#### HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING 3430 Courthouse Drive 88 88



Ellicott City, Maryland 21043

410-313-2350 Voice/Relay

Valdis Lazdins, Director

FAX 410-313-3467

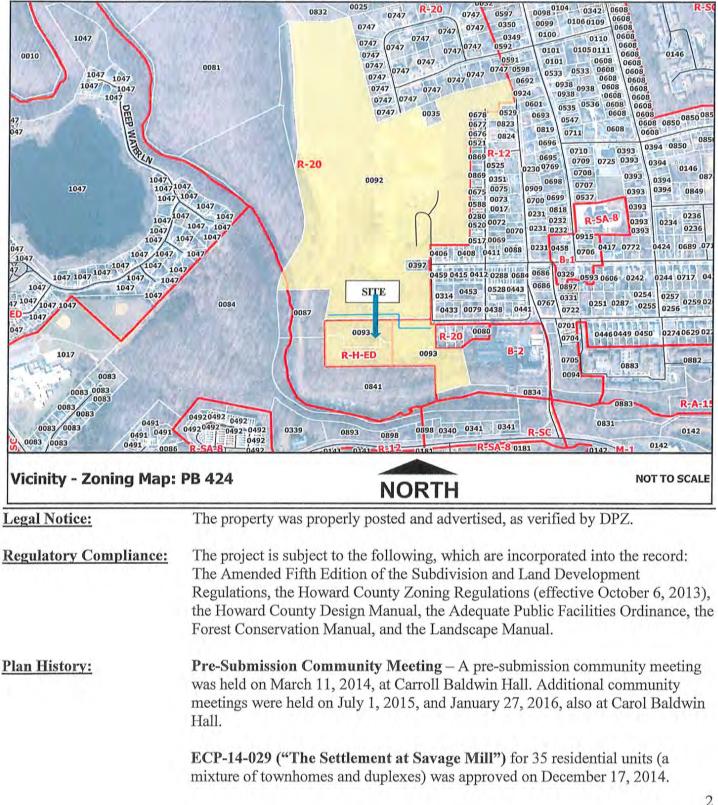
# TECHNICAL STAFF REPORT The Settlement At Savage Mill

Planning Board Hearing of March 16, 2017

Case No./Petitioner:	PB-424/Savage Mill Remainder, LLC (Jay Winer) and Howard County Government, Department of Recreation and Parks (John Byrd, Director)
Project Name:	The Settlement at Savage Mill, Lots 1-35 & Open Space Lots 36-40
Filing Dates:	April 5, 2016 (SP-15-017) and October 14, 2016 (PB 424)
<u>Developer:</u>	Buzzuto Homes, Inc. (Melvin Byrd)
Land Consultant:	Pennoni Associates, Inc.
<u>DPZ Planner:</u>	Tanya Krista-Maenhardt, AICP, Planning Supervisor (410) 313-2350, tmaenhardt@howardcountymd.gov
<u>Request:</u>	To approve Preliminary Equivalent Sketch Plan (SP-15-017) for 6 single-family, detached residential lots, 29 single-family, attached residential lots (12 duplex and 17 townhomes) 5 open space lots, and other site improvements on 7.85 acres pursuant to the following Sections of the Howard County Zoning Regulations: Section 107.0.F. (R-ED: Residential: Environmental Development); Sections 108.G.2.and 108.G.3. which allow for density exchange in certain instances for R-20 (Residential: Single) zoned properties developed pursuant to R-ED district regulations; and Section 111.1.F. (R-H-ED: Residential: Historic-Environmental District).
<u>Recommendation:</u>	<b>Approval</b> of Preliminary Equivalent Sketch Plan (SP-15-017) in accordance with remaining Subdivision Review Committee (SRC) comments, Alternative Compliance approvals, final approval of the land swap and subject to any conditions by the Planning Board.
Location:	Tax Map 47, Grid 11, Parcels 92 and 93 [8400 (Parcel 92) and 8550 & 8554 Fair Street (Parcel 93), Savage, Maryland 20763].
<u>Vicinal Properties:</u>	East: Parcel 314, owned by Victoria G. Ladler, zoned R-12; Parcel 432, owned by Solomons Lodge AF & AM, zoned R-12; Parcel 435 owned by Jimmy Velez & Michelle Rios, zoned R-20; Parcel 461 owned by Savage Mill Limited Partnership, zoned B-2; & Parcel 841, owned by the Howard County Department of Public Works, zoned R-20.
	West: Parcel 841, owned by the Howard County Department of Public Works, zoned R-20; Parcel 87, owned by Howard County, zoned R-20.

North: remainder of Parcel 92, owned by Howard County, zoned R-20.

South: Parcel 841, owned by the Howard County Department of Public Works, zoned R-20.



Vicinity Map:

ECP-15-053 ("The Settlement at Savage Mill") for 35 residential units (a mixture of single-family homes, townhomes and duplexes) was approved on May 12, 2016. This proposal incorporates a swap with County park land to the north, which would allow development to shift north. The result is a greater distance between the development and on-site and adjacent environmental resources.

Alternative Compliance Petition #17-002 – An alternative compliance petition to Sections 16.120(c)(4) and Section 16.1205(a)(7) of the Subdivision and Land Development Regulations was submitted on July 7, 2016.

Section 16.120(c)(4) requires single-family-attached lots to have a minimum 15 feet of frontage on a public road. Single family attached lots may be approved without public road frontage provided they front on a commonly owned area containing a parking area, or a private road not exceeding 200 feet in length, measured from the edge of the public right-of-way along the centerline of the private road. Section 16.1205(a)(7) which requires the retention of specimen trees (30" dbh or greater) that are not contained within other priority forest retention areas, as outlined in Section 16.1205(a)(1-10).

- The applicant is proposing private road access for the attached residential units.
- 2. The applicant is requesting the removal of 7 of the 29 specimen trees located within the Limit of Disturbance.

The petitioner has provided written justification as part of the alternative compliance request for the SRC to consider. On December 1, 2016, the Director of Planning and Zoning determined that no action would be taken on this request until after the Planning Board had an opportunity to review and consider SP-15-017 at a public hearing.

ACREAGE	
Gross Acreage of Property	74.25 ac.
Gross Acreage of Project Area	
Area of 100-year Floodplain within project area	
Area of 25% or Greater Steep Slopes within project area	0.026 ac.
Net Tract Area	7.82 ac.
Limit of Disturbance (LOD)	6.01 ac.
DENSITY – Cluster Subdivision	
Total No. of Lots Allowed By Right in the R-H-ED, (Base Der	nsity)29 lots
(10 units per Net Acre)(2.98 Net Acres)	
Total No. of Lots Allowed By Right in the R-20 (R-ED), (Base	e Density)5 lots
(2 units per Net Acre) (2.73 Net Acres)	
Maximum No. of Lots Allowed using Density Exchange Optio	n1 lot
(bonus of 0.546 for neighborhood DEO)	
Total Number of Lots Proposed	35 lots

## Site Information:

## Site Analysis:

The subject property contains approximately 74.25 (gross) acres and the area of development is approximately 7.85 acres. The property is located on Tax Map 47, Grid 11, Parcels 92 & 93, in the Sixth Election District of Howard County, Maryland. The site is zoned R-20 (Residential: Single), R-H-ED (Residential: Historic-Environmental District) and B-2 (Business: General), and is unimproved. The area of development is almost entirely wooded and contains limited steep slopes (25% or greater).

The applicant proposes Lots 1-35 (including 1 lot per 10% density bonus) and Open Space Lots 36-40 on 7.85 acres. The proposal incorporates single family units, townhomes, and duplex units within an integrated design. Units will gain vehicular access via an extension of Washington Street, a public right-of-way, and sidewalks are proposed to encourage people to walk the historic district.

Two of the open space lots provide access to the park north of the project, with the remaining open space lots containing green space and private roads. While the design and construction of the community limits site disturbance to the extent possible, 4.82 acres of forest will be cleared, or not included within a protective easement. There will be 0.95 acres reforested on the adjacent County property and 0.45 acres on-site. An additional 0.23 acres of forest protected will be protected on the "Savage Mill" property with an off-site easement.

The Wildlife and Heritage Service (Department of Natural Resources)(DNR) has determined that the project is located along a portion of the Little Patuxent River, known to support the state-listed endangered Appalachian Snaketail (dragonfly) and the rare/watchlist Laura's Clubtail (dragonfly). In addition, DNR records indicate that the state-listed threatened Glassy Darter (fish) is documented in close proximity, but farther downstream, of the site.

The site has also been identified as Forest Interior Dwelling Bird Species (FIDS) habitat, which does not inhibit development, but requires that development be restricted to non-forested areas whenever possible. If losing forest cannot be avoided, clearing must be restricted to the perimeter of existing forest, existing smaller areas of forest (300' wide or less), isolated forest less than 50 acres in size and portions of the forest with lower quality FIDS habitat. This proposal respects DNR's guidelines to the extent possible.

Adequate Road Facilities: This project passed the APFO Roads test requirements by submitting an Adequate Public Roads Facility Study with the processing of this Preliminary Equivalent Sketch plan. This study was determined to be acceptable by the County (Development Engineering Division and Department of Public Works).

Adequate Public Facilities: Allocations in the Established Communities Allocation Area are currently available, but will not be finalized until the project has been approved by the Planning Board and the Decision and Order has been executed.

Noise Impact Analysis: A Noise Impact Analysis is not required.

**Stormwater Management:** Stormwater management (SWM) is provided using Environmental Site Design, as required by the "Stormwater Management Act of 2007." Management of runoff is controlled by the use of Micro-bioretention facilities, a bioretention facility, and pervious pavement, which the Development Engineering Division has approved .

**Design Advisory Panel (DAP):** Per Section 111.1.F.2., "prior to Planning Board Approval, the Preliminary Equivalent Sketch Plan will be evaluated by the DAP. The DAP recommendations shall be included in the Technical Staff Report...and forwarded to the Planning Board of [sic] its consideration." See the attached DAP recommendations and applicant's responses dated March, 2016.

**Historic Preservation Commission (HPC):** Per Section 111.1.1.1, "The design of new structures shall be determined by the Historic Preservation Commission to be compatible with the historic character of the area." The HPC has reviewed previous versions of the plan for Advisory Comments in July, 2015 and October, 2015 (see attached). The Commission has not yet heard the case for a Determination. The Commission must hold a public hearing, make a Determination of compatibility for the design of the new structures, and issue a written Decision and Order.



**Topography Map: PB 424** 

NORTH

NOT TO SCALE

Land Swap:	A land swap with the County is being pursued for Parcels 92 and 93 to lessen the impacts on environmental resources located on Parcel 93. Bozzuto Homes is working with the Department of Recreation and Parks to swap 2.77 acres on Parcel 93 for 2.73 acres of County owned land on Parcel 92. The 2.77 acres owned by the developer is forested and contains steep slopes, floodplain, a perennial stream, and an associated stream buffer. The County owned land is partially wooded, but is not encumbered with other environmental features. Based on Planning Board approval of SP-15-017, the land swap will be presented to the County Council for approval. If the Council approves the swap, the State Department of Natural Resources will then formally review the swap and begin the Federal review process. The current subdivision design is based upon anticipated approval of the land swap.
<u>Planning Board Review:</u>	Section 111.1.F.3. requires developments in the R-H-ED District, to seek Preliminary Equivalent Sketch Plan approval by the Planning Board at a public meeting. Section 107.0.F.2. requires a Planning Board Hearing for projects in the R-ED zoning district (which in turn applies to density exchange on R-20 zoned properties developed pursuant to R-ED district regulations)(Section 108.0.G.3.b.).
<u>Planning Board Criteria:</u>	Sections 111.1.F.7. <b>and</b> 107.0.F.6 of the Howard County Zoning Regulations outline the following criteria to be used when evaluating a Preliminary Equivalent Sketch Plan in the "R-H-ED" and "R-ED" Zoning Districts.

# 1. "The proposed lay-out of lots and open space effectively protects environmental and historic resources."

The proposed layout of the subdivision has taken into account the environmental features on this parcel. To help facilitate protecting forest and to fulfill the objectives of the R-ED zoning district, lots sizes have been minimized and open space has been provided in excess of the required 50% (1.36 acres required, 1.47 acres credited open space provided). The project is adjacent to the existing Savage Mill and a portion of the property is within the Savage National Register Historic District. The plan has been adjusted in accordance with comments and recommendations by the DAP and HPC. The layout of the development provides for a unified streetscape along Washington Street and the design considers and includes the architecture and orientation of the houses, the location of sidewalks, and landscaping. The project does not impact steep slopes as defined (25% or greater, 20,000 s.f. contiguous), streams, floodplains, wetlands or their buffers. The project has been shifted north to help protect sensitive resources to the south and west along the Little Patuxent River. The project provides a 250' stream buffer in accordance with the R-H-ED Zoning Regulations and the distance between the closest house and the buffer is 120'.

# 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 design of the subdivision takes advantage of the site's unique topography, environmental features, and forest by minimizing the limits of clearing and grading necessary to construct houses, roads, SWM facilities, and public utilities. The project has also been situated at the edge of a larger forested tract to help minimize impacts to the overall contiguous forest. The majority of the development occurs on the most gently sloping part of the site, west of the existing parking lot and south of Savage Park. The proposed land swap enables development to shift north and east, away from steep slopes, which limits clearing, grading, and the need for large retaining walls. SWM facilities are primarily microscale facilities and are situated throughout the development.

# 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 project is located adjacent to and is partially within the Savage National Register Historic District and will be set back from existing development on the east side of Fair Street. A wooded buffer will be maintained in the area between Fair Street and the development. The project will provide the required Howard County perimeter landscape buffer, through both preservation and planting. In addition, as discussed with the DAP and HPC, additional buffering along the east and south sides of the development will be provided. The eastern buffer will help shield the proposed homes from the existing parking lot. To the south, the existing woodland edge will be supplemented to provide a year round buffer from views looking north into the site. The wooded areas south and west of the development will be placed into preservation easements. The site is not located on a scenic road.

SRC Action:

The Subdivision Review Committee (SRC) has recommended approval.

**Recommendation:** 

**Approval** of Preliminary Equivalent Sketch Plan (SP-15-017) in accordance with remaining Subdivision Review Committee (SRC) comments, Alternative Compliance approvals, final approval of the land swap and subject to any conditions by the Planning Board.

Date

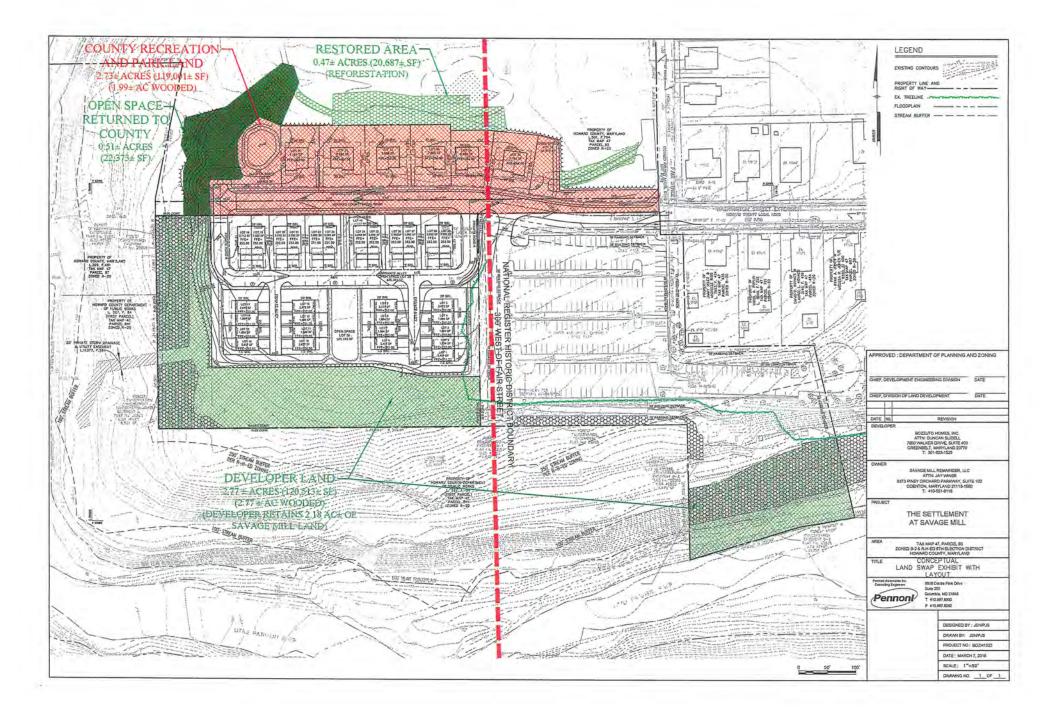
Valdis Lazdins, Director Department of Planning and Zoning

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.

**Overall View** 



Land Swap



**DNR Heritage Letter and Developer Responses** 

L.



Larry Hogan, Governor Boyd K. Rutherford, Lt. Governor Mark J. Belton, Secretary Mark L. Hoffman, Acting Deputy Secretary

August 4, 2015

Mr. Jonathan S. Norman Pennoni Associates, Inc. 8818 Centre Park Drive, Suite 200 Columbia, MD 21045

RE: Environmental Review for The Settlement at Savage Mill, (including Savage Park), Tax Map 47, Parcels 87, 92 & 93, Howard County, Maryland.

## Dear Mr. Norman:

The Wildlife and Heritage Service has determined that this project site is located along a portion of the Little Patuxent River that is known to support the state-listed endangered Appalachian Snaketail (*Ophiogomphus incurvatus incurvatus*) and the state rare/watchlist Laura's Clubtail (*Stylurus laurae*). Odonate species such as these are thought to be extremely susceptible to changes in water quality or hydrology during their aquatic larval stages. In addition, there are records for the state-listed threatened Glassy Darter (*Etheostoma vitreum*) documented in close proximity, but further downstream of, this project site. In order to reduce the likelihood of adverse impacts to these rare species and to help maintain the ecological integrity of their aquatic habitats in the Little Patuxent River, we offer the following recommendations:

## PROTECTION MEASURES FOR AQUATIC HABITATS SUPPORTING RARE, THREATENED AND ENDANGERED SPECIES

- Pursue environmentally sensitive design to address stormwater runoff by promoting the use of nonstructural best management practices to the maximum extent. The goal is to mimic natural infiltration patterns across the site in order to maintain natural hydrology.
  - a) Methods to pursue include the use of sheet flow to buffers, vegetated channels to convey road runoff (i.e. roadside swales), disconnection of roof and non-roof runoff, methods of bioretention such as rain gardens.
  - b) Reduce impervious cover as outlined in the MDE stormwater management manual section 5.1.3.1, which is available online at their website:
    - (http://www.mde.state.md.us/programs/Water/StormwaterManagementProgram/MarylandStormw aterDesignManual/Documents/www.mde.state.md.us/assets/document/Design%20Manual%20Cha pter%205%2003%2024%202009.pdf). In addition to these methods, options to pursue include the use of shared parking/driveways and pervious materials wherever possible.
  - c) Locate impervious surfaces as far as possible from permanent and intermittent streams and their floodplains.
- 2) In order to minimize risk of sedimentation in the aquatic and wetland habitats and to minimize changes to the hydrology of these habitats:
  - a) Minimize clearing and retain forest The limits of disturbance should be the minimum needed to build homes, allow access and provide fire protection. Conduct clearing and construction in phases in order to avoid having large areas cleared at one time. Pursue clustered development in order to allow retention of large blocks of contiguous upland forest along streams and wetlands.

b) Stabilize soil - Stabilization should occur immediately (within 24 hours). Special effort should be made to retain fine particle silt, sand and clay sediments including the incorporation of redundant/additional control measures in the sediment and erosion control plan to ensure maximum filtration of any sediment-laden runoff (e.g., accelerated stabilization, super silt fence instead of silt fence, etc.).

- c) Inspect frequently All measures should be inspected daily to ensure that they are functional from the very initial stages through final construction, and any problems should be corrected immediately.
- d) Provide a minimum 100 ft undisturbed forested upland buffer to permanent and intermittent streams and nontidal wetlands.
- e) Avoid disturbing steep slopes (15% slope or greater) and areas of highly erodible soils.

Our analysis of the information provided also suggests that the forested area on the project site contains Forest Interior Dwelling Bird habitat. Populations of many Forest Interior Dwelling Bird species (FIDS) are declining in Maryland and throughout the eastern United States. The conservation of FIDS habitat is strongly encouraged by the Department of Natural Resources. The following guidelines could be incorporated as appropriate into the site design to help minimize the project's impacts on FIDS and other native forest plants and wildlife:

- 1. Restrict development to nonforested areas.
- 2. If forest loss or disturbance is unavoidable, concentrate or restrict development to the following areas:
  - a. the perimeter of the forest (i.e., within 300 feet of existing forest edge)
  - b. thin strips of upland forest less than 300 feet wide
  - c. small, isolated forests less than 50 acres in size
  - d. portions of the forest with low quality FIDS habitat, (i.e., areas that are already heavily fragmented, relatively young, exhibit low structural diversity, etc.)
- 3. Maximize the amount if forest "interior" (forest area >300 feet from the forest edge) within each forest tract (i.e., minimize the forest edge:area ratio). Circular forest tracts are ideal and square tracts are better than rectangular or long, linear forests.
- 4. Minimize forest isolation. Generally, forests that are adjacent, close to, or connected to other forests provide higher quality FIDS habitat than more isolated forests.
- 5. Limit forest removal to the "footprint" of houses and to that which is necessary for the placement of roads and driveways.
- 6. Minimize the number and length of driveways and roads.
- Roads and driveways should be as narrow and as short as possible; preferably less than 25 and 15 feet, respectively
- 8. Maintain forest canopy closure over roads and driveways.
- 9. Maintain forest habitat up to the edges of roads and driveways; do not create or maintain mowed grassy berms.
- 10. Maintain or create wildlife corridors.
- 11. Do not remove or disturb forest habitat during April-August, the breeding season for most FIDS. This seasonal restriction may be expanded to February-August if certain early nesting FIDS (e.g., Barred Owl) are present.
- 12. Landscape homes with native trees, shrubs and other plants and/or encourage homeowners to do so.
- 13. Encourage homeowners to keep pet cats indoors or, if taken outside, kept on a leash or inside a fenced area.
- 14. In forested areas reserved from development, promote the development of a diverse forest understory by removing livestock from forested areas and controlling white-tailed deer populations. Do not mow the forest understory or remove woody debris and snags.
- 15. Afforestation efforts should target a) riparian or streamside areas that lack woody vegetative buffers, b) forested riparian areas less than 300 feet wide, and c) gaps or peninsulas of nonforested habitat within or adjacent to existing FIDS habitat.

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Thank you for allowing us the opportunity to review this project. If you should have any further questions regarding this information, please contact me at (410) 260-8573.

Sincerely,

dowa. Bym

Lori A. Byrne, Environmental Review Coordinator Wildlife and Heritage Service MD Dept. of Natural Resources

ER# 2015.0911.ho Cc: D. Brinker, DNR

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November 11, 2016

BOZH1302

ennoni)

Mr. Kent Sheubrooks Division of Land Development Howard County Department of Planning and Zoning 3430 Court House Drive Ellicott City, MD 21043

# RE: The Settlement at Savage Mill SP-15-017

Dear Mr. Sheubrooks:

Please find below our responses to the letter issued by the Maryland Department of Natural Resources (DNR) for this project on July 25, 2014. We have provided a detailed point by point response for the points raised in the letter identifying specific aspects of this project that relate to the DNR comments. We have revised the original responses to this letter based on comments received the Department of Planning and Zoning in August of 2016.

### Protection of Aquatic Habitat supporting RTE species

1. Pursue Environmentally Sensitive Design to address SWM runoff.

This plan provides ESD design to address a Pe of 1.8". ESD design includes a number of microbioretention facilities, most of which provide the fill Pe within their volume. Due to space constraints, some of the facilities cannot provide the full Pe volume. In order to provide SWM design that meets the full requirements, a large bioretention device is also provided, and this device provides the remaining volume.

- a, SWM Methods
  - i. Sheet Flow to Buffers this is not being utilized due to existing slopes and space limitations.
  - ii. Vegetated channels to convey road runoff this is not practical with the required closed section roads for this suburban setting.
  - iii. Disconnection of roof and non-rooftop runoff due to the dense nature of the development, this is not being utilized.
  - iv. Bioretention this is being utilized, both as typical bioretention and microbioretention devices.
  - v. Raingardens Due to drainage area limitations, this is not being utilized



## b. Reduce Impervious Cover

Impervious cover has been reduced as much as possible. The initial concepts had approximately 3.29 Ac. The current plan shows approximately 2.85 acres of impervious surfaces. These are relatively small house footprints, and the streets are relatively narrow, and include some private alleys which are even narrower. Shared driveways have also been utilized on lots 30-35. There are certain County design standards for public streets and sidewalks that must be met.

## c. Shared Driveways/Pervious Materials

Shared driveways have been used on the single family detached houses, on Lots 30-35. It is not practical to use shared driveways on other houses due to the narrow lot width. Pervious materials have been used where possible, however these are not allowed within a public right-of-way. Additionally, due to the public utility easements that will encumber the private streets, no pervious pavements will be able to be placed on the private streets.

## d. Locate Impervious surfaces as far as possible from streams and floodplains

The site development as a whole has been located as far as possible from streams and floodplains. Streams and floodplains are located south and west of the site; the development is focused to the north and east of the site with the addition of the land swap area. Stream, floodplains, and buffers are not being disturbed by this development.

## 2. Sedimentation

- a. Minimize clearing/retain forest the limits of disturbance are the minimum needed to build the homes, infrastructure, and SWM. Forest has been retained as much as possible, but the much of the site is wooded. Areas that have been previously cleared are being utilized for development. The addition of the land swap has allowed additional areas of forest to be retained. A large block of contiguous upland forest bordering the streams has been retained. Due to relatively small size of the project and the compact nature of the development, constructing the project in multiple phases is not practical from a development or financial standpoint. Clearing for the project will generally move from the outer edges to the wooded interior, so as to allow for the natural movement of fauna. A preliminary sequence of construction has been provided on Sheet 12 outlining how the project will be constructed, and the timeframes for construction. Due to the amount of clearing involved, the clearing and grubbing work will take at least a week to accomplish, and more than likely several weeks. Initial clearing will be required for the construction of sediment controls, and once these are installed, the remainder of the clearing, grubbing, and grading will occur, generally moving from the eastern edge of the project to the west.
- b. Stabilize soil This will be addressed with final sediment control plans. Same day stabilization requirements will be met, and redundant measures may be provided. This has been specified in the preliminary sequence of construction.
- c. **Inspect frequently** This will be the contractor's responsibility during construction. Daily inspections will occur. This has been specified in the preliminary sequence of construction.

- d. Min. 100' undisturbed buffer from stream and wetlands streams have a buffer well in excess of 100'. The current buffer provided is a minimum of 274'. There is one area of isolated non-tidal wetlands in the upland area of the site. It will have a buffer of 35-40'. It is located off the proposed lots, and outside of the limits of disturbance.
- e. Avoid disturbing steep slopes Other than a small area of steep slopes (0.026 acres) created by a previous construction project, no slopes over 15% are being disturbed with this project. There are hydric soils within the limits of disturbance. Hydric soils are located along the Little Patuxent River, along it floodplain and buffers.
- 3. Instream Work no instream work is proposed with this project.

## Forest Interior Dwelling Bird Species

1. Restrict Development to non-forested areas

Due to the nature of the site, this is impractical. Much of the 7.85 ac project area is wooded, approximately 4.9 ac. Some of the development has been shifted to the north onto previously developed areas with the land swap, but some forest impacts will occur; approximately 4.82 ac of clearing are proposed. Development has been limited to the edge of the forest, closest to the developed areas of Savage, Savage Park, and the Savage Mill, leaving the forested areas along the Little Patuxent River intact. With the project 2.54 ac of forest retention is proposed and 1.03 ac of reforestation (0.95 credited and 0.08 non-credited) will be provided.

## 2. Concentrate development to the following areas:

## a. Perimeter of the forest

Development has been limited to the outer edges of the forest, leaving the forested areas along the Little Patuxent River intact. Intrusions in the forested area are 322'-424' from the northern forest boundary and 460'-530' from the eastern forest boundary. Effort has been made to keep the development compact to limit disturbance on the site.

## b. Thin strips of forest less than 300' wide

This is not applicable to this site. There are no strips of forest less than 300' wide. The forested area on this site is connected to the forested buffers of the Little Patuxent River.

## c. Small isolated forest less than 50 acres in size

This is not applicable to this site. There are no isolated forests. The forested areas of this site are connected to the forested buffers of the Little Patuxent River that cover areas to the east, and north of this site.

### d. Portions of the forest with low quality FIDS habitat

The forest that is to be impacted is relatively young. Aerial photographs from the mid 1940's show this site cleared and developed with a tree farm or orchard. Forest has regrown over

the years in the higher, fairly level areas that will be impacted by this project. The tree canopy is composed of early to mid-successional tree species, and tends to be dominated by Tulip Poplar.

## 3. Maximize amount of forest interior

With the proposed plan, clearing is limited to the periphery and large of amounts of interior forest are maintained. The plan proposes the clearing of approximately 4.75 acres of unprotected forest at the periphery of a much larger forested area which is protected by environmental buffers. The clearing has been reduced

## 4. Minimize forest isolation

This has been accomplished with this plan. The only forest that is cleared is along the periphery. The integrity of the adjacent forested areas is not impacted with this plan.

# 5. Limit forest removal to the footprint of the houses and to that which is necessary for the placement of roads and driveways

No excess forest removal is proposed. The clearing proposed is only that needed for the houses and associated roads, walkways, stormwater facilities, sediment control measures, and utility infrastructure. These are relatively small lots, further limiting the clearing that will be needed. Due to the size of the lots, the location of SWM measures, the requirement for bypassing offsite drainage around the site, and the grading needed to construct the houses, it is not likely that trees will be left on lots. The LOD has been adjusted as much as possible. In addition, previously cleared areas north of the site (0.58 ac) will be restored with this plan.

## 6. Minimize the number and length of driveways and roads

This has been accomplished. Shared driveways are used for the six single family detached lots, Lots 30-35. The rest of the public and private road layout has been designed to be as efficient as possible, reducing pavement widths and lengths and providing for double loaded roads wherever possible.

## 7. Roads and Driveways as narrow and short as possible.

This has been accomplished. Road widths are as narrow as possible using current County design standards. The public road is 28' to allow parking along one side. The private alleys are 24' and 20' wide. The driveways for the singe family detached houses are 12' wide. The length of the driveways has been limited to the minimum required and necessary to meet design standards.

## 8. Maintain forest canopy closure

This is not practical given the density of this layout and the infrastructure required. However, as noted above the forest clearing that is proposed has been limited to the periphery of the site allowing the existing canopy adjacent to this site to be maintained.

## 9. Maintain forest up to edges of roads and driveways

In most cases, this is not practical with this layout given the density of this layout and the utility, stormwater, and sediment control infrastructure required with this plan. Along the perimeter of the project, the goal is to maintain the forest edge up to the limits of disturbance. The perimeter will be protected with appropriate tree protection measures, including where appropriate super silt fence, tree protection fence, and root pruning. IN addition, the forest edge will be supplemented with planting at the completion of construction to provide buffering of the site and to introduce native plant material into the forest edge.

## 10. Maintain wildlife corridors

This is being done with this layout. A main corridor in this area, the Little Patuxent River, is being maintained and protected. As well, the mill race below this site is being protected. The forest clearing that is proposed is located outside of these protected areas and the wildlife corridor located within and along these areas.

## 11. Do not remove or disturb forest during April -August

This has been incorporated into the preliminary sequence of construction.

## 12. Landscape with natives

The landscape plans developed will primarily use native plant material. However, due to the preference by deer of many native plant materials, there may be a reason to use a non-native, adaptive, non-invasive plant species. This will be assessed with the final design. At Final Plan stage, the consultant will seek guidance from DRP as to suggestions for native, deer resistant plant materials when preparing the Final FCP and landscape plans.

## 13. Encourage homeowners to keep cats indoors

This will be incorporated into the HOA documents.

## 14. Remove Livestock and control deer

Three are no livestock in this area, currently, and no plants for livestock in the future. There is little that can be done to control deer through the subdivision and development process. Howard County does have a deer management program, and this has included the adjacent Savage Park in the past. Mowing the understory within the forest conservation areas, and the removal of snags or woody debris in these areas shall not be permitted.

## 15. Afforestation

All afforestation (limited on this site) is being done to increase buffers and connect/expand wooded areas. As noted above, previously disturbed areas adjacent to this site are being restored with this project. There are no existing forested areas south and west of this site that are less than 300', and there are no peninsulas or gaps adjacent to this site.

Please contact me with any further questions or comments on these responses.

Sincerely,

10

PENNONI ASSOCIATES INC.

Peter J. Stone, RLA LEED AP B D +C Project Manager

Cc: Bobby Byrd, Bozzuto Homes

DAP Recommendations and Developer Responses



www.pennoni.com

March 2, 2016

### BOZH1302

nnor

Ms. Kristin O'Connor Chief, Comprehensive and Community Planning Howard County Department of Planning and Zoning 3430 Court House Drive Ellicott City, MD 21043

## RE: THE SETTLEMENT AT SAVAGE MILL DAP RESPONSE

Dear Ms. O'Connor:

Please find below our response to the DAP motions from the hearing of February 10, 2016

DAP Vice Chair Don Taylor offered the following motion: 1. "The applicant consider repositioning the duplexes to provide pedestrian access to the open space." Seconded by DAP member Phil Engelke. Vote: 6-0 approve.

Developer response: In accordance with discussions during the hearing, we have created a sidewalk between Lot 23 and 24 in order to create a connection to the north side of the project and the open space parcel to the south.

DAP member Bob Gorman offered the following motion:

2. "The developer consider a more naturalistic path along all edges celebrating the woodland and a more inviting resource for the community." Seconded by DAP member Phil Engelke. Vote: 6-0 approve.

Developer response: In accordance with discussions during the hearing, this adjustment will be made to the plan to the extent practical with the property and land swap limitations and other engineering and environmental protection requirements.

DAP member Phil Engelke offered the following motion:

3. "That the materials be studied to be in harmony with existing in old Savage." Seconded by DAP member Julie Wilson.

Vote: 6-0 approve.

Developer response: In accordance with discussions during the hearing, we will study materials from old Savage in an effort to harmonize this development with the existing conditions, to the extent that the materials are practical and marketable.

DAP member Julie Wilson offered the following motion:

4. "That the corner of site along Washington facades are looked at in more detail so they are more interesting." DAP Vice Chair member Don Taylor seconded. Vote: 6-0 approve.

# Developer Response: In accordance with discussions during the hearing, the developer and design team will review the visible side facades and will feature more detail to prominent lots.

DAP Chair Hank Alinger offered the following motion:

5. "The applicant consider looking at doors that front the streets for the end unit townhouses on the north side." DAP Vice Chair Don Taylor seconded. Vote: 6-0 approve.

# Developer Response: In accordance with discussions during the hearing, the developer will consider this while also considering marketability of side entrances.

DAP member Bob Gorman offered the following motion:

6. "That when the plans come back before the Panel, the applicant include private streetscape with sidewalks along the southern edge and rethink thoughtful open space feature on parcel E." DAP member Julie Wilson seconded.

Vote: 6-0 approve.

# Developer Response: The developer and design team will refine the design for the walkways and open space features prior to the final meeting with the Panel.

DAP Chair Hank Alinger offered the following motion: 7. "The applicant consider trail head terminus at Washington Street to integrate with overall system." DAP Vice Chair Don Taylor seconded. Vote: 6-0 approve.

# Developer Response: The design for this terminus will be refined through the design review and approval process.

DAP member Julie Wilson offered the following motion:

8. "That the applicant add a sidewalk where the parallel parking is being proposed." DAP member Phil Engelke seconded.

Vote: 6-0 approve.

## Developer Response: This sidewalk has been added as discussed during the hearing.

Please contact me with any further questions or comments on these plans.

Sincerely,

PENNONI ASSOCIATES INC.



Peter J. Stone, RLA LEED AP B D +C Project Manager

Cc: Nihar Shah, Bozzuto Homes

# The Settlement at Savage Mill (16-04) Design Advisory Panel 2016-02-10 Review

9

Director's Initials:

Date: 27 14	Date:	3-	4.	-16
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Ref#	Design Advisory Panel Recommendation – Verbatim Motion	Response by Applicant - 03/2/2016	DPZ Director's Endorsement
1,	"The applicant consider repositioning the duplexes to provide pedestrian access to the open space." Vote: 6-0	In accordance with discussions during the hearing, we have created a sidewalk between Lot 23 and 24 in order to create a connection to the north side of the project and the open space parcel to the south.	I Accept DAP Recommendation I Accept Architect's Response
2.	"The developer consider a more naturalistic path along all edges celebrating the woodland and a more inviting resource for the community." Vote: 6-0	In accordance with discussions during the hearing, this adjustment will be made to the plan to the extent practical with the property and land swap limitations and other engineering and environmental protection requirements.	I Accept DAP Recommendation I Accept Architect's Response
3.	"That the materials be studied to be in harmony with existing in old Savage." Vote: 6-0	In accordance with discussions during the hearing, we will study materials from old Savage in an effort to harmonize this development with the existing conditions, to the extent that the materials are practical and marketable.	「文Accept DAP Recommendation 文 Accept Architect's Response
4.	"That the corner of site along Washington facades are looked at in more detail so they are more interesting." Vote: 6-0	In accordance with discussions during the hearing, the developer and design team will review the visible side facades and will feature more detail to prominent lots.	I Accept DAP Recommendation I Accept Architect's Response
5.	"The applicant consider looking at doors that front the streets for the end unit townhouses on the north side." Vote: 6-0	In accordance with discussions during the hearing, the developer will consider this while also considering marketability of side entrances.	Accept DAP Recommendation
6.	"That when the plans come back before the Panel, the applicant include private streetscape with sidewalks along the southern edge and rethink thoughtful open space feature on parcel E." Vote: 6-0	The developer and design team will refine the design for the walkways and open space features prior to the final meeting with the Panel.	K Accept DAP Recommendation K Accept Architect's Response

# The Settlement at Savage Mill (16-04) Design Advisory Panel 2016-02-10 Review

7.	"The applicant consider trail head terminus at Washington Street to integrate with overall system." Vote: 6-0	The design for this terminus will be refined through the design review and approval process.	IX Accept DAP Recommendation IX Accept Architect's Response
8.	"That the applicant add a sidewalk where the parallel parking is being proposed." Vote: 6-0	This sidewalk has been added as discussed during the hearing.	<ul> <li>Accept DAP Recommendation</li> <li>Accept Architect's Response</li> </ul>

**Remaining Comments/Changemarks** 

# DLD Comments for The Settlement at Savage Mill (PB 424)(February 2017)

## Planner: TKM

Be sure that all the following comments are addressed on the PB exhibit (SP Plan) that is to be provided to the Planning Board members. Please provide DLD Staff with an updated PB exhibit (SP-15-017 plan) as soon as possible.

- 1. Provide a note on Sheet 1 of the plan to "see Sheet 9, General Note #35 for information on the land swap". Staff suggests placing this note somewhere under the "Site Analysis".
- 2. Provide a colored copy of the latest land swap exhibit for the official PB file.
- 3. If possible, submit a <u>completely signed</u> copy of the "Agreement of Covenants and Restrictions", <u>prior to</u> the Planning Board Hearing date of March 16, 2017.
- 4. On Sheet 2, provide leader arrows for the asphalt path shown through Open Space Lot 38.
- 5. Label the existing gravel path (that is also shown through Open Space Lot 38) as "to remain" or "to be removed". Do this for ALL sheets depicting the gravel path.
- REPEAT COMMENT: On Rage 3 of your write-up for the Planning Board, 4<sup>th</sup> paragraph, please include the acreage of the overall plan area (proposing to clear 4.82 acres of forest on 12.79 acres of Total Tract Area).
- 7. It would also be helpful to clarify the acreage of forest to be cleared within the 7.85 acres of development/project area, on Page 3 of your write-up for the Planning Board, 4<sup>th</sup> paragraph.
- 8. As soon as possible, submit a revised updated PB tetter addressing comments #5 and #6 above.
- 9. Please address all changemarks addressed under SP-15-017 and amend the exhibit for PB 424 as needed based on those changemarks. See summary of remaining DLD comments below.
  - REPEAT COMMENT: Provide a brief narrative on the existing forest stand-indicate overall age, health and various species of the existing forest stand. PLEASE INDICATE ON WHICH SHEET THIS CAN BE FOUND.
  - REPEAT ADVISORY: At mylar stage, provide an original signature from Pete Stone (or other LA, forester, or qualified professional) on ALL sheets of the FCP/FSD (forest stand delineation).
  - REMINDER: Provide metes, bounds, bearings and distances for ALL lots (residential and open space) on the Final FCP.
  - REMINDER: The Site Development plan and any plats will be required to provide meets, bounds, bearings and distance information for each Forest Conservation easement OR provide a reference to the associated easement plat along with plat recording references (once known).

TKM/H Drive/PB 424/DLD comments for The Settlement at Savage Mill PB 424 February 2017



Howard Soil Conservation District Phone (410) 313-0680 FAX (410) 489-5674 www.howardscd.org

14735 Frederick Road, Cooksville, MD 21723

Pennoni Associates, Inc. Consulting Engineers 8818 Centre Park Drive, Ste 200 Columbia, MD 21045 Date: November 22, 2016 Re: The Settlement @Savage Mill SP-15-17e

The above referenced plan has been reviewed by the Howard Soil Conservation District for compliance with sediment control, pond safety, temporary stormwater management, and sensitive area protection requirements. Results of the review are as follows:

- () Howard SCD approval is not required. However, the following recommendations and requests are being made to the Department of Planning & Zoning.
- (X) The plan is approved, subject to signatures being placed on the original(s). Any alterations to the plan shall void approval.
- () Address all comments which, due to their minor nature, may be addressed directly on the original(s) at the time of formal signature approval. There is no need to resubmit the plan.
- () Address all comments as noted below and resubmit the plan for further review.

# **REVIEW COMMENTS:**

1. The Howard SCD offers no further comments for this project at this stage of submission.

Warning: All soils have limitations, ranging from slight to severe, for building homes, constructing roads and ponds, and various other uses. Please consult the *Soil Survey of Howard County* for determining soil types and their suitability for development, engineering and building.

Technical Review by:

Bob Robertson

Approved b

Robert R. Ensor, District Manager

# Remaining comments from DED and Traffic and Pennoni Responses for SP-15-017 ("The Settlement at Savage Mill")

## Traffic & SCD

Created by: Jayesh Pancholi On: Thursday, October 27, 2016 10:38:51 AM Address Traffic Engineering & SCD comments, and provide their approvals.

## level spreader

Greated by: Jayesh Pancholi On: Thursday, July 28, 2016 1:42:12 PM Extend the level spreader and label the 60' length.

## Changemarks note #01

Created by: Peter Stone On: Wednesday, September 21, 2016 11:47:00 AM 1. The level spreader has been extended and labeled. Final design of the level spreader will occur at time of Final Plans.

## Street Lighting Comment - 1

Created by: Parris Zirkenbach On: Friday, October 07, 2016 5;30:22 PM Delete this location.

## Street Lighting Comment - 2

Created by: Parris Zirkenbach On: Friday, October 07, 2016 5:30:52 PM Delete this location.

## Street Lighting Comment - 3

Created by: Parris Zirkenbach On: Friday, October 07, 2016 5:31:18 PM Delete this location.

## Street Lighting Comment - 4

Created by: Parris Zirkenbach On: Friday, October 07, 2016 5:32:40 PM Relocate this light to location shown.

## Street Lighting Comment - 5

Created by: Parris Zirkenbach On: Friday, October 07, 2016 5:33:21 PM Relocate to Sta. 1+25, left.

## Street Lighting Comment - 6

Created by: Parris Zirkenbach On: Friday, October 07, 2016 5:45:00 PM Include a Street Light Chart on this sheet.

## Changemarks note #02

Created by: Peter Stone On: Friday, November 11, 2016 4:38:20 PM Per discussion with staff, this will be addressed with the Final Plans.

### Changemarks note #03

Created by: Peter Stone On: Friday, November 11, 2016 4:38:36 PM Per discussion with staff, this will be addressed with the Final Plans.

## Changemarks note #04

Created by: Peter Stone On: Friday, November 11, 2016 4:38:45 PM Per discussion with staff, this will be addressed with the Final Plans.

### Changemarks note #05

Created by: Peter Stone On: Friday, November 11, 2016 4:38:55 PM Per discussion with staff, this will be addressed with the Final Plans.

## Changemarks note #06

Created by: Peter Stone On: Friday, November 11, 2016 4:39:13 PM Per discussion with staff, this will be addressed with the Final Plans.

### Traffic Control Sign

Created by: Parris Zirkenbach On: Friday, October 07, 2016 5:29:46 PM Show a R2-1 ("SPEED LIMIT 25") sign at this location.

## Traffic Control Sign - 2

Created by: Parris Zirkenbach On: Friday, October 07, 2016 5:36:42 PM Show a "NO PARKING HERE TO CORNER" (with right arrow) sign at this location.

## Traffic Control Sign - 3

Created by: Parris Zirkenbach On: Friday, October 07, 2016 5:37:28 PM Show a "NO PARKINK HERE TO CORNER" (with left arrow) sign at this location.

## Traffic Control Sign - 4

Created by: Parris Zirkenbach On: Friday, October 07, 2016 5:37:57 PM NO PARKING signs may need to be installed along this side of the road.

## Traffic Control Signs & Markings

Created by: Parris Zirkenbach On: Friday, October 07, 2016 5:39:47 PM Add a note staying:

"All signs and markings along the public roadways shall be layed-out and/or approved by Howard County Traffic before any installations."

### Changemarks note #07

Created by: Peter Stone On: Friday, November 11, 2016 4:39:27 PM Per discussion with staff, this will be addressed with the Final Plans.

## Changemarks note #08

Created by: Peter Stone On: Friday, November 11, 2016 4:39:43 PM Per discussion with staff, this will be addressed with the Final Plans.

### Changemarks note #09

Created by: Peter Stone On: Friday, November 11, 2016 4:39:52 PM Per discussion with staff, this will be addressed with the Final Plans.

## Changemarks note #10

Created by: Peter Stone On: Friday, November 11, 2016 4:40:04 PM Per discussion with staff, this will be addressed with the Final Plans.

### Changemarks note #11

Created by: Peter Stone On: Friday, November 11, 2016 4:40:14 PM Per discussion with staff, this will be addressed with the Final Plans.

## Changemarks note #12

Created by. Peter Stone On Friday, November 11, 2016 4:40:28 PM Per discussion with staff, this will be addressed with the Final Plans.

Subject:	Settlement at Savage Mill PB 424
То:	Kent Sheubrooks, Chief, Land Development Division
	Chad Edmondson, Chief Development Engineering Division
Thru:	David Cookson, Office of Transportation
From:	Brian Muldoon, Office of Transportation
Date:	February 8, 2017

# **Observations**

This submittal for Planning Board review reflects Preliminary Equivalent Sketch (SP-15-017) submittal and has incorporated comments by the Office of Transportation. The proposal appears adequate and commensurate for Planning Board Review. However, the applicant should respond to the following comments in the Final Plan and Road Construction submission.

ward County

Internal Memorandum

## Comments

- 1. Please revise the Permanent Tee Turnaround of proposed Washington Street (extended) so the turnaround coincides with Specification 5.05 of Volume 4, Howard County Design Manual. Curb ramps access from/to the sidewalk entering the tee turnaround needs to be depicted. Additionally, detail of this curb ramp should be provided with the Final Plan Road Construction drawings.
- 2. Detail for the proposed "Pedestrian Plaza and Entry to Park Trails" needs to be included with the Final Plan Road Construction drawings. It would be logical for the sidewalk proposed on the north side of Washington Street to connect directly with the proposed pedestrian plaza.
- 3. Detail on how the sidewalk and crossing at Fair Street will intersect with county capital project No. J-4248 (Savage Area Complete Streets Improvements) to ensure a high quality connection.
- cc: Kris Jagarapu, Division Chief, DPW Traffic Engineering Division, DPW Chris Eatough, Howard County Bicycle and Pedestrian Coordinator, OOT

T:\Shared\Transportation\Site and other Development Plan Reviews\Settlement at Savage Mill\Settlement at SavageMill - PB 424.doc

**HPC Minutes** 



HOWARD COUNTY HISTORIC PRESERVATION COMMISSION ELLICOTT CITY HISTORIC DISTRICT 
LAWYERS HILL HISTORIC DISTRICT 3430 Court House Drive Ellicott City, Maryland 21043

Administered by the Department of Planning and Zoning

www.howardcountymd.gov 410-313-2350 FAX 410-313-1655 TDD 410-313-2323

# October Minutes

## Thursday, October 1, 2015; 7:00 p.m.

The ninth regular meeting for the year 2015 of the Historic Preservation Commission was held on Thursday, October 1, 2015 in the C. Vernon Gray Room located at 3430 Court House Drive, Ellicott City, MD.

Members present: Eileen Tennor, Chairperson, Allan Shad, Vice-Chair; Drew Roth, Secretary; Bruno Reich and Erica Zoren

Staff present: Beth Burgess, Lewis Taylor, and Carol Stirn

Chairperson Tennor opened the meeting at 7:00 p.m. with a statement explaining the process and rules of the meeting. Mr. Roth moved to Approve the September 3, 2015 minutes. Mr. Shad seconded. The motion was unanimously approved.

Mr. Taylor clarified some information for the public regarding Case 15-61, 8550 Fair Street in Savage. Mr. Taylor stated this case was returning for a determination, which is required for development, but the developers decided they needed to obtain additional advisory comments from the Commission on the revised proposal. Because of this, the developers will be presenting the application, but it will not be a contested case. After the proposal has been presented, there will be opportunity for public testimony, but this case will not be contested. In addition, since this will be a contested case later on, any information provided to the Commission is also required to be provided to all parties.

### PLANS FOR APPROVAL

- 1. 15-50 6117 Lawyers Hill Road, Elkridge, HO-445 (continued from September)
- 2. 15-54 1805 Marriottsville Road, Marriottsville, HO-191
- 3. 15-55 8090 Main Street, Ellicott City, HO-99
- 4. 15-56 3765 Church Road, Ellicott City
- 5. 15-57 8417 Merryman Street, Ellicott City
- 6. 15-58-3615 Fels Lane, Ellicott City
- 15-59 9598 (HO-968), 9590, 9584 (HO-967), 9580, 9570 (HO-966), 9562 (HO-965) Route 108, Columbia
- 8. 15-60 5333 Kerger Road, Ellicott City, HO-865
- 9. 15-61 8550 Fair Street, Savage
- 10. 15-62 3618 Fels Lane, Ellicott City

\*\*Please note the following comments and recommendations are from DPZ Staff and are recommendations for the Commission to consider, they do not represent a decision made by the Commission. \*\*

1

the remainder of the subdivision being sold. Mr. Reich stated the barn could also be renovated and turned into a house. Landscaping just needs to be placed around the house and the barn to create a separation from the rest of the homes. Ms. Zoren stated the community is very familiar with this house. Ms. Burgess stated many of the historic homes that are demolished do not fit in with the size of the new homes, but this house is one that should be saved and renovated. Ms. Zoren stated the small structures that are not part of the historic house have stone that should be reclaimed for some sort of a stone feature like a wall or a monument on site. Mr. Roth suggested that the wagon house also be offered to Historic Ellicott City for their showcase homes use for further renovation. The Commission stated they wanted to see the house preserved and they will support any waivers or variances necessary to do so.

#### 15-61 - 8550 Fair Street, Savage

Architectural compatibility advisory comments for R-H-ED zoning requirement. Applicant: Peter Stone, Pennoni Associates

**Background & Scope of Work:** This project came before the Commission at the July 2, 2015 meeting as #15-38. It is returning for a determination of its architectural compatibility because it falls under the new R-H-ED zoning, which requires that the design of the new structures be determined by the Historic Preservation Commission to be compatible with the historic character of the area. There are no existing structures on site, but the Applicant proposes a 35 lot subdivision on approximately 6 acres that sits adjacent to the parking lot for the Savage Mill, ballparks of Howard County Recreation and Parks and Little Patuxent River. The proposed structures will include 6 single family detached houses, 5 sets of townhouses and 5 duplex units. The site layout will include a system of alleys and private streets.

The single family and duplex houses will be constructed along the Washington Street extension. The townhouses will be located behind the duplexes. The new development will not be located directly adjacent to the existing historic houses; the parking lot and park will provide a buffer.

Research has revealed historic barns and orchards once resided in this area as part of the mill complex. The Applicant has revised the architectural components of the site to resemble a mill complex, showing 6 manager homes, 5 duplex unit worker homes, 2 wood barns "converted" to 6 unit dwellings and 3 small brick mills "converted" to 13 unit dwellings.

**Staff Comments:** Savage has a mix of housing types from "mill worker" home duplexes to Victorian farmhouses. Those found closest to the site location for the Settlement at Savage Mill are more modest, bungalow style buildings, although there are some elaborate structures located close by, such as the Mansion House (HO-218) and the Holte-Grafton House (Manager's House, HO-220), which have elements of the Greek Revival and Second Empire style respectively.

Staff finds the concept of the small mill complex to be a creative means to develop a community. The Applicant has submitted a substantial packet showing all views, elevations and dimensions as requested by the Commission. Staff is focusing on the comments from the July meeting to highlight what issues have been addressed:

- Plan view layout: Overall the plan view is very similar to the previous design. Staff notes the street and sidewalk pattern have remained the same except for a path connecting the open space and the 3 sets of duplexes have been converted to 2 sets of 3 townhomes.
- 2. Front loading garages: Comments expressed concern about front loading garages. The previous design had a third (12 out of 35) of the dwellings with front loading garages, 6 of them being the

single family homes that are the homes first seen in the development. Now, out of 35 units, 6 units are front loading with the majority of them being from the barn buildings.

- 3. Single Family houses: These 6 homes are considered the "manager homes" for the mill. Comments were that front loading garages are not compatible and the redesign reflects 5 out of 6 homes having side loading garages. Victorian architecture styles have been eliminated from the homes, making them a more simple style. The roof lines were reduced by 20% in pitch, providing a visual decrease of roof seen from the façade.
- 4. Duplexes: All front loading duplexes have been eliminated. The Victorian style gingerbread although found in Savage have been eliminated. The pitch of the roof has been reduced by 20% providing a simpler, less steep design. The garages are back loading and complement the historic Savage duplexes with the garage being a bumpout enclosure similar to many of the numerous additions added to the back of the existing homes throughout the community. The opportunity for outdoor space is added on the roof of the garage so no modern deck posts are seen from the road.
- 5. Townhomes: Comments expressed concern about townhomes. Staff found several houses on Baltimore Street have 3 unit dwellings, one having asphalt in the front and back yard to provide parking for 8 vehicles. For the new design 2 units will have 3 townhomes, 2 units will have 4 townhomes and 1 unit will have 5 townhomes. Three of the townhome sets are designed to mimic small brick mills that would have been converted into dwellings. The architecture is simple without porches or details beyond the brick and the consistent mill pattern of windows. The back of the mill townhomes have garages and a top floor balcony that cannot be seen by the front or sides as they are cut into the roof. The other 2 townhome units complement the look of barns with minimal details to the exterior and garages looking like barn door openings. The western side of the barn has a lower 3<sup>rd</sup> walkout level like most bank barns would have. The western side provides the most windows to view the open space of the river and park. There are 6 wood decks off the back of these units which cannot be seen from the road or any view from the community as they face open space.
- 6. Architecture: Comments in July stated that the conflict between Victorian vs Federal style needs resolution. This plan no longer has Victorian features to the design. The community is minimalistic in architectural features and focuses on more of the patterns, materials and scale of a mill complex such as wood exterior for barns and brick exterior for the small mills.
- Rooflines: The rooflines were considered too steep and have been reduced by 20% to have less of a pitch and less vertical height visible which complement the current homes in Savage.
- Connectivity to parkland: Previous plan did not show a connection to the open space. The revised plan shows a path linking to the recreation space.
- Parking requirement: Staff finds there have been no changes to parking per the Commissions comments but previous testimony stated the County parking requirements had been fulfilled.
- 10. Urban town look: The dense townhomes have been converted to larger scaled buildings like mills and barns that are more appropriate for the mill town of Savage. Mills often had multiple buildings of different sizes with narrow walkways and alleyways to allow for deliveries or pedestrian access. The close proximity of development seems more appropriate as a mill complex than as dwelling units.
- 11. Density of development: Comments identified compatibility with the size, scale and articulation relative to the surrounding community. Staff finds a small mill complex complimentary to the larger Savage mill adjacent to it. A person has to pass by the Historic Savage Mill to reach this community and the scale of the mills and barns adjacent to "Mill worker" homes are more relevant than the previous design.
- 12. Lack of historical data/connectivity: Staff notes the historic documentation identifies barns and orchards as the only historic findings on this site. The continuation of a mill community next to

an existing mill seems more compatible than creating an urban residential landscape. One comment from July testimony was "replicas of the Mill would be most appropriate."

- 13. Landscape plan: Landscape plan has not been submitted but the current plan shows standard street trees. Staff recommends consideration of a cluster of 6-10 trees planted in open space to mimic the orchards discovered on site. Staff recommends more of a buffer from the residential side of the community and a buffer from the Mill's parking lot so new residents do not look onto the parking lot.
- 14. Topography: Staff finds the majority of the development will be at the 250-248 foot elevation at the facades of the homes. The Barns will have a lower third floor walkout in the back west side of the property with elevations at 240 feet. The closest existing house at Fair Street and Washington Street has an elevation of 248'. The Mansion is at 252'. The Mill's parking lot is mostly in the 240' elevation and the west side of the mill at the roundabout drop-off is at 205' elevation which is 630 feet from the entrance to the development. Staff finds the grading minimal and notes the lack of retaining walls found on the site which is often the solution to new development grading issues, but would be disfavored here from a compatibility context.

Staff Recommendation: Staff finds the proposed buildings are architecturally compatible with the historic buildings found in Savage.

**Testimony:** Before Ms. Tennor swore in the Applicants, one of the residents speaking for the citizens of Savage and surrounding areas requested a dismissal of this case on the grounds that the petitioner was to speak to the community, per the Commission's order at the July 2 meeting. The petitioner has never had any meeting with the residents regarding this project. Mr. Taylor explained to the resident that there is nothing to dismiss. This meeting is just for advisory comments. The resident asked if material was supposed to be provided ahead of time. Mr. Taylor stated the application is on file at DPZ, and anyone can speak with Ms. Burgess about it. The opposition insisted that a ruling was made at the previous meeting and it has now been 90 days with no meeting. Mr. Taylor stated there was no ruling made; the meeting was only for advisory comments. The public will have a brief opportunity after the presentation to make comments that the Commission will take into consideration. Mr. Taylor said legally there is no requirement that any meeting must be held between the Applicant and the community before the presentation is given to the Commission, especially for Advisory Comments. The resident still insisted that a ruling was made. Mr. Taylor again stated there was no ruling made, and invited the resident to speak with him after the meeting is over.

Ms. Zoren has recused herself from this case, as her firm has done work on this project previously.

Ms. Tennor swore in Peter Stone from Pennoni Associates in Columbia, MD; Jeremy Potter from W.C. Ralston Architects in Chantilly, VA; Nihar Shah from Bozzuto Homes in Washington, DC; and Lisa Wingate, historical advisor. Ms. Tennor asked if there were any additions or corrections to the Staff comments. Mr. Stone made a short presentation of the project regarding modifications made to address the Commission's comments from the previous meeting. Lisa Wingate, a historic preservation consultant, has been added to the team to help with the architectural portion of the plan. Mr. Stone said changes made to the site plan include a trail connection added to the northwest; units on the west side will be addressed by Mr. Potter and Ms. Wingate; the single family detached units have side loaded garages. One of the units was not able to have a side loaded garage, but this will continue to be looked into.

Ms. Wingate explained the development team is working to provide four different kinds of houses, rather than a single townhouse style. She said the four different housing types will provide diversity in

the community from a marketing standpoint and from an architectural standpoint. The re-design which took place was about purposely trying to mesh the Savage Mill character and its surroundings with the new architecture. She said the architectural styles specifically reference brick, textile mills, Savage's frame Victorian buildings, common pair dwellings, and many of the dwellings in Savage containing features typical of a craftsman or bungalow style. This architecture is fairly common in Savage in the 20<sup>th</sup> century housing stock. Ms. Wingate stated there seemed to be much discussion at the last meeting on what is Victorian architecture versus Federal style architecture in Savage. In researching the area, she said there is a bit of every style located in Savage. Savage was looked at as a whole in the range of architecture; it was not just specific to the national register district. Ms. Wingate stated there was no duplication of any one particular style, or copying of any one particular building.

Ms. Wingate explained that in looking at the history of the proposed site, she found there used to be barns which were constructed by the Savage Manufacturing Company. There were two barns almost end to end, and had the same north-south orientation like the townhouses building for the west end of the site. The reason the configuration was changed from 3 pairs to 2 sets of 3 dwellings was to not have to use front loaded garages. The architectural style chosen was a large barn with a fairly dominant gable roof, which would look like the historic barns. This would allow the architecture to be relevant to Savage. Ms. Wingate stated the other change that was made was to the townhouses on the southeast corner of the site. Previous comments were made that this group of townhouses seem to be too urban in feeling. The solution was to design the townhouses to look similar to a brick textile mill building, but not to copy or make identical. Concerns were raised at the previous meeting that the townhouses were too large and too tall to be like Savage housing. The revised plan makes them like a mill complex with a variety of buildings. There was also concern about the density. There are many other locations which have the same type of complexes with housing of different sizes. These complexes are densely packed for functional reasons. The other type of housing used within the project is semi-detached housing. The new development represents a variety of architecture, and includes the potential to have a mill manager style house. On the back of the brick mill residence have a roof top deck, as one of the old photos of the area showed a roof top deck on one of the buildings.

Ms. Wingate stated the homes are more simplified and have removed the Victorian style. The single family detached houses were realigned and are facing almost directly to Washington Street, instead of being angled. Five of the houses now have side loading garages. The northern barn also was side loaded with a garage. The size of original barn's second floor windows were not used as there is not enough ventilation or egress to be bedroom windows. However, the windows are grouped in a way that this is not a typical townhouse. The doors were recessed in shadow in order to downplay the doors, especially the front garage doors. The new garage doors could not be produced the same shape as the barn doors, but the concept still exists. Ms. Wingate said that three of the townhouses are the same size and shape as one of the barns, hence the concept of two buildings with three units each. Mr. Stone stated another concern was raised on site grading. He showed on the drawings the different grading. Mr. Potter spoke about the barns and summarized the types of materials used to make the barn look uniform. Ms. Wingate stated the idea is to make the structure like a bank barn with a small amount of stone foundation visible in the front. The site slopes down making the back stone more visible, but from the front the structure looks like a two story dwelling.

Mr. Potter spoke about the brick townhomes and the height. The roof has been lowered, no longer being a four-story building. A rear roof terrace built into the back roof remains in the design but is not visible from the side. The brick would wrap the corner of the back side. Mr. Potter commented about the buildings being too urban; there is now a much more traditional amount of wall to window ratio with the windows reducing in size as they go up in story, Mr. Potter commented on the duplexes being

too tall that the roof and front pitch can be lowered. The units will change from the higher pitched roof of the Victorian style to the more traditional lower pitched roof. Some of the Victorian detail in the roof has been removed. The shutters are now louvered, rather than the previous panel. The windows now have four divided lites, rather than two. Porches will have hip roofs. Mr. Potter said the single family dwellings have changed with the roof slopes decreasing referencing more of the bungalow and craftsman. The only other change was to make the garage side loaded.

Ms. Wingate brought up a point from the previous meeting about a portion of this area being in the National Registry Historic District. She stated the Secretary of Interior Standards and Guidelines do not apply for this case, and the National Registry Historic District provides protection for historic resources when there is Federal licensing, Federal permits, or Federal tax credits. The Commission is not reviewing using local design guidelines, as guidelines have never been created since this not a local district. The Secretary of Interior Standards and Guidelines apply primarily to the rehabilitation and restoration of historic preservation occurring. Ms. Tennor clarified that the Commission was charged with reviewing the development in the context of the new zoning classification which the County defined. Mr. Taylor stated the guidelines of the Secretary of the Interior are not binding on the Commission. If a higher authority reviews the decision of the Commission needs to rely on reasonable information. A reference point could be that the Secretary of Interior guidelines referenced in the Ellicott City guidelines could be used to consider the compatibility of the proposed development with the existing community.

#### **Commission Comments**

Mr. Reich thanked the Applicants for putting together all the information on the project as it is very informative. Mr. Reich likes that the subdivision is separated from the rest of the community by the park, treed area and parking lot. For the landscape plan in the future, Mr. Reich recommends adding more landscaping along the eastern boundary, if the density remains, to provide additional separation and buffer. The changes and materials used to make the development more compatible makes it look like it belongs in Savage. The density is still going to be more than the rest of Savage. The side loading garages to the houses is a big improvement. Mr. Reich asked if all the single family houses have the same style and color or will they vary. Mr. Potter stated the idea is essentially to keep the houses similar with maybe small color variations. Mr. Roth stated since these houses are being positioned as manager houses, it is more likely that the houses would be different. Ms. Wingate stated she does not see any problem with putting five look-alikes in a row in Savage. Slight changes could be put on the houses, but it is traditional in many towns to have the same houses in a row. Mr. Reich stated the houses work better with varying setbacks due to the curb. There is some landscaping going along the street. Mr. Reich suggested the Applicant bring in a color palette when they are ready to make the final submission.

Mr. Reich asked about the brick façade and how it is done and will there be siding on the back. Mr. Potter explained the sides will have brick; the back will have pilaster and HardiePlank siding, painted the brick color. Mr. Reich commented about the elevations for the east-west section; the mill building was not shown. It would be helpful for the Commission and the community to give a better visual of the sections and the visual impact from the streets. Mr. Reich stated for the final presentation the goal should be to make the project compatible with the area, not to copy any of the buildings. Mr. Reich asked if the duplexes all have the same façade. Mr. Potter said yes. Mr. Reich asked if the HardiePlank is used or Board and Batten and what colors. Mr. Potter stated the duplexes have HardiePlank, and the single family homes will have the Board and Batten. Mr. Potter stated there will be a variation in color, but maybe pairs of units will be similar in color. Ms. Wingate commented there may be a unifying theme with color variation.

Mr. Roth stated this plan is significantly improved from the initial one. He likes the look of the barns. Mr. Roth stated preservation of the public park access has been achieved by tying into the trail system. Maintaining the neighborhood character was a concern but the massing and articulation is much improved; which helped by lowering the building height. Mr. Roth stated he understands the density for being functional and making the buildings inspired by places. All the details must be done correctly for this project to work.

Mr. Shad stated a much better Job has been done incorporating comments and materials. He still has some concern about the size and height of the structures. Mr. Shad still feels the 2 story looks like a 3 story; the 3 story looks like a 4 story. He is unsure what the development will look like from other perspectives – the existing mill, the parking lot, and other entrances – and how it will appear.

Ms. Tennor stated she is very appreciative of the responses to the comments from the previous meeting. Every comment of the Commission has been considered and addressed. All the buildings now have such a variety, but using the barn style helps amend the sense of density; it breaks apart into more manageable units rather than the vast grouping of townhomes. Ms, Tennor said these are new residential buildings, they are not the mill buildings, so the scales are not the same. She also understands that the old buildings are not being copied into the new structures, and feels it is great insight to look to the barn as part of the mill complex. Ms. Tennor stated there is a difference between the rendering of the barn structure and the architectural drawings. Even though it is referencing the barn, there is an opportunity to add more interest architecturally by making the barn door openings as deep as the rendering suggests. The barn is not drawn with much of an overhang, but is rendered as though there is an overhang. This kind of detalling could make the barn more interesting architecturally. Ms. Tennor stated the details could be enhanced on the building to give it a more residential feeling and more interest. The garage parking is much improved. There is just one unit with a front loading garage due to the curve of the street. The fact that a side garage can be placed on the barn helps vary the façade of the two buildings. Mr. Potter stated no shadows were shown on the computer drawings for the garage doors, but it is intended to do a recess for the doors so it has the shadow as on the rendering. Ms. Wingate said the garage doors will be painted a color to help them recede even more. Ms. Tennor shares Mr. Shad's concern regarding the scale, but agrees with Mr. Reich that the parking lot is buffering these buildings from the mill. The structures in their form now do help address the density.

#### Public Comments

Ms. Tennor swore in Mr. Ron Coleman, a Savage resident. Mr. Coleman asked for a clarification of when the developer presented the application in July, they had come in seeking certification, not for advisory comments. Mr. Taylor stated during the course of the hearing the Applicant requested to amend the application to receive advisory comments instead. Mr. Coleman stated it sounds like the team has done a lot of work on the plan since the July meeting. The issue is that no one from the community was able to give any input. Some of the comments stated tonight by the Commission would probably be the same comments that the community would have given to the developer and most likely more, if the team had the concept of community involvement in the development of the project. Mr. Coleman does not know if this developer has any policy against involving the community and the community should have been with the developer to walk the grounds, look at the drawings, and give some feedback about the size and scale that would fit in the community. The developer had not received any kind of information from the

community. If the developer had received comments from the community, the comments did not have to be accepted, but there was no respect shown to even involve the community. Mr. Coleman stated the developer needs to find a way before the final presentation to sit down with the community and discuss the project with them.

Ms. Tennor swore in Mr. Stuart Kohn, a Laurel resident. Mr. Kohn stated the Commission stated at the July meeting that the petitioner was to speak with the community before returning to the Commission. It has been 90 days and no meeting has occurred. The information presented at this meeting is unknown to the community. Ms. Tennor asked if the developer meets with the community prior to returning to the Commission for a rendering, would this satisfy the request for a meeting. Mr. Kohn stated yes it would. Mr. Kohn said the developer not meeting with the community was wrong and a meeting should have been arranged. Ms. Tennor stated the Commission has no authority over the developer to demand them to meet with the community.

Ms. Tennor swore in Ms. Susan Garber, Savage Mill Community President and Savage Historic Society member. Ms. Garber stated she appreciates the amount of work on the revisions; the single family and duplexes are moving in the right direction. The new proposal overstates while attempting to change the compatibility factor from the historic area to compatibility with the historic industrial mill complex. The mill is but part of greater Savage. Ms. Garber stated it is interesting that there is almost a skip-over of those homes in the national historic district in favor of looking at the ones further afield. At first, the architectural revisions may appear creative and clever. Ms. Garber stated the Applicant's description of the mini mills bears a greater resemblance to New England mill towns, than to Howard County. Making comparisons to Oella is not appropriate since Oella is more like a mountainous area, where the Savage site is more of a plateau. Unlike Ellicott City, the homes and shops were not constructed as long rows of attached buildings. The existence of the upper parking lot west of the mill complex eliminates any visual connectivity between the real mill and the pseudo mill. The new development can only be accessed by residential areas on Baltimore Street or Washington Street. Once entering, the view is not of the mill. There is a parking lot to the left and trees to the front, right where the housing will be. Ms. Garber said she also has issues with omissions in the narrative. While referring to a barn and mill complex, there are other items that were omitted, including a grist mill, saw mill, iron foundry, and a store. Ms. Garber commented no landscape plan is included, despite Mr. Stone's testimony at the July meeting that the Commission would review it. The Secretary of the Interior's guidelines includes the consideration of a landscape plan as a standard on the national historic register.

Ms. Garber stated other development issues: No information was provided of the August 4, 2015 letter from the Department of Natural Resources outlining the need to minimize clearing and retain the forest – limiting forest removal to the footprint of the houses, minimizing the number and length of driveways, and to maintain forest canopy closures over roads and driveways due to the presence of at least three endangered, threatened or rare species, as well as declining forest interior dwelling birds. The plan fails to clarify what previously recorded forest conservation area will be disturbed and why. The project summary reports community open space, but fails to denote having difficulty achieving the required amount on each of the two separate land segments. The project summary states storm water management ESD requirements met on site, yet fails to report as of September 3 the plan has been rejected by DED, DLD and SCD as not conforming to the objectives of the Howard County Code. The PDox comments from DLD of September 3 states a redesign of the project shifting lots and structures, proposing different dwelling types to meet the guidelines and the Planning Board criteria may be required. It is premature for this plan to be under architectural review by the Commission or the Design Advisory Panel when so much of the plan is still subject to change.

Ms. Tennor swore in Mr. W. Arnold Landvoigt, a Savage resident. Mr. Landvoigt stated he lives in the agricultural manager's house. Savage use to be made up of two and three bedroom homes; the large ones were anywhere from 1600 sq ft to 1800 sq ft. They were two stories, and a majority did not have a garage. Mr. Landvoigt has some concerns. He has not seen any information on the project about how much square footage these homes will be, the full height of the built home, the roof pltches seem to be more like New England than the roof pitches in Savage. Mr. Landvoigt stated he understands that people now want more in their homes, but there needs to be a balance somewhere. A comment was made that anyone can come to the County to look at all the drawings that are being presented at this meeting. It would be much easier if an extra copy of all the drawings were made and given to the community association or put in a secure place in town so any resident can come and look at the drawings to obtain a better understanding of the project. There is a lot of negativity in the community right now as no one really understands what is going on, and if a bit of effort was put into bringing the community along to help understand the project, it would really help.

Ms. Tennor swore in Mr. Brian Clifford, a Savage resident. Mr. Clifford stated he appreciates the redesign of the plan from what was presented earlier. It is much more palatable. Mr. Clifford stated there are a couple of items in Savage that are garish in color and asked that those colors not be used. Mr. Clifford said what is odd is that the mill is not being duplicated, replicated or reconstructed, but is being 'referenced'. Mills are normally by a water source at the bottom of a hill, but the structure that is to look like a mill is being located at the highest point in Savage. He feels this would be an odd look. Mr. Clifford commented that the Interior Standards talks about not giving buildings a setting which gives a false appearance. Just to clarify a point that was stated earlier about there not being the same type of houses along Washington Street. Mr. Clifford stated after living there for a number of years, he realized there are three different types of houses along the street. Mr. Clifford gave the house numbers for the three different houses to be used for a reference.

Ms. Tennor swore in Mr. Brent Loveless, a Laurel resident. Mr. Loveless stated he had forwarded some comments to Ms. Burgess for distribution, but did receive some guidance that this information needs to go to the Applicant. He asked if the comments could be forwarded and made available. Ms. Burgess explained the Commission does not have a copy of the information due to the late timing of it being submitted. The Commission will receive a copy once the Applicant has seen and approves the comments first, unless Mr. Loveless wishes to read the entire document into the record. Mr. Taylor asked Mr. Loveless to briefly state what the document is. Mr. Loveless stated there are two documents - one is for the national standards and items to be taken into consideration in regards to this particular project; the second document is talking points in response to the Settlement proposal. Mr. Loveless gave a historical talk on Savage and stated history is to be determined over the next few weeks or months due to the new proposal. This is going to be the significant landmark case in Howard County on how significant historic properties are treated. The national standards were addressed earlier and how they should be used as guidelines in this case. Mr. Loveless commented that the document has various areas highlighted that should be considered and interpreted appropriately to make the choice against continuing the project. Mr. Loveless chose a few points from the document to read to explain why this project should not be done. He also spoke about the history and the family who founded Savage. Ms. Tennor asked Mr. Loveless if he feels no development should be done because there was no development originally. Mr. Loveless stated no. He talked about official testimony being on the record at the Maryland Court of Appeals describing the old buildings that existed. Ms. Tennor asked how this information would mitigate against further development on the site. Mr. Loveless stated these items are all archaeological resources that are located on the Savage Mill property. They should be restored and preserved upon regrading and building of the site. Mr. Taylor stated he is not sure how any of this information is relevant to the determination of whether the design and new structures is compatible

with the area. Mr. Taylor stated the Commission has no authority at all over archaeological resources on the property. The only authority they have is to determine whether the design of the new structures is compatible with the existing neighborhood. The communication of the richness of the land was done very effectively, but it has no relevance of the design of the structures with the existing neighborhood.

Mr. Loveless stated the neighborhood is an industrial neighborhood, an archaeological neighborhood. There are very historical industrial events and activities which occurred here which is the Savage community that the new development is trying to achieve compatibility with. Regarding the barns, Mr. Loveless commented the guidelines say reconstructions must be relevant to the most historic period. Ms. Tennor stated the project is not being presented as a reconstruction of anything. Mr. Loveless commented the guidelines have historic site consideration. Mr. Taylor disagrees and explained the Commission can only make a decision on the design and whether the physical structures will be compatible with the existing area. Mr. Loveless commented that two barns are being referenced off an old photo which is undated and not referenced to a physical location. As far as historic compatibility with the neighborhood, the period would have been the point of decline for Savage, and questions if this is the period that is being used to honor the history of Savage. Ms. Tennor stated the history is appreciated, but the comments are no longer relevant to the case.

Ms. Tennor swore in Ms. Marie Raven, a Savage resident. Ms. Raven stated one of the features that stand out is the viewshed that will occur. It is important to remember the height characteristics of the mill and also the height characteristics of the proposed units in comparison with the rest of the community. Ms. Raven stated when there is a lack of area to expand, the building tends to go up, and this is the highest point in the town. Trees are going to come down and the trees serve as a buffer between the new community and the rest of the river. People come from everywhere to walk the park trails along the river. Ms. Raven would like a better sense of the visual impact when there is no tree cover or natural buffering, and how is the height of the new community going to play off of the height of the mill. The new buildings are not as high as the mill, but they are higher up and should be considered. Ms. Raven stated the wood decks of the bank barns will not be visible from the front, but will have the advantage of the park trail view from the back. Given the proposed density and that the trail will look back up at the decks, what kind of view will be seen from the trail, especially when there are no leaves, and how does the view fit with the overall character.

Mr. Roth addressed the Applicant and requested that when they return could a similar presentation be given of the view from the trail along the river and also present more landscaping information. Mr. Stone said yes.

Ms. Tennor swore in Mr. Kevin Burke, a Savage resident. Mr. Burke stated there have been some improvements addressing some concerns, but some of the points about continuity or comparability with the existing community have been raised. Even though the barns look cool, this is not something that is normally seen in the neighborhood. If there is anything that will take away from the historic character of the mill, it is going to be the new development. Mr. Burke's main concern is the height in comparison with the rest of the community and separation by landscaping.

#### **Other Business**

Mr. Taylor, Staff and the Commission had a short discussion about having the next Savage meeting as a separate meeting from the monthly HPC.

Ms. Burgess asked permission from the Commission to cancel the January meeting as it is the first Thursday of January, and it is very difficult to prepare all the reports and address issues during Holiday schedule and Applicants being out of town. The Commission had no issues and unanimously agreed to cancel the January meeting.

Ms. Burgess stated in October new chairs or positions are created for the next year. Nominations are needed for the Chair, Vice-Chair and Secretary positions. Ms. Tennor nominated Mr. Shad for Chair; Mr. Roth seconded. Mr. Shad accepted the nomination. Ms. Tennor stated she would be glad to take over the Vice-Chair position. No one objected. Mr. Roth will continue to be the Secretary. The new positions will be effective at the next meeting.

Mr. Sha'd moved to Adjourn the meeting. Ms. Zoren seconded. The meeting was adjourned at 10:40 p.m.

\*Chapter and page references are from the Ellicott City or Lawyers Hill Historic District Design Guidelines.

1.4

Beth Burgess, Executive Secretary

Elleen Tennor, Chairperson

Carol Stim

Carol Stirn, Recording Secretary



# HOWARD COUNTY HISTORIC PRESERVATION COMMISSION ELLICOTT CITY HISTORIC DISTRICT LAWYERS HILL HISTORIC DISTRICT 3430 Court House Drive Ellicott City, Maryland 21043

Administered by the Department of Planning and Zoning

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# **July Minutes**

### Thursday, July 2, 2015; 7:00 p.m.

The sixth regular meeting for the year 2015 of the Historic Preservation Commission was held on Thursday, July 2, 2015 in the C. Vernon Gray Room located at 3430 Court House Drive, Ellicott City, Maryland.

Members present:	Eileen Tennor, Chair; Allan Shad, Vice-Chair; Drew Roth, Secretary; and Bruno
	Reich
Members absent:	Erica Zoren
Staff present:	Beth Burgess, Samantha Holmes, and Lewis Taylor

Chairperson Tennor opened the meeting at 7:00 p.m. with a statement explaining the process and rules of the meeting. Mr. Roth moved to Approve the June 4, 2015 minutes. Mr. Shad seconded. The motion was unanimously approved.

### PLANS FOR APPROVAL

- 1. 14-31c 8358 Main Street, Ellicott City
- 2. 15-21-3713 Old Columbia Pike, Ellicott City (continued)
- 3. 15-38 8550 Fair Street, Savage
- 4. 15-39 3820 Old Columbia Pike, Ellicott City, HO-302

<u>14-31c – 8358 Main Street, Ellicott City</u> Final tax credit approval. Applicant: Kathleen Taylor

**Background & Scope of Work:** On June 5, 2014 the Applicant was pre-approved to replace the side porch roof, flashing and caulking. The Applicant has submitted documentation that \$2,460.00 was spent on repairs and seeks \$615.00 in final tax credits.

**Staff Comments:** There is a charge for \$195.00 for the repair of downspouts and cleaning of gutters that was not part of the original proposal. If the Commission determines this work does not fall under the work pre-approved as mentioned above, Staff recommends an adjusted amount of \$566.25 (\$2,265.00 in eligible work) for tax credit pre-approval.

Mr. Stewart doesn't want posts or columns to change the look of the front porch and would prefer to use a white railing to replace the black metal material. Mr. Shad has no objection to the overall proposal, but finds the PVC railing is not appropriate. Mr. Stewart does not find the current quality of wood to be good. The Commission agreed the railing should be replaced with wood or metal, which are the most appropriate materials.

Regarding the shed, Mr. Taylor explained that the Applicant is seeking to demolish a building within the historic district and the Commission needs to determine if it is a Structure of Unusual Importance. Ms. Holmes stated that Staff does not find it to be of unusual important. The Commission agreed the shed was not of unusual important and is not a contributing feature or significant to district.

**Motion:** Mrs. Tennor moved to Approve application as submitted with the change that the PVC railing be changed to be wood or metal railing material for both the front porch and back railing. The motion included the demolition of the shed. Mr. Shad seconded. The motion was unanimously approved.

#### Other business:

Clarification of approval for the Sylvan lane property with Tom Harmon. Was the plastic shed included in approval. No, the plastic shed needs to be removed as it was not approved. Mr. Harmon was going to submit a plan for a shed and trellis in the future.

#### 15-38 – 8550 Fair Street, Savage

Architectural compatibility review for R-H-ED requirement. Applicant: Peter Stone, Pennoni Associates

**Background & Scope of Work:** This project is before the Commission because it falls under the new R-H-ED zoning, which requires that the design of the new structures be determined by the Historic Preservation Commission to be compatible with the historic character of the area. The site will consist of 77.74 acres located on and adjacent to the parking lot for Savage Mill. There are no existing structures on site, but the Applicant proposes a 35 lot subdivision on 6 acres. The proposed structures will include single family detached housing, townhouses and duplex units. The site layout will include a system of alleys and private streets to allow some rear loaded units to be constructed.

The single family and duplex houses will be constructed along the Washington Street extension. The townhouses will be located behind the duplexes. The new development will not be located directly adjacent to the existing housing, the parking lot and park will provide a buffer.

**Staff Comments:** Savage has a mix of housing types. Those found closest to the site location for the Settlement at Savage Mill are more modest, bungalow style buildings, although there are some elaborate structures located close by, such as the Mansion House (HO-218) and the Holte-Grafton House (Manager's House, HO-220), which have elements of the Greek Revival and Second Empire style respectively. The front loading garages on the proposed single family houses and front loading duplexes are not commonly seen in the area, but many of the existing homes have driveways and cars in the front of the houses. The front loading duplexes are also located farthest away from the existing historic housing. The scale of the new construction will be larger than most buildings found in Savage. But overall the proposed buildings appear compatible with the various style of architecture found in Savage.

Staff Recommendation: Staff finds the proposed buildings are architecturally compatible with the historic buildings found in Savage.

**Testimony:** The Commission went into closed session prior to the start of the case to obtain legal advice regarding the new R-H-ED zoning and clarification of the process when there is opposition to a case.

Ms. Tennor swore in Peter Stone from Pennoni Associates in Columbia, MD; Mr. Jeremy Potter from W.C. Ralston Architects in Chantilly, VA; and Nihar Shah from Bozzuto Homes in Washington, D.C. Ms. Tennor asked if there were any corrections to the Staff comments. Mr. Stone clarified the size of development; he said the area that is subject to development is approximately 13 acres, but only 6 acres of which will be developed. The 77 acres includes the adjacent Savage Park, a portion of which is being subdivided out.

Mr. Taylor asked if there was anyone present in opposition and several citizens raised their hands. Ms. Tennor confirmed that all in opposition had signed in. Mr. Taylor clarified the process when a case is contested. He explained that the Commission's role is to make a determination about whether the exterior aesthetic appearance of the proposed development is compatible with the historic character of the surrounding area. He explained that the Applicants will make a presentation and then the opposition can ask the Applicant questions about their presentation. The Commission will then ask questions of the Applicants, if they have any. After that, the opposition will have an opportunity to present their case. At that time, the Applicants can ask the opposition questions after the opposition has presented their case. Then the Commission can ask questions of the opposition. Ms. Tennor explained that they will be sworn in when they come up to speak.

Mr. Stone with Pennoni Associate gave a Powerpoint presentation of the application, which was part of the paper application package to the Commission. The presentation included an overview of the entire project. There will be 35 lots, consisting of single family houses, duplex houses and townhouses. There will be a land swap with the County's Department of Recreation and Parks. Mr. Stone said there will be street and water and sewer improvements as part of the project as well. Mr. Stone reviewed the site and site layout.

Mr. Roth asked if the parcel the development extends into is the same parcel the historic mansion is located on. Mr. Stone said that the mansion is on its own lot at Baltimore and Fair Street. Mr. Roth asked if Baltimore Street was one street to the north of Washington Street. Mr. Stone said that was correct.

Mr. Stone showed a plan of the land swap and explained the red area is current County park land that would be transferred to the developer and the green area is land that is currently owned by the Mill that would be transferred back to the County. Mr. Stone and the Commission discussed the land swap map.

Mr. Roth inquired about the topography and if the topo is illustrated in the presentation. Mr. Stone stated the site is modeled as a flat site, but that there is a fairly steep slope. Mr. Stone said there is a cross section that shows more of the slope.

Mr. Potter discussed the various styles of architecture in Savage. He said that aside from the industrial mill and bungalow style buildings; there are Federal style duplex housing and Victorian style civic buildings, churches and single family houses. They looked toward more of the decorative styles for architectural influence. Townhouses are more of the Mill style and scale as they are larger buildings. Mr.

Potter discussed the various styles of housing – the duplex, townhouses, and single family houses. Mr. Potter said there are 3 and 4 story options the developer is presenting. The models show 4 stories and the architecture is the same, but contains a roof terrace. The 4<sup>th</sup> story designs are setback in the development. Mr. Potter showed photos of some of the existing architecture in the neighborhood. Mr. Potter said there are front porches throughout the community, so they have incorporated that detail into the design. Mr. Taylor said that some of the photographs were not in the application. Mr. Stone said that they added four photographs and he would provide them to Staff.

Mr. Roth asked if there were any townhouses in the historic section of Savage. Mr. Potter said there is a 4 unit housing structure, but no townhomes. Mr. Roth asked if the Mansion can be seen from the new construction. Mr. Stone said the ball fields are in between the site and the Mansion. Mr. Roth said his understanding is that the Mansion lies between Fair Street and the ball fields and that the new single family homes would be adjacent to the Mansion's parcel and the ball fields. Mr. Stone said the new single family are immediately south of the ball field. Mr. Roth asked if there was a photo that shows the extent that the Mansion would be visible from the gravel parking lot. Mr. Stone said he did not have a photo.

The Applicants concluded their presentation and the proceeding moved to questions from the public. Ms. Tennor swore in Stuart Kohn, who lives in Laurel, 7 miles away from the development. He asked how tall the tallest unit would be. Mr. Potter said the zoning regulations allow for a 40 foot height, so a 4 story option is available. Mr. Kohn asked what the tallest building in the community was. Mr. Stone replied that the Mill is the tall building. Mr. Kohn stated that he does not find a 4-story building to be compatible. Mr. Stone said it is compatible as the 4<sup>th</sup> story is optional and recessed back from the façade.

Ms. Tennor swore in John Garber, of Gorman Road. Mr. Garber asked about the average setback for the homes. Mr. Stone replied there are 20 foot setbacks. Mr. Garber asked about the percentage of lot coverage. Mr. Stone did not know the percentage of lot coverage, but said it is less than on Baltimore Street or Washington Street in Savage. Mr. Garber and Mr. Stone discussed the views of the street.

Ms. Tennor swore in Susan Garber, Savage Mill Community President and Savage Historic Society member, of Gorman Road. Ms. Garber asked why there isn't a perspective drawing from the river side. Mr. Stone said there was no reason. Ms. Garber and Mr. Stone discussed the viewshed. Mr. Stone said that efforts were made to move everything away from the river with the County land swap. Ms. Garber stated that it was the community's idea to swap the land. Ms. Garber asked questions regarding the federal style buildings, and the number of units in the townhouse design, layout and density.

Ms. Tennor swore in Brent Loveless, of Whiskey Bottom Road, who lives 1 mile away from the development. Mr. Loveless asked if the development site had any design consideration for or relevance to any local historic figures or events. Mr. Loveless questioned the architectural features of the development- the lack of chimneys, the roof pitch being too steep at 60% pitch, siding materials, too much Victorian style relative to the worker mill community, and the presence of rooftop decks. Mr. Loveless asked how the project draws people to Savage Mill. Mr. Stone stated the goal is to develop and draw people to the community. Mr. Potter thought more local people would increase the Savage Mill retail. Mr. Loveless asked if there has been any archaeological digging of the site and inquired of the grade change. Mr. Stone planned to keep the grading minimal and believed the shift of development to the North has helped minimize grading. Upon a question of whether grading was relevant, Mr. Taylor advised that final grading would be relevant because it affects the appearance of the site.

Mr. Roth noted the footpath allowing public access to the River and asked if the footpath was going to remain. Mr. Stone stated the footpath is not preferred there but access to River is being discussed with DRP.

Mr. Reich asked if side or back elevations had been produced. Mr. Potter had not created those elevations but stated the same façade materials are being wrapped around to the back. Ms. Tennor asked whether the open space adjacent to the single family homes was prescribed by County. Mr. Stone said yes, they are required by the County for SWM. Ms. Tennor asked if they meet the minimum requirement and Mr. Stone said he believed they exceeded the minimum. Ms. Tennor suggested that a different open space configuration could allow the single family lots to have side loading garages verses the current front loading garages which would be more appropriate for the architectural compatibility.

Mr. Reich asked where the plan is in the subdivision process for feedback. Mr. Stone said they need to attend several other meetings, so the lot lines are not final. Mr. Reich asked what is anticipated for landscaping and if the landscape plan is being reviewed by HPC. Mr. Stone said the landscape plan will be reviewed by HPC. Mr. Stone stated they plan to maintain some existing mature trees and the east end area adjacent to the Savage Mill parking lot will be screened. The high point of development site is about 10 feet above the existing parking lot. Street trees are required on Washington Street and Mr. Stone does not think any part of the community will be seen except for some of the height on that part of the development.

Mr. Shad asked if the homes on sheet plan A3 are 2- story or 3-story. Mr. Potter said the roofline will be maintained as a 2-story home but that an owner could have an option to have a 3<sup>rd</sup> story interior above the roofline exterior. Mr. Shad pointed out the existing community has 2-story homes with short roofs. Mr. Potter thinks the mansard mansion style sets the precedent for the 3-story built-in. Mr. Reich stated that front garages are all on the single family homes and the townhomes are all alley loaded and asked where the visitor parking will be located. Mr. Reich questioned if the development meets the parking requirement and if any parking was allowed on the Mill lot. Mr. Stone said the development meets the requirement with the garages included in the calculation and the visitor parking will be on the road. Mr. Stone said there is no provision to park at the Mill and no conversations have taken place with the Mill owners to allow that opportunity.

Ms. Susan Garber stated the Community was only shown the plan at the pre-submission meeting the night before. She shared a flowchart of the DPZ plan review process from Mr. Sheubrooks and Ms. Mclaughlin of DPZ from 2013 (Submitted to Commission as Protest Exhibit 1). Ms. Garber stated a small town feel draws people and makes it a sustainable community. Many homes in Savage are passed down generations and keeping a small town feel is critical to Savage. Ms. Garber submitted an image by DRP from May 2013 that shows the original 5 acre development site by the River. The proposal to shift the development further from the river would protect more environmental features, minimize site grading, reduce a proposed 17 foot retaining wall, and utilize the cleared and flat existing area.

Ms. Garber noted the proposed plan has an urban look and Savage is not an urban town. The density, the closeness of buildings, and the height of the homes are all out of scale to the existing Savage community. Ms. Garber is concerned that each step of the meetings and development process is building approval to DAP. She stated the balcony decks do not overlook green space but look into adjacent hardscape homes. She stated concern for loss of mature trees and noted the large difference from forest tree canopy vs street trees. RK&K, subcontractors to DPW, created plans for the Savage sewer project and Ms. Garber submitted exhibit (Protest Exhibit 2) with Applicants approval and stated

this plan is a good illustration of the set-backs and lots sizes of the historic district that the community wants to see in the new development.

Mr. Roth asked about the land swap and zoning specific to this plan. R-H-ED is the zoning and the original 5 acre development site of the original 10 acre was up for rezoning. Community requested no greater density and 10 units per acre for R-H-ED were allowed but all parties (developers and community) agreed to a 30 units development total. The noted steep slopes were a concern for development and the community wanted a buffer and protection of river so the community suggested moving the development forward, assuming it would be zoned R-H-ED.

Mr. Reich stated most of the Historic District is in a grid. Ms. Garber agreed and added it is on a steep hill. The highest building is the masonic lodge from the 1800's. There was the intention to continue the grid. Ms. Garber did not think about the street pattern since the original plan reflected a loop road. Mr. Roth asked about the Mill race trail. Ms. Garber said it is a pedestrian and bike trail that leads to the river's edge, unsure of material, maybe gravel and dirt. The trail cuts through land swap. Mr. Roth asked the Applicant about the trail connection. Mr. Kohn stated there are a lot of unknowns on this project and a 4- story building would not be compatible to Savage. He is concerned there is no buffer to site.

Mr. Loveless said it is unconscionable that there is no character history included in the site that has history dated back to 1685 which was surveyed by Colonel Ridgely. Mr. Loveless shared some history that this area was prime real estate, a fall line; the Warfields built a Mill in 1750's which is no longer standing; an industrial settlement. Commodore Joshua Barney, served in war of 1812, had a home there and Savage Mill is named after Commodore Barney's partner, John Savage.

Mr. Loveless submitted Protestants Exhibit 3, a Google earth picture of Captain Watson's house in Philadelphia. This black and white photo exhibit of a 4-story brick townhome that looked similar to the proposed Savage development in which Mr. Loveless expressed was not an appropriate townhome for a mill community.

Mr. Loveless was concerned that development is occurring on environmentally sensitive areas of the County in lieu of available land. He referenced the General Design Guidelines, Secretary of Interior Standards for 1992. Mr. Loveless shared excerpts directly from the Guidelines website. Mr. Taylor sited Sec 2.117. Mr. Reich pointed out the standards are for historic homes and not for new development. Mr. Roth said consideration of the site is perfectly appropriate. Mr. Taylor advised that there may be relevance from this. Mr. Stone had no objection to Mr. Loveless's perspective from the Secretary of Interiors but denied Protestants Exhibit 4 from being submitted into the record because there has been no advance review of paraphrasing or misinterpretation from this submittal. Mr. Loveless highlighted excerpts from the Secretary of Interiors: there should be minimal disturbances of terrain, no damage to important landscape features or archeological resources. Surveying and documenting areas of disturbance is needed. Retention of plant materials, trees and landscape features. Adding conjectural landscape features to sites that are historically appropriate. It is not recommended to have new buildings or site feature out of scale or have an inappropriate design. New building sites should not have a false appearance by basing the reconstruction or conjectural designs or the availability of features from the nearby historic site. Mr. Loveless concluded by stating fake historical structures are not historical.

Mr. Reich asked Mr. Loveless what is appropriate for this site and is something specific to this parcel that could relate to Commodore Joshua Barney. Mr. Loveless replied he would prefer for the site to be purchased as parkland for the County and remain an archeological site. He continued if development

was to happen, replicas of the Mill would be most appropriate. The steep slopes, mature growth and environmental features should remain as such. Mr. Shah from Bozzuto acknowledged concerns of citizens but believed the architectural designs are good and requested the HPC approve the plans and he will provide more details per requested.

Mrs. Tennor summarized her points of concern being that the development has small lots sizes relative to Savage, the front loading garages are not compatible, the high density is not compatible to Savage and the conflict between Victorian vs Federal style needs resolution. She reiterated the new R-H-ED zoning is design to be compatible with the historic area.

Mr. Reich requested more details. He said the application lacks dimensions, side and back elevations, color schemes and lentel details. Mr. Reich said this design is more of a suburban feel than the Savage community.

Mr. Roth does not find the design to be compatible because of lack of historic context, the encroachment on the Mansion, the design of townhomes when they don't currently exist and the lack of public access to the river. Mr. Roth points out the route 1 (CAC zoning) design guidelines that seek compatibility with the community in size, scale and articulation and does not believe this design does that.

Mr. Shad agreed with HPC members comments. States the actual site located on a hill concerns greatly the incompatibility to the rest of Savage.

The Commission went into closed session for legal advice from Mr. Taylor on the determination of architectural compatibility.

In open session, Mr. Shah, Bozzuto homes, stated he is amending the application to be Advisory comments and the Applicant will amend and resubmit at a later date.

Mrs. Tennor moved to Adjourn the meeting. Mr. Roth seconded. The meeting was adjourned at 11:12 p.m.

\*Chapter and page references are from the Ellicott City or Lawyers Hill Historic District Design Guidelines.

Beth Burgess, Executive Secretary

Mrs. Eileen Tennor, Chairperson

Carol Stirn, Recording Secretary

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HOWARD COUNTY HISTORIC PRESERVATION COMMISSION ELLICOTT CITY HISTORIC DISTRICT 
LAWYERS HILL HISTORIC DISTRICT 3430 Court House Drive Ellicott City, Maryland 21043

Administered by the Department of Planning and Zoning

www.howardcountymd.gov 410-313-2350 FAX 410-313-1655 TDD 410-313-2323

## **August Minutes**

### Thursday, August 6, 2015; 7:00 p.m.

The seventh regular meeting for the year 2015 of the Historic Preservation Commission was held on Thursday, July 2, 2015 in the C. Vernon Gray Room located at 3430 Court House Drive, Ellicott City, MD.

Members present:	Eileen Tennor, Chair; Allan Shad, Vice-Chair; Drew Roth, Secretary; Bruno Reich and Erica Zoren
Members absent:	
Staff present:	Beth Burgess, Dan Bennett, Lewis Taylor and Lisa Kenney

Chairperson Tennor opened the meeting at 7:00 p.m. with a statement explaining the process and rules of the meeting. Mr. Roth moved to Approve the July 3, 2015 minutes. Mr. Shad seconded. The motion was unanimously approved.

#### PLANS FOR APPROVAL

\*Please note the following comments and recommendations are from DPZ Staff and are recommendations for the Commission to consider, they do not represent a decision made by the Commission.

### Agenda

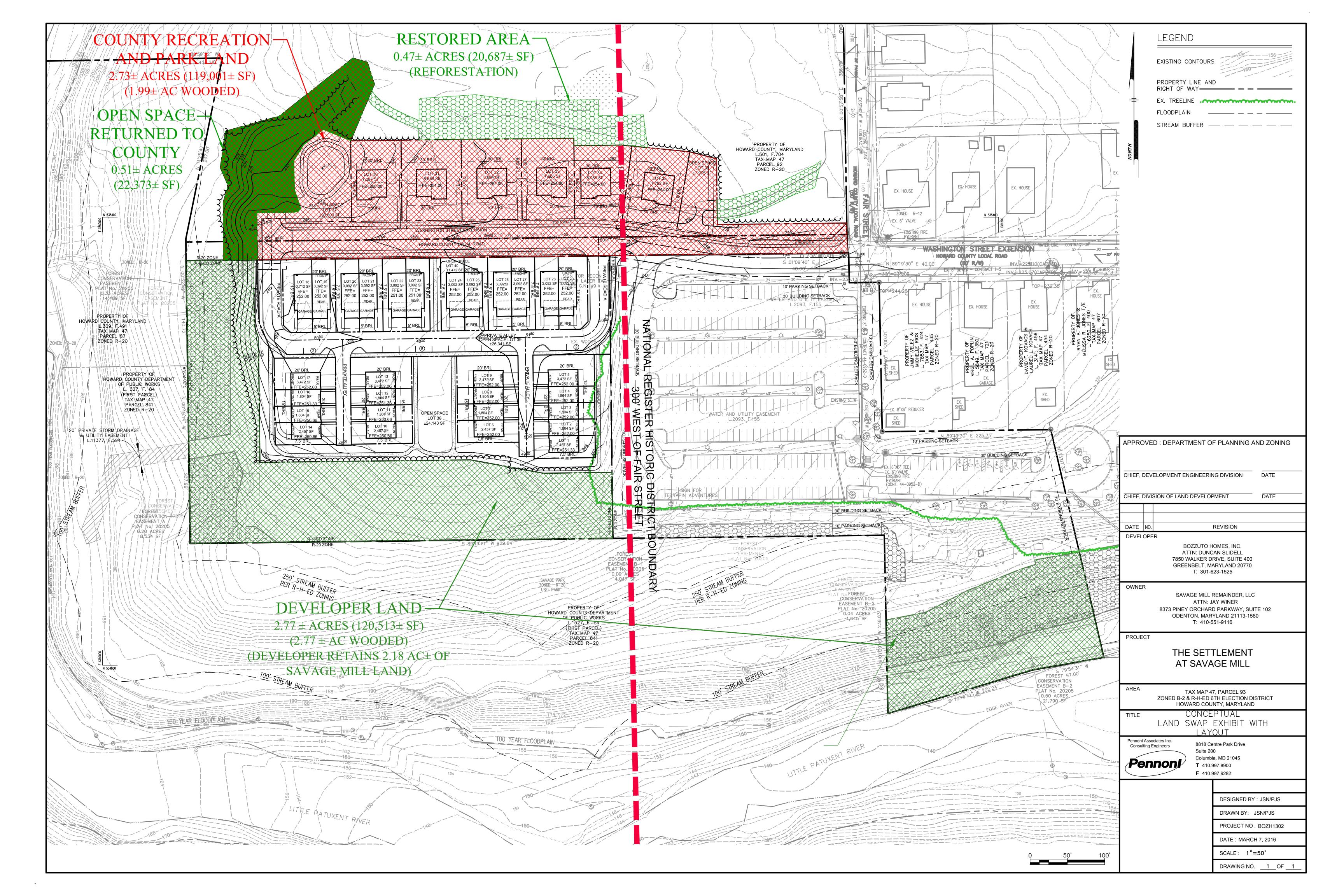
- 1. 14-77c 8069 Main Street, Ellicott City
- 2. 14-80c 8396 Park Drive, Ellicott City
- 3. 15-40 3711 Old Columbia Pike, Ellicott City
- 4. 15-41 3637 Fels Lane, Ellicott City
- 5. 15-42 8020 Main Street, Ellicott City
- 6. 15-43 8020 Main Street, Ellicott City
- 7. 15-44 8312 Main Street (Lot E), Ellicott City
- 8. 15-45 3884 Ellicott Mills, Ellicott City
- 9. 15-46 3880 Ellicott Mills, Ellicott City
- 10. 15-47 3578 Sylvan Lane, Ellicott City
- 11. 15-48 3570 Courthouse Drive, Ellicott City

#### CONSENT AGENDA

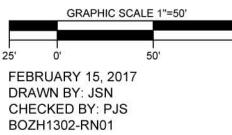
### <u>14-77c – 8069 Main Street, Ellicott City</u> Final Tax Credit Approval. Applicant: Len Berkowitz

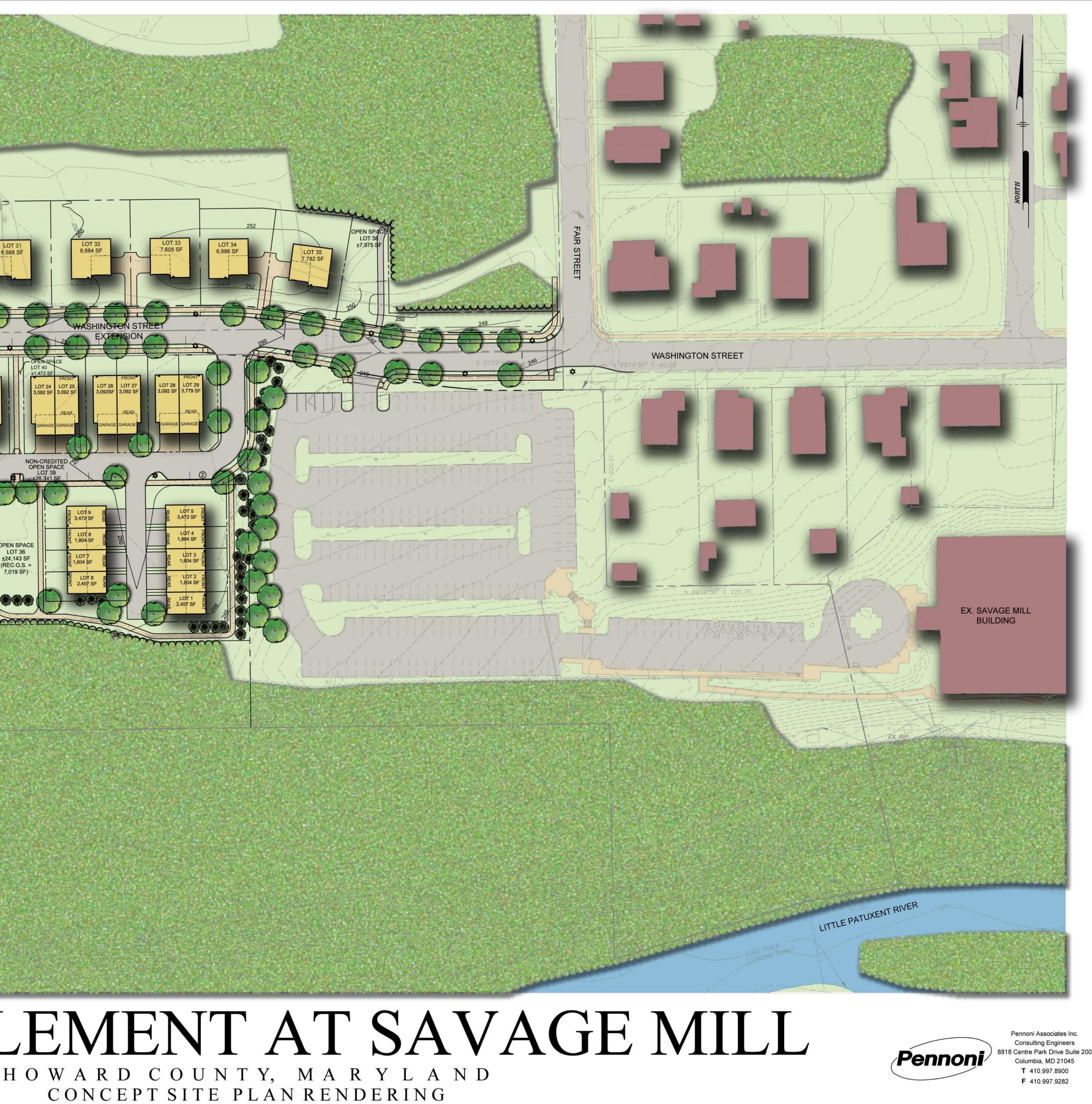
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SP-15-017 (The Settlement at Savage Mill)





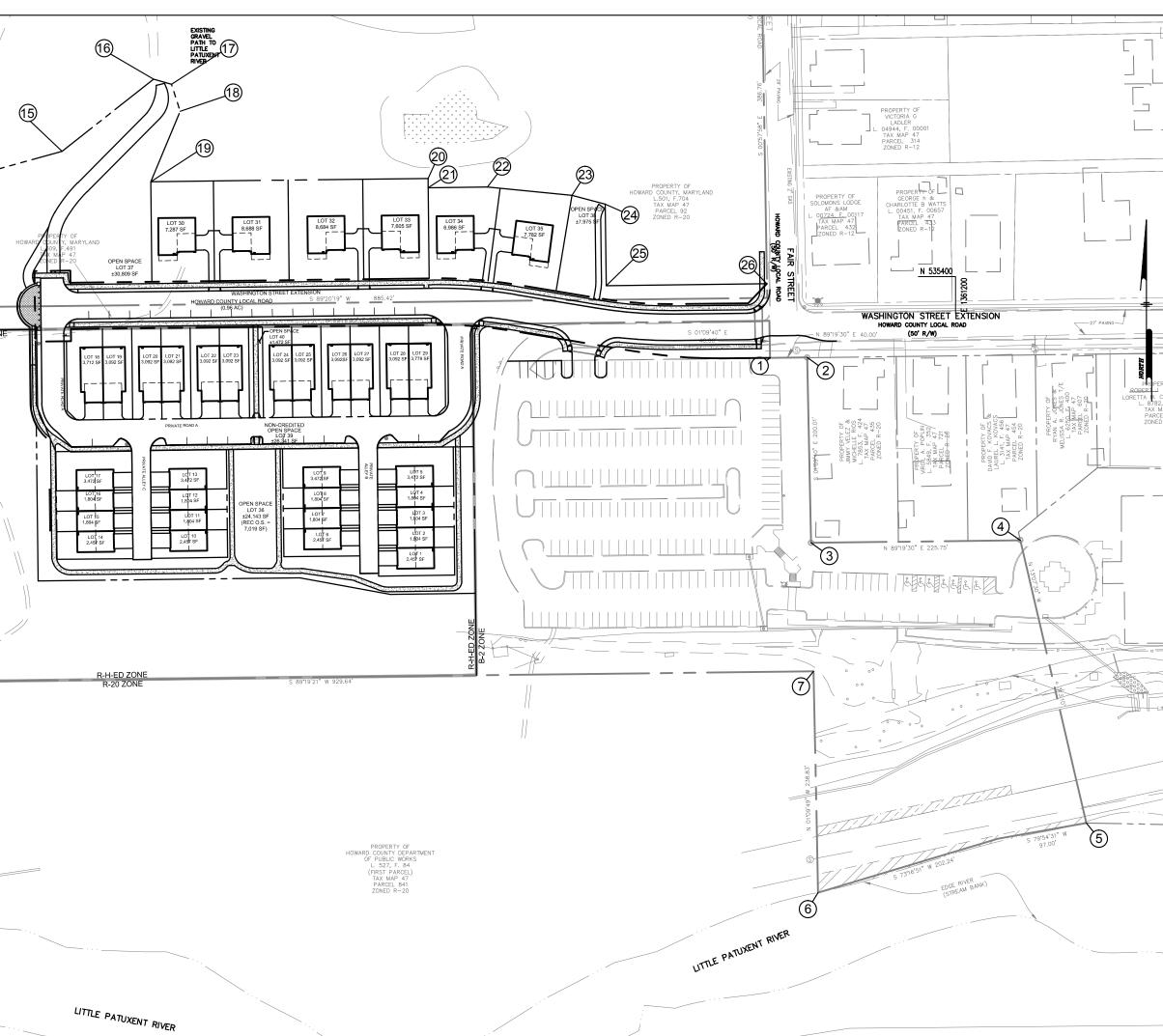




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<ul> <li>I. ALL CONSTRUCTION SHALL BE IN ACCORPANCE WITH THE HOWARD COUNTY DESIGN MANUAL, VOL. IV STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION" PLUS MSHA STANDARDS AND SPECIFICATIONS, IF APPLICABLE.</li> <li>2. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERINO/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PROR TO THE START OF WORK.</li> <li>3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AY LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.</li> <li>4. TRAFFIC CONTROL DEWCES:</li> <li>a) THE R1-1 (STOP?) SIGN AND THE STREET NAME SIGN (SNS) ASSEMBLY FOR THIS DEVELOPMENT MUST BE INSTALLED DEFORE THE BASE PAWING IS COMPLETED.</li> <li>b) THE R1-1 (STOP?) SIGN AND THE STREET NAME SIGN (410-313-2430) PROTE TO THE INSTALLATION OF ANY ENCAVATION WORK BEING DONE.</li> <li>4. TRAFFIC CONTROL DEWCES:</li> <li>b) THE TRAFFIC CONTROL DEWCES AND THER LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF HE MARYLAND MANUAL ON UNIFORM TRAFFIC DIVISION (410-313-2430) PROTECTION.</li> <li>c) ALL TRAFFIC CONTROL DEWCES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF HE MARYLAND MANUAL ON UNIFORM TRAFFIC DIVISION (410-313-2430) PROVE GROUND EVEL A ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2° GAUNANZED STEEL, PREFORATED, COURTD LEVELS' (MDWITCD).</li> <li>d) ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2° GAUNANZED STEEL, PREFORATED, COURT UBE SLEVE (12 GAUGE) – 3° LONG. THE ANORO SHALL NO TENET MOND ET BATT THO QUICK PUNCH?, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2° CAUNANZED STEEL, PREFORATED, SQUARE TUBE SLEVE (12 GAUGE) – 3° LONG. THE ANORO SHALL NO THE THON ON TO PO F EACH POST.</li> <li>5. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURES AND POLES SHALL BE IN ACCORDANCE WITH THE HOWARD COUNTY DESION MANUALU, VOLUNE WITH TWO QUUCK PUNCH? INSUMATION.</li> <li>5</li></ul>	
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<ul> <li>a) THE RI-1 (STOP<sup>3</sup>) SIGN AND THE STREET NAME SIGN (SNS) ASSEMBLY FOR THIS DEVELOPMENT MUST</li> <li>BE INSTALLED BEFORE THE BASE PAVING IS COMPLETED.</li> <li>b) THE TRAFFIC CONTROL DEVICE LOCATIONS SHOWN ON THE PLANS ARE APPROXIMATE AND MUST BE</li> <li>FIELD APPROVED BY HOWARD COUNTY TRAFFIC DIMSION (410-313-2430) PRIOR TO THE INSTALLATION OF ANY</li> <li>of THE TRAFFIC CONTROL DEVICES.</li> <li>c) ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST</li> <li>EDITION OF HE MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES'(MDMUTCD).</li> <li>d) ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL</li> <li>BE MOUNTED ON A 2' GALVANIZED STEEL, PERFORATED ('QUICK PUNCH'), SQUARE TUBE EVEP (12 GAUGE) - 3' LONG.</li> <li>THE ANCHOR SHALL NOT EXTEND MORE THAN TWO 'QUICK PUNCH'HOLES ABOVE GROUND LEVEL. A</li> <li>GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.</li> <li>5. STREET LIGHT PLACEMENT AND THE TYPE OF FIXTURES AND POLES SHALL BE IN ACCORDANCE WITH THE</li> <li>HOWARD COUNTY DESIGN MANUAL, VOLUME III (2006), SECTION 5.5.4. A MINIMUM OF 20' SHALL BE</li> <li>MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE. STREET LIGHTS SHALL BE LED-100 COLONIAL</li> <li>POST-TOP FIXTURE MOINTED ON A 14' BLACK FIBERGLASS POLE.</li> <li>6. THE EXISTING TOPOGRAPHY IS PROVIDED BY PENNONI ASSOCIATES, INC., DATED NOVEMBER 28, 2006, AND</li> <li>APRIL 2015, AND HAS BEEN SUPPLEMENTED BY COUNTY GIS INFORMATION.</li> <li>7. THE BOUNDARY SURVEY IS PROVIDED BY PENNONI ASSOCIATES, INC., DATED DECEMBER 5, 2006, AND</li> <li>MARCH 2015, AND HAS BEEN SUPPLEMENTED BY COUNTY GIS INFORMATION.</li> <li>8. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY MONUMENT NOS. 47EC AND</li> <li>47EB WERE USED FOR THIS PROJECT.</li> </ul>	
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<ul> <li>APRIL 2015, AND HAS BEEN SUPPLEMENTED BY COUNTY GIS INFORMATION.</li> <li>THE BOUNDARY SURVEY IS PROVIDED BY PENNONI ASSOCIATES, INC., DATED DECEMBER 5, 2006, AND MARCH 2015, AND HAS BEEN SUPPLEMENTED BY COUNTY GIS INFORMATION.</li> <li>THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL, WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 47EC AND 47FB WERE USED FOR THIS PROJECT.</li> </ul>	
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	NE M.6725001
9. WATER IS PUBLIC. CONTRACT 24–4968–D. 10. SEWER IS PUBLIC. CONTRACT 24–4968–D.	R R-20 ZONE R-H-ED ZONE
11. STORMWATER MANAGEMENT FOR THIS PROJECT IS PROVIDED BY MICRO-BIORETENTION FACILITIES, A BIORETENTION FACILITY AND PERVIOUS PAVEMENT. ALL STORMWATER MANAGEMENT FACILITIES ARE PRIVATELY OWNED AND MAINTAINED BY THE DEVELOPER UNTIL THE HOA ASSUMES RESPONSIBILITY.	0049'14" W
12. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE. EXISTING UTILITIES ARE SHOWN BASED ON THE BEST AVAILABLE INFORMATION.	237.99
13. ACCORDING TO THE WETLAND DELINEATION REPORT DATED JUNE 2015, WETLANDS ARE FOUND ON PARCEL 92 AT THE NORTHERN LIMITS OF THE LIMIT OF DISTURBANCE. A REVIEW OF EXISTING RECORDS DID NOT INDICATE ANY WETLANDS FOR THE REMAINDER OF THE PROPERTY. NONE OF THE WETLANDS SHOWN ARE LOCATED WITHIN THE LIMITS OF DISTURBANCE FOR THIS PROJECT.	8
14. THE TRAFFIC STUDY FOR THIS PROJECT WAS PREPARED BY PENNONI, DATED MARCH 3, 2016, AND WAS APPROVED ON MAY 25, 2016.	
15. NO NOISE STUDY IS REQUIRED FOR THIS PROJECT.	
16. SUBJECT PROPERTY ZONED R-H-ED, R-20, AND B-2 PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.	300
17. ALL ELEVATIONS SHOWN ARE BASED ON THE U.S.C. AND G.S. MEAN SEA LEVEL DATUM, 1929.	
18. APPLICABLE HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING FILE REFERENCES ARE: SDP-85-146, SDP-80-155, SDP-85-31, SDP-85-51, SDP-90-191, WP-02-16, WP-07-105, BA-07-01, BA-07-17V, AA-07-05, SDP-07-076, ECP-14-029, ECP-15-053, WP-17-002, AND PB 424.	
19. THE CONTRACTOR SHALL TEST PIT EXISTING UTILITIES AT LEAST (5) DAYS BEFORE STARTING WORK SHOWN ON THESE DRAWINGS.	
20. CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.	
21. NO PIPE SHALL BE LAID UNTIL LINES OF EXCAVATION HAVE BEEN BROUGHT WITHIN 6" OF FINISHED GRADE.	
22. DESIGNED TRAFFIC SPEED IN ACCORDANCE WITH THE HOWARD COUNTY DESIGN MANUAL VOL. III. ALL 40'	
AND 50' RIGHT OF WAYS 25 M.P.H. 23. ALL STREET CURB RETURNS SHALL HAVE 25' RADII UNLESS OTHERWISE NOTED. 2 SPACES PER DWELLING UNIT	<u>R-H-ED</u>
23. ALL STREET CURB RETURNS SHALL HAVE 25' RADII UNLESS OTHERWISE NOTED.2 SPACES PER DWELLING UNIT 35 X 2.0 = 70 SPACES REQUIRED 70 SPACES PROVIDED IN UNIT GARAGES24. THERE ARE NO EXISTING STRUCTURES LOCATED ON THE PROPERTY.70 SPACES PROVIDED IN UNIT GARAGES	FACE TO FACE TO
25. NO CLEARING, GRADING, REMOVAL OF VEGETATIVE COVER TREES, PAVING, OR NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, THEIR REQUIRED BUFFERS, FLOODPLAIN OR FOREST CONSERVATION EASEMENT AREAS.	FACE OR FACE OR
26. BASED ON AVAILABLE COUNTY MAPS AND RECORDS, THERE ARE NO HISTORIC STRUCTURES OR KNOWN <u>TOTAL REQUIRED PARKING:</u> 88 SPA	ACES SIDE TO S
27. THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE TO TAL PROPOSED PARKING: 70 GARAGE SPACES + 12 PRIVATE STR	
FOR FOREST CONSERVATION WITH AN OBLIGATION OF 1.16 ACRES PROVIDED BY 2.54 ACRES OF ON-SITE RETENTION, 0.95 ACRES OF ON AND OFFSITE PLANTING AND 0.23 ACRES OF OFF-SITE RETENTION. THE LOCATION FOR OFFSITE PLANTING IS IN THE ADJACENT SAVAGE PARK, IMMEDIATELY ABUTTING THIS PROJECT AND ITS LIMITS OF DISTURBANCE. SAVAGE MILL PARKING LOT WILL NOT BE	LEX KISTING REAR TO
28. THE GEOTECHNICAL REPORT FOR THIS PROJECT WAS PREPARED BY ECS, LLC MID-ATLANTIC, DATED APRIL 16, 2007, AND WAS SUPPLEMENTED BY A REPORT PREPARED BY PENNONI ON AUGUST 27, 2015.	MAXIMUM
29. LANDSCAPING AND STREET TREES FOR THIS SUBDIVISION WILL BE PROVIDED ON THE FINAL PLANS IN ACCORDANCE WITH SECTION 16.124 OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY LANDSCAPE MANUAL.	PERMITTE PROVIDED MAXIMUM
30. THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER COUNCIL BILL NO. 45–2003 AND THE AMENDED ZONING REGULATIONS PER COUNCIL BILL NO. 75–2003. DEVELOPMENT OR CONSTRUCTION ON THESE LOTS/PARCELS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE BUILDING/GRADING PERMIT APPLICATIONS.	<u>Maximum</u> Permittei

SEE SHEET 9 FOR ADDITIONAL NOTES

# PRELIMINARY EQUIVALENT SKETCH PLAN THE SETTLEMENT AT SAVAGE MILL LOTS 1-35 **OPEN SPACE LOTS 36-40**



BUILDING TO BUILDING SETBACKS RECREATIONAL OPEN SPACE REQUIREMENTS FACE REQUIRED: 30'

<u>REQUIRED:</u>

<u>Provided:</u>

DÉVELOPMENT

R/20/R-ED ZONE: 300 SF/UNIT: 1,800 SF

R-H-ED: USEABLE OUTDOOR SPACE EQUAL TO A 15 DEEP YARD FOR 29 ATTACHED UNITS

A) 29 UNITS WITH 20'+ FRONT YARDS

AREA (WITHIN OPEN SPACE LOT 36)

D) TRAILHEAD FOR SAVAGE PARK

C) WALKWAYS AND TRAILS THROUGHOUT

B) 7,019 SF OF OPEN LAWN AND LANDSCAPE

(6 UNITS X 300 SF = 1,800 SF)

FACE PROVIDED: 104'

REAR TO SIDE REQUIRED: 30' REAR TO SIDE PROVIDED: 72'

SIDE REQUIRED: 15' SIDE PROVIDED: 15'

REAR REQUIRED: 60' REAR PROVIDED. 60'

FACE REQUIRED: 100' FACE PROVIDED: N/A

<u>1 BUILDING LENGTH:</u>

ED: 120' D: 111'

UNITS PER STRUCTURE (SFA): ED: 8 D: 5

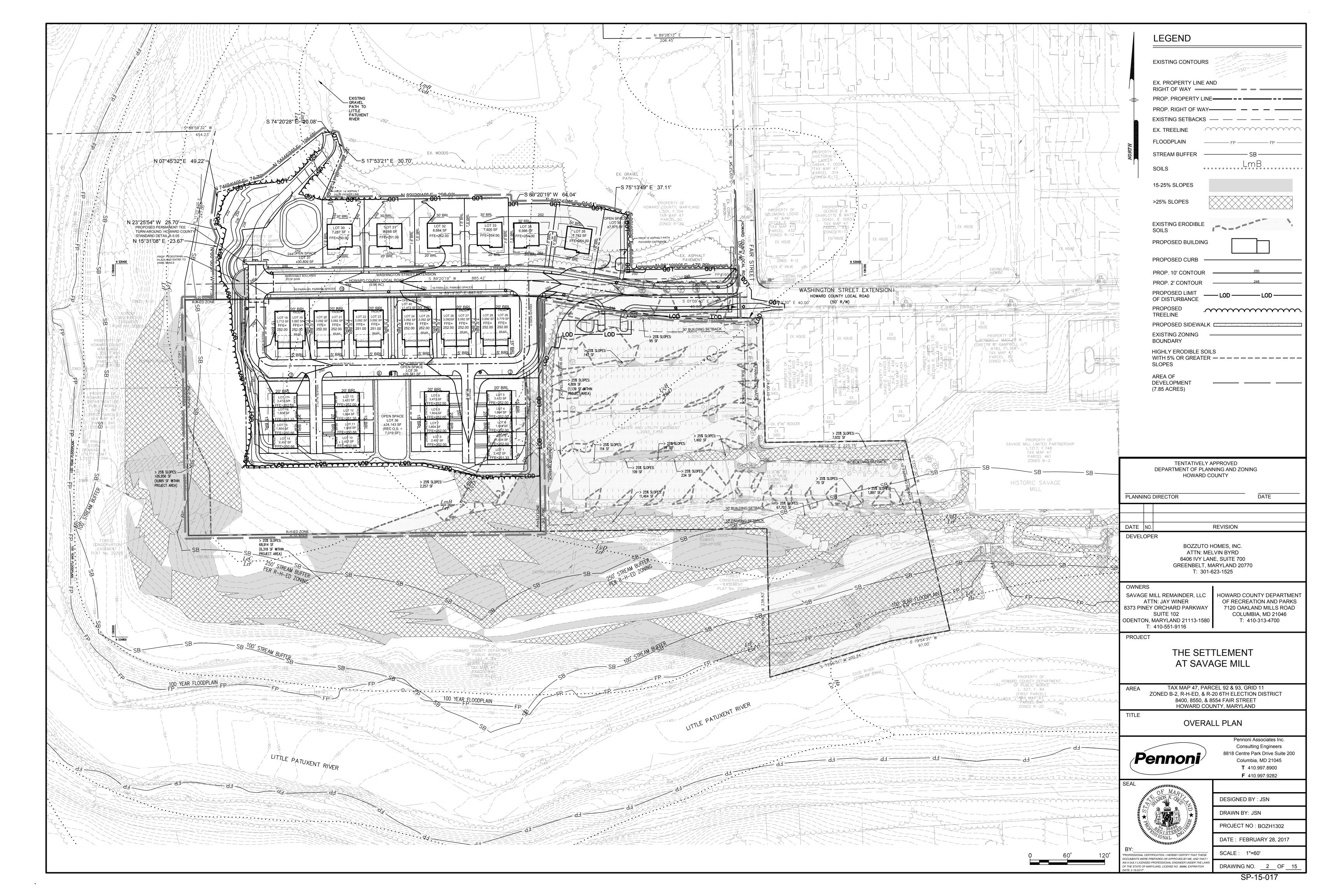
# LOCATION PLAN

SCALE: 1" = 100'

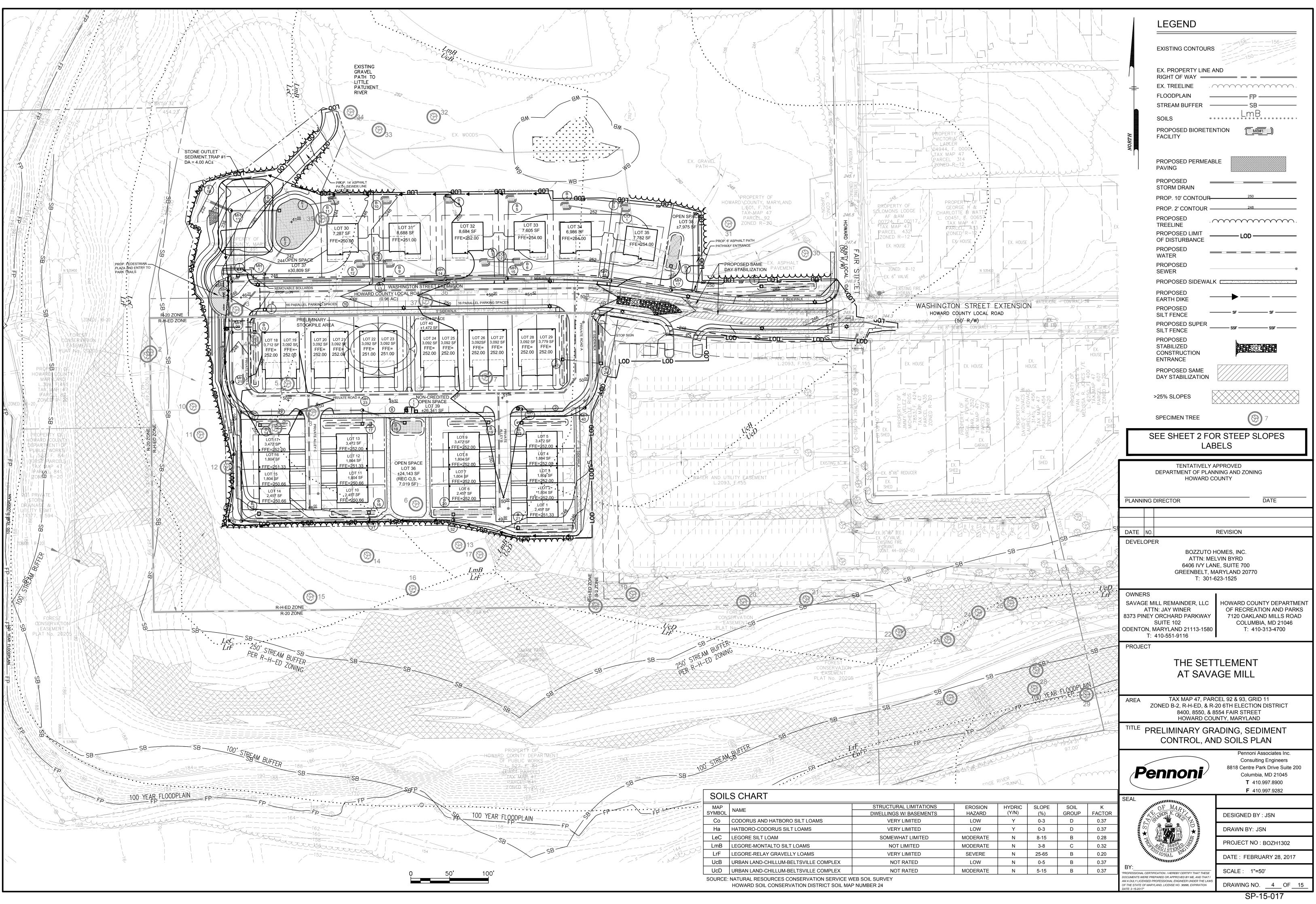
LOT	GROSS	PIPESTEM	MINIMUM	LOT	LOT	GROSS	PIPESTEM	MINIMUM	LOT
NO.	AREA (SF)	AREA (SF)	LOT SIZE (SF)	COVERAGE(%)	NO.	AREA (SF)	AREA (SF)	LOT SIZE (SF)	COVERAGE (%)
1	2,457	-	2,457	37%	34	6,986	-	6,986	24%
2	1,804	-	1,804	50%	35	7,782	-	7,782	22%
3	1,804	-	1,804	50%	36	30,603	-	30,603	
4	1,804	-	1,804	50%	37	23,791	-	23,791	
5	3,472	-	3,472	26%	38	7,975	-	7,975	
6	2,457	-	2,457	37%	39	26,341	-	26,341	
7	1,804	-	1,804	50%	40	1,472	-	1,472	
8	1,804	-	1,804	50%					
9	3,472	-	3,472	26%					
10	2,457	-	2,457	37%					
11	1,804	-	1,804	50%					
12	1,804	-	1,804	50%					
13	3,472	-	3,472	26%	LOT SIZE: R-H-ED:				
14	2,457	-	2,457	37%					
15	1,804	-	1,804	50%	І мі	NIMUM SFD LO	DT SIZE ALLO	WED: 6,000 SF	
16	1,804	-	1,804	50%	MAXIMUM SFD LOT SIZE PROPOSED: $N/A$ R-20(R-ED)*:				
17	3,472	-	3,472	26%					
18	3,712	-	3,712	38%					
19	3,092	-	3,092	46%	MINIMUM LOT SIZE ALLOWED: 6,000 SF				
20	3,092	-	3,092	46%	MAXIMUM LOT SIZE PROPOSED: 8,688 SF				
21	3,092	-	3,092	46%					
22	3,092	-	3,092	46%	* R-ED REGULATIONS ARE USED IN THIS AREA DUE				
23	3,092	-	3,092	46%	ТО	PROPOSED [	DENSITY TRAN	SFER.	
24	3,092	-	3,092	46%					
25	3,092	-	3,092	46%					
26	3,092	-	3,092	46%					1
27	3,092	-	3,092	46%				NOTE #35 FOR	
28	3,092	-	3,092	46%			<u>9, General</u> N ON THE LA		
29	3,779	-	3,779	37%			IN UN ITE LA	IND SWAP.	
30	7,287	-	7,287	23%					1
31	8,688	-	8,688	20%					
32	8,684	-	8,684	20%					
33	7,605	-	7,605	22%					

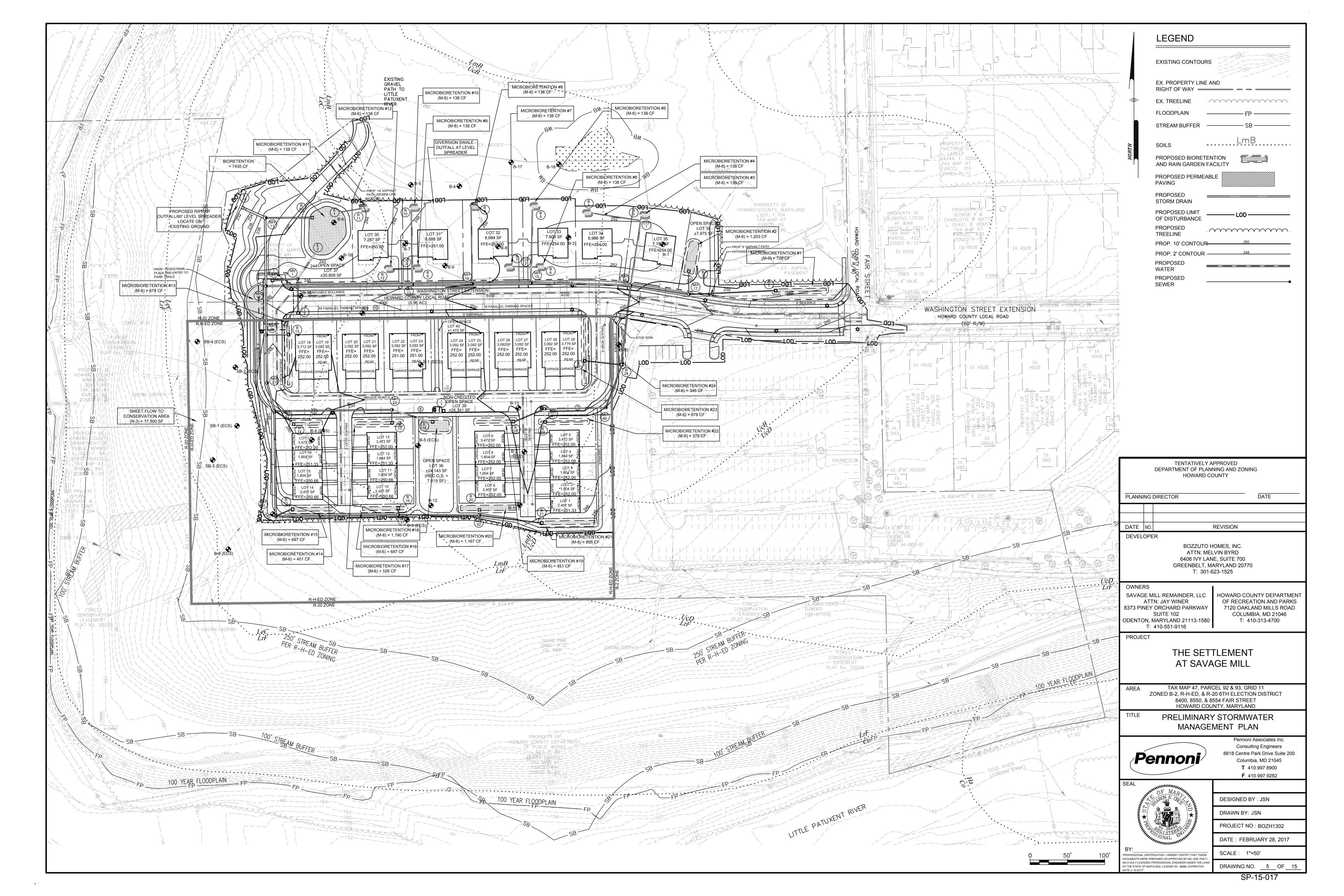
αίτε ανιαί ναις πατά		Ι		Qu
<u>SITE ANALYSIS DATA</u> <u>existing zoning:</u>			32)	PON CRO
4.95 ACRES (215,863 SF) R–20 (RESIDENTIAL: SINGLE)			HT.	$\langle \rangle$
2.73 ACRES (119,001 SF)		+	H = 1	
B–2 (BUSINESS GENERAL) 5.11 ACRES (222,736 SF)				$\sim \wedge$
<u>GROSS_AREA_OF_SITE:</u> COUNTY_R/W: 0.51_ACRES (22,069_SF)		MARTH MARTH	TOUNDRY BALTIMORE ST.	$\leq$
PARCEL 92: 63.68 ACRES (2,773,900.8 PARCEL 93: 10.06 ACRES (438,214 SF)			Brit Hillion C O I	$\mathcal{O}$
TOTAL AREA: 74.25 ACRES (3,234,183.8 SF		47EC		
AREA OF DEVELOPMENT (PROJECT AREA = $B-2$ , $R-20$ , AND $R-H-ED$ ZON	<u>NING):</u>	GORMAN		
7.85 ACRES (341,852 SF) (5.12 AC OF PARCEL 93 + 2.73 AC OF PARCEL 92)		Los X	47FB POR	
GROSS TRACT AREA OF DEVELOPMENT: 7.85 AC (341,852 SF)		K ~ Y		Ŭ
OVERALL AREA OF FLOODPLAIN (WITHIN GROSS AREA OF SITE) : 5.26 ACR	DES (220 165 SE)	XA		
(THERE IS NO FLOODPLAIN LOCATED WITHIN PROJECT AREA)	(223,103 51)		$\times$	
AREA OF STEEP SLOPES WITHIN GROSS AREA OF SITE:			VICINITY MAP SCALE: 1"=2,000'	·
15%–25%: ±0.55 ACRES (±23,866 SF) 25%+: ±1.58 ACRES (±68,619 SF)			COUNTY ADC MAP 40 GRIDS E4 C MAP USE LICENSE #3652	
25%+ ON R-20 ZONE: 0 ACRES (0 SF) (ONLY INCLUDES AREA IMMEDIATE	ELY ADJACENT TO			
PROJECT SITE 25%+ ON R-H-ED ZONE: $\pm 0.43$ ACRES ( $\pm 18,742$ SF)		HOWARD COU ELEVATION 2	BENCHMARKS JNTY SURVEY CONTROL: 47EC 33 691	
25%+ ON B-2 ZONE: ±1.15 ACRES (±49,877 SF)		N 534,261.232	E 1,359,948.1162 12' FROM FACE OF CURB ALON	IG
AREA OF STEEP SLOPES WITHIN R-H-ED PROJECT AREA: 0.026 AC (1,1	139 SF)			
(THERE ARE NO STEEP SLOPES WITHIN THE B-2 OR R-20 PROJECT AREA	)	ELEVATION 2	JNTY SURVEY CONTROL: 47FB 07.423 1 E 1,361228.6517	
NET TRACT AREA OF THE PROJECT AREA: 7.82 ACRES (340,713 SF)		LOCATION IS	2' FROM EDGE OF GORMAN RC TION WITH KNIGHTS BRIDGE R	
LIMIT OF DISTURBANCE: 6.01 ACRES (261,912 SF)		<b></b>	000000000000000000000000000000000000000	
<u>OVERALL AREA OF WETLANDS:</u> 0.087 ACRES (3,797 SF)			OORDINATE LIST 5,312.33 E 1,361,000.11	_
OVERALL AREA OF WETLAND BUFFERS: 0.21 ACRES (9,128 SF)		2 N 535	5,312.81         E 1,361,040.13           5,112.84         E 1,361,044.19	
WETLANDS WITHIN AREA OF DEVELOPMENT: 0.00 AC (0 SF)		4 N 535	5,112.54         E 1,361,341.03           5,810.58         E 1,361,341.02	
WETLAND BUFFERS WITHIN AREA OF DEVELOPMENT: 0.00 AC (0 SF)		6 N 534	4,735.41         E 1,361,051.83           4,974.19         E 1,361,046.98	$\exists$
OVERALL FOREST AREA: 45.43 ACRES (1,978,795 S AREA OF FOREST WITHIN AREA OF DEVELOPMENT: 8.13 ACRES (354,132 S	,	8 N 534	4,974.19         E 1,361,046.98           4,963.19         E 1,360,117.40           5,341.86         E 1,360,111.83	
(FOR FOREST PURPOSES AREA OF DEVELOPMENT ALSO INCLUDES B-2 ZON PARCEL 93 DUE TO PREVIOUS FOREST CONSERVATION PLANS APPROVED F	NED PORTION OF	10 N 535	5,342.45 E 1,360,162.05	
PROPERTY)		12 N 535	5,419.96         E 1,360,161.85           5,442.77         E 1,360,168.19	_
AREA OF FOREST WITHIN LOD: 4.82 ACRES (209,929 SF)	)	14 N 535	5,466.35E 1,360,157.975,515.12E 1,360,164.61	
AREA OF PROPOSED RESIDENTIAL LOTS: 2.88 ACRES (125,395 SF).		16 N 535	5,535.21E 1,360,236.625,612.95E 1,360,335.27	
AREA OF PROPOSED CREDITED OPEN SPACE LOTS: 1.47 ACRES (63,841 SF	F)		5,607.53E 1,360,354.605,578.32E 1,360,364.03	
AREA OF NON CREDITED OPEN SPACE LOTS (PRIVATE ROADS): 0.60 ACRES			5,502.44E 1,360,332.315,505.89E 1,360,631.22	
AREA OF PROPOSED PUBLIC ROADS WITHIN THE PROJECT: 0.96 ACRES (41			5,495.89E 1,360,631.345,496.63E 1,360,695.38	_
	1,990 51 ).	23 N 535	5,487.71 E 1,360,786.45 5,478.25 E 1,360,822.34	
THE NUMBER OF LOTS OR PARCELS PROPOSED IS AS FOLLOWS: BUILDABLE LOTS: 35		25 N 535	5,390.25         E 1,360,823.37           5,392.29         E 1,360,996.65	_
OPEN SPACE LOTS: 5 (4 CREDITED AND 1 NON-CREDITED. LOT 39 IS A PRIVATE STREET AND IS NOT CREDITED.)			·	
OPEN SPACE REQUIRED FOR THE PROPERTY: 50%	[	TENTATIVELY A DEPARTMENT OF PLAN	NING AND ZONING	
(BASED ON R–ED REQUIREMENTS) <u>OPEN SPACE PROVIDED ON THE PROPERTY:</u> 54%		HOWARD CO	JUNIY	
(63,841 SF OF O.S./119,001 SF OF R-20* LAND AREA) *NOTE: OPEN SPACE PROVIDED INCLUDES THE ENTIRE DEVELOPMENT,	PLANNING D	IRECTOR	DATE	
NOT JUST THE R-20 ZONED PORTIONS				
EACH SFA UNIT IN THE R-H-ED ZONE PROVIDES USEABLE OUTDOOR SPACE EQUAL TO A 15' DEEP YARD.				
ZONE R-H-ED BUILDING HEIGHT:	DATE NO.		REVISION	
MAXIMUM BUILDING HEIGHT: 40 FEET PROPOSED REAR-LOADED DUPLEX	DEVELOPER		IOMES, INC.	
BUILDING HEIGHT: 35 FEET PROPOSED FRONT- LOADED DUPLEX		ATTN: MEI		
BUILDING HEIGHT: 31 FEET		GREENBELT, M	ARYLAND 20770	
PROPOSED 3-STORY TOWNHOUSE BUILDING HEIGHT: 35 FEET PROPOSED 4 STORY TOWNHOUSE		1: 301-6	323-1525	
PROPOSED 4 STORY TOWNHOUSE BUILDING HEIGHT: 40 FEET	OWNERS SAVAGE MII	L REMAINDER, LLC	HOWARD COUNTY DEF	
ZONE R-20 (R-ED) BUILDING HEIGHT: *	ATTN	L REMAINDER, LLC I: JAY WINER )RCHARD PARKWAY	OF RECREATION AND 7120 OAKLAND MILL	) PARKS
MAXIMUM BUILDING HEIGHT: 34 FEET PROPOSED SINGLE-FAMILY DETACHED	S	UITE 102	COLUMBIA, MD 2	1046
J BUILDING HEIGHT: 30 FEET		ARYLAND 21113-1580 10-551-9116	T: 410-313-470	
<u>ZONE B-2 SETBACKS:</u> PUBLIC RIGHT-OF-WAY: 30 FEET	PROJECT			
RESIDENTIAL DISTRICT: 30 FEET PARKING USES: 10 FEET		THE SET	TLEMENT	
– <u>ZONE R-H-ED SETBACKS:</u>			GE MILL	
SFA FRONT OR SIDE: 20 FEET SFA FRONT OR SIDE				
W/DETACHED GARAGE: 20 FEET SFA FRONT OR SIDE	AREA		CEL 92 & 93, GRID 11	OT
W/OUT DETACHED GARAGE: 15 FEET	ZO	8400, 8550, & 8	20 6TH ELECTION DISTRI 554 FAIR STREET	СТ
		HOWARD COU	INTY, MARYLAND	
REAR TO PUBLIC STREET: 40 FEET REAR TO PRIVATE STREET: 20 FEET REAR TO INTERNAL ALLEY: 5 FEET	TITLE			
REAR TO PRIVATE STREET: 20 FEET REAR TO INTERNAL ALLEY: 5 FEET	TITLE	COVER	SHEET	
REAR TO PRIVATE STREET: 20 FEET REAR TO INTERNAL ALLEY: 5 FEET <u>ZONE R-20 (R-ED) SETBACKS (FROM LOT LINES):</u> * FRONT: 20 FEET	TITLE	COVER		Inc
REAR TO PRIVATE STREET: 20 FEET REAR TO INTERNAL ALLEY: 5 FEET <u>ZONE R-20 (R-ED) SETBACKS (FROM LOT LINES):</u> * FRONT: 20 FEET SIDE: 7.5 FEET REAR: 25 FEET			Pennoni Associates Consulting Engine	ers
REAR TO PRIVATE STREET: 20 FEET         REAR TO INTERNAL ALLEY: 5 FEET         ZONE R-20 (R-ED) SETBACKS (FROM LOT LINES):*         FRONT: 20 FEET         SIDE: 7.5 FEET         REAR: 25 FEET         PROJECT BOUNDARY SETBACK FOR SINGLE FAMILY DETACHED: 30 FEET			Pennoni Associates Consulting Engine 8818 Centre Park Drive S Columbia, MD 210	ers Suite 200 )45
REAR TO PRIVATE STREET: 20 FEET REAR TO INTERNAL ALLEY: 5 FEET <u>ZONE R-20 (R-ED) SETBACKS (FROM LOT LINES):</u> * FRONT: 20 FEET SIDE: 7.5 FEET REAR: 25 FEET			Pennoni Associates Consulting Engine 8818 Centre Park Drive S Columbia, MD 210 <b>T</b> 410.997.8900	ers Suite 200 )45 )
REAR TO PRIVATE STREET: 20 FEET         REAR TO INTERNAL ALLEY: 5 FEET         ZONE R-20 (R-ED) SETBACKS (FROM LOT LINES):*         FRONT: 20 FEET         SIDE: 7.5 FEET         REAR: 25 FEET         PROJECT BOUNDARY SETBACK FOR SINGLE FAMILY DETACHED: 30 FEET         PROPOSED WATER AND SEWER:	Pe	nnoni	Pennoni Associates Consulting Engine 8818 Centre Park Drive S Columbia, MD 210	ers Suite 200 )45 )
REAR TO PRIVATE STREET: 20 FEET         REAR TO INTERNAL ALLEY: 5 FEET         ZONE R-20 (R-ED) SETBACKS (FROM LOT LINES):*         FRONT: 20 FEET         SIDE: 7.5 FEET         REAR: 25 FEET         PROJECT BOUNDARY SETBACK FOR SINGLE FAMILY DETACHED: 30 FEET         PROPOSED WATER AND SEWER:         PUBLIC WATER AND SEWER         TOTAL NUMBER OF LOTS ALLOWED PER ZONING REGULATIONS:         WITHOUT LAND SWAP:	<b>Pe</b> SEAL	of MARINA	Pennoni Associates Consulting Engine 8818 Centre Park Drive Columbia, MD 210 <b>T</b> 410.997.8900 <b>F</b> 410.997.9282	ers Suite 200 )45 )
REAR TO PRIVATE STREET: 20 FEET         REAR TO INTERNAL ALLEY: 5 FEET         ZONE R-20 (R-ED) SETBACKS (FROM LOT LINES):*         FRONT: 20 FEET         SIDE: 7.5 FEET         REAR: 25 FEET         PROJECT BOUNDARY SETBACK FOR SINGLE FAMILY DETACHED: 30 FEET         PROPOSED WATER AND SEWER:         PUBLIC WATER AND SEWER         TOTAL NUMBER OF LOTS ALLOWED PER ZONING REGULATIONS:         WITHOUT LAND SWAP:         R-H-ED: 45 DU (4.52 NET AC/10 DU PER NET ACRE)         (NET ACREAGE = 4.95 GROSS AC - 0.43 AC STEEP SLOPES -	<b>Pe</b> SEAL	of MARINA	Pennoni Associates Consulting Engine 8818 Centre Park Drive S Columbia, MD 210 <b>T</b> 410.997.8900 <b>F</b> 410.997.9282 DESIGNED BY : JSN	ers Suite 200 )45 )
REAR TO PRIVATE STREET: 20 FEET REAR TO INTERNAL ALLEY: 5 FEET ZONE R-20 (R-ED) SETBACKS (FROM LOT LINES):* FRONT: 20 FEET SIDE: 7.5 FEET REAR: 25 FEET PROJECT BOUNDARY SETBACK FOR SINGLE FAMILY DETACHED: 30 FEET PROPOSED WATER AND SEWER: PUBLIC WATER AND SEWER TOTAL NUMBER OF LOTS ALLOWED PER ZONING REGULATIONS: WITHOUT LAND SWAP: R-H-ED: 45 DU (4.52 NET AC/10 DU PER NET ACRE) (NET ACREAGE = 4.95 GROSS AC - 0.43 AC STEEP SLOPES - 0 AC FLOODPLAIN = 4.52 NET AC)	<b>Pe</b> SEAL	of MARINA	Pennoni Associates Consulting Engine 8818 Centre Park Drive S Columbia, MD 210 T 410.997.8900 F 410.997.9282 DESIGNED BY : JSN DRAWN BY: JSN	ers Suite 200 )45 ) 2
REAR TO PRIVATE STREET: 20 FEET REAR TO INTERNAL ALLEY: 5 FEET $\frac{ZONE R-20 (R-ED) SETBACKS (FROM LOT LINES):*}{FRONT: 20 FEET}$ SIDE: 7.5 FEET REAR: 25 FEET PROJECT BOUNDARY SETBACK FOR SINGLE FAMILY DETACHED: 30 FEET $\frac{PROPOSED WATER AND SEWER:}{PUBLIC WATER AND SEWER}$ $\frac{TOTAL NUMBER OF LOTS ALLOWED PER ZONING REGULATIONS:}{WITHOUT LAND SWAP:}$ R-H-ED: 45 DU (4.52 NET AC/10 DU PER NET ACRE) (NET ACREAGE = 4.95 GROSS AC - 0.43 AC STEEP SLOPES - 0 AC FLOODPLAIN = 4.52 NET AC/ WITH LAND SWAP: R-H-ED: 29 DU (2.98 NET AC/10 DU PER NET ACRE )	<b>Pe</b> SEAL	of MARINA	Pennoni Associates Consulting Engine 8818 Centre Park Drive S Columbia, MD 210 T 410.997.8900 F 410.997.9282 DESIGNED BY : JSN DRAWN BY: JSN PROJECT NO : BOZH1	ers Suite 200 )45 ) 2
REAR TO PRIVATE STREET: 20 FEET REAR TO INTERNAL ALLEY: 5 FEET ZONE R-20 (R-ED) SETBACKS (FROM LOT LINES):* FRONT: 20 FEET SIDE: 7.5 FEET REAR: 25 FEET PROJECT BOUNDARY SETBACK FOR SINGLE FAMILY DETACHED: 30 FEET PROPOSED WATER AND SEWER: PUBLIC WATER AND SEWER TOTAL NUMBER OF LOTS ALLOWED PER ZONING REGULATIONS: WITHOUT LAND SWAP: R-H-ED: 45 DU (4.52 NET AC/10 DU PER NET ACRE) (NET ACREAGE = 4.95 GROSS AC - 0.43 AC STEEP SLOPES - 0 AC FLOODPLAIN = 4.52 NET AC/ WITH LAND SWAP: R-H-ED: 29 DU (2.98 NET AC/10 DU PER NET ACRE ) NET ACREAGE = 3.006 GROSS AC - 0.026 AC STEEP SLOPES - 0 AC FLOODPLAIN = 2.98 NET AC)	SEAL SEAL	nnoni	Pennoni Associates Consulting Engine 8818 Centre Park Drive S Columbia, MD 210 T 410.997.8900 F 410.997.9282 DESIGNED BY : JSN DRAWN BY: JSN	ers Suite 200 )45 ) 2
REAR TO PRIVATE STREET: 20 FEET          ZONE R-20 (R-ED) SETBACKS (FROM LOT LINES):*         FRONT: 20 FEET         SIDE: 7.5 FEET         REAR: 25 FEET         PROJECT BOUNDARY SETBACK FOR SINGLE FAMILY DETACHED: 30 FEET         PROPOSED WATER AND SEWER:         PUBLIC WATER AND SEWER         TOTAL NUMBER OF LOTS ALLOWED PER ZONING REGULATIONS:         WITHOUT LAND SWAP:         R-H-ED: 45 DU (4.52 NET AC/10 DU PER NET ACRE)         (NET ACREAGE = 4.95 GROSS AC - 0.43 AC STEEP SLOPES - 0 AC FLOODPLAIN = 4.52 NET AC)         WITH LAND SWAP:         R-H-ED: 29 DU (2.98 NET AC/10 DU PER NET ACRE )         NET ACREAGE = 3.006 GROSS AC - 0.026 AC STEEP SLOPES -	SEAL	of MARINA	Pennoni Associates Consulting Engine 8818 Centre Park Drive S Columbia, MD 210 T 410.997.8900 F 410.997.9282 DESIGNED BY : JSN DRAWN BY: JSN PROJECT NO : BOZH1	ers Suite 200 )45 ) 2

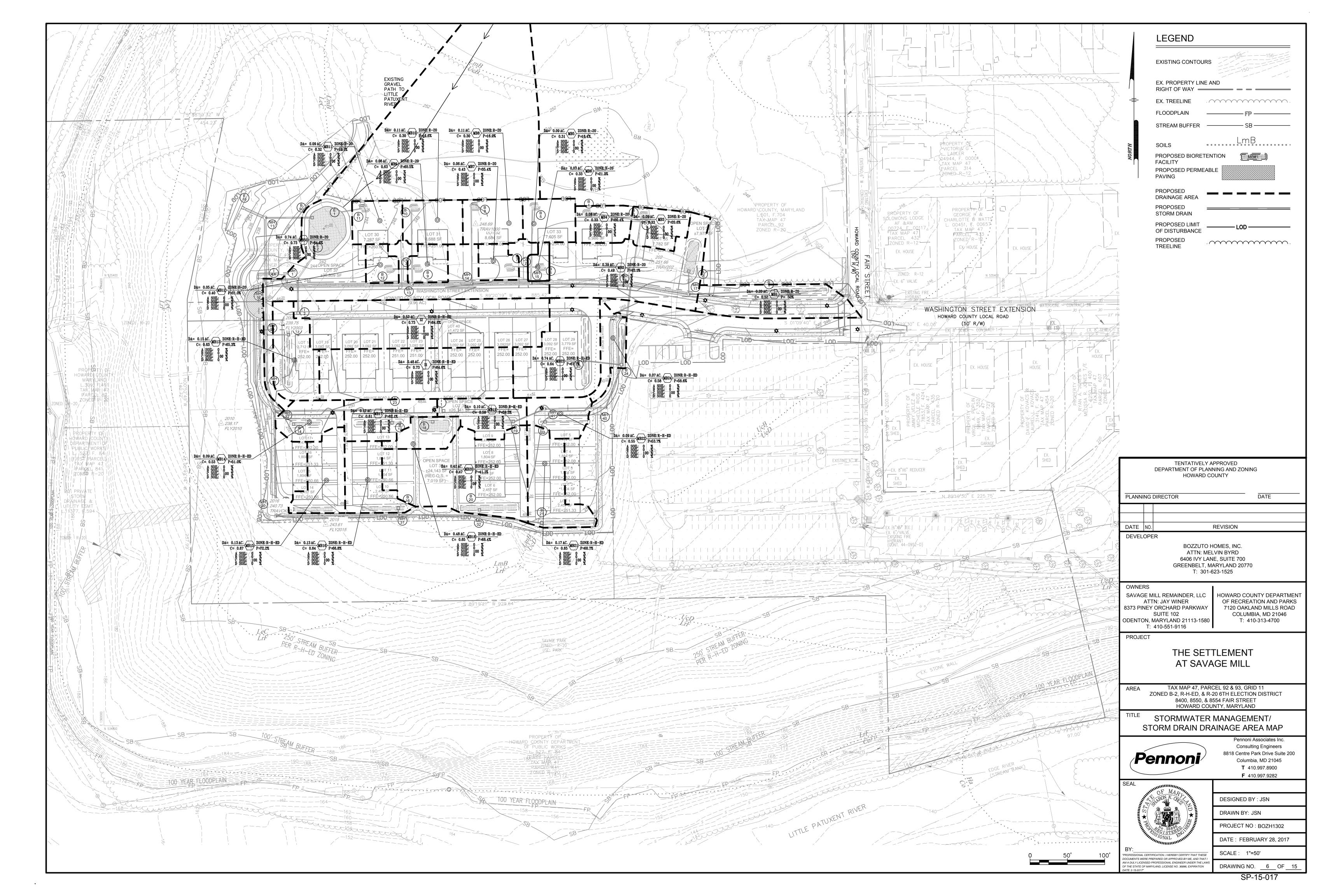
SP-15-017

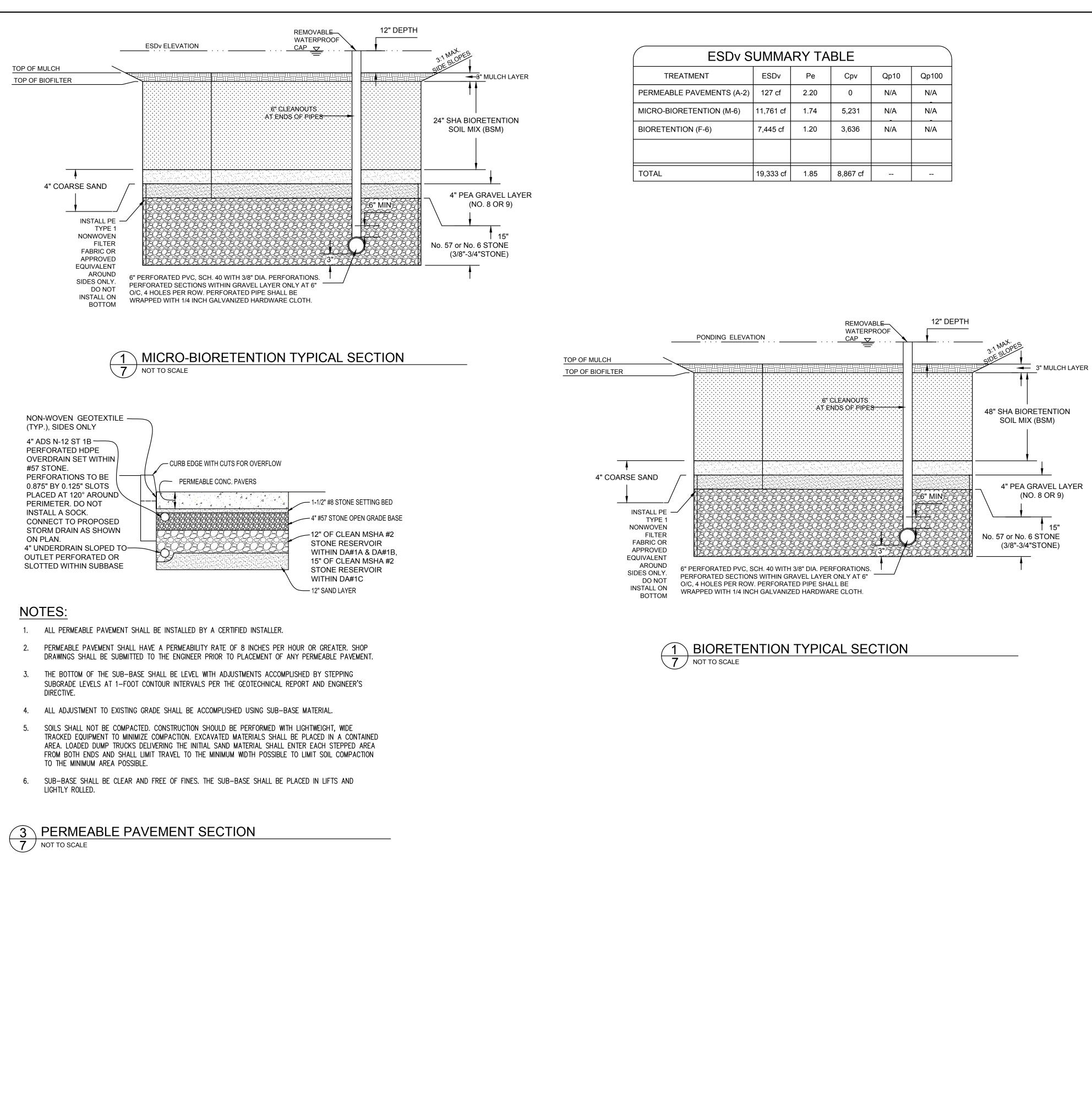




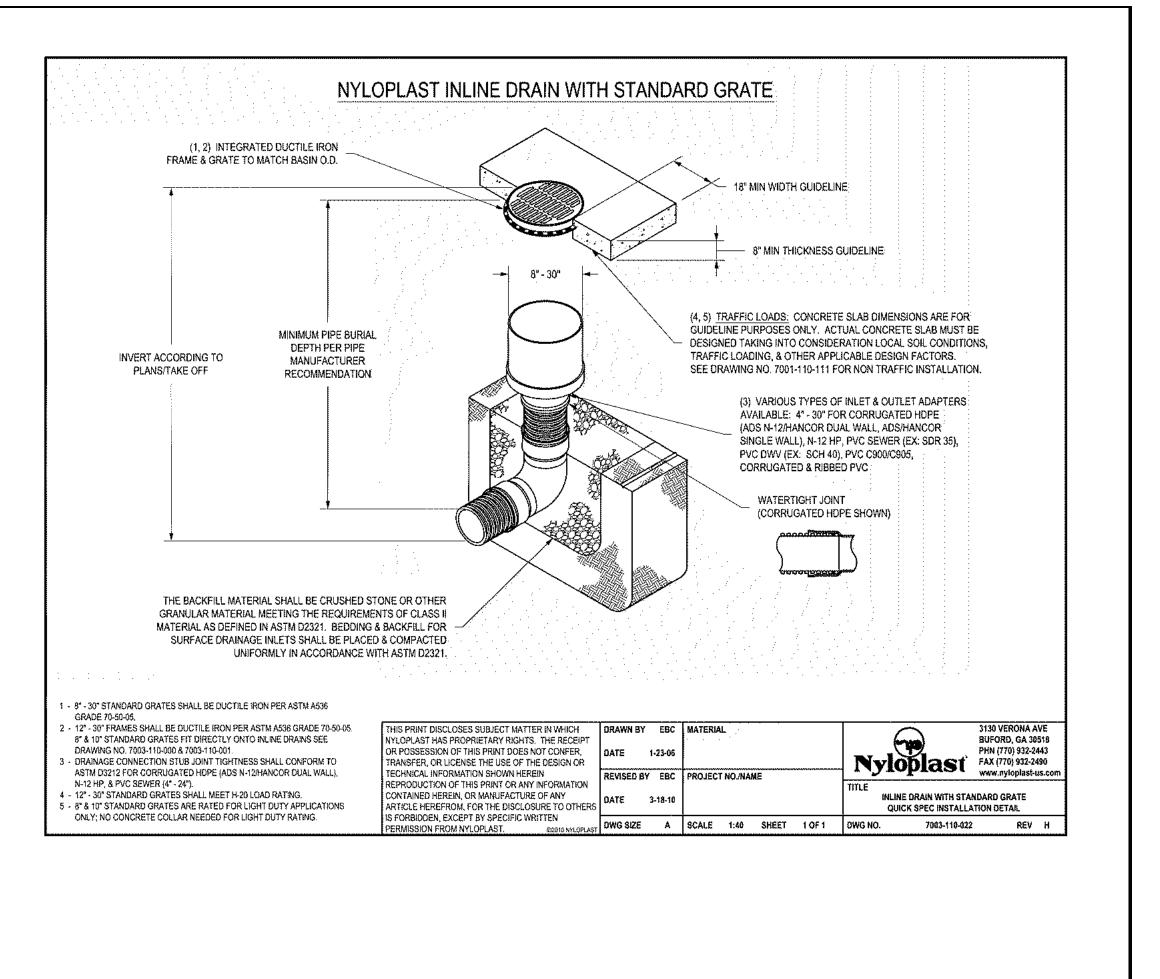




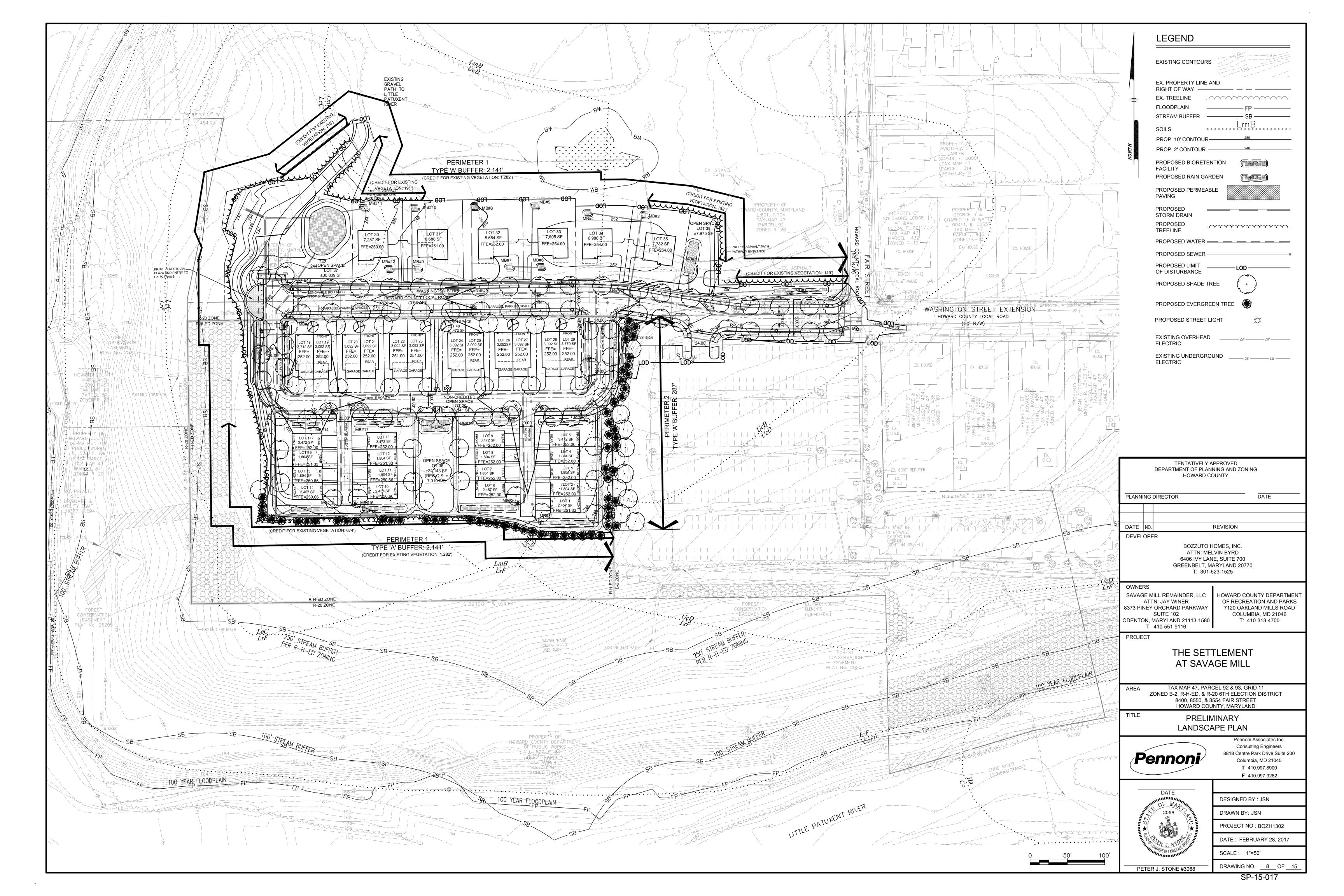


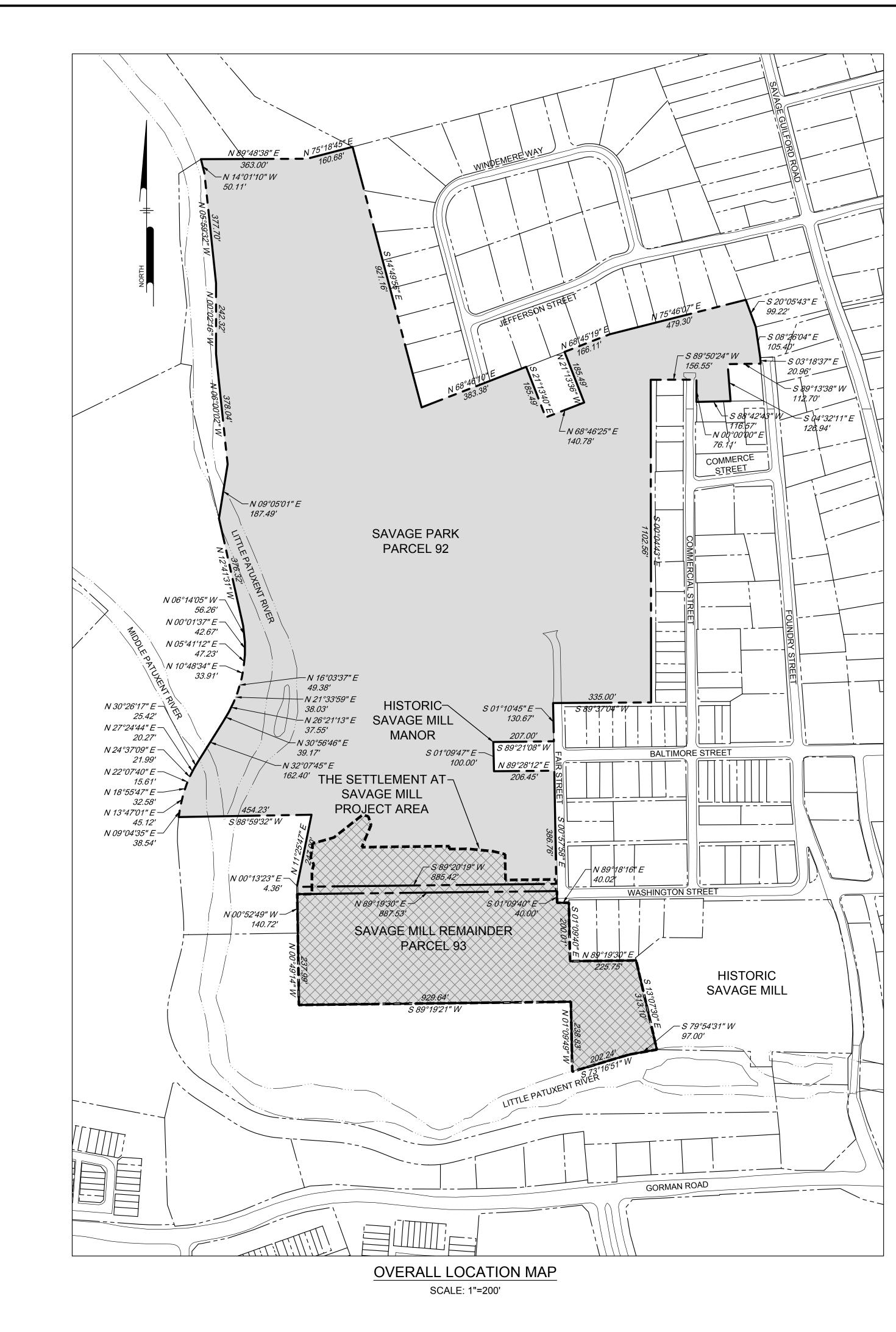


ESDv SUMMARY TABLE					
E3DV 3					
TREATMENT	ESDv	Ре	Срv	Qp10	Qp100
PERMEABLE PAVEMENTS (A-2)	127 cf	2.20	0	N/A	N/A
MICRO-BIORETENTION (M-6)	11,761 cf	1.74	5,231	N/A	N/A
BIORETENTION (F-6)	7,445 cf	1.20	3,636	N/A	N/A
TOTAL	19,333 cf	1.85	8,867 cf		



TENTATIVELY A DEPARTMENT OF PLAN HOWARD CO	NING AND ZONING				
PLANNING DIRECTOR	DATE				
DATE NO. REVISION					
DEVELOPER BOZZUTO HOMES, INC. ATTN: MELVIN BYRD 6406 IVY LANE, SUITE 700 GREENBELT, MARYLAND 20770 T: 301-623-1525					
OWNERS SAVAGE MILL REMAINDER, LLC ATTN: JAY WINER 8373 PINEY ORCHARD PARKWAY SUITE 102 ODENTON, MARYLAND 21113-1580 T: 410-551-9116	HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS 7120 OAKLAND MILLS ROAD COLUMBIA, MD 21046 T: 410-313-4700				
AT SAVA	TLEMENT GE MILL CEL 92 & 93, GRID 11 20 6TH ELECTION DISTRICT				
8400, 8550, & 8	554 FAIR STREET INTY, MARYLAND				
	MANAGEMENT AILS				
Pennoni Associates Inc. Consulting Engineers 8818 Centre Park Drive Suite 200 Columbia, MD 21045 T 410.997.8900 F 410.997.9282					
SEAL					
MARON K OR HARON K S + HON K S	DESIGNED BY : JSN				
	DRAWN BY: JSN				
	PROJECT NO : BOZH1302				
	DATE : FEBRUARY 28, 2017				
BY: "PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I	SCALE : AS SHOWN				
AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 36896, EXPIRATION DATE: 2-15-2017*	DRAWING NO. 7 OF 15				
	QD 15 017				





LANDSCAPE PLAN GENERAL NOTES:

THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.

FINANCIAL SURETY FOR THE REQUIRED LANDSCAPING MUST BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT WITH THE FINAL PLAN SUBMISSION.

3. THIS PLAN IS FOR LANDSCAPING PURPOSES ONLY.

4. CONTRACTOR IS SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES, PROCEDURES, AND SAFETY PRECAUTIONS AND PROGRAMS.

5. ALL MATERIAL SELECTED SHALL BE EQUAL TO OR BETTER THAN THE REQUIREMENTS OF THE "USA STANDARD FOR NURSERY STOCK", LATEST EDITION, AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN AND THE HOWARD COUNTY LANDSCAPE MANUAL.

6. ALL MATERIAL SHALL BE PLANTED IN ACCORDANCE WITH THE MINIMUM STANDARDS CITED IN THE LATEST EDITION OF "LANDSCAPE SPECIFICATION GUIDELINES" PUBLISHED BY THE LANDSCAPE CONTRACTORS ASSOCIATION AND THE HOWARD COUNTY LANDSCAPE MANUAL.

7. NO SUBSTITUTIONS OR RELOCATION OF PLANTS MAY BE MADE WITHOUT PRIOR APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING OF HOWARD COUNTY. ANY DEVIATION FROM THIS LANDSCAPE PLAN MAY RESULT IN A REQUIREMENT FOR SUBMITTAL OF AN OFFICIAL "REDLINE REVISION" TO THE SITE DEVELOPMENT PLAN(S) AND/OR DENIAL IN THE RELEASE OF LANDSCAPE SURETY.

8. SHOULD ANY TREE DESIGNATED FOR PRESERVATION FOR WHICH LANDSCAPING CREDIT IS GIVEN, DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE HOWARD COUNTY LANDSCAPE MANUAL.

9. POSTING OF SURETY FOR REQUIRED LANDSCAPING IN ACCORDANCE WITH SECTION 16.124 OF THE LANDSCAPE MANUAL FOR SHADE TREES, EVERGREENS, AND SHRUBS MUST BE POSTED AS PART OF THE GRADING PERMIT.

10. THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION. AND WHEN NECESSARY. REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION AND WHEN NECESSARY, REPAIRED OR REPLACED.

11. AT THE TIME OF INSTALLATION, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPING MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.

12. ADDITIONAL LANDSCAPING HAS BEEN PROVIDED ALONG THE EASTERN AND SOUTHERN BOUNDARIES OF THE PROJECTS BASED ON COMMENTS MADE BY THE DESIGN ADVISORY PANEL, THE HISTORIC PRESERVATION COMMISSION AND THE COMMUNITY

# GENERAL NOTES (CONTINUED FROM SHEET 1)

31. A 100 YEAR FLOODPLAIN IS LOCATED IN THE SOUTHEAST CORNER OF THE PROPERTY, ALONG THE LITTLE PATUXENT RIVER.

32. A PRESUBMISSION COMMUNITY MEETING OCCURRED ON MARCH 11, 2014 AT 7:00 PM AT CARROLL BALDWIN HALL, 9035 BALTIMORE STREET, SAVAGE, MD 20763. ADDITIONAL PRESUBMISSION COMMUNITY MEETINGS WERE HELD ON JULY 1, 2015, AND JANUARY 27, 2016, AT 6:30 PM AND 7 PM RESPECTIVELY AT CARROLL BALDWIN HALL, 9035 BALTIMORE STREET, SAVAGE, MD 20763.

33. LAND CONDOMINIUM PLAT TITLED "SAVAGE MILL LAND CONDOMINIUM" WAS RECORDED ON JUNE 30, 2008. THIS PLAT SHOWS LAND UNITS A, B, AND C, WHICH ARE REFLECTED ON THIS PLAN. THESE CONDOMINIUM PARCELS WILL BE VACATED IN THE FUTURE WITH THE PROPOSED SUBDIVISION.

34. FOREST INTERIOR DWELLING SPECIES (FIDS) PROTECTIVE MEASURES AS OUTLINED IN CORRESPONDENCE WITH MD-DNR HAVE BEEN ADDRESSED WITH THIS SKETCH PRELIMINARY PLAN. THESE MEASURES WILL BE IMPLEMENTED WITH THE FINAL SUBDIVISION AND SITE DEVELOPMENT PLANS. IN GENERAL THE STRATEGIES OUTLINED IN THE JULY 25, 2014 LETTER FOR PROTECTION OF THESE SPECIES AND THEIR HABITATS WILL INCLUDE ENVIRONMENTAL SITE DESIGN MEASURES FOR STORMWATER MANAGEMENT, LIMITATION ON CLEARING TO THE MINIMUM NEEDED. AND SOIL STABILIZATION MEASURES. STORMWATER MANAGEMENT FOR THIS SITE IS BEING PROVIDED BY MICROSCALE PRACTICES INCLUDING MICROBIORETENTION FACILITIES AND RAIN GARDENS. A LARGE BIORETENTION AREA IS ALSO PROVIDED WITHIN THE PROJECT.

35. A LAND SWAP WITH THE HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS IS BEING PROPOSED AS PART OF THIS PROJECT. THE DEVELOPER WILL RECEIVE APPROXIMATELY 2.73 ACRES OF R-20 ZONED LAND FROM RECREATION AND PARKS IN EXCHANGE FOR APPROXIMATELY 2.76 ACRES OF R-H-ED/B-2 ZONED LAND THAT WILL BE DEDICATED TO HOWARD COUNTY. IN ADDITION. OTHER OPEN SPACE FROM THE PROJECT WILL LIKELY BE DEDICATED TO THE COUNTY THROUGH THE SUBDIVISION PROCESS. THIS LAND SWAP HAS BEEN AGREED TO IN PRINCIPLE BETWEEN THE DEVELOPER AND THE COUNTY AND IS BEING COORDINATED WITH THE STATE DEPARTMENT OF NATURAL RESOURCES. SHOULD THE LAND SWAP NOT COME TO FRUITION. THE DEVELOPER WOULD UTILIZE THE CONCEPT PLAN APPROVED UNDER ECP-14-029, AND THIS SP WOULD BE REDESIGNED ACCORDINGLY.

36. ALL LOTS/RESIDENTIAL UNITS IN THIS SUBDIVISION ARE SUBJECT TO MIHU FEE-IN-LIEU REQUIREMENTS THAT ARE TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT.

37. SECTION 111.1.F.4.(A-H) OF THE HOWARD COUNTY ZONING REGULATIONS HAVE BEEN ADDRESSED AS FOLLOWS:

- a. THE AREA OF DEVELOPMENT FOR THIS PROJECT INCLUDES 7.85 ACRES. THIS AREA'S EXISTING ENVIRONMENTAL RESOURCES INCLUDE FORESTED AREAS AND SPECIMEN TREES. THESE RESOURCES HAVE BEEN SHOWN ON THE PRELIMINARY EQUIVALENT SKETCH PLANS. THERE ARE NO WETLANDS, STREAMS, BUFFER, FLOODPLAINS, OR STEEP SLOPES ON THE AREA OF DEVELOPMENT. THERE ARE NO STRUCTURES ON THE AREA OF DEVELOPMENT. THERE ARE HISTORIC STRUCTURES, STREAMS, WETLANDS, BUFFERS FLOODPLAINS, AND STEEP SLOPES ADJACENT TO THE AREA OF DEVELOPMENT. THESE RESOURCES HAVE BEEN PROTECTED, PRESERVED, AND BUFFERED WITH THIS DEVELOPMENT. THE AREA OF GREATEST IMPACT WILL BE THE REMOVAL OF FORESTED AREAS, WHICH IS UNAVOIDABLE IN ORDER TO DEVELOP THIS FULLY WOODED SITE. EXISTING VEGETATION WILL BE RETAINED TO THE MAXIMUM EXTENT POSSIBLE
- b. THE PROPOSED SITE IMPROVEMENTS WILL BE BUFFERED FROM THE EXISTING RESOURCES. THIS PLAN PROPOSES NO IMPACTS TO COUNTY REGULATED STEEP SLOPES, STREAMS, STREAM BUFFERS, WETLANDS, OR FLOODPLAINS, AND WITH THE PROPOSED LAND SWAP, THE PROPOSED DEVELOPMENT HAS BEEN SHIFTED FURTHER AWAY FROM THESE RESOURCES.
- c. NO SENSITIVE AREAS ARE BEING DISTURBED BY THE PROPOSED DEVELOPMENT. TREE CLEARING (4.82 ACRES) WILL BE MINIMIZED TO THE MAXIMUM EXTENT POSSIBLE USING PRUNING AND ROOT PRUNING PRACTICES DURING CONSTRUCTION, MINIMIZING GRADE CHANGES ACROSS THE SITE, AND BY LIMITING THE DEVELOPMENT FOOTPRINT. THESE MEASURES ARE OUTLINED ON SHEET 12 OF THE PRELIMINARY EQUIVALENT SKETCH PLANS.
- d. THE PROPOSED DEVELOPMENT INCLUDES THE CLEARING OF 4.82 ACRES OF FOREST AND THE DISTURBANCE OF APPROXIMATELY 6.01 ACRES. THE CLEARING AND GRADING HAS BEEN LIMITED TO THE NORTHERN PORTION OF THE DEVELOPMENT AREA, WHERE THE SITE IS MORE GENTLY SLOPED.
- e. THE EARTHMOVING ASSOCIATED WITH THE PROJECT IS LIMITED TO THE MORE LEVEL AREAS OF THE SITE WHERE MINIMAL EARTH MOVING WILL BE REQUIRED TO TIE OUT TO EXISTING GRADES AND DEVELOP THE PROJECT. THE SITE PROVIDES A LARGE

PROJECT.

38. DESIGN ADVISORY PANEL MEETINGS FOR THIS PROJECT WERE HELD ON OCTOBER 14, 2015 AND FEBRUARY 10, 2016. BOTH MEETINGS WERE HELD AT 3430 COURTHOUSE DRIVE, ELLICOTT CITY, MD, 21043, AT 7:30 PM. A DIRECTOR'S ENDORSEMENT FOR THE PROJECT WAS OBTAINED ON MARCH 4, 2016.

39. HISTORIC PRESERVATION COMMISSION (HPC) MEETINGS FOR ADVISORY COMMENTS FOR THIS PROJECT WERE HELD ON JULY 2, 2015, AND OCTOBER 1, 2015. BOTH MEETINGS WERE HELD AT 3430 COURTHOUSE DRIVE, ELLICOTT CITY, MD, 21043, AT 7:00 PM. ADVISORY COMMENTS WERE PROVIDED AT BOTH MEETINGS. ADVISORY COMMENTS INCLUDED THE FOLLOWING:

SUBMISSION TO THE HPC. BUILDINGS.

40. AN ALTERNATIVE COMPLIANCE REQUEST FOR THIS PROJECT (WP-17-002) FROM SECTION 16.120(c)(4) AND SECTION 16.1205(a)(7) WAS APPROVED ON \_\_\_\_\_. THE FOLLOWING CONDITIONS WILL APPLY TO THIS APPROVAL:

THE DECISION ON THE ALTERNATIVE COMPLIANCE REQUEST WILL BE DEFERRED UNTIL THE PROJECT HAS BEEN REVIEWED BY THE PLANNING BOARD.

41. THIS SP WAS REVIEWED BY THE PLANNING BOARD ON \_\_\_\_, PLANNING BOARD CASE # \_\_\_\_·

42. THIS PROJECT IS NOT LOCATED ON A SCENIC ROAD.

43. RECREATIONAL OPEN SPACE FOR THIS PROJECT IS PROVIDED BY 20'+ DEEP FRONT YARDS ON THE 29 ATTACHED UNITS, 7,600 SF OF OPEN LAWN AND LANDSCAPE AREA (OPEN SPACE LOT 36), WALKWAYS AND TRAILS THROUGHOUT DEVELOPMENT, AND A TRAILHEAD FOR SAVAGE PARK.

44. ONE DENSITY UNIT MUST BE IMPORTED FOR THIS PROJECT TO ALLOW THE USE OF THE R-ED ZONING REGULATIONS FOR THE R-20 ZONED PORTION OF THE PROPERTY. THIS UNIT IS BEING IMPORTED THROUGH THE NEIGHBORHOOD PRESERVATION PROGRAM, AND WILL BE IMPORTED FROM \_\_\_\_ (PLAN # \_\_\_\_).

45. IN ACCORDANCE WTIH SECTION 118.0.A.11, "IN A DEVELOPMENT WITH A PLAN SHOWING AN INTEGRATED DESIGN THAT INCORPORATES MORE THAN ONE ZONING DISTRICT, THERE IS NO REQUIRED SETBACK FROM AN INTERNAL ZONING DISTRICT BOUNDARY."

46. ALL UNITS LOCATED ON AND ACCESSED FROM PRIVATE STREETS (29 DUPLEX AND TOWNHOUSE UNITS) WILL BE REQUIRED TO HAVE PRIVATE TRASH AND RECYCLING COLLECTION.

47. THE APPLICANT WILL STUDY MATERIALS FROM OLD SAVAGE IN AN EFFORT TO HARMONIZE THIS DEVELOPMENT WITH THE EXISTING CONDITIONS TO THE EXTENT THAT THE MATERIALS ARE PRACTICAL AND MARKETABLE. -50°

STREET TREE CALCULATIONS					
WASHINGTON STREET EXTENSION	1,604'/40	40 LARGE TREES			
PRIVATE ROAD A	1,294'/40	32 LARGE TREES			
TOTAL TREES REQUIRED	72 LARGE TREES				
TOTAL TREES PROVIDED	73 LARGE TREES				

SCHEDULE A - PERIMETER LANDSO		Ξ
		ENT TO PROPERTIES
PERIMETER	1	2
LANDSCAPE TYPE	A	А
LINEAR FEET OF ROADWAY FRONTAGE/ PERIMETER	2,141'	287'
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	YES 1,282'	NO -
CREDIT FOR WALL, FENCE, BERM OR DRIVE AISLE (YES/NO/LINEAR FEET)	NO -	NO -
LINEAR FEET REMAINING	347'	287'
NUMBER OF PLANTS REQUIRED: SHADE TREES EVERGREEN TREES FLOWERING TREES SHRUBS	6 0 0 0	5 0 0 0

# SCHEDULE C - RESIDENTIAL DEVELOPMENT INTERNAL LANDSCAPING

NUMBER OF DWELLING UNITS	29
NUMBER OF SHADE TREES REQUIRED (1/1 SFA; 1/3 APTS)	29
NUMBER OF TREES PROVIDED SHADE TREES OTHER TREES (2:1 SUBSTITUTION)	13 32

NOTE: INTERNAL LANDSCAPING FOR RESIDENTIAL DEVELOPMENT WILL BE ADDRESSED BY ON-LOT LANDSCAPING AND BY LANDSCAPING PROVIDED IN RESPONSE TO DESIGN ADVISORY PANEL RECOMMENDATIONS.

BUFFER ALONG THE SOUTH AND WEST SLOPES ADJACENT TO THE LITTLE PATUXENT RIVER, MAINTAINING THE EXISTING CHARACTER OF THIS STREAM VALLEY. THE USE OF NATIVE PLANT MATERIAL WILL BE A PART OF THE LANDSCAPE PLAN FOR THIS

f. THIS PROJECT COMPLIES WITH THE COUNTY FOREST CONSERVATION PROGRAM BY 2.54 ACRES OF ON-SITE RETENTION. 0.95 ACRES OF ON AND OFFSITE PLANTING. AND 0.23 ACRES OF OFF-SITE RETENTION. THE OFFSITE PLANTING AREAS INCLUDE THE RESTORATION OF PREVIOUSLY DISTURBED AREAS WITHIN SAVAGE PARK. IMMEDIATELY ADJACENT TO THIS SITE.

a. CONSTRUCTION PRACTICES FOR THIS SITE MAY INCLUDE ROOT PRUNING, TREE PRUNING, AND OTHER MEASURES RECOMMENDED BY QUALIFIED PROFESSIONALS TO MAINTAIN THE EXISTING VEGETATION ABUTTING THE SITE. AND TO PRESERVE EXISTING TREES ON SITE. STANDARD, COUNTY REGULATED SEDIMENT CONTROL PRACTICES WILL BE FOLLOWED DURING CONSTRUCTION. PLANTING AREAS WILL REQUIRE LONG TERM MAINTENANCE TO ENSURE THAT THEY SURVIVE AND THRIVE, ENHANCING THE EXISTING RESOURCES ON THE SITE. PRECONSTRUCTION AND POST CONSTRUCTION PRACTICES AS OUTLINED ON THE FOREST CONSERVATION PLAN (SHEET 12) WILL BE IMPLEMENTED FOR THIS PROJECT.

h. FOREST CONSERVATION EASEMENTS WILL BE PUT IN PLACE WITH THIS PLAN PROVIDING PROTECTION FOR THE ENVIRONMENTAL BUFFERS AND SENSITIVE AREAS OF THE SITE. THE DEVELOPMENT AREA OF THIS PROJECT DOES NOT INCLUDE THE PRESENCE OF ANY HISTORIC STRUCTURES OR SETTINGS.

a) PROVIDE A LANDSCAPE BUFFER ALONG THE EASTERN PROJECT BOUNDARY. b) PROVIDE A FINAL COLOR PALETTE AT TIME OF FINAL SUBMISSION HPC. c) PROVIDE ADDITIONAL DETAIL TO THE EAST-WEST SITE CROSS SECTION AT TIME OF FINAL

d) MAKE THE PROJECT COMPATIBLE WITH THE AREA, NOT A COPY OF ANY OF THE EXISTING

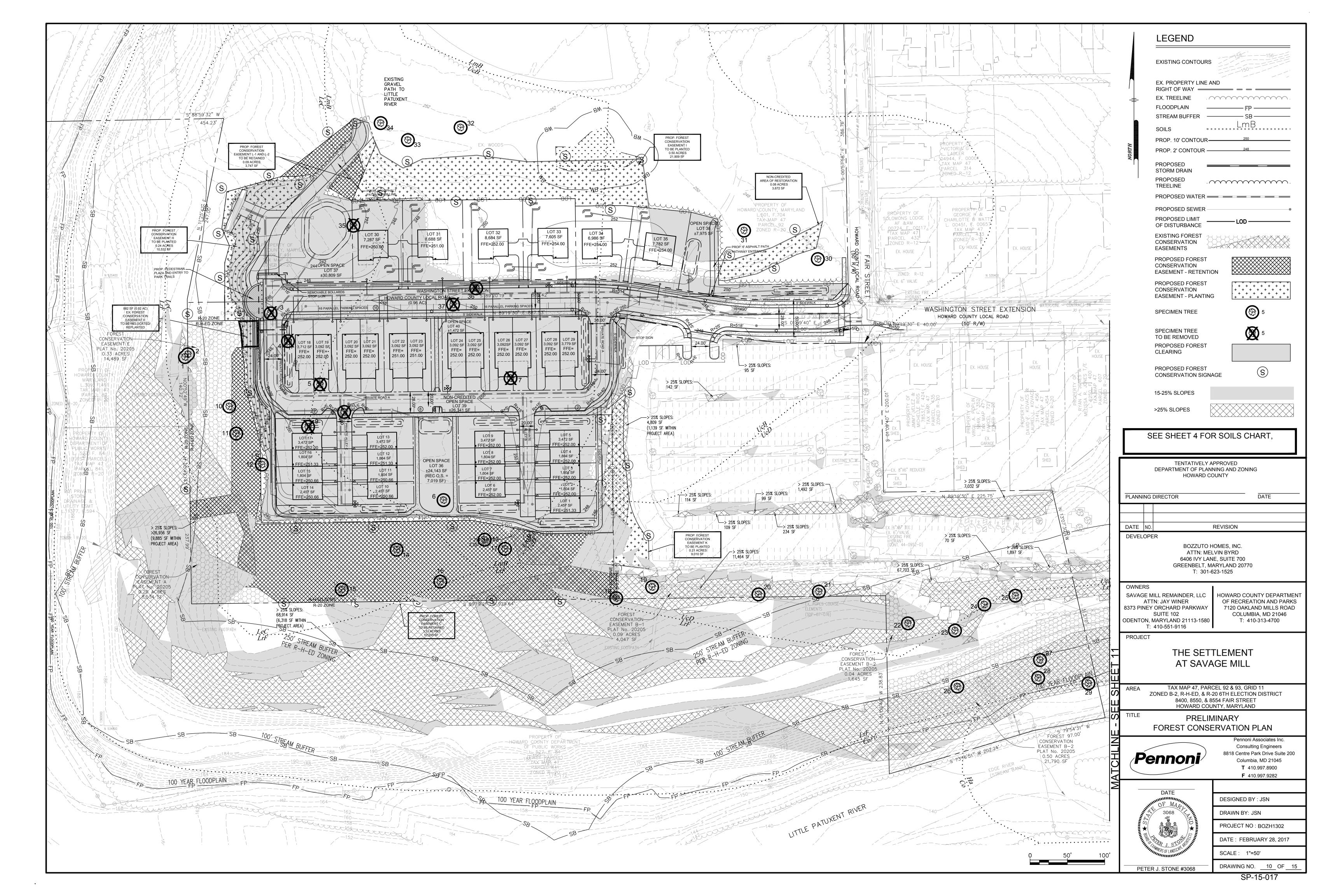
e) REVIEW APPEARANCE OF PROJECT FROM MULTIPLE PERSPECTIVES.

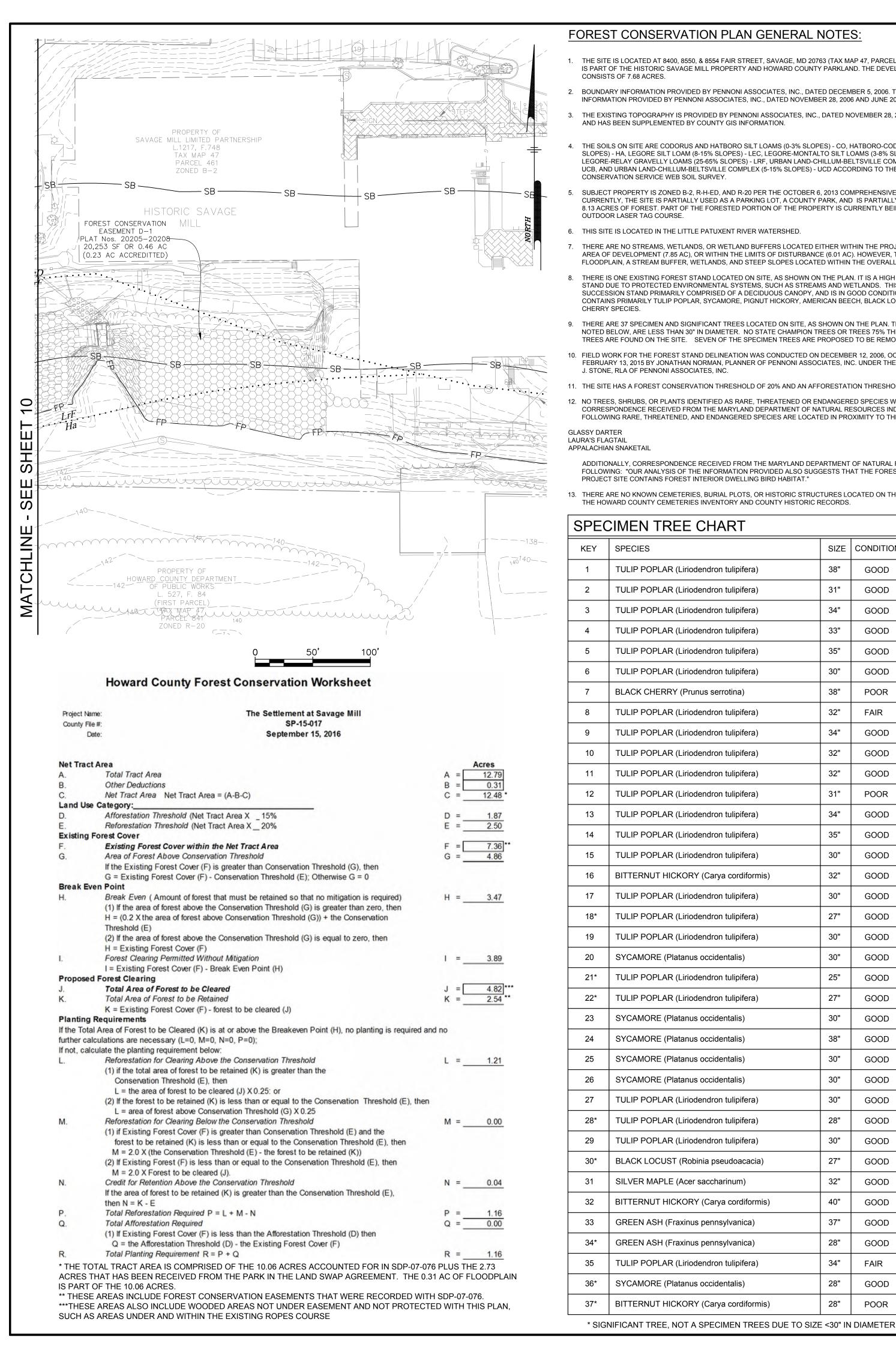
TENTATIVELY APPROVED DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY DATE PLANNING DIRECTOR DATE NO. REVISION DEVELOPER BOZZUTO HOMES, INC. ATTN: MELVIN BYRD 6406 IVY LANE, SUITE 700 **GREENBELT, MARYLAND 20770** T: 301-623-1525 OWNERS SAVAGE MILL REMAINDER, LLC HOWARD COUNTY DEPARTMENT ATTN: JAY WINER OF RECREATION AND PARKS 8373 PINEY ORCHARD PARKWAY 7120 OAKLAND MILLS ROAD SUITE 102 COLUMBIA, MD 21046 ODENTON, MARYLAND 21113-1580 T: 410-313-4700 T: 410-551-9116 PROJECT THE SETTLEMENT AT SAVAGE MILL TAX MAP 47, PARCEL 92 & 93, GRID 11 AREA ZONED B-2, R-H-ED, & R-20 6TH ELECTION DISTRICT 8400, 8550, & 8554 FAIR STREET HOWARD COUNTY, MARYLAND TITLE PRELIMINARY LANDSCAPE NOTES, AND DETAILS Pennoni Associates Inc. Consulting Engineers 8818 Centre Park Drive Suite 200 Pennoni Columbia, MD 21045 **T** 410.997.8900 **F** 410.997.9282 DATE DESIGNED BY : JSN DRAWN BY: JSN 3068 PROJECT NO : BOZH1302 DATE : FEBRUARY 28, 2017 SCALE : AS SHOWN

DRAWING NO. 9 OF 15 PETER J. STONE #3068

SP-15-017

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# FOREST CONSERVATION PLAN GENERAL NOTES

THE SITE IS LOCATED AT 8400, 8550, & 8554 FAIR STREET, SAVAGE, MD 20763 (TAX MAP 47, PARCEL 92 AND PARCEL 93) AND IS PART OF THE HISTORIC SAVAGE MILL PROPERTY AND HOWARD COUNTY PARKLAND. THE DEVELOPMENT AREA

BOUNDARY INFORMATION PROVIDED BY PENNONI ASSOCIATES, INC., DATED DECEMBER 5, 2006. TOPOGRAPHIC INFORMATION PROVIDED BY PENNONI ASSOCIATES, INC., DATED NOVEMBER 28, 2006 AND JUNE 2015.

3. THE EXISTING TOPOGRAPHY IS PROVIDED BY PENNONI ASSOCIATES, INC., DATED NOVEMBER 28, 2006, AND APRIL 2015, AND HAS BEEN SUPPLEMENTED BY COUNTY GIS INFORMATION.

4. THE SOILS ON SITE ARE CODORUS AND HATBORO SILT LOAMS (0-3% SLOPES) - CO, HATBORO-CODORUS SILT LOAMS (0-3% SLOPES) - HA, LEGORE SILT LOAM (8-15% SLOPES) - LEC, LEGORE-MONTALTO SILT LOAMS (3-8% SLOPES) - LMB, LEGORE-RELAY GRAVELLY LOAMS (25-65% SLOPES) - LRF, URBAN LAND-CHILLUM-BELTSVILLE COMPLEX (0-5% SLOPES) -UCB, AND URBAN LAND-CHILLUM-BELTSVILLE COMPLEX (5-15% SLOPES) - UCD ACCORDING TO THE NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY.

SUBJECT PROPERTY IS ZONED B-2, R-H-ED, AND R-20 PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN. CURRENTLY, THE SITE IS PARTIALLY USED AS A PARKING LOT, A COUNTY PARK, AND IS PARTIALLY UNDEVELOPED WITH 8.13 ACRES OF FOREST. PART OF THE FORESTED PORTION OF THE PROPERTY IS CURRENTLY BEING USED AS AN

THIS SITE IS LOCATED IN THE LITTLE PATUXENT RIVER WATERSHED.

7. THERE ARE NO STREAMS, WETLANDS, OR WETLAND BUFFERS LOCATED EITHER WITHIN THE PROJECT SITE (12.79 AC), THE AREA OF DEVELOPMENT (7.85 AC), OR WITHIN THE LIMITS OF DISTURBANCE (6.01 AC). HOWEVER, THERE IS A 100 YEAR FLOODPLAIN, A STREAM BUFFER, WETLANDS, AND STEEP SLOPES LOCATED WITHIN THE OVERALL PROPERTY (74.25± AC).

8. THERE IS ONE EXISTING FOREST STAND LOCATED ON SITE, AS SHOWN ON THE PLAN. IT IS A HIGH PRIORITY FOREST STAND DUE TO PROTECTED ENVIRONMENTAL SYSTEMS, SUCH AS STREAMS AND WETLANDS. THIS STAND IS A MID SUCCESSION STAND PRIMARILY COMPRISED OF A DECIDUOUS CANOPY, AND IS IN GOOD CONDITION. THE STAND CONTAINS PRIMARILY TULIP POPLAR, SYCAMORE, PIGNUT HICKORY, AMERICAN BEECH, BLACK LOCUST, AND BLACK

9. THERE ARE 37 SPECIMEN AND SIGNIFICANT TREES LOCATED ON SITE, AS SHOWN ON THE PLAN. THE SIGNIFICANT TREES, NOTED BELOW, ARE LESS THAN 30" IN DIAMETER. NO STATE CHAMPION TREES OR TREES 75% THE SIZE OF CHAMPION TREES ARE FOUND ON THE SITE. SEVEN OF THE SPECIMEN TREES ARE PROPOSED TO BE REMOVED.

10. FIELD WORK FOR THE FOREST STAND DELINEATION WAS CONDUCTED ON DECEMBER 12, 2006, OCTOBER 16, 2013, AND FEBRUARY 13, 2015 BY JONATHAN NORMAN, PLANNER OF PENNONI ASSOCIATES, INC. UNDER THE SUPERVISION OF PETER J. STONE, RLA OF PENNONI ASSOCIATES, INC.

11. THE SITE HAS A FOREST CONSERVATION THRESHOLD OF 20% AND AN AFFORESTATION THRESHOLD OF 15%. 12. NO TREES, SHRUBS, OR PLANTS IDENTIFIED AS RARE, THREATENED OR ENDANGERED SPECIES WERE OBSERVED. CORRESPONDENCE RECEIVED FROM THE MARYLAND DEPARTMENT OF NATURAL RESOURCES INDICATES THAT THE FOLLOWING RARE, THREATENED, AND ENDANGERED SPECIES ARE LOCATED IN PROXIMITY TO THE SITE:

ADDITIONALLY, CORRESPONDENCE RECEIVED FROM THE MARYLAND DEPARTMENT OF NATURAL RESOURCES STATED THE FOLLOWING: "OUR ANALYSIS OF THE INFORMATION PROVIDED ALSO SUGGESTS THAT THE FOREST AREA ON THE PROJECT SITE CONTAINS FOREST INTERIOR DWELLING BIRD HABITAT.

13. THERE ARE NO KNOWN CEMETERIES, BURIAL PLOTS, OR HISTORIC STRUCTURES LOCATED ON THE SITE, ACCORDING TO THE HOWARD COUNTY CEMETERIES INVENTORY AND COUNTY HISTORIC RECORDS.

SUNTE CEMETERIES INVENTORT AND COUNTERISTORY	0112001120		
EN TREE CHART			
RIES	SIZE	CONDITION	REMAIN/REMOVE
P POPLAR (Liriodendron tulipifera)	38"	GOOD	REMAIN
P POPLAR (Liriodendron tulipifera)	31"	GOOD	REMAIN
P POPLAR (Liriodendron tulipifera)	34"	GOOD	REMOVE
P POPLAR (Liriodendron tulipifera)	33"	GOOD	REMOVE
P POPLAR (Liriodendron tulipifera)	35"	GOOD	REMOVE
P POPLAR (Liriodendron tulipifera)	30"	GOOD	REMAIN
K CHERRY (Prunus serrotina)	38"	POOR	REMOVE
P POPLAR (Liriodendron tulipifera)	32"	FAIR	REMOVE
P POPLAR (Liriodendron tulipifera)	34"	GOOD	REMOVE
P POPLAR (Liriodendron tulipifera)	32"	GOOD	REMAIN
P POPLAR (Liriodendron tulipifera)	32"	GOOD	REMAIN
P POPLAR (Liriodendron tulipifera)	31"	POOR	REMAIN
P POPLAR (Liriodendron tulipifera)	34"	GOOD	REMAIN
P POPLAR (Liriodendron tulipifera)	35"	GOOD	REMAIN
P POPLAR (Liriodendron tulipifera)	30"	GOOD	REMAIN
ERNUT HICKORY (Carya cordiformis)	32"	GOOD	REMAIN
P POPLAR (Liriodendron tulipifera)	30"	GOOD	REMAIN
P POPLAR (Liriodendron tulipifera)	27"	GOOD	REMAIN
P POPLAR (Liriodendron tulipifera)	30"	GOOD	REMAIN
MORE (Platanus occidentalis)	30"	GOOD	REMAIN
P POPLAR (Liriodendron tulipifera)	25"	GOOD	REMAIN
P POPLAR (Liriodendron tulipifera)	27"	GOOD	REMAIN
MORE (Platanus occidentalis)	30"	GOOD	REMAIN
MORE (Platanus occidentalis)	38"	GOOD	REMAIN
MORE (Platanus occidentalis)	30"	GOOD	REMAIN
MORE (Platanus occidentalis)	30"	GOOD	REMAIN
P POPLAR (Liriodendron tulipifera)	30"	GOOD	REMAIN
P POPLAR (Liriodendron tulipifera)	28"	GOOD	REMAIN
P POPLAR (Liriodendron tulipifera)	30"	GOOD	REMAIN
K LOCUST (Robinia pseudoacacia)	27"	GOOD	REMAIN
ER MAPLE (Acer saccharinum)	32"	GOOD	REMAIN
ERNUT HICKORY (Carya cordiformis)	40"	GOOD	REMAIN
EN ASH (Fraxinus pennsylvanica)	37"	GOOD	REMAIN
EN ASH (Fraxinus pennsylvanica)	28"	GOOD	REMAIN
P POPLAR (Liriodendron tulipifera)	34"	FAIR	REMOVE
MORE (Platanus occidentalis)	28"	GOOD	REMOVE
ERNUT HICKORY (Carya cordiformis)	28"	POOR	REMOVE

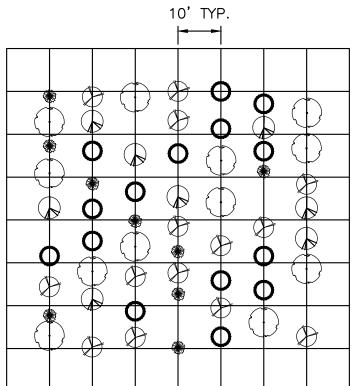
- 14. BASED ON AVAILABLE COUNTY MAPS AND RECORDS, THERE ARE NO EXISTING BUILDINGS, HISTORIC OR OTHERWISE, PRESENT ON THE SITE
- 15. THE FOLLOWING SOILS ARE PRESENT ON THE SITE: CODORUS AND HATBORO SILT LOAMS (0-3% SLOPES) CO, HATBORO-CODORUS SILT LOAMS (0-3% SLOPES) - HA, LEGORE SILT LOAM (8-15% SLOPES) - LEC, LEGORE-MONTALTO SILT LOAMS (3-8% SLOPES) - LMB, LEGORE-RELAY GRAVELLY LOAMS (25-65% SLOPES) - LRF, URBAN LAND-CHILLUM-BELTSVILLE COMPLEX (0-5% SLOPES) - UCB, AND URBAN LAND-CHILLUM-BELTSVILLE COMPLEX (5-15% SLOPES) - UCD ACCORDING TO THE NATURAL RESOURCES CONSERVATION SERVICE WEB SOIL SURVEY.
- 16. THE HOWARD COUNTY FOREST CONSERVATION MANUAL SUPERCEDES ANY DISCREPANCIES BETWEEN THE MANUAL AND THESE PLANS.
- 17. THIS PROJECT COMPLIES WITH THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION WITH AN OBLIGATION OF 1.16 ACRES PROVIDED BY 2.54 ACRES OF ON-SITE RETENTION, 0.95 ACRES OF ON AND OFFSITE PLANTING AND 0.23 ACRES OF OFF-SITE RETENTION. THE LOCATION FOR OFFSITE PLANTING IS IN THE ADJACENT SAVAGE PARK, IMMEDIATELY ABUTTING THIS PROJECT AND ITS LIMITS OF DISTURBANCE.
- 18. A FOREST CONSERVATION EASEMENT WILL BE ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION MANUAL. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.

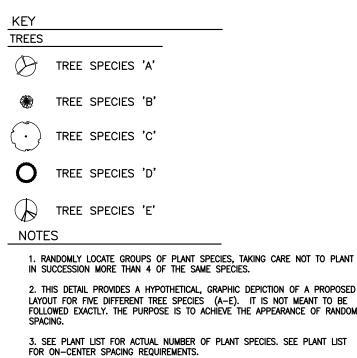
# PRELIMINARY FOREST CONSERVATION NARRATIVE

THE CLEARING ASSOCIATED WITH THIS PROJECT HAS BEEN LIMITED TO THE MORE LEVEL CENTRAL PORTION OF THIS SITE, AND TO AREAS THAT ARE ADJACENT TO EXISTING DEVELOPMENT. CLEARING FOR THIS PROJECT IS REQUIRED FOR THE CONSTRUCTION OF THE PUBLIC UTILITY AND ROAD INFRASTRUCTURE, THE REQUIRED SEDIMENT CONTROLS, STORMWATER MANAGEMENT AND STORM DRAIN SYSTEMS, AND FOR THE DWELLING UNITS.

PLANTING AREAS FOR THIS PROJECT HAVE BEEN SELECTED TO ENHANCE EXISTING ENVIRONMENTAL AND LANDSCAPE BUFFERS. PLANTING AREAS HAVE ALSO BEEN SELECTED TO RESTORE PREVIOUSLY DISTURBED AREAS. PLANTING FOR THIS PROJECT WILL INCLUDE 2" CALIPER DECIDUOUS SHADE TREES COMPRISED OF NATIVE SPECIES, TO COMPLEMENT THE EXISTING FORESTED AREAS ON THE SITE. PLANTING AREAS LESS THAN 10,000 SF IN AREA HAVE BEEN PROPOSED WITH THIS PLAN WHERE THE PLANTED AREAS ABUT EXISTING FORESTED AREAS, AND CAN SUPPLEMENT THE EXISTING FOREST COVER.

RETENTION AREAS FOR THIS PROJECT HAVE BEEN SELECTED TO ENHANCE EXISTING ENVIRONMENTAL BUFFERS. THE RETENTION AREAS PROVIDE A WIDER PROTECTED STREAM BUFFER, PROTECT STEEP SLOPES, AND PROVIDE PROTECTED HABITAT AREA. RETENTION WILL INCLUDE AT LEAST ONE OF THE SPECIMEN TREES LOCATED ON SITE





4. PLANTS SHALL NOT BE PLANTED IN A GRID PATTERN IN BOTH DIRECTIONS.

IN ONE DIRECTION, 10' ROWS SHALL BE LAID OUT. IN THE OTHER DIRECTION, DISTANCES SHALL VARY. CONTRACTOR TO PROVIDE A LAYOUT PLAN PRIOR TO

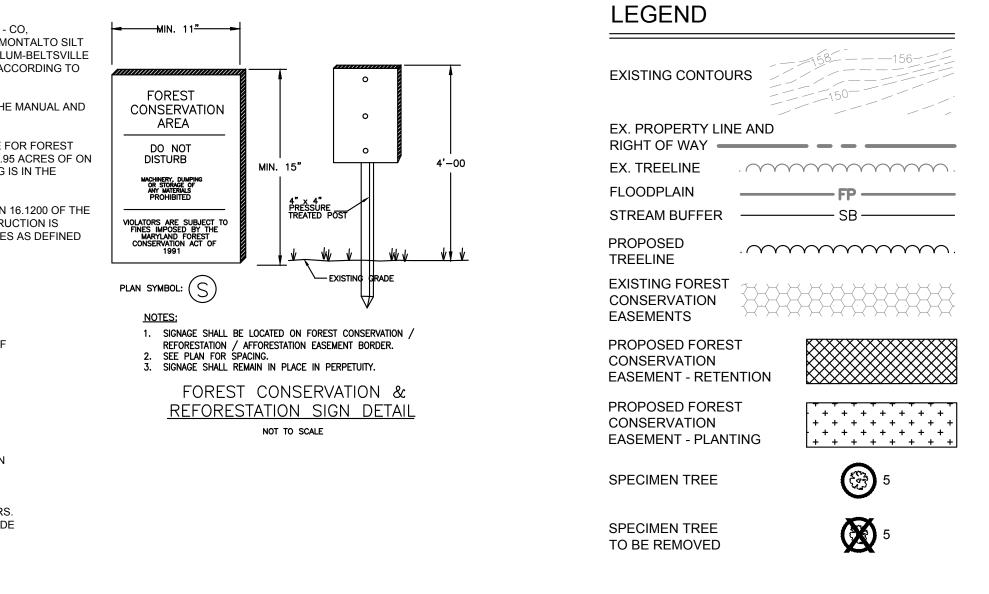
5. CONTRACTOR SHALL LEAVE 12' AT THE EDGE OF EACH PLANTING AREA FOR

6. CONTRACTOR SHALL ADJUST SPECIES IN FIELD BASED ON MICROCLIMATE CONDITIONS.

MAINTENANCE AND CIRCULATION.

# SEMI RANDOM PLANTING LAYOUT DETAIL NOT TO SCALE

FOREST	CONSERVATION	EASEMENT	TABLE
CONSERVATION TYPE	DESCRIPTION	ACRES	SF
EX. RETENTION ESMTS (A)	EX. EASEMENT A (PLAT NO. 20205)	0.20	8,534
	EX. EASEMENT B-1 (PLAT NO. 20205)	0.09	4,047
	EX. EASEMENT B-2 (PLAT NO. 20205)	0.04	1,645
	EX. EASEMENT B-2 (PLAT NO. 20205)	0.50	21,790
	EX. EASEMENT E (PLAT NO. 20205)	0.33	14,489
CLEARING OF EXISTING ON-SITE EASEMENT	EX. EASEMENT E (PLAT NO. 20205)	(0.02)*	(882)*
TOTAL EXISTING EASEMENTS (A)		1.14	49,623
PROPOSED RETENTION (B)	PROP. EASEMENT C	1.32	57,295
	PROP. EASEMENT L-1 & L-2	0.09	3,747
TOTAL PROPOSED RETENTION (B)		1.40	61,042
TOTAL RETENTION ( $C = A+B$ )		2.54	110,665
TOTAL PLANTING REQUIREMENT		1.16	
PROP. PLANTING	PROPOSED EASEMENT H	0.24	10,532
	PROPOSED EASEMENT I	0.50	21,909
	PROPOSED EASEMENT K	0.21	9,010
TOTAL PLANTING		0.95	41,541
EXISTING OFF-SITE EASEMENT	EX. EASEMENT D-1 (PLAT NO. 20205)	0.23	10,127
TOTAL PLANTING AND OFFSITE FOREST CONSERVATION PROVIDED		1.18	51,578



# REFORESTATION PLANTING LISTS

QUANTITIES	SCIENTIFIC/ COMMON NAME	SIZE	ROOT	REMARKS
20	LIRIODENDRON TULIPIFERA / TULIP TREE	2"-2.5" CAL.		
20	LIQUIDAMBAR STYRACIFLUA / SWEET GUM		B & B	FULL CROWN 10' ± SPACING SEE RANDOM
21	ACER RUBRUM / RED MAPLE	(14 OF THE PIN OAKS SHALL BE		
21	QUERCUS PALUSTRIS / PIN OAK	3–3.5" CAL FOR SPECIMEN		PLANTING DETAIL
21	NYSSA SYLVATICA BLACK GUM	TREE REPLACEMENT)		

1. EASEMENT AREAS AND 0.08 AC NON CREDITED RESTORATION AREA WILL HAVE 103 TREES PLANTED (100 TREE/AC X 1.03 AC = 103 TREES) 2. FOR EACH SPECIMEN TREE REMOVED, A TOTAL OF SEVEN SPECIMEN TREES, TWO 3-3.5" CALIPER TREES

SHALL BE PLANTED AS PART OF THE REFORESTATION/AFFORESTATION.

PLANNING DIRECTOR       DATE         DATE       NO.       REVISION         DATE       NO.       REVISION         DEVELOPER       BOZZUTO HOMES, INC. ATTN: MELVIN BYRD GREENBELT, MARYLAND 20770 T: 301-623-1525         OWNERS       SAVAGE MILL REMAINDER, LLC ATTN: JAY WINER 8373 PINEY ORCHARD PARKWAY SUITE 102       HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS 7120 OAKLAND MILLS ROAD COLUMBIA, MD 21046 T: 410-313-4700         ODENTON, MARYLAND 21113-1580       HOWARD COUNTY DEPARTMENT AT SAVAGE MILL         PROJECT       THE SETTLEMENT AT SAVAGE MILL         AREA       TAX MAP 47, PARCEL 92 & 93, GRID 11 ZONED B-2, R-H-ED, & R-20 6TH ELECTION DISTRICT 8400, 8550, & 8554 FAIR STREET HOWARD COUNTY, MARYLAND         TITLE       PRELIMINARY FOREST CONSERVATION PLAN, NOTES, AND DETAILS         VOMARD COUNTY, MARYLAND       Pennoni Associates Inc. Consulting Engineers 8818 Centre Park Drive Suite 200 Columbia, MD 21045 T 410.997.9282         DATE       DESIGNED BY: JSN         DATE       T=BRUARY 28, 2017		TENTATIVELY APPROVED DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY				
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Consulting Engineers 8818 Centre Park Drive Suite 200 Columbia, MD 21045 T 410.997.8900 F 410.997.9282 DATE DATE DATE DESIGNED BY : JSN DRAWN BY: JSN PROJECT NO : BOZH1302		ISE				
DATE DESIGNED BY : JSN DRAWN BY: JSN DRAWN BY: JSN PROJECT NO : BOZH1302 DATE : FEBRUARY 28, 2017 SCALE : 1"=50'	F	<b>e</b>	ennoni	Consulting Engineers 8818 Centre Park Drive Suite 200 Columbia, MD 21045 <b>T</b> 410.997.8900		
DESIGNED BY : JSN DRAWN BY: JSN DRAWN BY: JSN PROJECT NO : BOZH1302 DATE : FEBRUARY 28, 2017 SCALE : 1"=50'	_		DATE			
DRAWN BY: JSN PROJECT NO : BOZH1302 DATE : FEBRUARY 28, 2017 SCALE : 1"=50'		OF MAD		DESIGNED BY : JSN		
PROJECT NO : BOZH1302 DATE : FEBRUARY 28, 2017 SCALE : 1"=50'			3068	DRAWN BY: JSN		
DATE : FEBRUARY 28, 2017 SCALE : 1"=50'				PROJECT NO : BOZH1302		
SCALE : 1"=50'				DATE : FEBRUARY 28, 2017		
			AMMERS OF LANDSCHILL	SCALE : 1"=50'		
	PETER J. STONE #3068 DRAWING NO			DRAWING NO. <u>11</u> OF <u>15</u>		
SP-15-017				SP-15-017		

AREA CHART	
	-
AREA	ACRES
TOTAL TRACT AREA	77.74
EXISTING FOREST WITHIN TRACT AREA	45.43
AREA OF DEVELOPMENT	7.85
EXISTING FOREST WITHIN AREA OF SUBDIVISION	8.13**
STREAM BUFFERS WITHIN AREA OF SUBDIVISION	0.65
FLOODPLAIN WITHIN AREA OF SUBDIVISION	0.31
WETLANDS & WETLAND BUFFERS WITHIN AREA OF SUBDIVISION	0.00
FORESTED STREAM BUFFERS WITHIN AREA OF SUBDIVISION	0.65
FORESTED FLOODPLAIN WITHIN AREA OF SUBDIVISION	0.31
FORESTED WETLANDS & WETLAND BUFFERS WITHIN AREA OF SUBDIVISION	0.00

\*\* THESE AREAS INCLUDE FOREST CONSERVATION EASEMENTS THAT WERE RECORDED WITH SDP-07-076. THESE AREAS ALSO INCLUDE WOODED AREAS NOT UNDER EASEMENT AND NOT PROTECTED WITH THIS PLAN, SUCH AS AREAS UNDER AND WITHIN THE EXISTING ROPES COURSE

PLANT COMMUNITY SUMMARY				
SYMBOL	COMMUNITY	AREA	PRIORITY RETENTION	
F1	FOREST	8.13 Ac.±	HIGH	

# SEQUENCE OF OPERATIONS

PRE-CONSTRUCTION SITE PREPARATION

- 1. FIELD STAKE LIMITS OF DISTURBANCE (L.O.D.) AT 25' INTERVALS.
- 2. REVIEW L.O.D. IN FIELD AND ADJUST IF PRACTICAL.
- 3. INSTALL TREE PROTECTION FENCE AT THE L.O.D. AND IMPLEMENT TREE PROTECTION METHODS AS SHOWN.
- 4. CLEAR AND GRUB AS NECESSARY TO FACILITATE ROOT PRUNING TO A DEPTH OF 2-3 FEET WITHIN THE LIMITS OF THE DISTURBED AREA. CLEAR REMAINING TREES IN A WAY THAT "SAVE TREES' ARE NOT DISTURBED. FLUSH CUT OR GRIND STUMPS 12" IN DIAMETER AND LARGER THAT ARE WITHIN 25' OF THE L.O.D.
- 5. DO NOT ATTEMPT TO SAVE TREES WITHIN 25' FROM THE L.O.D. UNLESS, IN THE OPINION OF THE CONSULTING ARBORIST, THEY HAVE A 75% CHANCE OR BETTER OF SURVIVAL.
- 6. PRUNE AND FERTILIZE DESIRABLE 'EDGE TREES' AS PER CONSULTING ARBORIST'S RECOMMENDATIONS.
- 7. REMOVE OR TREAT WITH AN ACCEPTABLE METHOD, NOXIOUS PLANT MATERIAL SUCH AS MULTIFLORA ROSE, TEARTHUMB, AND JOHNSON GRASS BEFORE INSTALLING REFORESTATION PLANTS.
- 8. INSTALL TREE PROTECTION SIGNAGE. ATTACHMENT OF SIGNS OR ANY OTHER OBJECTS TO TREES WITHIN THE PROTECTED AREAS IS PROHIBITED.
- 9. STABILIZE ANY DISTURBED AREAS USING THE SPECIFIED STABILIZATION MIXTURE WHICH ALLOWS FOR NATURAL REVEGETATION OF FOREST COMMUNITIES.

# FOREST CONSERVATION SEQUENCE OF OPERATIONS

- 1. PRIOR TO BEGINNING ANY GRADING OPERATIONS ON THIS SITE OR ON A RESPECTIVE LOT, THERE SHALL BE A PRECONSTRUCTION MEETING HELD AT THE SITE WHICH IS TO INCLUDE THE CONTRACTOR AND REPRESENTATIVES FROM PENNONI, AND A REPRESENTATIVE FROM HOWARD COUNTY. THE PURPOSE OF THIS MEETING WILL BE TO REVIEW THE APPROVED FCP AND TO FIELD VERIFY THE CORRECT LIMITS OF DISTURBANCE (LOD).
- GRADING OPERATIONS OR OTHER CONSTRUCTION OPERATIONS WHICH COULD DISLODGE OR OTHERWISE DAMAGE THE PROTECTIVE DEVICES SHALL BE AVOIDED ALONG THE EDGES OF THE LOD LINES IF POSSIBLE. ANY PROTECTIVE DEVICES WHICH ARE DAMAGED DURING SITE CONSTRUCTION OPERATIONS SHALL BE PROPERLY REPAIRED IMMEDIATELY BY THE CONTRACTOR.
- 3. AFTER SITE GRADING, ROAD, AND UTILITY CONSTRUCTION HAVE BEEN COMPLETED, ALL TREES ADJACENT TO THE LOD LINE SHALL BE INSPECTED FOR INDICATIONS OF CROWN DIE-BACK (SUMMER INDICATOR), DAMAGE WITHIN RESPECTIVE CRITICAL ROOT ZONES OR ANY DEAD WOOD OR OTHER CONDITIONS WHICH MIGHT BE HAZARDOUS TO PEDESTRIANS, BUILDINGS, UTILITY LINES, VEHICULAR ACCESS WAYS OR PARKED VEHICLES.
- 4. SHOULD THERE BE EVIDENCE OF ANY DAMAGE TO TREE TRUNKS, BRANCHES OR THE CRITICAL ROOT ZONE OF TREES WITHIN THE PROTECTED AREAS, OR TO ISOLATED SPECIMEN TREES TO BE PRESERVED, THE DAMAGE SHALL BE EXAMINED WITHIN A PERIOD OF TWO (2) DAYS FROM THE DATE OF OBSERVANCE BY AN ARBORIST. EXPOSED ROOTS SHOULD BE COVERED IMMEDIATELY TO A DEPTH OF 6 - 8 INCHES WITH SOIL, PREFERABLY MIXED WITH 50% PEAT MOSS OR LEAF MOLD.
- REMOVE DAMAGED, DEAD OR DYING TREES OR LIMBS ONLY IF THE TREES OR LIMBS POSE AN IMMEDIATE SAFETY HAZARD TO BUILDINGS, UTILITY LINES, VEHICLES, OR ACCESS AND EGRESS DRIVES OR PEDESTRIAN AREAS. TREES DESIGNATED FOR PRUNING OR REMOVAL SHALL BE PRUNED OR REMOVED USING EQUIPMENT AND METHODS WHICH WILL NOT DAMAGE OR DESTROY ADJACENT LARGE TREES OR UNDERSTORY TREES OR SHRUBS DESIGNATED FOR RETENTION.
- 6. ALL TEMPORARY FOREST PROTECTION DEVICES WILL BE CAREFULLY REMOVED AFTER ALL GENERAL CONSTRUCTION, NECESSARY TREE SURGERY, REMOVAL OF DEBRIS, ETC. REGRADING AND RESEEDING OF SEDIMENT AND EROSION CONTROL DISTURBANCE HAVE BEEN COMPLETED AND ACCEPTANCE AND APPROVAL OF THE WORK AND SITE CONDITIONS HAVE BEEN GIVEN BY THE PROJECT INSPECTOR.

AFFORESTATION/REFORESTATION PLANTING SEQUENCE OF OPERATIONS

- 1. THE CONTRACTOR(S) SHALL INFORM THE LANDSCAPE ARCHITECT AND THE PROJECT MANAGER WHEN PLANTING OPERATIONS ARE TO BEGIN.
- 2. DETERMINE STORAGE AREAS FOR MATERIALS AND EQUIPMENT. OBTAIN APPROVAL OF LOCATION FROM THE LANDSCAPE ARCHITECT AND PROJECT INSPECTOR.
- PRIOR TO BEGINNING ANY PLANTING, THE SOILS WITHIN THE AREA(S) DESIGNATED FOR AFFORESTATION OR REFORESTATION SHALL BE ANALYZED BY A QUALIFIED SOIL LABORATORY REGARDING THE FOLLOWING FEATURES: NUTRIENT CONTENT, ORGANIC MATTER, STRUCTURE, PH AND CATION EXCHANGE CAPACITY. SOILS THAT HAVE BEEN ACTIVELY FARMED MAY REQUIRE EVALUATION FOR PESTICIDE OR HERBICIDE CONTAMINATION. SUCH ANALYSIS MAY BE PERFORMED BY THE LOCAL SOIL CONSERVATION SERVICE OR AGRICULTURAL EXTENSION SERVICE. A MINIMUM OF THREE RANDOM SAMPLES SHOULD BE COLLECTED FOR THE ANALYSIS. AN ASSESSMENT OF SOIL MOISTURE SHOULD ALSO BE MADE AT THIS TIME. CORRECTIVE MEASURES SHALL BE MADE IN ACCORDANCE WITH ANALYSIS RESULTS AND RECOMMENDATIONS. STEP 3 IS TO BE PERFORMED BY THE CONTRACTOR AND ALL COSTS INVOLVED IN TESTING OR CORRECTIVE MEASURES SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 4. THE CONTRACTOR SHALL STAKE (OR WIRE-FLAG) PLANTING AREA LIMITS AND PLANT LOCATIONS IN ACCORDANCE WITH THE PLAN AND DETAILS. PLANTING AREA LIMITS SHALL BE INSPECTED BY PROJECT LANDSCAPE ARCHITECT PRIOR TO PLANTING.
- 5. PROVIDE AND PLANT ALL TREES OF THE SPECIES AND SIZES SPECIFIED AND IN ACCORDANCE WITH THE DETAIL(S) SHOWN ON THE FOREST CONSERVATION PLANS.
- 6. AT THE COMPLETION OF PLANTING, REMOVE ALL EXCESS MATERIALS AND MISCELLANEOUS DEBRIS FROM THE RESPECTIVE AREA(S) OF WORK.
- 7. PROTECTION DEVICES TO PREVENT DAMAGE WITHIN PLANTED AREAS, ALL REFORESTATION AND/OR AFFORESTATION SITES MUST BE POSTED WITH APPROPRIATE SIGNS AND THE AREA(S) DELINEATED WITH APPROPRIATE PROTECTIVE FENCING. NO CONSTRUCTION EQUIPMENT NOR STORAGE OF MATERIALS SHALL BE PERMITTED WITHIN THE PLANTED AREAS. DETAILS ARE SHOWN ON THE FOREST CONSERVATION PLANS REGARDING TYPICAL SIGN SIZE AND WORDING. NO PEDESTRIAN TRAFFIC SHALL BE ALLOWED WITHIN THE PROTECTED AREAS.
- 8. ATTACHMENT OF SIGNS OR ANY OTHER OBJECTS TO TREES WITHIN THE PROTECTED AREAS IS PROHIBITED.

- 2. OBTAIN GRADING PERMIT. (1 DAY)
- SEDIMENT TRAP (4 WEEKS)

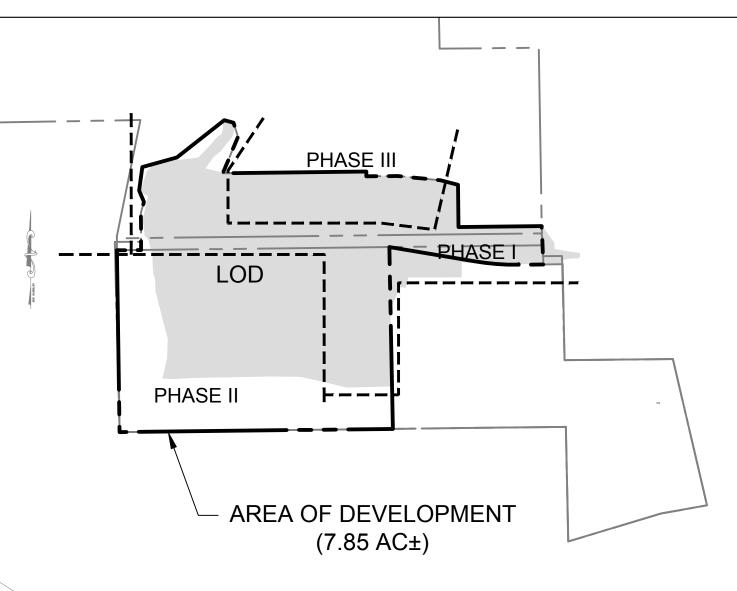
- 10. COMPLETE SITE AREA 1 LANDSCAPING AND SITE STABILIZATION UPON AREA 1 HOME COMPLETION. (2 WEEKS) <u>PHASE II</u>

- EDGE OF PROJECT. (2 MONTHS)

# <u>PHASE III</u>

<u>PHASE IV</u> 21. UPON COMPLETE STABILIZATION OF SITE, REMOVE SEDIMENT TRAP, CONSTRUCT STORM DRAIN OUTFALL, COMPLETE STORM DRAIN CONSTRUCTION, CONSTRUCT TRAIL, AND CONSTRUCT BIORETENTION FACILITY. (2 MONTHS)

22. UPON PERMISSION OF COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROL DEVICES AND STABILIZE



# LOD-AREA OF DEVELOPMENT INSET SCALE: 1"=200'

# PRELIMINARY SEQUENCE OF CONSTRUCTION

1. CONDUCT A PRE-CONSTRUCTION MEETING WITH COUNTY INSPECTOR. (1 DAY)

3. STAKEOUT LIMITS OF DISTURBANCE. (5 DAYS)

4. INSTALL STABILIZED CONSTRUCTION ENTRANCE. CLEAR AND GRUB AS NECESSARY TO INSTALL PERIMETER SEDIMENT CONTROLS AND

PHASE I (PERIMETER SEDIMENT CONTROLS SHALL BE INSPECTED ON A DAILY BASIS)

5. CONCURRENT WITH INSTALLATION OF PERIMETER CONTROLS, ROOT PRUNE AT LIMITS OF DISTURBANCE AND AROUND SPECIMEN TREE TO AS SHOWN ON FOREST CONSERVATION PLAN. MULCH ALONG "SAVE" SIDE OF ROOT PRUNE LINE AND CONDUCT ANY TREE PRESERVATION MEASURES IN ACCORDANCE WITH ARBORIST RECOMMENDATIONS. (1 WEEK).

6. AT COMPLETION OF SEDIMENT CONTROL AND ROOT PRUNING ACTIVITIES, BEGIN GRADING AND INSTALLATION OF WATER AND SEWER EXTENSION FROM WASHINGTON STREET/FAIR STREET INTERSECTION. (3 WEEKS)

7. MODIFICATIONS TO SAVAGE MILL PARKING LOT, AND CONSTRUCTION OF WASHINGTON STREET EXTENSION FROM INTERSECTION TO LOCATION OF STABILIZED CONSTRUCTION ENTRANCE SHALL BE CONDUCTED USING SAME DAY STABILIZATION MEASURES. CONTRACTOR SHALL ONLY INSTALL AS MUCH CURB, PIPE, AND PAVEMENT AS CAN BE STABILIZED IN A SINGLE DAY. (6 WEEKS)

8. CONTINUE SITE GRADING AND UTILITY INSTALLATION OF AREA 1. (2 MONTHS)

9. BEGIN CONSTRUCTION OF DUPLEX AND TOWNHOME UNITS IN AREA 1 (8 MONTHS)

11. AT COMPLETION OF AREA 1 UTILITIES PROCEED WITH SITE CLEARING OF AREA 2 (3 WEEKS)

12. BEGIN SITE GRADING AND UTILITY INSTALLATION OF AREA 2. AS SITE GRADING PROCEEDS CONSTRUCT RETAINING WALLS AT WESTERN

13. WITH COMPLETION OF SITE UTILITIES IN AREA 2, BEGIN ROAD CONSTRUCTION. PLACE INLET PROTECTION AT ALL INLETS AS THEY ARE INSTALLED. AFTER ROAD CONSTRUCTION REESTABLISH INLET PROTECTION IN ALL PAVED AREAS. STORM DRAIN CONSTRUCTION SHALL END AT SEDIMENT TRAP, DEFER CONSTRUCTION OF STORM DRAIN OUTFALL UNTIL SITE IS STABILIZED AND TRAP REMOVED. (2 MONTHS). 14. WITH COMPLETION OF AREA 2 INFRASTRUCTURE, BEGIN AREA 2 DUPLEX AND TOWNHOME CONSTRUCTION. (10 MONTHS)

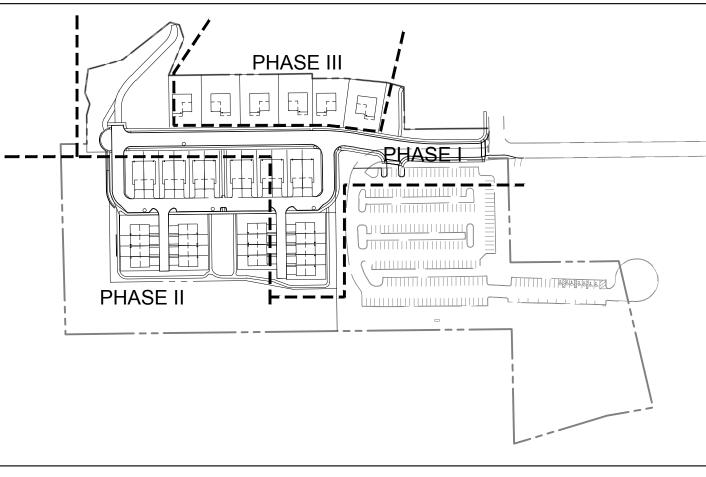
15. CONCURRENT WITH HOUSE CONSTRUCTION, AS LOTS ARE STABILIZED, CONSTRUCT STORMWATER MANAGEMENT FEATURES ON LOTS. DO NOT BEGIN THE CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES UNTIL AREA DRAINING TO FACILITY IS STABILIZED. (1 MONTH) 16. COMPLETE SITE AREA 2 LANDSCAPING AND SITE STABILIZATION UPON AREA 1 HOME COMPLETION. (2 WEEKS)

17. UPON COMPLETION OF AREA 2 INFRASTRUCTURE BEGIN AREA 3 SITE CLEARING AND GRADING (2 WEEKS)

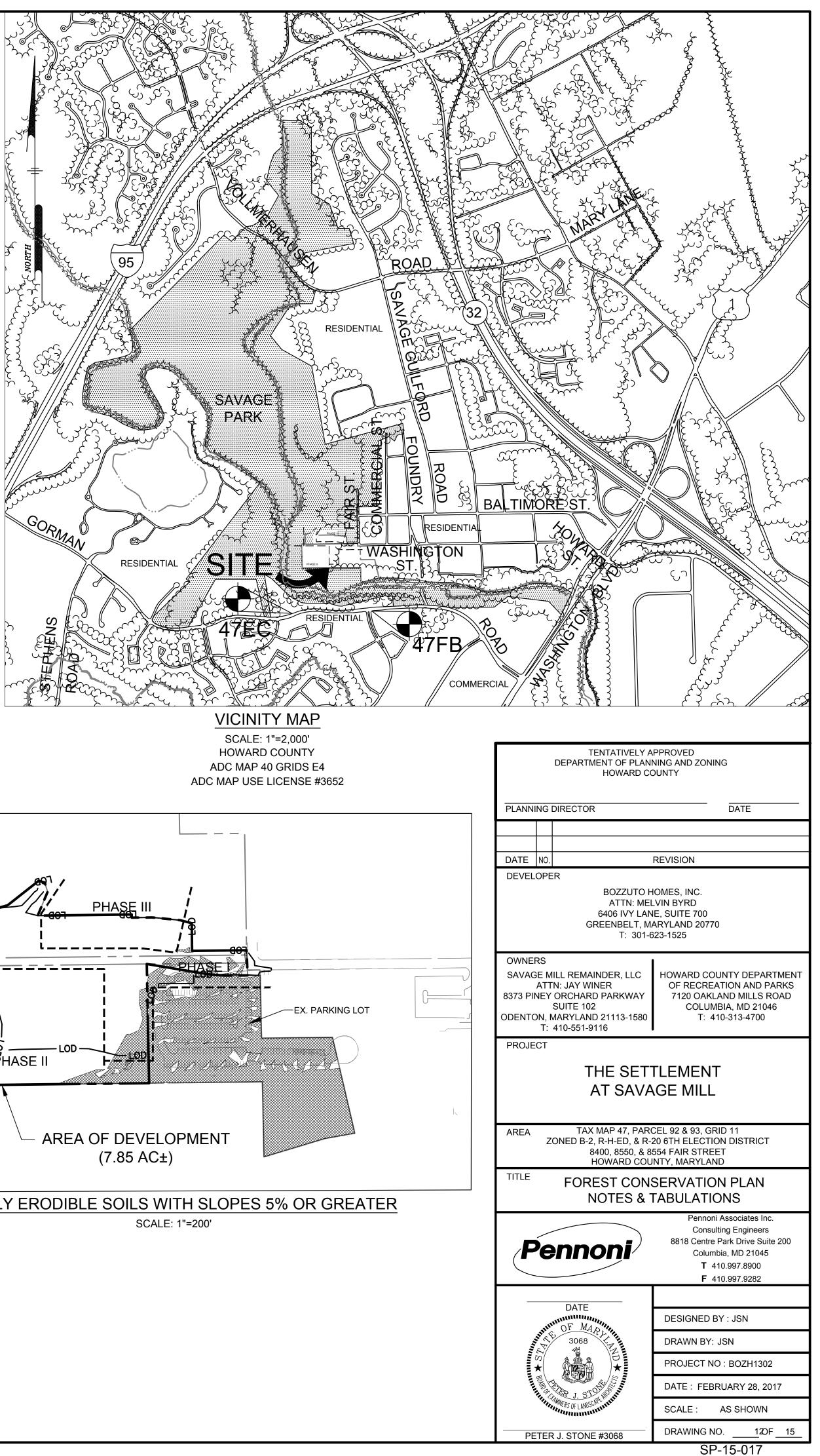
18. BEGIN SINGLE FAMILY HOME CONSTRUCTION ON AREA 3 (8 MONTHS)

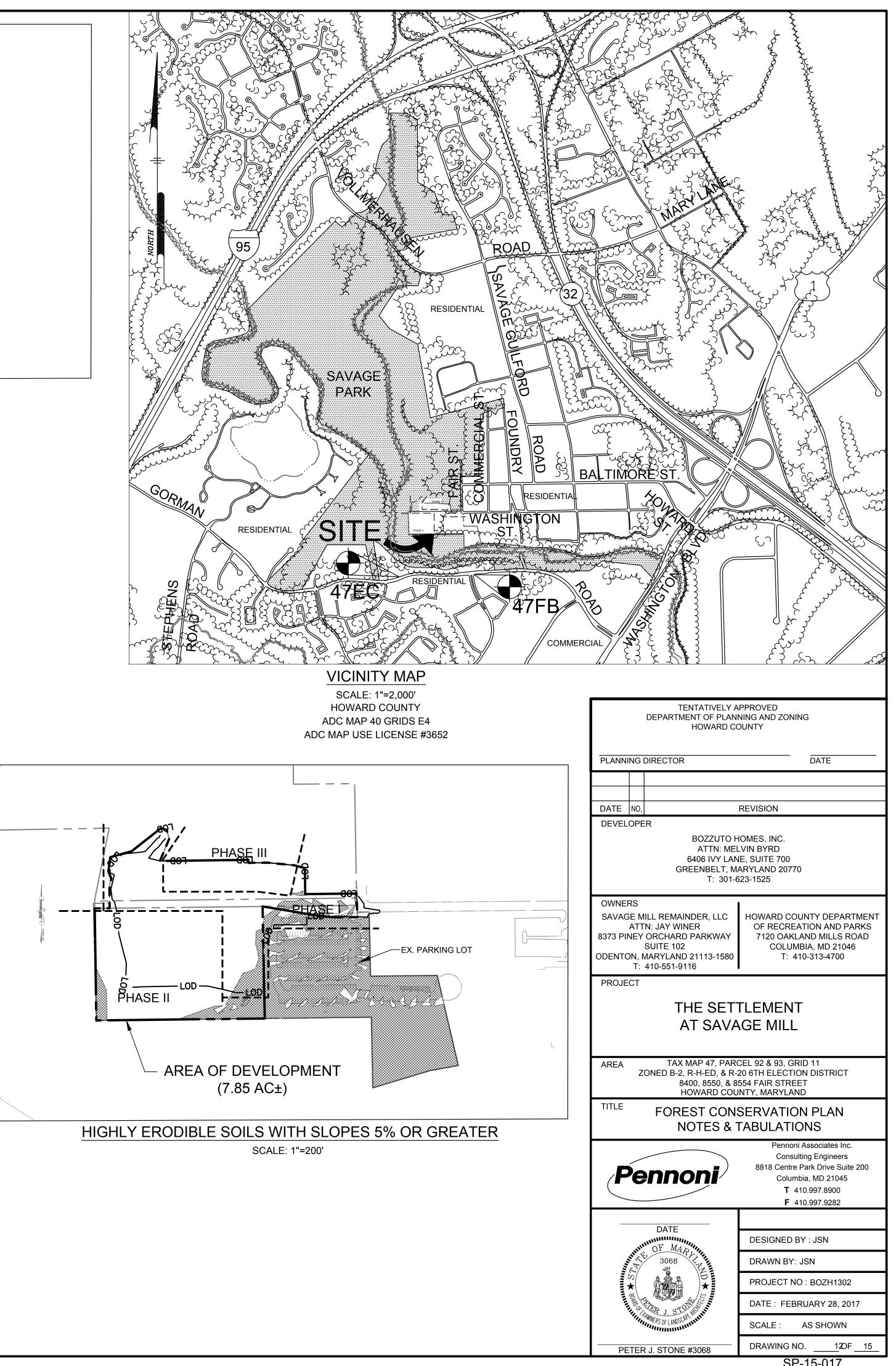
19. CONCURRENT WITH HOUSE CONSTRUCTION, AS LOTS ARE STABILIZED, CONSTRUCT STORMWATER MANAGEMENT FEATURES ON LOTS. DO NOT BEGIN THE CONSTRUCTION OF STORMWATER MANAGEMENT FACILITIES UNTIL AREA DRAINING TO FACILITY IS STABILIZED. (1 MONTH) 20. COMPLETE SITE AREA 1 LANDSCAPING AND SITE STABILIZATION UPON AREA 3 HOME COMPLETION. (2 WEEKS)

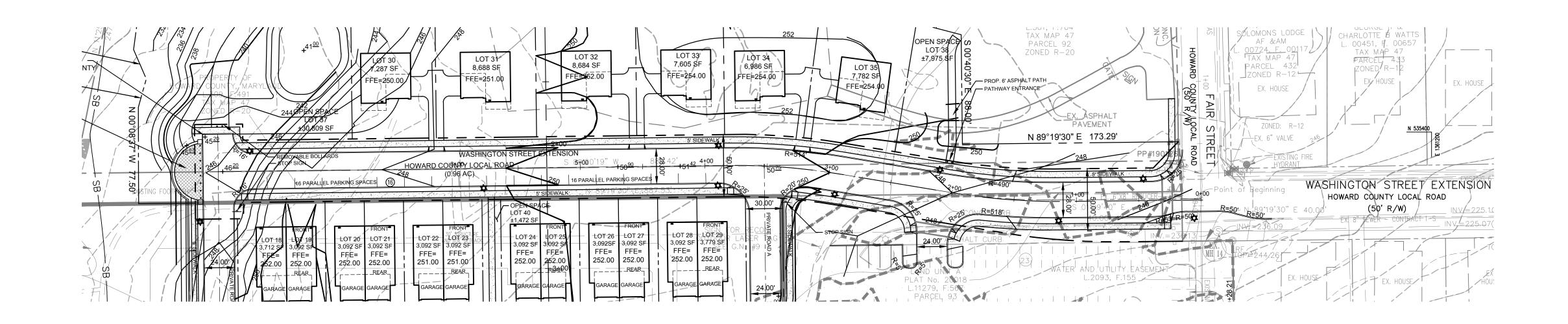
DISTURBED AREAS IN ACCORDANCE WITH PERMANENT SEEDING NOTES. (5 DAYS)

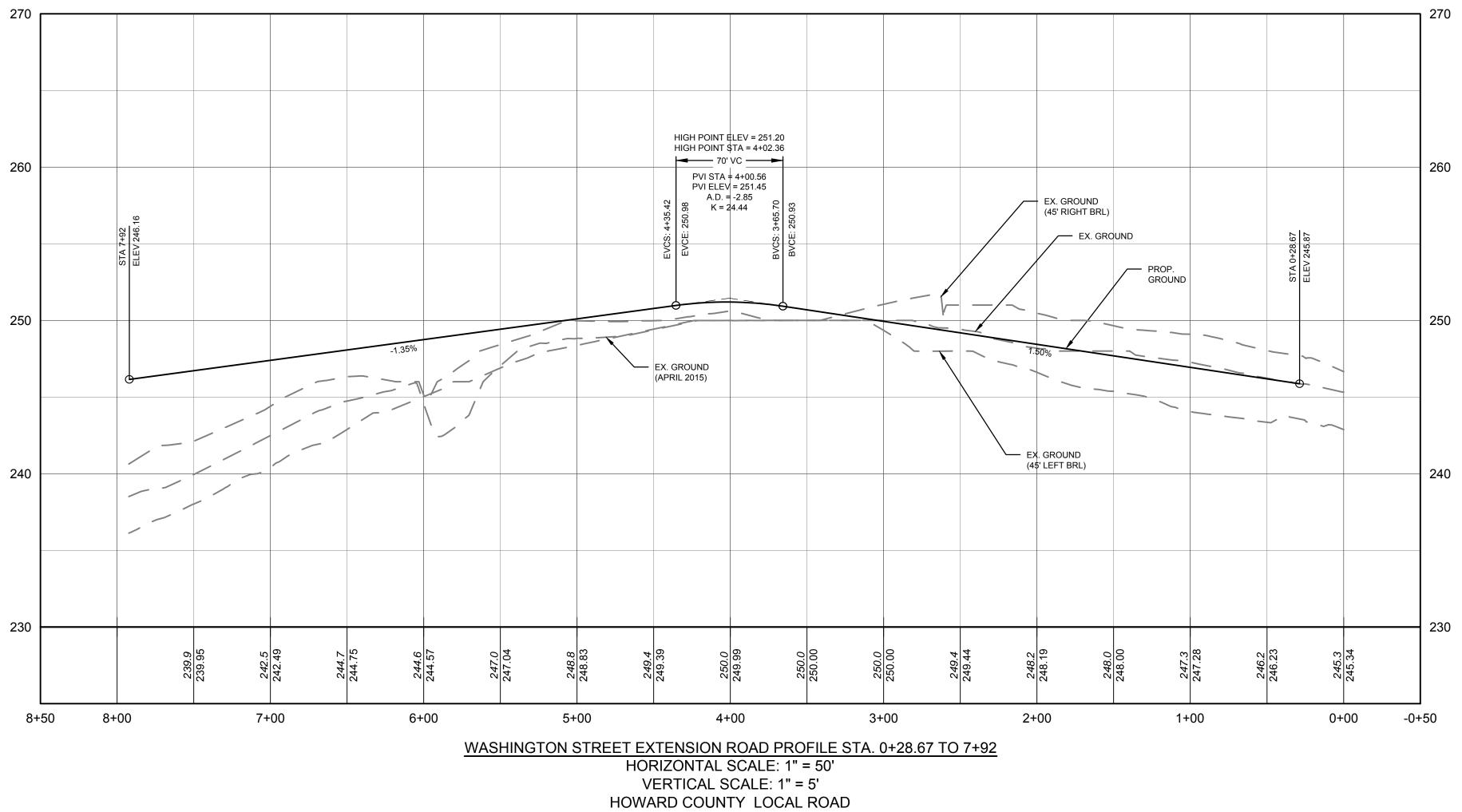


SEDIMENT CONTROL PHASING PLAN SCALE: 1"=200'





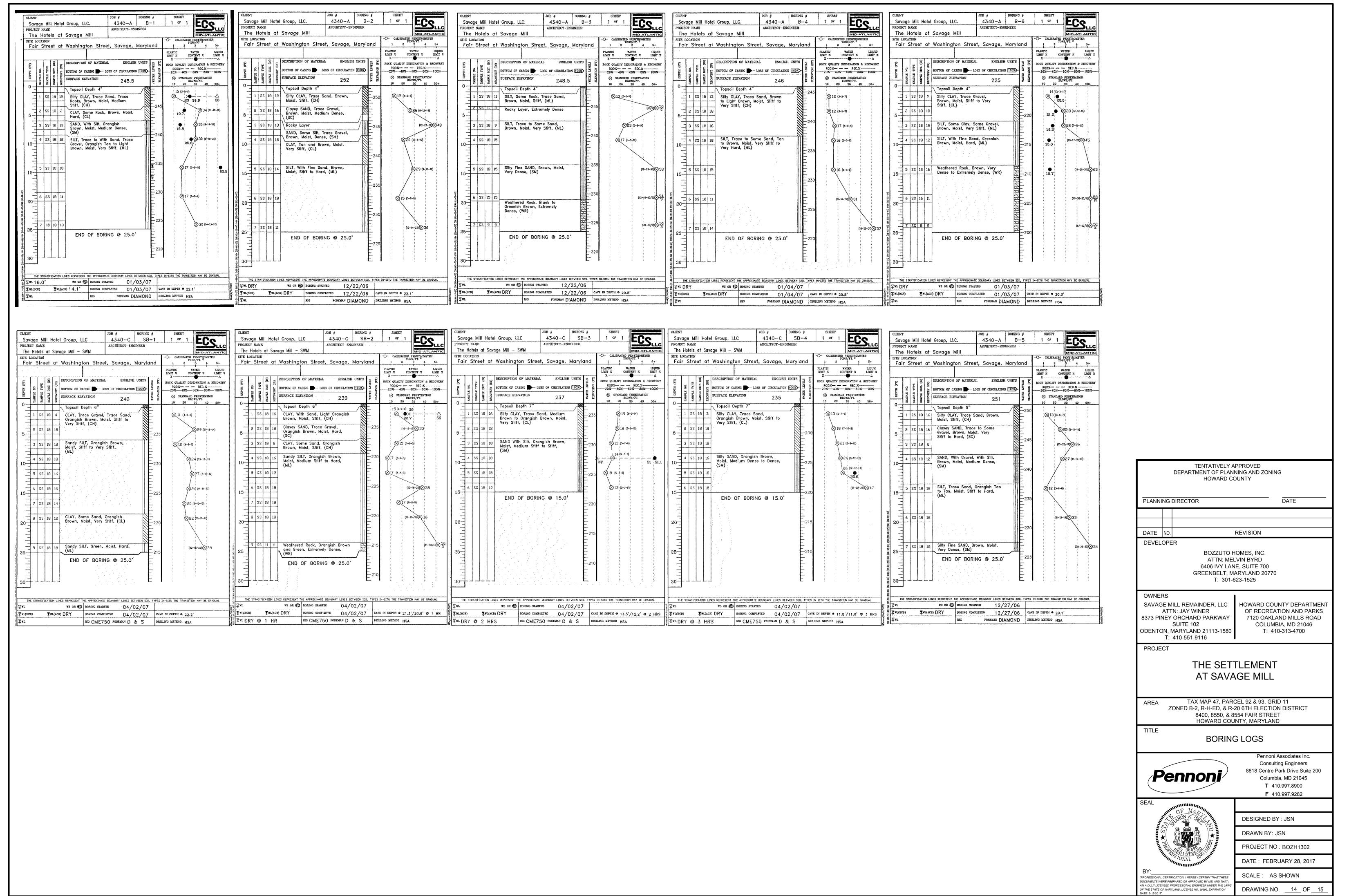




DESIGN SPEED = 40 MPH

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TENTATIVELY A DEPARTMENT OF PLAN HOWARD CO	NING AND ZONING				
PLANNING DIRECTOR	DATE				
	REVISION				
ATTN: MEI 6406 IVY LAN GREENBELT, M	IOMES, INC. LVIN BYRD IE, SUITE 700 ARYLAND 20770 523-1525				
OWNERS SAVAGE MILL REMAINDER, LLC ATTN: JAY WINER 8373 PINEY ORCHARD PARKWAY SUITE 102 ODENTON, MARYLAND 21113-1580 T: 410-551-9116	HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS 7120 OAKLAND MILLS ROAD COLUMBIA, MD 21046 T: 410-313-4700				
THE SET	THE SETTLEMENT AT SAVAGE MILL				
ZONED B-2, R-H-ED, & R- 8400, 8550, & 8	CEL 92 & 93, GRID 11 20 6TH ELECTION DISTRICT 554 FAIR STREET INTY, MARYLAND				
	ROAD PROFILES				
Pennoni	Pennoni Associates Inc. Consulting Engineers 8818 Centre Park Drive Suite 200 Columbia, MD 21045 <b>T</b> 410.997.8900 <b>F</b> 410.997.9282				
SEAL					
Had the state of	DESIGNED BY : JSN				
	DRAWN BY: JSN				
A 10, 36820 A	PROJECT NO : BOZH1302				
FILLSTONAL ENVIRONMENT	DATE : FEBRUARY 28, 2017				
BY: "PROFESSIONAL CERTIFICATION. I HEREBY CERTIFY THAT THESE	SCALE : AS SHOWN				
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. 36896, EXPIRATION DATE: 2-15-2017"	DRAWING NO. <u>13</u> OF <u>15</u>				
	SP-15-017				



Pennon TEST BORING LOG	TEST BORING LOG BORING NUMBER B-2 PAGE 1 OF 1	Pennoni TEST BORING LOG BORING NUMBER B-3 PAGE 1 OF 1	Pennon TEST BORING LOG BORING NUMBER B-4 PAGE 1 OF 1	TEST BORING LOG BORING NUMBER B-5	TEST BORING LOG BORING NUMBER B-6 PAGE 1 OF 1	
CLIENT         Bozzuto Homes         PROJECT NAME         Savage Mill Residential Subdivision           PROJECT NUMBER         BOZH1302         PROJECT LOCATION         Savage, MD           DATE STARTED 6/8/15         COMPLETED 6/8/15         GROUND ELEVATION 250.84 ftNav088         HOLE SIZE 3.25 inches	CLIENT         Bozzuto Homes         PROJECT NAME         Savage Mill Residential Subdivision           PROJECT NUMBER         BOZH1302         PROJECT LOCATION         Savage, MD           DATE STARTED_6/8/15         COMPLETED 6/8/15         GROUND ELEVATION 244.47 ft NAVD88         HOLE SIZE 3.25 inches	CLIENT         Bozzuto Homes         PROJECT NAME_Savage Mill Residential Subdivision           PROJECT NUMBER_BOZH1302         PROJECT LOCATION Savage, MD           DATE STARTED 6/8/15         COMPLETED 6/8/15         GROUND ELEVATION 250.5 ft NAVDE8         HOLE SIZE 3.25 inches	CLIENT_Bozzuto Homes     PROJECT NAME_Savage Mill Residential Subdivision       PROJECT NUMBER_BOZH1302     PROJECT LOCATION_Savage, MD       Bate Started_6/8/15     COMPLETED 6/8/15	CLIENT         Bozzuto Homes         PROJECT NAME         Savage Mill Residential Subdivision           PROJECT NUMBER_BOZH1302         PROJECT LOCATION         Savage, MD           B         DATE STARTED         6/8/15         GROUND ELEVATION 248.21 ft NAVD88 HOLE SIZE 3.25 Inches	CLIENT_Bozzuto Homes     PROJECT NAME_Savage Mill Residential Subdivision       PROJECT NUMBER_BOZH1302     PROJECT LOCATION_Savage, MD       Date started_6/8/15     COMPLETED 6/8/15	
DRILLING CONTRACTOR Connelly & Associates Drilling       WATER ENCOUNTERED:         DRILLING METHOD_ASTM D1586       DURING DRILLING — NE         DRILLER / HELPER T. Redman       AT END OF DRILLING — NE         COGED BY E. Pate       CHECKED BY S. Donahue	brilling Contractors       Connelly & Associates Drilling       WATER ENCOUNTERED:         brilling METHOD       ASSTM D1586       DURING DRILLING — NE         briller / HELPER       T. Redman       AT END OF DRILLING — NE         LOGGED BY E. Pate       CHECKED BY S. Donahue       24 HRS AFTER DRILLING — NM	DRILLING CONTRACTOR Connelly & Associates Drilling       WATER ENCOUNTERED:         DRILLING METHOD_ASTM D1586       DURING DRILLING NE         DRILLER / HELPER T. Redman       AT END OF DRILLING NE         LOGGED BY E. Pate       CHECKED BY S. Donahue       24 HRS AFTER DRILLING NM	DRILLING CONTRACTOR Connelly & Associates Drilling       WATER ENCOUNTERED:         DRILLING METHOD_ASTM D1586       DURING DRILLING NE         DRILLER / HELPER_T. Redman       AT END OF DRILLING NE         LOGGED BY E. Pate       CHECKED BY S. Donahue         24 HRS AFTER DRILLING NM	Brilling Contractor Connelly & Associates Drilling       WATER ENCOUNTERED:         Drilling METHOD_ASTM D1586       DURING DRILLING NE         DRILLER / HELPER T. Redman       AT END OF DRILLING NE         LOGGED BY E. Pate       CHECKED BY S. Donahue	DRILLING CONTRACTOR Connelly & Associates Drilling       WATER ENCOUNTERED:         DRILLING METHOD_ASTM D1586       DURING DRILLING NE         DRILLER / HELPER T. Redman       AT END OF DRILLING NE         LOGGED BY E. Pate       CHECKED BY S. Donahue	
Handbarren     Standbarren     Stand	HIGHLING CONTRACTOR OF CONTRAC	Hat     State     State <t< td=""><td>Hugg     But Hagg     State     State</td><td>Hand     Material Description     REMARKS       1000     0.0     0.0     0.0     0.0     0.0     0.0     0.0       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000</td><td>MATERIAL DESCRIPTION     REMARKS       0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0&lt;</td><td></td></t<>	Hugg     But Hagg     State	Hand     Material Description     REMARKS       1000     0.0     0.0     0.0     0.0     0.0     0.0     0.0       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000       1000     1000     1000     1000     1000     1000     1000     1000	MATERIAL DESCRIPTION     REMARKS       0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0     0.0<	
-       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -       -	5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         230.5           5.0         5.0         5.0           7.5         83         6.8-8-9           6.8         83         6.8-8-9           6.8         83         6.8-8-9           6.8         83         6.8-8-9           7.5         5.2         83         6.8-8-9	SS       75       4-4-7-4 (11)       B         Light brown fine SAND, some silt (moist)       Light brown fine SAND, some silt (moist)       CAVING AT 4'         SS       71       2-5-7-8 (12)       Light brown fine SAND, some silt (moist)       CAVING AT 4'         SS       5.0       SS       71       2-5-7-8 (12)       Light brown fine SAND, trace to little silt (moist)       CAVING AT 4'         Bottom of borehole at 7.0 feet.       Bottom of borehole at 7.0 feet.       CAVING AT 4'       CAVING AT 4'	SS         67         2-3-5-3 (8)         A         Orange, brown SILT, little fine to coarse sand (wet from 4-4.5)         CAVING AT 3'           5.0         5.3         75         0-6-6-7 (12)         A         Orange, brown SILT, little fine to coarse sand (wet from 4-4.5)         Caving AT 3'           5.0         5.3         75         0-6-6-7 (12)         Light red SILT, little to some fine to coarse sand         Caving AT 3'	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	5.0     5.0     234.3       5.0     5.0     234.3       5.0     5.0     234.3       5.0     5.1     100       5.1     100     5.4-7-9 (11)       7.5     5.5     7.5       7.5     5.2     75       7.5     7.9-10-13 (19)	
Image: set of the set	Bottom of borehole at 10.0 feet.			ENNONI TEST DORINGLOO JANUKKY ZA15 - GINT GETU LAB COT - 622/115	SS         100         6-7         B         Brown, black, orange fine to medium SAND, and silt         229.3           10.0         229.3         Bottom of borehole at 10.0 feet.         Bottom of borehole at 10.0 feet.         Bottom of borehole at 10.0 feet.	
BORING NUMBER B-7 PAGE 1 OF 1         PROJECT NAME_Savage Mill Residential Subdivision         PROJECT NAME_Savage Mill Residential Subdivision         PROJECT NUMBER_BOZH1302       PROJECT LOCATION_Savage, MD         DATE STARTED_6/8/15       COMPLETED 6/8/15         GROUND ELEVATION 244.88 ft NAVD88       HOLE SIZE 3.25 inches         DRILLING CONTRACTOR Connelly & Associates Drilling       WATER ENCOUNTERED:         DRILLING METHOD_ASTM D1586       DURING DRILLING — NE         DRILLER / HELPER T. Redman       AT END OF DRILLING — NE	BORING NUMBER B-8 PAGE 1 OF 1         CLIENT BOZZUTO Homes PROJECT NUMBER BOZH1302         PROJECT NUMBER BOZH1302       PROJECT LOCATION Savage, MD         PROJECT NUMBER BOZH1302       PROJECT NOME SAVAGE         PROJECT NUMBER BOZH1302       GROUND ELEVATION 249.31 ft NAVDOR HOLE SIZE 3.25 inches         WATER ENCOUNTERED:       DURING DRILLING	CLIENT         BOZZUTO Homes         PROJECT NAME         Savage Mill Residential Subdivision         PAGE 1 OF 1           CLIENT         BOZZUTO Homes         PROJECT NAME         Savage Mill Residential Subdivision         PROJECT NUMBER         BOZH1302         PROJECT LOCATION         Savage Mill Residential Subdivision         PROJECT LOCATION         Savage Mill         PROJECT LOCATION         Savage Mill         Savage	BORING NUMBER B-10         PROJECT NAME Savage Mill Residential Subdivision         PROJECT NUMBER_BOZH1302       PROJECT NAME Savage Mill Residential Subdivision         PROJECT NUMBER_BOZH1302       PROJECT LOCATION_Savage, MD         DATE STARTED 6/9/15       GROUND ELEVATION 250.33 ft NuvDeat HOLE SIZE 3.25 inches         DBILLING CONTRACTOR Connelly & Associates Drilling       WATER ENCOUNTERED:         DRILLING METHOD_ASTM D1586       DURING DRILLING NE	Image: Constraint of the project number by the project nu	BORING NUMBER B-12 PAGE 1 OF 1         DIFFECT NAME Savage Mill Residential Subdivision         PROJECT NAME Savage Mill Residential Subdivision         PROJECT NUMBER_BOZH1302       PROJECT LOCATION Savage, MD         DATE STARTED 6/9/15       COMPLETED 6/9/15         DBILLING CONTRACTOR Connelly & Associates Drilling       WATER EncounterED:         DRILLING METHOD_ASTM D15866       DURING DRILLING         DRILLER / HELPER T. Redman       AT END OF DRILLING	
LOGGED BY E. Pate     CHECKED BY S. Donahue     24 HRS AFTER DRILLING NM       Logged BY E. Pate     CHECKED BY S. Donahue     24 HRS AFTER DRILLING NM       H     H     K     K     NUMORO V     V       H     K     K     NUMORO V     V     K       0.0     Brown SILT, little fine sand     Brown SILT, little fine sand     Light brown SILT, some fine to coarse sand	LOGGED BY         E. Pate         CHECKED BY         S. Donahue         24 HRS AFTER DRILLING         NM           H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H         H	LOGGED BY E. Pate       CHECKED BY S. Donahue       24 HRS AFTER DRILLING NM         H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H       H	LOGGED BY E. Pate       CHECKED BY S. Donahue       24 HRS AFTER DRILLING NM         HIGH       HI	LogGED BY E. Pate     CHECKED BY S. Donahue     24 HRS AFTER DRILLING - NM       Hand Hand Hand     Hand Hand Hand Hand Hand Hand Hand Hand	LOGGED BY E. Pate       CHECKED BY S. Donahue       24 HRS AFTER DRILLING NM         High       Hi	
5.0     SS     21     1-3-3-5     Brown, gray SILT, little organics (moist)     CAVING AT 4.5'       5.0     SS     21     1-3-3-5     Light brown SILT, and fine to medium sand (wet)     CAVING AT 4.5'	SS         96         5-6-9-11         C         Light brown fine SILT, and fine to medium sand         245.3           5.0         SS         96         5-6-9-11         C         CAVING AT 4'           6.0         Light brown fine SAND, little clay (moist)         243.3         CAVING AT 4'           6.0         Light brown fine SAND, little clay (moist)         243.3           6.0         B         B         CAVING AT 4'	5.0     5.0     242.2       5.0     5.0     242.2       -     -     SS     92       3.4-8-6     (10)     B       -     -     SS       -     -     SS       -     -     -       -     SS     100       4-4-8-7     -       -     -       SS     100       4-4-8-7     -       Brown, orange SiLT, trace fine sand	1     -     -     -     -     -     245.3       5.0     -     -     -     245.3       63     4-4-4-3     B     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -     -       -     -     -     -       -     -<	1     -     -     -     5.0     235.7       5.0     5.0     -     -     235.7       5.0     -     -     -     -       5.0     -     -     -     235.7       5.0     -     -     -     -       5.0     -     -     -     -       5.0     -     -     -     -       5.0     -     -     -     -       5.0     -     -     -     -       5.0     -     -     -     -       5.1     79     3-6-8-8     -     -       7.5     -     -     -     -       7.5     -     -     -     -       7.5     -     -     -     -       5.2     54     4-7-8-10     -       6     -     -     -       7.5     -     -     -       5.2     54     4-7-8-10     -       7.5     -     -     -       7.5     -     -     -       7.5     -     -     -       7.5     -     -     -       7.5     -     -     - <t< td=""><td>5.0     5.0     245.5       5.0     5.0     245.5       5.0     5.0     245.5       6.0     5.0     245.5       6.0     5.0     245.5       6.0     7.5     7.5       7.5     7.5     7.5-8.6       8.2     7.5     7.5-8.6       8.2     7.5     7.5-8.6       9.2     7.5     7.5-8.6       10     10       11     10       12     13</td><td></td></t<>	5.0     5.0     245.5       5.0     5.0     245.5       5.0     5.0     245.5       6.0     5.0     245.5       6.0     5.0     245.5       6.0     7.5     7.5       7.5     7.5     7.5-8.6       8.2     7.5     7.5-8.6       8.2     7.5     7.5-8.6       9.2     7.5     7.5-8.6       10     10       11     10       12     13	
LINEY 2016 - GINT STID US LUB GOTT -	- The Last of the	SS     100     6-8     C     Light brown SILT, some sand, trace fine gravel       10.0     S-3     100     6-8     Bottom of borehole at 10.0 feet.	Image: Sign of the second s	Image: Signature     SS S-3     100     2-5     Orange SiLT, little fine sand (dry)       Image: Silt of the signature     Bottom of borehole at 10.0 feet.	Image: Signal of the second	
PERMON TEST BORING LOG	PENNON TEST BORING LOG		PENKON TEST BORNEL LOO JAN	PENNON TEST BORING LOO JUNE LA	PENKON TEST BORING LOO JAN	TENTATIVELY APPROVED DEPARTMENT OF PLANNING AND ZONING HOWARD COUNTY
CLIENT_BOZUID Homes PROJECT NUMBER BOZH1302 PROJECT LOCATION Savage, MD	CLIENT BOZH1302  PROJECT NUMBER BOZH1302  BORING NUMBER B-14 PAGE 1 OF 1  PROJECT NAME_Savage Mill Residential Subdivision PROJECT NUMBER BOZH1302  PROJECT NUMBER BOZH1302	CLIENT BOZUTO HOMES PROJECT NUMBER BOZH1302 PROJECT NUMBER BOZH1302 PROJECT NUMBER BOZH1302 PROJECT LOCATION Savage, MD	CLIENT BOZET NUMBER BOZH1302  BORING NUMBER B-16 PAGE 1 OF 1  PAGE 1 OF 1  PROJECT NAME Savage Mill Residential Subdivision PROJECT NUMBER BOZH1302  PROJECT LOCATION Savage, MD	CLIENT BOZET NUMBER BOZH1302  BORING NUMBER BCZH1302  BORING NUMBER BCZH1302	CLIENT BOZETT NUMBER BOZH1302  BORING NUMBER B-18 PAGE 1 OF 1  PAGE 1 OF 1  PROJECT NAME Savage Mill Residential Subdivision PROJECT NUMBER BOZH1302  PROJECT LOCATION Savage, MD	PLANNING DIRECTOR DATE
PROJECT NUMBER BUZHTI3UZ PROJECT NUMBER BUZHTINUZ PROJECT NUMBER BUZHTI	PROJECT NUMBER BOZITISUZ     PROJECT NOUATION Savage, MD       DATE STARTED_6/9/15     COMPLETED_6/9/15       BRULLING CONTRACTOR Connelly & Associates Drilling     WATER ENCOUNTERED:       DRILLING METHOD_ASTM D1586     DURING DRILLING NE       BRULLER / HELPER T. Redman     AT END OF DRILLING NE	PROJECT NUMBER B02H1302     PROJECT L0CATION Savage, MD       DATE STARTED 6/8/15     GROUND ELEVATION Savage, MD       DRILLING CONTRACTOR Connelly & Associates Drilling     WATER ENCOUNTERED:       DRILLING METHOD_ASTM D1586     DURING DRILLING NE       DRILLER / HELPER T. Redman     AT END OF DRILLING NE	Date started 6/8/15         COMPLETED 6/8/15         GROUND ELEVATION 3/39/39, MD           Date started 6/8/15         COMPLETED 6/8/15         GROUND ELEVATION 2/39.44 ft MAXDB8 HOLE SIZE 3.25 inches           Datiling contractor Connelly & Associates Drilling         WATER ENCOUNTERED:           DBILLING METHOD_ASTM D1586         DURING DRILLING NE           DRILLER / HELPER T. Redman         AT END OF DRILLING NE	Display         Display <t< td=""><td>Date started 6/8/15         COMPLETED 6/8/15         GROUND ELEVATION_254/33 ft NuVbes         HOLE SIZE 3.25 inches           Date started 6/8/15         COMPLETED 6/8/15         GROUND ELEVATION_251/33 ft NuVbes         HOLE SIZE 3.25 inches           DRILLING CONTRACTOR Connelly &amp; Associates Drilling         WATER ENCOUNTERED:         DURING DRILLING — NE           DRILLER / HELPER T. Redman         At END OF DRILLING — NE         At END OF DRILLING — NE</td><td>DATE NO. REVISION DEVELOPER</td></t<>	Date started 6/8/15         COMPLETED 6/8/15         GROUND ELEVATION_254/33 ft NuVbes         HOLE SIZE 3.25 inches           Date started 6/8/15         COMPLETED 6/8/15         GROUND ELEVATION_251/33 ft NuVbes         HOLE SIZE 3.25 inches           DRILLING CONTRACTOR Connelly & Associates Drilling         WATER ENCOUNTERED:         DURING DRILLING — NE           DRILLER / HELPER T. Redman         At END OF DRILLING — NE         At END OF DRILLING — NE	DATE NO. REVISION DEVELOPER
LOGGED BY     E. Pate     CHECKED BY     S. Donahue     24 HRS AFTER DRILLING     NM       Under Display     Back     S. Donahue     24 HRS AFTER DRILLING     NM       HL     Back     S. MUTOR     S. MUTOR     S. MUTOR       HL     Back     S. MUTOR     S. MUTOR     S. MUTOR       UNING     DILLAGES     Auger to 5'     Auger to 5'	Logged BY     E. Pate     CHECKED BY     S. Donahue     24 HRS AFTER DRILLING NM       Under Line     B     S. Alago     S. Donahue     24 HRS AFTER DRILLING NM       Under Line     B     S. Alago     S. Donahue     MATERIAL DESCRIPTION     REMARKS       Under Line     B     S. Alago     S. Alago     S. Alago     Auger to 5'	LOGGED BY     E. Pate     CHECKED BY     S. Donahue     24 HRS AFTER DRILLING - NM       H     N     N     N     N       H     N     N     N     N       H     N     N     N     N       H     N     N     N     N       N     N     N     N     N       N     N     N     N     N       N     N     N     N     N       N     N     N     N     N       N     N     N     N     N       N     N     N     N     N       N     N     N     N     N       N     N     N     N     N       N     N     N     N     N       N     N     N     N     N       N     N     N     N     N       N     N     N     N     N       N     N     N     N     N       N     N     N     N     N       N     N     N     N     N       N     N     N     N     N       N     N     N     N     N	LOGGED BY_E.Pate     CHECKED BY_S. Donahue     24 HRS AFTER DRILLING NM       Image: Strate of the strate of	LOGGED BY     E. Pate     CHECKED BY     S. Donahue     24 HRS AFTER DRILLING NM       Harris     BA     S. All SO     S. Donahue     24 HRS AFTER DRILLING NM       Harris     BA     S. All SO     S. Donahue     DA       Harris     BA     S. All SO     S. Donahue     DA       BA     S. All SO     S. Donahue     DA     DA       BA     S. All SO     S. All SO     DA     DA       BA     MOTERIAL DESCRIPTION     REMARKS	LOGGED BY E. Pate         CHECKED BY S. Donahue         24 HRS AFTER DRILLING NM           H         BA         S         DONAHUE         24 HRS AFTER DRILLING NM           H         BA         S         DONAHUE         DONAHUE         DONAHUE           BA         S         DONAHUE         MATERIAL DESCRIPTION         REMARKS           NOTBO         NOTBO         Auger to 7'         DONAHUE         DONAHUE	BOZZUTO HOMES, INC. ATTN: MELVIN BYRD 6406 IVY LANE, SUITE 700 GREENBELT, MARYLAND 20770
*OFFSET 20 SOUTHWEST DUE TO CONFLICT WITH TREES 2.5 5.0 5.0 6.0 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	5.0     5.0       5.0     5.0       5.0     Crange, light brown SILT, little fine sand, trace medium to coarse sand (moist)				21	T: 301-623-1525 OWNERS SAVAGE MILL REMAINDER, LLC ATTN: JAY WINER 8373 PINEY ORCHARD PARKWAY SUITE 102 ODENTON, MARYLAND 21113-1580 T: 410-551-9116 HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS 7120 OAKLAND MILLS ROAD COLUMBIA, MD 21046 T: 410-313-4700
No.         SS         63         2-4-5-6         Red, orange, brown SILT, and fine to medium sand (quartz rock in shoe)           7.5         7.5         85         67         5-6-10-10         A           7.5         85         67         5-6-10-10         A           800         8-2         67         5-6-10-10         A           800         8-2         67         5-6-10-10         A           800         8-2         67         5-6-10-10         A           800         8         8         8         8           10.0         8         8         8         8           10.0         4-3         7         8         8           10.0         4-3         7         8         8           10.0         8-3         100         4-3         7	SS     SS     T5     3-3-4-5       7.5     SS     54     4-7-9-8       7.5     SS     54     4-7-9-8       100     SS     50     3-5       100     SS     50     3-5       100     SS     50       100     SS     50			7.5     7.6     7.0     244.5       7.5     7.5     7.6     0range, brown ELASTIC SILT, some fine sand (moist)       10.0     58     92     5-8-11-12       10.0     58     88     4-6-9-10       10.0     58     88     4-6-9-10	7.5     7.5     7.0     244.3       7.5     SS     75     3-5-11-10     A       10.0     SS     17     5-7-7-10     B       10.0     SS     17     5-7-7-10     B	PROJECT THE SETTLEMENT AT SAVAGE MILL
PENNON TEST BORING LOO JUMUMAY 2015	PENNONI TEST BORING LOO JUNIA TEST BORING LOO JUNIA TEST BORING LOO JUNIA	Brown, orange, black, white fine to medium SAND, little slit       Bottom of borehole at 12.0 feet.	SS     142     9-12     B   Bottom of borehole at 12.0 feet.	SS     42     12-10     Orange, brown ELASTIC SILT, little fine sand       12.0     239.5   Bottom of borehole at 12.0 feet.	SS S-3 75 8-12 C Orange, brown SiLT, little fine to medium sand (motet) Bottom of borehole at 12.0 feet.	AREA TAX MAP 47, PARCEL 92 & 93, GRID 11 ZONED B-2, R-H-ED, & R-20 6TH ELECTION DISTRICT 8400, 8550, & 8554 FAIR STREET HOWARD COUNTY, MARYLAND TITLE BORING LOGS
						Pennoni Associates Inc. Consulting Engineers 8818 Centre Park Drive Suite 200 Columbia, MD 21045 T 410.997.8900 F 410.997.9282
						BY:       PROJECT NO : BOZH1302         BY:       SCALE : AS SHOWN
						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. 36896, EXPIRATION DATE: 2-15-2017" DRAWING NO. <u>15</u> OF <u>15</u> SP-15-017

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