



LOUDOUN COUNTY PUBLIC SCHOOLS

Division of Planning & GIS Services

LEGI-2023-0078

Dulles North High School and Elementary School: CMPT-2023-0006

Response to First Referral Comments

November 8, 2023

Department of Planning and Zoning – Community Planning

Comments Dated August 4, 2023

Comment 1: The land use and public facilities policies of the 2019 GP support the co-location of County facilities such as schools to increase operational efficiency and optimize the use of the land. The proposed establishment of a high school and elementary school on the 173-acre property is consistent with the land use, environmental and public facilities policies of the 2019 GP. Community Planning finds the general location, character, and extent of the proposed high school and elementary school is in conformance with the Comprehensive Plan and supports approval of the CMPT.

Response: Acknowledged.

Department of Transportation and Capital Infrastructure

Comments Dated July 27, 2023

Comment 1: DTCI requests the Applicant clarify the statement on Page 68 of the TIS regarding failing LOS at Intersection #10 (Evergreen Mills Road and Site Entrance 3). Per Tables 10 and 11 Intersection #10 operates at LOS D or better for all approaches. However, the third bullet related to Evergreen Mills Road and Site Entrance 3 mentioned that the eastbound approach operates at LOS F during the AM and PM High School peak hour along with the PM commuter peak hour recommending a signal.

Response: Table 10 and Table 11 have been revised to show unsignalized Synchro results for the unmitigated scenario. Without mitigation, Intersection #10 (Steeplechase Loop Drive and Evergreen Mills Road) indicates a failing level of service when the intersection is evaluated as Steeplechase Loop Drive connecting to a two-lane Evergreen Mills Road at a unsignalized intersection. LCPS acknowledges that the traffic study indicates significant improvements to Evergreen Mills Road will likely be required and is prepared to address the changes as required during the STPL phase of the project, pending funding availability.

Comment 2: DTCI requests the Applicant clarify what mitigation measures are proposed with this Application specifically relating to the traffic signal at Intersection #10.

Response: LCPS recognizes that a traffic study is not required to be submitted with the CMPT application. The study was included in an effort to be proactive and provide awareness of the potential impacts of the additional schools on the transportation infrastructure. LCPS acknowledges that the traffic study indicates significant improvements to Evergreen Mills Road will likely be required and is prepared to address the changes as required during the STPL phase of the project, pending funding availability.

Comment 3: DTCI requests the Applicant clarify and provide the necessary right-of-way and easements for the future Evergreen Mills Road widening consistent with the 2019 CTP.

Response: The ROW line for Evergreen Mills Road adjacent to the property has been added and is consistent with STPL-2021-0033 (Watson Mountain Middle School) and the 2019 CTP. See sheets 4 and 6.

Comment 4: As provided in *Attachment 2*, DTCI notes per the CTP Interpretation Letter for Red Hill Road, dated March 31, 2022, Red Hill Road from Evergreen Mills Road to approximately 0.19 mile east of Evergreen Mills Road, along the frontage of the subject property, was reclassified from a rural minor collector roadway to an urban minor collector roadway.

Response: Acknowledged.

Comment 5: Approved CPAP 2021-0018 (MS-14 Road Improvements) provides a southbound right- turn lane from Evergreen Mills Road onto Red Hill Road and improves the eastbound approach of Red Hill Road to provide a shared left-turn/through lane and a dedicated right-turn lane at the intersection with Evergreen Mills Road.

Response: Acknowledged.

Comment 6: DTCI notes that per the CMPT Site Plan, the Application will provide pedestrian facilities along the CTP roadways adjacent to the site consistent with the 2019 CTP (Chapter 2, Countywide Motor Vehicle Plan Policies, Policy 2-2.1, Purpose).

Response: Acknowledged.

Comment 7: Approved CPAP-2021-0018 provides a 10-foot-wide shared use path along the south side of Red Hill Road along the subject property frontage, a five-foot-wide sidewalk along one side of Steeplechase Loop Drive, and a five-foot-wide sidewalk along one side of Giving Best Court.

Response: Acknowledged. The Commission Permit Plan has been revised with the second submission to reflect that Giving Best Court has been renamed Hidden Fox Court.

Comment 8: DTCl encourages the Applicant to provide interparcel bicycle and pedestrian access to adjacent neighborhoods to the north, west, and south consistent with the 2019 CTP (Chapter 2, Countywide Bicycle and Pedestrian Policies, Policy 2-2.9, Community Access).

Response: Acknowledged. Future interparcel bicycle and pedestrian access improvements will be taken into consideration as part of a future land development application.

Loudoun Water

Comments Dated August 4, 2023

Comment 1: Public water and sanitary sewer service would be contingent upon the developer's compliance with the Authority's Statement of Policy, Rates, Rules and Regulations and Design Standards.

Response: Acknowledged.

Comment 2: Loudoun Water requires sites to have multiple water connections to provide health and safety by ensuring adequate looping, pressures for fire flow, reliability of service, and water quality.

Response: Acknowledged.

Comment 3: Improvements to the existing water and sewer system resulting from the requested legislative change(s) by this application will be the sole responsibility of the applicant at no cost to Loudoun Water.

Response: Acknowledged.

Comment 4: Offsite easements required to extend public water and/or sanitary sewer to this site are the applicant's responsibility and will be dedicated to the Authority at no cost to the County or to the Authority.

Response: Acknowledged.

Comment 5: The development applicant will be responsible for hydraulic water models, sanitary sewer capacity studies, and upsizing of pipes to accommodate the site and the systems' needs, which could include downstream and/or offsite upgrades at the time of Loudoun Water construction plan submission.

Response: Acknowledged.

Comment 6: Easements to adjacent properties may be requested to be dedicated.

Response: Acknowledged.

Comment 7: Loudoun Water easements must remain unencumbered (free of landscaping and fencing) and dry utilities must cross under the water pipes.

Response: Acknowledged.

Metropolitan Washington Airports Authority

Comments Dated August 7, 2023

Comment 1: The Airport Authority confirms that this property is located partially within the recently adopted 60 DNL – 1 Mile Buffer contour and partially outside it.

Response: Acknowledged.

Comment 2: Though this location is in the 60 DNL – 1 Mile Buffer contour, it is also near a departure flight path from Runway 30 that has been in use for over 30 years according to the Federal Aviation Administration. It is important to note that this location is exposed to numerous daily aircraft departures from the very busy Runway 30 with very large aircraft flying overhead at low altitudes of between 1,800 and 2,500 feet. There is also an arrival flight path that is overhead at 5,000 feet in altitude.

Response: Acknowledged.

Comment 3: If approved, this location will experience frequent overflights and associated noise from departing and arriving aircraft (similar to noise levels in other areas of Loudoun County experience where overflights occur) that is expected to increase over time. All outdoor amenities such as play areas and sports fields will be exposed to aircraft noise exposure which cannot be mitigated.

Response: Acknowledged.

Comment 4: The Airport Authority understands that the applicant is requesting a maximum building height of 35 feet Above Ground Level (AGL) for the High School Building. We do not object to this proposed building height in addition we recommend that none of the proposed infrastructure shines light upward into the night sky.

Response: Acknowledged.

Department of Building and Development – Natural Resources Team (NRT) and Floodplain Management Team (FMT)

Comments Dated August 9, 2023

Floodplain Management

Comment 1: The proposed high school subject area encroaches into the minor floodplain. Consistent with discussions associated with the middle school project, please note that a floodplain study will be required at the time of site plan to accurately identify the limits of the floodplain and verify compliance with the Floodplain Overlay District (FOD). Staff notes that FPST-2022-0011, approved on March 16, 2023, updated the floodplain limits downstream of the subject area. (R93ZO 4-1508(A) and FSM 5.411)

Response: Acknowledged. A floodplain study will be provided at the time of site plan if there is encroachment into the minor floodplain.

Comment 2: Please note that any encroachment into the minor floodplain must be consistent with the uses listed in R93ZO Section 4-1505(B) and requires the appropriate application (e.g., Floodplain Alteration or Declaration of No Impact to Floodplain narrative) to address the associated floodplain impacts. The floodplain application would need to be approved prior to the approval of the site plan application. (FSM 5.440)

Response: Acknowledged. If needed as part of this project, a Floodplain Alteration or Declaration of No Impact to Floodplain narrative will be included with the site plan application.

County Urban Forester

Comment 3: Recommendation – Staff recommends that the applicant provide a Tree Survey or Tree Conservation Narrative to verify that the proposed vegetation in the 20' Tree Preservation Area will be suitable to satisfy the buffer requirements of the Zoning Ordinance.

Response: The Tree Stand Evaluation Map (Sheet 98) of the approved Watson Mountain Middle School site plan (STPL-2021-0033) has been provided as part of the second submission materials. The proposed tree preservation area is within an existing forested area of the property. It consists of forest stand type "D", as described in the "Tree Stand Evaluation Map" prepared by Wetlands Studies and Solutions Inc, dated April 24, 2020. If an additional narrative is required, it will be provided at the time of site plan.

Comment 4: Recommendation – Staff recommends the applicant explore opportunities to incorporate additional Tree Conservation Area at the Southeast area of the parcel where trees are proposed to be retained.

Response: Acknowledged. LCPS will evaluate this recommendation for additional Tree Conservation Area as part of the site plan. LCPS plans to retain existing mature vegetation where possible on the property.

Natural Resources

Comment 5: Note 9 on the Cover Sheet references wetlands permit WP4-21-1275 which covered impacts associated with the middle school and related infrastructure. Staff notes that this application proposes additional impacts to wetlands not previously covered under the referenced permit. Note that a permit revision or new permit will be needed for the proposed impacts. Staff recommends pursuing the wetland permit early to avoid any potential delays with construction.

- a) As a general note, Staff recommends that avoiding impact to jurisdictional and state waters and wetlands to the greatest extent possible. (2019 GP NHR Strategy 6.2)
- b) Be aware that a valid wetland permit and associated documentation will be required with the grading permit application. (FSM 8.111.A.2)
- c) If a wetlands permit is obtained prior to completion of the CMPT process, ensure that Note 9 is updated to reflect the most up to date permit number(s), issuance date(s), and expiration date(s). (FSM 8.107.A.26.b)

Response: Acknowledged. Note 9 has been revised.

Comment 6: Staff appreciates that the minor floodplain, adjacent riparian forest, and the majority of the wetlands on site are being avoided. Consistent with 2019 GP River and Stream Corridor Resources (RSCR) Strategy Staff recommends providing the 50' RSCR Management Buffer off of the minor floodplain limits and avoiding encroachments to provide additional protection to the minor floodplain and adjacent wetlands.

Response: Acknowledged. The plan has been revised to include the RSCR management buffer line adjacent to River and Stream Corridors existing onsite.

Comment 7: Staff notes that tree clearing will be necessary for the project. The property contains potential suitable habitat for the federally endangered Northern Long-Eared Bat (NLEB). Be aware that coordination with the USFWS will be required for the project. Staff recommends beginning coordination as soon as possible to avoid delays with permitting.

a) Staff recommends that the applicant conduct an acoustical bat survey as part of the project to identify or rule out potential impacts to the NLEB and other bat species. Be aware that this may be required as part of the wetland permitting process.

Response: If required as part of any wetland permitting processes, LCPS would adhere to tree clearing limitations or complete a survey as required.

Comment 8: Staff supports the conservation of existing trees and vegetation to meet canopy and buffer requirements. To assist with the review and land development application process, Staff recommends that the applicant conduct and provide a Tree Survey and associated narrative with the CMPT plat to ensure that the proposed buffers shown on Sheet 7 meet the standards of desirability for preservation to meet buffering and screening requirements. (FSM 7.300.B)

a) Staff recommends that existing vegetation and forest be conserved on site to the maximum extent possible and recommends that the applicant depict Tree Conservation Areas (TCAs) on the CMPT plat.

Response: The Tree Stand Evaluation Map (Sheet 98) of the approved Watson Mountain Middle School site plan (STPL-2021-0033) has been provided as part of the second submission materials. The proposed tree preservation area is within an existing forested area of the property. It consists of forest stand type "D", as described in the "Tree Stand Evaluation Map" prepared by Wetlands Studies and Solutions Inc, dated April 24, 2020. If an additional narrative is required, it will be provided at the time of site plan. If additional plantings are required, that will be addressed as part of the site plan review process. LCPS plans to retain existing mature vegetation where possible on the property.

Parks, Recreation and Community Services

Comments Dated August 4, 2023

Comment 1: The Department of Parks, Recreation and Community Services has enjoyed a long- standing collaboration with Loudoun County Public Schools that allows the use of certain school facilities for PRCS programs. We appreciate that cooperative agreement and hope it continues since it is clearly consistent with the Revised General Plan policy that states school sites should be “community assets and the focal point for active recreation and after-school programs”.

Response: Acknowledged.

Comment 2: What are the potential traffic impact assessments and measures considered for managing the proximity of Independence High School, Brambleton Middle School, Madison’s Trust Elementary, and Hal and Berine Hanson Regional Park, given concerns of traffic generated by the existing and proposed schools and park activities?

Response: The potential traffic impacts have been identified and included in the Traffic Impact Study, dated November 3, 2023.

Virginia Department of Transportation

Comments Dated August 8, 2023

Comment 1: VDOT (Land Use) has “No Objection” to the Commission Permit Plat. See Traffic Engineering related comments below.

Response: Acknowledged.

Comment 2: The Site Plan/Plat is not very legible. Check quality of Site Plan/Plat prior to any future submittals.

Response: An updated plat has been submitted.

Comment 3: Additional comments will be made at the Site Plan stage in respect to Access Management Standards and Requirements for Entrances.

Response: Acknowledged.

Comment 4: For the turning movement counts of figures of Synchro analysis, please note all turning movement counts figures that result in these figures, including Appendix. Also verify all figure numbers in Appendix and resulting figure numbers in this TIA.

Response: All turning movement count figures have been verified. As provided in the Existing Traffic Volumes section, the methodology used for the Ryan Road intersections is thoroughly described and the supplemental 2021 counts sheets were provided in the Appendix. Please note that peak hour traffic counts shown in the traffic count sheets are intersection peaks. However, system peak volumes have been calculated and used in the TIA. As shown in Page 11 of the TIA, consistent with the approved scoping document with County staff, five (5) peak hours were analyzed: AM High School Peak Hour (8:30 AM – 9:30 AM), PM High School Peak Hour (4:00 PM – 5:00 PM), PM Commuter Peak Hour (4:15 PM – 5:15 PM), AM Elementary School Peak Hour (6:45 AM – 7:45 AM), and PM Elementary School Peak Hour (2:00 PM – 3:00 PM).

Comment 5: Is NB Lane configuration of the intersection 3 (Creighton Rd & Evergreen Mills Rd) dual right-turning lane as screenshot below? Please clarify.

Response: The NB Lane configuration is (Left lane, Thru lane, Right lane). The aerial in this comment reflects the interim condition when this approach was restriped and barriers separating the left three lanes and the right two lanes. The right two lanes, one thru lane and one right turn lane were barricaded and not open to the public. With the barriers, the lane configuration was (Left lane, Thru lane, Right lane), which was used in the TIA. In addition, as shown on the Loudoun County WebLogis website March 2023 Map, the NB has been restriped. And the lane configuration is still (Left lane, Thru lane, Right lane). Hence, the correct lane configuration was used.



Comment 6: At intersection of 7, intersection crash rate is 3.04, which is way more than 1.0. there are only two PDOs for this intersection and seem to be very high. Please verify with ADT.

Response: The ADT used for the crash rates have been added to Table 1. The crash rate for Intersection 7 has been verified. There were two (2) crashes reported with 600 vpd. Hence, this resulted in a high crash rate.

Comment 7: Are background development trip generations approved by the County?

Response: All background developments were discussed at the scoping meeting and approved by County staff. It is noted that the County has reviewed the first submission of this TIA, and has no comment on the background development and the trip generation methodologies.

Comment 8: Inherent growth traffic volume in Figure 5 shows some differences. For example, SB at intersection shows 28/26/26. However, they should be 22/22/22 by 1% growth from 2022 to 2028. Please verify all movement growth rates in Figure 5.

Response: All growth was verified and no errors were found. An inherent growth of 1% per year was applied to Evergreen Mills Road, Ryan Road, Hartland Drive, and Creighton Road to account for the regional growth in traffic volumes. The through traffic in the network was increased where needed to provide balance. This is the reason why the growth rate is slightly higher (more conservative) than 1% for some movements. It is noted that the County has reviewed the 1st submission of this TIA, and they have no comments on the inherent growth methodologies and future volume projections.

Comment 9: EB approach on Red Hill Rd to Evergreen Mills Rd is planned to have an exclusive right turn lane (Watson Mountain Middle School). However, an exclusive left turn lane is also provided in Synchro model for future without development 2028. Please verify all improvement.

Response: Please refer to Page 31 of the TIS which explains this planned background improvement. "Ryan Road is planned to be widened to a four-lane road from Evergreen Mills Road to Northstar Boulevard. An exclusive left turn lane on eastbound of Red Hill Road will be provided as part of the Ryan Road widening project." It is noted that the County has reviewed the first submission of this TIA, and has no comment on the planned background improvements.

Comment 10: SB right turn lane on Evergreen Mills Rd is planned to expand (Watson Mountain Middle School). Please address how long this turn lane is expanded.

Response: Per the approved CPAP-2021-0018, the SB right turn lane is planned to be extended with a 180-foot turn lane and 200-foot taper. It has been included in TIA.

Comment 11: Are EB and WB tuning lanes exclusive at intersection 8 as in Figure 9? They are shared with through lanes in Synchro model for future without development 2028. Please verify them.

Response: An exclusive WB left turn lane is planned at Intersection 8 but no EB right turn lane. Synchro files have been verified and are correct. The EB Lane configuration has been corrected in Figure 8 and other related figures.

Comment 12: Please verify Table 4 trip generation. For example, AM, average rate is 0.52. So 2100×0.52 is 1092, not 920 by ITE TG 11th edition. Check the PM also. Also address details with actual trip generation calculation for notes under the table. Table This comment applies to Table 5 trip generation.

Response: Fitted curve equations have been used. This is consistent with the approved scoping document. Please note that the County has reviewed the first submission of this TIA, and has no comment on the site trip generation methodologies.

Comment 13: In Figure 15, are site improvement (green lanes) not part of lane configuration in 2028? In Synchro model they are not present (Future with Development 2028). Please verify.

Response: Two Synchro files were provided for Future with Development 2028 conditions; one is without mitigation, and the other is with mitigation (labeled MIT). Figure 15 shows the lane configurations with mitigation measures.

Comment 14: Please verify all trip generation of Table 8. For example, trip generation of elementary (ITE 520) for AM is $0.74 \times 960 = 711$, not 720 by TG 11th edition. Please elaborate in detail for trip generation if correct.

Response: Fitted curve equations have been used. This is consistent with the approved scoping document. It is important to note that the County has reviewed the first submission of this TIA, and has no comment on the site trip generation methodologies.

Comment 15: Should the elementary trip generation be added to high school trip generation to develop one trip generation for future with development for 2032 instead of separate trip generations and capacity analyses?

Response: Please refer to Page 7 Section Peak Hour of Evaluation which explains the offset peak hours of schools and applicable factors. Trip generation methodology is consistent with the approved scoping document, as discussed with the County staff. It is important to note that the County has reviewed the first submission of this TIA, and has no comment on the site trip generation methodologies.

Comment 16: Opening year of 2032 for the high school and the elementary should be considered for signal warrant.

Response: The traffic volumes in the Future with Development (2028) were utilized for the preliminary signal warrant analysis as that is the year the signal was recommended in the study, and signal warrants were satisfied for that year. Volumes will be even higher for 2032. Hence, the signal warrant for 2032 does not need to be analyzed if it is satisfied under Future with Development (2028) conditions.

Comment 17: Please elaborate estimated ADT in Table 12.

Response: The methodology for estimating ADT has been included on Page 74.

Comment 18: Some PHF for future without development are not 0.92. For example, at intersection 2, NB approach has 0.94 in AM. Please verify all of PHF.

Response: The PHF in Synchro files has been verified and no errors found. The PHF methodology is described in under each 'Capacity Analysis' section and is consistent with VDOT TOSAM guidelines. According to TOSAM, the higher of 0.92 or the existing PHF should be used for analyses under future conditions. Hence, if existing PHF is higher than 0.92 then that higher PHF should be used in future conditions.

Comment 19: Is Figure H.3 the summation of H.1 + H.2 in Appendix H?

Response: Yes, and it has been revised.

Comment 20: Is Figure J.5 supposed to be Figure 13 in TIA (2028), not Figure 25? Please verify all figure numbers in appendix and corresponding figures in TIA. Make sure all resulting trips should be matching to all trips from all scenarios.

Response: Yes, and it has been revised.

Comment 21: Opposite Vol and Approach Vol are switched.

Response: Comment acknowledged. The Opposite Vol and Approach Vol have been corrected in the figure.

Department of Planning and Zoning – Zoning Administration Comments Dated September 7, 2023

Comment 1: Zoning Administration staff notes that pursuant to Section 6-1101(A) of the Zoning Ordinance the Planning Commission shall review the application to determine if the feature for which approval is sought is substantially in accord with the adopted Comprehensive Plan. The applicant addresses the accordance with the Comprehensive Plan in the Statement of Justification (SOJ). Zoning Administration staff defers to the Department of Planning and Zoning, Community Planning Division for comment about such accordance.

Response: Acknowledged.

Comment 2: If the Commission Permit is approved, a site plan will be required to be approved prior to development of the site. It is recommended that graphic depiction of the new schools be provided with the existing yards and buffers approved and installed on the site for Watson Mountain Middle School. This will allow Zoning Administration staff to accurately determine and apply any additional buffers needed due to current site conditions, the new school design and current Zoning.

Response: Acknowledged. The requested buffer yard sheet would be included as part of the future site plan.

Comment 3: Please provide the CPAM application number on Page 1.

Response: The CPAM application number has been provided on sheet 1.

Comment 4: Please provide a high-resolution CMPT Plat. Several notes and details within the plan set are illegible, including building labels (building height, etc) and adjacent property information throughout the plan set, along with General Note #3, portions of the zoning tabulations, and the Vicinity Map on Sheet 1.

Response: Acknowledged. A revised Plat and plan set has been provided with the second submission.

Comment 5: Please show zoning district boundaries within the plan set.

Response: The zoning district boundaries have been added on sheet 2.

Comment 6: Section 5-666(I)(4) requires crosswalks to be provided at signalized intersections adjacent to the school site. There are no crosswalks shown on the Ryan Road/Evergreen Mills Road signalized intersections within the plan set. Please address.

Response: The requirements for crosswalks pursuant to Z.O. Section 5-666 will be addressed as part of the site plan. See Note 3 on Sheet 1.

Comment 7: Sheet 1: Within Note 16, please note that the site is also subject to Landscaping/Buffer/Screening requirements of Section 5-666(C).

Response: Note 16 has been updated on Sheet 1.

Comment 8: Sheet 1: Within Note 17, please confirm whether the proposed schools will be served by the Central Water Supply and Sewer System.

Response: Note 17 has been updated on Sheet 1.

Comment 9: Sheet 1: Please revise the Minimum Yard requirements within the Zoning Tabulations table to indicate no building shall be located within twenty five (25) feet of any property line or thirty five (35) feet from any other road right of way, private access easement, and/or prescriptive easement (Section 2-404(D)), and eliminate the Minimum Road Setbacks requirements information.

Response: The Minimum Yard requirements in the Zoning Tabulations has been updated and the Minimum Road Setbacks requirement information has been removed on Sheet 1.

Comment 10: Sheet 1: Regarding the Maximum Lot Coverage in the Zoning Tabulations Table, please note that only 10% of the lot may be used for residential or non-residential structures excluding agricultural and horticultural structures not open to the public, per Section 2-405(A).

Response: The Maximum Lot Coverage in the Zoning Tabulations Table has been updated on Sheet 1.

Health Department - Environmental Health

Comments Dated August 1, 2023

Comment 1: The following wells are located on parcel pin #242-18-1260 and are not identified or labeled on the plat: WWIR-2023-0084, WWIN-1972-0256.

Response: The two wells on parcel pin #242-18-1260 have been added to the plan on Sheet 2.

Comments provided by the following agencies indicate no objection to the proposed school use and request no additional information:

- Department of Planning and Zoning – Archaeology (Community Planning)
- Department of Building and Development – Land Development Division
- Loudoun County Fire Marshal’s Office
- Loudoun County Combined Fire and Rescue – Planning
- Loudoun County Department of General Services
- Loudoun County Office of Management and Budget