The Maryland-National Capital Park and Planning Commission Prince George's County Planning Department Development Review Division 301-952-3530



Note: Staff reports can be accessed at www.mncppc.org/pgco/planning/plan.htm.

REMANDED DETAILED SITE PLAN DSP-03083

Application	General Data	
 Project Name: Sandy Spring Estates, Lots 15-18 Location: Northwest of the T intersection of Old Sandy Spring Road and Sandy Road, adjacent to a ramp of the Capital Beltway (I-95) 	Date Remanded :	4/16/2004
	Planning Board Action Limit:	N/A
	Plan Acreage:	1.89 acres
	Zone:	R-R
	Dwelling Units:	4
	Square Footage:	N/A
Applicant/Address: Sandy Spring Estates, LLC P.O. Box 310 Ashton, MD 20861	Planning Area:	60
	Tier:	Developing
	Council District:	1
	Municipality:	N/A
	200-Scale Base Map:	220NE06

Purpose of Applicatio	n	Notice Dates	
Approval of four single-family detached houses and a noise attenuation fence		Adjoining Property Own Previous Parties of Reco Registered Associations (CB-12-2003)	ord 3/4/2004
		Sign(s) Posted on Site:	11/21/2006
Staff Recommendatio	n	Staff Reviewer:	H. Zhang, AICP
APPROVAL	REAPPROVAL WITH CONDITIONS	DISAPPROVAL	DISCUSSION
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THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

PRINCE GEORGE'S COUNTY PLANNING BOARD

STAFF REPORT

SUBJECT: Detailed Site Plan, DSP-03083, Sandy Spring Estates (Remanded to the Planning Board for an evidentiary hearing and for various amendments to the detailed site plan)

BACKGROUND

Detailed Site Plan DSP-03083 for Sandy Spring Estates and Variance Application VD-03083, were accepted for review by the Development Review Division on April 16, 2004. The Development Review Division coordinated a review of the application with all offices having any planning activities that might be affected by the proposed development. DSP-03083 and VD-03083 were approved by the Planning Board on June 24, 2004; PGCPB Resolution No. 04-153 was adopted on July 15, 2004.

On September 15, 2004, the District Council elected to review this case. On July 11, 2005, the District Council voted to remand the case to the Planning Board in accordance with Section 27-290 of the Zoning Ordinance. The Order of Remand states that the case is:

REMANDED to the Planning Board, for the following reasons:

- A. Applicant should prepare and staff should review a supplement to applicant's noise study, an addition to show and analyze peak and average noise levels during the peak traffic hour on a weekday, measuring traffic along the ramp from southbound I-95 onto eastbound and westbound MD198. The noise study in the record shows average noise level over a 24-hour period ("dBA Ldn"), and that data will not accurately predict the noise-receiving experience of future residents of Lots 15-18.
- B. The applicant should state in the administrative record all measures to be taken to protect homeowners on Lots 15-18, to suppress traffic noise from I-95 and its entrance and exit ramps. The placement and anticipated buffering effect of the proposed sound barrier wall should be fully explained in the record. Additional home features, including without limitation enhanced glass in windows and increased baffling in exterior walls, should also be explained in the record.
- C. The reports and data to be added to the record shall be placed there in sufficient time to permit full review by the Urban Design and Environmental Planning Sections.

The Evidentiary Hearing required by the Order of Remand is scheduled before the Planning Board on July 26, 2007. The following staff report reexamines the issues identified for analysis in the Order of Remand. The Appendix A attached to this report includes all changes to the original resolution that will be reflected in the amended resolution for this remanded DSP.

RECOMMENDATION SUMMARY

The staff recommends REAPPROVAL of the detailed site plan, with the revised conditions listed in the Revised Recommendation section of this report.

DISCUSSION

Summary: The information collected in response to the order of remand resulted in some changes to DSP-03083 and revisions to findings and conditions as follows:

MODIFICATIONS TO DETAILED SITE PLAN

- 1. The proposed four single-family detached houses have been re-oriented toward an interior cul-desac road. The finished floor elevation of the houses has also been lowered by 8.48 to 11.97 feet.
- 2. A large earth berm in addition to a six-foot-high Trex sound fence (which is crafted from a material consisting of recycled and reclaimed wood and plastic) has been proposed along the boundary area adjacent to the ramp to I-95. The proposed sound fence is located on the top of the earth berm, which is located at the rear of Lots 15 through 18 between the houses and the ramp to I-95.
- 3. Since the proposed sound fence is six feet in height, no variance is needed. The applicant has withdrawn the variance application for the original higher fence from this review.

REVISED FINDINGS

Based upon the analysis of the subject application, the Urban Design staff recommend the following findings:

1. **Request:** The subject application is for approval of a detailed site plan for four single-family detached houses in the R-R Zone.

2. **Development Data Summary:**

	EXISTING	PROPOSED
Zone(s)	R-R	R-R
Use(s)	Single-family residential	Single-family residential
Acreage	1.89	1.89
Lots	4	4

ARCHITECTURAL MODELS

Model	Base Finished Area (Sq.Ft.)
Avalon	2,935
Balmoral	3,893
Courtland	2,877
Highgrove	3,576
Victoria	2,439
Waverly	3,189

- 3. **Location:** The subject detailed site plan covers Lots 15 through 18 of a larger subdivision known as Sandy Spring Estates, which is located on the north side of Old Sandy Spring Road, just west of I-95. The ramp from I-95 to westbound Sandy Spring Road (MD 198) is to the southeast of this property. The site is in Planning Area 60, Council District 1.
- 4. **Surroundings and Use:** Lots 15 to 18 are located at the southeast-most end of Sandy Spring Estates and northwest of the Old Sandy Spring Road right-of-way, which is stubbed to the south

corner of Lot 15. Lot 15 is bounded to the southwest by the right-of-way of Sandy Road. A new interior cul-de-sac street off Sandy Spring Road provides access to the proposed four lots. The four lots are bounded to the north and west by the right-of-way of the interior cul-de-sac street and Lot 12 of Sandy Spring Estates; they are bounded to the south and east by the rights-of-way of Old Sandy Spring Road, Sandy Spring Road and the ramp of I-95.

- 5. Previous Approvals: The subject DSP covers Lots 15 through 18 of a subdivision known as Sandy Springs Estates. The subdivision has previously approved Preliminary Plan of Subdivision 4-00017 (PGCPB No. 00-160), including Type I Tree Conservation Plan (TCPI/10/00), which was approved in 2000 for 18 lots and subsequently expired. A new Preliminary Plan of Subdivision, 4-03114, was approved (PGCPB No. 04-59) in March 2004 along with TCPI/10/00-01. A Type II Tree conservation plan covering Lots 15-18 was approved in 2002. The subject DSP for Lots 15-18 is required by Condition 6 of the Preliminary Plan of Subdivision 4-03114 (see below Finding 8 for more discussion) to ensure that the proposed noise barrier will attenuate the adverse noise impacts associated with I-95 and to provide a safe and attractive neighborhood for future residents.
- 6. **Design Features:** Lots 15 through 18 are accessed through an interior cul-de-sac street off Misty Pine Road, which further intersects with Old Sandy Spring Road. An earth berm is provided around the site's rear boundary area adjacent to the ramp of I-95. A six-foot-high board-on-board fence is also proposed on the top of the berm to mitigate the traffic noise impact on the proposed houses.

The architectural models to be constructed on the four lots are among the top products of Ryan Homes. The models show a popular elevation design that draws heavily from traditional colonial style housing. The models have two stories and two-car garages as standard features. Various finishing materials including standard vinyl siding, brick veneer, and various roof patterns have been shown in the architectural package. Various architectural details such as jack arch windows, Palladian windows, bay windows, keystones, quoins, transom entrance doors, shutters, etc. have been presented on various elevations. The front elevation of the models will be finished with brick veneer.

COMPLIANCE WITH EVALUATION CRITERIA

7. **Zoning Ordinance:** The subject application has been reviewed for compliance with the requirements in the R-R Zone and the site plan design guidelines of the Zoning Ordinance.

The subject application is in conformance with the requirements of Section 27- 441(b), which governs permitted uses in residential zones. The proposed single-family detached houses are a permitted use.

- 8. **Preliminary Plan of Subdivision 4-03114:** The Planning Board approved Preliminary Plan of Subdivision 4-03114 on March 18, 2004, subject to eight conditions that are applicable to this DSP review as follows:
 - 3. A Type II Tree conservation plan shall be approved prior to the issuance of permits, or at the time of detailed site plan approval for Lots 15 through 18, whichever comes first.

Comment: A Type II Tree Conservation Plan (TCPII/87/02) for Sandy Spring Estates was approved in 2002. Lots 15 through 18 were covered by the approved TCPII/87/02.

5. Prior to approval of building permits for proposed Lots 15-18, the applicant shall construct a noise barrier to mitigate noise impacts from I-95. The following note shall be placed on the final plat: "Building permits for lots shall not be approved until the noise barrier adjacent to Lots 15-18 is constructed."

Comment: This condition will be carried forward as a condition of approval of this DSP.

6. Prior to approval of the final plat that includes Lots 15-18, a limited detailed site plan shall be approved by the Planning Board to ensure that the proposed noise barrier will attenuate the adverse noise impacts associated with I-95 and to provide a safe and attractive neighborhood for future residents. The site plan shall include the proposed fine grading, house locations and house types for Lots 15-18. The site plan shall also reflect the location and design of the proposed barrier along with proposed screening through the use of trees, shrubs and other plant materials. Finally, the plan shall be submitted to PEPCO or BGE to evaluate the location of the proposed noise barrier with respect to the location of the existing overhead electrical transmission lines. If determined necessary by PEPCO or BGE, the overhead electrical lines may need to be relocated or elevated by the applicant. The material used for the construction of the wall as a sound barrier shall be limited to concrete and/or masonry materials or other materials found to be accepted by the Environmental Planning Section due to the longevity of the materials and the need for little or no maintenance.

Comment: The subject DSP was submitted in order to satisfy this condition. The DSP includes fine grading, house footprints, and architectural models for the four lots. The site plan and landscape plan also show the location, design and the proposed six-foot Trex noise fence. A review by the Environmental Planning Section (Shirley to Zhang, July 11, 2007) indicates that the proposed Trex wooden noise fence is sufficient to mitigate successfully the transportation-related noise that impacts the subject site.

The applicant also submitted a noise study entitled I-95 Traffic Noise Evaluation—Sandy Spring Estates, Prince George's County, Maryland. According to the noise study, the proposed noise barrier will attenuate the adverse noise impacts associated with I-95 and provide a safe neighborhood for future residents.

The applicant has retained Polysonics Corp, an acoustics and technology consulting firm, to look into the peak-hour traffic noise issue in response to Item A of the District Council's Remand Order. In a letter (Spano to Norris) dated February 8, 2007, the noise engineer provided the following findings:

"In fact Ldn and Leq peak hour are normally the same per industry standards and Maryland State Highway Administration standards if the peak hour is approximately 10 percent of average daily traffic (ADT) and nighttime traffic (10 pm to 7 am) is approximately 15 percent of ADT. This is the case at this site with regard to I-95 ramp noise....

"A berm with solid fence per the site plan was provided in the backyards of the lots near the ramp (lots 15 through 18). This will bring the rear yards to below county noise requirements. Upper story windows above the berm/fence in these lots should have windows meeting a minimum 32 Sound Transmission Class (32 STC) requirement. Walls will be normal wood construction with siding, minimum ½ inch sheathing, fibrous batts and interior ½ inch thick gypsum drywall with a typical STC 39. This will meet county indoor noise requirements."

- 9. *Landscape Manual:* The proposed development is subject to the requirements of Section 4.1, Residential Requirements, of the *Landscape Manual*. Section 4.1(e), for cluster subdivisions in the R-R Zone, requires that three major shade trees and two ornamental or evergreen trees shall be planted on each lot. The applicant has provided the required number of plant units on each lot.
- 10. **Woodland Conservation Ordinance:** The Sandy Spring Estates Subdivision (Lots 1–18) is subject to the provisions of the Prince George's County Woodland Conservation and Tree Preservation Ordinance because the gross tract area is in excess of 40,000 square feet; there are more than 10,000 square feet of existing woodland on site; and there is the previously approved Type I Tree Conservation Plan TCPI/10/00.

AType II Tree Conservation Plan TCPII/87/02, including Lots 1 through 18, was approved in 2002. Revised Type II Tree Conservation Plan TCPII/87/02-02 has been submitted with this DSP. The Environmental Planning Section (Shirley to Zhang, July 11, 2007) recommends approval of TCPII/87/02-02 along with this DSP.

- 11. **Referral Comments:** The subject application was referred to the concerned agencies and divisions. The referral comments are summarized as follows:
 - a. In a memorandum dated June 9, 2004, the Community Planning Division noted that there are no master plan or general plan issues related to this detailed site plan application.
 - In a memorandum dated May 13, 2004, the Subdivision Section staff indicated that the detailed site plan is subject to the three conditions of approval of Preliminary Plan 4-03114. The staff listed each condition applicable to this DSP review. See Finding 8 for a detailed discussion.
 - c. The Transportation Planning Section, in a memorandum dated April 23, 2004, noted that the plan is acceptable.

In a separate memorandum from the Transportation Planning Section dated June 9, 2004, on detailed site plan review for master plan trail compliance, the trails planner indicated that there are no master plan trail issues identified in the adopted and approved Subregion I master plan for the subject application. The required sidewalk has been shown on the DSP.

d. The Environmental Planning Section, in a memorandum dated May 21, 2004, indicated that the plans as submitted have been found to meet all applicable environmental requirements. The staff recommended approval of this application subject to one condition that has been incorporated into the recommendation section of this report.

The Environmental Planning Section, in a memorandum dated July 11, 2007, in response to the remand order, stated that the plan meets all applicable environmental requirements including noise requirements and recommended approval with four conditions that have been incorporated in the recommendation section of this report.

e. The Permit Section, in a memorandum dated May 3, 2004, made four comments regarding the DSP's compliance with the requirements of the *Landscape Manual* and required certain information.

Comment: In a response dated May 12, 2004, the applicant revised both site and landscape plans to address each comment.

f. The State Highway Administration (SHA), in a memorandum dated May 4, 2004, indicated that the proposed noise-attenuation wall is appropriate. The SHA engineer concluded that SHA does not have an objection to the approval of DSP-03083 and VD-03083.

SHA had not responded to the second referral request regarding the remanded detailed site plan at the time the staff report was written.

Comment: SHA had no objection to the previous concrete noise attenuation wall at time of DSP-03083 approval. Given the noise wall recommended by staff in this application is less visually intrusive in terms of height (reduced from the previous 8-18 feet to six feet) than the previously approved one, and the new noise fence is located away from the ramp to I-95, staff will not expect any objection from SHA.

- g. The City of Laurel had not responded to the referral request at the time the staff report was written.
- 12. Urban Design Review: The Urban Design Section has coordinated a review of this remanded DSP with the Environmental Planning Section in response to the District Council's remand order and provides a summary of the DSP's conformance with each item of the remand order as follows:
 - A. Applicant should prepare and staff should review a supplement to applicant's noise study, an addition to show and analyze peak and average noise levels during the peak traffic hour on a weekday, measuring traffic along the ramp from southbound I-95 onto eastbound and westbound MD198. The noise study in the record shows average noise levels over a 24-hour period ("dBA Ldn"), and that data will not accurately predict the noise-receiving experience of future residents of Lots 15-18.

Comment: The applicant has retained the same acoustical consulting firm to conduct additional noise analysis and this firm has prepared a letter specifically explaining how the peak and average noise levels have been analyzed. The letter explains that:

"In fact Ldn and Leq peak hour are normally the same per industry standards and Maryland State Highway Administration standards if the peak hour is approximately 10 percent of Average Daily Traffic and nighttime traffic (10 pm to 7 am) is approximately 15 percent of ADT. This is the case at this site with regard to I-95 ramp noise. This practice is accepted by all state highway administrations and is industry standard. The noise modeling for these noise analyses (Stamina 3.0) also uses this methodology."

The Environmental Planning Section agrees with the analysis of the applicant.

B. The applicant should state in the administrative record all measures to be taken to protect homeowners on Lots 15-18, to suppress traffic noise from I-95 and its entrance and exit ramps. The placement and anticipated buffering effect of the proposed sound barrier wall should be fully explained

in the record. Additional home features, including without limitation enhanced glass in windows and increased baffling in exterior walls, should also be explained in the record.

Comment: The applicant has reoriented the four lots toward a new internal cul-de-sac street; has provided a large earth berm with a six-foot high noise fence between the four lots in question and the ramp to I-95, and has lowered the finished floor elevations of four lots by 8.48 to 11.97 feet. As a result of the noise design, no variance is needed for the proposed noise fence. In addition, according to the applicant, the upper level windows with 32 Sound Transmission Class will be sufficient to achieve an interior noise level of less than 45 dBA Ldn. The windows with current normal wood materials and construction methods will be able to achieve a STC 39. Therefore the future homeowners would be sufficiently protected from traffic-related noise.

C. The reports and data to be added to the record shall be placed there in sufficient time to permit full review by the Urban Design and Environmental Planning Sections.

Comment: This remanded DSP has been continued several times from the originally scheduled hearing date on December 21, 2006 to July 26, 2007. As such, staff had sufficient time to carry out a full review of this DSP.

13. The detailed site plan represents a reasonable alternative for satisfying the site design guidelines of Subtitle 27, Part 3, Division 9, of the Prince George's County Code without requiring unreasonable cost and without detracting substantially from the utility of the proposed development for its intended use.

REVISED RECOMMENDATIONS

Based on the preceding evaluation, the Urban Design Review Section recommends that the Planning Board adopt the revised findings of this report and REAPPROVE Detailed Site Plan DSP-03083 and Type II Tree Conservation Plan TCPII/87/02-02, subject to the following conditions:

- 1. Prior to certificate approval of this detailed site plan, the applicant shall
 - a. Provide the noise barrier details and section drawings on the DSP.
 - b. Revise TCPII/87/02-02 as follows:
 - 1) Provide a separate exhibit showing the locations of the cross sections for Lots 15-18.
 - 2) On the revised cross sections for Lots 15–18 show the proposed two-story dwelling units at a height of 35 feet.
 - 3) Show the correct elevations for the top of the noise barrier on both the revised plans and cross sections.
 - 4) Show a limit of disturbance for all proposed development.

- 5) Provide the correct distance of the house from the proposed location of the noise barrier on the cross section for Lot 17.
- 6) Include the following note in bold type:

Each homebuyer of proposed Lots 15–18 must sign an affidavit at the time a deposit is made on these lots. The affidavit shall stipulate the homebuyer's understanding of the necessity and function of the noise barrier on Lots 15–18. At no time shall the homeowners of Lots 15–18 attempt to remove, alter, dismantle, damage or relocate the noise barrier and these homeowners shall accept maintenance responsibility of said noise mitigation barrier on Lots 15–18. If a homeowner harms a noise barrier on Lots 15–18, this shall constitute a violation of DSP-03083 and TCPII/87/02-02.

- 7) Have the qualified professional who prepared the plan sign and date the plan.
- 2. Prior to the issuance of any building permits for Lots 15–18, the applicant shall construct a noise barrier to mitigate noise impacts from I-95. The following note shall be placed on the final plat:

"Building permits for lots shall not be approved until the noise barrier adjacent to Lots 15–18 is constructed."

- 3. No two units located next to or immediately across the street from each other may have identical front elevations.
- 4. The developer, his heirs, successors and/or assignees shall display in the sales office all of the plans approved by the Planning Board for this subdivision, including all exterior elevations of all approved models, the detailed site plan, and the landscape plan.
- 5. Prior to the approval of building permits for proposed Lots 15–18, a certification by a professional engineer with competency in acoustical analysis shall be placed on these building permits stating that building shells of structures within prescribed noise corridors have been designed to reduce interior noise levels to 45 dBA Ldn or less.
- 6. Prior to final plat approval, a disclosure clause shall be placed on the final plat including language notifying all future contract purchasers of Lots 15–18 of the existence of the noise barrier on those lots. By signing the purchase contracts of Lots 15–18, the homeowners understand the necessity and function of the noise barrier on Lots 15-18. At no time shall the homeowner(s) of Lots 15–18 attempt to remove, alter, dismantle, damage or relocate the noise barrier and these homeowners shall accept maintenance responsibility of said noise mitigation barrier. If a homeowner harms a noise barrier on Lots 15-18, this shall constitute a violation of DSP-03083 and TCPII/87/02-02."

APPENDIX A.

THE MARYLAND-NATIONAL CAPITAL PARK AND PLANNING COMMISSION

PRINCE GEORGE'S COUNTY PLANNING BOARD

STAFF REPORT

SUBJECT: Detailed Site Plan, DSP-03083, Sandy Spring Estates (Remanded to the Planning Board for an evidentiary hearing and for various amendments to the detailed site plan)

BACKGROUND

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On September 15, 2004, the District Council elected to review this case. On July 11, 2005, the District Council voted to remand the case to the Planning Board in accordance with Section 27-290 of the Zoning Ordinance. The Order of Remand states that the case is:

REMANDED to the Planning Board, for the following reasons:

- A. Applicant should prepare and staff should review a supplement to applicant's noise study, an addition to show and analyze peak and average noise levels during the peak traffic hour on a weekday, measuring traffic along the ramp from southbound I-95 onto eastbound and westbound MD198. The noise study in the record shows average noise level over a 24-hour period ("dBA Ldn"), and that data will not accurately predict the noise-receiving experience of future residents of Lots 15-18.
- B. The applicant should state in the administrative record all measures to be taken to protect homeowners on Lots 15-18, to suppress traffic noise from I-95 and its entrance and exit ramps. The placement and anticipated buffering effect of the proposed sound barrier wall should be fully explained in the record. Additional home features, including without limitation enhanced glass in windows and increased baffling in exterior walls, should also be explained in the record.
- C. The reports and data to be added to the record shall be placed there in sufficient time to permit full review by the Urban Design and Environmental Planning Sections.

The Evidentiary Hearing required by the Order of Remand is scheduled before the Planning Board on July 26, 2007. The following staff report reexamines the issues identified for analysis in the Order of Remand.

RECOMMENDATION SUMMARY

The staff recommends REAPPROVAL of the detailed site plan, with the revised conditions listed in the Revised Recommendation section of this report.

DISCUSSION

Summary: The information collected in response to the order of remand resulted in some changes to DSP-03083 and revisions to findings and conditions as follows:

MODIFICATIONS TO DETAILED SITE PLAN

- 1. The proposed four single-family detached houses have been re-oriented toward an interior cul-de-sac road. The finished floor elevation of the houses has also been lowered by 8.48 to 11.97 feet.
- 2. A large earth berm in addition to a six-foot-high Trex sound fence (which is crafted from a material consisting of recycled and reclaimed wood and plastic) has been proposed along the boundary area adjacent to the ramp to I-95. The proposed sound fence is located on the top of the earth berm, which is located at the rear of Lots 15 through 18 between the houses and the ramp to I-95.
- 3. Since the proposed sound fence is six feet in height, no variance is needed. The applicant has withdrawn the variance application for the original higher fence from this review.

REVISED FINDINGS

(The findings below are those adopted by the Planning Board in PGCPB Resolution No. 04-153 with new language to be added **bold and underlined** and old language to be removed [*bracketed and in italics*].)

Based upon the analysis of the subject application, the Urban Design staff recommends the following findings:

1. **Request:** The subject application is for approval of a detailed site plan for four single-family detached houses in the R-R Zone.

2. **Development Data Summary:**

	EXISTING	PROPOSED
Zone(s)	R-R	R-R
Use(s)	Single-family residential	Single-family residential
Acreage	1.89	1.89
Lots	4	4

ARCHITECTURAL MODELS

Model	Base Finished Area (Sq.Ft.)
Avalon	2,935
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- 3. **Location:** The subject detailed site plan covers Lots 15 through 18 of a larger subdivision known as Sandy Spring Estates, which is located on the north side of Old Sandy Spring Road, just west of I-95. The ramp from I-95 to westbound Sandy Spring Road (MD 198) is to the southeast of this property. The site is in Planning Area 60, Council District 1.
- 4. **Surroundings and Use:** Lots 15 to 18 are located at the southeast-most end of Sandy Spring Estates and northwest of the Old Sandy Spring Road right-of-way, which [*ends with a cul-de-sac in front of Lot 18*] <u>is stubbed to the south corner of Lot 15</u>. Lot 15 is bounded to the southwest by the right-of-way of Sandy Road. <u>A new internal cul-de-sac street off Sandy Spring Road</u> <u>provides access to the proposed four lots. The four lots are bounded to the north and west</u> <u>by the right-of-way of the interior cul-de-sac street and Lot 12 of Sandy Spring Estates;</u> <u>they are bounded to the south and east by the rights-of-way of Old Sandy Spring Road,</u> <u>Sandy Spring Road and the ramp of I-95.</u> [to the northwest of Lots 15 to 18 are other lots in the Sandy Spring Estates subdivision. Further across Old Sandy Spring Road to the east is the ramp for I-95. Lot 18 is adjacent to the ramp of I-95 to the northeast.]
- 5. Previous Approvals: The subject DSP covers Lots 15 through 18 of a subdivision known as Sandy Springs Estates. The subdivision has a previously approved Preliminary Plan of Subdivision, 4-00017 (PGCPB No. 00-160), including a Type I Tree Conservation Plan (TCPI/10/00), which was approved in 2000 for 18 lots and subsequently expired. A new Preliminary Plan of Subdivision, 4-03114, was approved (PGCPB No. 04-59) in March 2004 along with TCPI/10/00-01. A Type II Tree Conservation Plan covering Lots 15-18 was approved in 2002. The subject DSP for Lots 15-18 is required by Condition 6 of the Preliminary Plan of Subdivision 4-03114 (see below Finding 8 for more discussion) to ensure that the proposed noise barrier will attenuate the adverse noise impacts associated with I-95 and to provide a safe and attractive neighborhood for future residents.
- 6. Design Features: Lots 15 through 18 are accessed through an interior cul-de-sac street off Misty Pine Road, which further intersects with Old Sandy Spring Road. [Lots 15 through 18 are accessed through Old Sandy Spring Road, which ends with a cul-de-sac in front of Lot 18. Four lots are plotted in a line starting at the "T" intersection of Sandy Road and Old Sandy Spring Road with Lot 15 and ending with Lot 18. A two-segment noise-attenuation wall with various heights is located along the site boundary line abutting I-95. The wall consists of approximately 400-foot long, 8- to 16foot-high segments along the I-95 right-of-way, and a 100-foot long, 14- to 16-foot-high segment along the north site property line of Lot 18. The concrete wall is treated with texture on the side facing the subdivision and with a smooth surface facing I-95. Since most of the noise attenuation walls along I-95 have been painted, a condition of approval has been proposed to ensure that the proposed wall will be harmonious with other existing noise attenuation walls.] An earth berm is provided around the site's rear boundary area adjacent to the ramp of I-95. A six-foot-high board-on-board fence is also proposed on the top of the berm to mitigate the traffic noise impact on the proposed **houses.** [Landscaping has also been provided along the noise-attenuation wall facing the residential subdivision.]

The architectural models to be constructed on the four lots are among the top products of Ryan Homes. The models show a popular elevation design that draws heavily from the traditional colonial style housing. The models have two-story in height with two-car garage as a standard feature. Various finishing materials including standard vinyl siding, brick veneer, and various roof patterns have been shown in the architectural package. Various architectural details such as jack arch windows, Palladian window, bay windows, keystone, quoin, transom entrance door, shutter, etc. have been presented on various elevations. The front elevation of the models will be finished with brick veneer.

COMPLIANCE WITH EVALUATION CRITERIA

- 7. **Zoning Ordinance:** The subject application has been reviewed for compliance with the requirements in the R-R Zone and the site plan design guidelines of the Zoning Ordinance.
 - a. The subject application is in conformance with the requirements of Section 27- 441(b), which governs permitted uses in residential zones. The proposed single-family detached houses are a permitted use.
 - [b. The detailed site plan is in general compliance with the requirements of Section 27-442, Regulations, for development in the R-R Zone. But Section 27-420, Fence and Walls, requires that fences and walls (including retaining walls) more than six feet high shall not be located in any required yard and shall meet the setback requirements for main buildings. The application provides a two-segment noise barrier with a height varying from 8 to 16 feet along the property line adjacent to I-95 in order to efficiently mitigate the noise impacts associated with the interstate highway. The applicant has filed a variance application to allow the noise wall to be erected as close as possible to the noise source without observing the setback requirement of 25 feet from the street for the main building in the R-R Zone.]
 - [c. Per Section 27-230 of the Zoning Ordinance, a variance may only be granted when the Planning Board finds that:
 - "(1) A specific parcel of land has exceptional narrowness, shallowness, or shape, exceptional topographic conditions, or other extraordinary situations or conditions;"

Comment: Lots 15 through 18 are located at the southeast-most corner of Sandy Spring Estates subdivision abutting the ramp of the intersection of I-95 and Sandy Spring Road. The four lots are accessed through Old Sandy Spring Road, which serves as a frontage road to the site. The site has irregular configuration and is in close proximity to I-95, exposing it to noise levels from the highway in excess of allowable limits. The approval of this subdivision in March 2004 created an extraordinary situation for the site in that the approval requires installation of a noise wall prior to construction of the houses, but the wall, to be most effective, must be at a height and location that are in violation of the building setback. The subject DSP is required by Condition 6 of Preliminary Plan 4-03114 (See Finding 8 below for more discussion).

"(2) The strict application of this Subtitle will result in peculiar and unusual practical difficulties to, or exceptional or undue hardship upon, the owner of the property; and"

Comment: The strict application of the required setback of 25 feet from the street, in this case, would cause the proposed noise-attenuation wall to fail to meet the mitigation standard. An even higher noise wall would be needed and that would have an extremely detrimental impact on the aesthetic appearance of the neighborhood. The denial of the variance application would make it impossible for the applicant to achieve the required 65 dBA (Ldn) noise level for outdoor activities and 45 dBA (Ldn) for internal activities with a reasonably sized wall, which would result in the applicant not being able to develop Lots 15 through 18.

"(3) The variance will not substantially impair the intent, purpose, or integrity of the General Plan or Master Plan."

Comment: The subject site is in Planning Area 60. The site is also in the Developing Tier of the 2002 General Plan. According to the referral comments of the Community Planning Division, there are no master plan issues raised through the review of this detailed site plan application. The State Highway Administration has also agreed that the proposed noise abatement wall is appropriate. The variance will not substantially impair the intent, purpose, or integrity of the General Plan or the master plan.

The proposed single-family detached dwelling and the required noise-attenuation wall have unique circumstances that justify approval of the aforementioned variance. Due to the property being located in a cluster development in the R-R Zone, within such close proximity to I-95, granting the relief requested would not substantially impair the intent, purpose or integrity of the General Plan or the master plan, while denying the variance request would result in a practical difficulty upon the owner of the property. Staff, therefore, recommends approval of the variance from the required setback to allow the noise-attenuation wall to be located as close as possible to the noise source in order to effectively mitigate noise impacts associated with I-95 to provide a safe and attractive neighborhood for future residents.]

- 8. **Preliminary Plan of Subdivision 4-03114:** The Planning Board approved Preliminary Plan of Subdivision 4-03114 on March 18, 2004, subject to eight conditions that are applicable to this DSP review as follows:
 - 3. A Type II Tree Conservation Plan shall be approved prior to the issuance of permits, or at the time of detailed site plan approval for Lots 15 through 18, whichever comes first.

Comment: A Type II Tree Conservation Plan (TCPII/87/02) for Sandy Spring Estates was approved in 2002. Lots 15 through 18 were covered by the approved TCPII/87/02.

5. Prior to approval of building permits for proposed Lots 15-18, the applicant shall construct a noise barrier to mitigate noise impacts from I-95. The following note shall be placed on the final plat: "Building permits for lots shall not be approved until the noise barrier adjacent to Lots 15-18 is constructed."

Comment: This condition will be carried forward as a condition of approval of this DSP.

6. Prior to approval of the final plat that includes Lots 15-18, a limited detailed site plan shall be approved by the Planning Board to ensure that the proposed noise barrier will attenuate the adverse noise impacts associated with I-95 and to provide a safe and attractive neighborhood for future residents. The site plan shall include the proposed fine grading, house locations and house types for Lots 15-18. The site plan shall also reflect the location and design of the proposed barrier along with proposed screening through the use of trees, shrubs and other plant materials. Finally, the plan shall be submitted to PEPCO or BGE to evaluate the location of the proposed noise barrier with respect to the location of the existing overhead electrical transmission lines. If determined necessary by PEPCO or BGE, the overhead electrical lines may need to be relocated or elevated by the applicant. The material used for the construction of the wall as a sound barrier shall be limited to concrete and/or masonry materials or other materials found to be accepted by the

Environmental Planning Section due to the longevity of the materials and the need for little or no maintenance.

Comment: The subject DSP was submitted in order to satisfy this condition. The DSP includes fine grading, house footprints, and architectural models for the four lots. The site plan and landscape plan also show the location, design and the proposed <u>six-foot Trex noise fence</u>. *[screening of the noise barrier. The noise wall consists of two elements with various heights starting from the southeast boundary of Lot 18 that is adjacent to I-95 and turning to the frontage along Old Sandy Spring Road and ending around the intersection of Old Sandy Spring Road and Sandy Road. The lowest point of the wall is eight feet and the highest point is 16 feet. The submitted noise-attenuation wall details indicate that the wall is made of precast concrete panels with a textured surface facing the subdivision and a smooth finish toward I-95. The concrete panel is four inches thick with reinforced steel bars. A review by the Environmental Planning Section (Shirley to Zhang, May 21, 2004) indicates that the proposed noise-attenuation wall is acceptable.* **J A review by the Environmental Planning Section (Shirley to Zhang, July 11, 2007) indicated that the proposed Trex noise fence is sufficient to mitigate successfully the transportation-related noise that impacts the subject site.**

[By a letter dated July 10, 2003 (Hartley, Director of New Business Growth & Design, BGE, to Norris, Heritage Homes Development Corporation), BGE has approved the applicant's request to put a 14- to16-foot-high noise barrier on the location as proposed in this DSP (Refer to the attached letter for more details).]

The applicant also submitted a noise study entitled I-95 Traffic Noise Evaluation—Sandy Spring Estates, Prince George's County, Maryland. According to the noise study, the proposed noise barrier will attenuate the adverse noise impacts associated with I-95 and provide a safe neighborhood for future residents.

<u>The applicant has retained Polysonics Corp. an acoustics and technology consulting firm, to</u> <u>look into the peak-hour traffic noise issue in response to Item A of the District Council's</u> <u>Remand Order. In a letter (Spano to Norris) dated February 8, 2007, the noise engineer</u> <u>provided the following findings:</u>

"In fact Ldn and Leq peak hour are normally the same per industry standards and Maryland State Highway Administration standards if the peak hour is approximately 10% of Average Daily Traffic and nighttime traffic (10 pm to 7 am) is approximately 15% of ADT. This is the case at this site with regard to I-95 ramp noise.

"... a berm with solid fence per the site plan was provided in the backyards of the lots near the ramp (lots 15 thru 18). This will bring the rear yards to below county noise requirements. Upper story windows above the berm/fence in these lots should have windows meeting a minimum 32 Sound Transmission Class (32 STC) requirement. Walls will be normal wood construction with siding, minimum ½ inch sheathing, fibrous batts and interior ½ inch thick gypsum drywall with a typical STC 39. This will meet county indoor noise requirements."

9. *Landscape Manual:* The proposed development is subject to the requirements of Section 4.1, Residential Requirements, of the *Landscape Manual*. Section 4.1(e), for cluster subdivisions in the R-R Zone, requires that three major shade trees and two ornamental or evergreen trees shall be planted on each lot. The applicant has provided the required number of plant units on each lot. [In addition, landscaping has also been provided along the noise barrier per Condition 6 of Preliminary Plan of Subdivision 4-03114, but the landscape plan shows the noise barrier in the same location as the plant materials. A condition of approval has been proposed in the recommendation section of this report to correct the presentation oversight.]

10. **Woodland Conservation Ordinance:** The Sandy Spring Estates Subdivision (Lots 1-18) is subject to the provisions of the Prince George's County Woodland Conservation Ordinance because the gross tract area is in excess of 40,000 square feet; there are more than 10,000 square feet of existing woodland on site; and there is a previously approved Type I Tree Conservation Plan TCPI/10/00.

A Type II Tree Conservation Plan (TCPII/87/02), including Lots 1 through 18, was approved in 2002. [Currently TCPII/87/02 is still valid. No additional tree conservation plan is required to be approved with this limited detailed site plan.] <u>A revised Type II Tree Conservation Plan TCPII/87/02-02 has</u> <u>been submitted with this DSP. The Environmental Planning Section (Shirley to Zhang, July 11, 2007) recommends approval of TCPII/87/02-02 along with this DSP.</u>

- 11. **Referral Comments:** The subject application was referred to the concerned agencies and divisions. The referral comments are summarized as follows:
 - a. In a memorandum dated June 9, 2004, the Community Planning Division noted that there are no master plan or general plan issues related to this detailed site plan application.
 - b. In a memorandum dated May 13, 2004, the Subdivision Section staff indicated that the detailed site plan is subject to the three conditions of approval of Preliminary Plan 4-03114. The staff listed each condition applicable to this DSP review. See Finding 8 for a detailed discussion.
 - c. The Transportation Planning Section, in a memorandum dated April 23, 2004, noted that the plan is acceptable.

In a separate memorandum from the Transportation Planning Section dated June 9, 2004, on detailed site plan review for master plan trail compliance, the trails planner indicated that there are no master plan trail issues identified in the adopted and approved Subregion I master plan for the subject application. The required sidewalk has been shown on the DSP.

d. The Environmental Planning Section, in a memorandum dated May 21, 2004, indicated that the plans as submitted have been found to meet all applicable environmental requirements. The staff recommended approval of this application subject to one condition that has been incorporated into the recommendation section of this report.

<u>The Environmental Planning Section, in a memorandum dated July 11, 2007, in</u> <u>response to the Remand Order, stated that the plan meets all applicable</u> <u>environmental requirements including noise requirements and recommended</u> <u>approval with four conditions that have been incorporated in the recommendation</u> <u>section of this report.</u>

e. The Permit Section, in a memorandum dated May 3, 2004, made four comments regarding the DSP's compliance with the requirements of the *Landscape Manual* and required certain information.

Comment: By a response dated May 12, 2004, the applicant revised both site and landscape plans to address each comment.

f. The State Highway Administration (SHA), in a memorandum dated May 4, 2004, indicated that the proposed noise-attenuation wall is appropriate. The SHA engineer concluded that SHA does not have an objection to the approval of DSP-03083 and VD-03083.

<u>The State Highway Administration (SHA) had not responded to the second referral</u> request regarding the remanded detailed site plan at the time the staff report was written.

Comment: The SHA had no objection to the previous concrete noise attenuation wall at time of DSP-03083 approval. Given the noise wall recommended by staff in this application is less visually intrusive in terms of height (reduced from the previous 8-18 feet to six feet) than the previously approved one, and the new noise fence is located away from the ramp to I-95, staff will not expect any objection from SHA.

- g. The City of Laurel had not responded to the referral request at the time the staff report was written.
- 13. <u>Urban Design Review: The Urban Design Section has coordinated a review of this</u> remanded DSP with the Environmental Planning Section in response to the District <u>Council's remand order and provides a summary of the DSP's conformance with each item</u> of the remand order as follows:
 - A. <u>Applicant should prepare and staff should review a supplement to</u> <u>applicant's noise study, an addition to show and analyze peak and average</u> <u>noise levels during the peak traffic hour on a weekday, measuring traffic</u> <u>along the ramp from southbound I-95 onto eastbound and westbound</u> <u>MD198. The noise study in the record shows average noise level over a</u> <u>24-hour period ("dBA Ldn"), and that data will not accurately predict the</u> <u>noise-receiving experience of future residents of Lots 15-18.</u>

<u>Comment: The applicant has retained the same acoustical consulting firm to</u> <u>conduct additional noise analysis and this firm has prepared a letter specifically</u> <u>explaining how the peak and average noise levels have been analyzed. The letter</u> <u>explains that:</u>

"In fact Ldn and Leq peak hour are normally the same per industry standards and Maryland State Highway Administration standards if the peak hour is approximately 10 percent of Average Daily Traffic and nighttime traffic (10 pm to 7 am) is approximately 15 percent of ADT. This is the case at this site with regard to I-95 ramp noise. This practice is accepted by all state highway administrations and is industry standard. The noise modeling for these noise analyses (Stamina 3.0) also uses this methodology."

The Environmental Planning Section agrees with the analysis of the applicant.

B. <u>The applicant should state in the administrative record all measures to be</u> <u>taken to protect homeowners on Lots 15-18, to suppress traffic noise from</u> <u>I-95 and its entrance and exit ramps. The placement and anticipated</u> <u>buffering effect of the proposed sound barrier wall should be fully explained</u> <u>in the record. Additional home features, including without limitation</u> <u>enhanced glass in windows and increased baffling in exterior walls, should</u> <u>also be explained in the record.</u>

Comment: The applicant has reoriented the four lots toward a new internal cul-desac street; has provided a large earth berm with a six-foot high noise fence between the four lots in question and the ramp to I-95, and has lowered the finished floor elevations of four lots by 8.48 to 11.97 feet. As a result of the noise design, no variance is needed for the proposed noise fence. In addition, according to the applicant, the upper level windows with 32 Sound Transmission Class will be sufficient to achieve an interior noise level of less than 45 dBA Ldn. The windows with current normal wood materials and construction methods will be able to achieve a STC 39. Therefore the future homeowners would be sufficiently protected from traffic-related noise.

C. <u>The reports and data to be added to the record shall be placed there in</u> <u>sufficient time to permit full review by the Urban Design and Environmental</u> <u>Planning Sections.</u>

<u>Comment: This remanded DSP has been continued several times from the originally</u> <u>scheduled hearing date on December 21, 2006 to July 26, 2007. As such, staff had</u> <u>sufficient time to carry out a full review of this DSP.</u>

13. [*12*] The detailed site plan represents a reasonable alternative for satisfying the site design guidelines of Subtitle 27, Part 3, Division 9, of the Prince George's County Code without requiring unreasonable cost and without detracting substantially from the utility of the proposed development for its intended use.

REVISED RECOMMENDATIONS

Based on the preceding evaluation, the Urban Design Review Section recommends that the Planning Board adopt the revised findings of this report and REAPPROVE Detailed Site Plan DSP-03083 [and further approved Variance Application No. VD-03083] and Type II Tree Conservation Plan TCPII/87/02-02, subject to the following conditions:

(The conditions below are those adopted by the Planning Board in PGCPB Resolution No. 04-153 with new language to be added **bold and underlined** and old language to be removed [bracketed and in *italics*].)

- 1. Prior to certificate approval of this detailed site plan, the applicant shall
 - [a. Revise the plans to identify the location and height of the existing overhead electrical power lines, if any].
 - a. <u>Provide the noise barrier details and section drawings on the DSP.</u>

- [b. Revise the landscape plan to ensure that the proposed plant materials are properly located in relation to the proposed noise attenuation wall.]
- [c. Provide lot numbers of the adjacent lots.]
- [d. Provide a note on the site plan indicating that the proposed noise-attenuation wall will be painted in a harmonious way with other existing walls along I-95.]

b. <u>Revise TCPII/87/02-02 as follows:</u>

- 1) Provide a separate exhibit showing the locations of the cross sections for Lots 15-18.
- 6) <u>On the revised cross sections for Lots 15-18 show the proposed two-story</u> <u>dwelling units at a height of 35 feet.</u>
- 7) <u>Show the correct elevations for the top of the noise barrier on both the</u> revised plans and cross sections.
- 8) <u>Show a limit of disturbance for all proposed development.</u>
- 9) <u>Provide the correct distance of the house from the proposed location of the</u> noise barrier on the cross section for Lot 17.
- 6) **Include the following note in bold type:**

Each homebuyer of proposed Lots 15-18 must sign an affidavit at the time a deposit is made on these lots. The affidavit shall stipulate the homebuyer's understanding of the necessity and function of the noise barrier on Lots 15-18. At no time shall the homeowners of Lots 15–18 attempt to remove, alter, dismantle, damage or relocate the noise barrier and these homeowners shall accept maintenance responsibility of said noise mitigation barrier on Lots 15–18. If a homeowner harms a noise barrier on Lots 15–18, this shall constitute a violation of DSP-03083 and TCPII/87/02-02.

7) <u>Have the qualified professional who prepared the plan sign and date</u> <u>the plan.</u>

2. Prior to the issuance of any building permits for Lots 15–18, the applicant shall construct a noise barrier to mitigate noise impacts from I-95. The following note shall be placed on the final plat:

"Building permits for lots shall not be approved until the noise barrier adjacent to Lots 15-18 is constructed."

- 3. No two units located next to or immediately across the street from each other may have identical front elevations.
- 4. The developer, his heirs, successors and/or assignees shall display in the sales office all of the plans approved by the Planning Board for this subdivision, including all exterior elevations of all approved models, the detailed site plan, and the landscape plan.

- 5. <u>Prior to the approval of building permits for proposed Lots 15–18, a certification by a professional engineer with competency in acoustical analysis shall be placed on these building permits stating that building shells of structures within prescribed noise corridors have been designed to reduce interior noise levels to 45 dBA Ldn or less.</u>
- 6. Prior to final plat approval, a disclosure clause shall be placed on the final plat including language notifying all future contract purchasers of Lots 15–18 of the existence of the noise barrier on those lots. By signing the purchase contracts of Lots 15–18, the homeowners understand the necessity and function of the noise barrier on Lots 15–18. At no time shall the homeowner(s) of Lots 15–18 attempt to remove, alter, dismantle, damage or relocate the noise barrier and these homeowners shall accept maintenance responsibility of said noise mitigation barrier. If a homeowner harms a noise barrier on Lots 15–18, this shall constitute a violation of DSP-03083 and TCPII/87/02-02."