#### **RESOLUTION NO. 2020 - 15**

- A RESOLUTION OF THE LOWER PROVIDENCE TOWNSHIP BOARD OF SUPERVISORS, MONTGOMERY COUNTY, PENNSYLVANIA, APPROVING THE PRELIMINARY/FINAL LAND DEVELOPMENT PLAN OF THE METHACTON SCHOOL DISTIRCT FOR ARROWHEAD ELEMENARY SCHOOL LOCATED ON LEVEL ROAD IN THE TOWNSHIP
- WHEREAS, The Methacton School District ("Applicant") located at 1001 Kriebel Mill Road, Eagleville, PA 19403, submitted a preliminary/final land development Plan to reconstruct the Arrowhead Elementary School; and
- WHEREAS, the Plan has been reviewed by both the Montgomery County Planning Commission and the Lower Providence Township Planning Commission; and
- WHEREAS, the Board of Supervisors now intends to approve the preliminary/final Plan of the Applicant consisting of twenty-five (25) sheets, dated March 13, 2020, last revised June 1, 2020, prepared by Burisch and Associates, Inc.
- **NOW, THEREFORE**, it is hereby **RESOLVED** that the Lower Providence Township Board of Supervisors does hereby approve the preliminary/final land development Plan, prepared by Burisch and Associates, Inc., consisting of twenty-five (25) sheets, dated March 13, 2020, last revised June 1, 2020, subject to the following conditions:
- 1. Compliance with the Woodrow & Associates correspondence dated June 19, 2020, a copy of which is attached hereto and incorporated herein as **Exhibit "A"**.
- 2. Compliance with the McMahon Associates, Inc. correspondence dated July 1, 2020, a copy of which is attached hereto and incorporated herein as **Exhibit "B"**. Additionally, the Applicant shall establish financial security approved by the Township to guarantee the post development traffic study in accordance with paragraph 2, prior to the issuance of a certificate of occupancy for the school.
- 3. Compliance with the Thomas Comitta Associates, Inc. correspondence dated June 30, 2020, a copy of which is attached hereto and incorporated herein as **Exhibit "C"**. Additionally, the Township shall determine whether additional financial security should be established to guarantee additional buffer plantings prior to the issuance of a certificate of occupancy for the school.
- 4. Compliance with all other ordinances and regulations, including the requirements of the Lower Providence Township Sewer Authority and applicable County, State and Federal rules, regulations and statutes.
- 5. The Applicant shall execute Development and Financial Security Agreements in a form and manner to be approved by the Township Solicitor.
- 6. The Applicant shall pay a traffic impact fee in the amount of \$27,330.00 in accordance with paragraph 18 of the McMahon Associates, Inc. correspondence dated July 1, 2020.

	_	g Subdivision and Lan resolved as follows:	d Development ordinan	ce modifications and stormwater			
curbing within	a. n interio	SLDO Section 123 r streets and parking		struction of storm sewers and			
		X	Approved	Denied			
	b.	SLDO Section 123-37.E – as to foundation landscape planting.					
		X	Approved	Denied			
	ccordan	e Applicant performs	a post construction eva	buffer screening along property aluation of screening and buffer Associates, Inc. June 30, 2020			
		<u>X</u>	Approved	Denied			
pipe construct	d. ion.	Stormwater Ordinan	ce Section 129-19.C.(2)	) – as to alternative storm sewer			
		X	Approved	Denied			
e. Stormwater Ordinance Section 129-19.C.(3) – to permit a 12" diamete storm sewer pipe as to the proposed roof drains.							
		X	Approved	Denied			
portion of the		Stormwater Ordinar ater piping to be reduce	•	5) – to permit the velocity in a			
		X	Approved	Denied			
detained depth	g. n water f	Stormwater Ordinar For the 100-year storm	•	3)(b) – to permit the maximum			
		X	Approved	Denied			

In addition to the foregoing conditions of preliminary/final land development plan

7.

stormwater	h. basin in lie		nance Section 129-19 the bottom in order to		
		X	Approved		Denied
basin A an	i. d basin B to		nance Section 129-19.6 inches respectively.	H.(15) – to permit th	ne freeboard in
		X	Approved		Denied
rate to assu	j. me existing		nance Section 129-20.	_	ulation of flow
		X	Approved		Denied
3rd SO	RESOLVI y of Sept	ED, at a duly converge, 2	ened meeting of the Bo 2020.	oard of Supervisors co	nducted on this
THE TOWNS TO SERVICE T	MONTGOM COUNTY PA.	ERY SET		PROVIDENCE TO OF SUPERVISORS	
ATTEST:	Donald D.	Delamater, Secret	ary		



June 19, 2020

Michael Mrozinski, Director of Community Development Lower Providence Township 100 Parklane Drive Eagleville, PA 19403

Reference: Arrowhead Elementary School – Reconstruction

Dear Mike:

I am in receipt of a 25-sheet set of land development plans dated March 13, 2020, last revised June 1, 2020, and prepared by Burisch and Associates. The application is supplemented by stormwater management calculations and additional plans that speak directly to stormwater management and erosion control measures. The revised plan set responds to comments made by the various township consultants and specifically to my letter dated April 10, 2020, which spoke to larger planning issues and my memo dated April 23, 2020, which evaluated the design in much greater detail. Any topic or comment from those earlier reviews not mentioned herein can be considered as closed from my perspective. The remaining topics for discussion include the following:

- A. Approvals/Permits/Reviews Any approvals our board of supervisors would grant this application must be conditioned upon the school district securing the following approvals/permits/reviews:
  - 1. PA DEP NPDES Permit for construction activities and stormwater management.
  - 2. Lower Providence Township Sewer Authority For proper abandonment and reconnection to the sewer system.
  - 3. Lower Providence Township Fire Marshal
- B. Threshold Issues In review of the plans from my perspective, these two topics deserve the greatest attention:
  - 1. Coordination with all team members to assure the safety of our students, teachers and traveling public during construction.
  - 2. Stormwater Management has been much improved from the first submission. A site walk with the design team helped to illustrate my concerns, which are now addressed.

#### C. Zoning Ordinance Review:

Zoning compliance appears to have been met.

Exhibit "A

June 19, 2020

Michael Mrozinski, Director of Community Development

Lower Providence Township

Reference: Arrowhead Elementary School – Reconstruction

## D. Subdivision and Land Development Ordinance Review:

- 1. Waiver Requests the applicant is seeking waiver from the following five sections of our subdivision and land development ordinance.
  - a) Section 123-32 The applicant is requesting a waiver from the requirement that commercial and multifamily developments require curbs. Since this is an institution project, Curbs should not be required curbs along the fire lane or part of the parking lot to aid in the drainage and snow removal of the parking lot. We find this conclusion appropriate.
  - b) Section 123-50 —The applicant is requesting a waiver from the screen buffer design. The screening requirements for the school against residential uses was modified in the design since the school is an existing use and not a new one. The adjoining residences have lived with the school with its existing shade tree hedgerow buffer for decades. Additional evergreen trees were added along the property lines where existing hedgerows were reduced due to the grading needed for the relocated school. Along the eastern property line (where the existing hedgerow was reduced) a double row of evergreens will augment the existing remaining trees and saplings. Along the southern property line where the hedgerow / grow was reduced) a single row of evergreens will augment the existing remaining trees and saplings. We defer an opinion to the Township landscape consultant.
  - c) Section 129-19.C.(2) The applicant is requesting that the sewer pipe materials not be required to be Class III reinforced concrete pipe. The applicant is requesting that the storm sewers within the site be allowed to be HDPE instead. No new storm piping is proposed in a public right-of-way. We take no exception to this request.
  - d) Section 129-19.C.(6) Flow velocity Stormwater collection systems shall be designed to produce a minimum velocity of three (3) feet per second when flowing full. The applicant is requesting that the velocity in one run of pipe be less than three fps for storm run P4-P5. This is requested to provide the required cover over the pipe without steepening up the slope of the pipe (which is constrained by the existing inlet that is being connecting in Level Road. We take no exception to this request.
  - e) Section 129-19.H.(10) The applicant is requesting a flat bottom basin instead of providing a 2% slope in the bottom to promote recharge within the soil amendment areas. In order to meet current NPDES obligation, this waiver request is appropriate.
- 2. Section 123-22 Agreements, a conversation must be initiated to discuss what form of agreement will be necessary to bind the school district, their contractors and the Township to assure proper performance.
- 3. Section 123-5.H With regard to ultimate right-of-way, it appears that the school district acknowledged the ultimate right-of-way width of Level Road at the original time of school construction. We will work with McMahon and Associates to assure proper understanding of these right-of-ways.

June 19, 2020
Michael Mrozinski, Director of Community Development
Lower Providence Township
Reference: Arrowhead Elementary School – Reconstruction

4. Section 123-2 – Curbs internal to the project. The applicant is not showing curbing along the portion of the internal parking lot. This curbing is removed from the design to allow for sheet flow of stormwater into detention basin A. In an abundance of caution, they have requested a waiver of the obligation to install curb in this location. From a stormwater management perspective, I can't support this waiver request. Further, no curbing has been shown along the fire lane which provides access to the south, westerly side of the new building. As this is a very low traffic area, I would not take exception to absence of curb in this location.

- 5. Section 123-43 Stormwater Management I would like the opportunity to walk the site with the design engineers to properly field viewpoints of discharge, points of potential stormwater concentration connection and other areas of the site that may warrant further protections. Of specific interest is the drainage pattern to the northeast side of the proposed structure. I want to be sure that our proposed design does not adversely impact our neighbors on that side of the project. I look forward to a time when we all are able to meet and conduct this field investigation.
- 6. Our design team field walk resulted in an agreement as to how adjacent properties would be protected during the initial stages of construction. The solution included, amongst other techniques, the installation of silt sock along the southeastern boundary. The plan now shows this control measure. I would ask that the plan be supplemented with a clear note to the contractor that the goal is to swale runoff to the point of existing concentrated flow. The details must reinforce the idea that soil is placed against the silt sock to create this swale effect. Flow arrows must clearly designate the point at which runoff will leave the site.

#### E. Stormwater Management Review:

- 1. The applicant will need to seek additional waivers from our stormwater codes. In general, I take no exception to the requests. The waivers will not impact the quality of design performance. They can be more characterized by a need to fit our ordinances into the latest guidance and direction from PA DEP. The department is adjusting design requirements with great frequency to evolve with new wisdom from the industry.
- 2. Section 129-19.C.(2): Requires all storm sewer piping to be class III reinforced concrete pipe, We note the applicant has proposed HDPE which will require a waiver. Woodrow and Associates, Inc. takes no exception to this waiver request.
- 3. Section 129-19.C.(3): Requires a minimum pipe diameter of 15" whereas the applicant's engineer is proposing 12" which will require a waiver. Woodrow and Associates, Inc. takes no exception to this waiver request.
- 4. Section 129-19.H.(3).(b): Requires the maximum detained depth of water for the 100-year storm of 36 inches or less. Both Basins A and B are over the maximum and require a waiver. Woodrow and Associates, Inc. takes no exception to this waiver request.

June 19, 2020

Michael Mrozinski, Director of Community Development

Lower Providence Township

Reference: Arrowhead Elementary School – Reconstruction

- 5. Section 129-19.H.(15): Requires the minimum freeboard through the emergency spillway shall be one foot of freeboard. We note that the applicant's engineer is providing less than the required for both Basins A and B. The design should be revised or a waiver requested. Woodrow and Associates, Inc. takes no exception to this waiver request so long as at least 0.50 foot is provided.
- 6. Section 129-20.F: For the purpose of existing conditions flow rate determination for all development activity, undeveloped land and existing impervious surfaces shall be considered as meadow in good condition. The predevelopment calculations provided assume 100% of the existing impervious surface for both the front and rear predevelopment areas. We note that the subject tract consists of the existing school, supporting parking area and drop off area and that the proposed application slightly reduces the impervious surface with the new design. A waiver is required. Woodrow and Associates, Inc would support a partial waiver allowing the applicant's engineer to show a 20% reduction for the existing impervious surface to meadow. This is consistent with current PA DEP requirements.

Sincerely,

Timowe Woodrow, P.E.

Township Engineer

Woodrow & Associates, Inc.

TPW/del

cc: John Rice, Esq., Township Solicitor - Lower Providence Township

Casey Moore, P.E., McMahon Associates

Dan Mallach, RLA - Thomas Comitta Associates

Kim Kryder – Bursich Associates, Inc.

Methacton School District



July 1, 2020

Mr. Michael Mrozinski Director of Community Development Lower Providence Township 100 Parklane Drive Eagleville, PA 19403

RE: Traffic Review #2 – Preliminary/Final Land Development Plans

Proposed Arrowhead Elementary School Site Modifications Lower Providence Township, Montgomery County, PA

McMahon Project No. 820306.11

McMAHON ASSOCIATES, INC.

425 Commerce Drive, Suite 200 Fort Washington, PA 19034 p 215-283-9444 | f 215-283-9446

PRINCIPALS

Joseph J. DeSantis, P.E., PTOE
John S. DePalma
Casey A. Moore, P.E.
Gary R. McNaughton, P.E., PTOE
Christopher J. Williams, P.E.

ASSOCIATES John J. Mitchell, P.E.

R. Trent Ebersole, P.E.
Matthew M. Kozsuch, P.E.
Maureen Chlebek, P.E., PTOE
Dean A. Carr, P.E.
Jason T. Adams, P.E., PTOE
Christopher K. Bauer, P.E., PTOE
Mark A. Roth, P.E.

FOUNDER

Joseph W. McMahon, P.E.

John R. Wichner, P.E., PTOE

#### Dear Mike:

Per the request of the Township, McMahon Associates, Inc. (McMahon) has prepared this letter that summarizes our second (2<sup>nd</sup>) formal, traffic-related review of the site modifications for the existing Arrowhead Elementary School campus at 232 Level Road in Lower Providence Township, Montgomery County, PA. An interim, technical review of materials was completed with comments and redline markups on June 3, 2020 for the applicant and their project team to incorporate.

Based on our review of the submitted plans, the project proposes to build a new Arrowhead Elementary School on the existing property of the currently operating Arrowhead Elementary School, and the construction will occur in phases. The existing 59,870 square-foot elementary school building will be replaced with a 57,820 square-foot elementary school building on the property.

- **Phase One** consists of constructing the proposed new school building while the existing school building remains in operation and occupied with students/faculty/staff.
- **Phase Two** consists of demolishing the existing building and constructing the remaining site improvements such as parking lots, playgrounds, etc.

Access will be modified to the site, as the existing western full-movement driveway along Level Road is proposed to be shifted approximately 155 feet to the east of its existing location (opposite Lenape Drive) and be used to serve the by faculty/staff/visitors parking area, as well as the parent drop-off/pick-up area of the site. Access to the bus drop-off/pick-up area, as well as the loading docks for deliveries and dumpster area for trash trucks is proposed to be provided via a shifted eastern driveway along Level Road that is proposed to be relocated approximately 300 feet to east of its current location.

Exhibit "B"

The following documents were reviewed and/or referenced in preparation of our traffic review:

- 1. <u>Preliminary/Final Land Development Plans for Arrowhead Elementary School, prepared by Bursich Associates, Inc., last revised June 1, 2020.</u>
- 2. <u>Response to Comments Letter Arrowhead Elementary School Replacement,</u> prepared by Bursich Associates, Inc., dated June 11, 2020.

Based on our review of the documents listed above, McMahon offers the following comments for consideration by the Township and action by the applicant:

### **Waiver Request**

1. The applicant is requesting one of their waivers from Section 123-32 of the Subdivision and Land Development Ordinance, requiring curbing to be provided in all commercial and multi-family parking areas where the pavement edge and grass meet. The plans currently do not show any curbing along the proposed fire lane and along the northern side of the proposed parking lot.. Since this is a redeveloped institutional facility, we are not opposed to the granting of the waiver for the area along the proposed fire lane and for the one section of the parking lot to aid in snow removal. This has also been accepted by the Township Engineer.

### Preliminary/Final Land Development Plans

- 2. It would be beneficial for the applicant to conduct a site access assessment at both site accesses along Level Road to detail future traffic operations at both accesses with the proposed site modifications; however, due to the COVID-19 impact on traffic volumes and early closure of the school, this was not possible at this time. Therefore, the applicant has agreed to conduct a post-development traffic study to include site access assessment to analyze site access operations, evaluate on-site traffic operations, and possibly make any necessary traffic management adjustments based on the results of the post-development evaluation on the efficiency and safety of traffic circulation, pedestrians and special event parking. The applicant should contact McMahon Associates to discuss the full scope of this post-development site access assessment prior to beginning the study. The study should be conducted for typical weekday operations, as well as for a special event, noting drop-offs/pick-ups of students in both the bus loop and passenger vehicle loop and vehicular queuing. Additionally, the study must contain a parking evaluation on a special event, such as Back-to-School Night, to evaluate the on-site vs off-site supply and demand for parking, as well as pedestrian safety. Timing for the study should be upon the full opening of the new school and all its amenities.
- 3. The applicant and their engineer have provided more details on the drop-off/pick-up process and how they expect it to work on paper. We appreciate the details and the focus on safety, but we do continue to have some concerns about maintaining smooth operations of the parent drop-

off/pick-up on school days if it is not managed closely, and the necessary adjustments made to improve the procedures. We feel as though multiple vehicle drop-offs and pick-ups at one time may be difficult to safely accomplish. Efficient and safe passenger vehicle drop-off/pick-up will be critical to overall traffic operations on site. School personnel must monitor the proposed parent drop-off/pick-up operations and be prepared to make necessary changes to the parent drop-off/pick-up procedure should issues routinely arise as currently proposed. A written policy on this procedure should be contained in the student/parent handbook and reviewed with parents. Furthermore, the post-development traffic, parking and pedestrian study that is to be completed should include this aspect and also be helpful to the school administration to making any procedural changes, as we take note of in the applicant's reply.

- 4. The applicant has indicated that all students attending the school <u>currently</u> arrive and depart the site via school buses or passenger vehicles, and that no students walk to/from the site on a typical school day. This may change in the future possibly. However, for added safety and visibility to <u>all</u> pedestrians along Level Road in the vicinity of the site and since a sports field area will be constructed that area residents/children may take advantage of utilizing, we continue to recommend that a rectangular rapid flashing beacon (RRFB) device be installed at the pedestrian crossing along Level Road at Lenape Drive.
- 5. In order to enhance pedestrian safety along Level Road and crossing it from Lenape Drive, we recommend that the school provide a crossing guard at the pedestrian crossing along Level Road near Lenape Drive and the main parking lot site access during very large school events, such as Back-to-School Night, etc. We also recommend that the Arrowhead Elementary School plan to use other area school facilities (i.e. Arcola Intermediate School) when possible and available parking is known to be an issue, or implement separate nights (K-2, 3-4, etc.) for large school events like Back-to-School Night in order to reduce off-site parking impacts in the vicinity of the site.
- 6. We previously reviewed and recommended that the western access driveway to the new main parking lot and vehicular drop-off/pick-up area of the new school be relocated from its currently proposed relocation to intersect directly opposite Lenape Drive, and where the crosswalk crossing Level Road is located to form a 4-way intersection with appropriate left-turn lanes into the western school driveway and Lenape Drive. However, through conversation at the April Planning Commission meeting and further technical discussion with the applicant's engineer and the Township consultants, we understand that this may require the planned playing field area and stormwater design to be adjusted on the site. However, if the Township Planning Commission and Board of Supervisors are satisfied with the currently proposed location of the western access driveway, we can support it and will continue to coordinate with the applicant to ensure that it is appropriately designed.

- 7. It has been our recommendation for the bus loop/delivery/trash truck access driveway be slightly shifted to the west to intersect Level Road closer to the inside of the horizontal curve as this shift westerly may provide for better sight lines in <a href="both">both</a> directions, and will then not require an egressing driver from the proposed bus loop access to look more than 90 degrees to the left (during school or using it at other times). The applicant's engineer has indicated that the driveway location as currently shown on the plans should remain since shifting the driveway to the west will require the relocation of a utility pole and force the applicant to incur unnecessary costs. Pole relocation costs should not in and of itself be the reason for the provided design and not relocating the driveway in order to improve upon the sight distance and operations of the driveway. We understand that most traffic will be destined to/from the east so most egress should turn right, and that a planned stormwater detention area exists on the plans between the access points in this area. If it is necessary to provide the stormwater detention in this location with no flexibility in its design, we will coordinate with the applicant to balance the location of the driveway and drainage design in this area.
- 8. Sight distances must be kept clear at all times. No physical obstructions must be placed in the lines of sight (vegetation, monument signs, etc.). Of concern on the plans shown is that sight distances from the main school access go through the bus loop area, so a bus or vehicle queue there may affect sight distance at times, and vice versa to a lesser extent.
- 9. The Township Fire Marshal should complete their review of the fire truck turning plans for accessibility and circulation needs of emergency apparatus. This is especially true since there is not a paved surface for accessibility of fire trucks around the entire building as currently shown. Ensure that any correspondence, including any review comments and/or approvals, is included in subsequent submissions.
- 10. All curb ramps and pedestrian routes (i.e. sidewalks, crosswalks, etc.) are to be constructed in accordance with the current Federal and PennDOT ADA standards. McMahon has not reviewed any ramps internal to the site, as the applicant's engineer will be responsible for their design satisfying the required ADA standards.
- 11. ADA Design Forms for all ramps located within the Township Right-of-Way along Level Road, etc. must be included for review. In addition, identifying information (ramp numbers or road names) must be provided on the detailed ADA designs provided for clarification. Non-compliant values must be reviewed and modified to satisfy requirements, or be as close as possible, with sufficient justification. A Technically Infeasible Form should then be prepared for any non-compliant ramp component for review and concurrence by the Township. Any non-compliant ramp must include documentation for the non-compliance and be as close to compliance as possible prior to being considered for approval. It appears that Ramp 3 has a non-compliant cross-slope at the front edge of the DWS, Ramp 5 has been designed with a 2.00% ramp cross slope, which is compliant but leaves no margin for construction, and additional roadway spot

elevations will need to be provided at any proposed turning areas located in the roadway due to ramp angles, for Ramp 6.

- 12. As indicated in the email communication with the applicant's engineer on June 3, 2020, we recommend that left-turn lanes be provided along Level Road at the western (main) school access and at Lenape Drive. A concrete refuge island should be installed between the left-turn lane into Lenape Drive and the left-turn lane into the main school access. The crosswalk crossing Level Road should be shifted towards the main school access, and a rectangular rapid flashing beacon (RRFB) device is recommended to be installed at the crossing. Appropriate pedestrian signage should also be provided at, and in advance of, the intersection. The redline of the concept that was emailed back to the applicant's engineer is again attached for reference.
- 13. The plans must be signed and sealed by a Professional Engineer registered to practice in the Commonwealth of Pennsylvania.
- 14. We continue to recommend that "No Parking" signs be installed along the site frontage of Level Road so that visitors of the site do not park along the site frontage in order to access the proposed school building, particularly during large events such as back-to-school night, and which may further restrict egressing sight lines from either school access.
- 15. The applicant has indicated that since the bus drop-off/pick-up drive will be used for occasional overflow parking for large events that an "Authorized Personnel and Deliveries Only" sign will not be shown on the plans at the northern end of the bus drop-off/pick-up drive facing Level Road. However, we continue to recommend that an "Authorized Personnel and Deliveries Only" sign be considered and shown on the plans at this location possibly with an hours of restriction placard mounted below the sign in order to limit the use of this driveway to school buses, trash trucks, and delivery vehicles during a typical school day.
- 16. Backstops nor netting is not being planned for the play fields to protect pedestrians and vehicles along Level Road. A 4.5-foot decorative fence is all that is currently proposed.
- 17. As requested, for review and constructability purposes along Level Road, please provide the following information on the plans:
  - a) Construction baselines for the proposed new access driveways. While the applicant's engineer notes that baselines are not needed for the constructability of the school parking lot or driveways, it assists in the review of the provided profiles versus location on the plans.
- 18. According to the Township's Roadway Sufficiency Analysis, the proposed development is located in Transportation Service Area One, which has a corresponding impact fee of \$1,822 per

"new" weekday afternoon peak hour trip and the applicant will be required to pay a Transportation Impact Fee in accordance with the Township's Transportation Impact Fee Ordinance. Based on information provided by the applicant, the current school has an enrollment of 406 students and the proposed school is being designed to accommodate a maximum enrollment of 493 students. Therefore, we calculated the transportation impact fee based on 87 students that could potentially attend the elementary school once the site modifications are complete. Based on Land Use Code 520 (Elementary School) in ITE Publication, Trip Generation, 10th Edition, the additional 87 students are expected to generate approximately 15 "new" weekday afternoon peak hour trips, resulting in a transportation impact fee of \$27,330.

19. Based on our review, the applicant should address the aforementioned comments, and provide revised plans and materials to the Township and our office for further review and approval recommendations. The applicant's engineer must provide a response letter that describes how each specific review comment has been addressed, where each can be found in the plan set or materials, as opposed to general responses. This will aid in the detailed review and subsequent review timeframes.

We trust that this review letter responds to your request and satisfactorily addresses the traffic issues that are related to the proposed site modifications apparent to us at this time. If you or the Township have any questions, or require clarification, please contact me, or Michelle Eve, P.E.

Sincerely,

Casey A. Moore, P.E.

Carey a. Moore

Executive Vice President - Corporate Operations

BMJ/MEE/CAM

cc: Don Delamater, Township Manager
John Rice, Esquire, Township Solicitor
Timothy Woodrow, P.E., Woodrow Engineers, Township Engineer
Kim Kryder, R.L.A., Bursich Associates, Inc.
John Miklos, Montgomery County Planning Commission



### MEMORANDUM

TO: Michael W. Mrozinski, Director of Community Development, Lower Providence Township

Don Delamater, Township Manager, Lower Providence Township

Timothy Woodrow, P.E., Township Engineer, Woodrow & Associates, Inc.

John B. Rice, Esq., Township Solicitor, Grim, Biehn & Thatcher

FROM: Daniel B. Mallach, RLA, AICP, CPRP

Thomas J. Comitta, AICP, CNU-A, RLA

DATE: June 30, 2020

SUBJECT: REVIEW COMMENTS - ARROWHEAD ELEMENTARY SCHOOL

PRELIMINARY & FINAL LAND DEVELOPMENT PLAN REVISED JUNE 1, 2020

The enclosed Review Comments pertain to the following documents that we received on June 12, 2020 or as otherwise noted, and to a Site Visit conducted on March 20, 2020:

- Preliminary & Final Land Development Plan consisting of 25 sheets dated revised June 1, 2020 prepared by Bursich Associates, Inc.;
- Erosion & Sediment Control Plan consisting of five (5) sheets dated revised June 1, 2020 prepared by Bursich Associates, Inc.;
- Resubmittal Letter from Kim Kryder, RLA, Project Manager, Bursich Associates, Inc., dated June 11, 2020, including Responses to the TCA Review Comments dated March 25, 2020; and
- Waiver Request Letter dated March 13, 2020, prepared by Kim Kryder, RLA, Project Manager, Bursich Associates, Inc., received March 17, 2020.

Please let us know if there are any questions.

Exhibit "C"



June 30, 2020

Please note the following Review Comments pertaining to the documents listed in the Cover Memorandum.

Items from our Review Comments dated March 25, 2020 that have been addressed are so noted.

New and updated text is in bold type.

#### 1. Overall Comment

The Plan to rebuild and improve the Arrowhead Elementary School property is generally compliant with respect to Ordinance provisions pertaining to planting, and is thoroughly prepared. The specified plants are mostly native, with the appropriate inclusion of some non-native trees and shrubs that are attractive and non-invasive.

The Plan has been revised to address most of our prior comments pertaining to plan preparation and refinement. With respect to Screening Buffer planting adjacent to residences, and a potential after-construction evaluation of additional buffering needs, please see below comment 2.

#### 2. Perimeter Landscaping Adjacent to Single Family Residences

#### 2,A Base Requirements

Adjacent to single-family residences, §123-50.B.3 of the Subdivision and Land Development Ordinance (SLDO) requires the installation of a Screening Buffer, as detailed in §123-50.C (SLDO).

The <u>primary</u> component of a Screening Buffer shall be a double row of evergreen trees spaced 15 feet apart on center, with the trees in one (1) row offset seven and one half feet (7½') from the trees in the other row; the rows shall be at least five feet (5') apart. These trees shall be not less than six feet (6') in height at the time of planting and shall be of such species that the expected height at maturity shall be not less than 20 feet.

The <u>secondary</u> component of a Screening Buffer shall be either earthen mounding or additional plant materials to supplement the minimum required double row of evergreen trees.

#### 2.B Current Condition - Secondary Component Satisfied

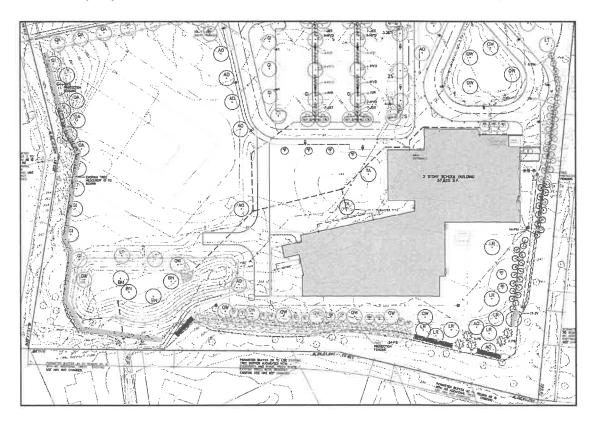
Except for the portion of the school property that abuts the Audubon Water Company property at the northeast (see below comment 3), the remainder of the property abuts single-family residential properties.

Based on our site visit and the type, quantity and condition of the existing vegetation to be preserved along the school property line, we consider the "secondary component" Screening Buffer to be satisfied.



June 30, 2020

However, in some locations, the "primary component" of evergreen trees is <u>not</u> satisfied by either existing evergreen trees or the proposed planting of new evergreen trees. A Waiver has been requested accordingly. This Waiver would apply along the portions of the property line indicated by a green bar in the below markup of the **6-1-2020** Landscape Plan:



### 2.C Primary Component Evergreen Screening: After-Construction Evaluation

The Applicant has requested a Waiver from §123-50.C (SLDO) in order to forgo further Screening Buffer planting. Notably, most of the property boundary where the full evergreen Screening Buffer is <u>not</u> indicated would be along the proposed open play fields and a detention basin where, critically, there will be no adjacent lighting and vehicular traffic. As such, the new proposed "flipped" site layout <u>represents a significant improvement</u> in this respect. In addition, the existing buffering condition along these property boundaries could be considered a type of "existing nonconformity" relative to compliance with the Screening Buffer requirements.

With this in mind, perhaps a modified Screening Buffer could be provided that focuses on the screening of the direct sight lines between the adjacent affected residents—their dwellings



June 30, 2020

and perhaps portions of their yards— that would not be adequately screened by existing or proposed vegetation, or topographical differences.

Accordingly, the 6-11-2020 Resubmittal Letter suggests that "an after-construction evaluation can be made to see where additional property line buffers are needed to shield direct sight lines from the adjacent homes."

We believe that this is a reasonable and appropriate approach to ascertaining the need for additional visual buffering along the school property lines adjacent to residences. If determined by the Board of Supervisors to be an appropriate path forward, Conditions of Approval could be prepared accordingly. Conditions could include the following elements:

- 1. The determination as to the potential type, location and configuration of additional buffering shall be made solely by the Township. However, any additional buffering shall not be required in excess of the requirements contained in §123-50.B.3 (SLDO) and §123-50.C (SLDO).
- 2. In order to promote safety and security, any additional required buffering shall not obstruct views of students or users of the property, including in the vicinity of the concrete sidewalk on the south side of the property.
- 3. Any additional required buffering shall neither interfere with the typical use of school facilities such as the Open Grass Playing Field, nor necessitate adjustment to their approved configuration.
- 4. Any additional required buffering shall not interfere with the operation of stormwater management infrastructure or other utilities.
- 5. Two (2) after-construction evaluations shall be conducted: one (1) during daylight hours and one (1) during nighttime hours while the school's lights are turned on as they would be during evening school events.
- 6. The after-construction evaluation(s) shall be conducted between November 15<sup>th</sup> and April 1<sup>st</sup> in order to consider the site conditions while deciduous vegetation is not in leaf.
- 7. With permission from the adjacent Property Owners, the after-construction evaluation(s) shall be conducted from the adjacent properties, in the vicinity of their homes' ground floor windows.
- 8. In order to achieve buffering objectives, and if space and growing conditions permit, any additional required buffer planting may be installed in areas indicated on the approved Plan to be <u>outside</u> of the limit of disturbance. However, existing



June 30, 2020

tree or shrub vegetation shall not be removed in order to facilitate such planting, unless such existing vegetation has been determined to be invasive or in poor health.

- 9. After the completion of the after-construction evaluation(s), the Applicant shall submit to the Township a Supplementary Buffer Landscape Plan that satisfactorily addresses any buffering needs observed during the evaluation(s). As with the plants on a Final Landscape Plan, plants installed per a Supplementary Buffer Landscape Plan shall be subject to the 18-month guarantee period required by §123-50.D (SLDO).
- 10. Given the appropriate timing of evergreen tree planting (ideally September 15th through November 15th or March 15th through April 30th), and the recommended timing of the evaluation(s) between November 15th and April 1st, any requirement to install additional buffer planting shall not delay or otherwise hinder the normal use of the school building and its grounds.

#### 3. Perimeter Landscaping Adjacent to the Audubon Water Company Property - SATISFACTORY

Per §123-50.B.2 (SLDO), along property lines abutting nonresidential districts or developments, one (1) shade tree per 100 feet of property line plus one (1) evergreen tree and one (1) flowering tree or three flowering or evergreen shrubs per 150 feet of property line shall be installed.

This provision applies to the portion of property line adjacent to the Audubon Water Company property (northeast corner of the school property).

With respect to the preparation of the Land Development Plans, and assuming the successful preservation of the qualifying existing vegetation, we still consider the Plan to be compliant with this requirement.

#### 4. Building Foundation Planting - WAIVER MAY BE REQUIRED

Per §123-37.E (SLDO), the area between a building and a parking area shall be used for walkways and foundation planting.

The Landscape Plan indicates a small amount of planting between the building and parking. We believe that the appearance of the building would be enhanced with additional such planting that also satisfies safety, security and visibility requirements, the needs of first responders (e.g., keeping an open fire lane) and the maintenance of stormwater management systems.

Per the 6-11-2020 Resubmittal Letter: "Schools like to keep landscaping to a minimum. Woodlawn Elementary School, Eagleville Elementary and the current Arrowhead Elementary School do not have foundation plantings."



June 30, 2020

Additional planting adjacent to the building would enhance its appearance. However, we appreciate the maintenance, access, safety and security issues involved in providing such planting. Further, the Plan <u>does</u> indicate a full complement of good plants along Level Road and within the main parking area in front of the building. Therefore, to forgo the installation of foundation planting on this project, so as to not set a precedent for other land development projects, it may be appropriate for the Applicant to request a Waiver from §123-37.E (SLDO).

### 5. Internal Landscaping - SATISFACTORY

§123-50.A.3 (SLDO) details the requirements for Internal Landscaping:

- §123-50.A.3.a One (1) shade [deciduous] tree <u>and</u> one (1) evergreen tree per 5,000 square feet of paved area used as parking, loading and driveways.
- §123-50.A.3.b One (1) flowering [deciduous] <u>or</u> evergreen shrub per 1,500 square feet of paved area used as parking, loading and driveways.

As noted on Sheet **24** (Construction Details - Landscape), a total of 77,830 square feet of pavement is indicated on the Plan for use as parking, loading and driveways. The Plan therefore requires:

- 16 deciduous trees:
- 16 evergreen trees; and
- 52 deciduous or evergreen shrubs.

The Plan still indicates the required vegetation. Therefore, the Plan complies with this requirement.

Note: The information table on Sheet 24 indicates that only three (3) evergreen trees are proposed to satisfy the Internal Landscaping requirement. However, because this requirement can be satisfied by <u>any</u> plants preserved or proposed on the property, in order to memorialize compliance with this requirement, we recommend that this '3' be changed to '16'.

#### 6. Street Trees - SATISFACTORY

Per §123-50.B.1 (SLDO) and §123-52 (SLDO), shade trees shall be planted along the Level Road frontage at an interval of no less than 40 feet and no more than 50 feet. Trees shall be placed behind the right-of-way line of the street.

For the 925 linear feet of Level Road frontage, a minimum of 19 shade trees are required (18.5 rounded up).

The Plan still complies with the numeric and size requirements with the provision of 18 proposed trees of 2½ inches in caliper and one (1) existing tree to be preserved.



June 30, 2020

In addition, the Plan now indicates greater species diversity along Level Road, recommended as a long-term hedge against insect infestation or disease.

This item has been resolved.

### 7. Tree Replacement - SATISFACTORY

Per §123-146.B.6.a (SLDO), one (1) 2½-inch caliper replacement tree shall be provided for each tree of eight inches (8") DBH or greater that is removed.

Replacement Trees shall be provided in addition to other required landscaping, such as Street Trees and Internal Landscaping as otherwise set forth in the Subdivision and Land Development Ordinance.

A total of 58 replacement trees are required. With respect to the proposed quantity and size of replacement trees, *the Plan is still compliant*.

In addition, as requested, four (4) additional trees to be removed have now been marked "TBR" on the Plan for removal during the appropriate phase of demolition.

This item has been resolved.

#### 8. Tree Protection Fencing - SATISFACTORY

Per §123-114.B.3 (SLDO), tree protection fencing shall be installed around the root protection zones of all trees to remain.

The Landscaping Plan, Existing Conditions - Demolition Plan and the Erosion & Sediment Control Plan all indicate tree protection fencing adjacent to the vegetation to be preserved. A good Detail is included on the Erosion & Sediment Control Plans.

As it pertains to Plan preparation, <u>we still consider this requirement to be satisfied</u>. The location and condition tree protection fencing should be inspected during the onsite preconstruction meeting, prior to the commencement of any demolition and approved tree removal.

#### 9. School Sign & Tree Proximity - SATISFACTORY

As suggested, an adjacent tree has been shifted to promote visibility of the school sign.

This item has been resolved.



June 30, 2020

#### 10. Tree / Inlet Conflict - SATISFACTORY

As recommended, a tree has been shifted away from a basin inlet.

This item has been resolved.

#### 11. Decorative Fence - SATISFACTORY

A Detail for the Decorate Fence has been added to the Plan (post & rail w/ black mesh backing).

This item has been resolved.

### 12. Basin Fencing - SATISFACTORY

As recommended for safety, the Plan now indicates fencing around the detention basins.

This item has been resolved.

#### 13. Tree Planting Detail for Slopes - SATISFACTORY

The Tree Planting Detail now notes appropriate practices for planting on slopes.

This item has been resolved.

#### 14. Conclusions

- 14.A Previously noted items pertaining to Plan preparation have been addressed, and we have no new recommendations.
- 14.B An after-construction evaluation should be conducted in order to ascertain additional visual buffering needs adjacent to residences, with Conditions of Approval prepared accordingly (comment 2).
- 14.C A Waiver may be required to forgo additional Building Foundation Planting (comment 4).

Please let us know if there are any questions.