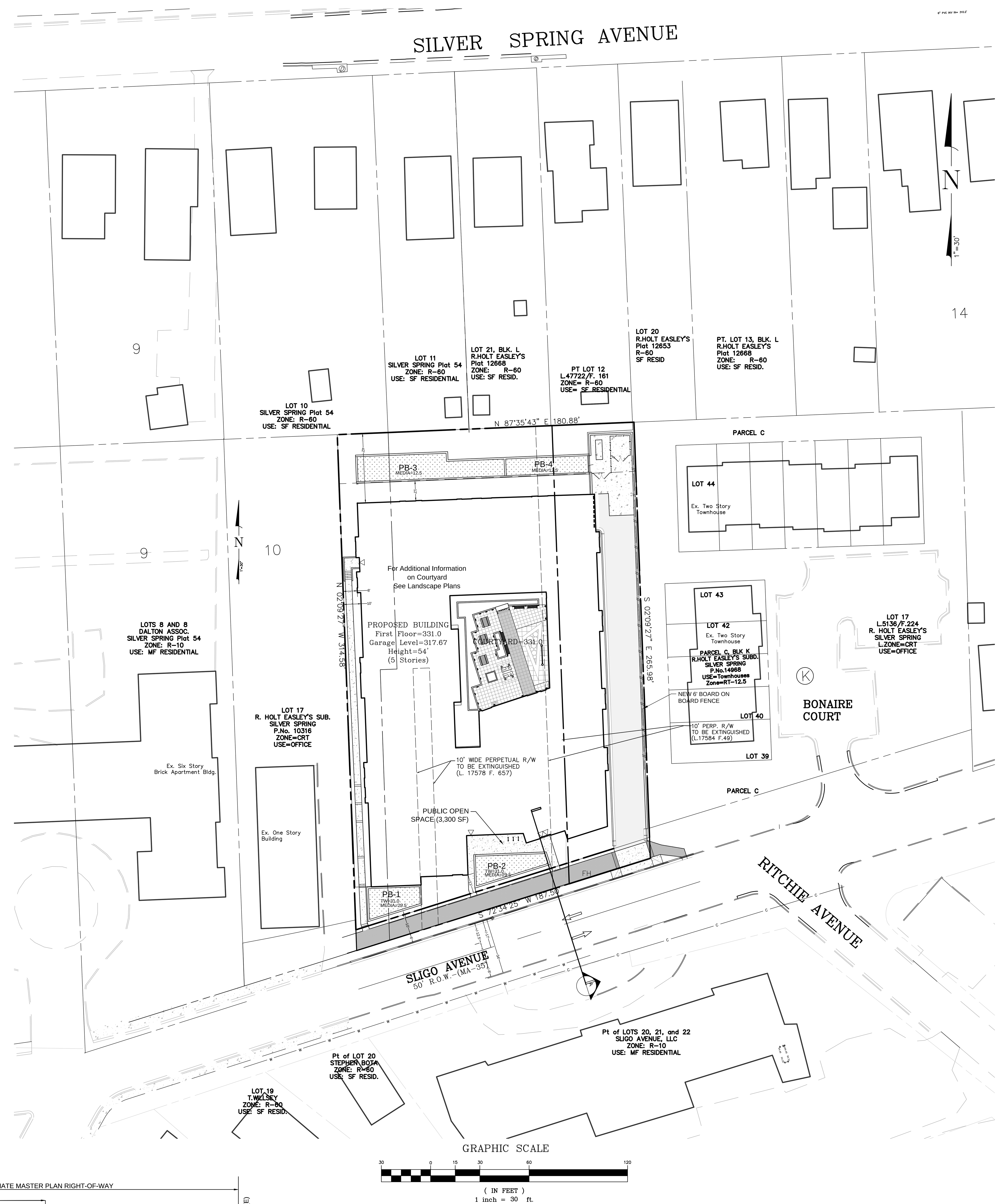
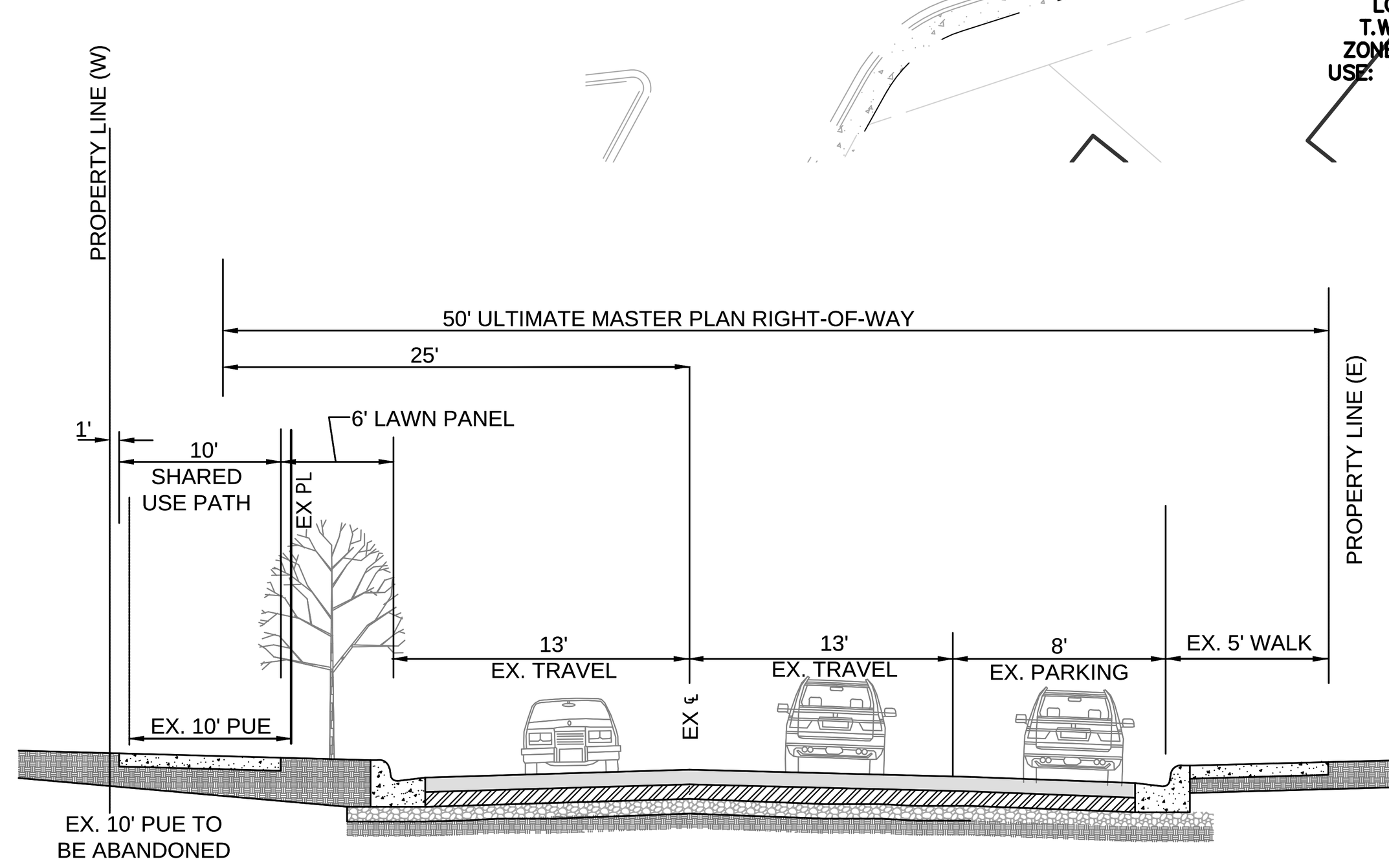
ATTACHMENT A





SLIGO AVENUE - TYPICAL SECTION
MODIFIED MCDOT STANDARD NO. MC-2004.27

811 Know what's below. Call before you dig.

FOR UTILITY LOCATIONS
CONTACT "ONE CALL" AT 811
AT LEAST 48 HOURS
PRIOR TO CONSTRUCTION

GENERAL SKETCH PLAN NOTE

UNLESS SPECIFICALLY NOTED ON THIS PLAN DRAWING OR IN THE PLANNING BOARD CONDITIONS OF APPROVAL, THE BUILDING FOOTPRINTS, BUILDING HEIGHTS, SETBACKS, ON-SITE PARKING, SITE CIRCULATION, AND SIDEWALKS SHOWN ON THIS SKETCH PLAN ARE ILLUSTRATIVE. THE FINAL DETAILS OF BUILDINGS, STRUCTURES, AND HARDSCAPE WILL BE DETERMINED AT THE TIME OF SITE PLAN REVIEW.

-The Site is exempt from the requirements of Chapter 22A of the Montgomery County Code (Forest Conservation Law). Section 22a-5(s)(1),MNCPPC # 42021143E, approved March 2, 2021

-Stormwater management (SWM) for the property will be provided for in accordance with Chapter 19 of the Montgomery County Code and the State of Maryland. The SWM design will incorporate environmental site design (ESD) planning techniques and practices. The Stormwater management system will include micro-bioretention facilities, green roofs, and impervious area disconnection. Conceptual Stormwater management design will require Geotechnical evaluation and testing prior to approval of a Stormwater Management Concept Plan.

DEVELOPER'S CERTIFICATE
THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF PLAN APPROVAL NO. **320220080** INCLUDING APPROVAL CONDITIONS, DEVELOPMENT PROGRAM, AND CERTIFIED SKETCH PLAN.

DEVELOPER: GREEN STREET HOUSING, LLC (COMPANY) — THOMAS AYD, JR. (CONTACT)

ADDRESS: 212 E. MAIN STREET, SUITE 200, SALISBURY, MD 21801
EMAIL: tom@greenstreethousing.com

SIGNATURE: ____

MNCPPC # **320220080**

MHG

Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com
Prepared By: Brian Donnelly

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the Laws of the State of Maryland License No. 16905, Expiration Date: 04/21/2024

OWNER:
SLIGO 42, LLC and SLIGO 60, LLC
c/o TM ASSOC. DEVELOPMENT
1375 PICCARD DRIVE, SUITE 150
ROCKVILLE, MARYLAND 20850
240.428.7799

CO-DEVELOPERS:
GREEN STREET HOUSING, LLC
212 EAST MAIN STREET, # 200
SALISBURY, MARYLAND 21801
443.615.7121

CO-DEVELOPERS:
TM ASSOC. DEVELOPMENT, INC.
1375 PICCARD DRIVE, SUITE 150
ROCKVILLE, MARYLAND 20850
240.428.7799

REVISIONS

NO.	DESCRIPTION	DATE
1	MNCPPC SUBMISSION	03/22
2		

ARCHITECT:
MINER FEINSTEIN ARCHITECTS, LLC
241 East 4th Street | Suite 207
Frederick, Maryland 21701
301.760.7988

LAND USE ATTORNEY
WIRE GILL, LLP
4800 HAMPDEN LANE, SUITE 200
BETHESDA, MARYLAND, 20814
HEATHER DLHOPOLSKY
301-263.6275

REVISIONS

NO.	DESCRIPTION	DATE
1	DESIGN DEVELOPMENT SUBMISSION	05/14/21

TAX MAP JN43 WSSC 210 NW 01

PLATS 21509 and 54

13TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

SLIGO APARTMENTS

R.HOLT EASLEY'S
LOTS P10, P12, & 51

PROJ. MGR	BJD
DRAWN BY	BJD
SCALE	1"= 30'
DATE	03/2022

SKETCH PLAN
RELATIONSHIPS OF
BUILDINGS AND ROW

SK-2.01

PROJECT NO.	17.172.14
SHEET NO.	3 OF 4

ATTACHMENT B

Legend

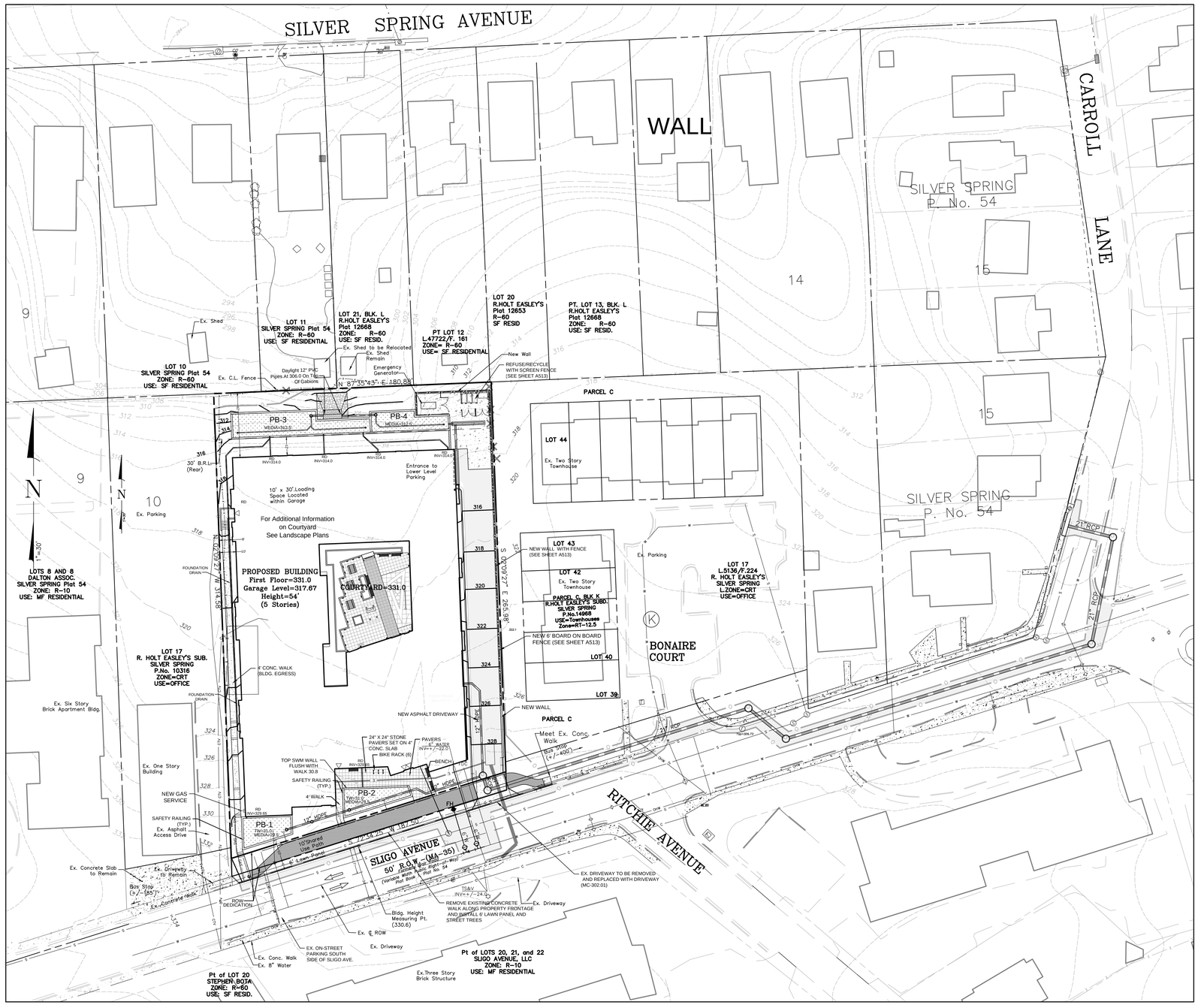
EXISTING	PROPOSED	
		Bituminous Paving
		Concrete
		Shared Use Path
		Pavers
		Stormwater Management (Planter Box)
	Spill Curb	Conc. Curb & Gutter
GUY WIRE		Sign
		Utility Pole
		Public Lamp Post
		Post or Bollard
TO REMAIN	TO BE REMOVED	Tree
		Table
		Bench
		Bicycle Rack
		Lights
		Trash Receptical
EX. —KV ELEC.	ELEC.	Electric
OHW		Overhead Wires
EX. 8" SEW	6" SEWER	Sanitary Sewer
EX. 15" S/D	15" RCP	Storm Drain
EX. 6" WAT	3" WATER	Water Line
	VALVE	Fire Hydrant
EX. 6" HP GAS	4" GAS	Gas
EX. TELE	TELE	Telephone
	DOOR	Buildings
77.1 x	75.5+	Spot Elevation
	474	Contour
	0	Limits of Disturbance

LOT EXHIBIT

SCALE: 1"=50'

811 Know what's below. Call before you dig.

FOR UTILITY LOCATIONS CONTACT "ONE CALL" AT 811 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)

1 inch = 30 ft.

THE BUILDING FOOTPRINTS, BUILDING HEIGHTS, ON-SITE PARKING, SITE CIRCULATION, AND SIDEWALKS SHOWN ON THIS PRELIMINARY PLAN OF SUBDIVISION ARE ILLUSTRATIVE. THE FINAL LOCATIONS OF BUILDINGS, STRUCTURES AND HARDSCAPE WILL BE DETERMINED AT THE TIME OF SITE PLAN. PLEASE REFER TO THE ZONING DATA TABLE FOR DEVELOPMENT STANDARDS SUCH AS SETBACKS, BUILDING HEIGHT, AND LOT COVERAGE FOR EACH LOT. OTHER LIMITATIONS FOR SITE DEVELOPMENT MAY ALSO BE INCLUDED IN THE CONDITIONS OF THE PLANNING BOARD'S APPROVAL.

-The Site is exempt from the requirements of Chapter 22A of the Montgomery County Code (Forest Conservation Law). Section 22a-5(s)(1),MNCPPC # 420211436, approved March 2, 2021

-Stormwater management (SWM) for the property will be provided for in accordance with Chapter 19 of the Montgomery County Code and the State of Maryland. The SWM design will incorporate environmental site design (ESD) planning techniques and practices. The Stormwater management system will include micro-bioretention facilities, green roofs, and impervious area disconnection. Conceptual Stormwater management design will require Geotechnical evaluation and testing prior to approval of a Stormwater Management Concept Plan.

-All work in the Sligo Avenue and Carroll Lane subject to review by Montgomery County as part of the Right of Way Improvement plans for storm drain alignment and driveway access.

-Ex. Public Utility Easement within the subject property along Sligo Avenue to be abandoned as part of the Record Plat.

-All interior lot lines and Rights of Ways/Easements to be extinguished as part of the Record Plat.
See Existing Conditions Plan

MNCPPC **#120220110**

MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com
PREPARED BY: BRIAN DONNELLY

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the Laws of the State of Maryland License No. 16905, Expiration Date: 04/01/2024

OWNER:
SLIGO 42, LLC and SLIGO 60, LLC
c/o TM ASSOC. DEVELOPMENT
1375 PICCARD DRIVE, SUITE 150
ROCKVILLE, MARYLAND 20850
240.428.7799

CO-DEVELOPERS:
GREEN STREET HOUSING, LLC
212 EAST MAIN STREET, # 200
SALISBURY, MARYLAND 21801
443.615.7121

CO-DEVELOPERS:
TM ASSOC. DEVELOPMENT, INC.
1375 PICCARD DRIVE, SUITE 150
ROCKVILLE, MARYLAND 20850
240.428.7799

REVISIONS

NO.	DESCRIPTION	DATE
1	MNCPPC SUBMISSION	03 /22
2		

ARCHITECT:
MINER FEINSTEIN ARCHITECTS, LLC
241 East 4th Street | Suite 207
Frederick, Maryland 21701
301.760.7988

LAND USE ATTORNEY
WIRE GILL, LLP
4800 HAMPDEN LANE, SUITE 200
BETHESDA, MARYLAND, 20814
HEATHER DLHOPOLSKY
301-263.6275

REVISIONS

NO.	DESCRIPTION	DATE
1	DESIGN DEVELOPMENT SUBMISSION	05/14/21
	MNCPPC SUBMISSION	05/04/22

TAX MAP JN43 WSSC 210 NW 01

PLATS 21509 and 54

13TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

SLIGO APARTMENTS

R.HOLT EASLEY'S LOTS P10, P12, & 51

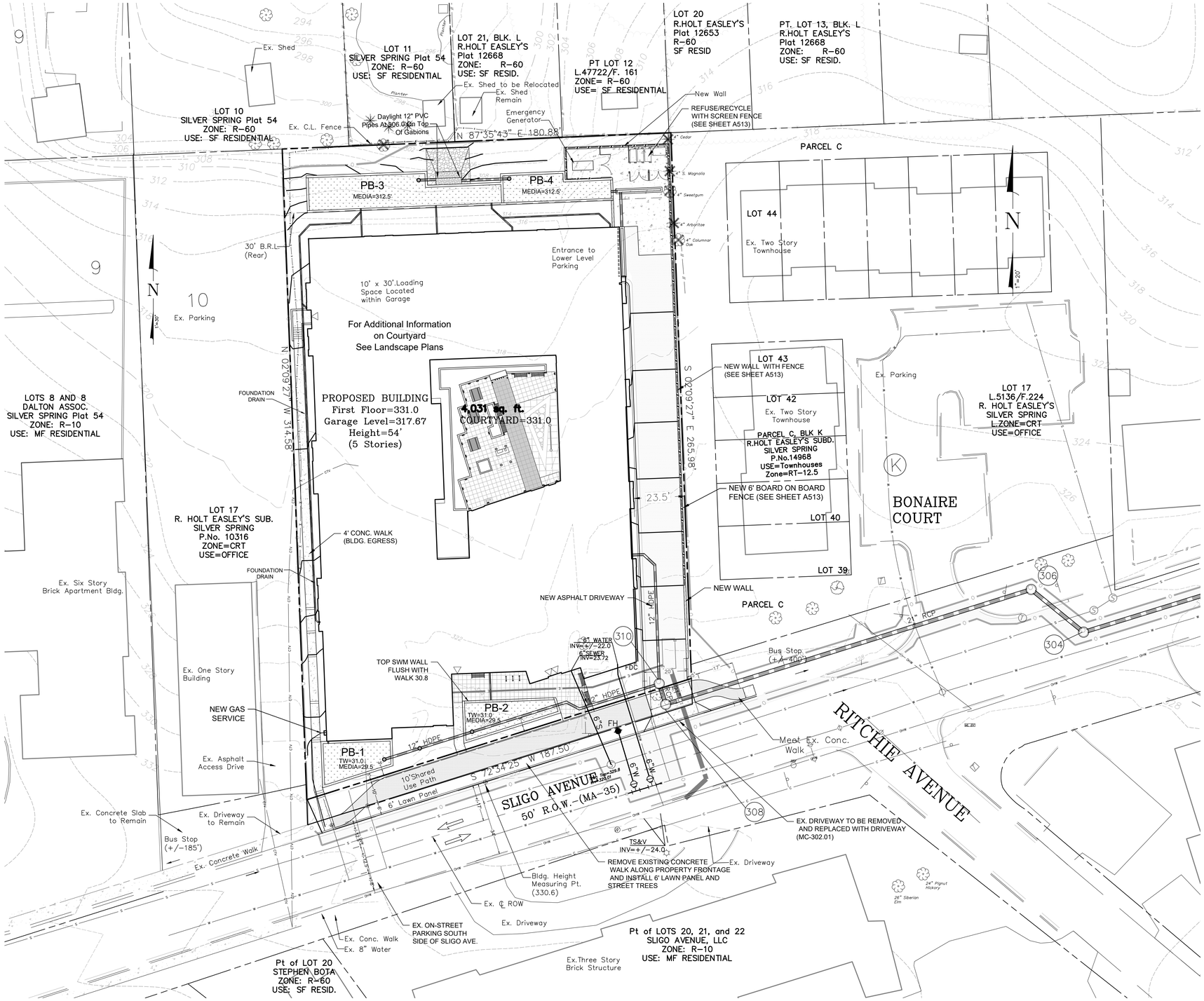
PROJ. MGR	BJD
DRAWN BY	BJD
SCALE	1"= 30'
DATE	03/2022

PRELIMINARY PLAN

PP2.01

PROJECT NO.	17.172.14
SHEET NO.	3 OF 4

ATTACHMENT C



GRAPHIC SCALE

20 0 10 20 40 80

(IN FEET)

1 inch = 20 ft.

FOR ADDITIONAL INFORMATION ON STORM DRAIN OUTFALL SEE SHEET SP 2.01
SEE SHEET SP 2.3 FOR GRADING

SEE SHEET 2.01 FOR LEGEND

Know what's below. Call before you dig.

FOR UTILITY LOCATIONS CONTACT "ONE CALL" AT 811 AT LEAST 48 HOURS PRIOR TO CONSTRUCTION

DEVELOPER'S CERTIFICATE
THE UNDERSIGNED AGREES TO EXECUTE ALL THE FEATURES OF PLAN APPROVAL NO. **820220170** INCLUDING APPROVAL CONDITIONS, DEVELOPMENT PROGRAM, AND CERTIFIED SITE PLAN.

DEVELOPER: GREEN STREET HOUSING, LLC. THOMAS AYD, JR.
COMPANY CONTACT

ADDRESS: 212 E. MAIN STREET, SUITE 200, SALISBURY, MD 21801
EMAIL: tom@greenstreethousing.com

SIGNATURE:

MNCPPC **#820220170 (SITE PLAN)**

MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
www.mhgpa.com
PREPARED BY: BRIAN DONNELLY

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the Laws of the State of Maryland License No. 16905, Expiration Date: 04/21/2024

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c/o TM ASSOC. DEVELOPMENT
1375 PICCARD DRIVE, SUITE 150
ROCKVILLE, MARYLAND 20850

CO-DEVELOPERS:
GREEN STREET HOUSING, LLC
212 EAST MAIN STREET, # 200
SALISBURY, MARYLAND 21801
443.615.7121

CO-DEVELOPERS:
TM ASSOC. DEVELOPMENT, INC.
1375 PICCARD DRIVE, SUITE 150
ROCKVILLE, MARYLAND 20850
240.428.7799

REVISIONS

NO.	DESCRIPTION	DATE
1	PROGRESS SET	02/22/22
2	95% CD SUBMISSION	04/8/22
	MNPPC SUBMISSION	05/04/22

CO-DEVELOPERS:
MINER FEINSTEIN ARCHITECTS, LLC
241 East 4th Street | Suite 207
Frederick, Maryland 21701
301.760.7988

LAND USE ATTORNEY
WIRE GILL, LLP
4800 HAMPDEN LANE, SUITE 200
BETHESDA, MARYLAND, 20814
HEATHER DLHOPOLSKY
301-263.6275

REVISIONS

NO.	DESCRIPTION	DATE
1	DESIGN DEVELOPMENT SUBMISSION	05/14/21

TAX MAP JN43 WSSC 210 NW 01

PLATS 21509 and 54

13TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

SLIGO APARTMENTS

R.HOLT EASLEY'S LOTS P10, P12, & 51

PROJ. MGR	BJD
DRAWN BY	BJD
SCALE	1"= 20'
DATE	03/ 2022

DETAILED SITE PLAN

SP-2.02

PROJECT NO. 17.172.14

SHEET NO. 2 OF 4

I:\17172\dwg\SP_2.dwg, SP-2.02 DETS PLAN, 5/14/2022 8:54:43 AM, Dornetz, Copyright © 2022 Macris, Hendricks & Glascock, P.A.

DEPARTMENT OF TRANSPORTATION

Marc Elrich
County Executive

Christopher R. Conklin
Director

June 01, 2022

Ms. Grace Bogdan, Planner Coordinator
Down-County Planning Division
The Maryland-National Capital
Park & Planning Commission (M-NCPPC)
2425 Reedie Drive
Wheaton, Maryland 20902

RE: Preliminary Plan No. 120220110
Sligo Apartments
Preliminary Plan Letter

Dear Ms. Bogdan:

We have completed our review of the preliminary plan uploaded on eplans dated May 20, 2022, respectively and the additional documents received via email. A previous plan was reviewed by the Development Review Committee at its April 26, 2022, meeting. We recommend approval of the plan subject to the following comments:

Significant Plan Review Comments

1. At or prior to the recordation of the plat, all existing easements within the area to be dedicated as right-of-way are subject to subordination agreement.
2. The roadway cross section for the roadways along the frontage shall be the following:
   Sligo Avenue-From the Property Line to the Face of Curb
   - Proposed 1-ft Maintenance Buffer
   - Proposed 10-ft Shared Use Path *
   - Proposed 6-ft Tree Pael

   * The 10-ft shared use path shall transition and tie into the existing sidewalks on the east and west end of the property as shown in the plans.
3. At the signing and marking plan, the plan shall show appropriate signage for restricting motorized vehicles (MUTCD Sign R5-3) along the 10-ft wide shared use path. Please coordinate with our

Division of Traffic Engineering and Operations at trafficops@montgomerycountymd.gov during the time of signing and marking pan for details.

4. **Storm Drain Analysis:** The revised storm drain analysis was reviewed and is acceptable. No improvements are needed to the downstream public storm drain system for this plan.
5. **Sight Distance:** The sight distance has been approved and is an attachment to this letter.
6. **Transportation Demand Management (TDM):**
   The provisions of the amended County Code for TDM are not required as this project is not located in a District (just outside the Silver Spring TMD) so a Project-based TDM Plan is not required. However, the project is in the Purple Line East Policy Area which has a blended NADMS goal of 50% for employees and residents. The proposed project's 98 multi-family residential units are within walking distance to downtown Silver Spring and its retail, amenities, and multiple public transportation options. In addition to the transit-supporting features at the Project and to support efforts to achieve and maintain the 50% NADMS for the policy area, we recommend that the developer:
   a. Identify a contact person at the Project to work with the Department if contacted, to provide information about transportation options or related events to residents and on-site employees.
   b. Assist in communicating the opportunity for residents and on-site employees to participate in the County's commuter survey or data collection, if requested.
   c. Install a monitor in the lobby of the residential building that shows real-time information for bus and nearby Metrorail service as well as information about nearby micromobility devices.
   d. Have a display in the lobby for materials for bike maps and a minimal amount of promotional materials.

   The applicant should coordinate with Ms. Sandra Brecher, Chief of the Commuter Services Section. Ms. Brecher may be contacted at Sandra.Brecher@montgomerycountymd.gov or at 240-777-8380.

Standard Plan Review Comments

1. All Planning Board Opinions relating to this plan or any subsequent revision, project plans or site plans should be submitted to the Montgomery County Department of Permitting Services (MCDPS) in the package for record plats, storm drain, grading or paving plans, or application for

access permit. Include this letter and all other correspondence from this department.

2. Trees in the County ROW – spacing and species to be in accordance with the applicable MCDOT standards. Tree planning within the public ROW must be coordinated with MCDPS ROW Plan Review Section.
3. No steps, stoops or retaining walls for the development are allowed in County ROW. No door swings into county ROW.
4. If the proposed development will alter any existing streetlights, , please contact Mr. Dan Sanayi of our Traffic Engineering Design and Operations Section at yazdan.sanayi@montgomerycountymd.gov or at (240) 777-2190 for proper executing procedures. All costs associated with such relocations shall be the responsibility of the applicant.
5. Relocation of utilities along existing roads to accommodate the required roadway improvements shall be the responsibility of the applicant.
6. Record a covenant for the operation and maintenance of private streets, storm drainage systems, and/or open space areas.
7. Design all access points and alleys to be at-grade with the sidewalk, dropping down to street level between the sidewalk and roadway.
8. Posting of a ROW permit bond is a prerequisite to MCDPS approval of the record plat. The ROW permit will include, but not necessarily be limited to, the following improvements:
    a. Shared use path, handicap ramps (if needed), and storm drainage and appurtenances along Sligo Avenue.
    b. Enclosed storm drainage and/or engineered channel (in accordance with the MCDOT Storm Drain Design Criteria) within the County ROW and all drainage easements.
    c. Permanent monuments and property line markers, as required by Section 50.4.3(G) of the Subdivision Regulations.
    d. Erosion and sediment control measures as required by Chapter 19 and on-site stormwater management where applicable shall be provided by the Developer (at no cost to the County) at such locations deemed necessary by the MCDPS and will comply with their specifications. Erosion and sediment control measures are to be built prior to construction of streets, houses and/or site grading and are to remain in operation (including maintenance) as long as deemed necessary by the MCDPS.

Thank you for the opportunity to review this preliminary plan. If you have any questions or comments regarding this letter, please contact Mr. Deepak Somarajan, our Development

Review Engineer for this project at deepak.somarajan@montgomerycountymd.gov or at (240) 777-7170.

Sincerely,

Deepak Somarajan

Deepak Somarajan, Engineer III
Development Review Team
Office to Transportation Policy

SharePoint\teams\DOT\Director's Office\Development Review\Deepak\Preliminary Plan\ 120220110-Sligo Apartments\Letter\ 120220110-Sligo Apartments-DOT Preliminary Plan Letter

Enclosures: Sight Distance

cc: SharePoint correspondence Folder FY-22

cc-e:	Heather Dlhopolsky	Wire Gill LLP
	Brian Donnelly	Macris, Hendricks, & Glascock
	Katherine Mencarini	MNCPPC
	Atiq Panjshiri	MCDPS RWPR
	Sam Farhadi	MCDPS RWPR
	Mark Etheridge	MCDPS WRS
	Mark Terry	MCDOT DTEO
	Dan Sanayi	MCDOT DTEO
	Sandra Brecher	MCDOT CSS
	Beth Dennard	MCDOT CSS
	Corey Pitts	MCDOT DTE
	Rebecca Torma	MCDOT OTP

MONTGOMERY COUNTY, MARYLAND

DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DEPARTMENT OF PERMITTING SERVICES

SIGHT DISTANCE EVALUATION

Facility/Subdivision Name: R. Holt Easley's P10, P12 and 51

Preliminary Plan Number: **1- Pending**

Street Name: Sligo Avenue

Master Plan Road Classification: Minor Arterial

Link To MoCo Road Classification Map

Posted Speed Limit: 30 mph

Street/Driveway #1 (Proposed)

Sight Distance (feet)		OK?
Right	439	Yes
Left	600	Yes

Comments:

Street/Driveway #2 ( )

Sight Distance (feet)		OK?
Right		
Left		

Comments:

GUIDELINES

Classification or Posted Speed (use higher value)	Required Sight Distance in Each Direction*
☐ Tertiary - 25 mph	150'
☐ Secondary - 30	200'
☐ Business - 30	200'
☐ Primary - 35	250'
☒ Arterial - 40	325'
☐ (45)	400'
☐ Major - 50	475'
☐ (55)	550'

*Source: AASHTO

Sight distance is measured from an eye height of 3.5' at a point on the centerline of the driveway (or side street) 6' back from the face of curb or edge of traveled way of the intersecting roadway where a point 2.75' above the road surface is visible. (See attached drawing)

ENGINEER / SURVEYOR CERTIFICATE

I hereby certify that this information is accurate and was collected in accordance with these guidelines and that these documents were prepared or approved by me, and that I am a licensed Professional Engineer under the laws of the State of Maryland, License No. 14979, Expiration Date07/02/2022

Signature

04/02/2021
Date

14979
PLS/P.E. MD Reg. No

Montgomery County Review:

☒ Approved

☐ Disapproved:

By: Deepak Somarajan

Date: 6/1/2022

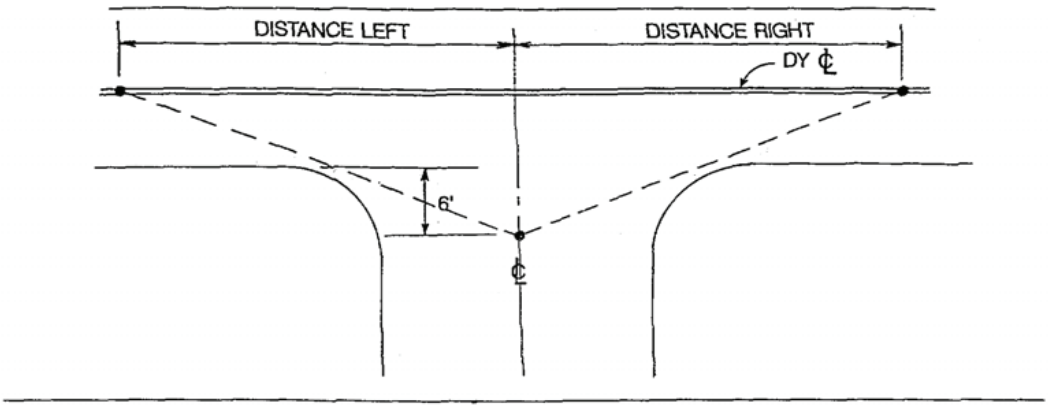
Form Reformatted: March, 2000

MONTGOMERY COUNTY, MARYLAND

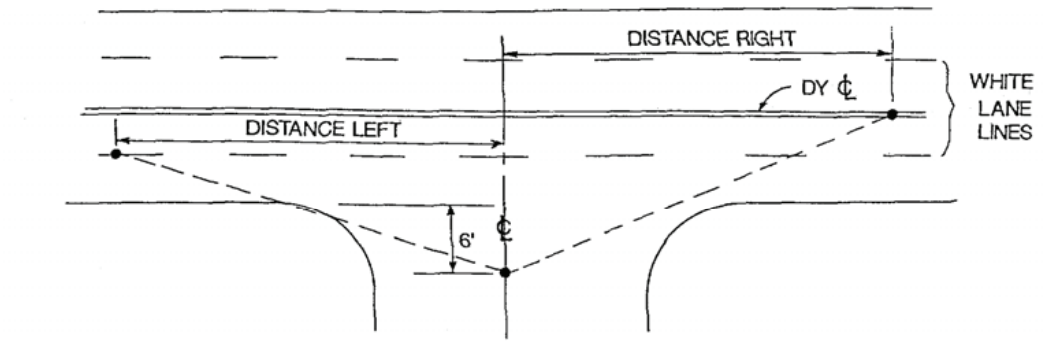
DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION
DEPARTMENT OF PERMITTING SERVICES

SIGHT DISTANCE EVALUATION ATTACHMENT

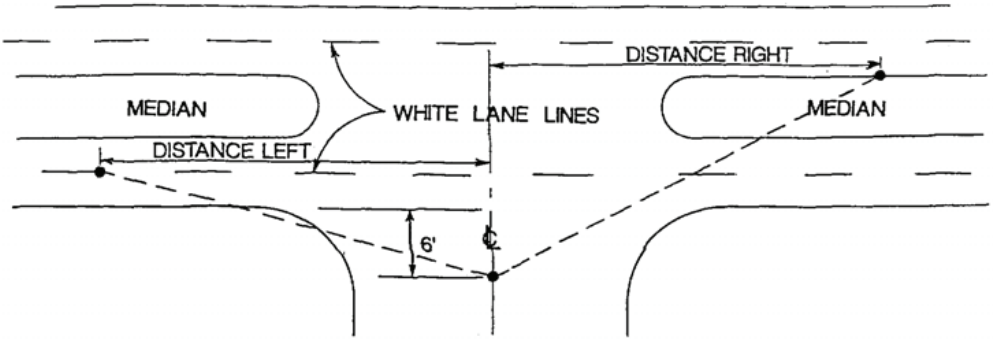
2 LANE UNDIVIDED ROADWAY



MULTI-LANE UNDIVIDED ROADWAY



MULTI-LANE DIVIDED ROADWAY

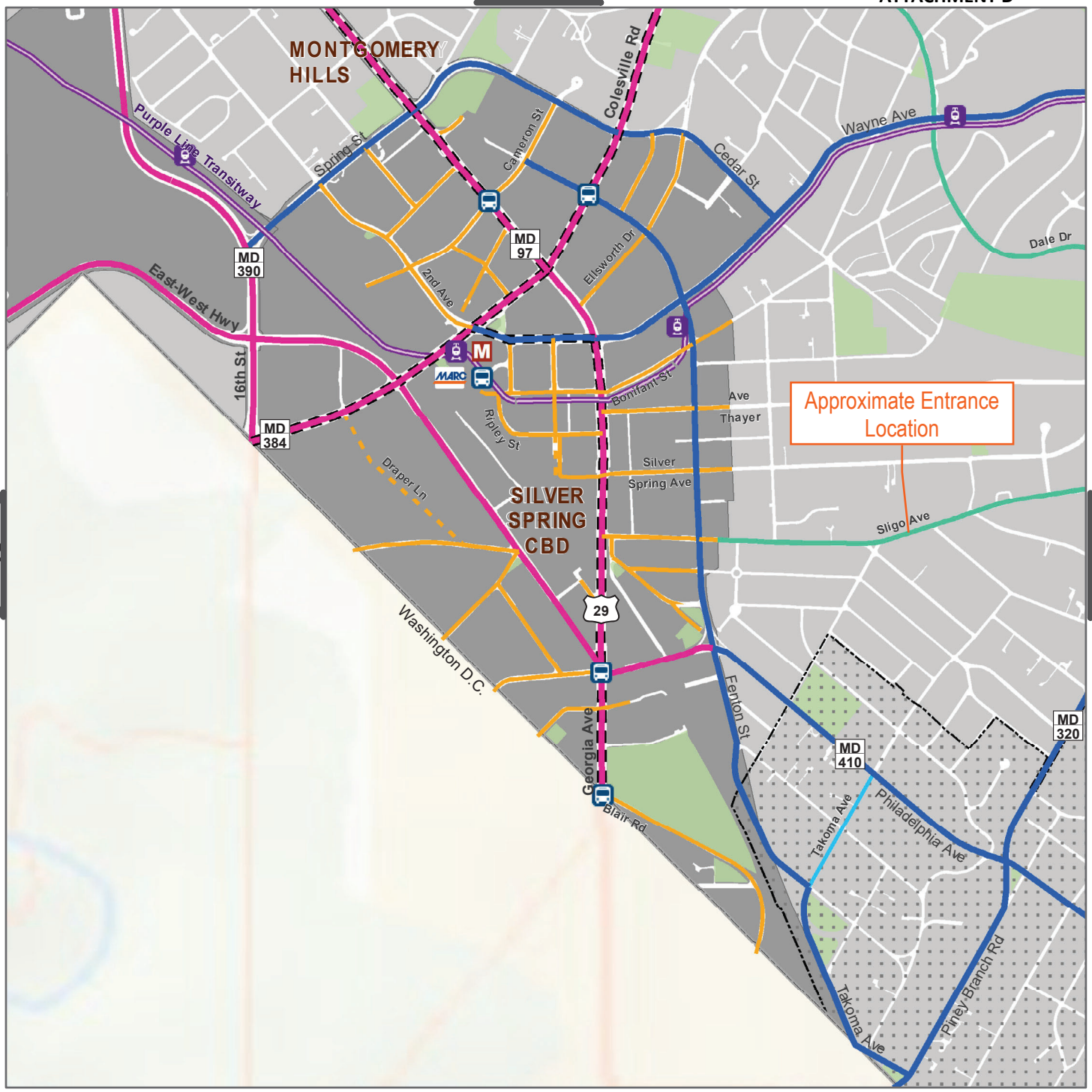


Form Reformatted:
March, 2000

Sligo Avenue Proposed Entrance Sight Distance Images

Looking West Toward Proposed Entrance

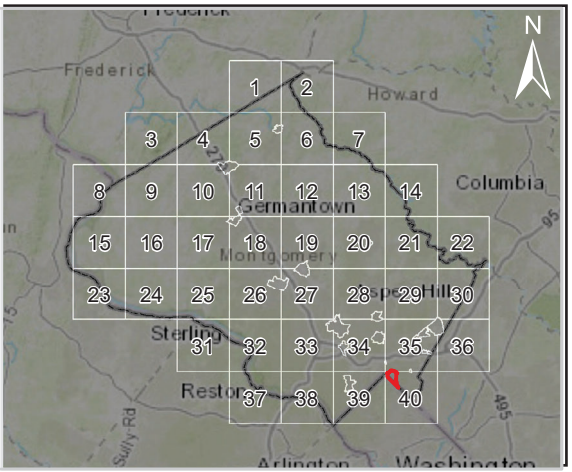
Looking East Toward Proposed Entrance.



Master Plan of Highways and Transitways Designations

- Planned Light Rail
- Major Highway
- Major Highway with Planned BRT
- Arterial
- Arterial with Planned BRT
- Arterial with Planned Light Rail
- Minor Arterial
- Primary Residential
- Business (Planned)
- Business
- Business with Planned Light Rail

0 0.175 0.35 0.7 Miles



DEPARTMENT OF PERMITTING SERVICES

Marc Elrich
County Executive

Mitra Pedoeem
Director

June 9, 2022

Mr. Steven Wilde
Macris, Hendricks & Glascock, P.A.
9220 Wightman Road, Suite 120
Montgomery Village, MD 20886

Re: **COMBINED STORMWATER MANAGEMENT CONCEPT/*SITE DEVELOPMENT STORMWATER MANAGEMENT PLAN*** for
Sligo Apartments, LLC, 719 Sligo Avenue
Preliminary Plan #: 120220110
SM File #: 287546
Tract Size/Zone: 1.15 Ac / 49,950 SF
CRT-0.75, C-0.75, R-0.25, H-35
Total Concept Area: 1.43 ac / 62,400 SF
Lots/Block: P10, P12 and 51
Watershed: Sligo Creek

Dear Mr. Wilde:

Based on a review by the Department of Permitting Services Review Staff, the stormwater management concept for the above-mentioned site is **acceptable**. The stormwater management concept proposes to meet required stormwater management goals via green roof and microbioretention planter box. A partial waiver of stormwater management requirements is requested as part of this concept and is hereby conditionally granted with the expectation that incorporation of additional stormwater opportunities will be explored during the design phase of the project.

The following items will need to be addressed during the detailed sediment control/stormwater management plan stage:

1. This approval is granted under the condition that stormwater management opportunities will continue to be sought as part of the design phase. ESD to the MEP must be demonstrated as part of that review as it is not fully established as part of this concept.

2. A detailed review of the stormwater management computations will occur at the time of detailed plan review.

3. An engineered sediment control plan must be submitted for this development.

4. All filtration media for manufactured best management practices, whether for new development or redevelopment, must consist of MDE approved material.

This list may not be all-inclusive and may change based on available information at the time.

Payment of a stormwater management contribution in accordance with Section 2 of the Stormwater Management Regulation 4-90 **is required**.

This letter must appear on the sediment control/stormwater management plan at its initial submittal. The concept approval is based on all stormwater management structures being located outside of the Public Utility Easement, the Public Improvement Easement, and the Public Right of Way unless specifically approved on the concept plan. Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

If you have any questions regarding these actions, please feel free to contact Jean Kapusnick, P.E. at jean.kapusnick@montgomerycountymd.gov or at 240-777-6345.

Sincerely,

Mark Etheridge

Mark C. Etheridge, Manager
Water Resources Section
Division of Land Development Services

MCE: jak

cc: N. Braunstein
SM File # 287546

ESD: Required/Provided 8,707 cf / 7,083 cf
PE: Target/Achieved: 2.2"/1.79"
STRUCTURAL: 0.0 cf
WAIVED: 1,724 cf / 0.27 ac.

Department of Permitting Services
Fire Department Access and Water Supply Comments

DATE: 31-May-22

TO: Stephen Crum - scrum@mhgpa.com
Macris, Hendricks & Glascock

FROM: Marie LaBaw

RE: Sligo Apartments
120220110 820220170

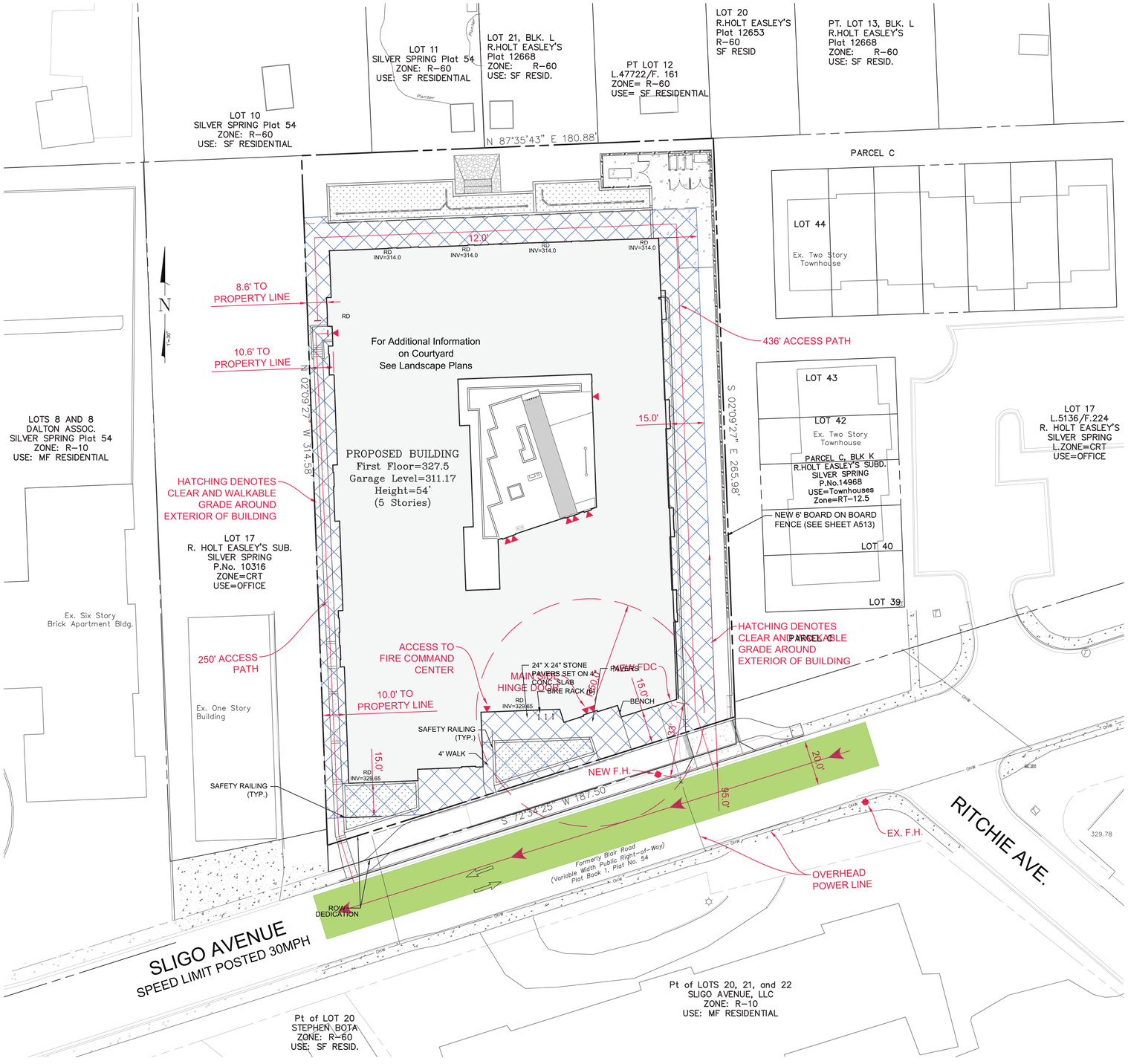
PLAN APPROVED

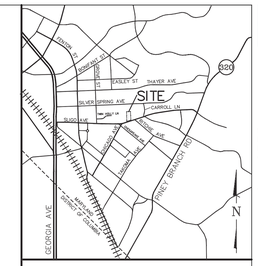
1. Review based only upon information contained on the plan submitted **31-May-22** .Review and approval does not cover unsatisfactory installation resulting from errors, omissions, or failure to clearly indicate conditions on this plan.

2. Correction of unsatisfactory installation will be required upon inspection and service of notice of violation to a party responsible for the property.

***** See statement of performance based design *****

ATTACHMENT D





VICINITY MAP
SCALE 1"=2,000'

The 15'-0" Min. distance between the west property and the building has been reduced to 8' min. The interior building walls will be upgraded to the 2 hours fire rating corridor and units demising walls (compartmentalized to 2 hours fire rated walls). A request will be submitted under a performance based design.

LEGEND

- FIRE DEPARTMENT ACCESS PATH
- 15' CLEAR AND WALKABLE GRADE AROUND BUILDING
- MAIN EXTERIOR DOORS
- FIRE ACCESS PATH

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

FIRE CODE ENFORCEMENT
Fire Department Access Review
Review based only upon information contained on this plan. Does not cover unsatisfactory layout resulting from ommissions, errors or failure to clearly indicate conditions on this plan. Correction of such unsatisfactory layout to afford required access will be required if found upon inspection after installation
BY: SAC FM: 43 DATE: 5/31/2022

MHG
Civil Engineers
Land Planners
Landscape Architects
Land Surveyors

9220 Wightman Road, Suite 120
Montgomery Village, MD 20886
Phone: 301.670.0840
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STATE OF MARYLAND
STEPHEN EDWARD CRUM
No. 21509
PROFESSIONAL ENGINEER

E=sec@mhgpa.com, CN=Stephen E. Crum, O="Macris, Hendricks and Glascock, P.A.", L=Montgomery Village, S=Maryland, C=US
2022.05.31 11:54:23-04'00'

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed Professional Engineer under the Laws of the State of Maryland License No. 16905, Expiration Date: 04/21/2024

OWNER:
SLIGO 42, LLC and SLIGO 60, LLC
c/o TM ASSOC. DEVELOPMENT
1375 PICCARD DRIVE, SUITE 150
ROCKVILLE, MARYLAND 20850
240.428.7799

CO-DEVELOPERS:
GREEN STREET HOUSING, LLC
212 EAST MAIN STREET, # 200
SALISBURY, MARYLAND 21801
443.615.7121

CO-DEVELOPERS:
TM ASSOC. DEVELOPMENT, INC.
1375 PICCARD DRIVE, SUITE 150
ROCKVILLE, MARYLAND 20850
240.428.7799

REVISIONS

NO.	DESCRIPTION	DATE
1		
2	MNCPPC SUBMISSION	05/2022

ARCHITECT:
MINER FEINSTEIN ARCHITECTS, LLC
241 East 4th Street | Suite 207
Frederick, Maryland 21701
301.760.7988

LAND USE ATTORNEY
WIRE GILL, LLP
4800 HAMPDEN LANE, SUITE 200
BETHESDA, MARYLAND, 20814
HEATHER DLHOPOLSKY
301-263.6275

TAX MAP JN43 WSSC 210 NW 01

PLATS 21509 and 51

13TH ELECTION DISTRICT
MONTGOMERY COUNTY
MARYLAND

SLIGO APARTMENTS

R.HOLT EASLEY'S LOT 51, LOT 12 and PT. OF LOT 10

PROJ. MGR	BJD
DRAWN BY	JDP
SCALE	1"= 20'
DATE	04.28.2022

FIRE APPARATUS ACCESS PLAN

PROJECT NO.	17.172.14
SHEET NO.	1 OF 1

DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS

Marc Elrich
County Executive

Aseem K. Nigam
Director

June 2, 2022

Grace Bogdan, Planner III
Down-County Planning Division
Montgomery County Planning Department
2425 Reedie Drive
Wheaton, Maryland 20902

Re: Sligo Apartments
Preliminary Plan No. 120220110 / Site Plan 820220170

Dear Ms. Bogdan:

The Montgomery County Department of Housing and Community Affairs (DHCA) has reviewed the above referenced plan and recommends Approval. The development will need to enter into an Agreement to Build MPDUs to designate MPDUs in accordance with Chapter 25A.

Sincerely,

Somer Cross, Manager
Affordable Housing Programs Section

DPS-ROW CONDITIONS OF APPROVAL May 27, 2022

820220170 Sligo Apartments

Contact: Sam Farhadi at 240 777-6333

We have reviewed site plan files:

"**07-SITE-820220170-05.pdf V5**" uploaded on/ dated "**5/20/2022**" and

The followings need to be addressed prior to the certification of site plan:

1. Access points on public roads:
    a. Provide truck turning movement for all (especially right turn) movements;
    b. Driveways should not cross the frontage.
2. Provide public sidewalk:
    a. To ADA standards (minimum five feet wide) and label it accordingly;
    b. Ensure the proposed side path connects with the receiving sidewalks within the site frontage seamlessly. Show/ label the existing sidewalks where connection is made.
    c. Ensure positive drainage toward ROW.
    d. In order to the sidewalks/ shared use paths handicap ramps be distinguished from vehicular travel lanes appropriate signage is needed (R5-3).
3. Investigate re-routing the proposed storm drain out of road/ driveway pavement.
4. On landscaping plan, provide street trees per approved tree species list at the required spacing and clearances.
5. Provide and label all non-woody landscaping in ROW per MC-704.01.

And the following needs to be a condition of the certified site plan:

1. All existing easements within the area to be dedicated as ROW are subject to subordination agreement.

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May 13, 2022

Joe Buckley
Development Manager
Green Street Housing
212 E. Main Street, Suite 200
Salisbury, MD 21801

Re: Sligo Apartments
Site Noise Analysis

Joe:

This report summarizes the site noise analysis for the Sligo Apartments project in Montgomery County, MD.

1. Executive summary

A site survey was performed and sound levels were measured in the locations shown in Figure 2 for over two days. Traffic volumes were counted briefly at the beginning of the survey. The Traffic Noise Model was used to model existing traffic noise levels. The output sound levels compared well to the measured sound levels. A traffic forecast was developed based on a combination of historical traffic data and an annual growth rate provided by the state DOT. The Traffic Noise Model was used to predict future noise levels on the site 5 feet high, and at the facades of the building on each floor.

The design goals are to ensure that the Day-Night Average Sound Level (DNL) not exceed 65 dB in usable outdoor areas such as the courtyard, or 45 dB inside residences. To provide a margin for error we are aiming for a DNL of 42 dB indoors.

The projected DNL will be well below 40 dB in the courtyard. Noise barriers are not required.

The DNL will be as high as 67.7 dB outdoors at the facades of residences. To reduce the DNL to 42 dB or lower in all rooms, we recommend using windows rated at STC 27 or higher in all rooms facing Sligo Avenue (including on the perpendicular exterior walls of those rooms).

2. Introduction

Hush Acoustics LLC was contracted by Green Street Housing to perform sound level measurements on the site, to model future noise levels, to design noise barriers, and to design modifications to the residences to limit indoor noise levels, as necessary. This analysis was based on the 95% CD submission drawings prepared by Miner Feinstein Architects dated March 9, 2022. The site is located along the north side of Sligo Ave between the intersections with Ritchie Ave and Chicago Ave. A vicinity map is included as Figure 1.

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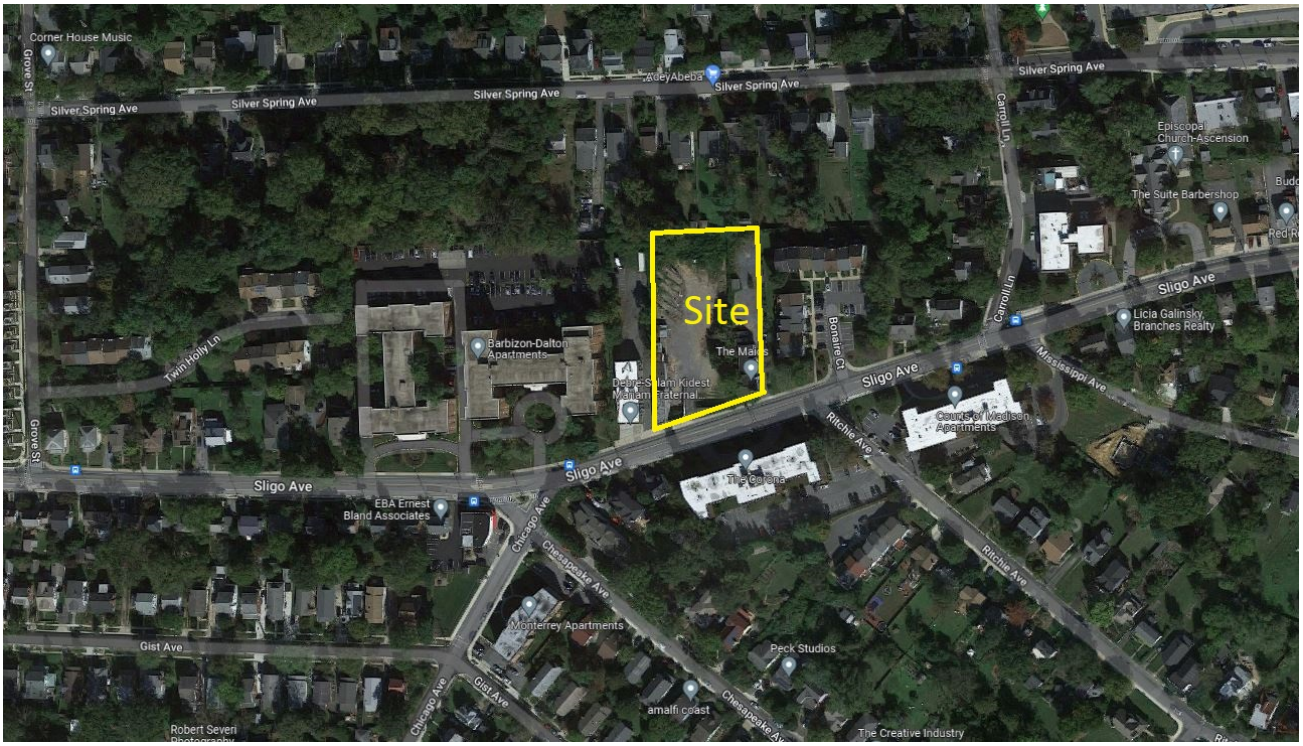

Figure 1. Vicinity Map

Per previous conversations with Mr. Mark Pfefferle of Montgomery County Park and Planning staff and with Mr. Josh Penn, we understand that Montgomery County uses the 1983 Staff Guidelines to evaluate transportation noise impacts for proposed residential land development. The guidelines provide outdoor DNL criteria as a function of both site location and community type. Per the location map, this site is within the area where the DNL goal would be 65 dB. However, per Table 2-1 of the guidelines, the DNL goal should be 60 dB where suburban densities predominate. Although the Staff Guidelines say the noise level goals apply at the building line, from conversations with county staff we learned that they should be evaluated in usable outdoor areas such as rear and sometimes side yards, as well as common recreation areas. For this project, the recreation area is the central courtyard.

The Montgomery County Staff Guidelines also state that the interior noise guideline is a DNL of 45 dB but to provide a margin for error we will design for a DNL of 42 dB.

3. Site survey

The purposes of the site survey are as follows:

1. to collect noise level data on the site. Noise level data are useful for the following reasons:
    a. to validate the noise model
    b. to determine how the hourly average sound levels compare to the Day-Night Average Sound Levels (DNL). The DNL is the noise metric used by Montgomery County staff. However, the Traffic Noise Model (TNM) uses the hourly average sound level. For locations mostly impacted by traffic noise, the relationship between the DNL and loudest

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hour average sound level is relatively constant. The measured sound levels are useful for determining this relationship.

c. to identify any significant non-traffic noise sources.

2. to observe traffic conditions such as prevailing speeds, classifications (i.e., percentages of automobiles, trucks, buses, and motorcycles), and directional distributions. Many of these parameters are not well documented in traffic studies. The prevailing speed often differs from the posted speed limit.
3. to observe road conditions such as locations and timing of traffic flow control devices (e.g., traffic signals, stop signs, and toll booths), and the pavement type.
4. to observe site conditions not represented on the site plan such as the presence and height of existing noise barriers along the road right-of-way.

The purpose of the site survey was not to determine how loud it will be at the proposed buildings. That is performed using the computerized noise modeling discussed below.

3.1 Sound level measurement procedure

Larson Davis model 831 sound level meters were installed in the locations indicated in Figure 2 from 11:30 am on Tuesday May 10, 2022, through 2 pm on Thursday May 12, 2022. However, the meter at location M1 had a malfunction at 9 pm on Tuesday May 10 and stopped logging data after that time. The sound level meters were programmed to report average, maximum, and minimum A-weighted sound levels during each one-minute interval. In addition, the meters were programmed to record audio files each time a loud noise event occurred over 84 dBA at location M1 and over 75 dBA at location M2. The microphones were attached to poles 31 feet above the ground.

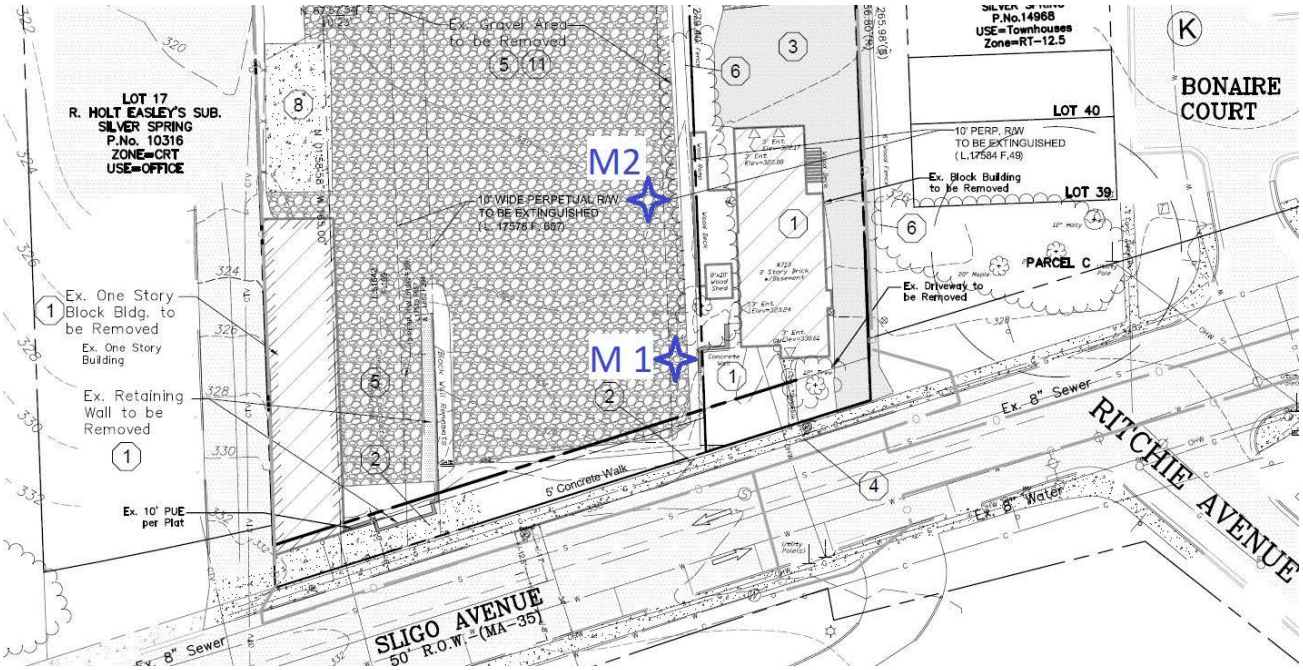

Figure 2. Sound Level Meter Locations

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3.2 Site observations

The site currently has a gravel area covering most of the site. Most of the site is fairly level at an elevation approximately 8 to 10 feet below that of the pavement of Sligo Ave. The main noise source on the site is traffic on Sligo Ave although there is sound from birds, rustling leaves, and lawn mowing.

There are no traffic signals or stop signs near the site on Sligo Ave. Each direction of traffic has one lane. The posted speed limit is 30 mph each direction.

3.3 Measured sound levels

Average sound levels during five-minute intervals were calculated based on the measured one-minute average sound levels. Figure 3 presents the resulting five-minute average sound levels. Hourly average sound levels were calculated based on the five-minute average sound levels. Figure 4 presents the hourly average sound levels. The Day-Night Average Sound Levels (DNL) were calculated for each full calendar day. Table 1 presents the DNL and loudest-hour average sound level, and the difference between the two, for each calendar day.

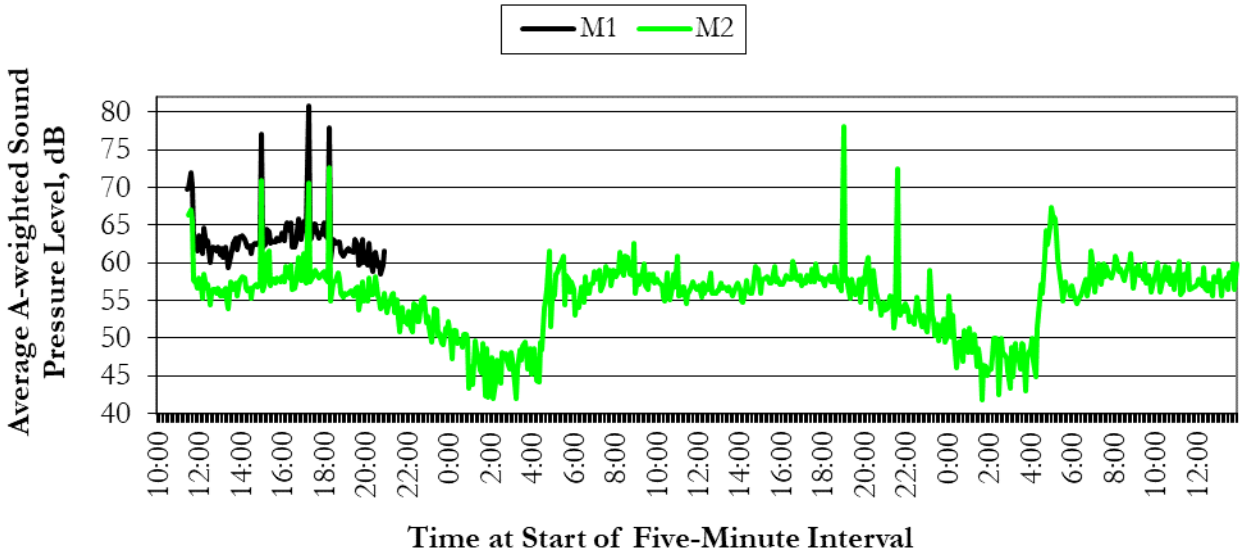

Figure 3. Five-Minute Average Sound Levels

Table 1. Measured DNL and Loudest-Hour Average Sound Levels, dB

Day, Date	DNL		Loudest-Hour Average Sound Level		DNL Minus Loudest-Hour Average	
	M1	M2	M1	M2	M1	M2
Tuesday, May 10, 2022				63		
Wednesday, May 11, 2022		61.6		67.7		-6.1
Wed. w/o 2 sirens		60.7		59.8		
Thursday, May 12, 2022				62.3		

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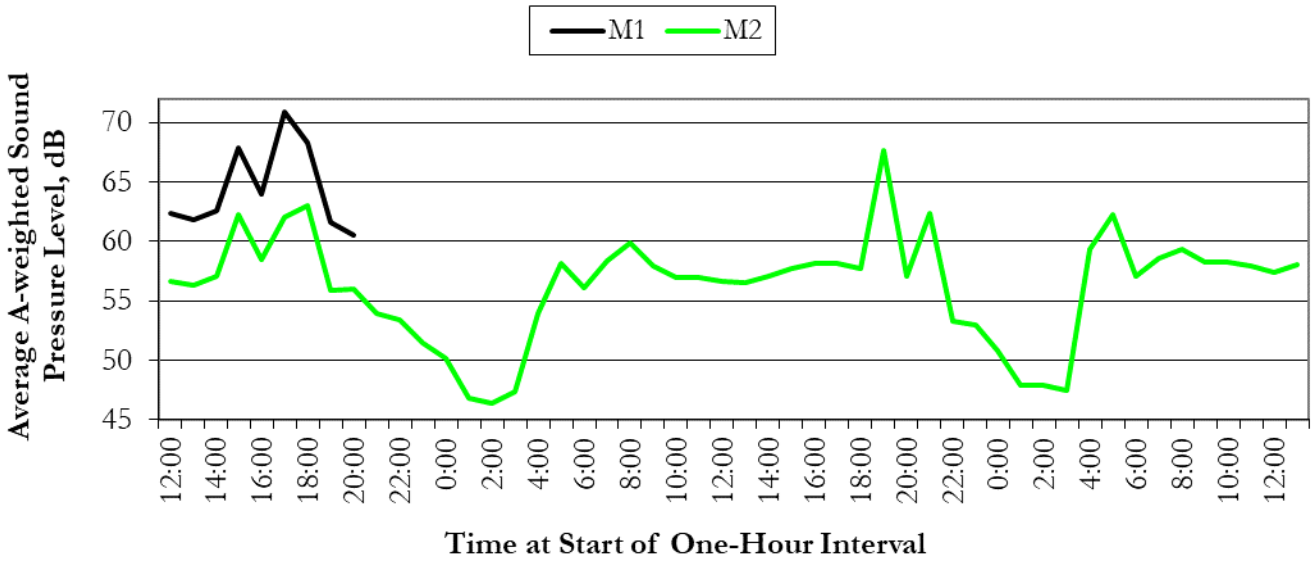

Figure 4. Hourly Average Sound Levels

Sound levels were significantly elevated over 75 dBA and audio files were created 15 times at location M2. We listened to the audio files and determined that the sound sources were loud vehicles in 6 cases, sirens in 4 cases, birds in 3 cases, and car or truck horns in 2 cases. Table 2 also presents sound levels that would have resulted if it were not for the two minutes that had sirens on Wednesday. Clearly, the sirens dominated the highest hourly average sound level.

No trains or train horns caused the creation of audio files. This means that trains, if they are even audible in this location, produce sound levels below 75 dBA. Given the distance from the site to the railroad (2,175 feet based on Google Earth), that there do not appear to be any at-grade train-road crossings near the site, that we did not hear any trains while on site, and that there were no audio files caused by train sound levels, we are assuming train noise is negligible at the site. The remainder of this report addresses only traffic noise.

3.4 Traffic counts

Traffic volumes were counted during a 15-minute interval for each direction of traffic on Sligo Avenue at the start of the survey. From these volumes the hourly average traffic volumes were extrapolated. Table 2 presents the extrapolated hourly traffic volumes. Automobiles include pickup trucks, passenger cars hauling trailers, and vans. Medium trucks are six-wheeled cargo vehicles with two axles. Heavy trucks are cargo vehicles with three or more axles. Speeds were determined using a hand-held radar gun. The median speeds for dozens of vehicles are listed in Table 2.

3.5 Weather

Weather can affect both the propagation of sound from a roadway, as well as produce sound by rustling leaves or causing wind or rain noise at the microphone. For these reasons, weather conditions were documented during the survey. Hourly weather information was obtained from the National Weather

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Service for Ronald Reagan Washington National Airport. No precipitation was noted. The following wind faster than 10 mph were noted:

- From the NE to NNE at 12 to 16 mph during the traffic counts on May 10
- From the NE to E at 8 to 18 mph from then until 8:15 pm on May 10
- From the N to NE at 9 to 17 mph from 6:35 am to 6:05 pm on May 11
- From the NNE at 9 to 14 mph from 6:55 am to 10:30 am on May 12

Table 2. Extrapolated Hourly Traffic Volumes and Prevailing Speeds for Tuesday May 10, 2022 at 11:57 am to 12:12 pm

Lanes	Speed (mph)	Autos	Medium Trucks	Heavy Trucks	Buses	Motorcycles
EB	27	144	8	0	0	4
WB	28	196	4	0	12	0

4. Outdoor noise modeling

4.1 TNM overview

In the United States, roadway traffic noise levels are typically analyzed using the Federal Highway Administration's (FHWA) Traffic Noise Model (TNM). The current version is 2.5. The output from TNM is the hourly average sound level at the receivers. The program allows input of the following information:

- Coordinates of selected points along the road centerlines
- Pavement width and type
- Hourly volumes and speeds of autos, medium trucks, heavy trucks, buses, and motorcycles for each road segment
- Locations of traffic flow control devices such as stop signs, traffic signals, and toll booths at the start of roads
- Coordinates and heights of evaluation points (receivers)
- Coordinates of ground elevations in selected locations (terrain lines)
- The default ground type
- Coordinates of existing and proposed objects that shield the site such as noise walls and buildings (barriers)

Not used for this project:

- Road locations that are elevated (structure roadways)
- Coordinates and height of areas covered with thick evergreen forest (tree zones)
- Coordinates, height and spacing between buildings of rows of buildings which partially shield the site (building rows)
- Coordinates and ground material in selected locations (ground zones)

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4.2 TNM validation

The traffic volumes and speeds presented in Table 2 were input into TNM. This TNM run is called the validation run. Following is a summary of included parameters:

- Receivers were added at the two measurement locations.
- Each direction of travel of Sligo Avenue was modeled as an individual road in TNM. The locations and elevations of selected points along the road and the road width were taken from the site plan.
- Per FHWA guidance, the pavement was modeled as "Average."
- The default ground type was "hard soil."
- Barriers were added representing the existing The Maids building at 713 Sligo Ave, the existing 2-story townhouses east of there on Bonaire Court, the existing brick wall on the site, the existing 1-story building at 719 Sligo Ave on the site, the existing 1-story building at 721 Sligo Ave to the west of the site, and the existing 6-story Dalton apartment building to the west of the site.

The output sound levels were then compared to the sound levels measured during the traffic counts. After an initial comparison it was noted that the output from TNM was somewhat less than measured. To make the output better match measured sound levels we made the following changes:

- Traffic speeds were increased to 35 mph each direction despite our observations that they might have been somewhat lower than this.
- We noted on site that many vehicles were accelerating near the site, either getting in or out of the flow of traffic. To account for the extra noise accelerating vehicles make, we assumed that 30% of traffic comes to a stop and accelerates (as if at a stop sign) for the two crosswalks (one to the east of the site at Carroll Lane and one to the west of the site at Chicago Ave).

Table 3 presents this final comparison after the changes were made. It can be seen from Table 3 that TNM was accurate, producing sound levels between 1.1 dB less than and 0.1 dB greater than were measured. This level of agreement between the modeled and measured sound levels is within the accepted level of accuracy of TNM.

Table 3. Comparison of TNM Validation Run Output and Measured Sound Levels, dB

	M1	M2
Measured During Traffic Counts on Tuesday	62.4	56.8
TNM Output	61.3	56.9
TNM Minus Measured	-1.1	0.1

4.3 Future traffic conditions

Based on a 48-hour traffic volume count close to the site on Sligo Avenue (i.e., between US 29 and Philadelphia Ave, near Mayor Lane and Selim Road) on May 2 to 3, 2018, on the Maryland Department of Transportation (MDOT) website, the hours with the highest traffic volumes were 8-9 am and 5-6 pm. The average hourly traffic volumes over the two dates during these am/pm peak-hours were 177/281 eastbound and 260/185 westbound.

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In an email on May 5, 2022, a representative of MDOT stated that the annual growth rate for this location should be 0.5%. Applying this value to the 2018 hourly traffic volumes, yields 2040 am/pm peak-hour volumes of 198/314 eastbound and 290/206 westbound.

We could not locate any classified traffic counts for Sligo Avenue. On the MDOT website there are no classified counts anywhere on Sligo Avenue, and counts on the county's website are too old to be of any use. The most applicable count we could locate was on the MDOT website for Dale Drive 0.5 miles west of MD 320 (near Nolte Park). Sligo Ave and Dale Drive are both 2-lane minor arterial roads with 30 mph speed limits that generally go east-west between US 29 and Piney Branch Road (MD 320). At this location on Dale Drive we located 48-hour classified counts performed on November 28-29, 2018, and June 8-9, 2021. Traffic volumes were 16% lower in 2021 than in 2018, due to lingering effects of the COVID-19 pandemic. We focused only on the 2018 data for this reason. The average classifications from the 2018 counts during the 8-9 am and 5-6 pm am/pm peak-hours were 5.26%/8.22% medium trucks, 0.38%/1.24% heavy trucks, 0.00%/0.47% buses, and 0.38%/0.31% motorcycles. We assumed that in the year 2040 the am/pm peak-hour forecasts will include 5.5%/8.5% medium trucks, 0.5%/1.5% heavy trucks, 1%/1% buses, and 0.5%/0.5% motorcycles each direction. The resulting forecast traffic volumes are presented in Table 4.

Table 4. Year 2040 Peak-Hour Traffic Volumes

Time/Lanes	Autos	Medium Trucks	Heavy Trucks	Buses	Motor-cycles	Prevailing Speed (mph)
am EB	184	11	1	1	1	35
am WB	270	16	1	1	1	35
pm EB	279	27	5	2	2	35
pm WB	184	18	3	1	1	35

4.4 Future traffic noise modeling

The Master Plan of Highways dated April 20, 2019, states that Sligo Ave at the site (between Fenton Street and Piney Branch Road) is a two-lane road, and will remain so in the future. As such, we assumed that the road centerline locations and widths would stay the same in the future.

TNM was run using the traffic volumes and speeds presented in Table 4, once for the morning and once for the afternoon peak-hour. The highest output was used in the calculations to determine the DNL. All parameters from the validation run were retained with only the following changes:

- Traffic volumes listed in Table 4 were used.
- The two noise barriers representing the existing 1-story building and the existing Maids building on the site were removed to make way for the proposed apartment building.
- A barrier was added representing the proposed apartment building on the site.
- Receivers were added throughout the site 5 feet high to locate noise contours and in the courtyard.
- Receivers were added at the heights of the tops of windows on each floor around the building.

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4.5 Future outdoor traffic noise levels

It can be seen from Table 1 that the total DNL at location M2 for the full calendar day was 61.6 dBA, and not counting the minutes containing two sirens the loudest-hour average sound level was 59.8 dBA, which is 1.8 dB A less than the total DNL. The future loudest-hour average sound levels due to normal traffic were output from TNM for the morning and afternoon peak-hours. To be conservative, we assumed that in the year 2040 the DNL would be 2.5 dBA greater than the loudest-hour average sound level output from TNM. This assumption is equivalent to assuming that a higher percentage of traffic would travel on Sligo Ave at night (between 10 p.m. and 7 a.m.) than presently do.

The resulting year 2040 DNL are presented in Figures 5 and 6. It can be seen from Figure 5 that the DNL in the courtyard will be well below 40 dB and will meet the county limit of 60 or 65 dB (depending on how the guidelines are interpreted). In either case, there is no need for a noise barrier.

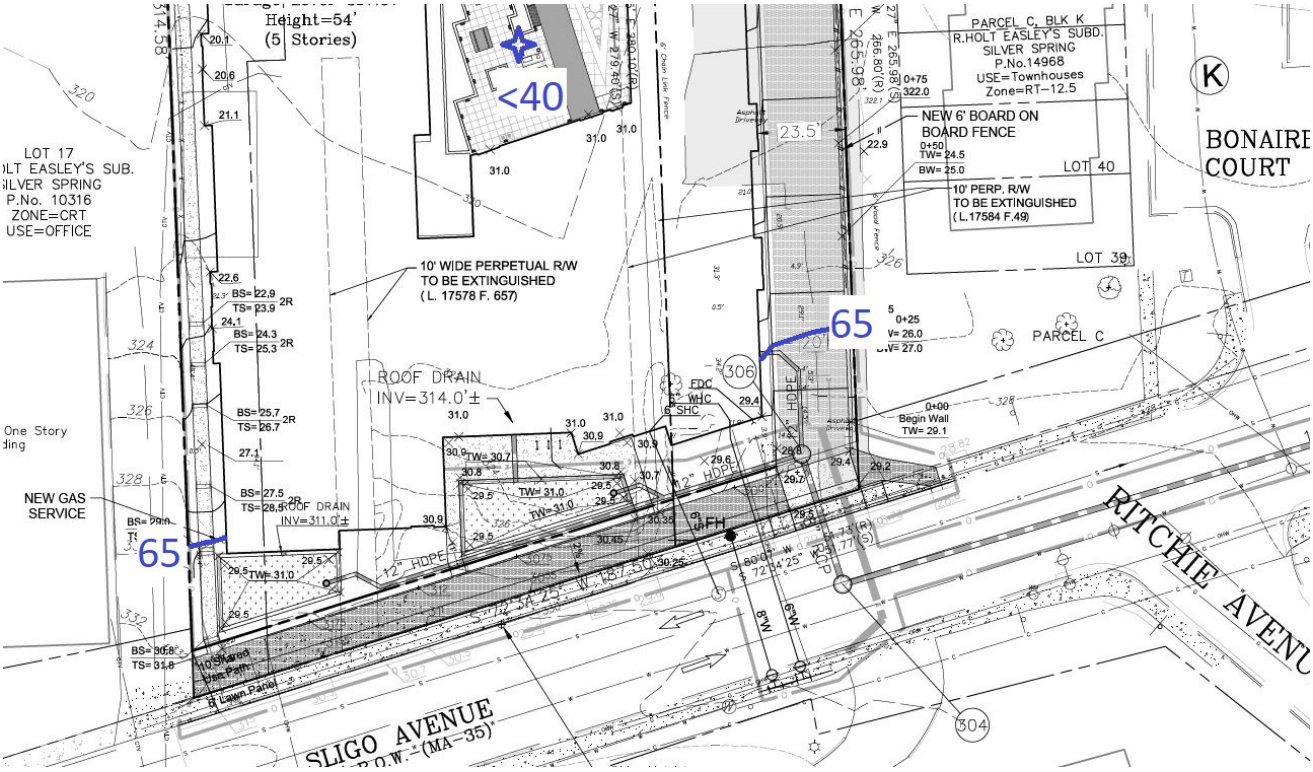

Figure 5. Year 2040 DNL, dB, Five Feet High Outdoors

5. Indoor traffic noise levels

5.1 Proposed Architectural Design

The drawings show room sizes and types, and window and door sizes. Exterior walls will consist of two layers of 5/8" gypsum board, 2x6 wood studs with batt insulation, 7/16" OSB, 1-1/2" rigid insulation, and cladding consisting of fiber cement siding, PVC panels, 1-1/2" thick adhered thin brick, or 3-5/8"

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standard brick. Windows will be light commercial grade vinyl windows. There are no sliding glass doors in units facing Sligo Avenue.

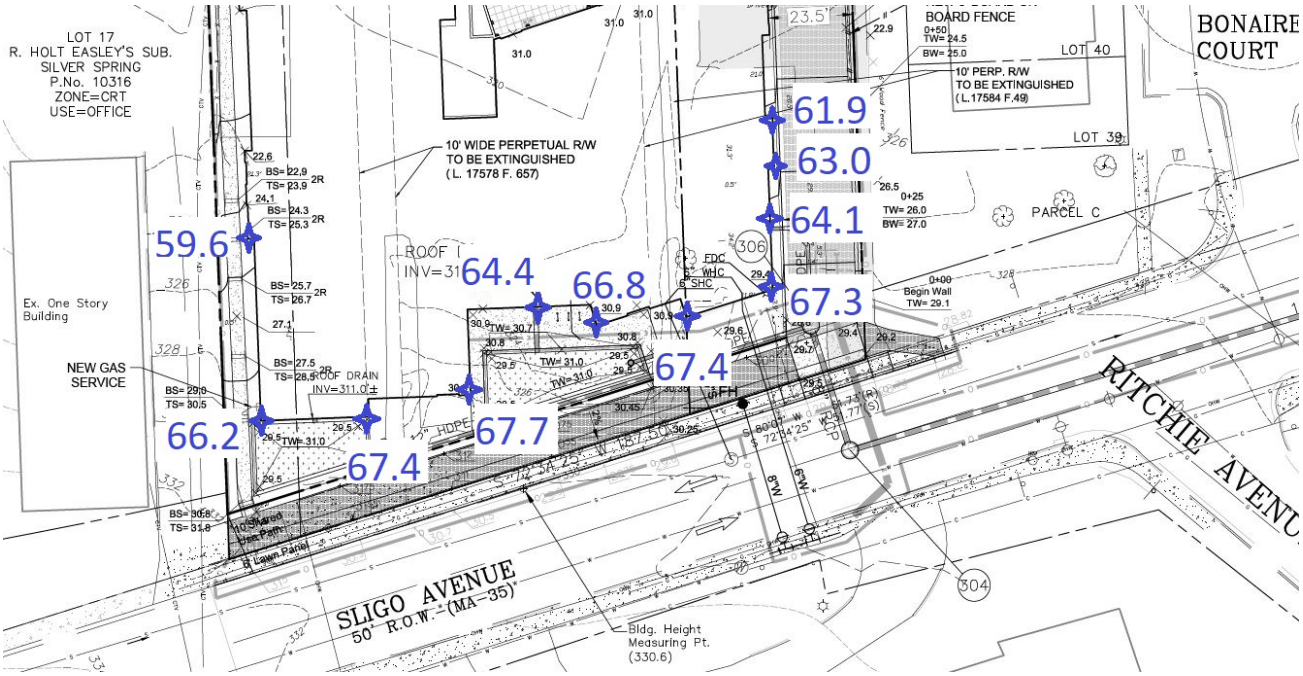

Figure 6. Year 2040 DNL, dB, at Facades of Residences on Loudest Floor

5.2 Noise Level Reduction Design Goal

As noted above, the indoor noise goal is a DNL of 45 dB. To provide a margin for error, we are designing for an indoor DNL of 42 dB. It can be seen from Figure 6 that the DNL at the residences will be as high as 67.7 dB. Therefore, the building envelope must reduce noise levels by as much as 25.7 dB.

5.3 Indoor Noise Modeling

Sound levels are often expressed for selected ranges of pitches (frequencies). The most common way to divide up frequencies is using one-third octave bands. The Noise Reduction (NR) is the difference between noise levels outdoors and indoors in a single one-third octave frequency band and is calculated based on the Noise Reduction (NR) in a single one-third octave band, the area of each exterior envelope material (e.g., walls, windows, doors, and roof), the transmission loss of each exterior envelope material, the surface area of each room finish material (e.g., walls, floors, beds, etc.), and the sound absorption coefficient of each room finish material. The areas of exterior envelope materials were taken from the architectural drawings.

Transmission loss is a laboratory measure of the sound insulation performance in a single one-third octave band of a product or assembly. The transmission losses of the windows and doors were obtained from published test reports provided by various manufacturers; the results were grouped based on ranges of

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reported Sound Transmission Class (STC) ratings. The STC rating is a common rating used to describe the sound insulation performance of windows and doors, as well as other products and assemblies. The specifications do not call for a specific STC rating for windows. We initially assumed that the proposed windows would have a rating of at least STC 24, since this is the lowest rating we have seen in the past. Acoustical data for the walls were estimated using computer modeling. Since the acoustical performance of the roof will be so much better than that of the walls and windows, and since the roof is partially shielded from traffic noise, the roof was neglected in our analysis of traffic noise.

The sound absorption coefficient is a value that expresses how much incident sound is absorbed by a room finish material; a value of 0.0 represents no absorption (i.e., complete reflection) while a value of 1.0 represents complete absorption. The areas and sound absorption coefficients of room finish materials were assumed based on typical finishes for the given type of room. In other words, it was assumed that rooms would be normally furnished; in unfurnished rooms noise levels will be higher. Per the design drawings, bedrooms will have carpeted flooring while living rooms will not.

The Noise Level Reduction (NLR) is the A-weighted difference between noise levels outdoors and indoors and is calculated based on the sound spectrum outdoors, and the NR values in individual frequency bands. For the purposes of this calculation it is not necessary to know the absolute noise level outdoors. Rather, it is only necessary to know how the noise levels vary as a function of frequency; this variation is known as the sound spectrum. The sound spectrum measured at location M2 during the afternoon rush-hour was used. The DNL were determined by subtracting the NLR from the DNL in Figure 6.

5.4 Noise Level Reduction Results

Table 5 presents the calculated DNL for each room impacted by traffic noise with 4 possible STC ratings for windows. Again, these noise levels are based on the assumption that the rooms are furnished; noise levels in unfurnished rooms will be higher.

5.5 Recommendations

It can be seen from Table 5 that the predicted DNL will meet the goal of 42 dB in every room with STC 27 windows. We recommend using windows rated at STC 27 or higher in all rooms facing Sligo Avenue (including on the perpendicular exterior walls of those rooms). Off-the-shelf windows can often meet this rating. If you have any questions, please contact me at 703/534-2790 or via e-mail at Gary@HushAcoustics.com.

Sincerely,

Gary Ehrlich, P.E.
Principal

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Table 5. Calculated DNL, dB

Room	DNL Outside	DNL Inside			
		STC 24	STC 25	STC 26	STC 27
2.1d-VHI Living Rm (Gr Fl)	67.5	43.6	42.2	42.4	41.3
2.1d Living Rm (2nd-5th Fl)	67.5	43.6	42.2	42.4	41.3
2.1d-VHI Bed (Gr Fl)	67.7	43.8	42.8	42.6	41.5
2.1d Bed (2nd-5th Fl)	67.7	44.0	43.1	42.9	41.8
3.2e, 3.2e-BF Liv Rm (2nd-5th Fl)	67.0	42.7	41.3	41.5	40.4
3.2e and 3.2e-BF Bed (2nd-4th Fl)	65.5	35.7	35.0	34.7	33.8
3.2e and 3.2e-BF Bed (5th Fl)	65.5	38.7	37.9	37.7	36.7
3.2c S Bedroom (2nd-4th Fl)	67.4	41.3	40.6	40.4	39.5
3.2c SE Corner Bed (2nd-4th Fl)	67.5	44.0	43.2	42.9	42.0
2.1e Living Rm (Gr Fl)	66.7	40.9	39.4	39.6	38.5
2.1e SW Corner Bedroom (Gr Fl)	66.3	41.1	40.1	39.9	38.8
2.1e Living Rm (2nd-4th Fl)	66.7	41.2	39.9	40.1	39.1
2.1e SW Corner Bed (2nd-4th Fl)	66.3	42.0	41.3	41.1	40.2