

**RESOLUTION NO. 2015-
RADNOR TOWNSHIP**

A RESOLUTION OF RADNOR TOWNSHIP, DELAWARE COUNTY, PENNSYLVANIA, APPROVING THE PRELIMINARY PLAN OF BMR-145 KING OF PRUSSIA ROAD, L.P. FOR A PROPERTY LOCATED AT 145 KING OF PRUSSIA ROAD PURSUANT TO PLANS PREPARED BY NAVE NEWELL CONSISTING OF THIRTY (30) SHEETS DATED SEPTEMBER 3, 2014 LAST REVISED MARCH 17, 2015.

WHEREAS, BMR-145 King of Prussia Road, L.P. (“Applicant”) submitted a Preliminary Land Development Plan for a proposed office project located at 145 King of Prussia Road within the Township’s PLO Zoning District (“Property”); and

WHEREAS, the proposed office project consists of 474,600 square feet, a subsurface parking structure, surface parking areas and related improvements all as set forth on plans consisting of thirty (30) sheets prepared by Nave Newell dated September 3, 2014, last revised March 17, 2015 (“Plan”).

WHEREAS, the proposed preliminary plan has been reviewed by both the Radnor Township Planning Commission and the Delaware County Planning Commission.

NOW, THEREFORE, it is hereby **RESOLVED** that the Board of Commissioners of Radnor Township does hereby approve the Preliminary Plan of land development for 145 King of Prussia Road subject to the following conditions:

1. The Applicant shall comply with the April 7, 2015 correspondence of the Township Engineer, Gannett Fleming, a copy of which is attached hereto as *Exhibit “A”*.
2. The Applicant shall comply with the April 7, 2015 correspondence of Gilmore & Associates, Inc., a copy of which is attached hereto as *Exhibit “B”* including the construction of the following traffic improvements:
 - A. King of Prussia Road and Lancaster Avenue (U.S. Route 30)/I-476 NB Off-Ramp-
 - i. Widen southbound King of Prussia Road to provide a second right-turn lane within the existing right-of-way. If additional right-of-way from the Radnor Township School District is necessary and cannot be acquired from the School District, the currently proposed traffic signal located at the southern driveway to the site shall be relocated to the northern driveway to the site. If this relocated signal occurs, the applicant shall update its traffic impact study and shall revise its internal circulation plans to the satisfaction of the Township Engineer and approved by the Board of Commissioners.

ii. Restripe northbound I-476 off-ramp for a shared through/right-turn lane.

B. King of Prussia Road and Raider Road-

i. Construct a new traffic signal.

C. King of Prussia Road and Southern Site Access-

i. Provide one ingress lane and two egress lanes.

ii. Install a traffic signal, which is warranted during the weekday afternoon peak hour. This traffic signal will be interconnected with the existing U.S. Route 30 traffic signal system.

iii. Provide 45-foot curb radii (at minimum), or larger if necessary for the anticipated delivery traffic.

iv. Widen northbound King of Prussia Road to provide a separate right-turn lane, contingent upon the ability to secure right-of-way from PennDOT. If additional right-of-way cannot be acquired from PennDOT, the currently proposed traffic signal located at the southern driveway to the site shall be relocated to the northern driveway to the site. If this relocated signal occurs, the applicant shall update its traffic impact study and shall revise its internal circulation plans to the satisfaction of the Township Engineer and Township Traffic Engineer.

D. King of Prussia Road and SEPTA Access/Northern Site Access-

i. Provide one ingress lane and two egress lanes.

ii. Construction of a northbound King of Prussia Road right turn deceleration lane.

iii. Construction of a southbound King of Prussia Road left turn lane.

iv. Construct a bus shelter on King of Prussia Road on the southeast of the SEPTA Access/Site Access.

v. Construct sidewalks from the site to the R-100 Station at the rear of the property.

vi. Construct a new traffic signal, if the necessary additional right-of-way cannot be acquired from Radnor School District or PennDOT as discussed above. If this relocated signal occurs, the applicant shall update its traffic impact study and shall revise its internal circulation plans to the satisfaction of

the Township Engineer and Township Traffic Engineer.

- E. King of Prussia Road-
 - i. Provide a four-lane cross section along the property's site frontage along King of Prussia Road (between the southern site access and the northern site Access).
 - ii. Construct 5 foot wide sidewalks along the entire property frontage on King of Prussia Road.
 - F. Traffic Adaptive Signal Coordination at the following intersections, subject to PennDOT review and approval:
 - i. Route 30 & I-476/King of Prussia Road.
 - ii. Route 30 & I-476 Southbound Ramps.
 - iii. Route 30 & Radnor-Chester Road.
 - iv. King of Prussia Road & Radnor-Chester Road.
 - v. King of Prussia Road & Matsonford Road.
 - vi. Matsonford Road & South Centennial Drive.
 - vii. Matsonford Road & North Centennial Drive.
 - viii. King of Prussia Road & Raider Road.
 - ix. King of Prussia Road & Southern Driveway (if signalized).
 - x. King of Prussia Road & Northern Driveway (if signalized).
 - xi. Radnor Chester and Raider Road
 - xii. Radnor Chester and TD Bank
 - G. Construct a trail extension from the Southern Driveway through the existing PennDOT Right-of-Way, southeast of the site with connections to the existing Route 30 sidewalks. The location, width and composition of the path materials shall be approved by the Public Works Director.
3. The Applicant shall comply with the March 31, 2015 correspondence of Gilmore & Associates, Inc., a copy of which is attached hereto as ***Exhibit "C"***.

4. The Applicant shall comply with the March 26, 2015 correspondence of RETTEW, a copy of which is attached hereto as *Exhibit "D"* with respect to the following provisions in that letter:
 - A. Compliance with subdivision comment 1 with respect to Section 255-29.A.(6).
 - B. Compliance with subdivision comment 2 with respect to Section 255-29.B.(1).
 - C. Compliance with general planning review comment 1 with respect to the need for additional sidewalks from the entrance and exit for buildings 2a and 2b.
 - D. Compliance with general planning review comment 3 which permits the Board of Commissioners to require pedestrian lighting in accordance with Section 255-37.E. The applicant shall provide for a comprehensive pedestrian lighting plan in accordance with this comment.
5. The Applicant shall pay \$393,533.00 in park and recreation fees based on a total square footage of 474,600 in lieu of dedication of park land. All fees are due and payable upon execution of development and financial security agreements.
6. Applicant shall comply with current IBC and NFPA guidelines for all new construction. The Applicant shall provide sufficient vehicle access to all buildings as recommended by the Township Fire Marshall. Additionally, the Applicant shall research and provide to the Township information and/or training guidelines for firefighting issues which may arise upon construction, and operation of the underground parking structure prior to final plan approval. Applicant shall also provide all tenants with emergency egress procedures for utilization of the underground parking structure to be reviewed and approved by the Township Fire Marshall.
7. The Applicant shall comply with all other Township, County, State, and Federal ordinances, statutes, rules and regulations.
8. The Applicant shall execute development and financial security agreements in a form and manner to be approved by the Township Solicitor. Additionally, all surface parking areas removed and placed underground shall be restricted from further development or disturbance in a manner approved by the Township Solicitor.



MEMORANDUM

Date: April 7, 2015

To: Radnor Township Board of Commissioners

From: Roger Phillips, PE

cc: Robert Zienkowski – Township Manager
Stephen Norcini, P.E. – Director of Public Works
Kevin W. Kochanski, RLA, CZO – Director of Community Development
John Rice, Esq – Grim, Biehn, and Thatcher
Amy Kaminski, PE – Gilmore and Assoc.
Steve Gabriel - Rettew

RE: 145 King of Prussia Road
Biomed Realty Trust, Inc. – Applicant

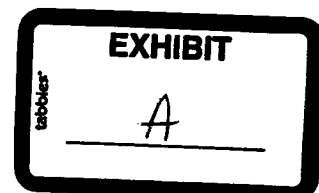
Date Accepted: October 6, 2014
90 Day Review: January 4, 2015 Extended to April 30, 2015

Gannett Fleming, Inc. has completed a review of the 145 King of Prussia Road Preliminary Plan for compliance with the Radnor Township Code. This Preliminary Plan was reviewed for conformance with Zoning, Subdivision and Land Development, Stormwater Management, and other applicable codes of the Township of Radnor.

The applicant is proposing to redevelop the property at 145 King of Prussia Road to construct office buildings at 474,600 gross square footage and three buildings. This project is located in the PLO district of the Township.

The applicant appeared before the Planning Commission on April 6, 2015. The Planning Commission recommended approval of the plans based on the following conditions:

- The applicant must secure the right of way necessary for the traffic construction proposed.
- Stormwater issues particularly infiltration have to completely satisfy staff.
- The underground parking structure meet code and is safe and fire safe.
- Traffic issues are a primary concern of the commission and we hope that the Board of Commissioners address that when they vote to approve or deny and recommend that the applicant remove more surface parking.



Gannett Fleming

The applicant has reduced the number of office buildings from four to three and the gross square footage of office space from 533,247 square feet to 474,600 square feet. Surface parking has been reduced to 335 parking spaces from 446 surface parking spaces on the previous submission.

The applicant has indicated that the following waivers will be requested from the Subdivision and Land Development Code:

- §255-20.B(5)(d)[4]– To permit the use of ITE Trip Generation Rates.
- §255-27.C(1) – To permit a 44 wide cartway along King of Prussia Road.
- §255-27.H – To permit an intersection which is not a 90 degree alignment.
- §255-29.A(6) – To permit painted gore marking in lieu of concrete curb for parking stalls along the concrete ramp due to drainage concerns.
- §255-29.A(12)(b) – To permit a 22 foot drive aisle in areas without parking to maintain a roadside vegetative drainage swale.

Plans Prepared By: Nave Newell
Dated: 09/03/2014, revised 03/17/2015

I Zoning

1. §280-6.C(5) – Refer to legal interpretation memo dated January 23, 2015 prepared by John B. Rice and Peter Nelson with regard to nonconformance with this Section.
2. §280-64.B – 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 to Chapter 255. The zoning data on sheet C3.1 indicates that the maximum building coverage is 14.4% and the minimum landscape area is 47.3%. The building coverage of each building and the landscape areas should be clearly identified in a table on the plans to determine conformance with the Radnor Township Zoning Code. The applicant has revised the zoning chart to include this information.
3. §280-64.D(3) – In no case shall the width of the building or accessory structures or the aggregate width of buildings or accessory structures fronting on a street on the same lot exceed 80% of the width of the lot. The applicant has provided the calculation on the zoning table to indicate that the width provided is 73.4%.
4. §280-70.C – Service, utility, maintenance and storage areas, including solid waste containers, loading and unloading areas and heating, ventilating and air condition equipment, shall be screened from view from public streets and abutting properties. This may be accomplished by means of enclosing walls, stone, brick or wood fences or a buffer planting strip. Visual screening so provided shall be of sufficient density so as not to be seen through and of sufficient height to constitute an effective screen. Detail of the

dumpster/recycling area and the mechanical pit screenings must be provided on the plans. The applicant has indicated that this will be provided during Final Land Development

5. §280-112.B. – Any applicant for a building permit, preliminary subdivision plan approval on land which contains areas with a grade or slope of 14% or more shall be required to have the limits of such areas defined by a registered professional engineer. These areas must be shown on the plans. The applicant has shown the location of these areas on the plans
6. §280-112.C. – Areas of steep slopes containing slopes steeper than 14% shall be outlined as following (1) Areas containing slopes steeper than 14% but less than 20% shall be distinguished from the areas containing slopes of 20% or steeper. (2) Areas containing slopes of 20% and steeper shall be separately identified. The applicant has shown the location of these areas on the plans and has indicated that these slopes were classified as exempt during the 2009 plan approval.
7. §280-132.B. – An itemized breakdown of areas with an accompanying plan must be provided clearly indicating conformance with the maximum building coverage and minimum landscape area requirements as required by the special regulations for planned laboratory office districts. The applicant has revised the zoning chart to include this information.

II Subdivision and Land Development

1. §255-41.H. – Outdoor collection stations shall be provided for garbage and trash removal when indoor collection is not provided. Collection stations shall be screened from view and landscaped. A detail of the dumpster/recycling area screening must be provided. The applicant has indicated that this will be provided with the final land development plan submission.
2. §255-43.1.E(2) – Where, upon agreement with the applicant or developer, it is determined that the dedication of all or any portion of the land area required for park and recreation purposes is not feasible, the applicant or developer shall pay a fee in lieu of dedication of any such land to the Township. The fee for non-residential subdivisions or land developments shall be \$3,307 per 4,000 square feet of building area. The applicant must conform to this section.
3. §255-27.C.(1) – King of Prussia Road is designated as a major collector and has a required Right-of-Way 80 feet, cartway 48 feet. Consideration may be given to requiring additional right of way along the frontage of King of Prussia Road due to the extent of the proposed roadway improvements. The ultimate right of way shown on the plans is 65 feet. Curbing and sidewalk for a major collector road shall be provided as recommended by Penn DOT. The applicant has requested a waiver to allow a 44 foot wide cartway along King of Prussia Road.

Gannett Fleming

4. §255-29.A.(12)(b) – The width of entrance and exit drives shall be a minimum of 25 feet for two-way use. The two way drive located in the rear of the property is 22 feet wide. This must be revised. The applicant has requested a waiver to permit a 22 foot wide drive aisle in areas without parking to maintain a roadside vegetative swale. The applicant must provide specific locations for where the waiver will be requested.
5. §255-29.B.(2) – All parking areas shall have at least one tree 2 ½ inches, minimum caliper for every five parking spaces in single bays and one tree 2 ½ inches minimum in caliper for every ten parking spaces in double bay. The applicant has revised the landscaping plan to accurately reflect the tree requirement.
6. §255-54.B – The central water system should be designed with adequate capacity and appropriately spaced fire hydrants for fire-fighting purposes pursuant to the specification of the National Fire Protection Association. Review and approval by the Township Engineer and the Township Fire Marshall shall be required in order to ensure that adequate fire protection is provided.

III Stormwater Management

1. §245-22.A.1 - Infiltration tests have not been completed or submitted at this time. Percolation tests must be provided to indicate that the stormwater facility will be able to drain within 96 hours. Final design and sizing of the stormwater facility must be based on the results of the percolation tests. The applicable modifications to the drainage report must also be completed reflecting the revised sizing and configurations of the buildings. The applicant has indicated that this will be provided during the final land development submission.

If you have any questions or require any additional information, please contact me.

Very truly yours,

GANNETT FLEMING, INC.



Roger A. Phillips, P.E.
Senior Project Manager



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

MEMORANDUM

Date: April 7, 2015

To: Steve Norcini, P.E.

From: Amy Kaminski, P.E., PTOE.

cc: Roger Phillips, P.E., Gannett Fleming, Inc.
Steve Gabriel, P.P, Rettew
Damon Drummond, P.E., PTOE

Reference: Preliminary Land Development Transportation Impact Study Review
145 King of Prussia Road
Radnor Township, Delaware County
G&A 12-06069

Gilmore & Associates, Inc. has completed a transportation review of the referenced project and offers the following comments for Township consideration:

I. PROJECT OVERVIEW:

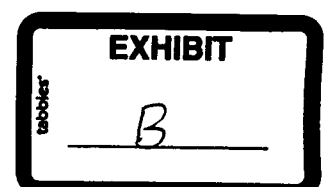
Biomed Realty Trust, Inc. proposes to redevelop the site at 145 King of Prussia Road to provide additional office space. The site currently contains 427,109 square feet of office/research and development space (177,233 sf is currently vacant). The proposed design includes the removal of the existing space to provide 475,000 square feet of new office space. Access to the proposed site will be provided via the existing southern site access and the existing northern shared access with SEPTA.

II. SUBMISSION

1. Response letter regarding the Gilmore & Associates, Inc. February 23, 2015 review memorandum, prepared by McMahon Associates, Inc., dated March 17, 2015.
2. Transportation Impact Study, prepared by McMahon Associates, Inc., dated March, 2015, received March 26, 2015.

III. IDENTIFIED IMPROVEMENTS

1. King of Prussia Road and Lancaster Avenue (U.S. Route 30)/I-476 NB Off-Ramp



- i. Widen southbound King of Prussia Road to provide a second right-turn lane, contingent upon the ability to secure right-of-way from Radnor Township School District.
 - ii. Restripe northbound I-476 off-ramp for a shared through/right-turn lane.
 2. King of Prussia Road and Raider Road
 - i. Construct a new traffic signal.
 3. King of Prussia Road and Southern Site Access
 - i. Provide one ingress lane and two egress lanes.
 - ii. Install a traffic signal, which is warranted during the weekday afternoon peak hour. This traffic signal will be interconnected with the existing U.S. Route 30 traffic signal system.
 - iii. Provide 45-foot curb radii (at minimum), or larger if necessary for the anticipated delivery traffic.
 - iv. Widen northbound King of Prussia Road to provide a separate right-turn lane, contingent upon the ability to secure right-of-way from PennDOT.
 4. King of Prussia Road and SEPTA Access/Site Access
 - i. Provide one ingress lane and two egress lanes.
 - ii. Construction of a northbound King of Prussia Road right turn deceleration lane.
 - iii. Construction of a southbound King of Prussia Road left turn lane.
 - iv. Construct a bus shelter on King of Prussia Road on the southeast of the SEPTA Access/Site Access
 - v. Construct sidewalks from the site to the R-100 Station at the rear of the property.
 5. King of Prussia Road
 - i. Provide a four-lane cross section along the property's site frontage along King of Prussia Road (between the southern site access and the shared SEPTA/Site Access).
 - ii. Construct 5 foot sidewalks along the entire property frontage on King of Prussia Road.
 6. Traffic Adaptive Signal Coordination at the following intersections, subject to PennDOT review and approval:
 - i. Route 30 & I-476/King of Prussia Road
 - ii. Route 30 & I-476 Southbound Ramps
 - iii. Route 30 & Radnor-Chester Road
 - iv. King of Prussia Road & Radnor-Chester Road
 - v. King of Prussia Road & Matsonford Road
 - vi. Matsonford Road & South Centennial Drive
 - vii. Matsonford Road & North Centennial Drive
 - viii. King of Prussia Road & Raider Road
 - ix. King of Prussia Road & Southern Driveway

7. Construct a trail extension from the Southern Driveway through the existing PennDOT Right-of-Way, southeast of the site with connections to the existing Route 30 sidewalks.

IV. WAIVERS REQUESTED

1. §255-20.b(5)(d)[4] – To permit the use of ITE Trip Generation Rates in the Transportation Impact Study.
2. §255-27.C(1) – To permit a 44 foot wide cartway along King of Prussia Road.
3. §255-27.H. – To permit an intersection which is not a 90 degree alignment.
4. §255-229.A(6) – To permit painted gore marking in lieu of a concrete curb for parking stalls along the concrete ramp due to drainage concerns.
5. §255-229.A(12)(b) – To permit a 22 foot drive aisle in areas without parking to maintain a roadside vegetative drainage swale.

V. TRANSPORTATION IMPACT STUDY REVIEW COMMENTS

1. Provide a comparison of the trip generation numbers based on ITE Land Use Code (LUC) 720 Medical Office Use. During a recent meeting with the applicant, this may be a possible tenant and the trip making characteristics for this type of use is more significant than the LUC 710 General Office used in the Transportation Impact Study (TIS); therefore, a worst case scenario must be provided for review.
2. A Signal Warrant Analysis was provided for both proposed signals on King of Prussia Road in in Appendix F. Although the applicant evaluated both the peak hour and four-hour traffic signal warrants for both intersections, only the Peak Hour Warrant (Warrant 3) was met. PennDOT requires Central Office approval if only the Peak Hour Warrant is met for an intersection being considered for signalization. We recommend the applicant perform the following:
 - i. Re-evaluate both intersections to determine if either intersection meets warrant conditions for 8 hour warrant analysis. This may require additional traffic counts that should be obtained prior to school releasing for summer break.
 - ii. Submit a copy of both traffic signal warrant analyses (including the above discussed 8 hour warrant) to PennDOT for review and consideration.
3. Appendix F *Traffic Signal and Auxiliary Turn Lane Warrant Worksheets* identifies the following improvements are warranted:
 - i. King of Prussia Road and Raider Road: A 275 foot northbound left turn lane and taper on King of Prussia Road at Raider Road.
A northbound left turn lane at Raider Road is not offered as an improvement.
 - ii. King of Prussia Road and Southern Access:
 - (1) A 100 foot southbound left turn lane and taper

(2) A 375 foot northbound right turn lane and taper

No southbound left turn lane is proposed, and a 100 foot northbound right turn lane with an 85 foot taper is proposed.

- iii. Investigate the left turn conflict factor worksheets for both proposed traffic signals; adjust the proposed traffic signal timings as needed.
- iv. Route 30 and King of Prussia Road:

(1) Provide an auxiliary turn lane analysis for the southbound right-turn lane on King of Prussia Road at Route 30 to determine the maximum required storage length. The proposed storage length should be the greater of the auxiliary turn lane length analysis or the 95 percentile queue length analyses, based on the Future Build conditions.

A 200 foot southbound right turn lane and 100 foot taper is currently proposed.

- 4. The **Executive Summary** should be updated to include the auxiliary lane information discussed above.
- 5. Appendix L: *Concept Plans & Cost Estimates*: The provided cost estimates do not appear to include the improvements at Raider Road and the proposed trail improvements
- 6. **Lancaster Ave/King of Prussia Rd/I-476 Northbound off Ramp**: The applicant proposed southbound King of Prussia Road dual right turn lanes and restriping the northbound right turn lane from I-476 to a share through/right lane. These improvements will improve the overall delay at the intersection but not all critical lane movement deficiencies will be mitigated. Other capacity improvements are likely infeasible due to the physical constraints at the intersection such as the overpasses. The improvements at this intersection will be subject to the review and approval of PennDOT.



GILMORE & ASSOCIATES, INC.
ENGINEERING & CONSULTING SERVICES

MEMORANDUM

Date: March 31, 2015

To: Steve Norcini, P.E.

From: Amy Kaminski, P.E., PTOE.

cc: Roger Phillips, P.E., Gannett Fleming, Inc.
Steve Gabriel, P.P, Rettew
Damon Drummond, P.E., PTOE

Reference: Preliminary Land Development Transportation Review 2
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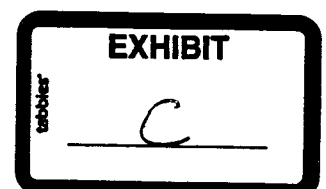
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2. Response letter regarding the Gilmore & Associates, Inc. February 23, 2015 review memorandum, prepared by McMahon Associates, Inc., dated March 17, 2015.
3. Preliminary Land Development Plan for 145 King of Prussia Road, prepared by Nave Newell, Inc., dated September 3, 2014 and last revised March 17, 2015, 35 sheets.



4. Transportation Impact Study, prepared by McMahon Associates, Inc., dated March, 2015, received March 26, 2015.

III. IDENTIFIED IMPROVEMENTS

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5. §255-29.A(12)(b) – To permit a 22 foot drive aisle in areas without parking to maintain a roadside vegetative drainage swale.

V. PLAN REVIEW

1. Several onsite stop bars are located less than 4 feet from proposed pedestrian crosswalks. Verify and adjust as necessary.
2. Adjust the design of the proposed pedestrian crosswalk near the southern access and parking garage access to continue north through the gore striping.
3. Refer to PennDOT Publication 111, TC-8600 for the following standards:
 - i. Include 24" gore striping on roadways and driveways. Although the plan includes call-out a 24" SYL @ 45°, spaced every 4'; the plans do not appear to reflect the correct spacing and width.
 - ii. Revise C7.4 (18 of 30) *Construction Detail* pavement marking arrows.
4. Sheet C3.0 (5 of 30): Provide contiguous right-of-way lines on the west side of King of Prussia Road, near Route 30.
5. Sheet C3.1 (6 of 30):
 - i. Include typical midblock signage for the pedestrian crosswalk at the proposed Trail and the Southern Access. (W11-2 *Pedestrian Sign* and W16-7P *Diagonal Downward Point Arrow Plaque*)
 - ii. Provide pedestrian ramps at the following locations:
 - (i) The pedestrian crosswalk located in the southwest corner of the parking lot near Office Building 1C.
 - (ii) The pedestrian crosswalk from the Atrium between Office Building 3A and 3B to the surface lot. In addition, provide an ADA accessible route from the same pedestrian crosswalk to the

proposed handicapped parking spaces.

- iii. Provide a sidewalk/pedestrian path from the southwest corner of the parking lot to sidewalk proposed along King of Prussia Road.
6. Sheet C3.2 (7 of 30):
 - i. Provide details for all proposed Raised Pedestrian Crosswalk located near Office Building 1A, 2A, 2B and south of Office Building 2A connecting to the parking facilities.
 - ii. Complete the pedestrian route from the SEPTA facility to the entrance of Office Building 2A.
 7. Sheet C3.3 (8 of 30):
 - i. Prepare side by side turning templates for the dual right turns from southbound King of Prussia Road to westbound Route 30. Adjust stop bars and the concrete island as needed to accommodate a WB-67 or based on PennDOT requirements.
 - ii. Provide a WB-67 truck template for the right turn out of the SEPTA/Northern Access to King of Prussia Road.
 - iii. Provide side by side turning templates for the dual left turns from the Southern Access to southbound King of Prussia Road.
 8. Sheet C7.1 (15 of 30):
 - i. Provide a legend on the plan sheet.
 - ii. Provide dimensions on the plan sheet
 9. Sheet C7.4 (18 of 30):
 - i. Revise all references for PennDOT Publication 67 to PennDOT Pub 236; although most of the references were eliminated, several remain along the bottom of sheet C7.4.
 - ii. Revise the OM1-1 Object Marker referenced detail to OM1-3 Object Marker. Refer to PennDOT 236 for an updated detail. Remove the reflectorized domes from the detail.

10. Final Land Development

The following comments are provided as placeholders:

- i. Provide construction details related to ADA curb ramps, including spot elevations, dimensions and slopes.
- ii. Provide a separate pavement marking and signage plan. Include all right-of-way lines, lane lengths, widths, bay taper lengths, lane line colors, lane line widths.
- iii. All improvements and/or modifications located within the PennDOT right-of-way will require a Highway Occupancy Permit Application. The Township requests the opportunity to attend any meetings with PennDOT and to concurrently review any PennDOT submissions.
- iv. Traffic Signal Construction and Permit Plans must be provided to the

Township and PennDOT for review and approval.

- v. All new or modified signal permit plans require a completed TE-160 form and resolution.

VI. TRANSPORTATION IMPACT STUDY REVIEW

Given the complexity of the project and late receipt of the Transportation Impact Study (March 26, 2015), we were unable to provide a comprehensive review in advance of the scheduled meetings. The review will be provided under separate cover.



We answer to you.

3020 Columbia Avenue, Lancaster, PA 17603 • Phone: (717) 394-3721
E-mail: rettew@rettew.com • Web site: rettew.com

Engineers
Planners
Surveyors
Landscape
Architects
Environmental
Consultants

March 26, 2015

Mr. Stephen F. Norcini, PE
Public Works Director
Radnor Township
301 Iven Avenue
Wayne, PA 19087-5297

RE: 145 King of Prussia Road
Preliminary Land Development Plan
Review No. 3
RETTEW Project No. 101442004

Dear Steve:

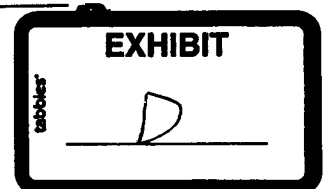
We have completed our review of the above referenced plan as prepared by Nave Newell. Our review was of the following information received electronically on March 18, 2015:

1. Thirty (30) plan sheets entitled "Preliminary Land Development Plan for 145 King of Prussia Road," dated September 3, 2014 and last revised March 17, 2015; and,
2. Plan reviews response letters dated March 17, 2015.

Project Overview:

| | |
|------------------------------|---|
| <u>Applicant:</u> | BMR – 145 King of Prussia Road, L.P. |
| <u>Requested Action/Use:</u> | Preliminary Land Development Plan Review |
| <u>Zoning District:</u> | Planned Laboratory - Office District |
| <u>Location and Size:</u> | Property near the intersection of the Blue Route (I-476) and Lancaster Avenue (SR 0030), and is accessed off of King of Prussia Road. It has a combined gross area of 26.96 acres and a combined net site area at the proposed right-of-way lines of 18.28 acres. |
| <u>Proposed Use:</u> | Office |

This Preliminary Land Development Plan for 145 King of Prussia Road proposes the redevelopment of the site referred to as the BioMed site. The applicant is proposing two access drives, three office building complexes (down from four in the previous plan submittal), surface and underground parking, stormwater management to include green roofs and subsurface detention facilities, and pedestrian sidewalk connections. A total of 474,600 square feet of office space is now proposed, down from the 533,247 square feet of the previous plan submittal.



We have performed a review of the plan for compliance with the comments from our previous review letter of February 20, 2015, as well as a few related land development items. We have the following comments for your consideration:

ZONING

1. Per the January 23, 2015 memorandum from Township Solicitors John Rice and Peter Nelson, the proposed **building lengths** have been found to comply with the zoning ordinance in Section 280-64.D.
2. The proposed **underground parking** is a permitted accessory use. Per the January 23, 2015 memorandum from John Rice and Peter Nelson, the proposed underground parking exceeds the number of spaces allowed under the provision "A parking structure, when constructed as an accessory structure for the purpose of eliminating allowable surface parking" (Section 280-63.C(5)). However, the applicant contends that the above provision does not stipulate a particular amount of surface parking that must be eliminated nor does it restrict the amount of underground parking to be provided.

SUBDIVISION

1. The plan needs to clarify that the curbed areas interrupting rows of surface parking spaces contain landscaping of some sort (Section 255-29.A(6)).
2. The proposed landscaping for the surface parking areas does not appear to meet the standards for numbers of trees planted within single and double rows of parking spaces (Section 255-29.B(1)) and the required minimum landscaped area of 10% of the area of parking lot facilities greater than 2000 square feet (Section 255-29.B(1)). See Sheets C9.1 and C9.2.

COMPREHENSIVE PLAN CONSISTENCY REVIEW

1. The Open Space and Recreation section of the comprehensive plan contains an objective to "create a Township-wide trail marking" or "**wayfinding**" system for trail and pedestrian facilities. This type of signage could be beneficial to encourage increased use of public transit adjacent to and up King of Prussia Road from the site, which is identified as a goal in the Transportation and Circulation Section of the Comprehensive Plan. *The applicant has indicated that wayfinding signage will be provided as an operational item with the ultimate tenants of the property.*
2. The Transportation and Circulation Plan identified the Lancaster Avenue and King of Prussia Road/Radnor-Chester Road intersections as having operating deficiencies and an overall poor level of service for multiple movements during peak hours. The Transportation and Circulation Plan calls for, as a short term improvement, optimizing signal timings to reduce delay and improve progression along Lancaster Avenue. As part of its proposed development plan, the applicant needs to evaluate its proposed King of Prussia Road signalized intersection's impact on the roadway network in that area and address any **signal coordination** that may be required. *The applicant indicated at the March 10 Planning Commission meeting and in its Traffic Engineer's March 17 response letter to Gilmore Engineering's review of the Traffic Impact Study that the*

applicant will install a traffic adaptive signal system including 9 intersections in the vicinity of the site. Its sufficiency is pending Gilmore Engineering's review.

3. The applicant needs to compare the level of **impact on traffic flow** the proposed southern entrance signal will have versus its impact were it located at an entrance/exit opposite Raider Road or the shared with SEPTA driveway. *The applicant has added a proposed second right-turn lane from southbound King of Prussia Road onto westbound Lancaster Avenue and is proposing to include its proposed two traffic signals on King of Prussia Road as part of a traffic adaptive signal system by the applicant covering 9 intersections in the vicinity. Resolution of this item is pending Gilmore Engineering's review of this latest proposal and its impact on traffic flow including the applicant's original Synchro analysis that shows southbound King of Prussia Road traffic at Lancaster Avenue backing up through the proposed signal at the southern entrance to the site.*
4. The Transportation and Circulation Plan also contains a goal to support **ride sharing or carpooling**, as well as other trip reduction strategies to reduce single occupancy, private vehicle commuting by employees of major businesses. *The applicant has indicated that carpooling incentives will be provided as an operational item with the ultimate tenants of the property.*

RADNOR GREENWAYS & OPEN SPACE NETWORK PLAN CONSISTENCY REVIEW

1. The Township's Greenways Plan proposes multiuse trails along the west and north boundaries of the property (along King of Prussia Road and connecting to the train station) and also along Browns Run south of the property. These trail segments are designated as High Priority. *The plan now shows sidewalk running along the frontage of the site on King of Prussia Road and connecting to a sidewalk that leads up to the R-100 train station. The plan also proposes a trail running to the southeast along Brown's Run, under I-476, and connecting the site to Lancaster Avenue.*

GENERAL PLANNING REVIEW

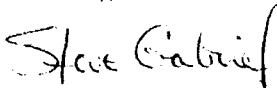
1. **Sidewalk** is needed from the entrance/exit for Buildings 2A and 2B for occupants to safely walk to the R-100 station (and for commuters to walk from the station to Buildings 2A and 2B). *The plan now shows new sidewalk running along the frontage of the site along the SEPTA driveway and parking lot to the R-100 station. However, a short sidewalk section is still needed to connect the sidewalk in front of the entrance to Buildings 2A and 2B to the sidewalk fronting the SEPTA driveway and parking lot. With sidewalk added in that manner, completely continuous sidewalk (plus crosswalks) will exist from the doors to Buildings 2A and 2B to the R-100 station.*
2. To help **mitigate the development's traffic generation**, and to encourage the use of public transit by building occupants, the plan should incorporate elements that would discourage employees from feeling a need to drive away from the site on their breaks or over lunch. Within the PLO zoning district, such elements that are permitted as accessory uses may include a landscaped courtyard, small recreational area, cafeteria complex, and outdoor seating and dining area. *The applicant has indicated that accessory uses similar to those noted will be provided as an operational item with the ultimate tenants of the property. Any present intent to provide such accessory uses on the site should be included on the development plan and be part of the*

Township's review of the development's compliance with zoning. At a minimum, the addition of such accessory uses in the future will be subject to a zoning permit application and review.

3. The plan needs to encourage people to feel safe walking from the office complex to the various public transit options. Such improvements would include appropriate **pedestrian-scaled lighting** along pedestrian routes to transit stops. The Subdivision Ordinance specifies that sidewalks and pedestrian paths should be adequately lighted, if required by the Board of Commissioners (§ 255-37.E). No pedestrian lighting is shown on the plan along the existing walkway at the rear of proposed Office Complex 2 that leads directly to the R-100 station and more lighting will likely be needed along the walkway at the rear of Office Complex 3. *The applicant has indicated that walkway lighting will be provided as an operational item with the ultimate tenants of the property. Because this aspect of the development relates to users' safety as well as to a provision of the subdivision ordinance, such lighting needs to be included on the development plan and be part of the Township's review of the development's ordinance compliance.*

Should you have any questions or require any additional information, please do not hesitate to contact us at any time.

Sincerely,



Stephen R. Gabriel, PP
Township Planning Consultant

copy: Suzan Jones – sjones@radnor.org
Kevin Kochanski, RLA, CZO – kkochanski@radnor.org
Roger Phillips, PE – rphillips@gfnet.com
Amy Kaminski, PE – akaminski@gilmore-assoc.com
John B. Rice, Esq. – jrice@grimlaw.com

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