



**TECHNICAL STAFF REPORT**

**St. Charles Woods**

Planning Board Quasi-Judicial Public Hearing, August 17, 2017

**Case No./Petitioner:** PB-430/Cadogan Property, LLC (c/o R. Jacob Hikmat)

**Project Name:** St. Charles Woods, SP-15-010  
Lots 1 – 22 and Open Space Lots 23-25

**Owner/Developer:** Cadogan Property, LLC (c/o R. Jacob Hikmat)

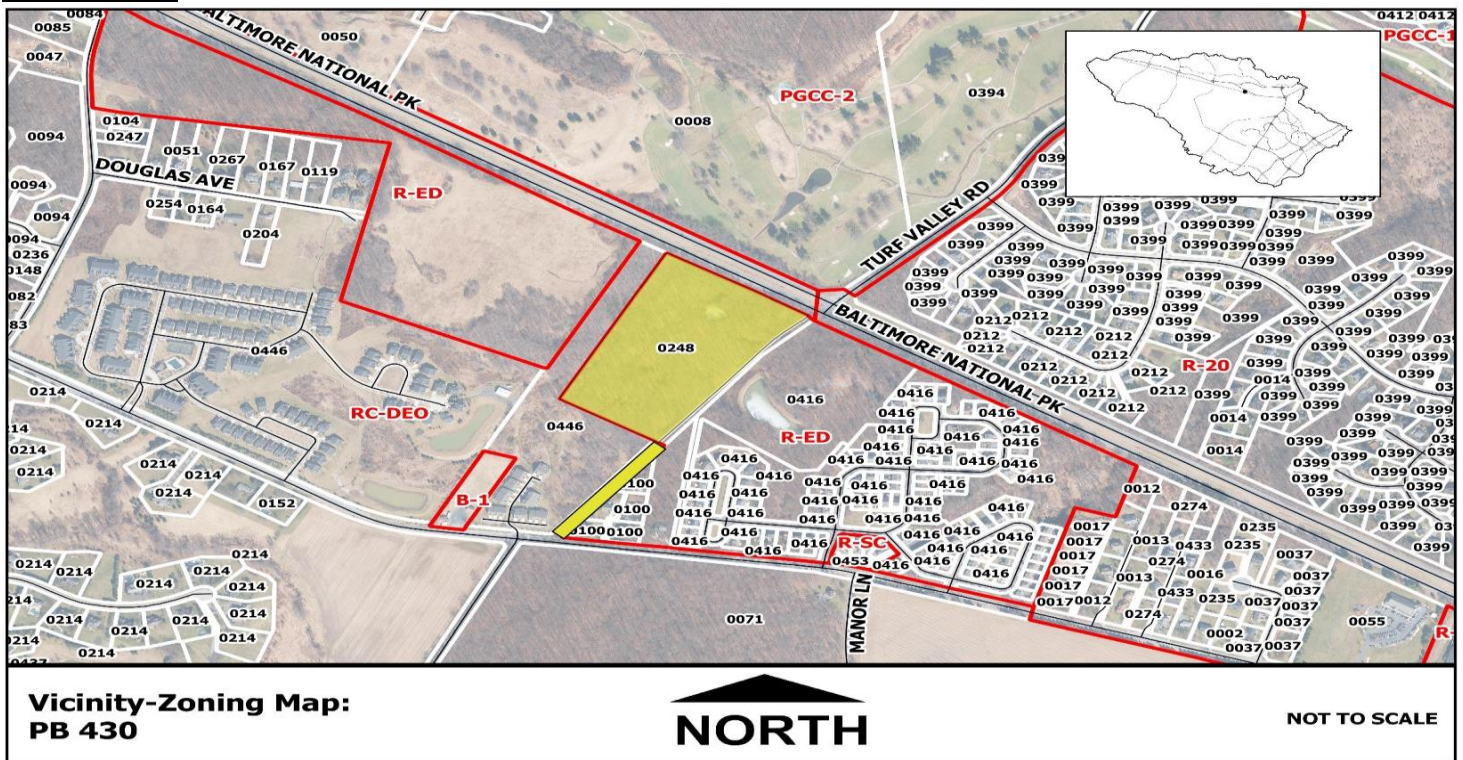
**Engineering Consultant:** Mildenberg, Boender & Associates, Inc.

**DPZ Planner:** Tanya Krista-Maenhardt, AICP, Planning Supervisor  
(410) 313-2350, tmaenhardt@howardcountymd.gov

**Request:** For the Planning Board to approve Preliminary Equivalent Sketch Plan (SP-15-010) for ten single-family, semi-detached, residential lots, twelve single-family, attached residential lots, three open space lots, and other improvements on 17.26 acres, zoned R-ED (Residential: Environmental Development), pursuant to Section 107.0.F. of the Howard County Zoning Regulations.

**Recommendation:** Approval of Preliminary Equivalent Sketch Plan (SP-15-010), subject to complying with remaining Subdivision Review Committee (SRC) comments, Alternative Compliance and Design Manual approvals, and any conditions by the Planning Board.

**Vicinity Map:**



**Location:**

10611 Baltimore National Pike-located between Baltimore National Pike and Frederick Road, Ellicott City, Third Election District of Howard County, Maryland; Tax Map 16, Grid 23, Parcel 248.

**Plan Summary:**

- The Preliminary Equivalent Sketch Plan establishes the preliminary lot layout, street network, open space areas, drainage, stormwater management (SWM), landscaping, and forest conservation areas.
- There are no existing structures on the site; however, there is a BGE easement and gravel pathway along the eastern edge, which provides access to the utility poles. The poles will either have to be relocated or the utility lines placed underground.
- The site is encumbered by environmental features, including a floodplain, streams, wetlands, buffers, and forest.
- The site fronts both US 40 (Baltimore National Pike) and MD 144 (Frederick Road).
- The Developer proposes ten single-family, semi-detached and twelve single-family, attached dwellings.
- The site is in the:
  - Established Communities Allocation Area
  - Little Patuxent River watershed
  - Planned Service Area (PSA)-public water and sewer will be provided
- The tests for housing unit allocations and public schools will be conducted upon approval of the Planning Board’s Decision and Order.

**Vicinal Properties:**

North: Baltimore National Pike (US 40)

East: Lot 61, “St. College Farms” subdivision, Lots 4 & 5 “C. Fischer Property”, Parcel 100 owned by the Cramer Family and Lot 106 “Terra Maria”. All lots/parcels are zoned R-ED (Residential: Environmental Development).

West: Ellicott Meadows Subdivision, Zoned RC-DEO (Rural Conservation: Density Exchange Option).

South: Frederick Road (MD. 144)

**Legal Notice:**

The property was properly posted with two Planning Board posters, verified by Department of Planning and Zoning staff, and the case was advertised in two local newspapers, a minimum 30 days prior to the hearing date.

**Regulatory Compliance:**

This project is subject to the Amended Fifth Edition of the Subdivision and Land Development Regulations, the 2013 Howard County Zoning Regulations (effective October 6, 2013), the Howard County Design Manual, the Adequate Public Facilities Ordinance, the Forest Conservation Manual, and the Landscape Manual.

**Plan History:**

- A **pre-submission community meeting** was held June 26, 2014, at the Miller Library.

- **The Design Advisory Panel** reviewed the plan September 10, 2014, and made recommendations. The DAP will review the plan and building elevations again at Site Development Plan.
- **An Administrative Adjustment (AA-14-019)** was approved by the Planning Director December 24, 2014. This Zoning Map Amendment rezoned a portion of the site R-ED, correcting a 2012/2013 Comprehensive Zoning error when the lot's pipestem to Frederick Road was not rezoned.
- An **Environmental Concept Plan (ECP-15-006)** was approved November 2014.

**An alternative compliance petition (WP-15-077)** to the Subdivision and Land Development Regulations, **Section 16.116(a)(1): Streams and Wetlands** prohibiting grading, removal of vegetative cover and trees, paving, and new structures within 25 feet of a wetland in any zoning district was conditionally approved by the Planning Director March 13, 2015. It allows disturbing 0.15 acres of wetland and 0.18 acres of wetland buffer for a road crossing.

- **An alternative compliance petition (WP-16-049)** to the Subdivision and Land Development Regulations, **Section 16.144(i)(2): Report of Review Committee; Additional Information** was conditionally approved by the Planning Director January 29, 2016. This regulation requires a developer to submit additional information within 45 days of receiving a request from either the Department of Planning and Zoning or Review Committee. A one year extension to submit revised plans was granted to allow additional time (to October 18, 2016) to design the project around the sewer extension to the "Ellicott Meadows" subdivision.
- **An alternative compliance petition (WP-17-075)** to the Subdivision and Land Development Regulations **Section 16.116(a)(1): Streams and Wetlands** prohibiting grading, removal of vegetative cover and trees, paving, and new structures within 25 feet of a wetland in any zoning district; and **Section 16.116(a)(2)** prohibiting grading, removal of vegetative cover and trees, paving, and new structures within 100 feet of a perennial stream was submitted February 6, 2017. WP-17-075 would allow 0.3 acres of wetlands, 0.2 acres of wetland buffer, and 0.32 acres of a perennial stream and a perennial stream buffer to be disturbed for a road crossing.

The petitioner has provided written justification for the SRC to consider. On April 25, 2017, the Planning Director determined that no action would be taken until after the Planning Board reviewed and considered SP-15-010 at a public hearing.

- **A Design Manual Waiver** will be required to allow 6 or more users on a Use-In-Common driveway.
- **Noise Impact Analysis:** A Noise Impact Analysis was approved May 3, 2017.
- **Adequate Public Facilities Ordinance (APFO):**

*Roads Test:* A traffic study, approved by the Development Engineering Division and Department of Public Works, showed the Frederick Road at Quarter Folly Road/John Bernard Drive and US-40 at 144A/Pebble Beach Drive intersections will operate at acceptable levels of service.

*Schools Test:* The subdivision is in the Established Communities Allocation Area, the North School Region, the Manor Woods Elementary School District, and the Mount View Middle School District. Once the Decision and Order has been signed, the subdivision will be tested for housing allocations and school capacity.

- **Water and Sewer:** Public water and sewer will serve this project. Water service will be via a connection to the existing water main in Frederick Road, contract #44-3479, while sewer service will be via a connection to a future 8” sewer main, Capital Project S-6293, contract # 20-4987.
- **Stormwater Management:** SWM is provided by ESD practices. Four bio-retention facilities and 24-drywells are proposed to meet SWM requirements.

**Site Information:**

<b>ACREAGE</b>	
Gross Acreage of Property.....	17.26 ac.
Area of 100-year Floodplain.....	5.59 ac.
Area of 25% or Greater Steep Slopes.....	0.00 ac.
Net Tract Area.....	11.67 ac.
Limit of Disturbance (LOD).....	6.03 ac. (34.9% of site)
Proposed Public Right-of-Way.....	2.08 ac.
<b>DENSITY</b>	
Total No. of Lots Allowed By Right .....	23 lots
(2 dwelling units per net acre)	
Total Number of Lots Proposed.....	22 lots
MIHUs required (10% of dwellings).....	3 lots
MIHUs provided.....	0 units (fee-in-lieu proposed)
<b>OPEN SPACE</b>	
Required (50% of gross).....	8.63 ac.
Proposed.....	12.50 ac. (72% of site)

**Site Proposal:**

- Preliminary Equivalent Sketch Plan, SP-15-010, initially submitted November 2014, proposes twenty-two residential lots (ten single-family, semi-detached dwellings and twelve single-family, attached dwellings), ranging from 2,805 square feet to 6,467 square feet. Eight semi-detached lots will gain access from a Use-In-Common Access drive that connects to Gibran Lane (a proposed public road); all others will directly access Gibran Lane. Three open space lots ranging from 16,527 square feet to 10.44 acres are also proposed. Three on-site forest conservation retention easements (FCE) will contain 4.21 acres of forest. A letter dated May 17, 2017, indicates that DPZ considers the Preliminary Equivalent Sketch Plan to be “approvable”, subject to Planning Board approval and remaining SRC comments.
- **Environmental Resources:** The site contains 5.59 acres of floodplain, 9.40 acres of wetlands, 6.38 acres of streams, and 10.70 acres of forest. There are no steep slopes (25% or greater) onsite.
- **Open Space:** The R-ED zoning district requires 50% open space, based on gross site area - equating to 8.63 acres. This proposal provides 12.50 acres of open space (72% of gross site area), within three open space lots. Recreational open space is also required at a rate of 400 square feet per unit, or 8,800 square feet. This proposal provides 20,690 square feet of recreational open space.

- **Landscaping:** Landscaping complies with the Howard County Landscape Manual and will be provided along the perimeter of the new lots and on both sides of Gibran Lane. A total of 164 shade trees and 24 evergreens, along with a credit for the existing forest, addresses the landscaping requirements and conditions of WP-15-077.
- **Forest Conservation:** There are 10.70 acres of existing forest (excluding floodplain) onsite; however, of that, 6.64 acres will either be cleared or maintained outside the FCEs. Three retention easements (including a small amount of wooded floodplain) are proposed and range from 0.43 acres to 2.96 acres, for a total 4.21 acres of retention. The onsite easements will address the requirements of the Forest Conservation Act; therefore no additional planting or retention is required.
- **Scenic Roads:** Frederick Road is a scenic road and the project must meet the requirements of Section 16.125 (Protection of Scenic Roads) of the Howard County Subdivision and Land Development Regulations. Only a small portion of the property (~ 65 feet) is adjacent to the scenic road. The closest proposed dwelling (Lot 14) to Frederick Road will be located approximately 800 feet from the right-of-way and should not be visible from Frederick Road. The proposed development will be buffered from Frederick Road and most houses within the Ellicott Meadows subdivision by retaining existing forest. Additional street trees and perimeter landscaping will provide some additional buffering.
- **Access:** Access from Gibran Lane to Frederick Road has been preliminarily approved by the State Highway Administration (SHA), the Department of Public Works (DPW) and the Development Engineering Division (DED). Improvements to Frederick Road will be made to ensure safe ingress and egress. Gibran Lane will not be a through-street and will end in a cul-de-sac. Final road improvements to Frederick Road and the design of Gibran Lane will be finalized at Final Plan.

**Planning Board Criteria:**

Section 107.0.E.6. of the Howard County Zoning Regulations outlines the following criteria to be used for evaluating a Preliminary Equivalent Sketch Plan in the “R-ED” Zoning District:

**1. “The proposed lay-out of lots and open space effectively protects environmental and historic resources.”**

The design of the subdivision effectively protects and preserves onsite environmental features, or minimizes their disturbance. To help facilitate protecting forest, floodplain, wetlands and streams, and to fulfill the objectives of the R-ED zoning district, semi-detached and townhouse units will be clustered, the size of residential lots will be minimized, and smaller residential units will be used to effectively protect environmental features. More open space has been provided than required 50% (8.63 acres required, 12.5 acres provided) and there are no existing structures, nor is the site in an historic district. Most environmental features will be in an easement and/or Open Space, to be maintained and protected by Howard County.

**2. “Buildings, parking areas, roads, storm water management facilities and other site features are located to take advantage of existing topography and to limit the extent of clearing and grading.”**

The subdivision takes advantage of the site’s unique topography and limits impacts to the forest by clustering lots. The limits of clearing and grading necessary for residential construction, roads, SWM, and utilities have also been minimized to the greatest extent possible, while still facilitating development of the property. Further, stormwater runoff has been reduced and pervious areas for its treatment have been maximized. Proposed site grading will limit changes to the location of the existing drainage divide, thereby maintaining a comparable drainage shed. During construction, environmental features will be protected by sediment control features.

**3. “Setbacks, landscaped buffers, or other methods are proposed to buffer the development from existing neighborhoods or roads, especially from designated scenic roads or historic districts.”**

The plan maintains setbacks, landscaped buffers, and existing forest along the project boundaries to sufficiently buffer the surrounding community and Frederick Road, a scenic road, from the subdivision. Only a small portion (~ 65 feet) of the development will be along Frederick Road and the closest dwelling (Lot 14) is approximately 800 feet from its right-of-way. Consequently, development should not be visible from Frederick Road. In addition, the subdivision will be buffered from Frederick Road, as well as most of the Ellicott Meadows subdivision, by existing forest that will be retained. Street trees and perimeter landscaping will provide additional buffering. This site is not located within a historic district.


**SRC Action:**

The Developer was notified by a letter dated May 17, 2017, that subdivision plan, SP-15-010, was **technically complete**, subject to complying with remaining Subdivision Review Committee (SRC) comments and any conditions by the Planning Board.

**Recommendation:**

The Department of Planning and Zoning recommends the Planning Board approve Preliminary Equivalent Sketch Plan SP-15-010, “St. Charles Woods”, subject to complying with any remaining SRC comments and any conditions by the Planning Board.

**Please note that this file is available for public review, by appointment, at the Department of Planning and Zoning’s public service counter, Monday – Thursday, 8:00 a.m. to 5:00 p.m. and Friday, 8:00 a.m. to 3:00 p.m.**

  
Valdis Lazdins, Director  
Department of Planning and Zoning

7/27/17  
Date

**Remaining DLD Comments for St. Charles Woods PB 430-June 2017**  
**Formerly known as Cadogan Property**

**Sheet 1**

1. Amend General Note #23 to read as follows (see below). This is an interim note that should be placed on the SP until after the Planning Board has rendered a decision on the SP. Then the note can be changed to the standard/typical Alternative Compliance Note:

Alternative Compliance request for WP-17-075 for the following: PENDING

Section 16.116(a)(1) which prohibits disturbance to wetlands and associated buffers.  
Section 16.116(a)(2) which prohibits disturbance to streams and associated buffers.

Decision on WP-17-075 is pending until final review of SP-15-010 by the Planning Board.

2. Complete General Note #40 once the Planning Board has reviewed the project. The PB case number is PB 430. Update the note as necessary based on decision and any conditions. ALSO-- add the date of the Planning Board to the note.
3. The recreational Open Space on Sheet 3 adds up to 13,130 sq. ft. (not 14,190). Please review and correct as necessary. [4,970 +3,910+4,250=13,130]
4. Correct the numbering of the General Notes. There are two notes that are numbered # 27.
5. REMINDER: Once approval has been granted to SP-15-010, you must submit the permit application to MDE. MDE permits are required and tracking numbers must be provided on the plans as soon as they are received. At the latest, a tracking number will be required on the Final Plan/plat (if not received earlier at the SP stage). DPZ will NOT sign any plat or Plan mylars until the MDE permit has been granted. (Be aware that many consultants do submit to MDE at the SP stage and receive tracking numbers at the SP stage. You are not required by MDE to wait until Final Plan to submit your application.)
6. REPEAT ADVISORY: Metes and bounds and bearings and distances must be provided for all FC easement areas by Final Plan stage.
7. It is also STRONGLY encouraged by the Department that you include the areas of floodplain, perennial stream and stream buffer in the proposed Forest Conservation Easement areas.

**SHEET 7**

8. Correct the overprint underneath the label for "Gibran Lane". Be sure the r-o-w width is also labeled (as was done on the other sheets of the SP).



## **Remaining SRC Comments for SP-15-010 (“St. Charles Woods”)**

### **ADA Ramp Detail**

Created by: Ray Mercado  
On: Tuesday, April 04, 2017 11:45:45 AM  
Look at the uploaded Ramp Detail #2

Instead of having the ramp pointing towards the main road at 45 degrees, use detail #2 so the ramps point towards each other.

### **Easement**

Created by: Jayesh Pancholi  
On: Wednesday, May 03, 2017 4:28:31 PM  
Provide 20' SD easement. Make sure lot 4 is clear of the easement.

### **SD Easement**

Created by: Jayesh Pancholi  
On: Wednesday, May 03, 2017 4:25:31 PM  
Show all SD easements.

### **Signs**

Created by: Ray Mercado  
On: Monday, May 08, 2017 1:15:47 PM  
Place three “No Parking” signs with double arrows on the island.

Created by: Jayesh Pancholi  
On: Wednesday, May 03, 2017 4:24:17 PM  
Add a section showing road improvements. Add lane dimensions.

### **Approval date**

Created by: Jayesh Pancholi  
On: Monday, May 15, 2017 9:12:44 AM  
Complete the note. Use May 3, 2017 as approval date for APFO and Noise Study.

### **DMW Note**

Created by: Jayesh Pancholi  
On: Wednesday, May 03, 2017 4:16:17 PM  
Add a note stating design manual waiver was approved to allow 8 lots on U-I-C driveway.

### **Note 40**

Created by: Jayesh Pancholi  
On: Wednesday, May 03, 2017 4:15:02 PM  
Please complete the note, add conditions when known.

SHA is providing **approval** conditioned on the developer receiving an access permit for all work within SHA r/w. SHA has provided a copy of the latest comment letter in the reviewer folder.



Larry Hogan, **Governor**  
Boyd K. Rutherford, **Lt. Governor**



Pete K. Rahn, **Secretary**  
Gregory Slater, **Administrator**

**STATE HIGHWAY  
ADMINISTRATION**

April 26, 2017

Ms. Maya Mildenberg  
Mildenberg, Boender & Associates Inc  
7350-B Grace Drive  
Columbia, Maryland 21044

RE: Howard County  
MD 144  
St. Charles Woods  
SHA Tracking No: 14APHO025XX  
Mile Post: 14.2

Dear Ms. Mildenberg:

Thank you for the opportunity to review the sketch plan for the proposed St. Charles Woods development located in Howard County. The Maryland Department of Transportation's State Highway Administration (SHA) review is complete and we are pleased to respond.

1. The proposed by-pass lane along the south side of MD 144 should be 16 feet in width, to include an 11 ft. width by-pass lane and 5 ft. width shoulder for bicycle compatible shoulder.
2. The proposed widening along the south side of MD 144 will impact at least three (3) existing utility poles. Indicate relocations at a minimum, 2 ft. from face of pole to back of curb or shoulder.
3. The proposed widening of the existing deceleration lane along the north side of MD 144 east of Gibran Way illustrates the proposed curb/gutter directly up against an existing utility pole.
4. The proposed NE corner curb radius at Gibran Way appears to be too short for turning vehicles larger than a standard compact car. SHA suggests the radius be adjusted to accommodate at least a Single Unit type vehicle.
5. Provide stormwater management measures, proposed easements if necessary and the hydraulic computations.

Please submit two (2) copies of the site plans and a CD containing the plans, all supporting documents, and a point-by-point response addressing the comments noted above to Mr. John M. Concannon at 5111 Buckeystown Pike, Frederick, MD 21704, attention of Mr. Scott Newill. Please reference the SHA tracking number on any future submissions. Your next submittal will initiate the actual plan review process for a commensurate permit package as required by the SHA, D7 office.

Ms. Maya Mildenberg  
SHA Tracking No: 14APHO025XX  
Page 2  
April 26, 2017

Please keep in mind that you can view the reviewer and project status via SHA Access Management web page at <http://www.roads.maryland.gov/pages/amd.aspx>. If you have any questions, or require additional information, please contact Mr. Scott Newill at 301-624-8151, by using our toll free number in Maryland only at 1-800-635-5119 (x8151) or via email at [snewill@sha.state.md.us](mailto:snewill@sha.state.md.us).



*CM*  
John M. Concannon  
Acting District Engineer

cc: Mr. Jacob Hikmat, Owner/Developer, Cadogan Property LLC.  
Mr. Chad Edmondson, Chief – Howard County Division of Engineering  
Mr. Kent Shuebrooks, Chief – Howard County Division of Land Development  
Mr. George Miller, Acting Assistant District Engineer- Traffic, SHA  
Mr. Scott Newill, Regional Engineer, District 7, SHA  
Mr. John Vranish, Innovative Contracting Division, SHA

Howard County  
Design  
Advisory  
Panel **DAP**

Meeting Summary  
September 10, 2014

**Attendance**

Panel Members: Phyllis Cook, Chair  
Henry Alinger  
Phillips Engelke  
Peggy White

DPZ Staff: Dace Blaumanis, Kate Bolinger, Lisa Kenney, Bill Mackey

**St. Charles Woods #14-15**

Owner/Developer: Cadogan Property, LLC  
Architect: Ash Tree Architecture, LLC  
Engineer: Mildenberg, Boender & Associates, Inc.

**1. Call to Order** – DAP Chair Phyllis Cook opened the meeting at approximately 7:44 pm, calling for introductions of the Panel, staff and project team.

**2. Review of St. Charles Woods #14-15** – Jacob Hikmat, owner of the property, and president of Mildenberg, Boender, & Associates, Inc., displayed a site plan for the Panel. He stated that the plan was very preliminary and that the specifics of the actual units were not yet known. He explained that of the site's approximately 17 acres, roughly 5 acres are buildable, with the remainder of the site comprised of existing wetlands, stream buffers and forest conservation areas.

Mr. Hikmat stated that vehicles will access the development from Route 144 (Old Frederick Road), and not Route 40. The back of two residential units will be visible from Route 40, and Mr. Hikmat described plans to provide a noise wall and additional vegetation (trees) to screen these units from the roadway.

While the architectural design of the units was not finalized, Mr. Hikmat stated that the units are planned as large, villa-style homes (2,500 to 3,000 square feet) with first-floor master suites and a 1 ½ story layout. He further stated that there would be an option for a second floor master bedroom and bath, which would change the unit from 1 ½ stories to 2 stories.

Ashraf Shaker, architect for the project, displayed a rendering of a possible unit design, reiterating that the exact design had not yet been chosen. Mr. Shaker explained that the development would likely contain mostly first floor master suite units with two car garages (1 ½ story design). Mr. Hikmat noted that while the proposed development would not be age-restricted, the units would likely attract an active adult demographic.

By unanimous consent pursuant to each motion duly made and seconded, DAP adopted the following recommendations for the project. These recommendations will be forwarded to the Director of the Department of Planning and Zoning.

DAP member Hank Alinger offered the following motions:

1. "That the applicant review the overall site layout to see what improvements can be made in the driveway layouts to consolidate driveways and to consolidate green spaces between the driveways and better organize them." Seconded by P. Engelke.

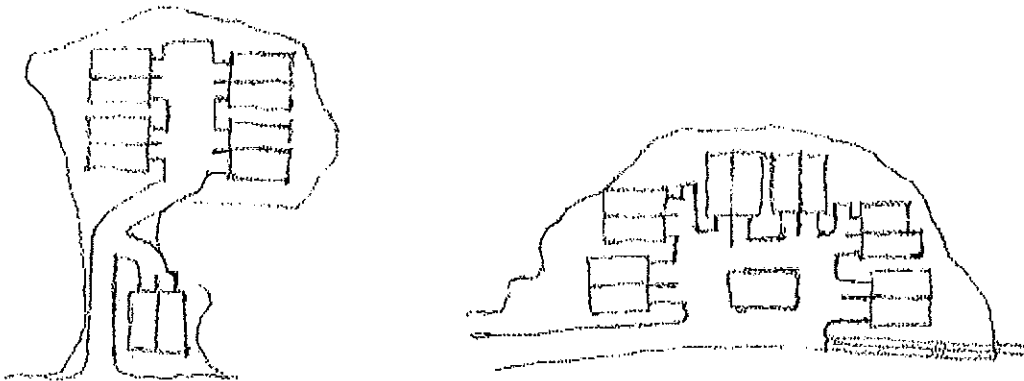
DAP member Phil Engelke offered the following motion:

2. "To consider all elevations of the houses because you will see them from different angles, and unlike the typical development I think it would enhance the whole project to take the character of the front façade and take it in some way all the way around." Seconded by H. Alinger.

DAP Chair Phyllis Cook offered the following motion:

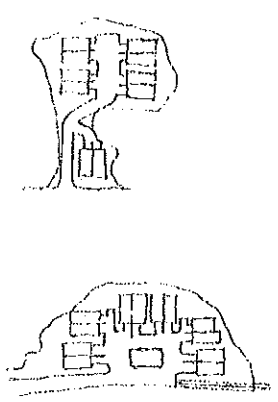
4. "That the applicant return when further along so [the Panel] can review the building elevations and site development plan." Seconded by H. Alinger.

DAP Chair Phyllis Cook provided the applicant with the following sketches as suggestions for re-organizing the project's residential units:



3. Call to Adjourn – Chair Phyllis Cook adjourned the meeting at 8:14 pm.

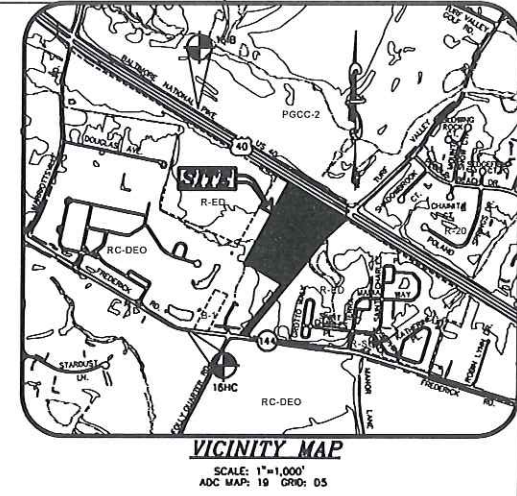
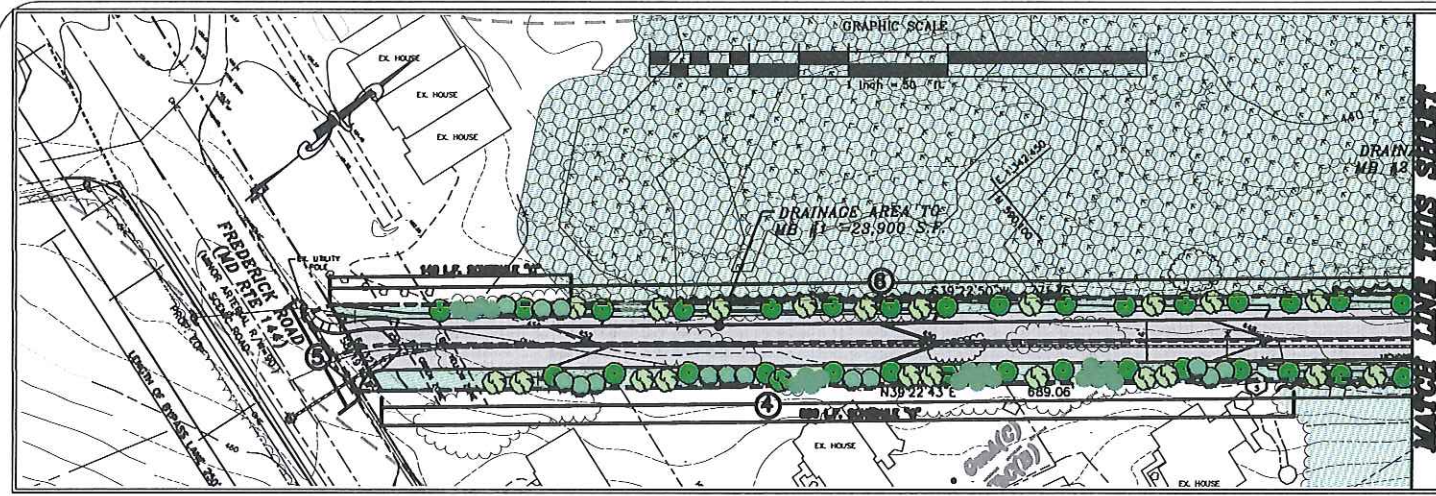
St Charles Woods (14-15)  
Design Advisory Panel  
2014-09-10 Review

Ref #	Design Advisory Panel Recommendation – Verbatim Motion	Response by Applicant – 09/22/2014	DPZ Director's Endorsement
1.	<p>"That the applicant review the overall site layout to see what improvements can be made in the driveway layouts to consolidate driveways and to consolidate green spaces between the driveways and better organize them." Vote: 4-0</p>	<p>The site layout will be reviewed to determine what improvements can be made concerning consolidation of the driveways and green spaces. These changes will be reflected on the Sketch-Preliminary Equivalent Plan when it is submitted.</p>	<p><input checked="" type="checkbox"/> Accept DAP Recommendation <input checked="" type="checkbox"/> Accept Architect's Response <i>Director's note: evaluate use of T turnaround rather than cul-de-sac and evaluate reducing the number of lots.</i></p>
	<p>DAP Chair Phyllis Cook provided the applicant with the following sketches as suggestions for re-organizing the project's residential units:</p> 	<p>The buildings that are situated farthest from the other lots need to have the orientation shown due to the restrictions of the building restriction lines, wetlands and their buffers, streams and their buffers, and the limits of the 100-year floodplain. Any alternative orientation for these two lots will not provide a large enough building envelope for the dwellings.</p> <p>It is desired for the development to contain public roadways to provide for County snow removal and trash pick-up and to reduce the required responsibilities of the Homeowners' Association. The orientation of the dwellings in the provided sketch does not allow for the design of public roads and therefore will not be able to be implemented.</p>	

**St Charles Woods (14-15)  
Design Advisory Panel  
2014-09-10 Review**

Ref #	Design Advisory Panel Recommendation – Verbatim Motion	Response by Applicant – 09/22/2014	DPZ Director's Endorsement
2.	<p>"To consider all elevations of the houses because you will see them from different angles, and unlike the typical development I think it would enhance the whole project to take the character of the front façade and take it in some way all the way around." Vote: 4-0</p>	<p>The facades of all elevations of the buildings will be considered as part of the architectural design process. The Site Development Plan (SDP) will contain elevations of the buildings from the front, side and rear.</p>	<p><input checked="" type="checkbox"/> Accept DAP Recommendation <input checked="" type="checkbox"/> Accept Architect's Response</p>
3.	<p>"That the applicant return when further along so [the Panel] can review the building elevations and site development plan." Vote: 4-0</p>	<p>We will return before the Design Advisory Panel prior to submission of the SDP.</p>	<p><input checked="" type="checkbox"/> Accept DAP Recommendation <input checked="" type="checkbox"/> Accept Architect's Response</p>





DATE	MARCH 2011
PROJECT	09-004
ILLUSTRATION	MMM
SCALE	1"=90'
APPROVAL	RJH

NO.	DESCRIPTION	DATE

**ST. CHARLES WOODS**  
 LOTS 1 THROUGH 22 AND OPEN SPACE LOTS 23 THROUGH 25  
 TAX MAP 16 - PARCEL 246 - GRID 23  
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
**PRELIMINARY LANDSCAPE EXHIBIT**

**MILDENBERG, BOENDER & ASSOC., INC.**  
 Engineers Planners Surveyors  
 7350-B Orce Drive, Columbia, Maryland 21044  
 (410) 997-0296 Tel. (410) 997-0296 Fax

P:\2004\09-004 CADOGAN (ST. CHARLES)\PRELIMINARY SKETCH-MAVA\UC-MAVA.JAY 2016 REV-2.DWG

**OWNER / DEVELOPER**  
 CADOGAN PROPERTY, LLC  
 7350-B GRACE DRIVE  
 COLUMBIA, MARYLAND 21044  
 (410)997-0296



**MINIMUM LOT SIZE CHART**

LOT NO.	GROSS AREA	PPESTEM AREA	MINIMUM LOT SIZE
15	6,294 SF	1,151 SF	3,143 SF
16	7,165 SF	1,048 SF	6,137 SF
17	7,270 SF	1,058 SF	6,221 SF
18	6,578 SF	1,178 SF	5,450 SF
19	7,348 SF	970 SF	6,379 SF
20	6,834 SF	868 SF	5,766 SF
21	6,516 SF	744 SF	5,772 SF
22	7,122 SF	655 SF	6,467 SF

**SHEET INDEX**

SHEET NO.	TITLE
1	COVER SHEET
2	PRELIMINARY EQUIVALENT SKETCH PLAN
3	PRELIMINARY EQUIVALENT SKETCH PLAN
4	PRELIMINARY GRADING AND EROSION AND SEDIMENT CONTROL PLAN
5	PRELIMINARY GRADING AND EROSION AND SEDIMENT CONTROL PLAN
6	LANDSCAPE & FOREST CONSERVATION PLAN AND DETAILS
7	PRELIMINARY LANDSCAPE AND FOREST CONSERVATION PLAN
8	PRELIMINARY ROAD PROFILES
9	PRELIMINARY SOILS AND DRAINAGE AREA MAP

**MODERATE INCOME HOUSING LOT (MIHU) CALCULATIONS**

PROPOSED NUMBER OF LOTS: 22  
 MINIMUM NUMBER OF MIHU LOTS: 10% x 22 = 2.2  
 PROVIDED NUMBER OF MIHU LOTS: 3  
 PER SECTION 107.6 OF THE HOWARD COUNTY ZONING REGULATIONS ADOPTED OCTOBER 6, 2013.

**RECREATIONAL OPEN SPACE CALCULATIONS**

(PER SECTION 18.12(a)(4)(v) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS)

PROPOSED NUMBER OF LOTS: 22  
 REQUIRED MIN. AREA OF RECREATIONAL OPEN SPACE: 400 SF x 22 LOTS = 8,800 SF  
 PROVIDED AREA OF RECREATIONAL OPEN SPACE: 11,310 SF  
 REC. AREA = 12,000 SF/TOT LOT = 4,000 SF (EQUIVALENT)  
 5 PICNIC TABLE W/BENCHES (500 SF/TABLE) = 2,500 SF (EQUIVALENT)  
 TOTAL PROVIDED: 19,810 SF

TOT LOTS AND PICNIC TABLES TO BE PROVIDED BY HOA.

**DENSITY CALCULATIONS:**

GROSS AREA OF THE SITE = 17.26 AC  
 AREA OF FLOODPLAIN (ON-SITE) = 5.59 AC  
 NET AREA OF THE SITE = 11.67 AC (FOR DENSITY)  
 ALLOWABLE DEVELOPABLE LOTS = 2 LOTS / NET ACRE  
 2 x 11.67 = 23.34 = 23 LOTS

PROPOSED DEVELOPABLE LOTS = 22 LOTS

**STORMWATER MANAGEMENT PRACTICES CHART**

LOT #	DRYWELL # (NUMBER)
1	2
2	2
3	2
4	2
5	2
6	2
7	2
8	2
9	2
10	2
11	2
12	2
13	2
14	2
15	2
16	2
17	2
18	2
19	2
20	2
21	2
22	2

**LOT COVERAGE CHART**

LOT #	LOT AREA	STRUCTURE AREA	LOT COVERAGE
1	4,286	1,430	33%
2	2,805	1,320	47%
3	2,909	1,320	45%
4	5,495	1,430	26%
5	6,184	1,430	23%
6	3,093	1,320	43%
7	3,073	1,320	43%
8	4,852	1,430	29%
9	5,981	1,430	24%
10	3,631	1,320	36%
11	3,835	1,320	34%
12	5,870	1,430	24%
13	4,895	1,950	40%
14	5,123	1,950	38%
15	5,143	1,950	38%
16	6,137	1,950	32%
17	6,221	1,950	31%
18	5,450	1,950	36%
19	6,036	1,950	32%
20	5,109	1,950	38%
21	5,772	1,950	34%
22	6,467	1,950	30%

**OWNER / DEVELOPER**

CADOGAN PROPERTY, LLC  
 7350-B GRACE DRIVE  
 COLUMBIA, MARYLAND 21044  
 (410)997-0296

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. 17942, EXP DATE 09/03/18

R. JACOB HIRWAT P.E. DATE:

APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY  
 PLANNING DIRECTOR DATE

APPROVED  
 PLANNING BOARD OF HOWARD COUNTY  
 PBN DATE

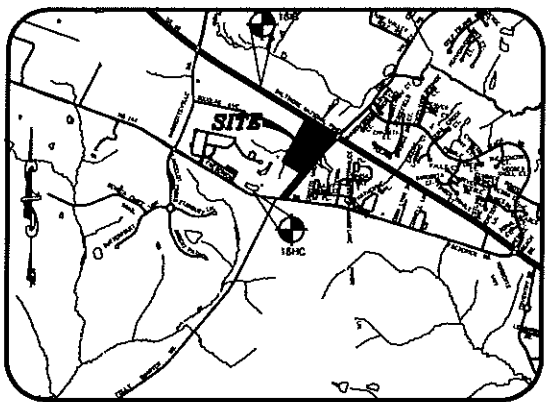
# PRELIMINARY EQUIVALENT SKETCH PLAN

## ST. CHARLES WOODS

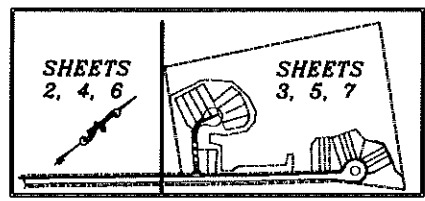
### LOTS 1 THROUGH 22 AND OPEN SPACE LOTS 23 THROUGH 25

### THIRD ELECTION DISTRICT

### HOWARD COUNTY, MARYLAND



**VICINITY MAP**  
 SCALE: 1"=2000'  
 AOC MAP: 19 GRID: 05



**LOCATION MAP**  
 SCALE: 1"=400'

- ALL LOTS/RESIDENTIAL LIMITS IN THIS SUBDIVISION ARE SUBJECT TO THE MIHU FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT.
- RTS 40 ADVISORY PANEL MEETING ON SEPTEMBER 10, 2014 RECOMMENDATIONS:
  - APPLICANT REVIEW AND IMPROVE OVERALL SITE LAYOUT
  - CONSIDER ALL ELEVATIONS OF THE PROPOSED HOUSES
  - DAP WILL REVIEW THE BUILDING ELEVATIONS AT SOP DESIGN STAGE.
- RESPONSES:
  - LOTS AND DRIVEWAY LAYOUT HAS BEEN REVISED AND ACCEPTED UNDER WP-15-077.
  - FACADES AND ELEVATIONS OF THE BUILDINGS CONSIDERED AS PART OF ARCHITECTURAL DESIGN PROCESS. SOP WILL CONTAIN FRONT, SIDES AND REAR ELEVATIONS.
  - DAP WILL REVIEW THE BUILDING ELEVATIONS AT SOP DESIGN STAGE.
- THE R1-1 "STOP" SIGN AND THE STREET NAME SIGN (SNS) FOR THIS DEVELOPMENT MUST BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED.
- THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIVISION (410-313-2430) PRIOR TO THE INSTALLATION.
- ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL PERFORATED (QUICK PUNCH), SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL PERFORATED SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN TWO QUICK PUNCH HOLES ABOVE GROUND LEVEL.
- STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURE AND POLES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOLUME II (2008), SECTION 5.5.A. A MINIMUM OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- MOVED COMBINATION CURB AND CLUTTER, HOWARD COUNTY STANDARDS R-3.01 AND RESIDENTIAL DRIVEWAY ENTRANCE, HOWARD COUNTY STANDARDS R-6.03 ARE TO BE USED.
- SURETY FOR THE PUBLIC ROAD STREET TREES WILL BE ADDRESSED WITH DEO'S COST ESTIMATE.
- SOILS LOCATION AND CLASSIFICATION BASED ON HOWARD COUNTY OS SURVEY DATA.
- PLANNING BOARD PB-436 WILL BE HELD ON AUGUST 17, 2017.

**GENERAL NOTES:**

- THIS SUBJECT PROPERTY IS ZONED R-60 PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- ON-SITE TOPOGRAPHY SHOWN HEREON IS BASED ON FIELD RUM SURVEY BY MILDENBERG, BOENDER & ASSOCIATES, INC. IN DECEMBER, 2008. OFF-SITE TOPOGRAPHY IS BASED ON HOWARD COUNTY OS.
- BOUNDARY SHOWN HEREON IS BASED ON FIELD RUM SURVEY BY MILDENBERG, BOENDER & ASSOC. IN DECEMBER, 2008.
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS MD 154C & 168B  
 STA. NO. 168C N 580,780.950 E 1,341,530.091 EL. 448.65  
 STA. NO. 168B N 500,475.997 E 1,344,753.928 EL. 459.84
- SITE ANALYSIS DATA:  
 LOCATION TAX MAP: 18 GRID: 23 PARCEL: 248  
 ELECTION DISTRICT: THIRD  
 ZONING: R-60  
 TOTAL AREA: 17.26 AC.  
 NET TRACT AREA: 11.67 AC.  
 AREA OF BUILDABLE LOTS: 2.48 AC.  
 AREA OF PUBLIC ROADS: 2.08 AC.  
 AREA OF WETLANDS: 5.59 AC.  
 AREA OF FLOODPLAIN: 5.59 AC.  
 AREA OF STREAMS AND THEIR BUFFERS: 6.38 AC.  
 AREA OF STEEP SLOPES (25% OR GREATER): 0  
 LIMIT OF DISTURBED AREA: 6.03 AC.  
 AREA OF OPEN SPACE PROVIDED (SOP): 12.50 AC.  
 AREA OF OPEN SPACE REQUIRED (SOR): 8.83 AC.  
 PROPOSED USE FOR SITE: RESIDENTIAL  
 TOTAL NUMBER OF UNITS: 22  
 TYPE OF PROPOSED UNIT: SINGLE FAMILY SEMI-DETACHED (12 UNITS)  
 DEED REFERENCE: L 11592, F 327  
 PREVIOUS DEED NUMBERS: ECP-15-004, AL-14-019, WP-15-010, WP-15-077, WP-15-049, WP-17-075  
 ADDRESS: 10811 BALTIMORE NATIONAL PIKE, ELICOTT CITY, MD 21042
- WATER AND SEWER ARE PUBLIC. WATER SERVICE WILL BE PROVIDED BY CONNECTION TO THE EXISTING 12" WATER MAIN (CONTRACT 41-3475). SEWER SERVICE WILL BE PROVIDED BY CONNECTION TO FUTURE 8" SEWER CONSTRUCTED PER CAPITAL PROJECT 5-8293.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (CONTRACT 41-3475), ENFORCEMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION OR BUILDING/DRAINAGE PERMIT.
- SITE DEVELOPMENT PLAN APPROVAL BY THE DEPARTMENT OF PLANNING AND ZONING IS REQUIRED PRIOR TO BUILDING PERMITS BEING ISSUED FOR THE CONSTRUCTION OF RESIDENTIAL DWELLINGS ON THESE LOTS.
- FOREST STAND AND WETLAND DELINEATIONS ARE BASED ON A STUDY PERFORMED BY ECO-SOURCE PROFESSIONALS IN NOVEMBER, 2008, UPDATED ON OCTOBER 10, 2014 AND JANUARY 17, 2017.
- 100-YEAR FLOODPLAIN DELINEATION BASED ON A STUDY PREPARED BY MILDENBERG, BOENDER & ASSOCIATES, INC. IN JUNE, 2012.
- NOISE STUDY WAS PREPARED BY MILDENBERG, BOENDER & ASSOCIATES, INC. IN NOVEMBER, 2014 AND APPROVED ON MAY 3, 2017.
- FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 18.1202 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL FOR THIS SUBDIVISION WILL BE FULFILLED BY THE RETENTION OF 4.21 AC. (183,502 SQ.FT.) W/O FOREST CONSERVATION ELEMENTS "A" (0.82 AC.) AND "D" (0.43 AC.).
- AN AFO TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY WARS GROUP, INC. IN JULY, 2014 AND APPROVED ON MAY 3, 2017.
- LOTS 15 THROUGH 22 WILL BE SERVED BY A PRIVATE USE-IN-COMMON DRIVEWAY & UTILITY EASEMENT. DESIGN MANUAL WAIVER REQUEST TO APPENDIX "A" OF THE DESIGN MANUAL VOLUME II WAS APPROVED ON MARCH 17, 2017 BY DEO/DPW TO ALLOW 8 LOTS ON A USE-IN-COMMON DRIVEWAY.
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT, THERE ARE NO HISTORIC STRUCTURES ON SITE.
- ALL LANDSCAPING REQUIREMENTS SHALL BE FULFILLED AT THE FINAL PLAN STAGE IN ACCORDANCE WITH SECTION 18.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING WILL BE PROVIDED AT THE FINAL PLAN STAGE.
- A PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY FOR EACH ENTRANCE AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPER/OWNER'S EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5752 FOR DETAILS AND COST ESTIMATE.
- A PRE-SUBMISSION COMMUNITY MEETING WAS HELD FOR THIS PROJECT ON JUNE 26, 2014 AT THE MILLER LIBRARY AT 8:00 PM.
- SOIL DELINEATION IS BASED ON HOWARD COUNTY SOIL SURVEY MAP 2003.
- WRITTEN AUTHORIZATION BY BOE OF THE PROJECT LANDSCAPE PLAN WILL BE OBTAINED PRIOR TO SIGNATURE APPROVAL OF THE FINAL ROAD CONSTRUCTION PLANS.
- A WAIVER WP-15-077 TO SECTION 18.116(a)(1) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS TO ALLOW DISTURBANCE WITHIN THE WETLANDS AND BUFFER FOR THE CONSTRUCTION OF A PUBLIC ROAD HAS BEEN GRANTED ON MARCH 13, 2015 WITH THE FOLLOWING CONDITIONS:
  - IMPACT IS RESTRICTED TO 0.15 AC. OF WETLANDS AND 0.18 AC. OF WETLAND BUFFER AS SHOWN AND INDICATED ON THIS PROPOSAL TO INCREASE IMPACT TO THE WETLANDS AND BUFFER TO THE WETLAND AREA/WETLAND BUFFER OR ANY OTHER PROTECTED SOURCE ON SITE WILL REQUIRE AN ADDITIONAL WAIVER PETITION TO BE SUBMITTED OR A RECONSIDERATION OF THIS WAIVER PETITION.
  - THE APPLICANT SHALL PROVIDE UPDATED JUSTIFICATION AS TO WHY ACCESS TO THE PROJECT FROM US ROUTE 40 IS THE LESSER VALUE OPTION. THIS JUSTIFICATION SHALL BE PROVIDED WITH THE NEXT REVISED PLAN SUBMISSION OF SP-15-010.
  - AT FINAL PLAN DESIGN STAGE, THE APPLICANT AND CONSULTANT SHALL MAKE EVERY ATTEMPT TO REDUCE THE LENGTH OF THE OUTFALL PIPE (THIS REDUCING THE IMPACT TO THE WETLAND AREA).
- SP-15-010 AND ALL SUBSEQUENT PLANS SHALL REFLECT THE NEWER "THUMBNAIL" DESIGN OF GIBRAN LA (PREVIOUSLY INSPIRATION WAY), INSTEAD OF THE STANDARD CLA-DE-SAC. ANOTHER REVISED WAIVER PLAN EXHIBIT WHICH DEPICTS THE "THUMBNAIL" DESIGN OF GIBRAN LA (INSPIRATION WAY) AND LABELED BOTH GIBRAN LA (INSPIRATION WAY) AND US ROUTE 40 SHALL BE SUBMITTED WITHIN 2 WEEKS OF WAIVER APPROVAL (WHICH IS BEFORE MARCH 31, 2015).
- WITH SP-15-010 AND THE SUBSEQUENT F PLAN, THE APPLICANT AND CONSULTANT SHALL PURSUE ADDITIONAL BUFFERING/SCREENING OPTIONS PROPOSED INSPIRATION WAY AND THE PROJECT BOUNDARY PROPERTY LINE, ADJACENT TO ANY EXISTING HOMES. THESE OPTIONS WOULD INCLUDE SUCH THINGS AS BERRING, FENCING AND/OR LANDSCAPING SCREENING. THIS BUFFER/SCREENING WOULD BE IN ADDITION TO ANY REQUIRED PERMITTER LANDSCAPING AND STREET TREES.
- THE PROPOSED WETLAND AND WETLAND BUFFER DISTURBANCE ARE SUBJECT TO OBTAINING ALL NECESSARY PERMITS FROM THE MARYLAND DEPARTMENT OF THE ENVIRONMENT AND U.S. ARMY CORPS OF ENGINEERING, AS REQUIRED.
- ALTERNATIVE COMPLIANCE REQUEST FOR WP-17-075 FOR THE FOLLOWING PDWONS: SECTION 18.116(a)(1) WHICH PROHIBITS DISTURBANCE TO WETLANDS AND ASSOCIATED BUFFERS. SECTION 18.116(a)(2) WHICH PROHIBITS DISTURBANCE TO STREAMS AND ASSOCIATED BUFFERS. DECISION ON WP-17-075 IS PENDING UNTIL FINAL REVIEW OF SP-15-010 BY PLANNING BOARD.
- A WAIVER WP-16-049 TO SECTION 16.144(a)(2) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WHICH STATES THAT IF THE DEPARTMENT OF PLANNING AND ZONING OR THE REVIEW COMMITTEE INDICATED THAT ADDITIONAL INFORMATION IS NEEDED IN ORDER TO DECIDE WHETHER TO APPROVE THE PRELIMINARY PLAN, THE DEVELOPER SHALL PROVIDE THE ADDITIONAL INFORMATION WITHIN 45 DAYS OF RECEIVING SUCH INDICATION HAS BEEN GRANTED ON OCTOBER 29, 2015 WITH THE FOLLOWING CONDITIONS:
  - A REVISED PLAN SUBMISSION FROM SP-15-010 (ST. CHARLES WOODS) MUST BE SUBMITTED THROUGH POOR TO THE DEPARTMENT OF PLANNING AND ZONING ON OR BEFORE OCTOBER 19, 2016.
  - WRITTEN CONFIRMATION FROM DPW (VES DAUG) CONFIRMING SEWER ALIGNMENT AND DESIGN MUST ACCOMPANY THE REVISION OF SP-15-010.
  - STORMWATER MANAGEMENT IS PROVIDED BY M-5 DRY WELLS AND M-6 MICRO-BIOTRETENTION IN ACCORDANCE WITH THE 2007 MARYLAND STORMWATER DESIGN MANUAL.
- THIS PROPERTY IS SUBJECT TO ADMINISTRATIVE ADJUSTMENT PETITION (AA-14-019) TO THE DISTRICT MAP LINE FOR DRAINAGE ERRORS AND OTHER CORRECTIONS. PETITION WAS GRANTED ON DECEMBER 24, 2014 WITH FOLLOWING CONDITIONS:
  - THE PETITIONER SHALL COMPLY WITH ALL APPLICABLE FEDERAL, STATE AND COUNTY LAWS AND REGULATIONS.
  - THE GRANTED ADMINISTRATIVE ADJUSTMENT SHALL APPLY SOLELY TO THE DISTRICT MAP LINE AS DEPICTED ON THE PLAN SUBMITTED BY THE PETITIONER.
  - THIS DECISION AND ORDER SHALL BE TRANSFERRED TO ANY SUCCEEDING OWNERS OF THE PROPERTY.
- SLOPES GREATER THAN 25% DO NOT EXIST ON SITE.
- THERE ARE NO EXISTING STRUCTURES ON SITE.
- THIS PROJECT IS SUBJECT TO PLANNING BOARD APPROVAL IN ACCORDANCE WITH ZONING REGULATION SECTION 107.07.6.
- DESIGN MANUAL WAIVER REQUEST TO SECTION 2.5.B.1, TABLE 2.07 OF THE DESIGN MANUAL VOLUME II WAS APPROVED ON APRIL 24, 2017 BY DEO/DPW TO ALLOW REDUCED INTERSECTION SPACING ON MD ROUTE 144 TO 170 LF.

DATE	MAY 2017
PROJECT	09-004
ENGINEERING	MMM
ILLUSTRATION	MMM
SCALE	1"=50'
APPROVAL	RH

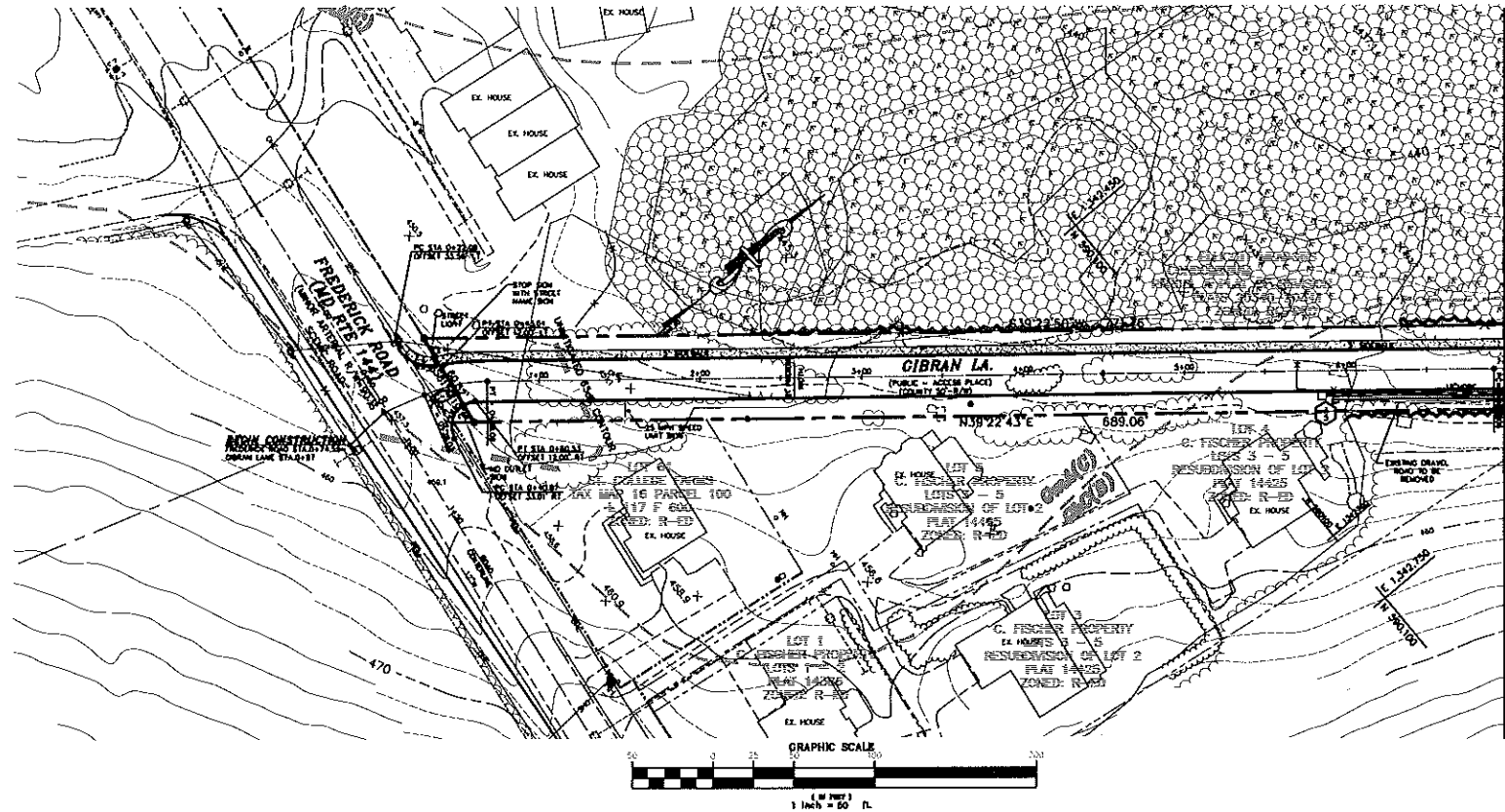
DATE	
DESCRIPTION	
REVISIONS	

**COVER SHEET**  
 ST. CHARLES WOODS  
 LOTS 1 THROUGH 22, AND OPEN SPACE LOTS 23 THROUGH 25  
 TAX MAP 18 - GRID 23 - PARCEL 248 - HOWARD COUNTY, MARYLAND  
 THIRD ELECTION DISTRICT

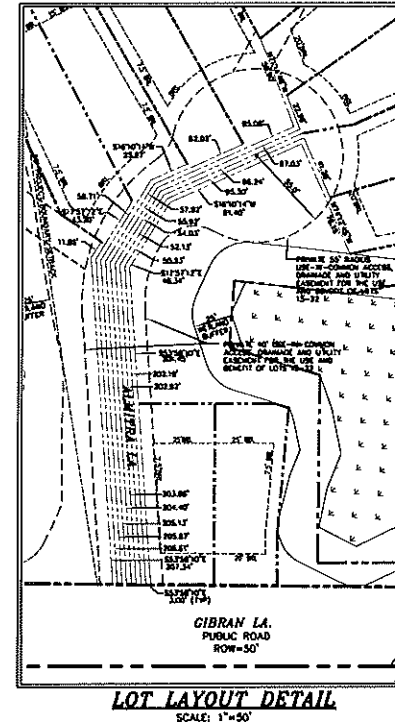
**MILDENBERG, BOENDER & ASSOC., INC.**  
 Engineers Planners Surveyors  
 7350-B Grace Drive, Columbia, Maryland 21044  
 (410) 997-0296 Fax

F:\2004\09-004 CADOGAN (ST. CHARLES) PRELIMINARY SKETCH-MAVA JULY 2016 REV-2.DWG

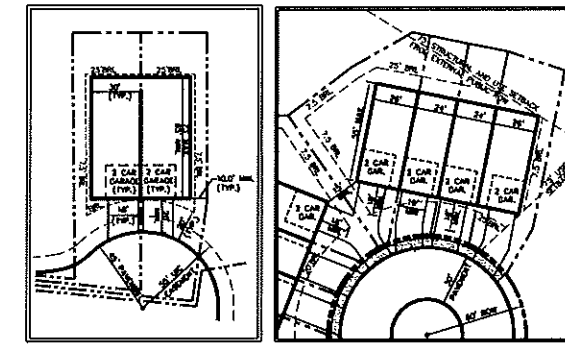
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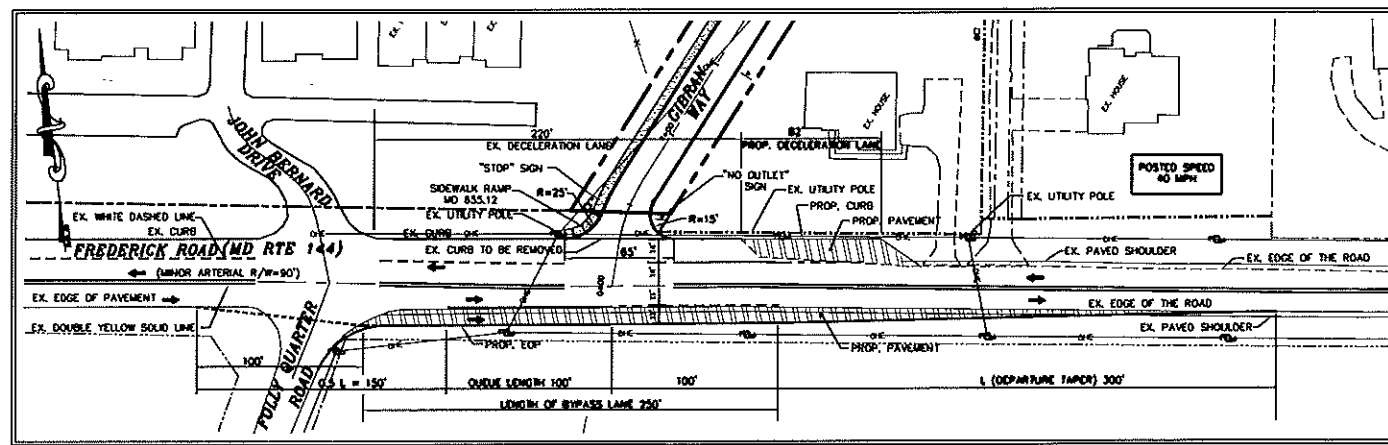
MATCHLINE SHEET 3



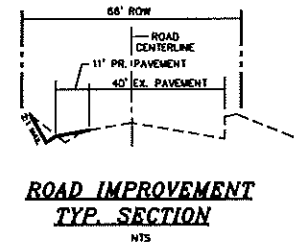
LOT LAYOUT DETAIL  
SCALE: 1"=50'



SCHEMATIC LOT DETAILS  
SCALE: 1"=50'



FREDERICK ROAD IMPROVEMENT CONCEPT PLAN  
SCALE: 1"=50'



ROAD IMPROVEMENT TYP. SECTION  
MTS

**LEGEND**

- AREA OF EXISTING WETLANDS
- AREA OF 100-YEAR FLOODPLAIN
- AREA OF FOREST CONSERVATION EASEMENT
- UNMITIGATED 65dB CONTOUR
- EXISTING TREELINE
- PROPOSED TREELINE
- PROPOSED 5' SIDEWALK

**OWNER / DEVELOPER**  
 CADOGAN PROPERTY, LLC  
 7350-B GRACE DRIVE  
 COLUMBIA, MARYLAND 21044  
 (410)997-0296

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. 17942, EXP DATE 09/03/18

R. JACOB HIKMAT P.E. DATE: \_\_\_\_\_

APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY  
 PLANNING DIRECTOR DATE

APPROVED  
 PLANNING BOARD OF HOWARD COUNTY  
 PBA DATE

Project	DB-004	Date	MAY 2017
Illustration	MM	Engineering	MM
Scale	1"=50'	Approval	RH

No.	Description	Date

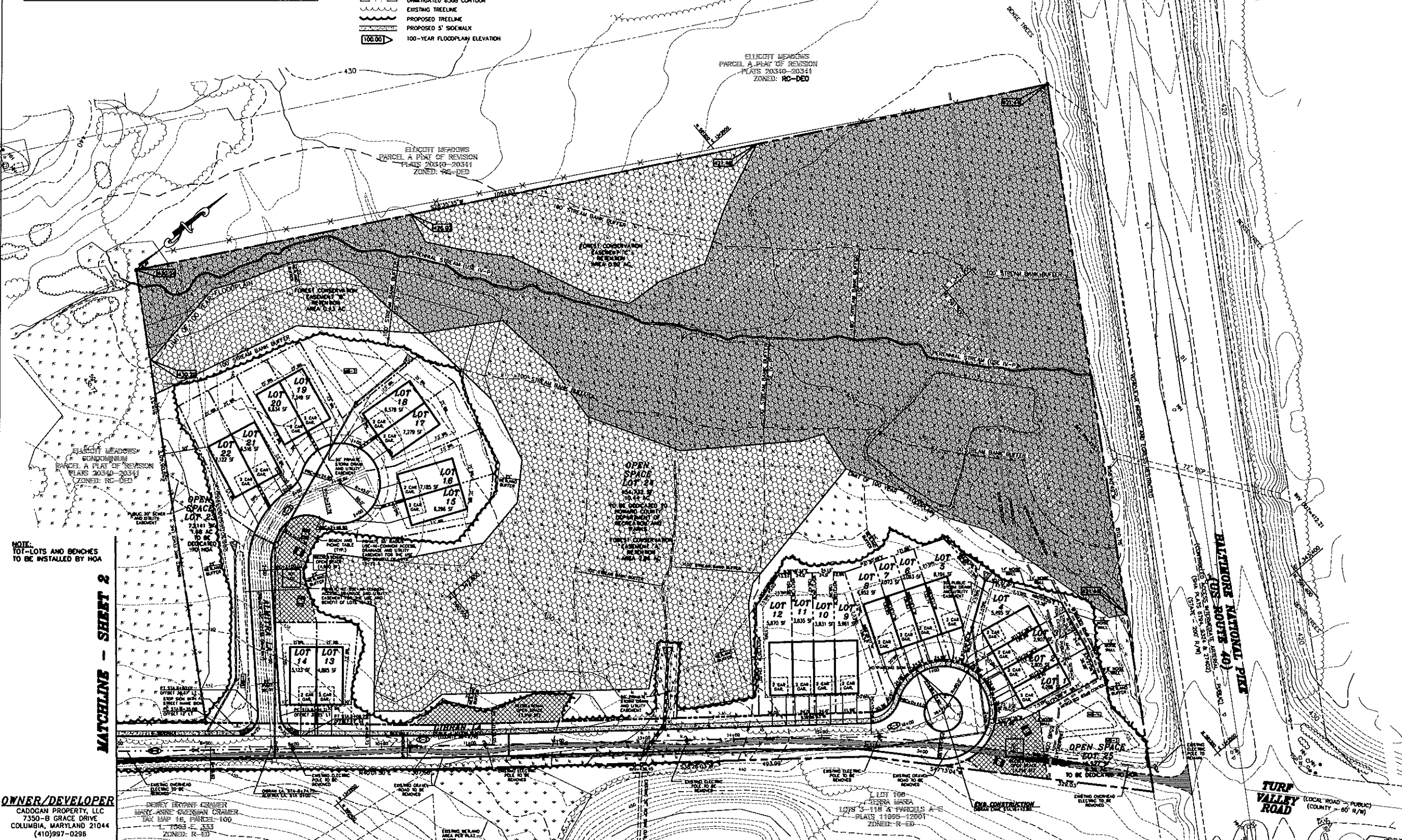
**ST. CHARLES WOODS**  
 LOTS 1 THROUGH 22 AND OPEN SPACE LOTS 23 THROUGH 25  
 TAX MAP 16 - PARCEL 248 - GRID 23  
 THIRD ELECTION DISTRICT  
 HOWARD COUNTY, MARYLAND  
**PRELIMINARY EQUIVALENT SKETCH PLAN**

**MILDENBERG, BOENDER & ASSOC., INC.**  
 Surveyors  
 Engineers Planners  
 7860-B Cruz Drive, Columbia, Maryland 21044  
 (410) 997-0296 TEL (410) 997-0296 FAX

CURVE TABLE						
CURVE	RADIUS	LENGTH	DELTA	TANGENT	CHORD BEARING	CHORD LENGTH
C-1	100.00	40.04	22°36'23"	20.29	S27°54'32"W	39.77
C-2	10000.00	113.77	0°39'07"	56.88	S39°42'16"W	113.77
C-3	5000.00	139.31	1°35'47"	69.66	N39°13'56"E	139.31
C-4	186.30	86.46	29°47'12"	44.23	N23°32'27"E	86.46
C-5	90.00	217.76	81°20'04"	77.32	S13°18'08"E	117.30

**LEGEND**

- AREA OF EXISTING WETLANDS
- AREA OF 100-YEAR FLOODPLAIN
- AREA OF FOREST CONSERVATION EASEMENT
- AREA OF RECREATIONAL OPEN SPACE
- UNDEVELOPED 5500 CONTOUR
- EXISTING TREELINE
- PROPOSED TREELINE
- PROPOSED 5' SIDEWALK
- 100-YEAR FLOODPLAIN ELEVATION



NOTE: LOT-1 AND BENCHES TO BE INSTALLED BY HOA

MATCHLINE - SHEET 2

**OWNER/DEVELOPER**  
 CADOGAN PROPERTY, LLC  
 7350-B GRACE DRIVE  
 COLUMBIA, MARYLAND 21044  
 (410)997-0296

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R. JACOB HIRMAT P.E. DATE: \_\_\_\_\_

APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY

PLANNING DIRECTOR DATE: \_\_\_\_\_

APPROVED  
 PLANNING BOARD OF HOWARD COUNTY

PBS DATE: \_\_\_\_\_



DATE	MAY 2017
PROJECT	DB-004
DESCRIPTION	illustration
BY	MM
CHECKED	MM
APPROVED	MM
SCALE	1"=50'

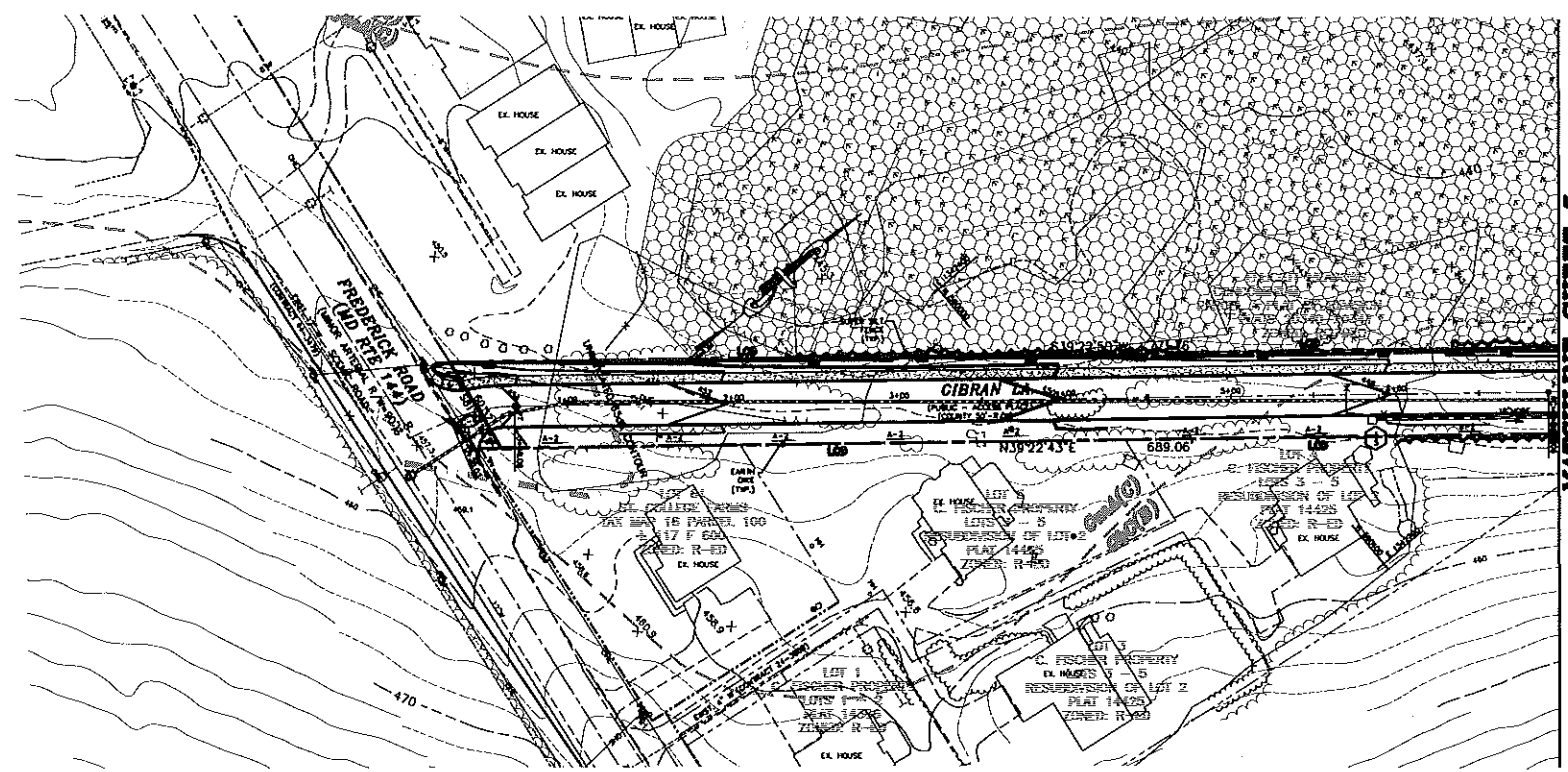
NO.	DESCRIPTION	DATE

**ST. CHARLES WOODS**  
 LOTS 1 THROUGH 22 AND OPEN SPACE LOTS 23 THROUGH 25  
 TAX MAP 16 - PARCEL 248 - GRID 23  
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
 PRELIMINARY EQUIVALENT SKETCH PLAN

**MILDENBERG, BOENDER & ASSOC., INC.**  
 Surveyors  
 7350-B Grace Drive, Columbia, Maryland 21044  
 (410) 997-0296 FAX



P:\2004\09-04 CADOGAN (ST. CHARLES)\PRELIMINARY SKETCH\UC-MAYA JULY 2016 REV-2.DWG

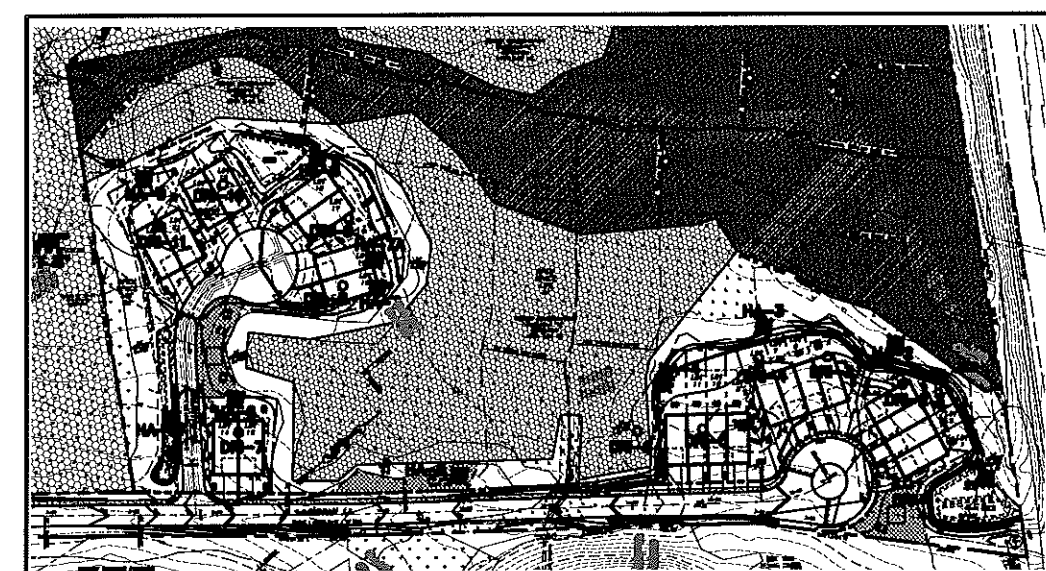


MATCHLINE SHEET 6



**LEGEND**

- AREA OF EXISTING WETLANDS
- AREA OF 100-YEAR FLOODPLAIN
- AREA OF FOREST CONSERVATION EASEMENT
- UNABRIDGED 65dB CONTOUR
- EXISTING TREELINE
- PROPOSED TREELINE
- PROPOSED 5' SIDEWALK
- LIMIT OF DISTURBANCE
- SUPER SILT FENCE
- SILT FENCE
- SILT DIVERSION FENCE
- STABILIZED CONSTRUCTION ENTRANCE
- MICRO-BIORETENTION FACILITY I.D.
- EARTH DIKE



**SOIL BORING LOCATION PLAN**  
SCALE: 1"=100'

**SOIL BORING TABLE FOR DRYWELLS (M-5)**

PIPE NO.	RISER HEIGHT (FT.)	EMBEDDED DEPTH (FT.)	DEPTH OF FILL MATERIAL	INFILTRATION RATE (IN/HR)
DR-1	1.0	2.0	5.0'	0.6
DR-2	2.0	2.0	5.0'	0.7
DR-3	1.0	2.0	5.0'	0.2
DR-4	1.0	2.0	5.0'	0.6
DR-5	2.0	2.0	5.0'	1.0
DR-6	N/A	N/A	4.0'	-
DR-7	N/A	N/A	5.0'	-
DR-8	1.0	2.0	3.0'	0.6
DR-9	1.0	2.0	2.5'	1.02
DR-10	1.0	2.0	2.0'	1.02
DR-11	1.0	2.0	5.0'	0.7

**SOIL BORING TABLE FOR MICRO-BIORETENTION (M-6)**

BORING NO.	EXISTING GROUND ELEVATION	GROUND WATER ELEVATION	BIO-RETENTION NO.
MA-1	428.59	N/A	MB-3
MA-2	422.25	N/A	MB-4
MA-3	424.82	N/A	-
MA-4	422.30	422.30	-
MA-5	434.56	431.56	-
MA-6	432.11	N/A	-
MA-7	432.07	N/A	-
MA-7A	431.24	N/A	-
MA-8	429.65	N/A	MB-2
MA-9	438.67	N/A	-
MA-10	440.19	434.48	MB-1

**OWNER / DEVELOPER**  
CADOGAN PROPERTY, LLC  
7350-B GRACE DRIVE  
COLUMBIA, MARYLAND 21044  
(410)997-0296

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R. JACOB HIKMAT P.E. \_\_\_\_\_ DATE: \_\_\_\_\_

APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY  
PLANNING DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED  
PLANNING BOARD OF HOWARD COUNTY  
PBO \_\_\_\_\_ DATE \_\_\_\_\_

Project	DATE	DESCRIPTION
DP-004	MAY 2017	engineering
Illustration	MM	MM
Scale	1"=50'	Approval
		PHH

NO.	DESCRIPTION	REVISIONS

**ST. CHARLES WOODS**  
LOTS 1 THROUGH 22 AND OPEN SPACE LOTS 23 THROUGH 25  
TAX MAP 16 - PARCEL 248 GRID 23  
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
**GRADING AND EROSION AND SEDIMENT CONTROL PLAN**

**MILDENBERG, BOENDER & ASSOC., INC.**  
Surveyors  
Engineers Planners  
7350-B Grace Drive, Columbia, Maryland 21044  
(410) 997-0296 TEL (410) 997-0298 FAX







**LEGEND**

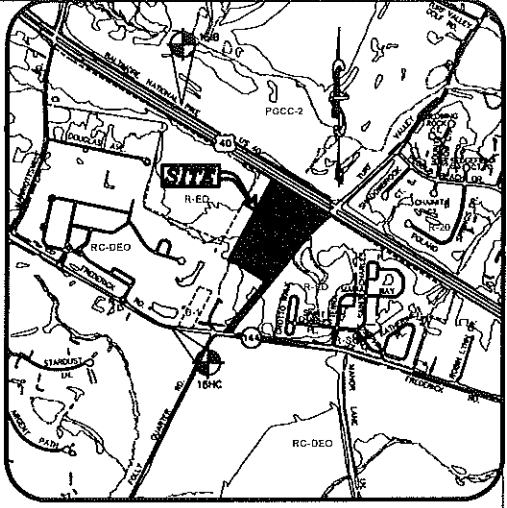
- EX. TREE LINE
- PR. TREE LINE
- AREA OF WETLANDS
- AREA OF FOREST CONSERVATION RETENTION
- FOREST CONSERVATION SIGNAGE

**SOILS TABLE**

SYMBOL	RATING	NAME	X FACTOR	MAP #	COMMENTS
GcC	(B)	GLADSTONE LOAM, 8-15% SLOPES	.20	12	---
GmA	(C)	GLENVILLE SILT LOAM, 0-3% SLOPES	.37	12	---
GmB	(C)	GLENVILLE SILT LOAM, 3-8% SLOPES	.37	12	---
GmC	(C)	GLENVILLE SILT LOAM, 8-15% SLOPES	.37	12	---
GaB	(C)	GLENVILLE-SABLE SILT LOAM, 0-8% SLOPES	.37	12	HYDRIC SOL.

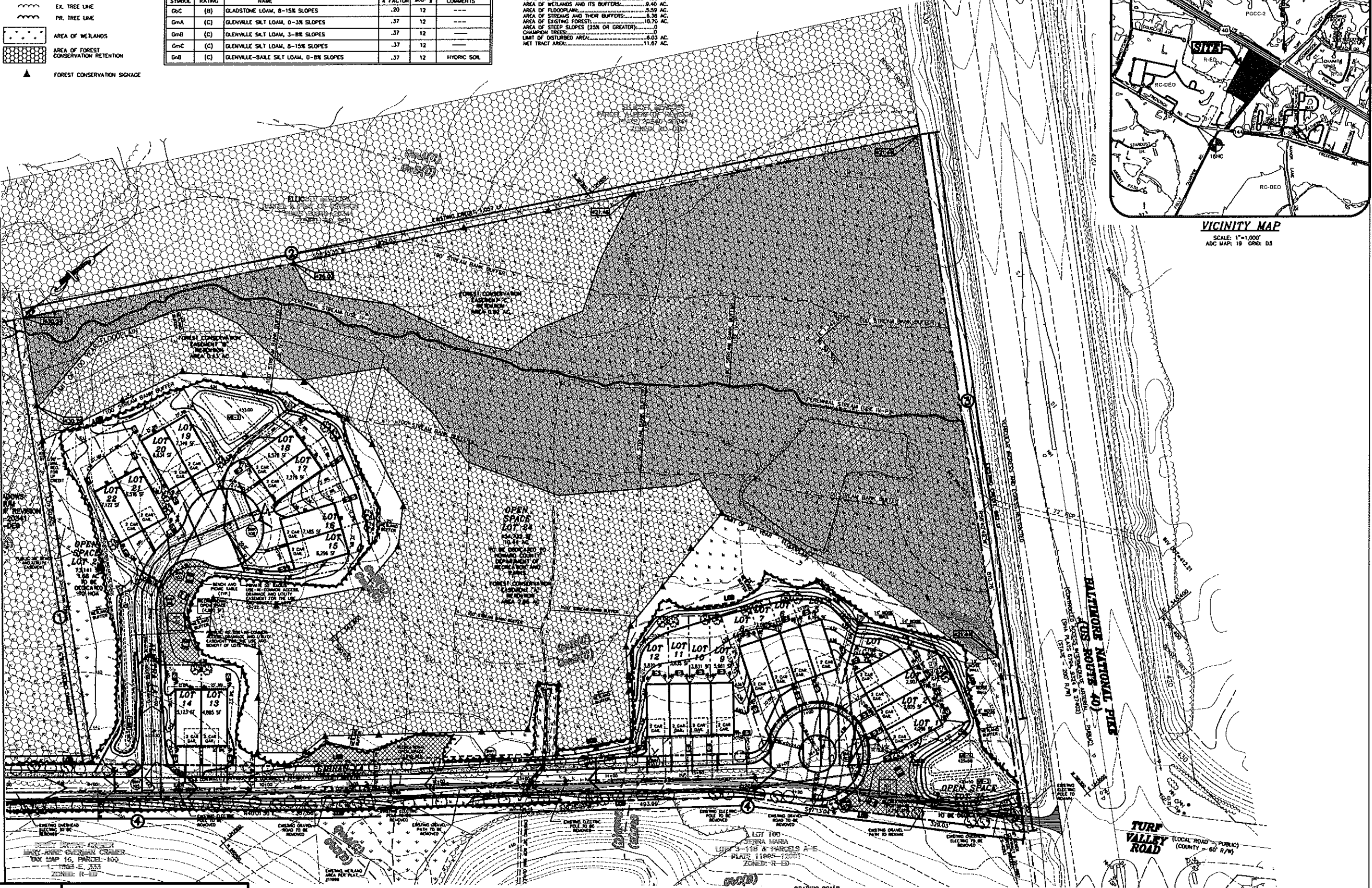
**SITE ANALYSIS DATA**

TOTAL AREA: 17.28 AC.  
 AREA OF WETLANDS AND ITS BUFFERS: 9.40 AC.  
 AREA OF FLOODPLAIN: 5.50 AC.  
 AREA OF STREAMS AND THEIR BUFFERS: 6.38 AC.  
 AREA OF EXISTING FOREST: 10.70 AC.  
 AREA OF STEEP SLOPES (25% OR GREATER): 0  
 CHAMPION TREES: 0  
 LIMIT OF DISTURBED AREA: 6.03 AC.  
 NET TRACT AREA: 11.87 AC.



**VICINITY MAP**  
 SCALE: 1"=1,000'  
 AUC MAP: 19 GRD: D3

MATCHLINE SHEET 6



DATE	MAY 2017	APPROVAL	RJH
PROJECT	06-004	ENGINEERING	MMK
ILLUSTRATION	MMK	SCALE	1"=50'

NO.	DESCRIPTION	REVISIONS

**ST. CHARLES WOODS**  
 LOTS 1 THROUGH 22 AND OPEN SPACE LOTS 23 THROUGH 25  
 TAX MAP 16 - PARCEL 246 - GRID 23  
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
**PRELIMINARY LANDSCAPE AND FOREST CONSERVATION PLAN**

**MILDENBERG, BOENDER & ASSOC., INC.**  
 Engineers Planners Surveyors  
 7350-B Grace Drive, Columbia, Maryland 21044  
 (410) 997-0296 Tel. (410) 997-0296 Fax.

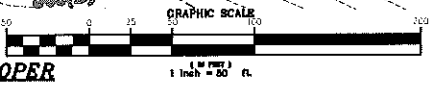
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R. JACOB HIKMAT P.E. DATE: \_\_\_\_\_

APPROVED  
 DEPARTMENT OF PLANNING AND ZONING  
 HOWARD COUNTY  
 PLANNING DIRECTOR DATE \_\_\_\_\_

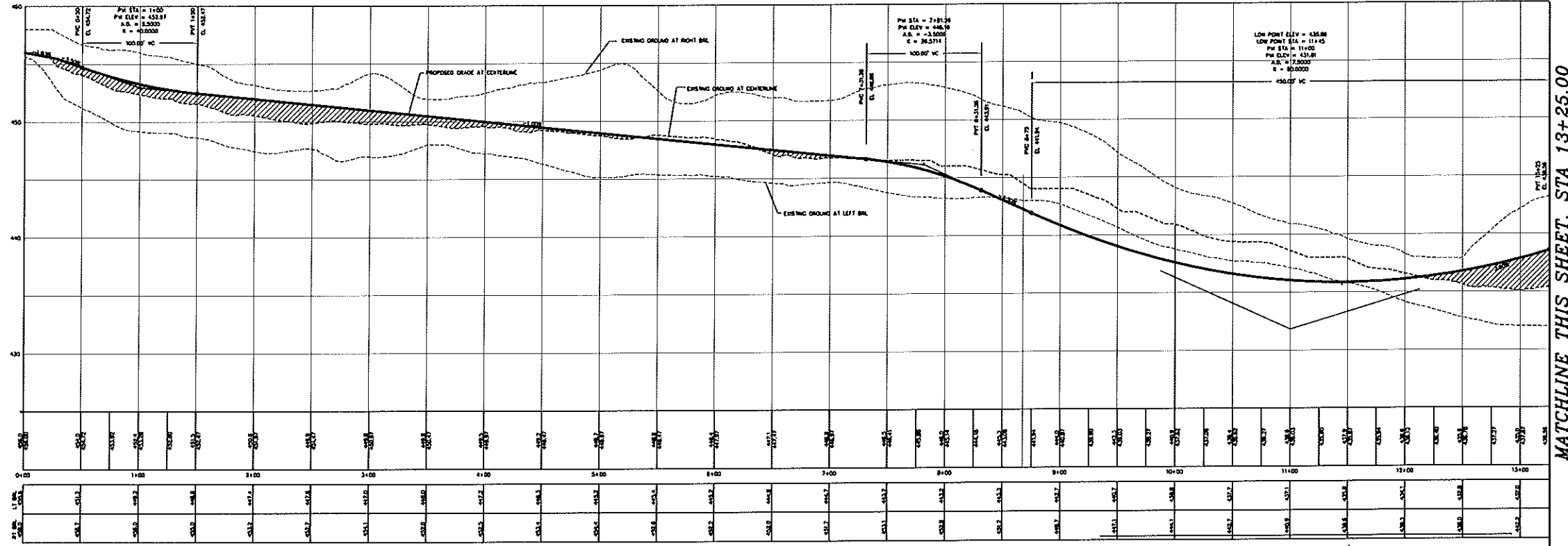
APPROVED  
 PLANNING BOARD OF HOWARD COUNTY  
 PDS DATE \_\_\_\_\_

**OWNER/DEVELOPER**  
 CADOGAN PROPERTY, LLC  
 7350-B GRACE DRIVE  
 COLUMBIA, MARYLAND 21044  
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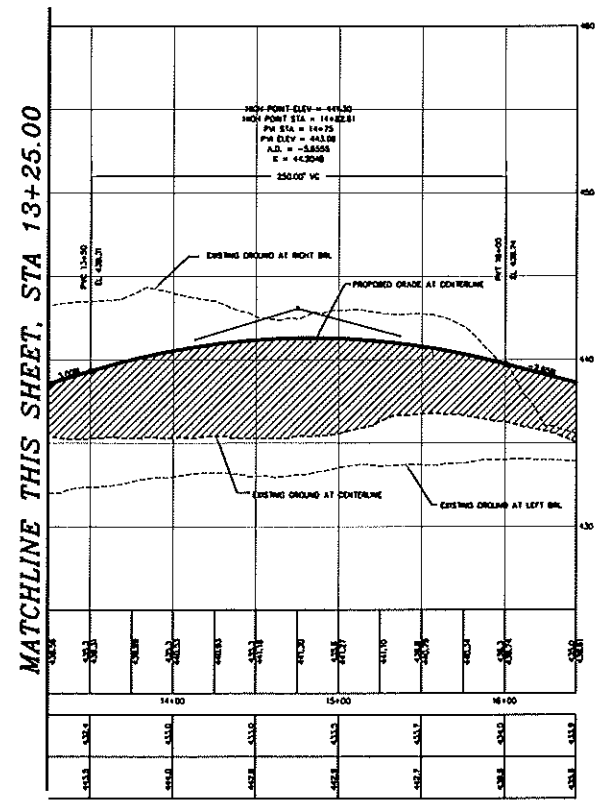


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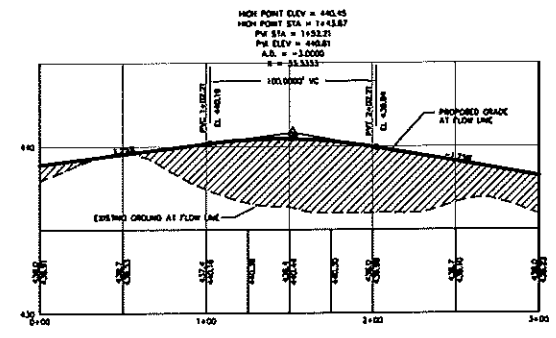
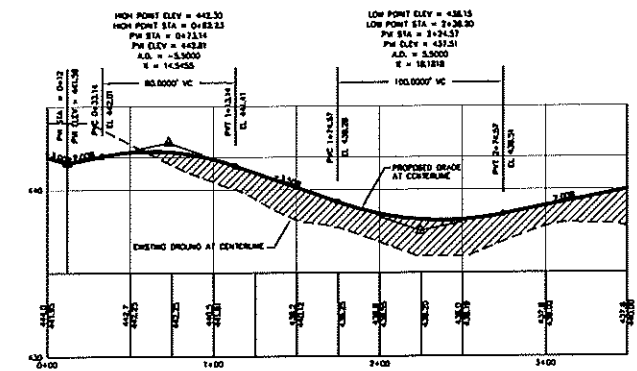
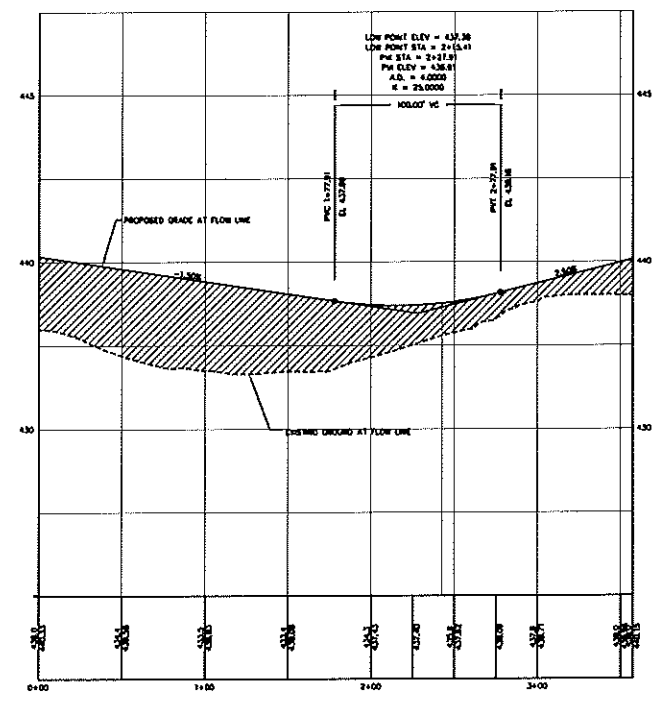
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MATCHLINE THIS SHEET, STA 13+25.00



MATCHLINE THIS SHEET, STA 13+25.00



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R. JACOB HIKMAT P.E. DATE: \_\_\_\_\_

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CADOGAN PROPERTY, LLC  
7350-B GRACE DRIVE  
COLUMBIA, MARYLAND 21044  
(410)997-0296

APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY

PLANNING DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED  
PLANNING BOARD OF HOWARD COUNTY

PBR \_\_\_\_\_ DATE \_\_\_\_\_

PROJECT	09-004
DATE	MAY 2017
ILLUSTRATION	ENGINEERING
SCALE	1"=50'
DESIGNER	MMK
CHECKER	MMK
APPROVAL	RJH

no.	description	date

**ST. CHARLES WOODS**  
LOTS 1 THROUGH 22 AND OPEN SPACE LOTS 23 THROUGH 25  
TAX MAP 16 - PARCEL 248 - GRID 23  
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

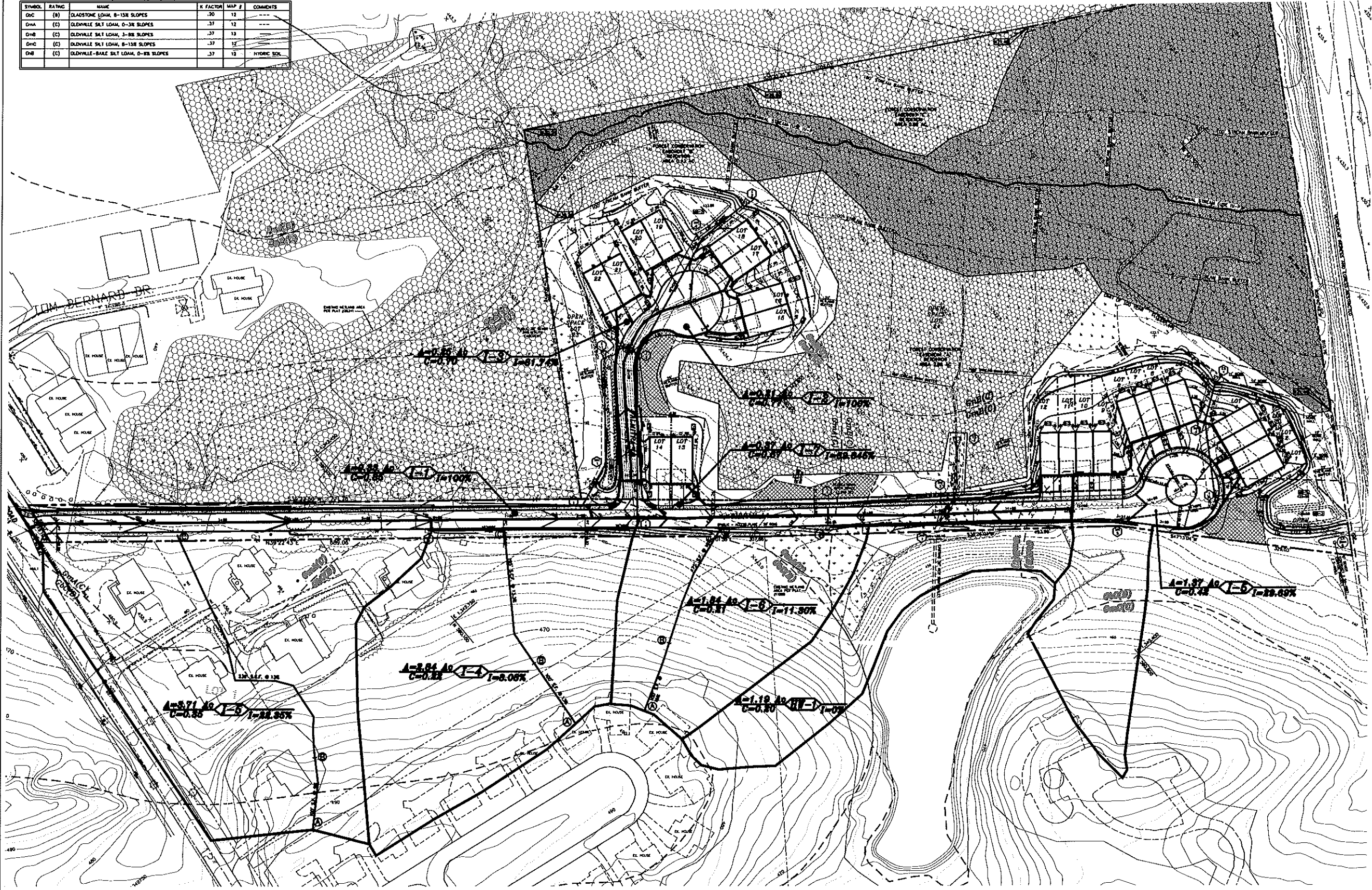
**PRELIMINARY ROAD PROFILES**

**MILDENBERG, BOENDER & ASSOC., INC.**  
Engineers Planners Surveyors  
7350-B Grace Drive, Columbia, Maryland 21044  
(410) 997-0296 Fax



**SOILS TABLE**

SYMBOL	RATING	NAME	K FACTOR	MAP #	COMMENTS
D1C	(B)	CLAYSTONE LOAM, 8-15% SLOPES	.20	12	
D1A	(C)	OLDVILLE SALT LOAM, 0-3% SLOPES	.37	12	
D1B	(C)	OLDVILLE SALT LOAM, 3-8% SLOPES	.37	13	
D1C	(C)	OLDVILLE SALT LOAM, 8-15% SLOPES	.37	12	
D1B	(C)	OLDVILLE-SALE SALT LOAM, 0-8% SLOPES	.37	12	HYDRO. SOL.



P:\2004\09-04 CADOGAN (ST. CHARLES)\PRELIMINARY SKETCH-MAY 16-2016 REV-2.DWG

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R. JACOB HUNYAT P.E. \_\_\_\_\_ DATE: \_\_\_\_\_

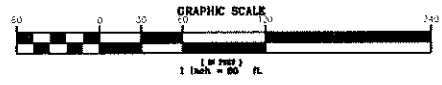
APPROVED  
DEPARTMENT OF PLANNING AND ZONING  
HOWARD COUNTY

PLANNING DIRECTOR \_\_\_\_\_ DATE \_\_\_\_\_

APPROVED  
PLANNING BOARD OF HOWARD COUNTY

DATE \_\_\_\_\_

**OWNER / DEVELOPER**  
CADOGAN PROPERTY, LLC  
7350-B GRACE DRIVE  
COLUMBIA, MARYLAND 21044  
(410)997-0296



Project	09-004	Date	MAY 2017
Illustration	MMW	Engineering	MMW
Scale	1"=60'	Approval	PHH

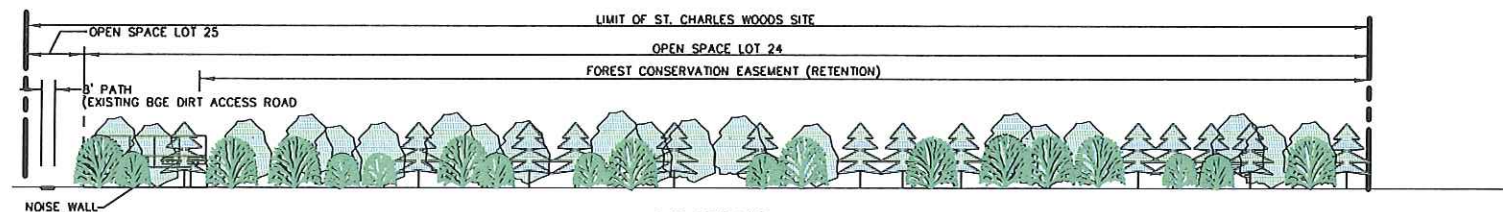
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**ST. CHARLES WOODS**  
LOTS 1 THROUGH 22 AND OPEN SPACE LOTS 23 THROUGH 25  
TAX MAP 16 - PARCEL 248 GRID 23  
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
**PRELIMINARY SOILS AND DRAINAGE AREA MAP**

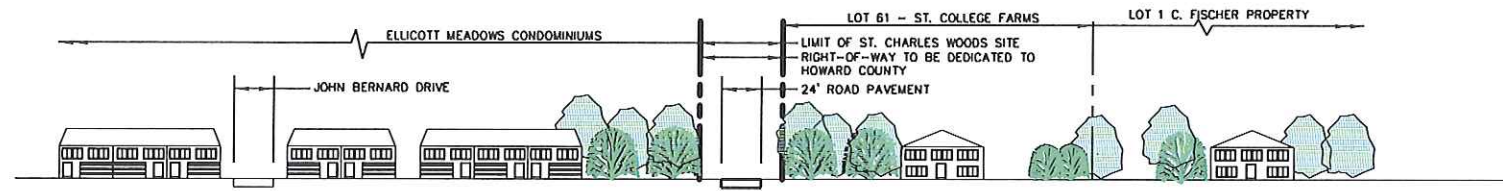
**MILDENBERG, BOENDER & ASSOC., INC.**  
Surveyors  
7350-B Grace Drive, Columbia, Maryland 21044  
(410) 997-0296 Tel. (410) 997-0298 Fax.



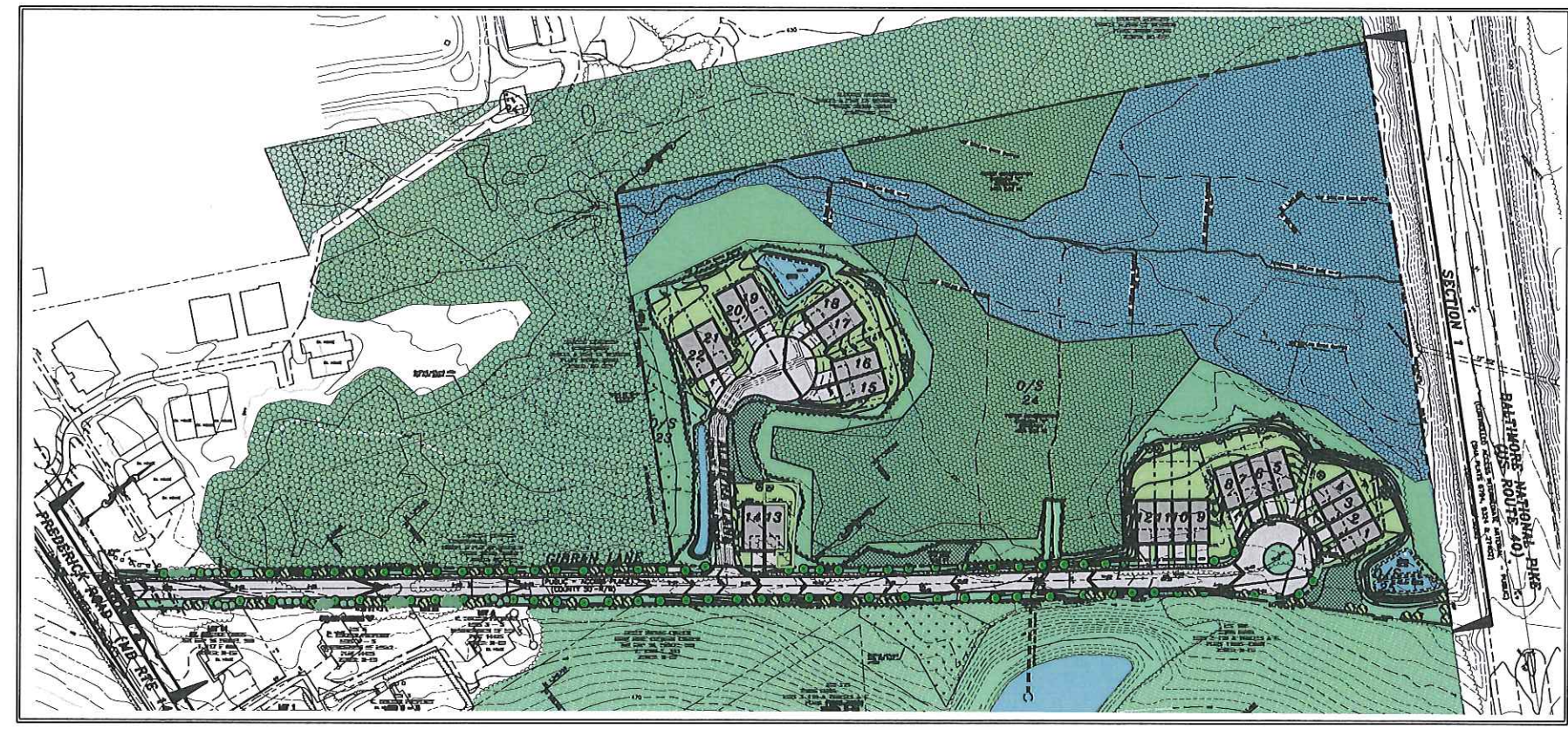
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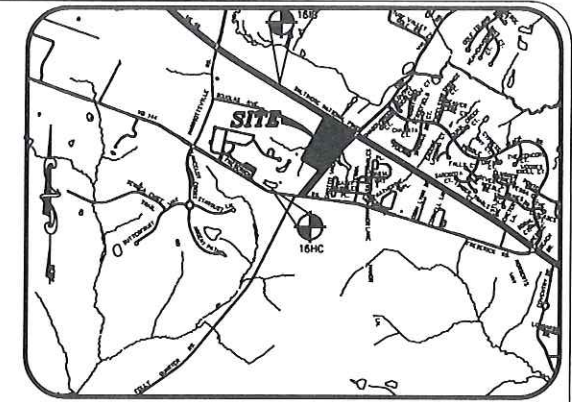
**SECTION 1**  
**SITE VIEW - LOOKING SOUTH INTO SITE FROM BALTIMORE NATIONAL PIKE (U.S. 40)**  
 NTS



**SECTION 2**  
**PROPOSED SITE VIEW - LOOKING NORTH INTO SITE FROM FREDERICK ROAD (MD 144)**  
 NTS



**PLAN VIEW**  
 SCALE: 1"=100'



**VICINITY MAP**  
 SCALE: 1"=2000'  
 ADC MAP: 19 GRID: 05

date	MAY 2017
project	09-004
illustration	MAM
scale	1"=50'
approval	RJH

no.	description	revisions	date

**ST. CHARLES WOODS**  
 LOTS 1 THROUGH 22 AND OPEN SPACE LOTS 23 THROUGH 25  
 TAX MAP 16 - GRID 23 - PARCEL 246  
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND  
**SITE VIEW**

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