Springfield Township Planning Commission Meeting April 21, 2020

Please note that this Meeting will be held via the Zoom web conferencing program. (Instructions for participating are included below)

Meeting ID: 556-923-349

Notice: The planning Commission of Springfield Township is an advisory board appointed by the Board of Commissioners. The actions of the Planning Commission on any agenda items does not reflect a final decision. The Board of Commissioners must render the final decision on all agenda items.

Call To Order:

Roll Call:	Murry	Devine	Sands
	Schaefer	Blankin	Bruce
	Gutowski	Mascaro	Helwig

Minutes: Review and approval of the minutes from the meeting of March 3, 2020.

Agenda Item:

PC1: This is a request for the waiver of land development review and approval by **Sandy Run Country Club** for the installation of 1,000 square foot pole building to be used for golf cart storage. The proposed pole building will be installed behind the existing Club House and will replace an existing smaller storage shed. The pole building is proposed to be partially installed over existing impervious coverage. On March 11, 2020 the Board of Commissioners referred this request to the Planning Commission for review and a recommendation. The property is zoned within the AA Residential District with an AAA Residential Overlay.

PC2: This is the application of **Springfield School District** for the conversion of the Enfield Elementary School Site into an athletic facility. The proposed development will include the demolition of the existing buildings and the creation of two new softball/baseball fields, a multipurpose field, on-site parking, an on-site stormwater management system and a building to be used for restrooms and a concession area. The applicant proposes to remove several of the existing trees and install new landscaping. The property is zoned within the A Residential District.

Adjourned:

To join and participating in the Zoom Meeting:

- VIA WEB BROWSER: Copy and paste this link into your web browser: https://us04web.zoom.us/j/556923349
- VIA ZOOM APP: if you have the Zoom App on your smartphone, tablet, or computer, open the program, click join a meeting, and enter the Meeting ID: **556-923-349**
 - VIA CALL-IN (no video): Dial +1 646 558 8656 and enter the Meeting ID: 556-923-349

For the safety of the public, it is strongly recommended that members of the community participate in the meeting online or on the phone. The ability to use web conferences is the result of the State relaxing Sunshine Law standards during this time of crisis to permit municipalities to continue operating while protecting their elected officials, employees and the public.

ANY INDIVIDUAL WITH A DISABILITY WISHING TO ATTEND THE ABOVE SCHEDULED NEETING AND REQUIRING AN AUXILIARY AID, SERVICE OR OTHER ACCOMMODATION TO PARTICIPATE IN THE PROCEEDINGS, PLEASE CONTACT THE OFFICE OF THE TOWNSHIP MANAGER AT 215-836-7600 AT LEAST ONE HOUR PRIOR TO THE MEETING.

Please bear with us as we work through this technology that is relatively new to most of us. Springfield Township is committed to providing continuity of essential services throughout this unprecedented time. Thanks to all our community members for their patience and understanding during these trying and unprecedented times.



Sandy Run Country Club

Name: $\underline{\mathcal{Thom}_{AS} \ D'LAURS}$, request that the Board of Commissioner for Springfield Township waiver the land development requirements as defined by Section 95.3 of the Subdivision & Land Development Ordinance.

Sincerely,

1hm

Position: BOARD HEABER Sandy Run Golf Course

200 Valley Green Road • Oreland, PA 19075-1599 • (215) 233-0666 • Fax (215) 233-1404



COMMISSIONERS Baird M. Standish

The Township of Springfield

MONTGOMERY COUNTY, PENNSYLVANIA Township Bldg., 1510 Paper Mill Rd., Wyndmoor, PA 19038 website: www.Springfield-Montco.org Phone: 215-836-7600 Fax: 215-836-7180

March 18, 2020

President Thomas D'Lauro Eddie T. Graham Vice President **Board Member** Jeffrey T. Harbison Peter D. Wilson Michael E. Maxwell Jonalhan C. Cobb James M. Lee

OFFICERS

A. Michael Taylor Secretary-Manager James J. Garrity Solicitor Bonny S. Davis Treasurer / Tax Collector Mark W. Eisold Engineer Sandy Run Country Club 200 Valley Green Rd. Oreland, PA 19075

> RE: LAND DEVELOPMENT WAIVER REQUEST

Dear Tom:

At the March 11, 2020 meeting of the Board of Commissioners of Springfield Township, the Board reviewed your request for a waiver to the development review process for Sandy Run Country Club in order for the Club to construct a 1,000 square foot pole building to be utilized for the storage of golf carts. While the Board is open to considering your request, it is the policy of the Board to refer all such requests to the local Planning Commission in order to obtain their feedback before rendering a decision on the request. At your earliest convenience, please contact Mark Penecale, Director of Planning and Zoning, to schedule an appearance before the Planning Commission. With that said, however, the Township has cancelled all public meetings through the end of March due to the COVID-19 pandemic. Those cancellations may extend through April depending upon guidance received from the State and Federal governments.

In addition, the Board is interested in working with Sandy Run Country Club to establish a walking path along the Walnut Avenue frontage of the Country Club property in order to provide a safe method for pedestrians to access the adjacent Sandy Run Park. The Board is not asking the Country Club to pay for the installation of the walking path, but hopes that the Club will grant an easement or right of way to enable the construction, or to accommodate a path in some other fashion. Attached please find a copy of a sketch plan that was prepared by the Township Engineer depicting one option for the desired path.

Thank you for your consideration of this request, and for working through the details of the land development waiver with the Planning Commission.

Very truly yours,

Michael Taylor Township Manager

MT:cmt

Cc: M. Penecale V





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SHEARON ENVIRONMENTAL

CORPORATE OFFICE: 5160 MILITIA HILL ROAD PLYMOUTH MEETING, PA, 19462 610,828,5488 610,828,9164 (fax) www.shearondesign.com

Scale:NTS 2.20.20 Cart Shed Location Plan Sandy Run Country Club 200 East Valley Green Road, Oreland, Pennsylvania

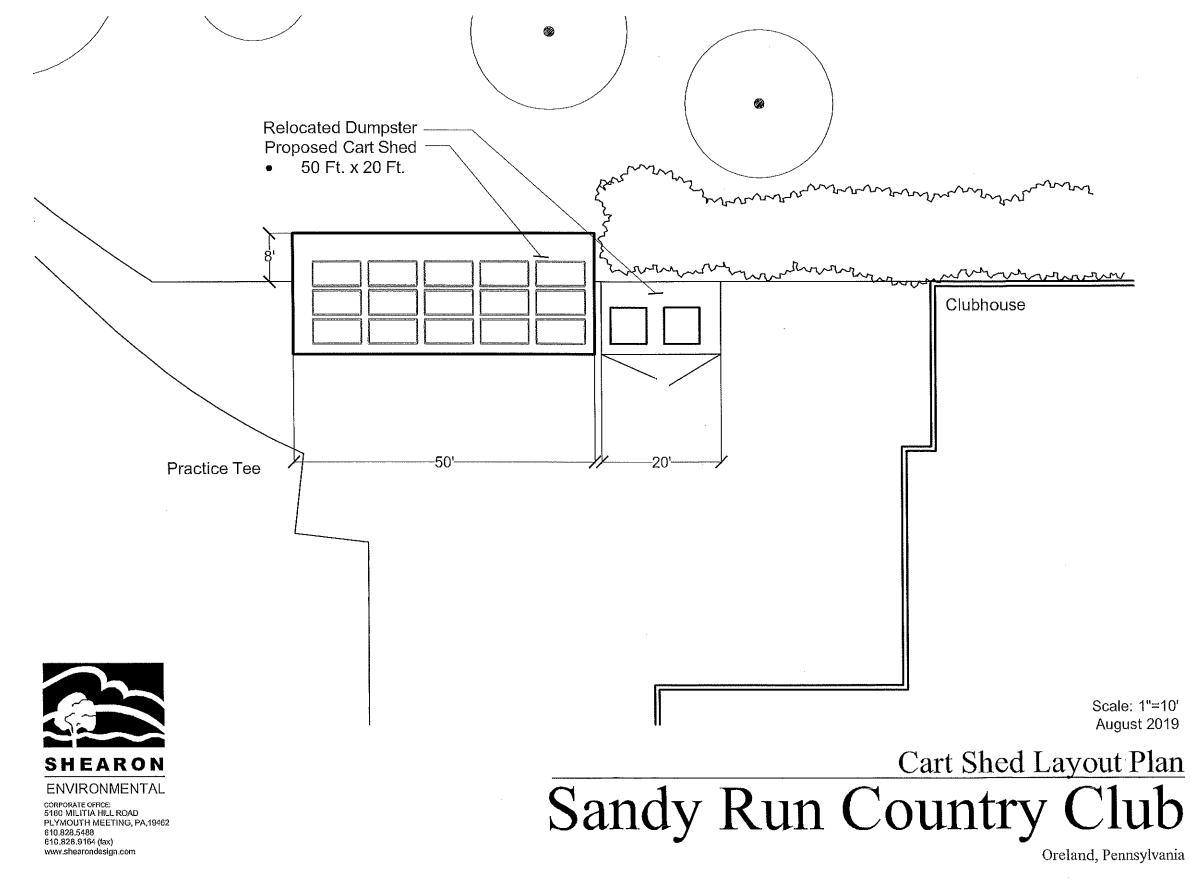




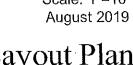
ENVIRONMENTAL

CORPORATE OFFICE: 5160 MILITIA HILL ROAD PLYMOUTH MEETING, PA,19462 610.828.9164 (fax) www.shearondesign.com

Scale: 1"=20' 2.20.20 Cart Shed Layout Plan Sandy Run Country Club 200 East Valley Green Road, Oreland, Pennsylvania

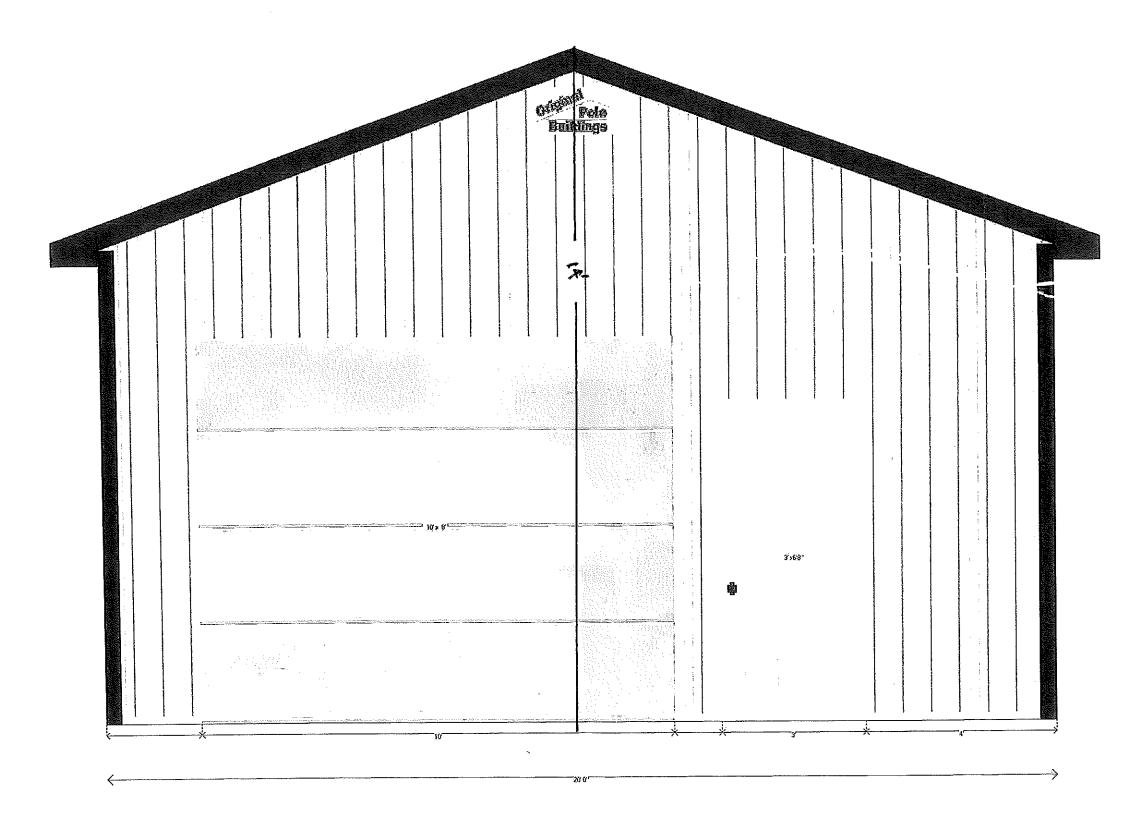


s p



ELEVATION PLAN (BY DIRECTION, ALL WINGS) -- West

st • b V i_{ng} en



Customer Approval

Date_





School District of Springfield Township

Administration Building

1901 E. Paper Mill Road • Oreland, PA 19075 • P: 215.233.6000 • F: 215.233.6025

Mark A. Penecale Director of Planning & Zoning Springfield Township 1510 Paper Mill Road Wyndmoor, PA. 19038

Date: March 26, 2020

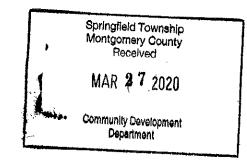
Re: Applicant's Address & Development Address

Dear Mr. Penecale

Please allow this letter to serve as a formal extension of the time limitations imposed by the Pennsylvania Municipality Planning Code pertaining to the review and final actions on pending Subdivisions & Land Development Applications. This extension is granted for a minimum of 60 days from the date of this letter.

Sincerely,

Kenneth W. King Business Administrator School District of Springfield Township 1901 E. Paper Mill Road Oreland, PA 19075



Where Schools and Community are One -

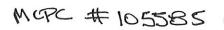


SPRINGFIELD TOWNSHIP APPLICATION FOR SUBDIVISION AND LAND DEVELOPMENT APPROVAL

APPLICATION FOR LAND DEVELOPMENT APPROVAL

A Application is hereby made for approval by the Board of Commissioners of the attached Land Development Plan.

В	Name of Land Develo	pment: Enfield Athletic Facility					
	Location:	1118 Church Road, Oreland, PA 19075					
С	Name of Owner:	School District of Springfield Township					
	Address:	1901 Paper Mill Road, Oreland, PA 19075					
	Phone #:	215-233-6000					
D	Name of Applicant:	School District of Springfield Township					
	Address:	1901 Paper Mill Road, Oreland, PA 19075					
	Phone #:	215-233-6000					
E	E Name of Engineer, Surveyor, or Planner responsible for preparation of the plan						
	T&M Associates						
	Address: 1700 Market Street, Suite 3110, Philadelphia, PA 19103						
F	F Existing Zoning Classification: A Residential						
	Total Acreage: 8.9 New Non-Res. Floor Area: (sq. ft)						
	Sewerage: Public Privat						





SPRINGFIELD TOWNSHIP APPLICATION FOR SUBDIVISION AND LAND DEVELOPMENT APPROVAL

N Signature

The undersigned represents that to the best of his/her knowledge and belief, all of the above statements are true, correct and complete.

In the event the applicant wishes to have the review by the Township discontinued, the applicant will notify the Township immediately, in writing, and processing of the review will be terminated upon receipt of such written notification to the Township, it being understood that all bills accrued to date of termination will be paid.

03/11/2020 DATE

SIGNATURE OF APPLICANT



SPRINGFIELD TOWNSHIP APPLICATION FOR SUBDIVISION AND LAND DEVELOPMENT APPROVAL

K Escrow Fund

The escrow account shall be established based on the following calculations:

\$3,000.00 per acre or fraction thereof

Total Escrow Amount \$ N/A

L Springfield Township Application Fees

Waiver or Sketch Plan Fee	\$N/A		
Preliminary Plan Fee	\$ <u>N/A</u>		
Final Plan Fee	\$ <u>N/A</u>		
Total	\$ <u>N/A</u>	 Check #	

M Montgomery County Planning Commission Fee Schedule Checks should be made payable to "Montgomery County Treasurer".

RESIDENTIAL LAND DEVELOPMENT

Per Lot or Unit
ee)
per unit
per unit
20 per unit

NON RESIDENTIAL LAND DEVELOPMENT AND CONVERSIONS

Gross Square Feet of New Building	General Fee + Fee for every 1,000 gross sq. ft. (round to nearest whole dollar)
1 2 000 0	\$220 flat fac

1 - 3,000 sq. ft. 3,001 - 25,000 sq. ft. 25,001 - 50,000 sq. ft. 50,001 - 100,000 sq. ft. 100,000 + sq. ft. \$220 flat fee
\$519 + \$27 for every 1,000 sq. ft.
\$1,050 + \$23 for every 1,000 sq. ft.
\$1,550 + \$20 for every 1,000 sq. ft.
\$2,580 + \$15 for every 1,000 sq. ft.

Total \$ N/A

Check #_____

MONTGOMERY COUNTY BOARD OF COMMISSIONERS

VALERIE A. ARKOOSH, MD, MPH, CHAIR KENNETH E. LAWRENCE, JR., VICE CHAIR JOSEPH C. GALE, COMMISSIONER



MONTGOMERY COUNTY PLANNING COMMISSION

MONTGOMERY COUNTY COURTHOUSE • PO Box 311 Norristown, Pa 19404-0311 610-278-3722 FAX: 610-278-3941 • TDD: 610-631-1211 WWW.MONTCOPA.ORG

> JOHN S. COVER, AICP INTERIM EXECUTIVE DIRECTOR

March 13, 2020

Mark Penecale, Director of Planning & Zoning Springfield Township 1510 Paper Mill Road Wyndmoor, PA 19038

Re: MCPC# 20-0046-001 Plan Name: Enfield Athletic Facility (recreational fields on 8.9 acres) Situate: South of Paper Mill Rd./ West of Church Rd.

Dear Mr. Penecale:

We have reviewed the above-referenced land development plan in accordance with Section 502 of Act 247, "The Pennsylvania Municipalities Planning Code," as you requested on February 20, 2020. We forward this letter as a report of our review.

BACKGROUND

The applicant, Springfield School District, has proposed to demolish an existing elementary school building in order to construct two softball fields and one multi-purpose recreation field along with associated improvements including bleachers and a 1,496 square foot building for concessions, storage, and restrooms. The plan increases onsite parking through converting the existing driveway off of Church Road to include 25 parking spaces, space for bus parking and turn around area, and restripe the existing parking area off Paper Mill Road for a combined total of 92 parking spaces. Both parking areas are accessed via state owned roads. A large detention basin is currently proposed at the southern end of the site that appears to handle the majority of the stormwater management along with a drainage pipe underneath the new parking area and multi-sport field; both of these facilities drain directly into Oreland Run Tributary. Additional proposed improvements include a continuous pedestrian path that circulates around and through the site, connecting the play fields and parking areas. The property is located in the township's Residential A zoning district.

COMPREHENSIVE PLAN COMPLIANCE

The Land Use element of the 2012 Springfield Township Comprehensive Plan identifies the Enfield Athletic Facility site as Institutional Use. In addition, the site is identified as a Suburban Residential Area in the Future Land Use Plan of the Montgomery County Comprehensive Plan, *Montco 2040: A Shared Vision*. Institutional uses, such as the proposed recreation fields, are appropriate in both land use designations.

RECOMMENDATION

The Montgomery County Planning Commission (MCPC) generally supports the applicant's proposal, however, in the course of our review we have identified the following issues that the applicant and Springfield Township may wish to consider prior to final plan approval. Our comments are as follows:

REVIEW COMMENTS

GENERAL COMMENT

This development proposes to change an existing educational use to another institutional use for recreational fields, providing an asset to both the school district and surrounding community. The redevelopment of this key site at the intersection of two main roads in the township provides an opportunity to improve neighborhood pedestrian connections, create a recreational amenity for the township, and be a potential showcase for green stormwater infrastructure.

PEDESTRIAN CIRCULATION

- A. Sections 95-10.C and 95-10.I of the township's subdivision and land development ordinance (SALDO) state that curbing and concrete sidewalks, not less than four feet wide, shall be provided on any street or road which is residential or commercial in character. Sidewalk and curbing already exist along Paper Mill Road, but there is currently no sidewalk and curbing proposed along the Church Street frontage. We recommend including curbing or sidewalk along the Church Street frontage to expand and enhance the existing pedestrian connectivity in the area.
- B. Based on the information provided it appears that there is an existing asphalt pedestrian pathway at the southeast end of the property connecting to Lantern Lane that is not shown on the proposed site plan. We recommend keeping and including this pathway into the site's overall pedestrian network to increase connectivity to the surrounding neighborhood.
- C. While the site is undergoing improvements, we encourage the applicant to improve the existing ADA curb ramps and sidewalks at the intersection of Paper Mill Road and Church Road.
- D. To promote pedestrian connectivity within the site, we recommend the applicant explore connecting the walking path between the multi-purpose field and the softball field. The 12' multi-sport ball stopper netting may need to be adjusted to accommodate this connection.

LANDSCAPING

A. <u>Street Trees.</u> The applicant has proposed nine new street trees, in addition to an existing tree credit of five trees, for a total of 14 street trees. According to §95-11.1.(2).(b) of the SALDO, no less than one street tree shall be provided for each 35 feet of street length, or portion thereof. Based on the information provided, the site has 968 feet of total frontage along Paper Mill Road and Church Road, which would require a total of 28 street trees. Future versions of the landscape plan should include the required number of street trees.

B. <u>Parking Landscape Areas.</u> The proposed plan indicates that 1,417 square feet of parking landscape area is being provided within the new, 25-space parking area accessed by Church Road. According to §95-11.I.(3).(b). [1]. of the Springfield Township SALDO, 500 square feet of parking landscape area per 10 spaces is required. Future plans should indicate measurements of landscaping areas to ensure they are meeting the minimum requirements found in §95-11.I.(3).

The existing parking area accessed off of Paper Mill Road is being restriped and expanded by five spaces from 62 existing spaces to 67 parking spaces. This area is not currently included in the parking landscape figure indicated above. We feel that while this site is up for land development review, the existing parking area should be improved to meet the current standards found in §95-11.1.(3). To accomplish this, we encourage green parking standards, such as naturalizing any buffer and drainage areas, providing shade trees, and using permeable materials to improve stormwater infiltration and reduce runoff. More information, including a list of recommended plantings, can be found in our Sustainable Green Parking Lots handbook: <u>https://www.montcopa.org/DocumentCenter/View/9735/Green-Sustainable-Parking-Guide-2 10 2016-Web</u>

- C. <u>Riparian Buffer.</u> Although the plans indicate that no trees are proposed to be removed near Oreland Run, we recommend as large a natural buffer as possible be maintained and ideally improved along the tributary. Protecting riparian corridors helps control erosion, promote water quality, and helps ensure the overall health of the stream and watershed. This can be accomplished through additional landscaping along the stream corridor. Based on the information provided, there appears to be approximately 20 feet between the proposed pedestrian walkway and the top of the bank which could provide room for additional plantings.
- D. <u>Side Yard Buffer</u>. We recommend additional vegetated side yard buffering between the parking areas and the adjacent parcels, in accordance with §95-11.I. of the SALDO, to better screen neighboring residences from the parking areas.
- E. <u>Retaining Wall Screening.</u> We recommend screening the front of the retaining wall that faces Church Road with vegetation and landscaping to improve both the experience of pedestrian path users, as well as to improve the view from Church Road.
- F. <u>Trash Area Screening</u>. There are no dumpsters or large trash collection areas indicated on the site plan. If there are dumpsters on site, these should be indicated on the plan and sufficiently screened.

STORMWATER MANAGEMENT

A. The applicant is proposing a large detention basin with a low-flow channel at the southern end of the site, along with a drainage pipe underneath the new parking area and multi-sport field; both of these facilities drain directly into Oreland Run Tributary. In general, we are not proponents of low-flow channels as they prevent stormwater from infiltrating naturally into the soil and subsurface. According to §88-8.F of the Springfield Township stormwater management code the "use of low-impact development techniques are encouraged." We believe there are opportunities to explore low-impact stormwater management techniques on site, and we encourage the use of natural green stormwater infrastructure (GSI) in the proposed detention basin and adjacent forebays through the use of natural features such as bio-swales, and additional plantings in order to improve water quality and slow water runoff.

Mark Penecale

B. The pipe along the new parking area and under the multi-purpose field, drains directly into Oreland Run and does not include any means to address water quality and runoff velocity from the site. This is another opportunity to explore the use of GSI, such as a bio-swale in place of the pipe in the parking area. The township should consider working with the applicant to investigate the feasibility of green infrastructure in this location.

LIGHTING

Although a "Landscape and Lighting Plan" is referenced in the sheet index on Sheet 8, no lighting plan is included in the site improvement plan document. If lighting is proposed for the site, additional information regarding the type and location of lighting fixtures should be included as part of future plan submissions.

CONCLUSION

We wish to reiterate that MCPC generally supports the applicant's proposal to construct recreational fields; however we believe that our suggested revisions will better achieve Springfield Township's planning objectives for institutional development.

Please note that the review comments and recommendations contained in this report are advisory to the municipality and final disposition for the approval of any proposal will be made by the municipality.

Should the governing body approve a final plat of this proposal, the applicant must present the plan to our office for seal and signature prior to recording with the Recorder of Deeds office. A paper copy bearing the municipal seal and signature of approval must be supplied for our files. Please print the assigned MCPC number (#20-0046-001) on any plans submitted for final recording.

Sincerely,

Cum Huly

Aaron Holly, Community Planner aholly@montcopa.org 610-278-3748

c: T & M Associates, Applicant's Engineer
 A. Michael Taylor, Springfield Township Manager
 Amanda Helwig, Chair, Springfield Township Planning Commission

Attachments: Attachment A - Aerial of Site Attachment B - Reduced Site Plan Mark Penecale

- Attachment A -

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March 13, 2020

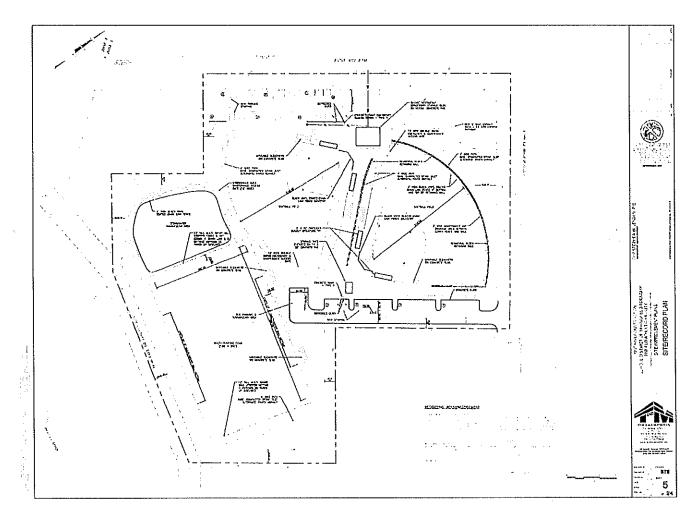


Enfield Athletic Facility MCPC #200046001 Å

Mark Penecale

- Attachment B -

March 13, 2020





10 Sentry Parkway, Suite 200 P.O. Box 3001 Blue Bell, PA 19422-3001 Tel 610.397.6500 Fax 610.397.0450 www.foxrothschild.com

David H. Comer Direct Dial: (610) 397-7963 Email Address: <u>dcomer@foxrothschild.com</u> File No. 77072-421

February 6, 2020

VIA CERTIFIED MAIL / RETURN RECEIPT REQUESTED and <u>VIA FIRST CLASS MAIL</u>

Springfield Township Planning Commission Springfield Township 1510 Paper Mill Road Wyndmoor, PA 19038

VIA CERTIFIED MAIL / RETURN RECEIPT REQUESTED and VIA FIRST CLASS MAIL

Montgomery County Planning Commission P.O. Box 311, 425 Swede Street Norristown, PA 19404-0311

Re: <u>School District of Springfield Township – Closure of Existing Enfield Elementary School</u> and opening of New Enfield Elementary School

Dear Sir or Madam:

Please be advised that this office serves as solicitor for the School District of Springfield Township (the "School District") in connection with the above-referenced matter. In that capacity, in accordance with the requirements of Section 305 of the Pennsylvania Municipalities Planning Code, 53 P.S. § 10305, this letter is to inform you of the School District's intent to close the existing Enfield Elementary School located in Springfield Township ("Existing Enfield Elementary School has an address of 1118 Church Road, Oreland, PA 19075 and conducts school programming for kindergarten and first grade students.

The School District is currently constructing a new Enfield Elementary School in Springfield Township, with an anticipated address of 300 West Montgomery Avenue, Erdenheim, PA 19038 ("New Enfield Elementary School"), in which New Enfield Elementary School the District intends to conduct school programming for kindergarten, first and second grade students starting with the 2020-21 school year.

A Pennsylvania Limited Liability Partnership

California	Colorado	Delaware	District	of Columbia	Florida	Georgia	Illinois	Minneso	ota Nevada
New Jersey	New York	North C	arolina	Pennsylvania	South	Carolina	Texas	Virginia	Washington



Springfield Township Planning Commission Montgomery County Planning Commission February 6, 2020 Page 2

Please consider this letter as submission to the municipal and county planning agencies pursuant to 53 P.S. § 10305 for such agencies' recommendations in connection with the School District's intent to close the Existing Enfield Elementary School and opening of the New Enfield Elementary School. Should you need any additional information, please do not hesitate to contact me.

Very truly yours,

Come

David H. Comer

DHC:kw





COMMISSIONERS Jeffrey T, Harbison President

The Township of Springfield

MONTGOMERY COUNTY, PENNSYLVANIA Township Bldg., 1510 Paper Mill Rd., Wyndmoor, PA 19038 website: www.springfieldmontco.org

Phone: 215-836-7600 Fax: 215-836-7180

April 8, 2020 Baird M. Standish Vice President

Glenn A. Schaum Peter D. Wilson Eddie T. Graham Michael E. Maxwell Jonathan C. Cobb

OFFICERS A. Michael Taylor

Secretary-Manager James J. Garrily Solicitor

Bonny S. Davis Treasurer / Tax Collector

Mark W. Elsotd Engineer

Mr. Mark Penecale, Director of Planning and Zoning The Township of Springfield 1510 Paper Mill Road Wyndmoor, Pennsylvania 19038

SUBJECT: ENFIELD SCHOOL DEMOLITION AND FIELD CONSTRUCTION SPRINGFIELD TOWNSHIP, MONTGOMERY COUNTY, PA **PROJECT NO. 20-40-289R**

Dear Mr. Penecale:

Per your request, we have completed our first review of the Preliminary/Final Subdivision and Land Development plans for the Springfield School District Athletic Fields project which were submitted for review and approval. The following documents were submitted for our review:

- One (1) copy of Preliminary/Final Subdivision and Land Development plans, titled School District of Springfield Township Enfield Athletic Facility, prepared by T&M Associates, dated January 17, 2019 (assumed to actually be 2020, and reported as January 17, 2020 in correspondence).
- One (1) copy of the Enfield Elementary School Demolition Post Construction Stormwater Management & Erosion and Sediment Control report, prepared by T&M Associates, dated February 17, 2020.
- One (1) copy of the Trip Generation Evaluation & Comparison report, prepared by McMahon Associates, Inc., dated February 17, 2020.
- One (1) copy of the Springfield Township Subdivision and Land Development Plans Checklist (4 pages).

BACKGROUND INFORMATION

The Applicant, the School District of Springfield Township, proposes to demolish existing structures within their lands (Parcel #52-00-03826-00-1; 8.90 acres), and to construct athletic fields. The parcel is located at the southern corner of the intersection of Paper Mill Road (S.R. 2032) and Church Road (S.R. 0073) and contains Enfield Elementary School, along with associated parking and recreational facilities. The School District proposes to demolish the existing school building and much of the surrounding improvements in favor of constructing two (2) softball fields, a multi-purpose field, a trail/path, and associated parking and stormwater management facilities.

Mr. Mark Penecale, Director of Planning and Zoning Enfield Athletic Facility April 8, 2020 Page 2 of 8

Based on our review of the above information, we offer the following comments and/or recommendations for your consideration:

ZONING ORDINANCE COMMENTS

- 1. The design plans indicate the property to have a lot width of 466 feet. This is shown to be the length of the deed line within Church Road (S.R. 0073). Pursuant to Chapter 114-21, the Lot Width should be measured, "at the street line on a public street". This length should be revised to be measured at the right-of-way line shown on the plan, and to subtract the length that is considered as a part of the Paper Mill Road (S.R. 2023) right-of-way.
- 2. The Application and design plans list the Proposed Use as "Elementary School". The proposed action by the School District in demolishing the school building alters the use of the property. Pursuant to Chapters 114-51.A and 114-41.D the Proposed Use should be revised to indicate the permitted use of "playgrounds".

SUBDIVISION OF LAND COMMENTS

3. Chapter 95-11.1(3) requires parking area landscaping. The design plans provide calculations to demonstrate the need for such plantings, but the plans are not clear as to where the required planting areas are provided.

STORMWATER MANAGEMENT COMMENTS

- 4. The Narrative report is lacking key pieces of information necessary to provide an adequate review of the proposed design. The following items are missing from the submitted Post Construction Stormwater Management Report.
 - a. This report contains no information demonstrating the calculated Time of Concentration for each sub-area. A Time of concentration is listed for each sub-area within the provided data sheets. However, there is no worksheet provided demonstrating how these times were calculated.
 - b. Both pre and post development analysis utilize a basin routing to determine final rates of runoff. The report must provide a Pond Report for each basin to demonstrate that the information used to model the basin does in fact match the existing and design conditions of the actual basins.
- 5. Basin calculations, once provided, shall include the following.
 - a. Routing calculations demonstration the maximum water surface elevation within the basin during each design storm.
 - b. Dewatering calculations to verify that the basin will empty within 72 hours.
 - c. Freeboard calculations to verify that 1-foot of freeboard is provided over the emergency spillway.
- 6. The "Volume Management" page near the front of the PCSM Narrative shows a Pre-Construction drainage area for POI-003 of 1.08 acres. However, the Existing Conditions Drainage Area Plan contained in the back of this document lists this area as 1.69 acres. This discrepancy shall be corrected.
- 7. The "Volume Management" page near the front of the PCSM Narrative shows a Post-Construction drainage area for POI-001 of 6.73 acres. However, the Proposed Conditions

Mr. Mark Penecale, Director of Planning and Zoning Enfield Athletic Facility April 8, 2020 Page 3 of 8

Drainage Area Plan contained in the back of this document lists this area as 7.15 acres. This discrepancy shall be corrected.

- 8. The "Volume Management" page near the front of the PCSM Narrative shows a Post-Construction drainage area for POI-003 of 1.10 acres. However, the Proposed Conditions Drainage Area Plan contained in the back of this document lists this area as 0.67 acres. This discrepancy shall be corrected.
- 9. Within the Narrative, a "General Information" page is provided for each drainage area (1-3). For each one, the area is listed as 8.90 acres. This should be revised as necessary.
- 10. The following discrepancies are noted between plan, profile, and/or narrative and should be corrected.
 - a. The plan lists the grate elevation for Inlet B3.3 as 214.02. The narrative calculations list the grate elevation as 214.00.
 - b. The plan lists the grate elevation for Inlet B3.2 as 214.04. The narrative calculations list the grate elevation as 214.00.
 - c. The plan lists the grate elevation for Inlet B3.1 as 214.02. The narrative calculations list the grate elevation as 214.00.
 - d. The plan lists the inlet out elevation for Inlet A9 as 216.25. The narrative calculations list the invert out elevation as 216.40.
 - e. The plan lists the inlet out elevation for Inlet A8.1 as 217.80. The narrative calculations list the invert out elevation as 220.55.
 - f. The plan lists the grate elevation for Inlet A4.6 as 224.51. The narrative calculations list the grate elevation as 225.34.
 - g. The plan lists the grate elevation for Inlet A4.4 as 221.50. The narrative calculations list the grate elevation as 222.24.
 - h. The plan lists the grate elevation for Inlet A10 as 222.00. The narrative calculations list the grate elevation as 227.82.
 - i. The plan lists the inlet out elevation for Inlet A10 as 216.50. The narrative calculations list the invert out elevation as 217.00.
 - j. The plan lists the grate elevation for Inlet A11 as 222.00. The narrative calculations list the grate elevation as 222.03.
 - k. The plan lists the inlet out elevation for Inlet A11 as 216.80. The narrative calculations list the invert out elevation as 217.90.
 - 1. The plan lists the grate elevation for Inlet A12 as 222.03. The narrative calculations list the grate elevation as 223.30.
 - m. The plan lists the inlet out elevation for Inlet A12 as 217.30. The narrative calculations list the invert out elevation as 218.70.
 - n. For the pipe run B2 to O1 the plan lists the pipe slope as 1.04%. The narrative calculations list the slope as 1.02%.
 - o. The pipe run A9 to A8 is listed on the plan as a 15" pipe at 1.22% slope. The narrative calculations list the run as an 18" pipe at 0.81% slope.
 - p. The pipe run A8.1 to A8 is listed on the plan as a 47.28' pipe at 2.64% slope. The narrative calculations list the run as a 99.97' pipe at 4.00% slope.
 - q. The plan lists the inlet out elevation for Inlet A8 as 216.50. The narrative calculations list the invert out elevation as 216.10.
 - r. The pipe run A12 to A11 is listed on the plan as a 77.80' pipe at 0.51% slope. The narrative calculations list the run as a 100.33' pipe at 0.60% slope.
 - s. The pipe run A11 to A10 is listed on the plan as a 51.66' pipe at 0.58% slope. The narrative calculations list the run as a 143.22' pipe at 0.49% slope.

Mr. Mark Penecale, Director of Planning and Zoning Enfield Athletic Facility April 8, 2020 Page 4 of 8

- t. The pipe run A10 to A9 is listed on the plan as a 45.30' pipe at 0.55% slope. The narrative calculations list the run as a 96.23' pipe at 0.42% slope.
- 11. Calculations have not been provided for the storm sewer run A8.2 through A8.1.
- 12. Calculations have not been provided for the storm sewer run A15 through A12.
- 13. The pipe run from Inlet B2.1 to Inlet B2 reflects a slope of 0.39%. There is no valid reason for this pipe slope to be less than the minimum slope of 0.50%. This pipe should be revised to reflect the minimum desired slope.
- 14. Inlet A8 reflects a 15" invert in of 216.10 and an 18" invert out of 216.10. Given the difference in pipe sizes the invert out should be set at 215.85 or less.
- 15. Inlet A4 reflects a 15" invert in of 211.40 and a 24" invert out of 211.20. Given the difference in pipe sizes the invert out should be set at 210.65 or less.
- 16. Inlet A2 reflects a 18" invert in of 210.10 and a 24" invert out of 210.10. Given the difference in pipe sizes the invert out should be set at 209.60 or less.
- 17. Within the profile "03 to 0 Sta 0+00 to 0+84" (Sheet 23) the label for the existing pipe through the basin berm should be reflected in non-bold italic type to indicate that this pipe is existing.
- 18. The proposed rip-rap apron extending from the proposed outlet structure is large enough to affect a significant area of existing grade surrounding its placement. Additional topography is required upstream and downstream from this feature, as well as across the bank of the existing water course, to provide the reviewing agency necessary information regarding the affect this placement will have on existing slopes, and what might be the potential for future erosion given the location of this placement. Also, as shown, this structure extends outside of the property boundaries. This shall be revised, or the Applicant must secure all necessary easements and/or covenants with the affected property owners.

PRE-DEVELOPMENT AND POST DEVELOPMENT TRIP GENERATION ANALYSIS

19. Trip Generation Evaluation & Comparison report, prepared by McMahon Associates, Inc., dated February 17, 2020, provides an analysis of the peak morning and afternoon vehicular trips to the project site before and after the proposed improvements. According to this report (Table 1) the total weekday morning peak hour vehicular trip rate is expected to be reduced from 203 trips to 3 trips: a 200-trip reduction. The total weekday afternoon peak hour vehicular trip rate is expected to be reduced from 190 trips to 49 trips: a 141-trip reduction. This comment is included for informational purposes only.

GENERAL COMMENTS

- 20. The proposed improvements require the Applicant to obtain the following additional agency permits.
 - a. General NPDES Permit for Construction Activities from the Montgomery County Conservation District

Mr. Mark Penecale, Director of Planning and Zoning Enfield Athletic Facility April 8, 2020 Page 5 of 8

- b. Erosion & Sediment Control ADEQUATE letter from the Montgomery County Conservation District
- c. Chapter 105 General Permit from the Pennsylvania Department of Environmental Protection
- d. Highway Occupancy Permit from the Pennsylvania Department of Transportation for all work performed within State owned rights-of-way.

The Applicant shall provide evidence that these permits have been issued upon receipt of same.

- 21. All plans have been dated January 17, 2019. This date shall be corrected as necessary.
- 22. Within the Demolition Plan (Sheet 4) there is no indication that the existing 18" x 23" elliptical pipe is to be removed, and such an existing pipe is not reflected within the design plans. The fate of this existing pipe shall be clarified.
- 23. The existing asphalt walk in the northern corner of the property, adjacent to the intersection of Paper Mill Road and Church Road, is identified as "TBR" within the Demolition Plan (Sheet 4). However, a portion of this walk is identified as remaining within the design plans. The extent of demolition of the existing path shall be clarified.
- 24. The existing "debris pile" within the eastern corner of the property, adjacent to parcels 52-00-09787-00-7 and 52-00-09784-00-1, should be TBR.
- 25. The existing asphalt walk in the southeastern corner of the property, near proposed Inlet B2.4, is not labeled as TBR and is not reflected in the design plans as if it is to remain. The fate of this walkway should be clarified. It is also noted that the Township desires that this existing asphalt walkway remain, and that it be connected to the proposed site trail system.
- 26. Within the Site/Record Plan (Sheet 5) dimensions shall be provided for the new striping of the old parking lot.
- 27. Within the Site/Record Plan (Sheet 5) dimensions shown once that are typical for other areas shall be indicated as "TYP" for purposes of clarity.
- 28. The following information shall be provided within the Site/Record Plan (Sheet 5).
 - a. Radial dimensions for all curved concrete curb sections.
 - b. Widths of all depressed curb sections.
 - c. Dimensions for concrete pads upon which the moveable bleachers will rest.
 - d. Dimensions for grassed islands and handicap accessible parking within the new parking lot.
- 29. The fencing around the multi-purpose field should reflect a gate for access by emergency and maintenance vehicles. We recommend that this gate be provided at the end of the parking aisle accessible from Church Road. We recommend that a depressed curb be added at the end of the proposed parking aisle to allow for emergency and maintenance access.
- 30. The type of fencing shall be identified on top of the softball field retaining wall.
- 31. We recommend that the applicant provide a concrete sidewalk adjacent to Church Road for the length of the property. If not for the full length, we recommend that a connection from the internal path be made to the new driveway intersection at Church Road, and that pedestrian ramps be added to both sides of this driveway.

- 32. The Grading Plan (Sheet 6) shall provide desired slope information for all sports fields to ensure desired slope construction. Contours alone with no additional spot elevations will not allow for adequate instruction to contractors.
- 33. The grading within the proposed drive aisle off of Church Road, and parking area is shown to be between 3.5% and 4.5%, including the designated handicap parking stalls. While we acknowledge the existing earthen grade is approximately at this slope, newly constructed designated handicap parking stalls and pedestrian ramps must be constructed so that all grades within these areas are at 2.0% or less. The grading shall be revised as needed to provide this ADA requirement.
- 34. The Grading Plan (Sheet 6) shall provided grading information for the proposed retaining walls (top of wall elevation, bottom of wall structure elevations, bottom of wall at-grade elevations) to ensure the wall is constructed properly for the expected height of the wall design.
- 35. Overlapping text within the Drainage and Utility Plan (Sheet 7) shall be revised to provide clarity.
- 36. The Drainage and Utility Plan (Sheet 7) proposes the construction of a new sanitary sewer manhole near the proposed snack stand. This manhole requires a detail and information as to rim elevations and invert elevations. A profile will also be required.
- 37. The Erosion & Sediment Control Plan (Sheet 8) identifies various inlets provided with inlet protection and others without protection. It appears that those without protection are tributary to the proposed sediment basin, which is permissible. However, a note shall be added (presumably to Sheet 14) stating that all tributary storm pipes shall be flushed to remove accumulated sediment prior to conversion of the basin from sediment functions to stormwater management functions.
- 38. The Erosion & Sediment Control Plan (Sheet 8) shall be revised to clearly identify the all proposed compost filter sock locations. The current plans show solid lines for most placements with a few containing the text "SOXX12", but not all. While numbers are provided that assist with identifying the placement, it is difficult to determine the beginning and end of each. 'The plans shall be revised utilizing a line type that provides better clarity.
- 39. The PCSM Details reflect the provision of an emergency spillway. However, the design plans fail to show the location of any such spillway. The location of the emergency spillway shall be identified, and all pertinent information pertaining thereto shall be added to the Post Construction Stormwater Management Plan (Sheet 10).
- 40. The Site Construction Details (Sheet 11) contains a detail for a "Bollard Pipe". The Site/Record Plan (Sheet 5) shall be revised to identify the location of these proposed bollards.
- 41. The Site Construction Details (Sheet 11) contains a detail for "Sidewalk Concrete". The Site/ Record Plan (Sheet 5) indicates that all paths are to be "dust" or asphalt, and that all concrete is found only as pads for structures. The plan shall be revised to identify the location of these proposed concrete sidewalks.
- 42. The Site Construction Details (Sheet 11) contains details for signs and signposts. The Site/ Record Plan (Sheet 5) shall be revised to identify the location of all proposed signs.
- 43. The Site Construction Details (Sheet 11) contains details for "Light Duty" paving, "Heavy Duty" paving, and "Heavy Duty Concrete Pavement". The Site/Record Plan (Sheet 5) shall be revised

Mr. Mark Penecale, Director of Planning and Zoning Enfield Athletic Facility April 8, 2020 Page 7 of 8

to identify the location of these various pavement types.

- 44. The Site Construction Details (Sheet 11) contains details for various types of pavement markings. The Site/Record Plan (Sheet 5) shall be revised to identify the location of these various forms of pavement markings.
- 45. The Site Construction Details (Sheet 12) contains a detail for bike racks. The Site/Record Plan (Sheet 5) shall be revised to identify the location of these proposed bike racks.
- 46. The Site Construction Details (Sheet 12) contains a detail for a "Type-1 Curb Ramp". However, none of the proposed ramps are Type-1 ramps. The detail shall be revised to reflect the correct ramp(s) as designed.
- 47. The compost filter sock location (Sheet 14) shall be revised the indicate the location as "See E&S Plans", rather than "See ENS Plans".
- 48. Note 29 of Sheet 14 references the Chester County Conservation District. This reference shall be corrected.
- 49. The Site Construction Details (Sheet 15) contains details for both endwalls and flared end sections. However, in no location within the plans or narrative are the end sections identified as either endwalls or flared end sections. At a minimum, the profile sheets shall be revised to properly identify the terminal structures as either endwalls or flared end sections. In addition, the sheet shall be revised as necessary to eliminate any unnecessary detail.
- 50. Details are required (presumably on Sheet 16) for the rip-rap low-flow channel.
- 51. On Sheet 16, within the detail for the "Outlet Control Structure O2", the basin floor is called out at elevation 682.00. This reference shall be corrected.
- 52. On sheet 16 there are two different details for an outlet structure trash rack. The plans shall be revised to eliminate the unnecessary detail. It is noted that one of the trash rack details identifies the rack dimensions as 5' x 2'. This is proposed to be placed upon an outlet structure that is currently designed using a Type 4 Inlet box, which has an inside dimension of 4' x 4'. The design engineer shall clarify the trash rack to be used.
- 53. Within the Operations & Maintenance notes on Sheet 17, the Bucks County Conservation District is references multiple times. This reference shall be corrected.
- 54. The Operations & Maintenance notes on Sheet 17 include the following statement. "The School District of Springfield Township (SDST) shall be responsible for all BMPs as identified in this narrative. Applicable BMPs are underground infiltration/detention, bio-retention, level spreader, infiltration and naturalized basins, and vegetated swales." Our review of the stormwater management plan indicates the use of a detention basin, and no other form of BMP. As this note is specific to this project, and does not appear to be a standard note, this note shall be revised as necessary to reflect the stormwater management design, and to eliminate references to BMPs that will not be present.
- 55. All profile sheets shall be revised to identify the inlets with "TG" elevations rather than "RIM" elevations to be consistent with the design plans.
- 56. Overlapping text within Storm Profiles (Sheet 21) shall be revised to provide clarity.

Mr. Mark Penecale, Director of Planning and Zoning Enfield Athletic Facility April 8, 2020 Page 8 of 8

57. It is hereby noted that the proposed work will result in a reduction of the daily sewage flows generated by this property. As such, the Springfield Township School District is encouraged to contact Springfield Township and the applicable sewage authority to determine the affect of EDUs utilized by this property that may be made available for future use in other locations.

We recommend the above comments be addressed to the satisfaction of the Township. To facilitate an efficient re-review of revised plan, the Design Engineer should provide a letter, addressing item by item, their action in response to each of our comments.

Sincerely,

Mark Wi Ersold Kan

Mark W. Eisold, P.E. Township Engineer

MWE/rdj/kam

Cc: M. Taylor – Springfield Township Manager Dr. Nancy Hacker – Superintendent, School District of Springfield Township Chris Jensen, P.E. – T&M Associates

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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

> FOUNDER Joseph W. McMahon, P.E.

February 17, 2020

Mr. Chris Jensen, P.E. T&M Associates, Inc. 1700 Market Street, Suite 3110 Philadelphia, PA 19103

RE: **Trip Generation Evaluation & Comparison** Enfield Elementary School Recreation Fields Springfield Township, Montgomery County, PA McMahon Project No. 820007.11

Dear Chris:

As requested, McMahon Associates, Inc. completed a trip generation evaluation for the proposed redevelopment of the Enfield Elementary School located at 1118 Church Road (S.R. 0073) in Springfield Township, Montgomery County, Pennsylvania. According to the preliminary information provided to our office, the redevelopment of the elementary school property will consist of demolishing the existing elementary school building and in its place, constructing a multi-purpose (soccer) field and two softball fields on the property. The existing two western-most driveways (loop driveway) located at the building entrance on Church Road (S.R. 00073) will be closed as part of the redevelopment. The existing service road driveway on Church Road (S.R. 0073) will be widened slightly and provide access to a new parking lot with approximately 36 parking spaces for the recreational uses on the site. The existing parking lot with access to Paper Mill Road (S.R. 2032) will remain on the site with the same number of parking spaces (i.e. 68 spaces). It is our understanding that the school district will maintain ownership of the property, but will allow Springfield Township the opportunity to utilize the fields on weekend for its organized, recreational sports activities. This evaluation provides a comparison of the trip generation for the proposed recreational fields development and the existing elementary school on the site.

Trip Generation

Traffic volumes generated by the proposed recreational fields were prepared based on trip generation data compiled from numerous studies contained in the Institute of Transportation Engineers (ITE) publication, *Trip Generation*, *10th Edition*. Since ITE does not provide any trip generation data for softball or baseball fields, the vehicular trips for the two softball fields were generated using Land Use Code 488 (Soccer Complex). Traffic volumes generated by the existing elementary school were prepared based

on manual turning movement (MTM) counts performed in favorable weather conditions in January 2020 at the three driveways along Church Road (S.R. 0073) and the driveway along Paper Mill Road (S.R. 2032) between 7:00 AM and 9:00 AM, and between 3:00 PM and 6:00 PM. The captured school peak hour occurred from 8:00 AM to 9:00 AM during the weekday morning at both accesses and between 3:00 PM and 4:00 PM at the Church Road (S.R. 0073) access and between 3:15 PM and 4:15 PM at the Paper Mill Road (S.R. 2032) access during the weekday afternoon. A copy of the MTM counts is provided in **Attachment A.** The trip generation comparison of the school operation versus the proposed recreation use is based on this methodology and shown in **Table 1**.

	We	ekday Morn Peak Hour	ing	Weekday Afternoon Peak Hour		
Land Use	In	Out	Total	In	Out	Total
Elementary School (1)	100	103	203	65	125	190
Proposed Recreational Fields ⁽²⁾	2	1	3	32	17	49
Difference in Trips	-98	-102	-200	-33	-108	-141

 Table 1. Vehicular Trip Generation Comparison

(1) Based on trip generation counts conducted at the existing driveways along Church Road (S.R. 0073) and Paper Mill Road (S.R. 2032).

(2) Based on rates for ITE Land Use Code 488 (Soccer Complex).

For a school this size and with a student population of 598 and 75 employees, Enfield Elementary School is generating approximately 50 percent fewer trips during the weekday morning peak hour and generating approximately 5 percent fewer trips during the weekday afternoon peak hour when compared to the Elementary School trip generation rates contained in ITE. As shown in Table 1 above, the proposed redevelopment of the site for 3 recreational fields is expected to generate substantially less traffic, equating to approximately 200 fewer trips during the weekday morning peak hour and approximately 141 fewer trips during the weekday afternoon peak hour than the existing elementary school, and accessory recreational fields.

Conclusion

As noted above, the proposed redevelopment of the site for 3 recreational fields will generate approximately 200 fewer trips during the weekday morning peak hour and approximately 141 fewer trips during the weekday afternoon peak hour than the existing elementary school. Furthermore, we can conclude that the surrounding intersections will operate at the same or improved conditions during these weekday peak periods with the expected reduction in trips. It should be noted that the closure of the two western-most driveways (loop driveway) located at the building entrance on Church Road (S.R. 00073) will provide an access management improvement resulting in more efficient and safe vehicular operations along Church Road (S.R. 0073) east of its intersection with Paper Mill Road (S.R. 2032). Any existing driveway modifications along Church Road (S.R. 0073) and Paper Mill Road (S.R. 2032) will require a Highway Occupancy Permit (HOP) from PennDOT.

Mr. Chris Jensen, P.E. February 17, 2020 Page 3 of 3

If there are any questions or if additional information is requested, please contact me or Casey A. Moore, P.E.

Sincerely,

Chad Dixson, AICP, PP Senior Project Manager

BMJ/CED

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Attachment A

Manual Turning Movement (MTM) Count Data

McMahon Associates, Jnc. Transportation Engineers and Planners 425 Commerce Drive, Suite 200

Fort Washington, PA 19034

.

Municipality: Springfield Location: Route 73 (Church Road) & Enfield Elementary School Accesses Counter: HP

File Name	: enfield01w
Site Code	: 82000701
Start Date	: 1/28/2020
Page No	: 1

	Groups	s Printed- Passenger	Vehicles - School	Vehicles - Heavy Ve	ehicles	
			Northbound		Eastbound	
	Start Time	Western In	Eastern In	Western Out	Eastern Out	Int. Total
L	07:00	0	1	0	0	1
	07:15	0	1	= 0	0	1
*** BREAK ***						
_,	07:45	D	4	0	0	46
	Total	0	6	0	0	6
	08:00	0	2 5	0	1	3 5
	08:15	0	5	0	0	5
	08:30	11	7	11	0	29
	08:45	<u>14</u> 25	9	14	0	<u> </u>
	Total	25	23	25	1	74
*** BREAK ***						
	15:00	10	6	5 ا	0	21
	15:15	4	14	4	0	22
	15:30	12	1	16	0	29
	15:45	1	1	5	0	<u> </u>
	Total	27	22	30	0	79
	16:00	1	2	1	0	4
*** BREAK ***				. 1	- 1	
	16:45	00	1	0	0	
	Total	1	3	1	0	5
*** BREAK ***				. 1	ام	
	17:45	1	0	1	0	2
	Total	1	0	1	0	2
	Grand Total	54	54	57	1	166
	Apprch %	32.7	32.7	34.5	100	
	Total %	32.5	32.5	34.3	0.6	
	ssenger Vehicles	11	54	12	1	78
<u>% Pa</u>	ssenger Vehicles	20.4	100	21.1	100	47 88
	School Vehicles	43	0	45	0	88
9	6 School Vehicles	79.6	0	78.9	0	<u>53</u> 0
	Heavy Vehicles	0	0	0	0	0
C	% Heavy Vehicles	0	0	υl	νţ	v

McMahon Associates, Inc.

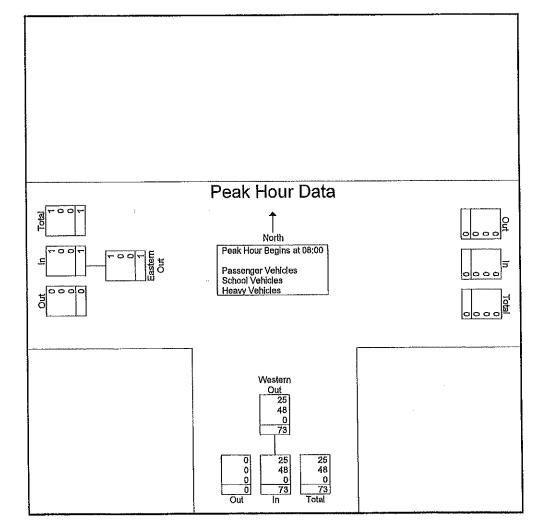
Transportation Engineers and Planners 425 Commerce Drive, Suite 200 *Fort Washington, PA 19034*

Municipality: Springfield Location: Route 73 (Church Road) & Enfield Elementary School Accesses Counter: HP

.

File Name	: enfield01w
Site Code	: 82000701
Start Date	: 1/28/2020
Page No	: 2

		Nort	hbound	Eastbo	und		
Start Time	Western In	Eastern In	Western Out	App. Total	Eastern Out	App. Total	Int. Total
Peak Hour Analysis From 07:0	0 to 11:45 - Peak	(1 of 1					
Peak Hour for Entire Intersection	on Begins at 08:0	0				,	
08:00	0	2	0	2	1	1	3
08:15	. 0	5	0	5	0	0	5
08:30	11	7	11	29	0	0	29
08:45	14	9	14	37	0	0	37
Total Volume	26	23	25	73	1	1	74
% App. Total	34.2	31.5	34.2		100		
PHF	.446	.639	.446	.493	,250	.250	.500
Passenger Vehicles	1	23	1	25	1	1	26
% Passenger Vehicles	4.0	100	4,0	34.2	100	100	35.1
School Vehicles	24	0	24	48	0	0	48
% School Vehicles	96,0	0	96.0	65.8	0	Ö	64.9
Heavy Vehicles	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0



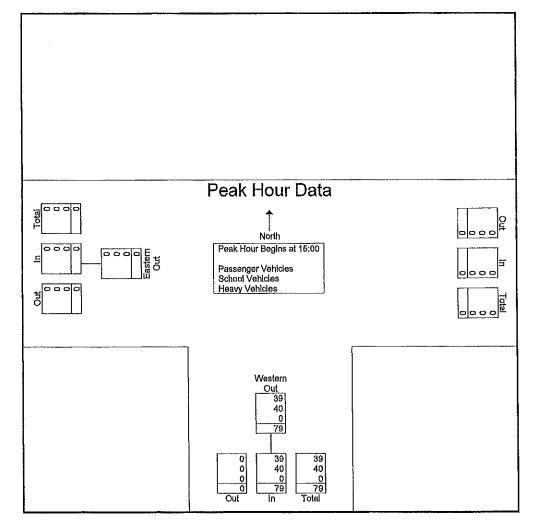
McMahon Associates, Inc.

Transportation Engineers and Planners 425 Commerce Drive, Suite 200 *Fort Washington, PA 19034*

Municipality: Springfield Location: Route 73 (Church Road) & Enfield Elementary School Accesses Counter: HP

File Name	: enfield01w
Site Code	: 82000701
Start Date	: 1/28/2020
Page No	: 3

		Nort	hbound	Eastbo			
Start Time	Western In	Eastern In	Western Out	App, Total	Eastern Out	App. Total	Int. Total
eak Hour Analysis From 12:0	0 to 17:45 - Peal	<1 of 1					
eak Hour for Entire Intersection	on Begins at 15:0	00					
15:00	10	6	5	21	0	0	21
15:15	4	14	4	22	0	0	22
15:30	12	1	16	29	0	0	29
15:45	1	1	5	7	0	0	7
Total Volume	27	22	30	79	0	0	79
% App. Total	34.2	27.8	38		0		
PHF	.563	.393	.469	.681	.000	.000	.681
Passenger Vehicles	8	22	9	39	0	0	39
% Passenger Vehicles	29.6	100	30.0	49.4	0	0	49.4
School Vehicles	19	0	21	40	0	0	40
% School Vehicles	70.4	0	70.0	50.6	0	0	50.6
Heavy Vehicles	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0



McMahon Associates, Jnc. Transportation Engineers and Planners 425 Commerce Drive, Suite 200

Fort Washington, PA 19034

Municipality: Springfield Location: Route 73 (Church Road) & Enfield Elementary School Accesses Counter: HP

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File Name	: enfield01w
Site Code	: 82000701
Start Date	: 1/28/2020
Page No	: 1

		Groups P	rinted- Passenger	/ehicles		
		Northbound			Eastbound	
	Start Time	Western In	Eastern In	Western Out	Eastern Out	Int. Total
	07:00	0	1	0	0	1
	07:15	0	1	0	0	1
*** BREAK ***						
	07:45	0	<u>4</u> 6	0	0	4
	Total	0	6	0	0	6
	08:00	0	2	0	1	3 5 7
	08:15	0	2 5 7	0	0	5
	08:30	0		0	0	
	08:45	1	<u>9</u> 23	1	0	11
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	Total	1	23	1	1	26
*** BREAK ***						
	15:00	6	6	5	0	17
	15:15	0	14	0	0	14
	15:30	1	1	3	0	5 3
	15:45	1	1	1	0	3
	Total	8	22	9	0	39
	16:00	1	2	1	0	4
*** BREAK ***				. 1	- 1	
	16:45	0	1	0	0	1
	Total	1	3	1	0	5
*** BREAK ***				. 1		
	17:45	1	0	1	0	2
	Total	1	0	1	0	2
	Grand Total	11	54	12	1	78
	Apprch %	14.3 14.1	70.1	15.6	100	
	Total %	14.1	69.2	15.4	1.3	

Transportation Engineers and Planners 425 Commerce Drive, Suite 200 *Fort Washington, PA 19034*

Municipality: Springfield Location: Route 73 (Church Road) & Enfield Elementary School Accesses Counter: HP

		Groups	Printed- School Ve	hicles		
	Start Time	Western In	Northbound Eastern In	Western Out	Eastbound Eastern Out	Int. Total
*** BREAK ***						
	08:30 08:45 Total	11 13 24	0 0 0	11 13 24	0 0 0	22 26 48
*** BREAK ***						
	15:00 15:15 15:30 <u>15:45</u> Total	4 4 11 0 19	0 0 0 0	0 4 13 4 21	0 0 0 0	4 8 24 <u>4</u> 40
*** BREAK ***	Grand Total Apprch % Total %	43 48.9 48.9	0 0 0	45 51.1 51.1	0 0 0	88

Transportation Engineers and Planners 425 Commerce Drive, Suite 200 *Fort Washington, PA 19034*

Municipality: Springfield Location: Route 73 (Church Road) & Enfield Elementary School Accesses Counter: HP

(<u></u>		Groups	Printed- Heavy Ve	hicles		
			Northbound		Eastbound	
	Start Time	Western In	Eastern In	Western Out	Eastern Out	Int. Total
*** BREAK ***						
	Grand Total	0	0	0	0	0
	Grand Total Apprch % Total %	0	0	0	0	

Transportation Engineers and Planners 425 Commerce Drive, Suite 200 *Fort Washington, PA 19034*

Municipality: Springfield Township Location: Papermill Road & Enfield Elementary School Access Counter: LB

File Name	: enfield02w
Site Code	: 82000702
Start Date	: 1/28/2020
Page No	: 1

Groups Printed- Passenger Vehicles - School Vehicles - Heavy Vehicles Paper Mill Road Southbound Enfield ES Access Paper Mill Road Northbound Start Time Left Thru Left Right Thru Right 07:00 2 0 6 3 0 3 07:15 3 0 2 2 0 5 07:30 6 0 5 4 0 5 07:45 5 0 3 3 0 8 07:45 5 0 3 3 0 8 08:00 11 0 4 1 0 12 08:00 11 0 4 1 0 12 08:01 11 0 4 1 0 12 08:02 7 0 13 18 0 6 08:30 7 0 13 18 0 5 Total]
$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Int. Total
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	14
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	12
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	20
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	
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15:16 2 0 10 10 31 15:30 0 0 18 12 0 3 15:45 1 0 12 13 0 2 Total 6 0 40 41 0 11	
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	7
16:30 5 0 4 3 0 8	20
Total 8 0 26 18 0 19) /1
17:00 2 0 6 4 0	3 15
17:00 2 0 6 4 0 3 17:15 5 0 5 5 0 4	19
17·30 4 0 9 13 U	3 32
	2 7
Total 12 0 22 24 0 16	5 73
Grand Total 64 0 142 134 0 90	6 436
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	2
$\frac{10137}{2} \frac{1477}{2} \frac{1477}{2} \frac{1477}{2} \frac{1477}{2} \frac{147}{2} \frac{134}{2} \frac{1}{2} $	6 436
Passenger venicies 04 0	0 100
	0 0
	0 0
	0 0
% Heavy Vehicles 0 0 0 0 0 0	0 0

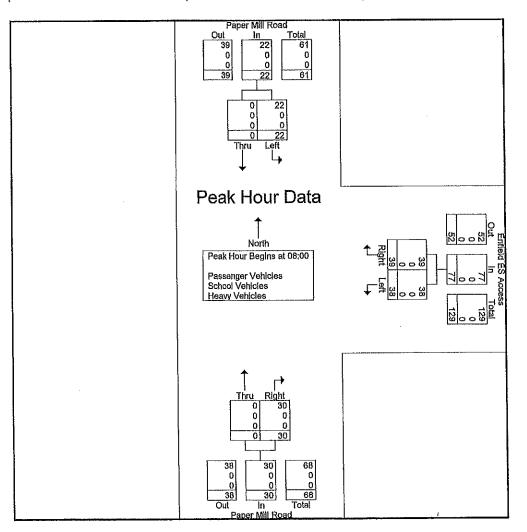
McMahon Associates, Jnc. Transportation Engineers and Planners 425 Commerce Drive, Suite 200

Fort Washington, PA 19034

Municipality: Springfield Township Location: Papermill Road & Enfield Elementary School Access Counter: LB

File Name	: enfield02w
Site Code	: 82000702
Start Date	: 1/28/2020
Page No	: 2

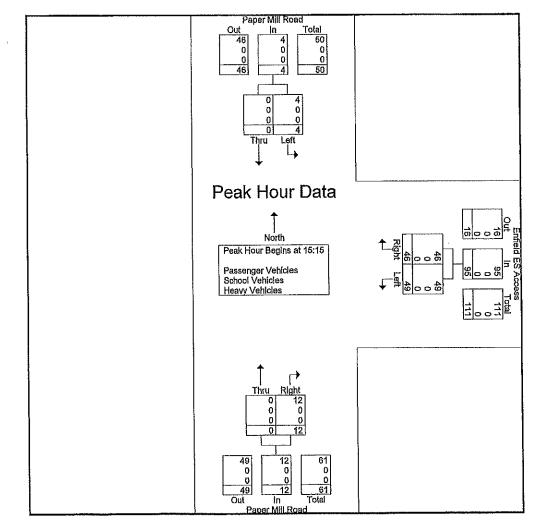
	Paper Mill Road				Enfield ES Access Westbound			Paper Mill Road Northbound		
		Southbound								
Start Time	Left	Thru	App. Total	Left	Right	App, Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 to 11:45 - Peak 1 of 1										
Peak Hour for Entire In	Itersection B	legins at 08:0	00							
08:00	11	0	11	4	1	5	0	12	12	28
08:15	3	0	3	3	0	3	0	7	7	13
08:30	7	0	7	13	18	31	0	6	6	44
08;45	1	0	1	18	20	38	0	5	5	44
Total Volume	22	0	22	38	39	77	0	30	30	129
% App. Total	100	0		49.4	50.6		0	100		
PHF	.500	.000	.500	.528	.488	.507	.000	.625	.625	.733
Passenger Vehicles	22	0	22	38	39	77	0	30	30	129
% Passenger Vehicles	100	0	100	100	100	100	0	100	100	100
School Vehicles	o	0	0	0	0	0	0	0	0	0
% School Vehicles	0	0	0	0	0	0	0	0	0	0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0



Transportation Engineers and Planners 425 Commerce Drive, Suite 200 *Fort Washington, PA 19034*

Municipality: Springfield Township Location: Papermill Road & Enfield Elementary School Access Counter: LB

	Paper Mill Road				Enfield ES Access			Paper Mill Road		
	<u>ن</u>	Southbound	1	V	Vestbound			Vorthbound		
Start Time	Left		pp. Total	Left	Right	App, Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 12:00 to 17:45 - Peak 1 of 1										
Peak Hour for Entire In	tersection Be	egins at 15:15								
15:15	2	0	2	10	15	25	0	5	5	32
15:30	0	0	0	18	12	30	0	3	3	33
15:45	. 1	0	1	12	13	25	0	2	2	28
16:00	1	0	1	9	6	15	0	2	2	18
Total Volume	4	0	4	49	46	95	0	12	12	111
% App. Total	100	0		51.6	48.4		0	100		
PHF	.500	.000	,500	.681	.767	.792	.000	.600	.600	.841
Passenger Vehicles	4	0	4	49	46	95	0	12	12	111
% Passenger Vehicles	100	0	100	100	100	100	0	100	100	100
School Vehicles	0	0	0	0	0	0	0	0	0	0
% School Vehicles	0	0	0	0	0	0	0	0	0	0
Heavy Vehicles	0	0	0	0	0	0	0	0	0	0
% Heavy Vehicles	0	0	0	0	0	0	0	0	0	0



Transportation Engineers and Planners 425 Commerce Drive, Suite 200 *Fort Washington, PA 19034*

Municipality: Springfield Township Location: Papermill Road & Enfield Elementary School Access Counter: LB

			hicles	ted- Passenger V	Groups Prin		
	ad	Paper Mill Ro	ess	Enfield ES Acc	ad	Paper Mill Ro	
		Northbound		Westbound	1 1	Southbound	
Int. Total	Right	Thru	Right	Left	Thru	Left	Start Time
14	3	0	3	6	0	2	07:00
12	5	0	2	2 5	0	3	07:15
20	5	0	4	5	0	6	07:30
<u>19</u> 65	8	0	3	3	0	5	07:45
65	21	0	12	16	0	16	Total
28	12	0	1	4	0	11	08:00
13	7	0	0	3	0	3	08:15
44	6	0	18	13	0	7	08:30
44	5	0	20	18	0	1	08:45
129	30	0	39	38	0	22	Total
							*** BREAK ***
5	1]	0	1	0	0	3	15:00
32	5	0	15	10	0	3 2	15:15
33	3	0	12	18	0	0	15:30
<u>28</u> 98	2	0	13	12	0	1	15:45
98	11	0	41	40	0	6	Total
18	2	0	6	9	0	1	16:00
7	2	0	1	3	0	1	16:15
20	8	0	3	4	0	5	16:30
26	7	0	8	10	0	1	16:45
71	19	0	18	26	0	8	Total
• 15	3	0	4	6	0	2	17:00
19	4	0	5	5	0	2 5	17:15
32	6	0	13	9	0	4	17:30
7	2	0	2	2	0	1	17:45
73	15	0	24	22	0	12	Total
436	96	0	134	142	0	64	Grand Total
	100	0	48.6	51.4	0	100	Apprch %
	22	0	30.7	32.6	o	14.7	Total %

Transportation Engineers and Planners 425 Commerce Drive, Suite 200 *Fort Washington, PA 19034*

Municipality: Springfield Township Location: Papermill Road & Enfield Elementary School Access Counter: LB

			Groups F	rinted- School Vel	hicles			
		Paper Mill Roa Southbound		Enfield ES Acc Westbound		Paper Mill Ro Northboun		
	Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
*** BREAK ***								
	Grand Total Apprch % Total %	0 0	0 0	0 0	0	0 0	0	0

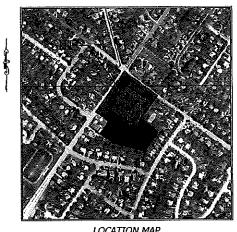
Transportation Engineers and Planners 425 Commerce Drive, Suite 200 *Fort Washington, PA 19034*

Municipality: Springfield Township Location: Papermill Road & Enfield Elementary School Access Counter: LB

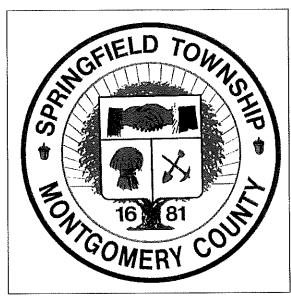
			Groups	Printed- Heavy Vel	hicles			
		Paper Mill Roa Southbound	d	Enfield ES Act Westbound	cess	Paper Mill Re Northboun		
L	Start Time	Left	Thru	Left	Right	Thru	Right	Int. Total
	Grand Total Apprch % Total %	0 0	0	0 0	0	0 0	0	0

PRELIMINARY/FINAL LAND DEVELOPMENT PLANS FOR SCHOOL DISTRICT OF SPRINGFIELD TOWNSHIP ENFIELD ATHLETIC FACILITY

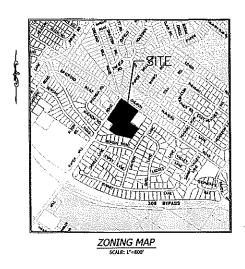
SPRINGFIELD TOWNSHIP, MONTGOMERY COUNTY, PENNSYLVANIA



SCALE: 1"=400"



OWNER/APPLICANT:



บสนา	Y USER LIST
AQUA PENNSYLVANA INC	PECO ENERGY
762 W LARCASTER AVE	400 PASK AVENUE
BITCH MARKE, PA 10010	WARMINISTR, PA 18974
PHCNE: 877-967-2782	PHONE: BOD-454-4100
BUCKS CO, WATER & SEWER AUT	H. PHILADELPHIA WATER
1275 Augstors: Rado	STOL MANNET STREET
Washington, pa 12970	PHILADELPHIA, PA 19107
Phone: 216-343-2538	PHKNE: 215-685-6300
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	SHEET INDEX					
LAND DEVELOPMENT PLAN SHEET NUMBER	RECORD PLAN SHEET NUMBER	DESCRIPTION				
1		COVER SHEET				
2		LEGEND AND NOTES				
3		EXISTING CONDITIONS PLAN				
4		DEMOLITION PLAN				
5		SITE/RECORD PLAN				
δ		GRADING PLAN				
7		DRAINAGE & UTILITY PLAN				
8	1	LANDSCAPE & LIGHTING PLAN				
9	I	EROSION AND SEDIMENTATION CONTROL PLAN				
10		POST CONSTRUCTION STORMWATER MANAGEMENT PLAN				
11		CONSTRUCTION DETAILS				
12		CONSTRUCTION DETAILS				
13		EROSION & SEDMENT CONTROL DETAILS				
14		EROSION & SEDMENT CONTROL DETAILS & NOTES				
15		STORN DETAILS				
16		PCSM DETAILS				
17		PCSM NOTES				
18		WATER & SEWER DETAILS				
19		LANDSCAPE & LIGHTING DETAILS				
20	1	STORM PROFILES				
21	1	STORN PROFILES				
22	1	STORN PROFILES				
23		STORM PROFILES				
24	1	TRUCK TURNING				

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