

February 27, 2015

#### <u>MEMORANDUM</u>

TO:	Amy Lindsey, Senior Planner Area 2 Planning Division
VIA:	Khalid Afzal, Supervisor Area 2 Planning Division
FROM:	Ed Axler, Planner/Coordinator Area 2 Planning Division
SUBJECT:	Mandatory Referral No. 2014048 Bethesda/Chevy Chase Middle School Kensington/Wheaton Policy Area

This memorandum is the Transportation Planning staff's Adequate Public Facilities (APF) review of the subject Mandatory Referral for a new middle school with a core capacity of 1,200 students on former Kensington Junior High School site or now part of the Rock Creek Hills Local Park.

## FINDINGS

Area 2 transportation planning staff reviewed the materials submitted for the subject Mandatory Referral and has the following transportation-related findings for transmission to Montgomery County Public Schools (MCPS):

- 1. Any mandatory referral submission for future school improvements at the subject school must include an updated traffic study if those improvements will increase the school's student core capacity beyond 1,200 students.
- 2. Consider preparing a traffic circulation study to analyze the local operational and safety issues at such intersections as at Saul Road and Kensington Parkway.
- 3. Ensure adequate sight distance and clear visibility of exiting vehicles from the proposed school site that may be hindered by dense vegetation to the west and topography and horizontal of the adjacent street to the east.
- 4. Ensure that the on-site parent drop-off and pick-up loop does not overflow onto the adjacent residential Saul Road by implementing a program to help parent living near each other carpool.

- 5. Provide and show on the plans at least two bike racks (storing four bikes) near the northeastern corner of the proposed tennis courts.
- 6. Provide and show on the plans the internal ADA-compliant marked pedestrian crosswalks and handicap ramps or at-grade sidewalk crossings.
- 7. Provide and show on the plans ADA-compliant marked pedestrian crosswalks perpendicular, not diagonal, across Saul Road and a handicap ramp on the south side of Saul Road.
- 8. For safe off-site pedestrian circulation, provide the missing sidewalks on the south side of Saul Road approximately 100 feet east of Elrod Road and from the driveway from Haverhill Drive to the houses on the south side of Saul Road.
- 9. Provide adequate number of vehicular parking spaces on the site.

## DISCUSSION

## School Location and Vehicular Access

The site is located a former MCPS school that was demolished and replaced by recreational facilities as M-NCPPC's Rock Creek Hills Park. MCPS proposes to construct a new middle school with similar recreation facilities. The site is located in the northeastern quadrant of Kensington Parkway and Saul Road. The proposed vehicular access points are as follows:

1. Parent drop-off/pick-up and service vehicles from Saul Road between Kensington Road and Elrod Road. Ensure that the on-site parent drop-off and pick-up loop does not overflow onto the adjacent residential Saul Road by implementing a program to help parent living near each other carpool as described in Finding No. 4.

Transportation Planning staff supports relocating the eastern curb cut at Saul Road from the proposed location between Kensington Road and Elrod Road to just east of Elrod Road. The relocated access point would have more than the minimum 200-foot sight distance required on secondary residential streets and more direct pedestrian access to the main first-floor western entrance. The relocated curb cut would reduce the significantly distance and grade of the lead-in sidewalk besides other non-transportation benefits.

Except for the local residents living on the east side of Kensington Parkway, motorists access the proposed middle school site from the west through the intersections of Saul Road with Connecticut Avenue and Kensington Parkway. In addition, non-local traffic is discouraged by the existing traffic calming measures installed on the local residential streets within the nearby neighborhood.

2. Bus loop and parking for the recreational facilities from Haverhill Drive just north of the intersection with Saul Road.

Except for local neighborhood trips from locations west of Kensington Parkway, the primary access to the school site would be through the intersections Kensington Parkway and Connecticut Avenue.

In addition as discussed in Finding No. 3, the Bethesda-Chevy Chase Middle School Final Feasibility Study noted that "Sight distance issues are apparent when exiting the site, as dense vegetation makes visibility difficult to the west and topography and horizontal curvature make visibility difficult to the east."

# **On-Site Parking**

The submitted plans include 82 on-site parking spaces on the west side and a bus loop for 16 buses with seven more parking spaces on the north east side. Per Finding No. 9, the 98 parking spaces is less than the minimum of 125 spaces recommended on page 20 of 35 of Appendix B in the "Report of the Selection Advisory Committee for Bethesda-Chevy Chase Middle School #2" dated March 12, 2012.

#### Master-Planned Roadway and Bikeway

- 1. Kensington Parkway is recommended as a primary road, P-4, with a 70-foot wide right-of-way and Class III bikeway in the 1989 *Master Plan for the Communities of Kensington-Wheaton Master Plan* Along Kensington Parkway, a signed share roadway, SR-29, is recommended in the 2005 *Countywide Bikeways Functional Master Plan*.
- 2. Saul Road west of Kensington Parkway is recommended as a primary road, P-3, with a 70-foot wide right-of-way, a signed share roadway, SR-29, is recommended in the 2005 *Countywide Bikeways Functional Master Plan*.
- 3. Connecticut Avenue is recommended as a 6-lane divided major highway, M-7, with a 120-foot wide right-of-way and Class I bikeway in the 1989 *Master Plan for the Communities of Kensington-Wheaton Master Plan* Along Kensington Parkway, a signed share roadway, SR-29, is recommended in the 2005 *Countywide Bikeways Functional Master Plan*

Not listed in the Master Plan, the segment of Saul Road east of Kensington Parkway is not a primary road, but a secondary residential street. Likewise Haverhill Drive and Elrod Road are also secondary residential streets with 60-foot wide rights-of-way.

## Public Transit Service

Ride-On route 33 operates along Kensington Parkway. Metrobus route L8 operates along nearby Connecticut Avenue to the west of the site.

#### Pedestrian and Bicycle Facilities

The school design plans include the following pedestrian and bicycle facilities:

- 1. Lead-in sidewalks from Haverhll Drive into the bus loop and parking area for the recreational fields.
- 2. An improved the lead-in sidewalk along driveway from Saul Road into the parent drop-off/pickup and service vehicles. The improved pedestrian access is much more ADA compliant by relocating the lead-in sidewalk such that the grade difference is significantly reduced.

- 3. ADA-compliant handicap ramps for the sidewalk across the school's Haverhll Drive driveway.
- 4. The internal circulation separates pedestrian and vehicular movements.
- 5. Internal ADA-compliant and marked pedestrian crosswalks and handicap ramps or at-grade sidewalk crossing on the site.
- 6. Handicapped parking spaces in the parking areas with delineated ADA accessible paths to the school's two entrances.
- 7. Bike racks are shown on the plans in front of the main first-floor western entrance and secondary second-floor eastern entrance, but is not shown near the recreational facilities. Refer to Finding No. 5.
- 8. Provide and show on the plans ADA-compliant marked pedestrian crosswalks perpendicular, not diagonal, across Saul Road and a handicap ramp on the south side of Saul Road. Refer to Finding No. 6.
- 9. Sidewalk existing only along the west side of Haverhill Drive. A sidewalk is proposed and shown on the plans on the north side of from Haverhill Drive to approximately 100 feet east of Elrod Road. Additional sidewalk connections are needed to provide safe off-site pedestrian circulation. Refer to Finding No. 7.

The off-site pedestrian circulation improvements above can be funded through the established MCDOT CIP project #506747- Annual Sidewalk Program or project #P509036- Transportation Improvements for Schools.

## Local Area Transportation Review

The numbers of peak-hour trips generated by the new middle school is based trip-generation rates derived from the best available data at four other middle schools in Montgomery County. The number of trips generated by the 1,200-student middle school would be 840 peak-hour trips within the weekday morning peak period (6:30 to 9:30 a.m.) and 396 peak-hour trips within the initially expected afternoon peak hour of the school from 2:15 to 3:15 p.m. The school's afternoon peak hour was changed to end earlier, but is still before the typical weekday evening peak-hour starting at 4:00 p.m.

A traffic study to satisfy the LATR test was prepared because the number of peak-hour trips is 30 or more total trips. The LATR test is a capacity test to compare analyzed levels of intersection congestion against the congestion standard for the Kensington/Wheaton Policy Area. Per Finding No. 2, the local traffic circulation is a different type of study and analyzes the safety and adequacy of the local access that would consider intersections such as at Saul Road and Kensington Parkway for operational and safety issues.

The intersections to be analyzed in the traffic study were determined based on the criterion in the *Local Area Transportation Review and Transportation Policy Area Review Guidelines* and before the Planning Board staff received the Mandatory Referral identifying the Cluster boundary. The Cluster boundary extended from south of Washington Street (i.e., the Town of Kensington's southern border) to below the Capital Beltway, I-495. The *Guidelines* criterion is to analyze at least two intersections with masterplanned roadways radially out from the site's proposed driveways. Thus the intersection analyzed includes the four intersections along Connecticut Avenue between Knowles Avenue and Beach Drive. Although appropriate for the school's staff, the intersections along Connecticut Avenue with Knowles Avenue and Washington Street are outside the Cluster boundary. The Capital Beltway to the south is a major "dividing line" where any additional traffic generated by the proposed school would be insignificant compared to the large traffic volume of entering and exiting Beltway's ramps. Reflecting the Cluster boundary, the traffic study did distribute 85% of the school generated traffic to the south towards the Beltway. Also, south of the Beltway, the intersection of Connecticut Avenue with Jones Mill Road-Kensington Parkway was reviewed for intersection improvements by the Planning Board hearing for Mandatory Referral No. MR2012036 on July 16, 2012, in connection with the BRAC relocation at the Walter Reed National Military Center at Bethesda.

Based on the traffic study results, the capacity/Critical Lane Volume (CLV) values at the studied intersections shown in the table below for the following traffic conditions:

- 1. <u>Existing</u>: Existing traffic conditions.
- 2. <u>Total</u>: The existing condition plus the site-generated trips generated by the new middle school with 1,200 students.

The background traffic condition was not analyzed because there are no approved but un-built nearby or "background" developments.

Studied Intersection		Traffic Condition			
		Existing		Total	
		PM	AM	PM	
Connecticut Avenue & Beach Drive	1,045	689	1,162	746	
Connecticut Avenue & Saul Road	955	674	1,332	954	
Connecticut Avenue & Washington Street	810	561	819	565	
Connecticut Avenue & Knowles Avenue		1,052	1,235	1,056	

The CLV values for the studied intersections are significantly less than the applicable congestion standard of 1,600 for the Kensington/Wheaton Policy Area and, thus no intersection improvements are required to satisfy the LATR test.

# Transportation Policy Area Review

Under the 2012-2016 Subdivision Staging Policy, the public schools are <u>not explicitly</u> exempt from the Transportation Policy Area Review (TPAR) test and must pay the <u>transportation</u> impact tax equaling 25% of the <u>development</u> impact tax. However, the transportation impact tax would be zero because the Montgomery County Office of the County Executive, County Register does not require the <u>development</u> impact tax for public schools.

ΕA

cc: Khalid Afzal

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#### MEMORANDUM

TO:	Amy Lindsey, Senior Planner Area 2 Planning Division
VIA:	Khalid Afzal, Supervisor Area 2 Planning Division
FROM:	Ed Axler, Planner/Coordinator Area 2 Planning Division
SUBJECT:	Dodd McMillian's 2/18/15-Letter regarding Mandatory Referral No. 2014048, Bethesda/Chevy Chase Middle School

## 1. BCC Cluster Boundary versus the traffic study scope

The intersections to be analyzed in the traffic study were determined based on the criterion in the Local Area Transportation Review and Transportation Policy Area Review Guidelines and before the Planning Board staff received the Mandatory Referral identifying the Cluster boundary. The Cluster boundary extended from south of Washington Street (i.e., the Town of Kensington's southern border) to below the Capital Beltway, I-495. The Guidelines criterion is to analyze at least two intersections with master-planned roadways radially out from the site's proposed driveways. Thus the intersection analyzed includes the four intersections along Connecticut Avenue between Knowles Avenue and Beach Drive. Although appropriate for the school's staff, the intersections along Connecticut Avenue with Knowles Avenue and Washington Street are outside the Cluster boundary. The Capital Beltway to the south is a major "dividing line" where any additional traffic generated by the proposed school would be insignificant compared to the large traffic volume of entering and exiting Beltway's ramps. Reflecting the Cluster boundary, the traffic study did distribute 85% of the school generated traffic to the south towards the Beltway. Also, south of the Beltway, the intersection of Connecticut Avenue with Jones Mill Road-Kensington Parkway was reviewed for intersection improvements by the Planning Board hearing for Mandatory Referral No. MR2012036 on July 16, 2012, in connection with the BRAC relocation at the Walter Reed National Military Center at Bethesda.

- <u>Why analyze the Connecticut/Knowles intersection in the traffic study</u> The intersections along Connecticut Avenue with Knowles Avenue (and Washington Street) are outside the Cluster boundary but will be appropriate for the school's staff.
- 3. <u>Connecticut Avenue with Jones Mill Road-Kensington Parkway was excluded in the traffic study</u> The Capital Beltway to the south is a major "dividing line" where any additional traffic generated by the proposed school would be insignificant compared to the large traffic volume of entering and exiting Beltway's ramps. Even though the intersection of Connecticut Avenue with Jones Mill Road-Kensington Parkway south of the Beltway was not analyzed, this intersection was reviewed for

intersection improvements by the Planning Board hearing for Mandatory Referral No. MR2012036 on July 16, 2012, in connection with the BRAC relocation at the Walter Reed National Military Center at Bethesda.

- 4. <u>Traffic distribution & 1.5 mile walk area</u> The traffic study did reflect the Cluster boundary by distributing 85% of the school generated vehicular traffic to the south towards the Beltway. We are making three findings to study the local circulation and improve off-site pedestrian circulation east of the Haverhill Drive and south of Saul Road.
- 5. Why was the Saul Rd/Kensington Pkwy intersection not analyzed in the traffic study The traffic study was required to satisfy the LATR test because the number of peak-hour trips is 30 or more total trips. The LATR test is a capacity test to compare analyzed levels of intersection congestion against the congestion standard for the Kensington/Wheaton Policy Area. A finding was made to prepare a local traffic circulation. A local traffic circulation is a different type of traffic study and analyzes the safety and adequacy of the local access that would consider intersections such as at Saul Road and Kensington Parkway for operational and safety issues.
- 6. <u>The LATR analyzed the wrong closing time of the school day</u> The traffic study initially expected afternoon peak hour of the school to be from 2:15 to 3:15 p.m. The school's afternoon peak hour was changed to end earlier, but is still before the typical weekday evening peak-hour starting at 4:00 p.m.
- 7. <u>The use of trip-generation data from Herbert Hoover & Thomas W Pyle Middle Schools no not accurately projects proposed BCC Middle School trips</u> The numbers of peak-hour trips generated by the new BCC Middle School is based trip-generation rates derived from the best available data at four other middle schools in Montgomery County. There is no other source of trip-generation data other than from the generic nationwide rates in the ITE Trip Generation Manual.

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