

Planning Commission
Special Meeting
Radnor Township
Wayne, Delaware County, Pennsylvania

Monday
January 30, 2017
7:00 P.M.

Agenda

1. Pledge of Allegiance
2. PLO Ordinance Amendment
3. Public Comment
4. Old Business
5. New Business
6. Adjournment

Next regular scheduled Planning Commission Monday, February 6, 2017

ORDINANCE NO. 2016-

AN ORDINANCE OF RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA, AMENDING CHAPTER 280 ZONING, ARTICLE XV, PLO PLANNED LABORATORY-OFFICE DISTRICT, SECTIONS 280-62, 280-63 AND 280-64, BY PROVIDING FOR ADDITIONAL USES IN THE PLO PLANNED LABORATORY-OFFICE DISTRICT INCLUDING MIXED USE DEVELOPMENTS; PROVIDING FOR REVISED DIMENSIONAL REQUIREMENTS FOR MIXED USE DEVELOPMENTS INCLUDING FINANCIAL SUBDIVISIONS AND PROVIDING FOR ADDITIONAL ACCESSORY USES

SECTION 1. Chapter 280, Article XV, Sections 280-62, 280-63 and 280-64 are hereby revised to read as follows:

Section 280-62 Purpose; application of regulations

- A. PLO Planned Laboratory-Office Districts are designed primarily to provide for selected modern laboratory, office establishments and other compatible uses which:
 - (1) Provide for attractive large-site, low-lot-coverage development in areas where traditional business development would be inappropriate.
 - (2) Strengthen and diversify the Township's tax base.
 - (3) Are compatible with the character of the surrounding areas.
 - (4) Increase the effectiveness of the zoning district by providing the capability for a mixture of complementary uses.
 - (5) Decrease the negative external effects of parking and traffic on surrounding areas by providing the capability for a mixture of complementary uses.
- B. PLO Districts may be established and developed only in accordance with the special provisions of § 280-132 and subject to the regulations of this article and any other pertinent provisions of this chapter.
- C. In PLO Planned Laboratory-Office Districts, the regulations contained in this chapter shall apply.

Section 280-63 Use regulations

A building or unified group of buildings may be erected or used and a lot may be used or occupied for any of the following purposes:

- A. Forty percent (40%) to one-hundred percent (100%) of the gross floor area may be used or occupied for the following:
 - (1) Scientific or industrial research, testing or experimental laboratory or similar establishment for research or product development, provided that there is no commercial production or storage of any commodity or substance except for storage necessary for scientific research.
 - (2) Office Building, including medical, dental, professional and sales.
- B. Subject to the requirements of § 280-64.G., up to sixty percent (60%) of the gross floor area may be used or occupied for the following:
 - (1) Hotel, including extended stay, which may contain restaurant and banquet space. Hotel pools and indoor health/fitness/recreation centers shall be for the use of hotel guests only.
 - (2) Skilled nursing and/or Senior Assisted Living facility.
 - (3) Senior Independent living facility.
 - (4) Ambulatory care facility - a health care facility or a distinct part of a health care facility which provides preventative, diagnostic, and treatment services to persons who come to the facility to receive services and depart from the facility on the same day, excluding medical and dental office uses. All land development plans proposing an Ambulatory care facility shall be limited to no smaller than 969 square feet per patient position yielding 103 patient positions per 100,000 square feet of gross floor area.
- C. Notwithstanding the minimum lot size of Section 280-64.A., properties with a total site area of less than 10 acres may be used or occupied as follows and may not be combined with any other principal use.
 - (1) Skilled nursing, Senior Independent Living, and/or Senior Assisted Living facility, excluding Drug and Alcohol Rehabilitation facilities.
 - (2) Hotel, including extended stay, which may contain restaurant and banquet space. Hotel pools and indoor health/fitness/recreation centers shall be for the use of hotel guests only.

D. Accessory uses, which may include:

- (1) Storage within a completely enclosed building in conjunction with a permitted use.
- (2) A cafeteria or other service facility located within the building and operated for the exclusive use of the occupants of the building. **An accessory cafeteria may include outdoor dining as permitted by § 280-115.3B.**
- (3) A recreational area for occupants.
- (4) Living quarters for watchmen, caretakers or similar employees.
- (5) A parking structure, when constructed as an accessory structure for the purpose of eliminating allowable surface parking. Parking structures may be located wholly or partly within the principal building, attached to and made a part of the principal building, or constructed as a detached accessory structure. Parking spaces within structures may be reduced to not less than nine feet in width by 19 feet in depth, exclusive of aisles, for each motor vehicle.
- (6) **Restaurant accessory to a permitted principal use not including existing non-conforming uses. Outdoor dining is permitted in accordance with § 280-115.3 B.**

Section 280-64 Area and height regulations

- A. Lot area and width. Every lot on which a building or combination of buildings is hereafter erected or used shall have a lot area of not less than 10 acres, and such lot shall not be less than 300 feet at the building line.
- B. Building area. Not more than 30% of the area of any lot may be occupied by buildings and structures, and not less than 45% of the total lot area, exclusive of those areas within the public right-of-way, shall be devoted to landscaping and planted in accordance with Chapter 255, Subdivision of Land. Landscaped areas shall include nonimpervious areas devoted to stormwater management, required buffer areas, and landscaping for parking facilities.
- C. Building placement. No building or accessory structure shall be located less than one hundred and fifty (150) feet from a street right-of-way line nor less than two hundred (200) feet from a side or rear property line and no surface parking area, driveway, service or interior roadway, with the exception of approved areas for vehicular access, shall be located less than 75 feet from a street right-of-way or other property line.
- D. Building size and spacing.

- (1) Except for a Mixed Use development permitted under § 280-64.G., the greatest dimension in length or depth of a building shall not exceed 160 feet, and no more than three buildings may be attached to each other, provided further that the facade of any building attached to another building be visibly offset from the adjoining building at an angle of approximately 90°.
- (2) The distance at the closest point between any two buildings or group of attached buildings, including accessory structures, shall not be less than 45 feet.
- (3) In no case shall the width of buildings or accessory structures or the aggregate widths of buildings or accessory structures fronting on a street on the same lot exceed 80% of the width of a lot.

E. Height regulations. Except for a Mixed Use development permitted under § 280-64.G., no building or accessory structure shall exceed three stories or 38 feet in height.

F. Riparian buffer setback: 35 feet

G. Mixed Use - A building or unified group of buildings may include the uses specified in § 280-63.A. and B. and no other, subject to the following conditions:

- (1) The minimum gross floor area of the B. uses shall be 30% of the Total Site Area. The maximum medical or dental office use shall be 30% of the gross floor area of the Total Site Area. Ambulatory Care facility uses shall be combined with a minimum 15% of gross floor area of the Total Site Area of one or more of the uses described in § 280-63.B.1, 2 or 3.
- (2) No building shall exceed 85 feet in height. Buildings in excess of three stories or 38 feet in height are subject to the following requirements:

Building Height (Tallest building on site)	Maximum Building Area (%)	Maximum Lot Coverage (%)	Set Back to Street ROW Line (ft)	Set Back to Side and Rear Property Line Adjacent to Residential Zoning District (ft)	Set Back to Side and Rear Property Line Adjacent to Non-Residential Zoning District (ft)	Set Back to Side and Rear Property Line Abutting Railway and Limited Access Highway (ft)
less than or equal to 55'	29	50	100	200	50	25
greater than 55' but less than or equal to 85'	28	45	100	200	50	25

- (3) The gross floor area for all buildings on lots/properties existing as of the date of this ordinance shall not exceed 25,500 square feet per acre of Total Site Area.

- (4) A parking garage or parking structure may have a height of up to 55 feet so long as such parking garage or parking structure does not exceed the height of any building on the site.
- (5) All other accessory structures shall not exceed 45 feet in height as long as the accessory structure does not exceed the height of any other building on the site.
- (6) Financial Subdivision - In connection with development of a Mixed Use within the PLO District, individual lots may be created for purposes of financing and/or conveyancing. Such individual lots shall not be required to comply on an individual basis with the dimensional requirements of this Article, provided that the site and uses comply with such requirements on an overall basis, and further provided that the deeds conveying such separate lots contain covenants requiring the purchasers to, at all times, operate and maintain such lots in good order and repair and in a clean and sanitary condition; that cross-easements for parking areas and all appurtenant ways, pedestrian access, and utilities shall be maintained between such lots; and that such covenants shall be subject to the approval of the Township. The purchaser of any such lot shall execute and file with the Township a written covenant agreeing to the forgoing conditions prior to purchasing.
- (7) In the event that development requires an expansion of the right of way; setbacks shall be measured from the proposed right of way line.
- (8) The greatest dimension in length or depth of a building (as specified in § 280.64.D) may be up to 350 feet provided that: (a) the façade is constructed of brick, stone, architectural concrete, architectural metal work, or articulated glass; (b) is constructed with vertical and horizontal articulation and; (c) is approved by the Township.
- (9) The Total Site Area for a Mixed Use development must be greater than or equal to 10 acres. Total Site Area is the gross area of a lot or lots as described in the deeds or from an actual survey but excluding the area of any public or private street or rights of way as of the date of this ordinance.
- (10) All Mixed Use developments shall submit a Transportation Impact and Mitigation Report to the Township as part of the land development application. The Transportation Impact and Mitigation Report shall address the following components for the proposed development:
 - (a) A description of all improvements proposed along the frontage of the property including curbs, sidewalks, drainage, and utility additions or extensions proposed as a result of the project.
 - (b) A description of all improvements to adjacent intersections or intersections within a 1/2 mile of the proposed project designed to mitigate the impact of the proposed development transportation at full build-out of the site.

- (c) A description of all off-site transportation improvements proposed by the developer or a description of proposed improvements to existing public transportation facilities including existing rail lines adjacent to or within ½ mile to the site.
 - (d) A description of transportation improvements proposed to be constructed by the applicant as recommended in the Township’s Comprehensive Plan.
- (11) No land development application shall be accepted or processed by the Township without the submission of the foregoing Transportation Impact and Mitigation Report.

SECTION 2. Repealer. All ordinances or parts of ordinances which are inconsistent herewith are hereby repealed.

SECTION 3. Severability. If any section, paragraph, subsection, clause or provision of this Ordinance shall be declared invalid or unconstitutional by a court of competent jurisdiction, such decision shall not affect the validity of this Ordinance as a whole or any part thereof other than that portion specifically declared invalid.

SECTION 4. Effective Date. This Ordinance shall become effective in accordance with the Home Rule Charter of Radnor Township.

ENACTED and *ORDAINED* this _____ day of _____, 2016.

RADNOR TOWNSHIP

By: _____
Name: Phil Ahr
Title: President

ATTEST: _____
Robert A. Zienkowski, Secretary



MEMORANDUM

Date: January 25, 2017

To: Steve Norcini, P.E.
Radnor Township Public Works Director

From: Amy Kaminski, P.E., PTOE
Transportation Services Manager

cc: Kevin Kochanski, ASLA, R.L.A., Director of Community Development
John B. Rice, Esq., Grim, Biehn and Thatcher
Roger Phillips, P.E., Senior Project Manager, Gannett Fleming, Inc.
Damon Drummond, P.E., PTOE, Gilmore & Associates, Inc.

Reference: PLO Zoning Amendment
Radnor Township, Delaware County, PA
G&A 15-06038

At the most recent Planning Commission meeting held on January 3, 2017, Planning Commission members requested that Gilmore & Associates, Inc. (G&A) provide a transportation discussion regarding the proposed PLO Zoning Amendment to include additional uses based on the dimensional requirements for: the Mixed-Use option, financial subdivisions and additional accessory uses in the PLO District. As such, I offer the following discussion for Radnor Township consideration:

I. DOCUMENTS REVIEWED

PLO Zoning Amendment; Chapter 280.62, 63, and 64, Ordinance 2016-13, dated November 29, 2016.

II. EXECUTIVE SUMMARY

The below summary table indicates for the maximum peak hour and daily trips generated under the existing PLO zoning ordinance and the proposed PLO zoning amendment the Mixed Use option under consideration generates the lowest number of vehicle trips compared to the maximum full-buildout of the by-right option.

Summary Comparison of Trip Generation for PLO Zoning Amendment

PLO District TRIP GENERATION	AM Peak Hour	PM Peak Hour	24 Hour ADT
Maximum By-Right General Office	6,489	6,617	40,687
Maximum By-Right 70% General & 30% Medical/Dental Office	10,064	8,306	91,437
Maximum Mixed Use (PLO Amendment) 70% Gen Office & 30% Ambulatory Care	4,504	3,850	36,347

III. EVALUATION

Mr. Kevin Kochanski, ASLA, R.L.A., Director of Community Development in Radnor Township prepared an Excel spreadsheet identifying the Maximum Allowable Gross Floor Area under the existing PLO Regulations for a 3 story building (considered the By-Right PLO). In addition, he developed the Proposed Maximum Office Square Footage of Office Use (List “A” in the Zoning Amendment) at 70% of the entire site Gross Square Footage and the balance of the site (30%) would be attributed to the List “B” uses. Trip generation calculations are based on Mr. Kochanski’s Excel Spreadsheet.

PLO By-Right Trip Generation:

Based on the Maximum Gross Floor Area developed by Mr. Kochanski, the trip generation for the maximum number of trips generated by the existing By-Right PLO for the entire PLO district is indicated below in **Table 1 PLO District By-Right General Office Trip Generation**.

Table 1 PLO District By-Right General Office Trip Generation

Intersection	Existing PLO 3 floors Column F	AM Peak Hour	PM Peak Hour	24 HR ADT
100 Matsonford Road	2,261,091	2,523	2,892	15,213
280 King of Prussia Road	268,155	421	379	2,779
201 King of Prussia Road	568,458	768	715	4,918
250 King of Prussia Road	326,961	494	445	3,230
259 Radnor Chester Road	410,623	592	538	3,841
175 King of Prussia Road	274,428	429	386	2,827
145 King of Prussia Road	1,056,940	1,262	1,262	7,879
TOTALS for PLO District		6,489	6,617	40,687

The information provided in **Table 2 PLO By-Right 70% General Office/30% Medical/Dental Office Trip Generation** below provides the maximum trips generated under the existing PLO Zoning for the by-right land uses, assuming the sites in the PLO are developed to the maximum assumed potential identified by Mr. Kochanski.

Table 2 PLO By-Right 70% General Office/30% Medical/Dental Office Trip Generation

Intersection	AM Peak Hour	PM Peak Hour	24 HR ADT
100 Matsonford Road	4,066	3,472	38,231
280 King of Prussia Road	599	481	5,026
201 King of Prussia Road	1,165	932	10,508
250 King of Prussia Road	714	569	6,007
259 Radnor Chester Road	872	696	7,776
175 King of Prussia Road	611	491	5,131
145 King of Prussia Road	2,037	1,665	18,758
TOTALS for PLO District	10,064	8,306	91,437

PLO Zoning Amendment Transportation Impact:

To evaluate the transportation impact the PLO Zoning Amendment will have on the PLO district a commensurable analysis must be developed for each of the land uses based upon a consistent unit of measure. The Institute of Transportation Engineer’s (ITE) *Trip Generation Manual* provides vehicular trip generation rates based on the various independent variables for each particular land use. For example, the *Hotel* land use relies on the number of rooms in the hotel; while the *Assisted Living* land use relies on the number of beds. Therefore, it is necessary to convert the independent variables to a consistent unit of measure.

For purposes of this evaluation, the analysis is based on the trip generation rate associated with the common size of 100,000 SF for the highest trip generation rate under the List “B” category. As indicated in **Table 3 List “B” Trip Generation Comparison**, the highest yielding land use under List “B” is the Ambulatory Care use.

Table 3 List “B” Trip Generation Comparison¹

Land Use	Assumed Size	100,000 SF Yield	AM Peak Hour ²	PM Peak Hour ²	24 Hour ADT ²
Hotel	910 SF /Room	110 Rooms	56	77	981
Assisted Living	910 SF /Bed	110 Beds	20	32	301
Ambulatory Care	969 SF /Patient Position	103 PP	165	109	1,860

¹ All vehicle trips were generated based on ITE *Trip Generation Manual* with the exception of the Ambulatory Care. The Ambulatory Care trips were developed utilizing a Pennoni study from three existing sites located near Radnor Township with approximately 969 SF/PP; the trip rates are as follows: 18.02 ADT Trips/Patient Position; 1.60 AM Peak Hour Trips/PP; & 1.06 PM Peak Hour Trips/PP

² Total vehicular trips generated during the peak hour of the adjacent street or roadway (typically 8AM-9AM and 5PM-6PM weekdays)

The Zoning Amendment allows a mixed use option with 70% of the Gross Floor Area utilized by the List “A” uses and 30% of the Gross Floor Area utilized by the List “B” uses.

Table 4 PLO Mixed Use 70% General Office/30% Ambulatory Care Trip Generation

Intersection	AM Peak Hour	PM Peak Hour	24 HR ADT
Address			
100 Matsonford Road	1,823	1,580	14,768
280 King of Prussia Road	310	272	2,501
201 King of Prussia Road	592	489	4,767
250 King of Prussia Road	328	285	2,638
259 Radnor Chester Road	430	361	3,453
175 King of Prussia Road	282	252	2,275
145 King of Prussia Road	738	610	5,945
TOTALS for PLO District	4,504	3,850	36,347

A summary table is provided below showing the comparison of the By-Right and Mixed Use Zoning Amendment. (See **Table 5 Summary Comparison of Trip Generation for PLO Zoning Amendment**)

Table 5 Summary Comparison of Trip Generation for PLO Zoning Amendment

PLO District TRIP GENERATION	AM Peak Hour	PM Peak Hour	24 Hour ADT
Maximum By-Right General Office	6,489	6,617	40,687
Maximum By-Right 70% General & 30% Medical/Dental Office	10,064	8,306	91,437
Maximum Mixed Use (PLO Amendment) 70% Gen Office & 30% Ambulatory Care	4,504	3,850	36,347

From: Kevin Kochanski
To: [Steve Norcini](#); [Hollye Wagner](#)
Cc: [Phillips, Roger A.](#); [Kaufman, Patricia L.](#); "Amy Kaminski"; [Peter Nelson](#)
Subject: RE: RT - PLO Ordinance Amendment
Date: Tuesday, January 17, 2017 4:52:09 PM
Attachments: [PLO Build-out analysis 9-6-2016.pdf](#)

Attached is a spreadsheet previously provided to the BOC. In terms of square footage, it shows a comparison of what currently exists and what the ordinance permits. In addition, it shows how much office could be developed under the proposed mixed use scenario. The spreadsheet shows all 7 properties. The current draft as introduced by the BOC would only apply to 3 sites – those over 10 acres; although 259 Radnor Chester may be eligible depending on an actual survey.

Kevin W. Kochanski, RLA, CZO
Director of Community Development

Radnor Township
301 Iven Avenue
Wayne, PA 19087

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www.radnor.com

From: Steve Norcini
Sent: Tuesday, January 17, 2017 4:46 PM
To: Hollye Wagner <hwagner@radnor.org>
Cc: Kevin Kochanski <kkochanski@radnor.org>; Roger Phillips <rphillips@gfnet.com>; Kaufman, Patricia <pkaufman@gfnet.com>; 'Amy Kaminski' <akaminski@gilmore-assoc.com>; Peter Nelson <pnelson@grimlaw.com>
Subject: RE: RT - PLO Ordinance Amendment
Importance: High

Hi Hollye,

Kevin has a ss and memo to go with the red line PLO Amendment. We should follow protocol and have GF send all to the PC.

Kevin, please provide your documents to GF. Roger, Kevin's info and the draft should be packaged together, along with anything Amy and Peter have, and sent to the PC. Please do so by tomorrow.

thanks

Stephen F. Norcini, P.E.
Radnor Township

Build-Out Analysis in PLO - Planned Laboratory-Office District

9-6-2016

A	B	C	D	Building Coverage	Gross Square Footage								
				E	F	G	H	I	J	K	L	M	N
				B x .30	E x 3 floors	F x .45	F x .65		I/F	D x 25,500	K/F	K x .70	M/F
Address	Lot Area - Square Footage	Lot Area - Acreage	Proposed Total Site Area (exclusive of Rights-of-Way)*	Maximum Allowable Bldg Coverage under Ex. PLO Regulations (30%)	Maximum Allowable Gross Floor Area under Ex. PLO Regulations (@ 3 story building)	Approximate Achievable Square Footage Based on Reasonable Site Constraints under Ex. PLO Regulations (@45% of Gross)	Approximate Achievable Square Footage Based on Reasonable Site Constraints under Ex. PLO Regulations (@65% of Gross)	Approximate Ex Square Footage	Existing Square Footage as a % of Maximum Allowable (Column F)	Proposed Maximum Allowable Gross Floor Area (Mixed Use with minimum 30% B List Uses - Site)	Proposed Maximum Square Footage as a % of Existing Maximum Allowable (Column F)	Proposed Maximum Gross Square Footage of Office Use (70% A List)	Proposed Maximum Office Square Footage as a % of Existing Maximum Allowable (Column F)
100 Matsonford Road	2,512,323	57.68	52.94	753,697	2,261,091	1,017,491	1,469,709	747,677	33.07%	1,349,970	59.70%	944,979	41.79%
280 King of Prussia Road	297,950	6.84	6.84	89,385	268,155	120,670	174,301	60,000	22.38%	174,420	65.04%	122,094	45.53%
201 King of Prussia Road	631,620	14.50	14.50	189,486	568,458	255,806	369,498	251,434	44.23%	369,750	65.04%	258,825	45.53%
250 King of Prussia Road	363,290	8.34	7.28	108,987	326,961	147,133	212,525	166,532	50.93%	185,640	56.78%	129,948	39.74%
259 Radnor Chester Road	456,247	10.47	9.97	136,874	410,623	184,780	266,905	125,430	30.55%	254,235	61.91%	177,965	43.34%
175 King of Prussia Road	304,920	7.00	6.12	91,476	274,428	123,493	178,378	63,436	23.12%	156,060	56.87%	109,242	39.81%
145 King of Prussia Road	1,174,378	26.96	18.71	352,313	1,056,940	475,623	687,011	475,088	44.95%	477,105	45.14%	333,974	31.60%

* Based on available published data



MEMORANDUM

Date: November 11, 2016

To: Steve Norcini, P.E.
Radnor Township Public Works Director

From: Amy Kaminski, P.E., PTOE
Transportation Services Manager

cc: Bob Zienkowski, Township Manager
Kevin Kochanski, ASLA, R.L.A., Director of Community Development
Damon Drummond, P.E., PTOE, Gilmore & Associates, Inc.

Reference: PLO Trip Generation Assessment- Commissioner Curley
Radnor Township, Delaware County, PA
G&A 15-06038

Gilmore & Associates, Inc. (G&A) was asked to assist Radnor Township Board of Commissioners in evaluating the PLO District Zoning Amendment with regard to various scenarios presented by Commissioner Curley; the assessment is present below in detail and summarized on page 2 to assist in reviewing and comparing each scenario.

Trip Generation Assessment

SCENARIO	LAND USE	SF AREA	AM Peak	PM Peak	24 Hr ADT
1 Allowable/Permitted Use as Medical or Dental Offices					
	Medical/Dental Office (ITE 720)	475,000	1,628	1,148	19,208
2 Allowable/Permitted Use as General Offices					
	General Office (ITE 710)	475,000	666	610	4,290
3 Allowable/Permitted Use as Medical/Dental & General Office					
	Medical/Dental Offices (ITE 720)	140,000	335	394	5,510
	General Office (ITE 710)	335,000	503	454	3,290
	TOTAL:	475,000	838	848	8,800
4 Prospective Mixed Use Proposed for Penn Medicine Site					
	Mixed Medical Ambulatory Care Facility ¹	250,000	413	273	4,649
	Hotel (ITE 310) ²	75,000	34	57	731
	General Office (ITE 710)	150,000	265	246	1,787
	TOTAL:	475,000	712	576	7,167

¹Assumes 969 SF for each Patient Position (PP) and Pennoni Mixed Medical Ambulatory Care trip generation rates 1.6/PP AM, 1.06/PP PM, and 18.02/PP ADT

²Assumes 910 SF for each Hotel room (includes public spaces) for a total of 82 Rooms

Trip Generation Assessment Summary

SUMMARY: Total Area of 475,000 SF	AM Peak	PM Peak	24 Hr ADT
1 Allowable/Permitted Use as Medical or Dental Offices	1,628	1,148	19,208
2 Allowable/Permitted Use as General Offices	666	610	4,290
3 Allowable/Permitted Use as Medical/Dental & General Office	838	848	8,800
4 Prospective Mixed Use Proposed for Penn Medicine Site	712	576	7,167



MEMORANDUM

Date: November 14, 2016

To: Steve Norcini, P.E.
Radnor Township Public Works Director

From: Amy Kaminski, P.E., PTOE
Transportation Services Manager

cc: Bob Zienkowski, Township Manager
Kevin Kochanski, ASLA, R.L.A., Director of Community Development
Damon Drummond, P.E., PTOE, Gilmore & Associates, Inc.

Reference: PLO Trip Generation Assessment- Commissioner Booker
Radnor Township, Delaware County, PA
G&A 15-06038

Gilmore & Associates, Inc. (G&A) was asked to assist Radnor Township Board of Commissioners in evaluating the PLO District Zoning Amendment with regard to various trip generation alternatives and scenarios as presented by Commissioner Booker.

BACKGROUND

Our review memorandum dated October 3, 2016 identified several items that required Penn Medicine to modify and correct information in the first trip generation analysis found to be erroneous. On October 13, 2016, Penn Medicine provided an updated Trip Generation memorandum (2nd submission) reflecting the requested changes and providing support information that G&A requested in the October 3, 2016 review memorandum. Following a G&A review of the revised Penn Medicine trip generation calculations and supporting information, G&A provided a memorandum dated November 4, 2016 indicating the methodology and calculations were validated; however, there was a discrepancy between the square footage of 915 Old Fern Hill Road site presented in the Penn Medicine Trip Generation analysis and the Ballinger Traffic Presentation. We bring this to your attention as an explanation for modifications to the table Commissioner Booker provided for this analysis included outdated information from the 1st Trip Generation analysis; we have corrected the numbers based on the 2nd submission analysis. On another note, Commissioner Booker requested trip generation information for "Ambulatory Care Roadway G&A"; there are no values to provide for this land use because we are in agreement with the information presented by the 2nd Penn Medicine Trip Generation submission.

A summary of the trip generation information presented in the updated Penn Medicine analysis is presented herein:

PENNONI TRIP GENERATION DATA SUMMARY

SITE LOCATION	PP ¹	Site Size ²	ADT ³ Rate	AM ⁴ Rate	PM ⁴ Rate	Avg SF per PP	AM Percent (In/Out)		PM Percent (In/Out)	
250 King of Prussia, Radnor Twp	189	124,300 SF	21.54	1.59	1.10	658 SF	68%	32%	37%	63%
1001 Chesterbrook Blvd, Valley Forge	149	88,300 SF	8.56	0.64	0.48	593 SF	92%	08%	19%	81%
915 Old Fern Hill Rd, Fern Hill	223	154,826 SF	21.38	2.24	1.42	694 SF	79%	21%	27%	73%
145 King of Prussia Penn Med	258	250,000 SF	18.02	1.60	1.06	969 SF	77%	23%	29%	71%

¹PP Patient Position

²SF Ambulatory Care or Medical Mixed Use

³ADT Average Weekday Traffic Volumes

⁴Trip rates all based on Patient Position

Below are the Trip Generation calculations for the various land uses requested by Commissioner Booker from 100,000 -450,000 SF by 50,000 increments with the following assumptions: 910SF/Hotel room; 900 SF/Assisted Living Beds.

100,000 SF Site	AM Peak Hour			PM Peak Hour			Weekday Average Daily Trips		
	In	Out	Total	In	Out	Total	In	Out	Total
General Office (ITE 710) Roadway	137	19	156	25	124	149	552	552	1,103
Ambulatory Care Roadway- Penni	127	38	165	32	78	109	930	930	1,860
Assisted Living (ITE 254) Generator	19	7	26	16	25	41	156	155	311
Medical Office (ITE 720) Roadway	189	50	239	81	210	291	1,807	1,806	3,874
Medical Office (ITE 720) Generator	231	114	350	167	260	427	1,807	1,806	3,874

150,000 SF Site	AM Peak Hour			PM Peak Hour			Weekday Average Daily Trips		
	In	Out	Total	In	Out	Total	In	Out	Total
General Office (ITE 710) Roadway	206	28	234	38	186	224	828	827	1,655
Ambulatory Care Roadway- Penni	191	57	248	48	117	164	1,395	1,395	2,789
Assisted Living (ITE 254) Generator	27	11	38	22	35	57	199	199	398
Medical Office (ITE 720) Roadway	284	75	359	118	302	420	2,960	2,959	5,919
Medical Office (ITE 720) Generator	346	170	516	250	391	641	2,960	2,959	5,919

200,000 SF Site	AM Peak Hour			PM Peak Hour			Weekday Average Daily Trips		
	In	Out	Total	In	Out	Total	In	Out	Total
General Office (ITE 710) Roadway	293	40	333	51	251	302	1,112	1,111	2,223
Ambulatory Care Roadway-Pennoni	254	76	330	63	155	219	1,860	1,860	3,719
Assisted Living (ITE 254) Generator	37	14	51	29	45	74	245	245	490
Medical Office (ITE 720) Roadway	378	100	478	152	392	544	3,982	3,981	7,963
Medical Office (ITE 720) Generator	460	227	687	333	521	854	3,982	3,981	7,963

250,000 SF Site	AM Peak Hour			PM Peak Hour			Weekday Average Daily Trips		
	In	Out	Total	In	Out	Total	In	Out	Total
General Office (ITE 710) Roadway	350	48	398	61	297	358	1,317	1,317	2,634
Ambulatory Care Roadway-Pennoni	318	95	413	79	194	273	2,325	2,325	4,649
Assisted Living (ITE 254) Generator	46	18	64	35	55	90	290	390	580
Medical Office (ITE 720) Roadway	472	126	598	186	479	665	5,004	5,004	10,008
Medical Office (ITE 720) Generator	575	283	858	417	651	1,068	5,004	5,004	10,008

300,000 SF Site	AM Peak Hour			PM Peak Hour			Weekday Average Daily Trips		
	In	Out	Total	In	Out	Total	In	Out	Total
General Office (ITE 710) Roadway	406	55	461	70	344	414	1,513	1,513	3,026
Ambulatory Care Roadway-Pennoni	381	114	495	95	233	328	2,789	2,789	5,579
Assisted Living (ITE 254) Generator	55	22	77	41	65	106	334	334	668
Medical Office (ITE 720) Roadway	566	151	717	219	564	783	6,026	6,026	12,052
Medical Office (ITE 720) Generator	689	340	1,029	500	781	1,281	6,026	6,026	12,052

350,000 SF Site	AM Peak Hour			PM Peak Hour			Weekday Average Daily Trips		
	In	Out	Total	In	Out	Total	In	Out	Total
General Office (ITE 710) Roadway	458	63	521	80	390	470	1,701	1,701	3,402
Ambulatory Care Roadway-Pennoni	445	133	578	111	272	383	3,254	3,254	6,509
Assisted Living (ITE 254) Generator	64	25	89	48	74	122	379	379	758
Medical Office (ITE 720) Roadway	661	176	837	252	648	900	7,049	7,048	14,097
Medical Office (ITE 720) Generator	804	396	1,200	583	912	1,495	7,049	7,048	14,097

400,000 SF Site	AM Peak Hour			PM Peak Hour			Weekday Average Daily Trips		
	In	Out	Total	In	Out	Total	In	Out	Total
General Office (ITE 710) Roadway	510	70	580	89	437	526	1,883	1,882	3,765
Ambulatory Care Roadway-Pennoni	509	152	660	127	311	438	3,719	3,719	7,439
Assisted Living (ITE 254) Generator	73	29	102	54	84	138	424	423	847
Medical Office (ITE 720) Roadway	755	201	956	284	731	1,015	8,071	8,070	16,141
Medical Office (ITE 720) Generator	919	452	1,371	666	1,042	1,708	8,071	8,070	16,141

450,000 SF Site	AM Peak Hour			PM Peak Hour			Weekday Average Daily Trips		
	In	Out	Total	In	Out	Total	In	Out	Total
General Office (ITE 710) Roadway	561	76	637	99	483	582	2,059	2,059	4,118
Ambulatory Care Roadway-Pennoni	572	171	743	143	350	492	4,184	4,184	8,368
Assisted Living (ITE 254) Generator	81	32	115	60	94	154	469	468	937
Medical Office (ITE 720) Roadway	850	226	1,076	316	812	1,128	9,093	9,093	18,186
Medical Office (ITE 720) Generator	1,033	509	1,542	750	1,172	1,922	9,093	9,093	18,186

Also requested by Commissioner Booker were the following tables for a by-right (allowable) uses and proposed uses as follows for 100,000 SF - 450,000 SF in 50,000 SF increments:

EXISTING BY RIGHT USES	100% GENERAL OFFICE			100% Medical-Dental Office			Proposed Uses			100% Hotel			100% Assisted Living			100% Ambulatory		
	Description	AM	PM	24 HR ADT	AM	PM	24 HR ADT	Description	AM	PM	24 HR ADT	AM	PM	24 HR ADT	AM	PM	24 HR ADT	
Description 100,000 SF	AM	PM	24 HR ADT	AM	PM	24 HR ADT	Hotel	73	81	981								
General Office	156	149	1,103				Assisted Living				26	41	311					
Medical/Dental Office				239	291	3,874	Ambulatory Care							165	109	1,860		
Description 150,000 SF	AM	PM	24 HR ADT	AM	PM	24 HR ADT	Hotel	105	118	1472								
General Office	234	224	1,655				Assisted Living				38	57	398					
Medical/Dental Office				359	420	5,919	Ambulatory Care							248	164	2,789		
Description 200,000 SF	AM	PM	24 HR ADT	AM	PM	24 HR ADT	Hotel	137	154	1962								
General Office	333	302	2,223				Assisted Living				51	74	490					
Medical/Dental Office				478	544	7,963	Ambulatory Care							330	219	3,719		
Description 250,000 SF	AM	PM	24 HR ADT	AM	PM	24 HR ADT	Hotel	168	191	2453								
General Office	391	354	2,634				Assisted Living				64	90	580					
Medical/Dental Office				598	665	10,008	Ambulatory Care							413	273	4,649		
Description 300,000 SF	AM	PM	24 HR ADT	AM	PM	24 HR ADT	Hotel	198	226	2944								
General Office	461	414	3,026				Assisted Living				77	106	668					
Medical/Dental Office				717	783	12,052	Ambulatory Care							495	328	5,579		
Description 350,000 SF	AM	PM	24 HR ADT	AM	PM	24 HR ADT	Hotel	228	261	3434								
General Office	521	470	3,402				Assisted Living				89	122	758					
Medical/Dental Office				837	900	14,097	Ambulatory Care							578	383	6,509		
Description 400,000 SF	AM	PM	24 HR ADT	AM	PM	24 HR ADT	Hotel	257	296	3925								
General Office	580	526	3,765				Assisted Living				102	138	847					
Medical/Dental Office				956	1,015	16,141	Ambulatory Care							660	438	7,439		

EXISTING BY RIGHT USES	100% GENERAL OFFICE			100% Medical-Dental Office			Proposed Uses			100% Hotel			100% Assisted Living			100% Ambulatory		
	Description	450,000 SF								AM	PM	24 HR ADT	AM	PM	24 HR ADT	AM	PM	24 HR ADT
Description	AM	PM	24 HR ADT	AM	PM	24 HR ADT	Hotel											
450,000 SF								286	331	4415								
General Office	637	582	4,118				Assisted Living				115	154	937					
Medical/Dental Office				1,076	1,128	18,186	Ambulatory Care								743	492	8,368	

Commissioner Booker further request various combinations of land uses as indicated below:

Trip Generation: 145 King of Prussia Road (18.7 Acres)

Scenario	Land Use		AM Peak	PM Peak	24 Hr Total
I	Allowable/Permitted New Use as Medical or Dental Offices				
	Medical/Dental Office 140,000 s.f.		335	394	5,510
	Medical/Dental Office 200,000 s.f.		478	544	7,963
II	Allowable/Permitted New Use as General Offices				
			AM Peak	PM Peak	24 Hr Total
	General Office 267,000 s.f.		420	377	2,769
III	267,500 s.f. - Allowable/Permitted Use as Medical/Dental and General Office - New Configuration				
			AM Peak	PM Peak	24 Hr Total
	Medical or Dental Offices (no new s.f.)		N/A	N/A	N/A
	New General Office 142,500 s.f.		254	238	1,718
		Total	254	238	1,718
	Medical or Dental Offices 15,000 s.f. (New Portion)		36	54	542
	General Office 127,500 s.f.		232	221	1,579
		Total	268	275	2,121

IV	427,500 s.f. - By Right Re-use of Existing Buildings as 250,000 s.f. Office and 177,500 s.f. Laboratory				
			AM Peak	PM Peak	24 Hr Total
	10,000 s.f. (New Portion) Medical Offices		24	37	194
	General Office 292,000 s.f.		451	405	2,964
		Total	475	442	3,158

V	Prospective Mixed Use as Proposed for Penn Medicine Site (475,000 s.f.)				
			AM Peak	PM Peak	24 Hr Total
	Mixed Medical Ambulatory Care Facility (250,000 s.f.)		413	273	4,649
	Hotel (75,000 s.f.)		56	61	731
	General Office (150,000 s.f.)		265	246	1,787
		Total	734	580	7,167