



LOUDOUN COUNTY PUBLIC SCHOOLS
PLANNING AND LEGISLATIVE SERVICES

21000 Education Court
Ashburn, Virginia 20148
Telephone: 571-252-1050
Facsimile: 571-252-1101

August 19, 2010

Mr. Marchant Schneider
Loudoun County Planning Department
1 Harrison Street, S.E., 3rd Floor
Leesburg, VA 20177

Re: ZMAP 2010-0001 and SPEX 2010-0003, HS-7 Dulles South and Elementary School, Goshen Road Assemblage, Revised SPEX Plat to Address Referral Comments

Dear Marchant:

Please find enclosed the revised SPEX/ZMAP Plat, last revised August 18, 2010, to address referral agency responses and the amended request for the Goshen Road abandonment for the proposed HS-7 high school and elementary school at the Goshen Road Assemblage in Dulles South. We are providing 10 sets of the revised ZMAP/SPEX Plat. Please note that the following changes have been incorporated into the Plat:

- Cover Sheet: Revised end of first sentence of Note 12 to reflect change in segment of Goshen Road proposed for abandonment, reading "...south to the intersection with planned Access Road B" instead of "...south to Braddock Road"; changed sheet legend to reflect revised name for Sheet 7 ("Road Improvements Map").
- Sheet 3: Reconciled limits of tree preservation area located west of stadium complex with site plan design (resulted in increased tree preservation and corresponding decrease in re-forestation area stemming from the realigned sewer line as recommended by staff to minimize impacts to green infrastructure elements); changed note regarding Goshen Road abandonment to read as follows: "Existing Goshen Road to be abandoned from this point south to Road B."
- Sheet 5: Changed width of trail proposed along east side of Northstar Boulevard from 8' to 10' and removed "by others" label for same; added phase line label.
- Sheet 7: Added exhibit identifying transportation improvements to be completed with HS-7 construction per draft SPEX conditions; re-titled "Road Improvements Map."
- ALL SHEETS: Added revision date (8/18/2010).

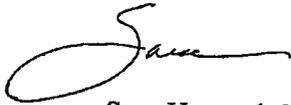
ATTACHMENT 3

A-203

LCPS/Goshen Road Assemblage
ZMAP 2010-0001/SPEX 2010-0003
August 19, 2010

If you have any questions or need additional information, please advise. Thank you for your continued assistance and guidance.

Sincerely,

A handwritten signature in black ink, appearing to read "Sara", with a large, stylized initial "S" that loops around the first part of the name.

Sara Howard-O'Brien, AICP
Land Management Supervisor



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JUL 22 2010

July 22, 2010

Mr. Marchant Schneider
Loudoun County Planning Department
1 Harrison Street, S.E., 3rd Floor
Leesburg, VA 20177

Re: ZMAP 2010-0001 and SPEX 2010-0003, HS-7 Dulles South and Elementary School, Goshen Road Assemblage, Response to Second Review Referral Comments

Dear Marchant:

Please find enclosed the responses to the second review referral comments for the proposed HS-7 high school and elementary school at the Goshen Road Assemblage in Dulles South. We are providing 10 sets of this cover letter, the referral responses and the revised ZMAP/SPEX Plat. Please note that the following changes have been incorporated into the Plat:

- Reforestation areas along with the parameters for the reforestation have been identified
- Plant materials to be utilized have been identified as indigenous
- The sewer line has been realigned to minimize impacts to green infrastructure elements
- A sidewalk has been added on the south side of Road B and additional crosswalks incorporated at Road B and Northstar Boulevard and the internal school road
- Additional pedestrian network connections have been added to provide a connection between the elementary school and the trail that serves Westport and an additional sidewalk has been added along the drive adjacent to the discus field
- Relocated Route 659 has been identified as Relocated Route 659/Northstar Boulevard
- Typical sections for Roads A and B have been added as an additional Sheet (7)
- The elementary school play field has been reduced in size to accommodate a track. The prior field playing area was 360" x 225" and the new area is 228' x 138'. LCPS felt the elementary school program would be better served with a smaller field with a track.

LCPS/Goshen Road Assemblage
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We very much appreciate the meeting on Wednesday, July 21, 2010, to review the Office of Transportation Services (OTS) comments. As a follow-up to our meeting we are providing additional analysis for Comments 6 and 11. We would be happy to meet with OTS Staff again to review in detail if that would be helpful.

I will be out of the office from July 23 to August 9. If you have any questions or need additional information you may contact Sam Adamo or our consultants (Chris Mohn at Bowman Consulting (703-443-2400) or Tushar Awar at Gorove Slade (703-787-9595)). Thank you for your continued assistance and guidance.

Sincerely,



Sara Howard-O'Brien, AICP
Land Management Supervisor

**Loudoun County Public Schools
HS-7 Dulles South and Elementary School
ZMAP 2010-0001, SPEX 2010-0003
Response to Second Referral Comments
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Zoning Administration
Comments dated June 23, 2010

There are no outstanding issues.

Parks and Recreation
Comments dated July 8, 2010

There are no outstanding issues.

Environmental Review Team
Comments dated July 8, 2010

Comment 1: A "Tree Cover Evaluation – Southern Portion of Site", prepared by Bowman Consulting, dated December 15, 2009, was provided with this submission. The evaluation identified 24 individual trees with a diameter at breast height (DBH) of 30 inches or greater. As previously stated, the hardwood stand located in the southern portion of the property is the most desirable tree cover for preservation on the property. Staff recommends exploring all opportunities to preserve portions of the tree stand and large individual tree (with a minimum condition rating of 60) within the development layout, including perimeter buffers and pocket tree save areas. [Revised General Plan (RGP) Forests, Trees, and Vegetation Policy 1]

Response: LCPS acknowledges that the trees in the southern portion of the property are desirable hardwood. However, in order to utilize the site for an elementary school it will be necessary to remove the trees. As development proceeds, LCPS will utilize existing trees to the extent possible within the perimeter buffers. As a practical matter, the site is tight and it may not be possible to preserve existing trees. In the 4/20/10 ERT referral, and as outlined below in Comment 2, County staff recommended recapturing the loss of tree canopy by committing to reforestation in other areas of the site. LCPS has incorporated the recommended reforestation areas as recommended by staff. Please refer to Comment 2 below.

Comment 2: During the June 28, 2010, site visit, two reforestation opportunities were identified and discussed: 1) open floodplain immediately adjacent to the South Fork of Broad Run, including the emergent wetland, outside of the existing and proposed sanitary sewer easements; and 2) open areas within the 50-foot GI Buffer, adjacent to the intermittent stream in the western portion of the property, outside of the proposed sanitary sewer easement. Based on site conditions, deer browse potential, and minimizing cost, the County Urban Forester recommends the use of 3-gallon containerized materials within the floodplain and bare root seedlings with tubes outside of the floodplain. Staff recommends

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that the reforestation areas be identified on sheets 3 (Special Exception/Rezoning Plat) and 6 (Water and Sewer Facilities Map). Attachment A and Photographs 1 and 2 identify the approximate location of the reforestation areas. Staff further recommends that a reforestation commitment be provided specifying the following: 1) the applicant shall work with the County Urban Forester on the development of the reforestation plan; 2) the reforestation plan shall be submitted to the County Urban Forester for review and approval prior to the approval of the first site plan; 3) plant material shall consist of 3-gallon containerized native trees within the floodplain and bare root seedlings with tubes outside of the floodplain; 4) the reforestation shall be implemented prior to issuance of the first certificate of occupancy; 5) the applicant shall ensure a minimum of 80 percent of the initial planting is determined to be established after two growing seasons; 6) an annual inspection shall be conducted by the applicant and the County Urban Forester to verify establishment; and 7) if the 80 percent establishment isn't achieved after the second growing season, a onetime planting to bring the project to full stocking shall be conducted by the applicant.

Consistent with RGP Forests, Trees, and Vegetation Text and Policy 1 on Page 5-32, reforestation efforts will help to recapture tree canopy that will be lost as a result of the project as well as increase riparian function and associated water quality benefits.

Response: LCPS appreciates the staff meeting (June 28, 2010) with our consultants to review the proposed reforestation areas. The recommended areas will be reforested as a part of the site development in accord with the outlined conditions. These areas have been identified on the SPEX plat Sheets 3 and 6 and the parameters for reforestation, as recommended by staff, have been noted on the plat.

Comment 3: The applicant's responses state that the proposed plan incorporates an enhanced extended detention pond, west of the stadium. Staff appreciates this enhanced water quality measure. However, to provide a more comprehensive enhanced water quality approach, staff recommends that all extended detention ponds (dry ponds) be designed as enhanced extended detention ponds (dry ponds with shallow marsh plantings). [Revised 1993 LCZO Section 6-1310(H) and RGP Surface Water Policy 5]

Response: The only extended detention pond is the pond west of the stadium. The other stormwater facilities consist of bioretention and the offsite wet pond.

Comment: 4: The enhanced extended detention pond, west of the stadium, corresponds with a proposed sanitary sewer line, which is problematic from a maintenance perspective. Please revise the pond location or sanitary sewer alignment. [FSM Section 5.225.A.4]

Response: LCPS apologizes. This is a SPEX Plat/Site Plan mapping error. The sewer line will not be located in the pond. The SPEX Plat has been amended.

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Comment: 5: Staff recommends relocating the 8-inch sanitary sewer line to align with the existing ford crossing the South Fork Broad Run and to connect to the existing sanitary sewer at the next manhole to the west. These adjustments would minimize tree cover loss adjacent to the stream as well as avoid wetland impacts. Attachment B depicts the recommended sanitary sewer alignment and connection (blue). [RGP Forests, Trees, and Vegetation Policy 1 and River and Stream Corridor Resources Policy 23]

Response: The sewer line has been realigned as recommended and aligned to meet Loudoun Water design standards.

Loudoun Water **Comments dated July 14, 2010**

There are no outstanding issues.

Community Planning **Comments dated July 13, 2010**

Forest Resources

Comment 1: Staff recommends that the applicant commit to the reforestation of the open floodplain associated with the South Fork of Broad Run and the open areas within the 50-foot Green Infrastructure buffer adjacent to the intermittent stream on the western portion of the property, with priority to the floodplain. Also, to avoid or minimize further tree cover loss and to allow for the reforestation of the 50-foot Green Infrastructure buffer, staff recommends that the 8-inch sanitary sewer line and easement be located outside of the 50-foot Green Infrastructure buffer to the extent possible. Additionally, staff recommends that the line be adjusted within the floodplain to avoid wetland impacts.

Response: LCPS will reforest the recommended areas in accord with Community Planning and ERT recommendations. Please also reference Response to ERT Comment 2 above. The sewer line has also been realigned outside the GI buffer to the extent possible. We wish to note that SWM/BMP requirements and the need to facilitate sewer extensions to the rest of the sewer shed make it impractical to completely relocate the sewer west of the baseball field.

Buffering & Planting Enhancements

Comment 2: Staff recommends that the applicant preserve existing tree stands and large individual trees where possible, including within perimeter buffers and isolated tree stands.

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Given the prominence, size, and importance of the enhanced buffer areas as habitat, staff recommends that the applicant commit to the use of indigenous plants for these plantings in consultation with the County Urban Forester. Such trees could include American Holly (*Ilex opaca*), Loblolly Pine (*Pinus taeda*), Shortleaf Pine (*Pinus echinata*), Eastern White Pine (*Pinus strobus*), and Eastern Red Cedar (*Juniperus virginiana*). Trees should be spaced to accommodate mature sizes.

Response: LCPS will utilize existing trees to the extent possible within the perimeter buffers. As a practical matter, the site is tight and it may not be possible to preserve existing trees. LCPS also commits to the use of indigenous plants for landscaping and will comply with the County's landscaping requirements.

Bicycle & Pedestrian Accommodations

Comment 3: To help meet the mobility needs of the adjacent residents, staff recommends that the applicant commit to a sidewalk on the south side of Road "B" with two additional crosswalks at the Route 659 Relocated/Road "B" intersection and one additional crosswalk at the north-south internal road/Road "B" intersection.

Staff recommends two additional sidewalk connections in the following locations:

- **Along the driveway adjacent to the discus field, which would allow people to safely walk from the high school to the stadium; and**
- **From the 10-foot multi-use trail serving the Westport development to the sidewalk/crosswalk near the front of the elementary school.**

Response: LCPS and Parks and Recreation have reviewed the plan again and the recommended sidewalk on the south side of Road B has been added along with the additional crosswalks. The additional sidewalk connections along the driveway at the discus field and between the Westport trail and elementary school have been added as recommended.

Lighting & Signage

Comment 4: Staff recommends that the applicant's commitments be supplemented to address the following:

- **Reflector technology systems for athletic field lighting and the times that these lights will be turned off; and**
- **Maximum heights for lighting fixtures and athletic field light poles.**

Response: The proposed athletic field lighting will include internal reflectors in addition to being cut-off, fully shielded and directed downward and inward to the site. In prior high school special exception conditions, athletic field lighting has been required to be turned off within one hour following the end of evening activities, or by 11 p.m., whichever occurs first. In addition,

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the light poles for athletic fields have been required to not exceed 80 feet in height, with height to be measured from the ground to the bottom of the light fixture. These conditions are acceptable to LCPS although it is noted that the height restriction can increase cost by requiring more poles/lighting fixtures in order to supply the appropriate athletic field lighting.

Office of Transportation Services

Comments dated July 13, 2010

Comment 1: In the Statement of Justification, the Applicant indicates that it will construct a half-section (two lanes) of Northstar Boulevard (Route 659 Relocated) between Tall Cedars Parkway and Braddock Road and pave a half-section (two lanes) of Braddock Road from the end of the existing pavement (in the vicinity of Great Berkhamstead Drive (the entrance to the Stratshire Crossing (Braddock Crossing) development) west to Northstar Boulevard and Goshen Road. These improvements are proposed to be in place prior to the opening of the proposed high school, if not already constructed by others. These road improvements necessary to access the school site and are recommended to be included in the future proffers and conditions associated with these applications.

Response: It is proposed to have two lanes of Northstar Boulevard between Tall Cedars Parkway and Braddock Road in place and to extend Braddock Road from the end of the existing pavement to Northstar Boulevard prior to the opening of the high school. (Braddock Road would be extended such that it provides an appropriate connection to Northstar Boulevard and allows proper transition. The construction plans and profiles for Braddock Crossing's first phase takes Braddock up to Northstar Boulevard. If Braddock Crossing has not extended Braddock Road for their second phase (across Northstar Boulevard and out to Goshen Road, then LCPS would provide improvement at the intersection of Northstar Boulevard and Braddock Road to ensure the tie in to Braddock Road with appropriate transitions). The extension of Braddock Road between Northstar Boulevard and Goshen Road would appropriately be the responsibility of the developer of Braddock Crossing in accord with that project's proffer requirements.

Comment 2: There are existing proffered commitments from the Stone Ridge, C.D. Smith, and Braddock Crossing developments to construct the Northstar Boulevard and Braddock Road improvements described in Comment 1 above. The Applicant indicates that at such time as the surrounding properties (Stone Ridge, C.D. Smith, and Braddock Crossing) reach the development thresholds that would have required the construction of these improvements, the cash-in-lieu of construction clauses in the respective proffers statements would be triggered. This should be verified by appropriate County staff.

Response: This comment is addressed to County staff. However, it may be helpful to have copies of letters prepared by the Zoning Staff in December of 2009 which sought early right-of-way dedication from the C.D. Smith and Braddock Crossing developments and further

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addressed the cash-in-lieu of construction. With regard to the Stone Ridge portion of Northstar Boulevard, Stone Ridge will construct the eastern two lanes of Northstar Boulevard between Tall Cedars Parkway and the southern boundary of Stone Ridge, including the 10 foot in width trail, prior to the issuance of the 1st zoning permit in Land Bay 1. The proposed high school is to be located in Land Bay 1. Stone Ridge is proffered to construct this improvement as a part of the recently approved ZCPA 2006-0003 and ZMAP 2006-0011 applications, reference Proffer II. C. 3., attached for easy reference. Further, as a part of the contract between LCSB and Stone Ridge, there are provisions for Stone Ridge to construct these two lanes, pursuant to Post Closing Development Matters, Paragraph 14 (a) and (b), also attached.

Comment 3: The Applicant should construct the eastbound right turn lane and the southbound left turn lane at the Northstar Boulevard/Braddock Road intersection prior to the opening of the high school in 2012 (these turn lanes are identified in the traffic study as being warranted at that time). The Applicant should seek reimbursement for these improvements to the extent that they have been proffered as part of other developments in the area.

Response: Pursuant to the Staff/Applicant meeting on July 21, 2010, it has been clarified that at the intersection of Northstar Boulevard/Braddock Road, the Applicant should construct the westbound right turn lane (not eastbound) and the southbound left turn lane, prior to the opening of the high school in 2012. (Please see page ix, Future Conditions with Development (High School Build Out - 2010)). Any cash-in-lieu proffered for these improvements by others would be provided to the County. LCPS acknowledges that these two turn lanes improvements will be provided as a part of the high school development.

Comment 4: The Applicant should construct the separate left and right turn lanes on Northstar Boulevard at Road A and Road B (the two entrances to the school site) prior to the opening of the high school in 2012, as recommended by the traffic study.

Response: Acknowledged

Comment 5: Tall Cedars Parkway has been constructed by Stone Ridge west to the vicinity of future Northstar Boulevard. Should any additional construction be necessary to tie this existing roadway to the proposed half-section of Northstar Boulevard described in Comment 1 above, the Applicant should construct such improvements concurrent with the construction of Northstar Boulevard.

Response: Acknowledged.

Comment 6: If not already constructed by others prior to the opening of the high school in 2012, the Applicant should construct the turn lanes recommended by the traffic study at the Gum Spring Road/Braddock Road intersection. Any necessary modifications to the existing traffic signal at this intersection should also be the responsibility of the Applicant if such modifications have not already been made by others. The Applicant should seek

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reimbursement for these improvements/modifications to the extent that they have been proffered as part of other developments in the area.

Response: As discussed in our July 21, 2010 meeting, the traffic study accounted for traffic generated by planned developments in the vicinity of the proposed schools. Hence, as traffic from the planned developments was accounted for, similarly the proffered roadway improvements by these planned developments were also assumed to be in place for the analysis years. As outlined below, the following improvements, which are not in place, were identified in the traffic study under the high school opening year (2012) at the intersection of Gum Spring Road/Braddock Road:

- Separate Left Turn Lane on Braddock Road EB (to NB 659) – Proffered by *Kirkpatrick Farms and Seven Hills*
- Separate Left Turn Lane on Braddock Road WB (to SB 659) - Proffered by *Seven Hills*
- Upgrade Right Turn Lane on Braddock Road EB (to SB 659) to meet VDOT Standards - Proffered by *Kirkpatrick Farms*

As stated above, the traffic study incorporates trips generated by the developments that have proffered to provide these improvements. However, if the trips generated by the background developments in the area are eliminated from the analysis, and an analysis of the intersection is conducted utilizing the existing traffic, the inherent growth (regional traffic increase) and the trips generated by the schools, the improvements listed above are not required. The technical memorandum confirming this finding, prepared by Gorove/Slade Associates dated July 22, 2010, is included for staff consideration. Based on this memorandum, LCPS asks that the intersection improvements (outlined above) be appropriately provided by those developments that have proffered these improvements as these improvements are not needed to facilitate safe and adequate access to the proposed schools.

Comment 7: The Applicant has submitted a request to the Board of Supervisors to abandon the segment of Goshen Road (Route 616) from Road A south to Braddock Road in order to facilitate the development of the proposed high school and elementary school. OTS has received comments from various referral agencies regarding this proposed abandonment; these comments and the Applicant's responses (dated June 8, 2010) are provided as *Attachment 42*. Of particular note is the comment from VDOT indicating that the abandonment cannot take place until the replacement section of roadway (Route 659 Relocated (Northstar Boulevard)) has been constructed and is accepted into the VDOT secondary system for maintenance. Further, OTS notes that VDOT does not accept half-sections of roadways (as is being proposed) for maintenance without a commitment from the County assuring the completion of the remaining half-section. These matters have the potential to delay the development of the proposed schools. Coordination and resolution of these matters with VDOT needs to occur in a timely manner, and all issues identified in the abandonment referral comments need to be resolved prior to the abandonment request moving forward for consideration by the Board of Supervisors.

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Response: At the Staff/Applicant meeting on July 21, 2010, it was agreed that a meeting should be held with appropriate County and VDOT staff to review the abandonment process and the acceptance of two lanes of Relocated Route 659 (Northstar Boulevard). We appreciate staff's assistance in the quick resolution of these concerns.

Comment 8: Further discussion is recommended with the Applicant and VDOT regarding Goshen Road north of the site. The potential of cutting off site access from Goshen Road at the northern site boundary should be explored in order to limit additional vehicle trips on this substandard facility.

Response: Access to the school facilities from Road A (at Goshen Road) is limited to the bus loop and teacher parking. LCPS is willing to restrict school bus usage of Goshen Road to only the bus(es) that would pick-up and drop-off students residing along Goshen Road unless traffic conditions, such as an emergency, otherwise warrant use of the unpaved section. Further, LCPS is willing to advise teachers to avoid use of Goshen Road. These measures would reduce potential traffic on Goshen Road.

Comment 9: The plan set (Sheet 5) depicts an extensive pedestrian network for the proposed high school and elementary school. This network includes pedestrian trails to the south and west connecting to the Westport development, and to the north connecting to a portion of the Stone Ridge development. Commitments to construct the pedestrian network as shown on Sheet 5 should be included with these applications, including extensions of trails to logical termini within Westport and Stone Ridge when those developments are constructed. The proffered trail on the east side of Northstar Boulevard should be in place prior to the opening of the high school in 2012.

Response: LCPS will implement the pedestrian network planned for the proposed school facilities as development occurs, as depicted on Sheet 5 of the SPEX plat. LCPS has been coordinating with Stone Ridge and Westport to determine the appropriate connection points and will build the pedestrian trails to the school boundaries and along proposed roadways. A portion of the school site is within Stone Ridge. Road A and Relocated Route 659/Northstar Boulevard are between the school facilities and the remainder of Stone Ridge. As such, the construction of sidewalks/trails along Road A and Relocated Route 659 will connect to Stone Ridge's proffered pedestrian network. With regard to Westport, it is not known when this project will move forward. It would be costly for LCPS to mobilize equipment in the future (after the school project is complete) to construct these trail extensions. In addition, it would be necessary for LCPS to secure permission and easements on the Westport property in order to construct. LCPS will provide the pedestrian trails to the property boundaries for future connection by others. The trail on the east side of Northstar Boulevard will be constructed in conjunction of the two lanes of Northstar Boulevard and will be in place prior to the opening of the high school in 2010.

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Comment 10: The Statement of Justification (Page 11) notes that all-way stop conditions (stop signs or traffic signals), crosswalks, and crossing guards are necessary to support walk zones to the proposed schools across Northstar Boulevard at both Road A and Road B. OTS notes that the referenced stop signs and crosswalks will require VDOT review and approval, and the Applicant should be responsible for providing appropriate warrant studies for the proposed all-way stop conditions on Northstar Boulevard at both Road A and Road B. Additionally, the Applicant should commit to the installation of traffic signals on Northstar Boulevard at Road A and Road B at such time as signals are warranted by the County or VDOT.

Response: LCPS will provide appropriate warrant studies as required for the proposed all-way stop control for Roads A and B. Based on the analysis presented in the traffic study, a signal will not be warranted at the intersection of Road A and Road B with Northstar Boulevard under the High School (2012) and Elementary School (2015) opening years. As discussed with and agreed to by the OTS staff at the meeting held on July 21, 2010, signal warrant studies will not be conducted at Road A and Road B. This decision is based on 1) the uncertainty as to when Northstar Boulevard will be extended between Tall Cedars Parkway and Route 50, 2) there are no existing proffers to construct this extension, 3) these signals, if warranted in the future, would primarily be due to regional traffic not the school traffic, 4) the school traffic peak hours are different from the commuter peak hours and 5) the appropriate timing for the signal analysis will likely be well beyond the full build out of the proposed schools (year 2020+).

Comment 11: While not included in the scoping agreement, a significant percentage of high school site-generated traffic is anticipated by the traffic study to go through the Stone Springs Boulevard/Tall Cedars Parkway intersection. According to the June 2009 traffic study for the Stone Ridge Commercial rezoning (ZMAP 2006-0011), certain movements at this intersection are forecast to operate at failing LOS (LOS E or F) by 2015 even without the proposed schools in place. The Applicant should analyze this intersection and identify and commit to necessary mitigation measures to maintain/restore acceptable LOS (LOS D or better) at this intersection.

Response: The requested analysis of the Stone Springs Boulevard and Tall Cedars Parkway intersection has been conducted and is presented in the traffic memorandum prepared by Gorove/Slade Associates dated July 22, 2010. The analysis reveals that the intersection will operate at acceptable levels of service for the High School peak hour (2012) and Elementary School peak hour (2015) as an unsignalized (all-way stop control) intersection.

Virginia Department of Transportation

Comments dated July 8, 2010

Comment 1: Please provide draft proffers for review.

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Response: Because of the limited scope of the rezoning (3 acres of land from PD-GI to TR-1), LCPS is not proposing proffers. LCPS is working with the County on Special Exception conditions which will be provided to VDOT as soon as they are available.

Comment 2: Please label all the applicable roads on the plan as they are designated in the Loudoun Countywide Transportation Plan (CTP) or as they are referenced in the TIS, e.g. "Route 659 Relocated" is also referred to as "Northstar Boulevard".

Response: The recommended labeling has been added to the SPEX Plat.

Comment 3: Provide typical sections for Roads "A" and "B" compliant with the applicable VDOT standard. Reference the standard used and include street width, design speed and projected traffic volume.

Response: The typical sections for Roads A and B have been added to the SPEX Plat as requested.

Comment 4: Goshen Road, Route 616 is not to be abandoned until an adequate replacement facility is in place.

Response: Acknowledged. Consistent with discussions with VDOT and as outlined in the application, it is planned to barricade Goshen Road south of the new cul-de-sac on Goshen Road at Road A, north of the parent drop off/student parking lot, and just north of Braddock Road until such time as the abandonment is officially approved. Please note that a meeting is being scheduled with the County and VDOT to further review the abandonment process and the acceptance of the two lane Northstar Boulevard.

Comment 5: Related to comment # 4: Please see the attached e-mail dated Monday, March 29, 2010 from James C. Zeller, P. E. of VDOT's Leesburg Residency office.

Response: The 3/29/10 email from Mr. Zeller notes that the proposed two lanes of Relocated Route 659 (Northstar Blvd.) must be accepted into the state system for maintenance before the Goshen Road right of way can be abandoned and that the portion of Relocated Route 659 to be constructed with this project is a part of the adopted Location of the Tri-County Parkway (VDOT Project R000-96A-102 P101, UPC 52405). Design and construction will need to be coordinated with the major design elements of the Tri-County Parkway Location Study. Contact information is provided for VDOT's project manager, Mr. Nick Nies.

LCPS understands that Relocated Route 659 must be accepted into the state system for maintenance in order for the identified section of Goshen Road to be abandoned. (Also reference Comment Response #4 above). In addition, LCPS consultants, Urban engineering, have coordinated with Mr. Nick Nies and the construction plans and profiles are consistent with the VDOT alignment and design.

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Comment 6: The cul-de-sac bulb at the northern end of the project is to have sufficient throat length per VDOT standards.

Response: Acknowledged.

Comment 7: This application appears to rely significantly upon proffered roadway improvements "By Others". To ensure an adequate roadway network, we recommend that the portion of the Statement of Justification (dated March 18, 2010) entitled "Summary of Related Road Improvement Proffers" and the "Conclusions" portion of the TIS dated March 8, 2010 be analyzed, merged and presented in an orderly fashion and incorporated into the proffers/approval conditions for this application. (This is related to Comment # 1 above). There should be a mechanism to ensure that any pertinent roadway proffers "By Others" are in place prior to the proposed school opening date. Receipt of this information may generate additional comments.

Response: Acknowledged. It is the intent of LCPS to construct the road improvements required to provide access to the school site if such improvements have not been constructed by others. LCPS anticipates SPEX conditions to this effect. County staff will be preparing recommended special exception conditions that identify the specific road improvement requirements.

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Loudoun County, Virginia
www.loudoun.gov

Department of Building and Development
Zoning Administration / MSC# 60
1 Harrison Street, S.E., P.O. Box 7000, Leesburg, VA 20177-7000
Administration: 703-777-0397 • Fax: 703-771-5215

JUL 22 2010

December 17, 2009

Marc Chadwick
Winchester Homes, Inc.
6905 Rockledge Drive
Suite 800
Bethesda, MD 20817

Re: Request for ROW Dedication for Route 659 Relocated

Dear Marc:

On behalf of Loudoun County, I am writing to request the dedication of right-of-way for Route 659 Relocated pursuant to the proffers of Braddock Crossing. As a follow up to this letter, you will be contacted by staff from Loudoun County Public Schools. Please ensure that Winchester Homes dedicates the requested right-of-way for Route 659 Relocated.

The Zoning Map Amendment application for Braddock Crossing, ZMAP 2003-0012, was approved by the Board of Supervisors on June 21, 2005, subject to the Proffers dated May 5, 2005 and the Letter of Clarification dated June 14, 2005. Proffer III.B.3 provides for dedication of right-of-way for Route 659 Relocated prior to the 59th residential zoning permit as stated in the proffer text:

3. Prior to the issuance of the zoning permit for the 59th residential unit on the Property, the Owner shall dedicate one-hundred twenty (120) feet of right-of-way for Route 659 Relocated as shown on Sheet 6 of the Concept Plan.

In addition, proffer III.B.7 provides for dedication of right-of-way upon request by the County in advance of development of the property.

7. Notwithstanding the above, dedication of right-of-way and easements shall occur upon request of the County in advance of development on the Property if others have prepared construction plans and profiles consistent with the Concept Plan and require dedication to commence construction, and provided the Owner shall not be obligated to incur costs or post bonds with the County in connection with such advance dedication.

Loudoun County Public Schools (LCPS) is proposing to construct a high school and an elementary school in the Dulles South area on property that is located along Goshen Road, which is west of the future alignment of Route 659 Relocated. The access for the proposed schools would be via Route 659 Relocated. Since it is likely that LCPS will construct the high school before development of Braddock Crossing reaches its triggers for dedication and construction of the right-of-way for Route 659 Relocated, LCPS is planning to construct two lanes of Route 659 Relocated in order to access the school site

ZCOR-2009-0259

At this time, pursuant to Braddock Crossing proffers III.B.3 and III.B.7, the County requests that Winchester Homes dedicate the required right-of-way for Route 659 Relocated as shown on a dedication plat that will be provided to you by Loudoun County Public Schools. As a follow up to this letter, you will receive correspondence from Sara Howard-O'Brien, Land Management Supervisor at Loudoun County Public Schools, which will contain the draft dedication plat and deed for your review. Ms. Howard-O'Brien can be reached via phone at 571-252-1156 and via email at showard@loudoun.k12.va.us.

It is noted that the developer of Braddock Crossing is required to construct, or bond for construction, two lanes of Route 659 Relocated pursuant to proffer III.B.4.

4. *Prior to the issuance of the zoning permit for the 59th residential unit on the Property, the Owner shall construct or bond for construction two lanes of the ultimate four-lane Route 659 Relocated as shown on Sheet 6 of the Concept Plan.*

In the event that Loudoun County Public Schools constructs the portion of Route 659 Relocated that Braddock Crossing is proffered to construct, Winchester Homes will owe a cash equivalent contribution prior to the issuance of the zoning permit for the 59th residential unit.

C. *Cash Equivalent Contribution*

Unless otherwise provided in these Proffers, the Owner agrees to contribute to the County, or its designee, an amount equal to the cost of constructing the transportation improvements described above in Proffers III.B.2. and III.B.4., III.B.5. and III.B.6., in lieu of actual construction, if said improvements have been constructed or bonded for construction by others prior to bonding for construction by the Owner. For the purposes of determining the in-lieu-of contribution, construction costs shall be deemed to include all engineering, surveying, bonding, permit fees, utility relocation, and other hard costs of construction based upon County bonding estimates for said construction per the FSM. Such contribution in lieu of actual construction shall occur at the time the Owner would otherwise have been required by these Proffers to bond or construct such improvements. As determined by the County, such contribution shall either be used to reimburse the party who constructed such improvements or for regional roadway improvements in the vicinity of and for the benefit of the Property.

According to County records, zoning permits have been issued for 10 residential units. In the event that the LCPS constructs Route 659 Relocated, a separate request for the cash equivalent contribution will be sent to Winchester Homes.

This determination applies solely to the referenced property and is not binding upon the County, the Zoning Administrator or any other official with respect to any other property. No person may rely upon this determination with respect to any property other than the referenced property.

Please be advised that any person aggrieved, or any officer, department or agency of Loudoun County affected by an order, requirement, decision or determination made by an administrative officer in the administration or enforcement of the provisions of the *Zoning Ordinance* may appeal said decision within thirty days to the Board of Supervisors in strict accordance with Section 15.2-2301 of the *Code of Virginia*. This decision is final and unappealable if not appealed within 30 days.

Marc Chadwick
Page 3
December 17, 2009

If you have any questions concerning this correspondence, please contact me via email (susan.glass@loudoun.gov) or you may call me at 703-777-0251.

Sincerely,



Susan Glass
Proffer Manager

Cc via email: Dan Schardein, Zoning Administrator
Stevens Miller, Dulles District Supervisor
Sara Howard-O'Brien, Land Management Supervisor, LCPS
Mike Seigfried, Assistant Director for Land Subdivision
Nancy Berfield, Permits Proffer Manager

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Loudoun County, Virginia
www.loudoun.gov

Department of Building and Development
Zoning Administration / MSC# 60
1 Harrison Street, S.E., P.O. Box 7000, Leesburg, VA 20177-7000
Administration: 703-777-0397 • Fax: 703-771-5215

December 17, 2009

Chris Rudy
Two Greens/Kirkvest LLC
8614 Westwood Center Drive
Suite 900
Vienna, VA 22182

Re: Request for ROW Dedication for Relocated Route 659

Dear Chris:

On behalf of Loudoun County, I am writing to request the dedication of right-of-way for Relocated Route 659 pursuant to the proffers of C.D. Smith. As a follow up to this letter, you will be contacted by staff from Loudoun County Public Schools. Please ensure that Two Greens/Kirkvest dedicates the requested right-of-way.

The Zoning Map Amendment application for C.D. Smith, ZMAP 2002-0003, was approved by the Board of Supervisors on October 11, 2005, subject to the Proffer Statement dated October 11, 2005. Proffers IV.B.1 provides for dedication and construction of Relocated Route 659 prior to the approval of the first record plat or site plan as stated in the proffer text.

B. Construction of Transportation Improvements

Transportation improvements shall be constructed by the Owner or his successor-in-interest in the following manner:

- 1. Concurrent with or prior to approval of the first record plat or site plan, whichever is first in time, for the Property, the Owner will:*
 - a. Dedicate right-of-way 120 feet in width through the Property for Relocated Route 659 and construct or bond for construction a half-section of a four lane divided roadway, including turn lanes as required by VDOT, at the site entrance, between the northern Property boundary and the southern Property boundary.*
 - b. Construct or bond for construction a half-section of a four-lane divided roadway, including turn lanes as required by VDOT, from the southernmost Property boundary to Braddock Road (Route 620).*

C.D. Smith proffer IV.A provides for advance dedication of right-of-way if others have prepared the construction plans and the Owner is not obligated to incur costs or post bonds in connection with such dedication.

IV. TRANSPORTATION

A. Road Network

Unless otherwise specified in the Proffers, all roads required for access to and within the Property will be constructed in accordance with the County of Loudoun's Land Subdivision and Development Ordinance and the FSM to provide access to the development parcels depicted on the Concept Plan as they are developed. All roads required for access to and within the Property will be designed and constructed in accordance with Virginia Department of Transportation ("VDOT") and County standards, unless modified otherwise. The Owner shall grant a public access easement for emergency vehicles over the private roads developed on the Property concurrently with the development of each section of the Property containing private roads.

The Owner shall dedicate to the County land necessary for construction of public roads which shall include all related easements outside the right-of-way, such as slope, maintenance, storm drainage and utility relocation easements. Dedication of right-of-way and easements shall occur either concurrently with development of each section of the Property or upon request by the County in advance of development on the Property by the Owner if: (1) others have prepared construction plans and profiles consistent with the Concept Plan that require dedication to commence construction; and (2) provided the Owner shall not be obligated to incur costs or post bonds with the County in connection with such dedication.

Loudoun County Public Schools (LCPS) is proposing to construct a high school and an elementary school in the Dulles South area on property that is located along Goshen Road, which is west of the future alignment of Relocated Route 659. The access for the proposed schools would be via Relocated Route 659. Since it is likely that LCPS will construct the high school before development of C.D. Smith reaches the triggers for dedication and construction of the right-of-way for Relocated Route 659, LCPS is planning to construct two lanes of Relocated Route 659 in order to access the School site.

At this time, pursuant to C.D. Smith proffers IV.A and IV.B.1, the County requests that Two Greens/Kirkvest dedicate the required right-of-way for Relocated Route 659 as shown on a dedication plat that will be provided to you by Loudoun County Public Schools. As a follow up to this letter, you will receive correspondence from Sara Howard-O'Brien, Land Management Supervisor at Loudoun County Public Schools, which will contain the draft dedication plat and deed for your review. Ms. Howard-O'Brien can be reached via phone at 571-252-1156 and via email at showard@loudoun.k12.va.us.

It is noted that proffer IV.B.1.b requires the Owner of the C.D. Smith property to construct, or bond for construction, a half section of Relocated Route 659 prior to the approval of the first record plat or site plan. Site plans and record plats being reviewed for the C.D. Smith project, but none have been approved yet. Proffer IV.C provides for a cash equivalent contribution to be paid to the County if the road improvements are constructed by others. In the event that the LCPS constructs Route 659 Relocated, a separate request for the cash equivalent contribution will be sent to Two Greens Kirkvest.

C. Cash Equivalent Contribution

Unless otherwise provided in these proffers, the Owner shall contribute to the County, or its designee, including a Community Development Authority ("CDA") or one or more private parties who collectively agree to construct public roadway improvements, an amount equal to the actual cost of constructing the transportation improvements (in the event the improvement is constructed) or an amount equal to the bonded cost estimate (in the event the improvement is bonded for construction), described above in Proffer IV.B 1.a and b and IV.B 2.a, in lieu of actual construction if said improvements have been either constructed or bonded by others prior to bonding for construction by the Owner. For the purposes of determining the in-lieu-of contribution, construction costs shall be deemed to include all engineering, surveying, bonding, permit fees, utility relocation, and other hard costs of construction based on paid invoices. Such contribution in lieu of actual construction shall be paid at the time the Owner would otherwise have been required by these Proffers to bond or construct such improvements. As determined by the County, such contribution shall either be used to reimburse the party who constructed such improvements or for regional roadway improvements in the same Planning area as the Property.

This determination applies solely to the referenced property and is not binding upon the County, the Zoning Administrator or any other official with respect to any other property. No person may rely upon this determination with respect to any property other than the referenced property.

Please be advised that any person aggrieved, or any officer, department or agency of Loudoun County affected by an order, requirement, decision or determination made by an administrative officer in the administration or enforcement of the provisions of the *Zoning Ordinance* may appeal said decision within thirty days to the Board of Supervisors in strict accordance with Section 15.2-2301 of the *Code of Virginia*. This decision is final and unappealable if not appealed within 30 days.

If you have any questions concerning this correspondence, please contact me via email (susan.glass@loudoun.gov) or you may call me at 703-777-0251.

Sincerely,



Susan Glass
Proffer Manager

**Cc via email: Dan Schardein, Zoning Administrator
Stevens Miller, Dulles District Supervisor
Sara Howard-O'Brien, Land Management Supervisor, LCPS
Mike Seigfried, Assistant Director for Land Subdivision
Nancy Berfield, Permits Proffer Manager**

JUL 28 2010

9. **STONE CARVER DRIVE**

Stone Carver Drive shown on Sheets 4 and 5 of the CDP shall be constructed as a public street with the traffic calming measures depicted on Sheet 15 of the Plans, subject to VDOT approval.

10. **DESTINY DRIVE**

Destiny Drive (a.k.a. Pebble Drive on the ZMAP 1994-0017 CDP) shall be constructed from its current southern terminus to the southern boundary of Stone Ridge and shall be open to traffic, but not necessarily accepted by VDOT for maintenance, no later than 9 months after the approval of this Application.

C. **WESTERN BYPASS/ROUTE 659 RELOCATED**

1. **WESTERN TRANSPORTATION CORRIDOR – HEREBY DELETED**

3. **ROUTE 659 RELOCATED (NORTHSTAR BOULEVARD)**

(a) Phase IIIB. Upon request by the County, the Owner shall dedicate to the County at no public cost a one hundred and twenty (120) foot wide right-of-way, increasing in width as necessary for turn lanes as required by VDOT and the County, for the construction of Northstar Boulevard (a.k.a. Route 659 Relocated) through the Property from Tall Cedars Parkway to the southern boundary of Stone Ridge in the general location shown on Sheet 4 of the CDP. The aforesaid right-of-way width will allow for the ultimate construction of Route 659 Relocated to six lanes in accordance with the County's Countywide Transportation Plan; however, the Owner shall be responsible only for construction as provided herein. The Owner shall design, bond and construct as a public street the eastern two lanes of Northstar Boulevard between Tall Cedars Parkway and the southern boundary of Stone Ridge, inclusive of an adjoining trail (10 feet in width) along the easterly right-of-way line. These improvements shall be bonded for construction prior to the earlier to occur of (i) the issuance of the 301st cumulative residential zoning permit in Land Bays 1, 2, 3, 4 and 5R, or (ii) the issuance of the 1st zoning permit in Land Bay 1. This road improvement shall be constructed and open to traffic, but not necessarily accepted by VDOT for maintenance, prior to the earlier to occur of (i) the issuance of the occupancy permit for the 301st cumulative residential unit in Land Bays 1, 2, 3, 4, and 5R or (ii) the issuance of the 1st occupancy permit in Land Bay 1.

F. **SIGNALIZATION**

3. **Stone Springs Boulevard and Millstream Drive.** The Owner shall submit to the County and VDOT a traffic signal warrant analysis for the intersection of Stone Springs Boulevard and Millstream Drive in conjunction with submission of the first site plan for Land Bay EE2A or, in the event Land Bay EE2A is consolidated for development purposes with the Remaining Portion of Land Bay EE2, as shown on the CDP, with the submission of the first site plan for the consolidated area. In the event the analysis concludes and VDOT concurs that a traffic signal is warranted at this intersection, the Owner shall, subject to the release to the Owner by the County of all funds collected by the County for such signal, design, construct and install the signal prior to the issuance of the first residential occupancy permit for Land Bay EE2 or EE2A. In the event that the funds collected by the County for such signal exceed the cost to design, construct and install the signal, the County shall be required to

refunded to Buyer, and the parties shall have no rights or obligations except such as specifically survive termination. Buyer acknowledges that Seller has filed and will pursue during the term of this Agreement and afterward, if necessary, ZCPA 2006-0003 that has been filed by Seller with respect to the Property and other land of Seller (the "Stone Ridge ZCPA"). Buyer agrees to join in any disclosure instruments or documents required to effect the Stone Ridge ZCPA within fifteen (15) business days after request, provided the same are consistent with the terms of the pending Stone Ridge ZCPA on the date hereof, and do not prohibit use and occupancy of the Property by Buyer as contemplated herein.

(b) In order to use the Property for its intended purpose as a public school or schools, Buyer may require a permit from Loudoun County to show a potential school site on the Property and nine additional parcels of land that together with the Property comprise the "Assemblage," which is shown on Exhibit "A-1". The required approval is called the "Commission Permit." Buyer has agreed to obtain the Commission Permit within 150 days after all of the parcels in the Assemblage are under contract. Commencing not later than the date all such parcels are under Contract, Buyer will diligently pursue the Commission Permit and use good faith efforts to obtain the same within 150 days after the Effective Date.

(c) In order to use the Assemblage for its intended purpose as a public school, Buyer is required to obtain a special exception applying to land including the Property from Loudoun County, generally in accordance with Exhibit "B", and Buyer may also elect to obtain a Zoning Amendment for land within the Assemblage other than the Property to amend the zoning and proffers attributable to such other land (the "School ZMAP", and together with the special exception, the "Special Exception"). Further, in the event Buyer is required to amend the Proffers for the Property then a Zoning Concept/Proffer Amendment may be filed by Buyer, subject to the review and approval of Seller in its sole and absolute discretion. Following submission of the application for the Special Exception, Buyer will diligently pursue, at Buyer's cost, approval of the Special Exception from all such applicable authorities. Buyer shall have no obligation to appeal any adverse decision received in connection with the proposed Special Exception or to file any litigation in connection with the same. The obligation of Buyer to consummate the purchase and sale of the Property as contemplated by this Agreement is conditioned upon the Special Exception having been issued and all appeal periods having expired without any appeal having been filed (or if an appeal has been filed, such appeal has been resolved in favor of issuance of the Special Exception). If the Special Exception is denied or if the Special Exception has not been issued by the Final Settlement Date, then and in that event, Buyer shall have the right to terminate this Agreement by notice to Seller, in which case the Deposit shall be refunded to Buyer, at Seller's request, Buyer will withdraw the application for the Special Exception, and the parties shall have no rights or obligations except such as specifically survive termination.

14. Post-Closing Development Matters. (a) After Settlement, Buyer and Seller agree to reasonably cooperate with each other in the development of each party's respective property within the Stone Ridge community, consistent with this Agreement, and to grant to one another and applicable governmental authorities utility, slope, sanitary sewer, water line, drainage, storm water outfall, storm water management and other development easements over the Property and the adjacent portions of the Stone Ridge community owned or controlled by Seller without cost. Seller shall make the dedications to governmental authorities of the future rights-of-way shown on Exhibit "B" and any other dedications that do not adversely affect the use and development of Seller's property. The easements and dedications shall be in a form and in locations reasonably acceptable to the granting party and the costs incurred in connection with the same shall be borne by the party requesting the easement(s) or dedications(s).

(b) During the ordinary course of its development of other portions of the Stone Ridge community, Seller, at its cost, shall design, construct and dedicate two lanes of the ultimate four lane Route 659 Relocated from Tall Cedars Parkway to "Road A", as depicted on Exhibit "B" as "Route 659 Required Construction". If this Agreement does not terminate pursuant to paragraph 5(b) above, then Seller shall commence preparation of plans for the Route 659 Required Improvements not later than the date thirty (30) days after the Due Diligence Date, and shall submit the same to the appropriate authorities of Loudoun County for approval within sixty (60) days after the Due Diligence Date and thereafter diligently pursue approval of the same. Subject to Force Majeure (hereinafter defined), the Route 659 Required Construction shall be substantially completed (meaning that the road is base paved and open for use) by the Required Improvements Completion Date (hereinafter defined), and Buyer agrees to give

Seller Buyer's Twelve Month Notice as provided in subparagraph 14(g) below.. Buyer shall grant, without consideration, such easements, for construction, utilities, slope, drainage, installation, use and maintenance as may be required by the governing jurisdiction for construction of the road from time to time in connection with the Route 659 Required Construction, provided the same do not adversely affect Buyer's intended use of the Property as contemplated herein. Seller shall provide Buyer with a draft of any such deed of easement, on the form required by the governing jurisdiction, concurrently with Seller's initial submission of the same to Loudoun County. Buyer shall have forty-five (45) days after receipt in which to review and approve any such deed of easement, and thereafter Buyer will execute the final approved deed of easement within fifteen (15) days after Seller delivers the same for execution. Upon substantial completion of any portion of the Route 659 Required Construction, until the same has been accepted by a governmental authority for maintenance, the parties shall grant to the other and its employees, agents, officers, tenants, and invitees a temporary nonexclusive right and easement across the Route 659 Required Construction, which shall automatically terminate on the date the Route 659 Required Construction is accepted for public use by the appropriate governmental authority. If the Stone Ridge ZCPA is approved, and it requires Seller to construct additional improvements to Route 659 Relocated ("Required Additional Improvements"), then Seller will commence the Required Additional Improvements when it commences the Route 659 Required Construction (but shall not be required to construct other than in an orderly manner nor prior to approval of the Stone Ridge ZCPA), and will pursue the same to completion. The escrow provisions of paragraph 14(g) do not apply to any such Required Additional Improvements, however. Subject to Force Majeure, If the Required Additional Improvements are required, and they are not completed within twelve (12) months after the Twelve Month Notice (hereinafter defined), then as Buyer's sole remedy, Buyer may send a notice to Seller, and if Seller does not commence completion within thirty (30) days after such notice and diligently pursue the same to completion, then Buyer may elect to perform construction of the Required Additional Improvements on Seller's behalf. If Buyer assumes construction of the Required Additional Improvements, then the applicable contracts, plans and specifications for the same shall be deemed assigned to Buyer (on a non-exclusive basis to the extent they cover other improvements), and Seller shall grant the required easements and make the required dedications necessary for the Required Additional Improvements, and Buyer shall continue with the same plans and contractors and assume the such contracts and plans and specifications and shall, prior to commencement of construction, replace any bonds posted by Seller with respect to the Required Improvements, and Seller shall have no liability for matters arising after the date of such assignment, except the obligation to make payments specified by this Agreement. Buyer will submit invoices and reasonable back-up to Seller evidencing the cost incurred by Buyer in completing the Required Additional Improvements in accordance with the plans therefore, and Seller will reimburse such amount to Buyer within first to occur of thirty (30) days after (i) the date Seller would be required to complete the Required Additional Improvements pursuant to the approved Stone Ridge ZCPA or (ii) the date Buyer receives a certificate of occupancy for a school on the Property..

(c) During the ordinary course of its development of other portions of the Stone Ridge community, Seller, at its cost, shall construct approximately 300 linear feet of "Road A" from Route 659 Relocated westward to a proposed entrance to the Property, as depicted on Exhibit "B" as "Road A Required Construction". If this Agreement does not terminate pursuant to paragraph 5(b) above, then Seller shall commence preparation of plans for the Road A Required Improvements not later than the date thirty (30) days after the Due Diligence Date, and shall submit the same to the appropriate authorities of Loudoun County for approval within sixty (60) days after the Due Diligence Date and thereafter diligently pursue approval of the same. Subject to Force Majeure, the Road A Required Construction shall be substantially completed (meaning that the road is base paved and open for use) by the Required Improvements Completion Date, and Buyer agrees to give Seller Buyer's Twelve Month Notice as provided in subparagraph 14(g) below. Buyer shall grant, without consideration, such easements, for construction, utilities, slope, drainage, installation, use and maintenance as may be required by the governing jurisdiction for construction of the road from time to time in connection with the Road A Required Construction provided the same do not adversely affect Buyer's intended use of the Property as contemplated herein. Seller shall provide Buyer with a draft of any such deed of easement, on the form required by the governing jurisdiction, concurrently with Seller's initial submission of the same to Loudoun County. Buyer shall have forty-five (45) days after receipt in which to review and approve any such deed of easement, and thereafter Buyer will execute the final approved deed of easement within fifteen (15) days after Seller delivers the same for execution. Upon substantial completion of any portion of the Road A Required Construction, until the same has been accepted by a governmental authority for

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**Loudoun County Public Schools
HS-7 Dulles South and Elementary School
ZMAP 2010-0001, SPEX 2010-0003
Response to Referral Comments
June 8, 2010**

Zoning Administration
Comments dated March 29, 2010



I. CRITICAL ISSUES

None

II. CONFORMANCE WITH AIOD REGULATIONS (§4-1400):

Comment 1: A disclosure statement must be placed on all plats, site plans, deeds, etc. clearly identifying that the parcels are located in the Ldn 60 – 1 mile buffer Airport Impact Overlay District. (§4-1405)

Response: Acknowledged

Comment 2: Revise General Note 3 and 4 on sheet 1 of the Plat to further identify the AIOD as “within 1-mile of the Ldn 60”.

Response: General Notes 3 and 4 have been revised as recommended.

III. CONFORMANCE WITH FOD DISTRICT REGULATIONS (§4-1500):

Comment 3: Revise General Note 3 on sheet 1 of the Plat to further identify the FOD as “major”.

Response: General Note 3 has been revised as recommended.

IV. CONFORMANCE WITH TRANSITION DISTRICT REGULATIONS (§. 5-700)

Comment 4: Remove Minimum Lot Width and Gross Density on sheet 3 as it does not apply to this site.

Response: The minimum lot width and gross density on Sheet 3 have been removed as recommended.

Comment 5: Because the PD-GI lot requirements are not relevant to this proposal, remove reference to it on sheet 3

Response. The PD-GI lot requirements have been removed as recommended.

Loudoun County Public Schools
HS-7 Dulles South and Elementary School
ZMAP 2010-0001, SPEX 2010-0003
Response to Referral Comments
June 8, 2010

V. CONFORMANCE WITH SCENIC CREEK VALLEY BUFFER (§5-1000)

Comment 6: Show and label the Scenic Creek Valley Buffer (SCVB) on sheet 3 as measured along the slope of the ground from the channel scar line. There appears to be sufficient area for the full 150' buffer, however, if the applicant seeks to reduce the setback a letter must be submitted to the Zoning Administrator demonstrating that one of the 2 criteria in 5-1200(D) can be met.

Response: The SCVB has been added and labeled on Sheet 3.

Comment 7: Construction of parking lots or other impermeable surfaces are prohibited within the SCVB. There is a note regarding the basketball court. Describe the "50' GI buffer" shown on sheet 3. There is a note regarding an encroachment and the 50' buffer. Explain the encroachment mentioned. If the "encroachment" is in the SCVB and is limited to grading, then there is no encroachment of impermeable surfaces and the note should be removed. See also comment 10 below.

Response: The 50 foot GI buffer is a 50 foot buffer as recommended by the Comprehensive Plan for green infrastructure elements. The encroachment is an encroachment into the recommended policy area and the note has been added to identify the minor encroachment into the policy area for comprehensive plan consistency analysis. There is no encroachment of impermeable surfaces into the SCVB.

VI. CONFORMANCE WITH BUFFERING AND SCREENING REGULATIONS (§5-1400)

Comment 8: Sheet 3 states that the enhanced buffer will be along the side and rear buffer yard. Label the rear (or western boundary) as enhanced.

Response: The enhanced buffer at the elementary school has been clarified. The side yard and a portion of the rear yard buffer will be enhanced. The areas are designated, length specified and the "portion" of the rear yard noted.

VII. CONFORMANCE WITH STEEP SLOPE REGULATIONS (§5-1508)

Comment 9: Any development or grading in the steep slope areas must be permitted as in 5-1508(D). A locational clearance may be required.

Response: Acknowledged.

Loudoun County Public Schools
HS-7 Dulles South and Elementary School
ZMAP 2010-0001, SPEX 2010-0003
Response to Referral Comments
June 8, 2010

VIII. CONFORMANCE WITH SPECIAL EXCEPTION REGULATIONS (§6-1300)

Comment 10: The SOJ references that the proposed elementary school could be used to satisfy the need for a school projected in the FY11-16 budget. Be advised that the period of validity for a special exception is 5 years from the date of approval. If the elementary school does not obtain a building permit and diligently pursue construction and/or an occupancy permit is not obtained and the use commenced, there is potential that the SPEX for the elementary school may expire. Pursuant to Section 6-1313(A), the period of validity may be extended as part of the special exception approval. If the applicant wishes to extend the period beyond the 5 years, they should amend the SOJ and request and alternate period of validity. If not approved as part of this application, the period of validity may be extended post approval, but must be done in writing 30 days before the expiration. Staff recommends that any extension requested be included in the conditions of approval.

Response: Because the construction of the school is tied to funding and that is unknown at this time, LCPS will amend the Statement of Justification to request an extended period of time beyond the 5 years for the special exception validity.

IX. OTHER

Comment 11: Revise the number of existing lots on sheet 3 as there are 10 lots that will comprise the 97 acres after lot consolidation.

Response: The number of existing lots on Sheet 3 has been amended to 10.

Comment 12: Add to the Total Site Area tabulation, under Zoning Requirements on sheet 3 that the acreage is based on Loudoun County Assessment Records after the lots are consolidated.

Response: The recommended notation has been added as recommended.

Comment 13: Revise the maximum floor area of the high school as it is 292,000 sf and 10,000 sf is accessory structures.

Response: The maximum square footage of the high school has been amended as recommended.

Comment 14: The Tree Save Narrative states that 80% of the canopy is being saved; however, there is no amount of canopy provided, therefore, there is no way to measure 80% of the existing canopy. State an amount of canopy existing in order to be able to measure the savings.

Response: The amount of tree canopy has been added to the Narrative.

Loudoun County Public Schools
HS-7 Dulles South and Elementary School
ZMAP 2010-0001, SPEX 2010-0003
Response to Referral Comments
June 8, 2010

Comment 15: Revise the first and second paragraphs of the Tree Save Narrative to state that trees may be removed “upon consultation with the County’s Urban Forester”.

Response: The recommended language has been added to the Narrative.

Parks and Recreation

Comments dated April 26, 2010

Comment 1: PRCS supports the additional playing fields at the proposed elementary school that could be utilized by community sports leagues, allocated through PRCS. Staff recommends LCPS and PRCS staff work together on the design and implementation of these fields in terms of size and grading

Response: The size of the proposed playing field at the elementary school is 360' x 225' with 30' end overruns and 20' side overruns, consistent with Parks and Recreation field standards. With regard to grading, the field is crowned.

Comment 2: Staff recommends LCPS staff consider the location and size of any future amenities such as a jogging track that is often developed after the school opens and funded by the PTA. Such a feature could have an impact on the proposed fields

Response: This is a good observation. However, for this particular site, there is not sufficient room to add a jogging track around the elementary school play field.

Comment 3: The Applicant will need to verify if the alignment for Road B (which will need to be built to a public road standard) meets Substantial Conformance and CDP-Minor Change requirements per Sections 6-1209 (E) and 6-1511(A) (2) of the Revised 1993 Zoning Ordinance for the proffered C.D. Smith Property park site. Furthermore, the proffered acreage for the park site is 14.57 acres, and it appears that the proposed public road will adversely affect that proffered acreage.

Response: Prior to filing the SPEX application, LCPS coordinated with Parks and Recreation on the proposed change and submitted a request to the Zoning Staff asking if the proposed change to the circulation elements within the proffered park site would be in substantial conformance with the approved C.D. Smith Concept Plan. In a letter dated February 5, 2010, the Zoning Staff determined that the modification is in substantial conformance with the approved Concept Plan. The acreage shown on the Concept Plan, Sheet 7 is listed as “Approx. Acreage 14.57 acres”. A calculation of the private road that would have been constructed indicates the road would have utilized .51 acres of the park area. The construction of a public street differs in that the area used for the road must be dedicated but the differential is minimal. Proposed Roadway B would provide .57 acres of right-of-way dedication with the resulting

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park acreage at 14 acres, after the dedication. The difference between the private street area and the public street area is .06 acres. A copy of the 2/5/10 zoning letter is attached for easy reference. As you know, LCPS is also seeking road abandonment for a portion of Goshen Road. The exhibit filed with the abandonment shows that the area that would come back to the C.D. Smith property on the west side of Relocated Route 659 (the proffered park) is 0.19853 acres. The park site acreage will be in substantial conformance with the approximate acreage shown on the proffered concept development plan.

Comment 4: In October 2009, the Applicant provided PRCS with two Concept Plan Alternatives for review. Staff reviewed those revised Concept Plat Alternatives for the Community Park, and provided verbal comments which have not been addressed to date. Staff noted the addition of restrooms and a U8 Micro Soccer Field, and that the entrance drive (shown as a road serving the proposed elementary school, called as Road B on Special Exception / Rezoning Plat) and the parking lot, have been realigned. Of the two alternatives provided, Staff prefers Plan Alternative 2, which has the majority of park uses (including the U8 Micro Soccer Field, the parking lot and the restrooms) on the same side of the school entrance road.

While PRCS appreciates these potential amenity upgrades, the Applicant will need to provide verification on whether the additional proposed amenities meet Substantial Conformance and CDP-Minor Change requirements per Sections 6-1209 (E) and 6-1511(A) (2) of the Revised 1993 Zoning Ordinance. Should these changes meet ordinance requirements, Staff requests that these amenities be provided in accordance with the January 2009 Loudoun County Parks, Recreation and Community Services Design and Construction Standards, and that the Applicant provide a Condition of Approval for these improvements.

Response: On May 24th, LCPS and Parks and Recreation staff met to review the Parks and Recreation referral and to ensure that all of Parks and Recreation staff comments have been addressed. Parks and Recreation staff confirmed their preference for the Alternative 2 layout, which was reviewed as a part of the February 5, 2010 Zoning letter. This letter includes a review of the alternative park layouts (Alternative 1 and Alternative 2) noting that PRCS had expressed that alternatives to the park were acceptable with the understanding that the size of the park is not reduced and that the parking area for the future County Park site is secured. The 2/5/10 Zoning letter recognized that the specific (proffered) uses and general layout remain the same. In other words, the proffered amenities could still be provided with the proposed change and additional amenities could be incorporated. The modification to the layout was deemed to be in substantial conformance. A copy of the February 5, 2010 Zoning letter is attached. Because the alignment of the public road is slightly different parking may be provided both to the north and south of the road. LCPS will either construct the parking areas when Road B is constructed or provide a cash contribution toward the future construction.

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Comment 5: As stated above, Staff reviewed and commented on the first submission of STPL 2008-0047 for C.D. Smith Park on January 6, 2009. The application has since gone inactive in County review due to the current economic situation. The conceptual proposals provided in October appear to be based on the park being constructed and conveyed to the County. Should the park not be constructed and/or conveyed prior to the Applicant's need to construct either of the proposed schools, the Applicant will need to coordinate with the Owner/Developer (Two Greens/Kirkvest) to obtain the proper permission to construct the road and amenities, and to calculate the proper value of those amenities provided, versus what the Owner/Developer is required to provide per proffer requirements.

Response: At the 5/24/10 meeting the timing of the school construction versus the potential timing of the CD Smith development was reviewed along with the C.D. Smith proffer for the park site. The proffer (ZMAP 2002-0003) provides for the park to be constructed and conveyed no later than the issuance of the 300th residential zoning permit (Proffer V. A. B. 3.). The C.D. Smith rezoning is approved for 455 residential units. There is no provision in the proffers that would provide for reimbursement if LCPS were to construct the park in advance of the proffer requirement. Due to current economic conditions, it is unlikely the park would be constructed by the C.D. Smith development prior to the construction of the proposed high school, opening Fall 2012. Based on this information, it was agreed that LCPS would inquire as to whether the owners of the C.D. Smith property would be willing to dedicate the park early and construct the park improvements at a later time when development moves forward. If the park were to be dedicated early, it could be used as a passive park. In this event, LCPS would construct the parking at the park site in conjunction with the construction of Roadway B. If the park is not dedicated in advance, then LCPS would provide a cash contribution for the parking (including gates for closure). LCPS Staff contacted the owner to inquire about early dedication. The owner indicated a review would be made and a response provided in the timeframe of this SPEX application review. LCPS will also provide a "sleeve" under Relocated Route 659 for the future extension of sewer from the C.D. Smith development to the park site and bring public water to the park site, including a stub for future park use (along Roadway B).

Comment 6: The abandonment proposal for Goshen Road is discussed on Page 10 of the Applicant's Statement of Justification. PRCS has reviewed the separate abandonment application and provided referral comments in a memo dated April 6, 2010. In that memo, Staff noted that the proposed abandonment will impact two proffered PRCS park sites. On Sheet 2 of the Abandonment Exhibit Plat, MCPI # 248-17-6333 (Parcel C, Stratshire Crossing, Phase 1) is to be dedicated to Loudoun County per amended Proffer IV.B.3 of ZMAP 2003-0012. The active recreation construction and parcel conveyance shall be completed prior to the issuance of the 100th residential zoning permit for the Property. Winchester Homes is currently coordinating with PRCS Staff to commence site construction and parcel conveyance this summer (2010). PRCS requests more clarification on whether the proposed abandonment is scheduled to be completed prior to the park conveyance to the County and whether the current street dedication and prescriptive right-of-way area will be conveyed to the County to be included within the park site as well.

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Furthermore, on Sheets 3, 4 and 5 of the Abandonment Exhibit Plat, MCPI # 248-29-4046, 248-30-5519, 248-39-4888 (Two Greens/Kirkvest LLC, C.D. Smith Property) is to be dedicated to Loudoun County per Proffer V.B.3 of ZMAP 2002-0003. PRCS requests addition clarification on whether the current prescriptive right-of-way area will be included in the future conveyance from Two Greens/Kirkvest LLC to the County as part of the park site.

Response: The proposed abandonment of Goshen Road requires that Relocated Route 659 be constructed and accepted into the state system for maintenance. It is probable that the Stratshire Crossing Park will be dedicated prior to the conclusion of the abandonment process. Upon the abandonment of Goshen Road there would be .12174 acres that would revert to the land that is to be proffered to the County.

As noted above in the response to Comment 3, the abandonment of Goshen Road would result in .19853 acres reverting to the C.D. Smith parcel located on the west side of Relocated Route 659, the proffered park site. It would be logical for that land area to convey with the park.

Comment 7: On Sheets 3 and 5 of the Special Exception / Rezoning Plat, please delineate the proffered amenities to be located within the C.D. Smith park site per ZMAP 2002-0003 and STPL 2008-0047.

Response: Based upon the 5/24 meeting, the Alternative 2 park layout amenities have been added to the Plat.

Comment 8: On Sheet 5 of the Special Exception / Rezoning Plat (Pedestrian Circulation Map), Staff requests that the Applicant revise the "Off-site Extension (By Others)" of the "Proposed 10' Multi-Use Trail" in the southeast corner of the property adjacent to the Elementary School, to be provided by the Applicant, to either connect to the future trail along the west side of Relocated Route 659, or to connect to the proffered park site at Stratshire Crossing via the future abandoned Goshen Road.

Response: There will be a 10' multi-use trail on the east of Relocated Route 659 that will provide connection between the Stratshire Crossing park site and the C.D. Smith proffered park site. It is unknown when and whether a trail will be constructed along the west side of Relocated Route 659 as it is unknown when the second two lanes of Route 659 Relocated will be constructed. With the abandonment of Goshen Road the prescriptive right of way will revert to the respective properties. LCPS will not control the abandoned road/right-of-way.

Comment 9: On Sheet 5 of the Special Exception / Rezoning Plat (Pedestrian Circulation Map), Staff requests that the Applicant revise the proposed "Sidewalk" along Road B to provide a "Proposed 10' Multi-Use Trail" to service the proffered park site and provide consistent connectivity with the rest of proposed adjacent trail system.

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Response: As requested, the pedestrian circulation has been revised to provide a 10' multi-use trail on the north side of Road B. Based on the 5/24/10 meeting LCPS understands that Parks and Recreation does not wish to have a sidewalk along the south side of Road B nor a sidewalk along the western frontage of the park property. Instead Parks and Recreation has asked that a connection be provided from the high school parking lot to the future trail that is to be constructed around the park pond. Please reference the SPEX Plat for the proposed connection.

Environmental Review Team

Comments dated April 20, 2010

Issues Regarding Tree Cover:

Comment 1: Staff reviewed the Forest Management Plan & Cover Type Map, prepared by Zimar & Associates, Inc., dated February 15, 2005. Cover Type I, consisting of upland hardwoods, located in the southern portion of the property, is the most desirable tree cover for preservation on the subject property. The hardwood tree stand corresponds to the proposed elementary school site. Staff recommends exploring all opportunities to preserve portions of the tree stand within the development layout, including perimeter buffers and a pocket tree save area separating the elementary school site from the high school baseball and softball fields (adjacent to the phase line). Attachment A provides an example pocket tree save area.

Response: LCPS will utilize existing trees to the extent possible within the perimeter buffers, however, the site is tight and it may not be possible. Similarly, the provision of a pocket tree save area in the proposed location will be extremely difficult. There will be grading on both sides of this small area and as a practical matter it does not work well. LCPS would rather provide trees in locations where they will have adequate room.

Comment 2: During the site visit, it was noted that larger trees within the above-referenced hardwood stand were tagged with an identification number. However, no individual tree information was provided with the Forest Management Plan & Cover Type Map report. For Cover Type 1, please identify all potential specimen trees with a diameter at breast height (DBH) of 30 inches or more on Sheet 3. Please also provide a corresponding table identifying scientific and common names, DBH, and condition rating.

Response: Subsequent to the pre-application meeting with County Staff, LCPS requested further analysis of the hardwood area in the vicinity of the elementary school site. A copy of that analysis, dated 12/15/09, is included in this resubmission.

Comment 3: Assuming the elementary school layout will not be adjusted to preserve the majority of Cover Type 1, staff recommends that the applicant recapture the loss tree canopy by committing to reforestation efforts on the subject property. Staff has identified the following two reforestation opportunities, in order of preference (see Attachment B and

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Photographs 1 and 2): 1) open floodplain immediately adjacent to the South Fork of Broad Run; and 2) open areas within the 50-foot GI Buffer, adjacent to the intermittent stream in the western portion of the property. As stated on Page 5-32 of the RGP, “riparian forests along streams provide the greatest single protection of water quality by filtering pollutants from stormwater runoff, decreasing stream bank erosion, and maintaining the physical, chemical, and biological condition of the stream environment”.

Staff recommends that the reforestation commitment specify the following: 1) the applicant shall work with the County Urban Forester on the development of the reforestation plan; 2) the reforestation plan shall be submitted to the County Urban Forester for review and approval prior to the approval of the first site plan; 3) plant material shall consist of 3-gallon containerized native trees, unless County staff determines smaller material (live stakes, bare root seedlings, etc.) is appropriate; 4) the reforestation shall be implemented prior to issuance of the first certificate of occupancy; 5) the applicant shall ensure a minimum of 80 percent of the initial planting is determined to be established after two growing seasons; 6) an annual inspection shall be conducted by the applicant and the County Urban Forester to verify establishment; and 7) if the 80 percent establishment isn’t achieved after the second growing season, a onetime planting to bring the project to full stocking shall be conducted by the applicant.

Response: In order to provide an elementary school at this location it will be necessary to remove the existing trees. LCPS appreciates the staff recognizing the critical need for school sites and suggesting alternatives for providing forest cover. LCPS will work with the County Urban Forester to develop a reforestation plan for the recommended areas and, depending on cost and budgeted funds, will reforest either of the areas as recommended.

Comment 4: To complement the protection of the eastern stream provided by the wetland preservation easement, which is mostly on the eastern side of the stream, staff recommends providing a tree save area that corresponds to the 50-foot GI Buffer on the western side of the stream. [RGP Forests, Trees, and Vegetation Policy 1 and River and Stream Corridor Policy 7]

Response: A tree save corresponding to the 50 foot GI Buffer on the western side of the stream has been incorporated into the SPEX as recommended.

Issues Regarding Water Quality

Comment 5: For the proposed bus parking area, ERT recommends installation of an oil-water separator to treat all runoff, above and beyond other best management practice (BMP) measures required. These areas are consistent with “fleet storage areas,” a hotspot use identified in FSM Section 5.320.E.1d.

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Response: An oil-water separator for the bus parking area has been incorporated as recommended. Please reference Note 25 on Sheet 1 of the SPEX plat.

Comment 6: To provide enhanced water quality protection, staff recommends that any proposed stormwater management (SWM)/BMP extended detention ponds (dry ponds) be designed as enhanced extended detention ponds (dry ponds with shallow marsh plantings). [Revised 1993 LCZO Section 6-1310(H) and RGP Surface Water Policy 5]

Response: The proposed plan has incorporated an enhanced extended detention pond as recommended. The pond is located west of the stadium.

Comment 7: Note 20 on Sheet 1 states that bioretention is proposed within the site to encourage infiltration and groundwater recharge. Please identify potential bioretention locations on Sheet 3. Staff recommends directing stormwater runoff to bioretention facilities corresponding with moderately well to well drained soils located on the property. [RGP Surface Water Policy 2]

Response: Sheet 3 of the SPEX plat has noted a bioretention facility south of the proposed high school building, to the east of the parking lot (at the southeast corner of the site) as recommended.

Comment 8: Please identify the shaded polygon depicted on Sheet 3, northwest of the high school stadium.

Response: The shaded polygon was an existing farm pond that will be removed. The shaded polygon has been removed from Sheet 3 to avoid confusion.

Comment 9: The regional SWM/BMP facility is located on-line with a jurisdictional stream, which is problematic. On-line SWM/BMP facilities are typically not permitted by the U.S. Army Corps of Engineers and Virginia Department of Environmental Quality. Staff recommends relocating the facility. [RGP River and Stream Corridor Resources Policies 11 and 23]

Response: The regional SWM/BMP facility cited was approved as a part of the Stone Ridge zoning approvals and permits have been approved by the U.S. Army Corps of Engineers and Department of Environmental Quality (DEQ).

Issues Regarding Steep Slopes

Comment 10: The steep slopes designation differs slightly from the Loudoun Geographic Information Systems (LOGIS) steep slopes layer. For clarity, please specify the basis for the steep slope designations on the plan set. [Revised 1993 LCZO Section 5-1508 and 6-407]

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Response: The steep slope information was derived from an aerial survey flown on April 6, 2004 by Air Survey with a contour interval of 2'. A note has been added to Sheet 2 (Reference Note 6).

Issues Regarding Green Building Practices

Comment 11: Staff appreciates the inclusion of sustainable design elements described in the statement of justification, consistent with Public Facilities text and General Public Facilities Policy 3 on page 3-6 of the RGP, which state that it is important that the location and design of public facilities set the highest possible standards and a positive example. With the second submittal, staff requests a benchmark analysis for Leadership in Energy and Environmental Design (LEED) for Schools, version 3 to indicate desired design outcomes for site sustainability, water efficiency, energy and atmosphere, indoor air quality, efficient materials and resources use, and innovative design. Providing the analysis will help assess where public facility design ranks vis-à-vis the LEED "silver" goal that is recommended in the December 2007 Metropolitan Washington Council of Governments green building report that was endorsed by the Board of Supervisors on April 15, 2008.

Response: LCPS will provide a comparison to the LEED requirements as soon as the design reaches a level of completion that allows for a complete description of the sustainable goals.

Comment 12: ERT commends Loudoun County Public Schools for earning Energy Star "Partner of the Year" for 2009 and deeply respects the effective public outreach that school staff is performing on energy conservation.

Response: Thank you

Dept. of Fire & Rescue Comments dated April 23, 2010

The Department of Fire and Rescue provided response times for the proposed schools. No Response necessary.

General Services Comments dated March 22, 2010

Comment: DGS has reviewed the above referenced proposal and because the stormwater management concept is incomplete we reserve our comments until it is completed.

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Response: DGS will have the opportunity to review the stormwater management plans as a part of the engineered site plan.

Health Department

Comments dated March 23, 2010

Comment 1: Ensure all the proposed lots and structures are properly served by public water and public sewer

Response: Acknowledged.

Comment 2: Ensure all existing wells and drainfields are shown on future plats.

Response: Acknowledged.

Comment 3: All existing wells and drainfields are properly abandoned (Health Department permit required) prior to grading, submission of record plat or razing the structure, whichever is first.

Response: LCPS will work with the Health Department to properly abandon wells and drainfields. LCPS would like to work with the Health Department to maintain one to two wells on the property for construction and irrigation purposes.

Loudoun Water

Comments dated April 27, 2010

Comment 1: Show conceptual layout of proposed water and sanitary sewer facilities.

Response: An additional sheet has been added to the SPEX plat to show the conceptual layout of the proposed water and sanitary sewer facilities. Please reference Sheet 6 of the SPEX plat.

Comment 2: Show location of existing water and sanitary sewer facilities.

Response: Please reference Sheet 6 of the SPEX plat.

Comment 3: Note on the plat that a 24" water main shall be constructed along Relocated Route 659 between Braddock Road (Route 620) and Tall Cedars Parkway. Show location of 24" water main on plat. Water service to this site is dependent upon extension of the Route 659 water main.

Response: Please reference Sheet 6 of the SPEX plat.

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Comment 4: Extend water and sanitary sewer lines and associated easements to adjacent properties as required.

Response: Sheet 6 of the SPEX plat depicts the proposed water and sewer lines. Please advise if there are extensions needed beyond what has been provided.

Comment 5: Should off-site easement be required to extend public water and/or sanitary sewer to this site, the applicant shall be responsible for acquiring such easements and dedicating them to Loudoun Water at no cost to Loudoun Water.

Response: Acknowledged.

Community Planning

Comments dated April 20, 2010

River & Stream Corridor Resources:

Comment 1: For the perennial stream near the intersection of Road "A" and Route 659 Relocated, staff recommends that the applicant use a stream crossing that protects the integrity of the streambed.

Response: Stone Ridge (Van Metre Companies) will be constructing the portion of Road A between Relocated Route 659 and the first residential street in Landbay 1 to the north of the school site.

Forest Resources

Comment 2: The preservation of existing vegetation in the proposed Tree Save Areas and the Green Infrastructure Area is consistent with the rural character envisioned in the Plan for developments in the Transition Policy Area. Staff recommends that the Tree Save Area be augmented with other forested areas, including the area east of the high school and the associated Physical Education Field, and the side and rear elementary school buffers.

Response: The SPEX Plat has been revised to incorporate a tree save within the 50 foot green infrastructure buffer to the east of the high school and the physical education field. While LCPS will endeavor to utilize existing trees as a part of the elementary school side and rear buffers the site is tight and it may not be possible. However, the side and rear buffers at the elementary school will be enhanced to incorporate additional evergreen tree plantings.

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Comment 3: Staff recommends that the applicant consider the replacement of the impacted forest resources within other portions of the Special Exception area, including the floodplain, other cleared areas within the Green Infrastructure Area, the proposed 50-foot Green Infrastructure Buffer, and buffer yards using indigenous plants. The applicant should coordinate with the County Urban Forester regarding these measures.

Response: LCPS will work with the County Urban Forester to develop a reforestation plan for other portions of the site. Please reference ERT Comment Response #3.

Comment 4: Staff further recommends a commitment to a long-term maintenance plan and forestry best management practices, including the removal of invasive species.

Response: On Sheet 3 of the SPEX under the Tree Save Narrative, there is a commitment to a long-term maintenance plan and forestry best management practices. Specifically:

After construction has been completed by the applicant, forest management techniques, performed by or recommended by a professional forester or certified arborist, that are necessary to protect or enhance the viability of the canopy may be undertaken. Such management techniques may include, without limitation, pruning and the removal of vines, invasive species, trees uprooted or damaged by extreme weather conditions, and trees or limbs that are diseased, insect-infested, dead or are considered a hazard to life or property. The site plan for each phase of the property containing a tree save area shall contain a note stating that the removal of trees within a tree save area is prohibited except in accordance with the provisions outlined in this note.

Comment 5: Staff recommends that the applicant specify the tree protection measures to be taken during construction to protect the surrounding vegetation from any direct physical damage or from indirect impacts, including soil compaction.

Response: A note has been added to the SPEX plat which outlines the tree protection measures to be undertaken during construction. Specifically:

Tree Conservation Areas shall be protected during construction by fencing, a minimum of four feet in height, placed at the limits of clearing and grading or at the drip line of the Tree Conservation Area, whichever is greater. Such fencing shall be installed prior to any land disturbing activity being conducted on any adjacent area, and shall be clearly visible to all construction personnel. The fencing shall be maintained throughout construction. A temporary sign stating "Tree Conservation Area-Do Not Disturb" [written in both English and Spanish] shall be posted so as to be clearly visible to on-site construction personnel.

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Historic and Archaeological Resources

Comment 6: Reference is made to the Staff Evaluation of historic and archaeological resources, attached to the Community Planning Referral. The evaluation dated April 19, 2010, concurs with the recommendations contained in the consolidated Phase I Archaeological Report prepared by Thunderbird Archeology dated December 2009. No mitigation of resources is warranted.

Response: No response necessary.

Building Scale And Form

Comment 7: Because the school buildings are longer than 150' in length, they do not meet County policies regarding the length of non-residential uses within the Transition Area. However, staff notes that the applicant has broken up several large building segments into smaller segments through the use of fenestration and setbacks. Staff recommends that views of the largest continuous surfaces be filtered through the use of nearby plantings.

Response: A type 2 buffer will be provided along Road A that will serve to complement the building. Along the eastern boundary of the site is the adjacent (off-site) wooded wetlands area and the on-site 50 foot green infrastructure/tree save buffer. To the west of the bus parking area, trees will be added for an internal filter to the building. Finally to the south of the parking lot, between the park and the school a landscape berm will be incorporated into the site layout.

Comment 8: Staff recommends that plantings be placed throughout the site, particularly shade trees and large shrubs, to help screen and soften views of buildings from roads, enhance the visual quality of the project, provide students, employees, and users of the facilities with open space, mitigate environmental impacts, allow the incorporation of indigenous vegetation into the project, and provide wildlife habitat.

Response: The site will be landscaped in accord with the County's landscape/buffering requirements including at the boundaries of the site and within the parking lots. In addition, certain locations will be enhanced such as the recommended landscaped berm south of the parking lot, the additional trees to the west of the bus parking lot, and the side and rear buffers of the elementary school as depicted on the SPEX Plat. In addition, an enhanced landscape plan will be prepared for the area to the north of the bus loop along Road A. Please Reference SPEX Plat, Sheet 3 notes.

Comment 9: Staff recommends that the applicant commit to the use of the depicted architectural treatments to ensure compatibility with the surrounding uses.

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Response: The High School building design shall avoid the use of continuous plane building surfaces and wherever practicable break up large building segments into smaller segments through the use of fenestration and setbacks. Building design will incorporate features to provide an aesthetic appearance including windows similar to residential construction and accent materials to provide interest in color and texture.

Parking

Comment 10: Staff recommends that parking surfaces be interspersed with tree plantings and other on-site landscape materials to prevent the creation of large continuous paved surfaces. Staff also recommends that the applicant pay special attention to views of parking areas from the adjacent uses and consider depressing the parking areas and/or screening them with berms to reduce their visual impact. The applicant should consider the use of a short berm to block the view of the southern high school parking lot from the adjacent proposed parkland.

Response: The parking areas will be interspersed with landscaping to prevent the creation of large paved surfaces. To the east of the high school is an off-site wetlands preservation area. LCPS has committed to saving the existing trees within a 50 foot green infrastructure buffer to the west of the wetlands preservation area. This combination will screen the school and parking areas from Relocated Route 659. To the north, along Road A, a type 2 front buffer will be provided and an enhanced landscape planting will be provided along Road A to the north of the bus loop. As noted above, the recommended landscape berm will be incorporated south of the high school parking lot.

Buffering

Comment 11: Staff recommends that the applicant commit to a landscape plan with special attention to the project's visual impact. Staff recommends that the plants frame front views of the schools, filter views of utility and parking areas, and be repeated throughout the school campus. The applicant should commit to the landscaping and buffering, a long-term maintenance plan, and the use of indigenous species for most or all of the plantings. Staff also recommends that the applicant consult with the County Arborist for plants indigenous to the area for use in the planting enhancement areas. Plantings should not be limited to external buffers, but should flow smoothly from external buffers into adjacent internal planting spaces.

Response: Please refer to Comment Responses #2, 3, 4, 7, 8 and 10 above and ERT Comment Responses #3 and 4. LCPS will work with the County Forester to utilize indigenous species for most or all of the plantings.

Stormwater Management

Comment 12: Staff recommends water treatment measures that mimic the pre-development conditions of the site, mitigate impacts to the watershed, and treat the stormwater runoff as an amenity, visible to students, employees, and visitors. The applicant should consider various site measures, such as permeable pavers, porous concrete, cisterns, planted swales, curb cuts, rain gardens, and bioretention filters adjacent to impervious areas, to promote infiltration on-site, minimize peak storm flows, and help filter non-point source pollutants. Pipe installation should be minimized. Staff recommends that stormwater management techniques provide efficient pollutant removal, that existing drainage patterns and hydrology to wetlands be maintained, and that low impact development (LID) techniques such as bioretention and sheet flow to vegetated buffer areas be implemented.

Response: Stormwater management for the site will be provided in accordance with the Virginia Stormwater Management Handbook as required by state permitting requirements. It is anticipated that these facilities will provide pollutant removal efficiencies of 50% or more, which exceeds minimum standards. Drainage patterns will be honored to the extent permitted by grading constraints associated athletic field and school construction. LID measures anticipated include bioretention and vegetative swales. Facilities anticipated for the site are as follows: A) A retention basin (wet pond) is planned to be constructed offsite as a regional facility in conjunction with the Stone Ridge development. This offsite facility allows the school project to avoid disturbance within the wetland conservation area to the east of the school site and has the opportunity to serve as an amenity to the community. B) A bioretention filter is planned to be located at the southeast corner of the site. This facility will, along with a vegetative swale along the southeast boundary, permit runoff to flow through vegetated areas prior to being treated by the facility. This facility will permit storm sewer piping to be reduced and provides an opportunity to serve as an amenity to the students, staff, and visitors. It also will allow adequate recharge of wetlands within the wetland preservation area to the east of the site. C) A vegetative marsh enhanced SWM facility (enhanced extended detention) is planned to treat runoff from the stadium complex and elementary school at the west side of the site. This facility will be located 'offline' preserving existing wetlands, and will provide pollutant removal efficiency in excess of what would normally be required.

Efficiency

Comment 13: Staff recommends that the applicant specify and commit to the sustainable design measures to be incorporated into the project site and building.

Response: LCPS is committed to the incorporation of sustainable design measures for both the site and building. LCPS will provide a comparison to the LEED requirements to the County as soon as the design reaches a level of completion that allows for a complete description of the sustainable goals.

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Bicycle & Pedestrian Accommodations

Comment 14: In addition to the facilities depicted on the Pedestrian Circulation Map, staff recommends that the applicant commit to the following facilities:

- A sidewalk on the east side of the internal loop road to the south and east of the proposed high school;
- A sidewalk on the south side of Road "B" along with two additional crosswalks at the Route 659 Relocated/Road "B" intersection and one additional crosswalk at the north-south internal road/Road "B" intersection; and
- An additional sidewalk on the east side of the north-south internal road opposite the high school softball field.

Response: The following responses are offered regarding the pedestrian circulation plan:

- Placing a sidewalk on the east side of the internal loop road to the south and east of the proposed high school would require clearing closer to the wetlands area and the recommended tree save area located within the 50 foot green infrastructure buffer. The sidewalk along the west side of the internal loop road will provide adequate pedestrian access for the proposed facilities.
- On 5/24 LCPS met with Parks and Recreation staff who asked that the sidewalk that had been proposed on the north side of Road B be changed to a multi-use trail. Further, Parks and Recreation staff advised that they did not want a sidewalk on the south side of Road B nor on the west side of the park. An alternative pedestrian connection was requested to connect the high school parking lot to the future trail that is to be constructed around the pond located on the park site. These changes have been incorporated into the SPEX Plat.

Comment 15: Staff recommends that all bicycle and pedestrian facilities be constructed in accordance with County policies, AASHTO, and ADA.

Response: Bicycle and pedestrian facilities will be constructed in accordance with county policies, AASHTO and ADA.

Lighting & Signage

Comment 16: Staff recommends that the applicant commit to lighting that is downward directed, is fully shielded, provides a glare-free environment, is confined to the site, and has illumination levels that are no greater than necessary for a light's intended purpose. All lighting should be designed to preclude light trespass onto adjoining properties, glare to passersby, skyglow, and deterioration of the nighttime environment.

Loudoun County Public Schools
HS-7 Dulles South and Elementary School
ZMAP 2010-0001, SPEX 2010-0003
Response to Referral Comments
June 8, 2010

Response: Lighting shall be cut-off and fully shielded and directed downwards and into the interior of the Property and away from surrounding public roads and properties. Lighting shall meet the performance standards of Section 5-1504 of the Zoning Ordinance.

Comment 17: Staff also encourages the applicant to provide signage that will alert people to the presence of significant environmental features, such as the Tree Save Area, wetlands, and floodplain. The signs should also include interpretive information regarding the natural significance of the area, particularly along pedestrian pathways.

Response: Signage will be incorporated into the site to identify significant environmental features including Tree Save Areas, wetlands and the floodplain. Interpretive information regarding the natural significance of the area will be included in the signage.

S:\Planning\Goshen Road Assemblage\Referral ResponsesHS7.doc

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RECEIVED

JUN - 9 2010

LOUDOUN COUNTY

**HS-7 Dulles South High School and
Elementary School, Goshen Road Assemblage
BCG Job #: 5185-01-002**

TREE COVER EVALUATION – SOUTHERN PORTION OF SITE

Inventory Location

Inventory was conducted on the southern portion of the Goshen Assemblage site, to include entire Frances L Hall parcel (MCPI # 249-38-2718) and the majority of the Doris Mae Larsen parcel (MCPI # 248-37-9637), located on the west side of Goshen Road (Route 616) between John Mosby Highway (Route 50) and Braddock Road (Route 620).

Inventory Area

15 acres (+/-)

Topography

Level to gently sloping

Inventory Procedure

A one hundred percent (100%) inventory was taken of all deciduous trees that measured a minimum of twenty-two inches (22") in diameter and conifers that measured a minimum of fourteen inches (14") in diameter at 4.5 feet above ground level. Each tree was tagged with a specific number and the diameter, species, and crown width of each specimen was recorded. Any unique descriptive features were also noted, as appropriate. The inventory was completed on December 14, 2009.

Insect/Disease

Little to no insect or disease damage found within the inventory area. Where damage was detected, it was on over mature declining specimens.

Understory Description

Sparingly stocked with Hickory (*Carya* sp.), Eastern Red Cedar (*Juniperus virginiana*), mixed Oak (*Quercus* sp.), Black Gum (*Nyssa sylvatica*) and Black Cherry (*Prunus serotina*). The understory consists of mostly stems ranging in diameter from approximately two inches (2") to ten inches (10").

Stand Description

This stand is an over mature stand consisting primarily of Oak (*Quercus* sp.) and Virginia Pine (*Pinus virginiana*). Of the specimens measured in this study, the stand is comprised with approximately seventy five percent (75%) Oak species (*Quercus* sp.), twenty three percent (23%) Virginia Pine (*Pinus virginiana*) and two percent (2%) Hickory (*Carya* sp.). The majority of the species ranging in diameter from twelve inches (12") to twenty inches (20") consist mainly of Oak (*Quercus* sp.) with a few scattered Hickory (*Carya* sp.) and Virginia Pine (*Pinus*

virginiana). The canopy is closed, and is receding due to the age and decline of the canopy species. No heritage or monarch trees were found within the surveyed area. The specimen trees, with a diameter of thirty inches (30") or greater, were found to be in various stages of decline.

Stand Evaluation

Overall, the stand was found to be generally healthy and free of insect damage. The majority of the larger trees, twenty six inches (26") and greater, are in various stages of decline, whereas the smaller trees seem to be healthy and somewhat vigorous. The under story is sparsely stocked with little to no underbrush, this is likely a result of the combination of the closed canopy and damage from over browsing.

Narrative Prepared by: Brian Gainer, ISA Certified Arborist MA-4808A

Tree #	Common Name Identification	Scientific Name Identification	DBH - Inches	DripLine - Diameter in Feet	Area of Root System	Comments
701	Black Oak	Quercus velutina	24	36	2290	Double @ 3' (18" broken off-dead)
702	Virginia Pine	Pinus virginiana	16	22	855	
703	Virginia Pine	Pinus virginiana	14	18	572	One sided crown
704	Virginia Pine	Pinus virginiana	14	18	572	
705	Pin Oak	Quercus palustris	22	26	1194	
706	Virginia Pine	Pinus virginiana	20	30	1590	
707	Black Oak	Quercus velutina	30	30	1590	Receding crown, Open areas of decay
708	Virginia Pine	Pinus virginiana	18	20	707	Insect damage, Fence line
709	Virginia Pine	Pinus virginiana	18	20	707	Insect damage
710	White Oak	Quercus alba	32	38	2551	Receding crown
711	Virginia Pine	Pinus virginiana	18	24	1018	
712	Black Oak	Quercus velutina	22	28	1385	Receding crown
713	Black Oak	Quercus velutina	24	30	1590	
714	Black Oak	Quercus velutina	24	32	1809	
715	Black Oak	Quercus velutina	28	40	2827	Receding crown, Open areas of decay
716	Virginia Pine	Pinus virginiana	20	22	855	
717	Virginia Pine	Pinus virginiana	18	20	707	
718	Virginia Pine	Pinus virginiana	16	20	707	
719	Virginia Pine	Pinus virginiana	16	18	572	Open areas of decay
720	White Oak	Quercus alba	24	36	2290	Receding crown, Open areas of decay
721	White Oak	Quercus alba	38	42	3117	Receding crown, Open areas of decay, Insect damage
722	Virginia Pine	Pinus virginiana	14	18	572	
723	Virginia Pine	Pinus virginiana	16	22	855	
724	Virginia Pine	Pinus virginiana	20	24	1018	
725	Virginia Pine	Pinus virginiana	22	28	1385	
726	White Oak	Quercus alba	28	42	3117	Receding crown
727	Black Oak	Quercus velutina	28	32	1809	Receding crown, Open areas of decay
728	Black Oak	Quercus velutina	28	36	2290	
729	Black Oak	Quercus velutina	36	48	4071	Receding crown, Open areas of decay
730	Black Oak	Quercus velutina	28	38	2551	
731	Black Oak	Quercus velutina	30	38	2551	Receding crown, Stress cracks
732	White Oak	Quercus alba	32	50	4417	
733	White Oak	Quercus alba	24	34	2043	
734	Black Oak	Quercus velutina	28	34	2043	Receding crown
735	White Oak	Quercus alba	24	30	1590	
736	Black Oak	Quercus velutina	26	32	1809	
737	Black Oak	Quercus velutina	26	30	1590	Open areas of decay
738	White Oak	Quercus alba	26	34	2043	Receding crown, Open areas of decay

739	Black Oak	Quercus velutina	22	28	1385	
740	Virginia Pine	Pinus virginiana	14	24	1018	
741	Virginia Pine	Pinus virginiana	18	28	1385	
742	Virginia Pine	Pinus virginiana	14	20	707	Fenceline
743	Virginia Pine	Pinus virginiana	16	22	855	
744	White Oak	Quercus alba	28	44	3421	
745	White Oak	Quercus alba	22	32	1809	
746	White Oak	Quercus alba	26	32	1809	
747	White Oak	Quercus alba	26	30	1590	
748	White Oak	Quercus alba	22	30	1590	
749	Virginia Pine	Pinus virginiana	16	22	855	
750	Virginia Pine	Pinus virginiana	16	22	855	
751	Black Oak	Quercus velutina	26	32	1809	
752	Virginia Pine	Pinus virginiana	14	22	855	
753	White Oak	Quercus alba	38	34	2043	Forks @ 5', Receding crown, Open areas of decay, Insect damage
754	Black Oak	Quercus velutina	24	30	1590	
755	White Oak	Quercus alba	24	28	1385	Fork @ 6', Receding crown, Open areas of decay, Insect damage
756	White Oak	Quercus alba	24	34	2043	
757	Black Oak	Quercus velutina	40	42	3117	Forks @ 8', Receding crown
758	Hickory	Carya species	22	30	1590	
759	White Oak	Quercus alba	26	34	2043	
760	White Oak	Quercus alba	34	40	2827	Forks @ 5', Receding crown
761	White Oak	Quercus alba	22	32	1809	Receding crown
762	White Oak	Quercus alba	24	34	2043	Double @ 2' (12")
763	White Oak	Quercus alba	22	28	1385	Receding crown
764	Black Oak	Quercus velutina	36	36	2290	Forks @ 5'
765	Black Oak	Quercus velutina	26	36	2290	
766	Black Oak	Quercus velutina	26	30	1590	
767	White Oak	Quercus alba	26	30	1590	Open areas of decay
768	White Oak	Quercus alba	22	34	2043	Open areas of decay, Hollow
769	White Oak	Quercus alba	22	30	1590	Open areas of decay
770	Virginia Pine	Pinus virginiana	16	24	1018	
771	Virginia Pine	Pinus virginiana	14	18	572	
772	Virginia Pine	Pinus virginiana	14	20	707	
773	White Oak	Quercus alba	30	50	4417	Receding crown
774	White Oak	Quercus alba	26	36	2290	
775	Black Oak	Quercus velutina	28	32	1809	Receding crown
776	White Oak	Quercus alba	38	46	3739	Receding crown
777	Black Oak	Quercus velutina	22	28	1385	Receding crown
778	White Oak	Quercus alba	30	36	2290	Receding crown, Open areas of decay
779	White Oak	Quercus alba	28	34	2043	Receding crown, Open areas of decay
780	White Oak	Quercus alba	40	48	4071	Forks @ 5', Receding crown, Open areas of decay

781	White Oak	Quercus alba	28	40	2827	Poor form, Stress crack
782	White Oak	Quercus alba	22	32	1809	
783	White Oak	Quercus alba	34	34	2043	Forks @ 5'
784	White Oak	Quercus alba	24	32	1809	
785	White Oak	Quercus alba	22	34	2043	
786	White Oak	Quercus alba	24	34	2043	Receding crown, Open areas of decay
787	White Oak	Quercus alba	22	30	1590	
788	White Oak	Quercus alba	26	30	1590	Forks @ 7'
789	Black Oak	Quercus velutina	28	38	2551	
790	Black Oak	Quercus velutina	24	34	2043	
791	White Oak	Quercus alba	32	32	1809	Forks @ 7'
792	Black Oak	Quercus velutina	24	36	2290	Open areas of decay
793	Black Oak	Quercus velutina	32	38	2551	Fenceline
794	Black Oak	Quercus velutina	24	38	2551	
795	White Oak	Quercus alba	30	50	4417	
796	White Oak	Quercus alba	26	36	2290	Double @ 4' (dead), Open areas of decay
797	White Oak	Quercus alba	28	32	1809	Forks @ 5'
798	White Oak	Quercus alba	32	40	2827	Forks @ 7'
799	White Oak	Quercus alba	22	34	2043	
800	White Oak	Quercus alba	26	32	1809	
801	White Oak	Quercus alba	32	30	1590	Open areas of decay
802	Black Oak	Quercus velutina	22	28	1385	Receding crown, Open areas of decay
803	Black Oak	Quercus velutina	22	28	1385	
804	White Oak	Quercus alba	22	32	1809	Fenceline
805	White Oak	Quercus alba	22	30	1590	Open areas of decay
806	White Oak	Quercus alba	24	32	1809	
807	White Oak	Quercus alba	22	28	1385	
808	White Oak	Quercus alba	28	28	1385	Forks @ 7'
809	Black Oak	Quercus velutina	22	36	2290	
810	Black Oak	Quercus velutina	22	34	2043	
811	Black Oak	Quercus velutina	22	24	1018	Double @ ground level (20")
812	Black Oak	Quercus velutina	28	36	2290	
813	Black Oak	Quercus velutina	30	42	3117	
814	White Oak	Quercus alba	28	38	2551	
815	White Oak	Quercus alba	24	32	1809	
816	Black Oak	Quercus velutina	22	28	1385	
817	White Oak	Quercus alba	22	32	1809	
818	Black Oak	Quercus velutina	24	32	1809	Receding crown, Open areas of decay
819	White Oak	Quercus alba	30	28	1385	Receding crown, Open areas of decay
820	White Oak	Quercus alba	24	34	2043	Double @ ground level (20"), Forks @ 6'
821	Black Oak	Quercus velutina	42	46	3739	Receding crown, Open areas of decay
822	White Oak	Quercus alba	26	38	2551	Forks @ 7'

823	Hickory	Carya species	22	28	1385	Forks @ 7', Insect damage
824	Black Oak	Quercus velutina	28	30	1590	Receding crown, Open areas of decay
825	Black Oak	Quercus velutina	22	30	1590	
826	White Oak	Quercus alba	22	32	1809	Double @ ground level (10')
827	Black Oak	Quercus velutina	24	30	1590	Receding crown, Open areas of decay
828	White Oak	Quercus alba	22	30	1590	Triple @ Ground level (8", 20"), Receding crown, Insect damage
829	Hickory	Carya species	24	32	1809	
830	Black Oak	Quercus velutina	22	30	1590	Receding crown
831	White Oak	Quercus alba	28	46	3739	Receding crown, Open areas of decay, Insect damage
832	Virginia Pine	Pinus virginiana	16	24	1018	Open areas of decay
833	Virginia Pine	Pinus virginiana	14	26	1194	
834	Virginia Pine	Pinus virginiana	14	22	855	
835	Virginia Pine	Pinus virginiana	16	24	1018	
836	Hickory	Carya species	22	26	1194	
837	Black Oak	Quercus velutina	32	32	1809	Receding crown
838	Virginia Pine	Pinus virginiana	18	24	1018	Open areas of decay
839	White Oak	Quercus alba	28	34	2043	
840	Black Oak	Quercus velutina	30	48	4071	
841	White Oak	Quercus alba	28	42	3117	
842	Virginia Pine	Pinus virginiana	14	18	572	
843	Virginia Pine	Pinus virginiana	14	20	707	
844	Virginia Pine	Pinus virginiana	16	20	707	



 Evaluated by: Brian Garner ISA Certified Arborist MA-4808A

 12-15-09



MEMORANDUM

TO: John Bassett
Marchant Schneider

VDOT
Loudoun County OTS

CC: Sam Adamo
Sara Howard-O'Brien

Loudoun County Public Schools
Loudoun County Public Schools

FROM: Christopher M. Tacinelli
Tushar A. Awar

DATE: June 9, 2010

SUBJECT: Response to Comments for Loudoun County Public Schools
HS-7 Dulles South High School and Elementary School, Goshen Road Assemblage
(1st Submission) Loudoun County Plan Number ZMAP 2010-0001 and SPEX 2010-0003

This document addresses the comments received from VDOT for the traffic impact analysis prepared for Loudoun County Public Schools HS-7 Dulles South High School and Elementary School, Goshen Road Assemblage (1st Submission), Loudoun County Plan Number ZMAP 2010-0001 and SPEX 2010-0003 in Loudoun County, Virginia. Each comment is presented in *italics* with the response in **bold** immediately following.

COMMENTS:

1) *Please provide Level of Service (LOS) by lane group in both tables and figures.*

Comment acknowledged. The revised report dated June 9, 2010 provides Level of Service (LOS) by lane group in both tables and figures.

2) *Page 63, Figure 27; site generated traffic volume (in and out of the site) does not match with the trip generated (e.g. AM traffic out of the site is 128+30+37+0+17 = 212, but trip generated is only 158) Even though the number used is more than trips generated but please verify and justify. Also, provide an example how the Figures 28-31 (page 64-67) were generated. The example should involve data as well as referenced table/figure #s.*

There were two separate trip generation scenarios analyzed under future conditions (2015) with the proposed elementary school and high school in place. One scenario



- 3) *Background developments; Background developments used in the report (page 21, page 43 etc) does not match as provided in the scoping documents. Also, background development # 13 on page # 21 does not match on page 22 (Figure 7) and an additional background development # 14 is shown on page 22 (Figure 7).*

After the scoping meeting was held, the exact locations and designations (names) of these developments were verified. In this process, the background development locations and names for a couple of developments were changed with the most updated information.

Background development #13 on page #21 was shown as background development #14 on page 22 (Figure 7). This was a typographical error and has been corrected in the revised traffic study.

Per Loudoun County staff's request, after the scoping meeting, an additional background development, Arcola Center, was added to the analysis. Traffic generated by the additional background development (Arcola Center) shown in Figure 7 was considered as part of the background traffic for the future without development conditions (2015) only. Two separate maps showing locations of the approved developments for both 2012 (Figure 7) and 2015 (Figure 21) are included in the revised traffic study.

- 4) *Page 23, Figure 8, intersection # 1; Westbound through AM peak volume is shown as 451 and 384 used in synchro analysis. Also, page 35, Figure 14, intersection # 7; Eastbound AM peak through volume is shown as 19 and used 19 in synchro. Should it not be 9? Please verify and correct accordingly.*

The westbound AM peak through volume at intersection #1 should be 384 trips and not 451. The previously submitted Synchro files and capacity analysis are correct. The typographical error in Figure 8 has been corrected in the revised traffic study.

The eastbound AM peak right turn volume at intersection #7 (Figure 14) should be 19 and not 9. The eastbound AM peak right turn volume at intersection #7 (Figure 12, page 33) should be 19 and not 9. This was a typographical error and has been corrected in the revised traffic study.

Comment acknowledged. LCPS is willing to provide for future signal warrant analysis and fund future signals if warranted. This should be addressed as a part of the Special Exception.

11) This study has assumed 8% heavy truck on US 50 where VDOT's license plate survey (conducted in June 2008) showed 13% heavy truck for the same location on US 50. Please make the adjustment and re-evaluate the impact.

Comment acknowledged. The Synchro files were updated to reflect this change. The results are included in the revised report.

Appendix A: Figures

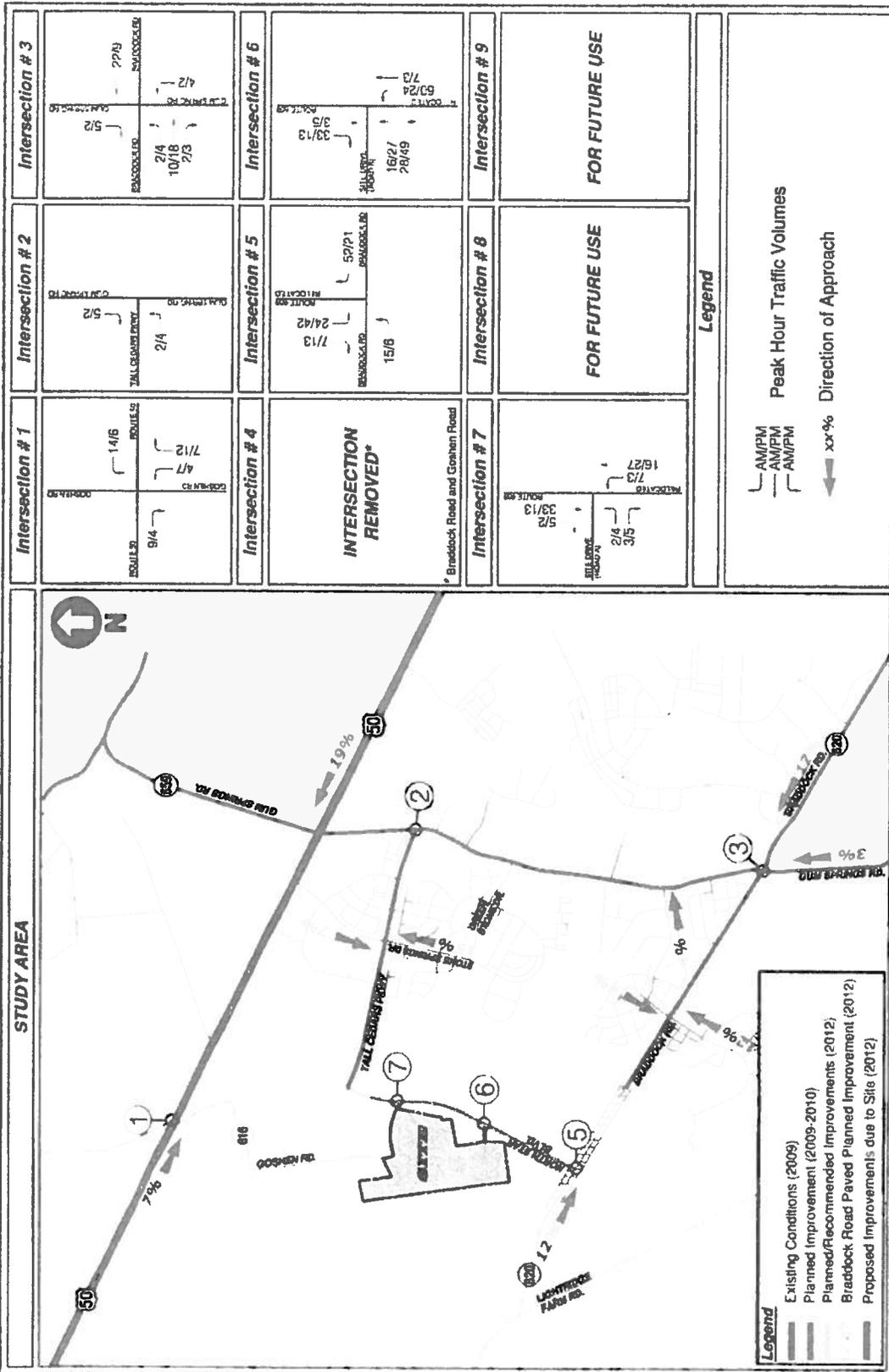


Figure 4
 Site Generated Traffic Volumes and Direction of Approach (2015)-High School
 Elementary School Peak Hour (7:00 AM to 8:00 AM and 2:15 PM to 3:15 PM)
 Alternative 1: Mixed Feed

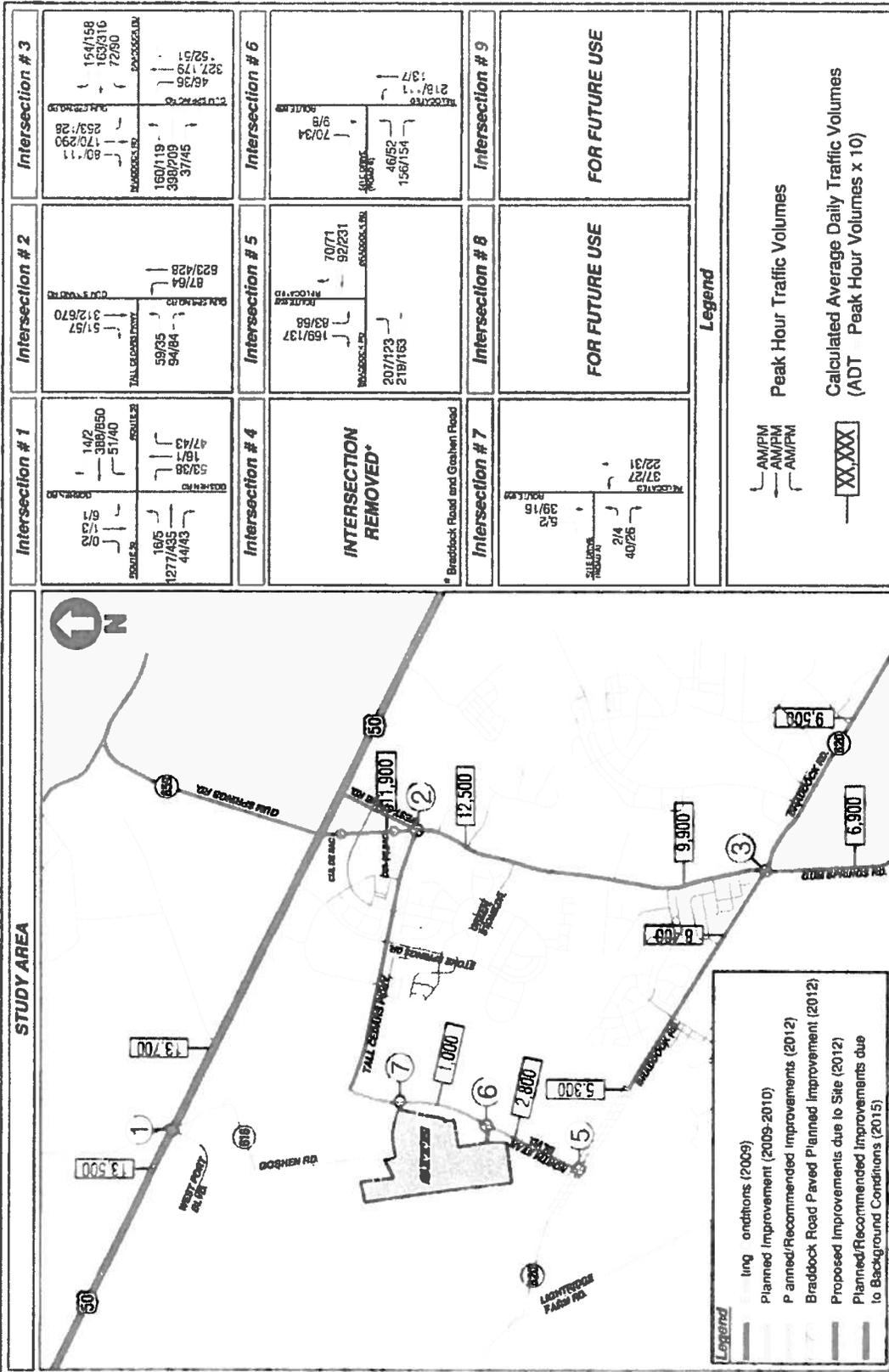


Figure 6
 Figure with Development Traffic Volumes (2015)
 Elementary School Peak Hour (7:00 AM to 8:00 AM and 2:15 PM to 3:15 PM)
 Alternative 1 : Mixed Feed

Weekly Average	Daily Average	Time	Potomac Falls HS	Freedom HS	Loudoun County HS
1	4	12:00 AM	0	0	13
0	0	12:15 AM	0	0	0
0	0	12:30 AM	0	0	0
0	0	12:45 AM	0	0	0
1	0	01:00 AM	0	0	0
0	1	01:15 AM	0	3	0
0	0	01:30 AM	0	0	0
0	0	01:45 AM	0	0	0
0	0	02:00 AM	0	0	0
0	0	02:15 AM	0	0	0
0	0	02:30 AM	0	0	1
0	0	02:45 AM	0	0	0
0	0	03:00 AM	0	0	0
0	0	03:15 AM	0	0	0
0	0	03:30 AM	0	0	0
0	0	03:45 AM	0	0	0
0	0	04:00 AM	1	0	0
0	0	04:15 AM	1	0	0
1	2	04:30 AM	2	2	1
1	1	04:45 AM	3	1	0
2	1	05:00 AM	1	1	1
1	0	05:15 AM	0	0	0
2	2	05:30 AM	1	4	0
4	3	05:45 AM	6	2	0
5	3	06:00 AM	5	3	0
10	10	06:15 AM	5	14	12
10	13	06:30 AM	17	15	7
22	21	06:45 AM	22	29	13
28	38	07:00 AM	39	41	33
35	60	07:15 AM	35	51	94
41	63	07:30 AM	36	69	84
66	88	07:45 AM	91	90	84
101	140	08:00 AM	156	142	123
128	168	08:15 AM	181	183	141
220	276	08:30 AM	272	281	274
295	363	08:45 AM	367	325	397
64	77	09:00 AM	66	76	90
21	20	09:15 AM	19	13	28
16	17	09:30 AM	15	18	19
17	20	09:45 AM	26	16	17
13	13	10:00 AM	10	11	17
16	15	10:15 AM	16	13	17
23	25	10:30 AM	23	18	33
18	21	10:45 AM	15	16	31
18	23	11:00 AM	25	25	20
15	20	11:15 AM	10	16	33
17	20	11:30 AM	18	21	20
17	24	11:45 AM	19	17	35

Note The Elementary School Peak Hours are from 7:00AM to 8:00 AM and are highlighted in yellow
The High School Peak Hours are from 8:00AM to 9:00 AM and are highlighted in green

Average Trips Generated by High School from 8:00AM to 9:00 AM = 745
Average Trips Generated by High School from 7:00AM to 8:00 AM = 171

Percentage of High School Traffic During Elementary School Peak Hours (AM) = 23%



LANDTRACK INFORMATION SHEET

This sheet is a summary of information relating to a submission made in accordance with the requirements of the Traffic Impact Analysis Regulations (24 VAC 30-155).

Submission Details

Project Name	Lo.Co. School Board: HS7/ES	Locality's Project ID	ZMAP 2010-0001
VDOT District	Northern Virginia	Jurisdiction	Loudoun County
Locality Contact	Wini Polis	TIA Preparer	Gorove/Slade Associates, Inc

Location

Route Number	Street Name	Principal Rte	ADT
620	Braddock Road	<input checked="" type="checkbox"/>	2800
659	Gum Springs Road	<input checked="" type="checkbox"/>	5800
		<input type="checkbox"/>	

Site Details

Submission Type	Zoning TIA Review	Chapter 527 Submission	YES
Facility Type	-- Select --	Acreage	97
Residential Units		Commercial SqFt	
VPH (net)	756	VPD (net)	3913
Principal Parcel ID	247-28-4151	Doubles Road VPD	NO
Other Parcel ID(s)	247-17-3577	248-47-8669	248-37-9637
	247-17-8636	248-47-8234	248-38-2718
	248-47-9789	248-37-9082	248-48-6530

Payment

Fee Waived	YES	Reason for Waiver	2nd Submission
Payment Included	NO	Payment Type	-- Select --
Check #		Check Holder	
Payment Amount		Received From	

Tracking

Date Received by Locality	Locality's Requested Due Date
---------------------------	-------------------------------

Comments

Facility Type: High School with approximately 1,800 students, and Elementary School with approximately 875 students

Fee Waived as this is a County School project.
 Along with the ZMAP, a SPEX is also being proposed: SPEX 2010-0003

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MEMORANDUM

TO: George Phillips Loudoun County
Lou Mosurak Loudoun County
Marchant Schneider Loudoun County

FROM: Anushree Goradia
Tushar Awar, P.E.
Christopher Tacinelli, P.E.

DATE: August 12, 2010

SUBJECT: Dulles South High School (HS-7) and Elementary School (ZMAP 2010-0001 and SPEX 2010-003) – Supplemental Analysis: Response to OTS Comments

INTRODUCTION

The Office of Transportation Services (OTS) reviewed the traffic study prepared for this application dated March 8, 2010. OTS staff also reviewed the revised version of the traffic study June 9, 2010, which incorporated the School Board's May 2010 adopted attendance zones/catchment areas for the proposed High School. A referral dated July 13, 2010 was issued by OTS. A supplemental analysis memorandum dated July 22, 2010 was prepared and submitted in order to address Comments # 6 and # 11 from the OTS referral. A follow up meeting was held with OTS staff on August 10, 2010 to discuss the supplemental analysis.

At the meeting held with OTS staff on August 10, 2010, additional analysis was requested for the intersection of Stone Springs Boulevard and Tall Cedars Parkway (related to comment # 11) during the 'Commuter' peak hours. The school generated traffic during the morning peak hour overlaps with the commuter peak hour. However, in the PM, the school peak hours fall outside the commuter peak hours.

Per OTS staff's request capacity analysis was conducted for both the AM and PM commuter peak hours at the intersection of Stone Springs Boulevard and Tall Cedars Parkway. The background traffic generation and distribution was maintained consistent with the June 9, 2010 traffic impact study. The information presented in the traffic study was utilized for this analysis as well. The results are summarized in Tables 1A and 1B on the next page.

Table 1A: Intersection Capacity Analysis Results – Future Conditions with Development (2015) – AMPH

Intersection (Approach/Movement)	ES AM Peak Hour (7:00 AM - 8:00 AM)		HS AM Peak Hour (8:00 AM - 9:00 AM)		AM Commuter Peak Hour* (7:30 AM - 8:30 AM)	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Stone Springs Blvd. / Tall Cedars Pkwy. Overall (Unsignalized – All Way Stop Control)	B	11.6	A	8.8	B	14.3
Eastbound Approach	B	10.9	A	8.7	B	12.9
Westbound Approach	B	10.2	A	8.5	B	11.4
Northbound Approach	B	13.9	A	9.3	C	18.5
Southbound Approach	B	10.0	A	8.4	B	11.7

Table 1B: Intersection Capacity Analysis Results – Future Conditions with Development (2015) – PMPH

Intersection (Approach/Movement)	ES PM Peak Hour (2:15 PM - 3:15 PM)		HS PM Peak Hour (3:30 PM - 4:30 PM)		PM Commuter Peak Hour* (4:30 PM - 5:30 PM)	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Stone Springs Blvd. / Tall Cedars Pkwy. Overall (Unsignalized – All Way Stop Control)	A	7.8	A	8.7	A	8.6
Eastbound Approach	A	7.9	A	8.8	A	8.5
Westbound Approach	A	7.5	A	8.3	A	8.3
Northbound Approach	A	7.8	A	9.0	A	8.5
Southbound Approach	A	7.8	A	8.5	A	8.9

**Note: HS and ES Traffic Reduced from School Peak Hours*

CONCLUSIONS

- Per OTS staff's request, the intersection of Stone Springs Boulevard and Tall Cedars Parkway was analyzed under future conditions with development (2015) scenarios. The analysis was conducted for all relevant School and Commuter peak hours. The analysis reveals that the study intersection will operate at acceptable level of service under all peak hour scenarios.
- The school traffic % at the intersection of Stone Springs Boulevard and Tall Cedars Parkway during the commuter peak hours is:
 - 13% during the AM commuter peak hour, and
 - 11% during the PM commuter peak hour
- In addition, the proffer conditions for the Stone Ridge Commercial development reveal that a traffic signal is proffered at this intersection when warranted.

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MEMORANDUM

TO: George Phillips Loudoun County
Lou Mosurak Loudoun County
Marchant Schneider Loudoun County

FROM: Anushree Goradia
Tushar Awar, P.E.
Christopher Tacinelli, P.E.

DATE: July 22, 2010

SUBJECT: Dulles South High School (HS-7) and Elementary School (ZMAP 2010-0001 and SPEX 2010-003)
– Supplemental Analysis: Response to OTS Comments

INTRODUCTION

The Office of Transportation Services (OTS) reviewed the traffic study prepared for this application dated March 8, 2010. OTS staff also reviewed the revised version of the traffic study June 9, 2010, which incorporated the School Board's May 2010 adopted attendance zones/catchment areas for the proposed High School. A referral dated July 13, 2010 was issued by OTS.

OTS COMMENT AND RESPONSE

Comment #6 from the OTS referral states – 'If not already constructed by others prior to the opening of the high school in 2012, the Applicant should construct the turn lanes recommended by the traffic study at the Gum Spring Road/Braddock Road intersection. Any necessary modifications to the existing traffic signal at this intersection should also be the responsibility of the Applicant if such modifications have not already been made by others. The Applicant should seek reimbursement for these improvements/modifications to the extent that they have been proffered as part of other developments in the area.'

At the meeting held with OTS staff on July 21, 2010, the improvements identified in the traffic study at the intersection of Gum Spring Road/Braddock Road prior to the opening of the high school in 2012 were identified. The following improvements identified in the traffic study at this intersection, although proffered by others, are not in place:

- Separate Left Turn Lane on Braddock Road EB (to NB 659) – Proffered by *Kirkpatrick Farms and Seven Hills*
- Separate Left Turn Lane on Braddock Road WB (to SB 659) - Proffered by *Seven Hills*

- Upgrade Right Turn Lane on Braddock Road EB (to SB 659) to meet VDOT Standards - Proffered by Kirkpatrick Farms

At the meeting with OTS staff, it was discussed that as the analysis in the traffic study accounted for traffic generated by the background developments, including the background developments listed above; there is a certain level of ambiguity with respect to the volume/capacity thresholds for these improvements. Hence, an analysis was conducted with the existing traffic, regional growth and the traffic generated by the proposed schools to evaluate exact level of impact from the school traffic at this intersection, without assuming the improvements listed above and without assuming traffic generated by approved developments in the area.

The existing volumes, inherent regional growth rates, and the school traffic distribution were maintained as presented in and consistent with the traffic study, dated June 9, 2010. Table 1 below presents the capacity analysis results.

Table 1: Intersection Capacity Analysis Results – Gum Spring Road/Braddock Road

Intersection (Approach/Movement)	AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Future Conditions with Development (2012) -HS Peak Hour (8-9 AM/3:30-4:30 PM)				
Overall (Signalized)	D	40.3	C	29.3
Eastbound Approach	D	48.5	C	30.1
Westbound Approach	D	46.0	C	28.7
Northbound Approach	D	40.4	C	29.5
Southbound Approach	C	26.5	C	29.1
Future Conditions with Development (2015) -HS Peak Hour (8-9 AM/3:30-4:30 PM)				
Overall (Unsignalized – All Way Stop Control)	D	43.2	C	30.3
Eastbound Approach	D	52.1	C	31.3
Westbound Approach	D	50.4	C	29.5
Northbound Approach	D	41.8	C	30.3
Southbound Approach	C	28.5	C	30.3

**Note: There is no traffic from the proposed Elementary School anticipated to utilize this intersection.*

Figure 1 on the next page shows the traffic volumes, capacity analysis results and lane configuration assumed for the intersection of Gum Spring Road and Braddock Road. The traffic count sheets and the capacity analysis Synchro worksheets are attached in the Appendix section.

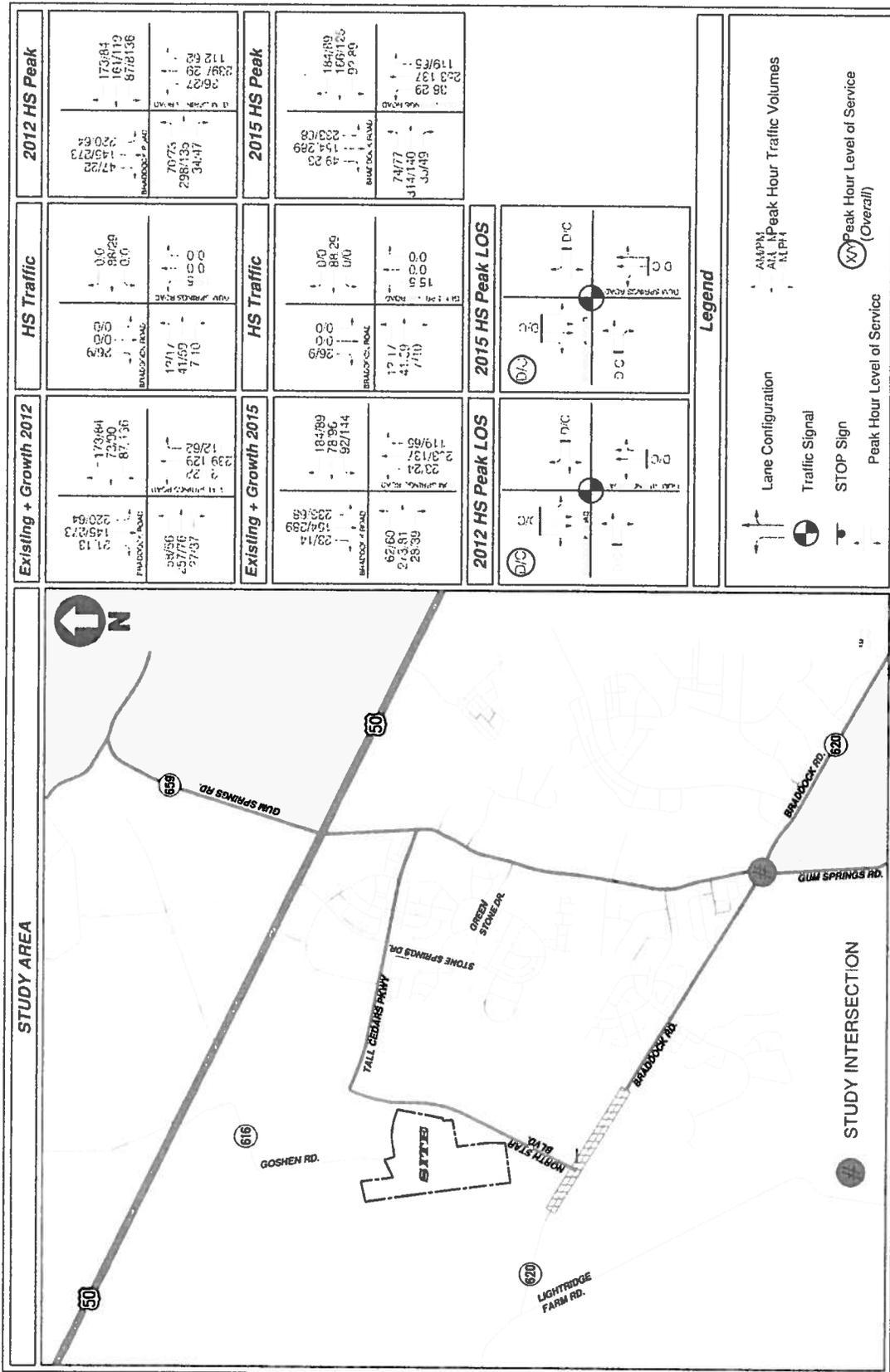


Figure 1 Gum Spring Road and Braddock Road

Comment #11 from the OTS referral states – ‘While not included in the scoping agreement, a significant percentage of high school site-generated traffic is anticipated by the traffic study to go through the Stone Springs Boulevard/Tall Cedars Parkway intersection. According to the June 2009 traffic study for the Stone Ridge Commercial rezoning (ZMAP 2006-0011), certain movements at this intersection are forecast to operate at failing LOS (LOS E or F) by 2015 even without the proposed schools in place. The Applicant should analyze the intersection and identify and commit to necessary mitigation measures to maintain/restore acceptable LOS (LOS D or better) at this intersection.’

In order to address this comment, this memorandum presents the results of the analysis conducted at the intersection of Stone Springs Boulevard/Tall Cedars Parkway under future conditions with development – HS Peak Hour (2012), and future conditions with development – ES Peak Hour (2015). The School Board’s adopted catchment area was utilized to evaluate the capacity analysis results. The background traffic generation and distribution was maintained consistent with the June 9, 2010 traffic impact study. Traffic counts were conducted at the intersection of Stone Springs Boulevard and Tall Cedars Parkway on Thursday, November 19, 2009. Table 2 below presents the capacity analysis results.

Table 2: Intersection Capacity Analysis Results – Stone Springs Boulevard and Tall Cedars Parkway

Intersection (Approach/Movement)	AM Peak Hour		PM Peak Hour	
	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)
Existing Conditions (2009) -HS Peak Hour (8-9 AM/3:30-4:30 PM)				
Overall (Unsignalized – All Way Stop Control)	A	7.7	A	8.0
Eastbound Approach	A	7.9	A	8.0
Westbound Approach	A	7.4	A	7.8
Northbound Approach	A	7.8	A	8.0
Southbound Approach	A	7.6	A	8.0
Future Conditions with Development (2012) -HS Peak Hour (8-9 AM/3:30-4:30 PM)				
Overall (Unsignalized – All Way Stop Control)	A	8.5	A	8.4
Eastbound Approach	A	8.4	A	8.5
Westbound Approach	A	8.2	A	8.0
Northbound Approach	A	9.0	A	8.7
Southbound Approach	A	8.1	A	8.2
Future Conditions with Development (2015) -ES Peak Hour (7-8 AM/2:15-3:15 PM)				
Overall (Unsignalized – All Way Stop Control)	B	11.6	A	7.8
Eastbound Approach	B	10.9	A	7.9
Westbound Approach	B	10.2	A	7.5
Northbound Approach	B	13.9	A	7.5
Southbound Approach	B	10.0	A	7.8

Figure 2 on the next page shows the traffic volumes, capacity analysis results and lane configuration for the intersection of Stone Springs Boulevard and Tall Cedars Parkway. The traffic count sheets and the capacity analysis Synchro worksheets are attached in the Appendix section.

CONCLUSIONS

- A meeting was held with OTS staff to discuss the referral dated July 13, 2010 provided by OTS for the proposed Dulles South High School (HS-7) and Elementary School. This memorandum presents the supplemental analysis as requested in the referral, and discussed at the meeting.
- An analysis was conducted at the intersection of Gum Spring Road and Braddock Road with just the existing traffic, regional growth and the traffic generated by the proposed schools to evaluate the exact level of impact from the school traffic at this intersection. The turn lane improvements proffered by other approved developments in the area and the traffic generated by approved developments in the area was not incorporated.
- The supplemental analysis presented in this memorandum as outlined above for the intersection of Gum Spring Road and Braddock Road shows that the intersection will operate at acceptable levels of service under future conditions (2012 and 2015). Hence, this analysis shows that the minimal addition of school traffic can be accommodated by the improvements that are already in place at this intersection. With the addition of traffic generated by background developments, the turn lane improvements identified in the traffic study are triggered.
- Per OTS staff's request, the intersection of Stone Springs Boulevard and Tall Cedars Parkway was analyzed under future conditions with development (2012 and 2015) scenarios. The capacity analysis results presented in this memorandum show that the intersection operates at acceptable levels of service conditions under existing conditions as an all way stop control intersection and will continue to operate at acceptable level of service conditions under future conditions with the High School (2012) and Elementary School (2015) in place.
- Based on these findings, we conclude that the intersection of Stone Springs Boulevard and Tall Cedars Parkway will operate at acceptable levels of Service under future conditions during the school peak hours.

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