the most upstream inlets and in the case of inlets I-B14 and I-B12 it is not possible to provide more than 12" of cover while maintaining a minimum 0.5% pipe slope. A minimum 12" of cover in non-vehicular traffic areas is a relatively common engineering standard and is adequate to prevent crushing under normal circumstances.

#### §144-311.B(11)

Ordinance Requirement: "Velocity within the storm sewer system shall be no less than three feet per second and no greater than 11 feet per second for the design storm peak flow."

Proposed Modification: Allow velocities within storm sewers to be less than three feet per second.

Justification: Due to minimal drainage areas for drain basins surrounding the synthetic turf fields and minimal outflows from the subsurface infiltration beds combined with minimal pipe slopes of approximately 0.5% a velocity of 3 feet per second cannot be achieved.

# §144-311.C(3) and §149-803.B(4)(c)

Ordinance Requirement: "The bottom of the basin shall have a minimum slope of 2% and any channel shall have a minimum slope of 0.5%."

Proposed Modification: Allow 0% slope for infiltration/water quality basin bottoms.

<u>Justification</u>: In order to maximize the filtration/infiltration area and avoid a low spot near the outlet structure, flat basin bottoms are being proposed for Infiltration Basins (BMP's 1 & 4), which is consistent with generally accepted engineering principles for BMP's intended to infiltration.

### §144-311.C(5) and §149-803.B(4)(e)

<u>Ordinance Requirement</u>: "The barrel shall be concrete pipe with anti-seep collars with a minimum projection of two feet beyond the pipe. Anti-seep collar design calculations shall be provided."

<u>Proposed Modification</u>: Allow smooth lined corrugated high-density polyethylene (SLCPP) outlet pipes for basins. Also allow concrete anti-seep collars for BMP's 1 & 4 to be designed in accordance with the PADEP E&S Control Manual.

<u>Justification</u>: SLCPP pipes have proven to be superior to concrete pipes in terms of longevity and economy and are now approved for use by PENNDOT. Additionally, the burial depths are well within the cover limits specified by the pipe manufacturer. Regarding anti-seep collars, based on calculations provided in the report and in accordance with guidance provided in the PADEP E&S Control Manual the proposed anti-seep collar dimensions/configuration for BMP's 1 & 4 are adequate.

#### § 149-700.A.

<u>Ordinance Requirement</u>: *"Within 60 days after approval of the preliminary plan, a final plan and all necessary supplementary data shall be officially submitted to the Township. However, an extension of time may be granted at the option of the Board of Supervisors upon written request of the applicant."* 

<u>Proposed Modification</u>: Submission of a combined Preliminary and Final Land Development Plan for review and approval by Westtown Township.

<u>Justification</u>: The scope of the proposed project is relatively limited and Applicant is submitting sufficient information and materials to satisfy the requirements for final land development plan review and approval with this Application. Section 149-600.C. of the SALDO permits the Township to review a Preliminary Plan for final approval under certain circumstances which are met with this Application. Efficiency in review and approval by the Township's consultants, staff and representatives will be served by the combined Preliminary and Final Land Development Plan Application submission.

#### §149-702.B(7)

<u>Ordinance Requirement</u>: "The total tract boundary lines of the area being developed with accurate distances to hundredths of a foot and bearings to the nearest second. These boundaries shall be balanced and closed with an error closure not less than one foot in 10,000 feet; provided, however, that the boundary(ies) adjoining additional unplatted land of the subdivider for example, between separately submitted final plan sections are not required to be based upon field survey, and may be calculated. Existing and proposed monuments shall be indicated, along with a statement of the total area of the property being developed. In addition, the engineer or surveyor shall certify to the accuracy of the survey and that the drawn plan is in conformance with Township chapters.

<u>Proposed Modification</u>: In lieu of providing a boundary survey complete with boundary lines having bearings and distances in strict conformance with the Ordinance and sealed by a Professional Land Surveyor or Engineer, provide instead a Deed Plot based on best available public records (County GIS and UPI).

<u>Justification</u>: Due to the age and illegibility of the deeds of record and the immense size of the Westtown School's land holdings, the School does not have (and cannot obtain without an enormously intensive undertaking) a property boundary survey meeting the requirements outlined in the Ordinance. Similar to recent land development projects undertaken on the Westtown School grounds (including but not limited to the Lane House), the proposed project is not situated close to any areas of the campus where the ownership of the land is questionable or in dispute. Similarly, the development is not being proposed in close proximity to a public right-of-way and thus encroachment onto lands not under Westtown School ownership is not a concern.

# §149-925.G(1)

<u>Ordinance Requirement</u>: "Lot or perimeter yard requirements. Each yard shall be landscaped as follows:"

Landscaping Per 100 Linear Feet			
	<i>Canopy Trees Mature</i> <i>Height Over 30 Feet</i>		Shrubs
Single-family detached dwelling			
Street frontage	1.5	0.5	
All other property lines	0.5	0.5	
<u>All other dwellings</u>			
Street frontage(s)	1.0	0.5	4.0
All other property line	0.5	0.5	2.0
<u>Nonresidential</u>			
Street frontage(s)	2.0	1.5	6.0
All other property lines	1.0	1.0	3.0

<u>Proposed Modification</u>: Provide perimeter landscaping consistent with what had been negotiated with adjoining property owners for the recent solar farm application and as directed by the Board of Supervisors during the Conditional Use Hearing for the Athletic Field Lighting. The proposed perimeter landscaping is limited to canopy trees and evergreen trees and is provided only along the portions of Shady Grove Way where views into the proposed development exist from adjoining properties.

<u>Justification</u>: The perimeter of the subject tract follows three (3) different road frontages and other lands owned by the Westtown School. The vast majority of the subject tract's perimeter is adjacent to actively cultivated farm fields (more than 113 acres of this parcel are leased by others for agricultural purposes). Planting trees and shrubs between a road and a farm field will decrease the agricultural productivity of the leased lands by reducing the field areas – either from direct encroachment or through the casting of shadows within which crops will not thrive. Perimeter landscaping will also impede farm equipment from accessing these fields. Perimeter landscaping is not proposed along Oak Lane because the right-of-way has been vacated and both sides of

the road are in common ownership. Also, Oak Lane is already lined by mature canopy trees on both sides.

Should you have any questions, please do not hesitate to call me. We thank you for your time and consideration of these waiver/modification requests.

Sincerely, **ELA GROUP, INC.** 

Jason C. Best, RLA Senior Project Manager Corporate Office

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