PRELIMINARY FOREST CONSERVATION PLAN MNCPPC F20250450

Attachment A

Sequence of Events for Properties Required to Comply With Forest Conservation Plans, Exemptions from Submitting Forest Conservation Plans, and Tree Save Plans

The property owner is responsible for ensuring all tree protection measures are performed in accordance with the approved final forest conservation plan or tree save plan, and as modified in the field by a Planning Department Forest Conservation Inspector. The measures must meet or exceed the most recent standards published by the American National Standards Institute (ANSI A300).

Pre-Construction

1. An on-site pre-construction meeting is required after the limits of disturbance have been staked and flagged and before any land disturbance.
2. The property owner must arrange for the meeting and following people ~~should~~ must participate at the pre-construction meeting: the property owner or their representative, construction superintendent, International Society of Arboriculture (ISA) certified arborist/Maryland Licensed Tree Expert (representing owner) that will implement the tree protection measures, The Planning Department Forest Conservation Inspector, and Montgomery County Department of Permitting Services (DPS) Sediment Control Inspector. The purpose of this meeting is verify the limits of disturbance and discuss specific tree protection and tree care measures shown on the approved plan. No land disturbance shall begin before tree protection and stress-reduction measures have been implemented and approved by the Planning Department's Forest Conservation Inspector.
   a. Typical tree protection devices include:
      i. Chain link fence (four feet high)
      ii. Super silt fence with wire strung between the support poles (minimum 4 feet high) with high visibility flagging.
      iii. 14 gauge, 2 inch x 4 inch welded wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging.
   b. Typical stress reduction measures may include, but are not limited to:
      i. Root pruning with a root cutter or vibratory plow designed for that purpose. Trenchers are not allowed, unless approved by the Forest Conservation Inspector
      ii. Crown Reduction or pruning
      iii. Watering
      iv. Fertilizing
      v. Vertical mulching
      vi. Root aeration systems

   Measures not specified on the Forest Conservation Plan may be required as determined by the Forest Conservation Inspector in coordination with the property owner's arborist.
3. A Maryland Licensed Tree expert must perform, or directly supervise, the implementation of all stress reduction measures. Documentation of the process (including

Page 1 of 3 February 2017

photographs) may be required by the Forest Conservation Inspector, and will be determined at the pre-construction meeting.

4. Temporary tree protection devices must be installed per the approved Forest Conservation Plan, Exemption Plan, or Tree Save Plan and prior to any land disturbance. The Forest Conservation Inspector, in coordination with the DPS Sediment Control Inspector, may make field adjustments to increase the survivability of trees and forest shown as saved on the approved plan.
5. Tree protection fencing must be installed and maintained by the property owner for the duration of construction project and must not be altered without prior approval from the Forest Conservation Inspector. All construction activity within protected tree and forest areas is prohibited. This includes the following activities:
   a. Parking or driving of equipment, machinery or vehicles of any type.
   b. Storage of any construction materials, equipment, stockpiling, fill, debris, etc.
   c. Dumping of any chemicals (i.e., paint thinner), mortar or concrete remainder, trash, garbage, or debris of any kind.
   d. Felling of trees into a protected area.
   e. Trenching or grading for utilities, irrigation, drainage, etc.
6. Forest and tree protection signs must be installed as required by the Forest Conservation Inspector. The signs must be waterproof and wording provided in both English and Spanish.

During Construction

7. Periodic inspections will be made by the Forest Conservation Inspector. Corrections and repairs to tree protection devices must be completed within the timeframe given by the Inspector.
8. The property owner must immediately notify the Forest Conservation Inspector of any damage to trees, forests, understory, ground cover, and any other undisturbed areas shown on the approved plan. Remedial actions, and the proposed timeframes to restore these areas, will be determined by the Forest Conservation Inspector.

Post-Construction

9. After construction is completed, but before tree protection devices have been removed, the property owner must request a final inspection with the Forest Conservation Inspector. At the final inspection, the Forest Conservation Inspector may require additional corrective measures, which may include:
   a. Removal, and possible replacement, of dead, dying, or hazardous trees
   b. Pruning of dead or declining limbs
   c. Soil aeration
   d. Fertilization
   e. Watering
   f. Wound repair

Page 2 of 3 February 2017

   g. Clean up of retention areas, including trash removal
10. After the final inspection and completion of all corrective measures the Forest Conservation Inspector will request all temporary tree and forest protection devices be removed from the site. Removal of tree protection devices that also operate for erosion and sediment control must be coordinated with both DPS and the Forest Conservation Inspector and cannot be removed without permission of the Forest Conservation Inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed.
11. Long-term protection measures, including permanent signage, must be installed per the approved plan. Installation will occur at the appropriate time during the construction project. Refer to the approved plan drawing for the long-term protection measures to be installed.

INSPECTIONS

All field inspections must be requested by the applicant.

Field Inspections must be conducted as follows:

Plans without Planting Requirements

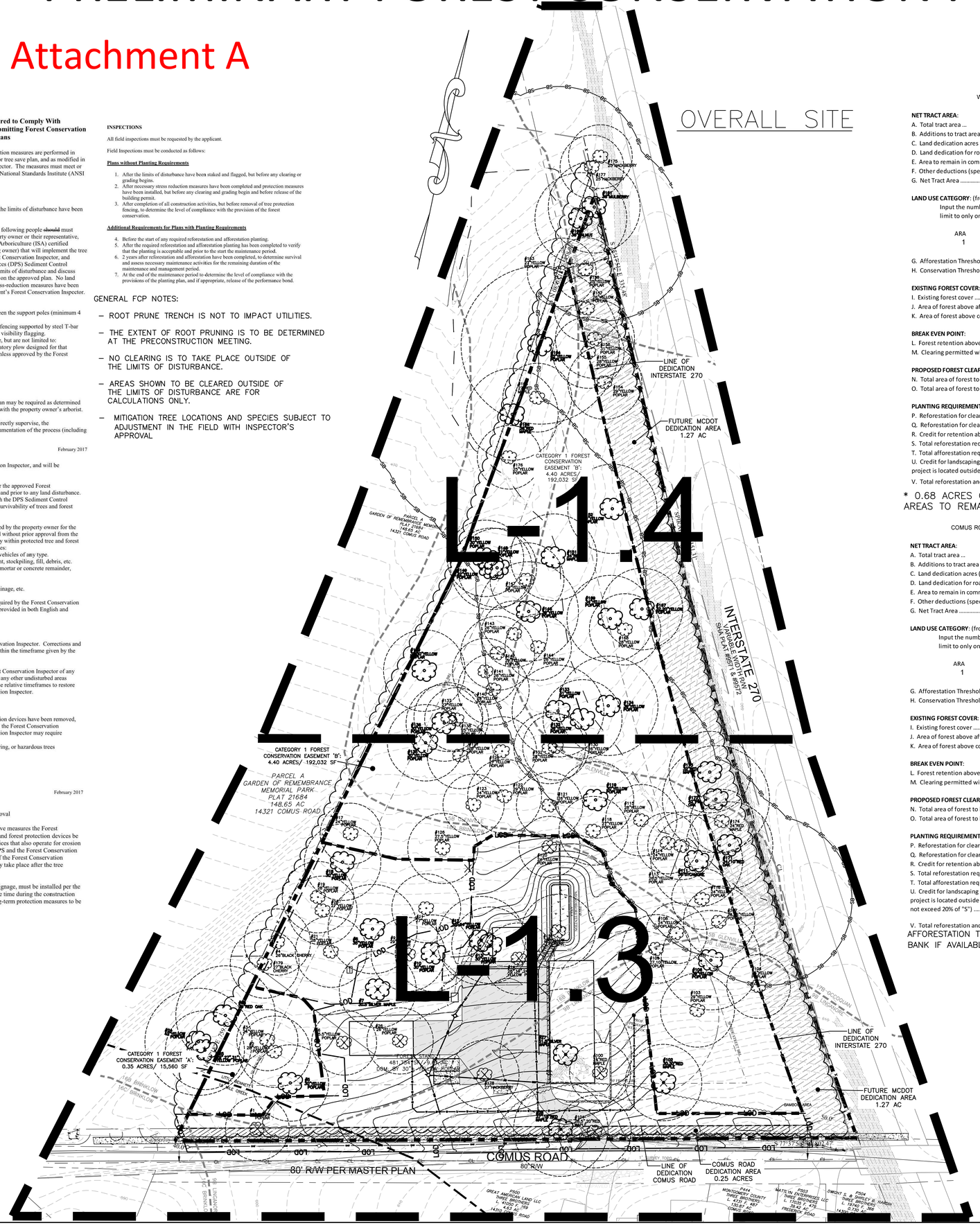
1. After the limits of disturbance have been staked and flagged, but before any clearing or grading begins.
2. After necessary stress reduction measures have been completed and protection measures have been installed, but before any clearing and grading begin and before release of the building permit.
3. After completion of all construction activities, but before removal of tree protection fencing, to determine the level of compliance with the provision of the forest conservation.

Additional Requirements for Plans with Planting Requirements

4. Before the start of any required reforestation and afforestation planting.
5. After the required reforestation and afforestation planting has been completed to verify that the planting is acceptable and prior to the start the maintenance period.
6. 2 years after reforestation and afforestation have been completed, to determine survival and assess necessary maintenance activities for the remaining duration of the maintenance and management period.
7. At the end of the maintenance period to determine the level of compliance with the provisions of the planting plan, and if appropriate, release of the performance bond.

GENERAL FCP NOTES:

- ROOT PRUNE TRENCH IS NOT TO IMPACT UTILITIES.
- THE EXTENT OF ROOT PRUNING IS TO BE DETERMINED AT THE PRECONSTRUCTION MEETING.
- NO CLEARING IS TO TAKE PLACE OUTSIDE OF THE LIMITS OF DISTURBANCE.
- AREAS SHOWN TO BE CLEARED OUTSIDE OF THE LIMITS OF DISTURBANCE ARE FOR CALCULATIONS ONLY.
- MITIGATION TREE LOCATIONS AND SPECIES SUBJECT TO ADJUSTMENT IN THE FIELD WITH INSPECTOR'S APPROVAL



FOREST CONSERVATION WORKSHEET
WITHIN SAME WATERSHED OR PRIORITY AREA

NET TRACT AREA:

A. Total tract area ...	9.45
B. Additions to tract area (Off-Site Work, etc.; construction required by this plan)...	0.21
C. Land dedication acres (parks, county facility, etc.) ...	0.00
D. Land dedication for roads or utilities (construction not required by this plan) ...	1.27
E. Area to remain in commercial agricultural production/use ...	0.00
F. Other deductions (specify)	0.00
G. Net Tract Area .....=	8.39

LAND USE CATEGORY: (from Chapter 22A-3. Definitions)
Input the number "1" under the appropriate land use, limit to only one entry.

ARA	CDR	MDR	IDA	HDR	MPD	CIA
1	0	0	0	0	0	0

G. Afforestation Threshold ...	20%	x G =	1.68
H. Conservation Threshold ...	55%	x G =	4.61

EXISTING FOREST COVER:

I. Existing forest cover .....=	8.18
J. Area of forest above afforestation threshold .....=	6.50
K. Area of forest above conservation threshold .....=	3.57

BREAK EVEN POINT:

L. Forest retention above threshold with no mitigation ....=	5.33
M. Clearing permitted without mitigation .....=	2.85

PROPOSED FOREST CLEARING:

N. Total area of forest to be cleared .....=	3.41 *
O. Total area of forest to be retained .....=	4.77

PLANTING REQUIREMENTS:

P. Reforestation for clearing above conservation threshold ....=	1.71
Q. Reforestation for clearing below conservation threshold ....=	0.00
R. Credit for retention above conservation threshold .....=	0.16
S. Total reforestation required .....=	1.55
T. Total afforestation required .....=	0.00
U. Credit for landscaping (may not be used to meet reforestation requirement if project is located outside an EFA. For projects within EFA, may not exceed 20% of	0.00
V. Total reforestation and afforestation required .....=	**1.55**

* 0.68 ACRES OF FOREST CLEARED ONLY FOR COMPUTATIONS. AREAS TO REMAIN IN THE FIELD.

FOREST CONSERVATION WORKSHEET
COMUS ROAD OUTSIDE SAME WATERSHED OR PRIORITY AREA

NET TRACT AREA:

A. Total tract area ...	9.45
B. Additions to tract area (Off-Site Work, etc.; construction required by this plan)...	0.21
C. Land dedication acres (parks, county facility, etc.) ...	0.00
D. Land dedication for roads or utilities (construction not required by this plan) ...	1.27
E. Area to remain in commercial agricultural production/use ...	0.00
F. Other deductions (specify)	0.00
G. Net Tract Area .....=	8.39

LAND USE CATEGORY: (from Chapter 22A-3. Definitions)
Input the number "1" under the appropriate land use, limit to only one entry.

ARA	CDR	MDR	IDA	HDR	MPD	CIA
1	0	0	0	0	0	0

G. Afforestation Threshold ...	20%	x G =	1.68
H. Conservation Threshold ...	55%	x G =	4.61

EXISTING FOREST COVER:

I. Existing forest cover .....=	8.18
J. Area of forest above afforestation threshold .....=	6.50
K. Area of forest above conservation threshold .....=	3.57

BREAK EVEN POINT:

L. Forest retention above threshold with no mitigation ....=	5.33
M. Clearing permitted without mitigation .....=	2.85

PROPOSED FOREST CLEARING:

N. Total area of forest to be cleared .....=	3.41 *
O. Total area of forest to be retained .....=	4.77

PLANTING REQUIREMENTS:

P. Reforestation for clearing above conservation threshold ....=	3.41
Q. Reforestation for clearing below conservation threshold ....=	0.00
R. Credit for retention above conservation threshold .....=	0.16
S. Total reforestation required .....=	3.25
T. Total afforestation required .....=	0.00
U. Credit for landscaping (may not be used to meet reforestation requirement if project is located outside an Equity Focus Area (EFA). For projects within EFA, may not exceed 20% of "S") .....=	0.00
V. Total reforestation and afforestation required .....=	**3.25**

AFFORESTATION TO BE MET THROUGH PURCHASE OF FOREST BANK IF AVAILABLE. IF NOT AVAILABLE, FEE-IN-LIEU WILL APPLY.

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. F20250450 including, financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: TORCATO ROMANO
Printed Company Name

Contact Person or Owner: TORCATO ROMANO
OWNER
Printed Name

Address: 15900 WOODS CENTER RD
SILVER SPRING MD 20906

Phone and Email:

Signature:

LEGEND

- EXISTING SIGNIFICANT TREE ≥24" AND <30"DBH
- EXISTING SPECIMEN TREE ≥30"DBH
- FOREST TREELINE
- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- EX. STREAM
- 100' STREAM BUFFER
- EX. CONTOUR
- LIMITS OF DISTURBANCE
- CATEGORY 1 FOREST CONSERVATION EASEMENT WITH COINCIDENTAL SPLIT RAIL FENCE
- FUTURE MCDOT DEDICATION AREA
- STEEP SLOPES 25% AND >
- SOIL BOUNDARY

SITE TABULATIONS:

ACREAGE OF TRACT:	9.66*
NET ACREAGE OF TRACT AFTER DEDICATION:	8.39
ACREAGE OF TRACT REMAINING IN AGRICULTURE:	0
ACREAGE OF ROAD AND UTILITY R/W WHICH WILL NOT BE IMPROVED AS PART OF DEV. APPLICATION:	0
ACREAGE OF EX. FOREST:	8.18
ACREAGE OF TOTAL FOREST RETENTION:	4.77
ACREAGE OF TOTAL FOREST CLEARED:	3.41
LAND USE CATEGORY:	ARA
AFFORESTATION THRESHOLD	1.68
CONSERVATION THRESHOLD	4.61
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN WETLANDS	0.00/0.00/0.00
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN 100-YEAR FLOODPLAIN	0.00/0.00/0.00
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITHIN STREAM BUFFERS	2.46/0.00/0.00
ACREAGE OF FOREST RETAINED, CLEARED, AND PLANTED WITH PRIORITY AREAS	0.00/0.00/0.00
LINEAR EXTENT & AVERAGE WIDTH OF STREAM BUFFER	615/100

*TOTAL TRACT AREA PLUS 0.21 AC OF OFFSITE LOD
NOTE: THE NON FORESTED AREA IS THE 0.21 AC OF OFFSITE LOD

CERTIFICATION OF QUALIFIED PROFESSIONAL

I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE WITH MARYLAND STATE, MNCP&PC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.

07.16.2025
DATE

MICHAEL A. NORTON
MDNR / COMAR 08.19.06.01

LIST OF DRAWINGS

SHEET #	DESCRIPTION
L-1.1	COVER SHEET
L-1.2	APPROVAL SHEET
L-1.3	PFCP
L-1.4	PFCP
L-1.5	PFCP

TITLE
PRELIMINARY FOREST CONSERVATION PLAN MNCPPC F20250450

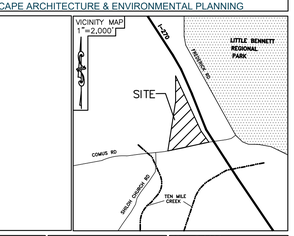
PROJECT
COMUS ROAD PARCEL 420
L.10932/F.0091
14301 COMUS ROAD
CLARKSBURG, MD 20871
ELECTION DISTRICT 02

PREPARED FOR
TORCATO ROMANO
15900 WOODS CENTER ROAD
SILVER SPRING, MD 20906
TONY@AJRCI.COM | 301.362.0080

NORTON LAND DESIGN
5146 DORSEY HALL DRIVE
2ND FLOOR
ELLICOTT CITY, MD 21042
O.443.542.9199
NORTONLANDDESIGN.COM
LANDSCAPE ARCHITECTURE & ENVIRONMENTAL PLANNING

REVISIONS

VICINITY MAP 1"=2,000'



WATER CLASS I,P	WATERSHED LITTLE BENNETT CREEK & 10 MILE CREEK		FEMA FLOODPLAIN MAP PANEL # 24031C0160D
TRIBUTARY N/A			
TAX MAP EW122	200 SHEET 233NW14	ADC MAP PAGE 8 GRID K-2 K-3	
SCALE AS SHOWN	DATE DEC 2024	PROJ. NO. 17-040	SHEET NO. L-1.1

CERTIFICATION OF QUALIFIED PROFESSIONAL

I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE WITH MARYLAND STATE, MNCP&PC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.

12.03.2024
DATE

MICHAEL A. NORTON
MDNR / COMAR 08.19.06.01

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. F20250450 including, financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: TORCATO ROMANO
Printed Company Name

Contact Person or Owner: TORCATO ROMANO
OWNER
Printed Name

Address: 15900 WOODS CENTER RD
SILVER SPRING MD 20906

Phone and Email:

Signature:

TITLE

FINAL FOREST CONSERVATION PLAN MNCPPC F20250450

PROJECT

COMUS ROAD PARCEL 420
L.10932/F.0091
14301 COMUS ROAD
CLARKSBURG, MD 20871
ELECTION DISTRICT 02

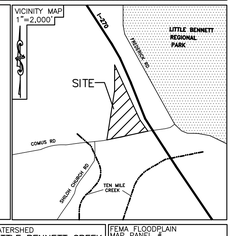
PREPARED FOR

TORCATO ROMANO
15900 WOODS CENTER ROAD
SILVER SPRING, MD 20906
TONY@AJRCI.COM | 301.362.0080

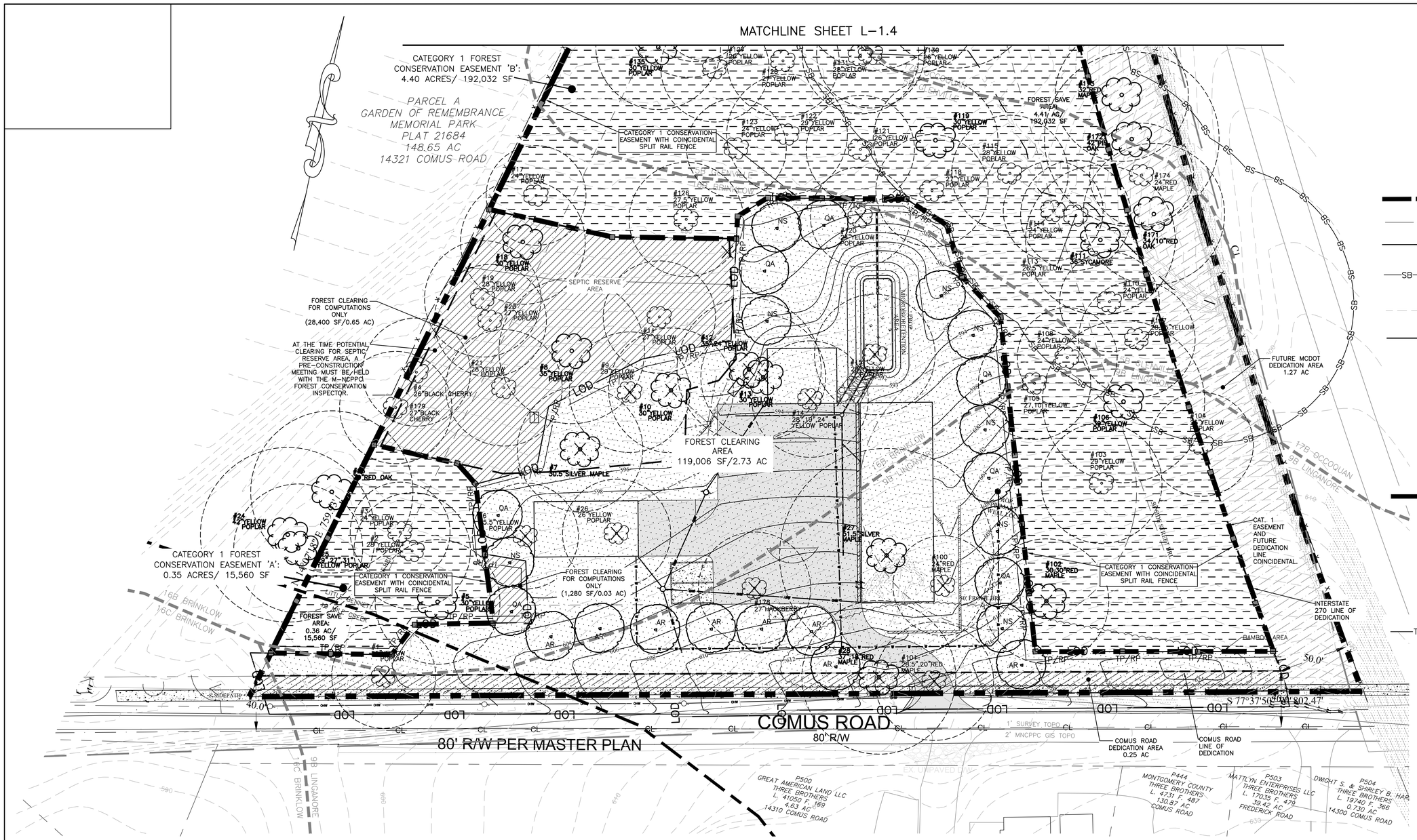
nld NORTON LAND DESIGN
LANDSCAPE ARCHITECTURE & ENVIRONMENTAL PLANNING
5146 DORSEY HALL DRIVE
2ND FLOOR
ELLICOTT CITY, MD 21042
O.443.542.9199
NORTONLANDDESIGN.COM

REVISIONS

VICINITY MAP
1"=2,000'



WATER CLASS I,P	WATERSHED LITTLE BENNETT CREEK & 10 MILE CREEK	FEMA FLOODPLAIN MAP PANEL # 24031C0160D	
TRIBUTARY N/A			
TAX MAP EW122	200 SHEET 233NW14	ADC MAP PAGE 8 GRID K-2 K-3	
SCALE AS SHOWN	DATE DEC 2024	PROJ. NO. 17-040	SHEET NO. L-1.2



LEGEND

- EXISTING SIGNIFICANT TREE ≥24" AND <30"DBH W/ CRZ
- EXISTING SPECIMEN TREE ≥30"DBH W/ CRZ
- SCRUB/SHRUB AREA
- FOREST TREELINE
- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- EX. STREAM
- 100' STREAM BUFFER
- EX. CONTOUR
- LIMITS OF DISTURBANCE
- FOREST CLEARING AREA
- FOREST CLEARING AREA (FOR COMPUTATIONS ONLY)
- FOREST SAVE AREA
- CATEGORY 1 FOREST CONSERVATION EASEMENT WITH COINCIDENTAL SPLIT RAIL FENCE
- PERMANENT FOREST CONSERVATION SIGNAGE
- FUTURE MCDOT DEDICATION AREA
- REGULATED TREE TO BE REMOVED
- TEMPORARY TREE PROTECTION FENCE/ ROOTPRUNING
- STEEP SLOPES 25% AND >
- SOIL BOUNDARY
- MITIGATION TREE

GENERAL NRI/FSD NOTES

1. THIS PROPERTY IS ZONED AR.
2. THE TAX IDENTIFICATION NUMBER ASSOCIATED WITH THIS PLAN IS: 00023661.
3. THE TOTAL TRACT AREA IS 9.45 ACRES.
4. SITE FIELD WORK WAS PERFORMED IN DECEMBER 2019 & JUNE 2020 AND UPDATED JULY 2024 BY MICHAEL NORTON, NORTON LAND DESIGN LLC.
5. THIS PROPERTY IS NOT WITHIN A PMA OR SPA.
6. THE PROPERTY LIES WITHIN THE LITTLE BENNETT AND 10 MILE CREEK WATERSHEDS, USE I,P.
7. FEMA FLOODPLAIN MAP PANEL #24031C0160D AND MNCPPC ULTIMATE FLOODPLAIN MAP NOTES NO FLOODPLAIN ONSITE.
8. ACCORDING TO MD MERLIN ONLINE, US FISH & WILDLIFE SERVICE: NWI, AND FIELD OBSERVATION; THERE ARE NO WETLANDS OR ASSOCIATED BUFFERS WITHIN 100' OF THE PROPERTY.
9. THERE ARE NO PRIME AGRICULTURAL, HYDRIC, HIGHLY EROSIVE, OR SERPENTINE SOILS ON THE PROPERTY (SEE SOIL TABLE).
10. 1' TOPOGRAPHY AND BOUNDARY SURVEY FROM O'CONNELL & LAWRENCE.
11. THERE IS NO PRIME AGRICULTURAL SOILS ON THE PROPERTY (SEE SOIL TABLE).
12. ALL TREES 24" AND GREATER ON THE PROPERTY ARE SURVEY LOCATED AND MEASURED WITH A FORESTERS DIAMETER TAPE MEASURE.
13. ALL TREES 24" AND GREATER OFFSITE ARE LOCATED AND MEASURED BY OCCULAR ESTIMATE ONLY. ALL MANMADE STRUCTURES OFFSITE ARE LOCATED BY AVAILABLE AERIAL PHOTOGRAPHS AND/OR OCCULAR ESTIMATE.
14. ALL TREES 24" AND GREATER ON THE SUBJECT PROPERTY ARE SURVEYED AND MEASURED WITH A FORESTERS DIAMETER TAPE MEASURE.
15. ALL TREES 24" AND GREATER OFFSITE ARE LOCATED AND MEASURED BY OCULAR ESTIMATE ONLY. ALL MANMADE STRUCTURES OFFSITE ARE LOCATED BY AVAILABLE AERIAL PHOTOGRAPHS AND/OR OCCULAR ESTIMATE.
16. NO RARE, THREATENED OR ENDANGERED SPECIES WERE OBSERVED ON OR OFFSITE AT THE TIME OF THE FIELD INVESTIGATION, AND CONFIRMED BY DNR LETTER DATED AUGUST 6, 2024.
17. NO TREES OCCUR WITHIN THE STUDY AREA WHICH ARE RECOGNIZED AS CURRENT NATIONAL, STATE, OR COUNTY CHAMPION TREES, OR TREES THAT ARE AT LEAST 75% OF THE CURRENT STATE CHAMPION.
18. THE SUBJECT PROPERTY IS NOT LISTED AS INDIVIDUAL HISTORIC SITES AS FOUND IN THE MNCPPC HISTORIC PROPERTIES INTERACTIVE MAP.
19. OWNER NAME AND ADDRESS: TORCATO ROMANO 15900 WOODS CENTER ROAD SILVER SPRING, MD 20906

SOIL TABLE

SOILS	ERODIBLE	HYDRIC	CONTAINS 15-25% SLOPES	CONTAINS > 25% SLOPES	CAPABILITY SUBCLASS SYMBOL	PRIME AGRICULTURAL SOIL
16B BRINKLOW-BROCKTOWN SILT LOAM 3-8% SLOPES	NO	NO	N/A	NO	e	NO
16C BRINKLOW-BROCKTOWN SILT LOAM 8-15% SLOPES	NO	NO	N/A	NO	e	NO
5B GLENVILLE SILT LOAM 3-8% SLOPES	NO	NO	N/A	YES	e	NO
17B OCCOQUAN LOAM 3-8% SLOPES	NO	NO	N/A	YES	e	NO
9B LINGANORE-HYATTSTOWN CHANNERY SILT LOAM 3-8% SLOPES	NO	NO	N/A	YES	e	NO

RESOURCE DATA TABLE

ACREAGE OF EX. FOREST:	8.18
ACREAGE OF 100 YEAR FLOODPLAIN	0.00
ACREAGE OF FORESTED 100 YEAR FLOODPLAIN	0.00
ACREAGE OF EXISTING WETLANDS	0.00
ACREAGE OF FORESTED WETLANDS	0.00
ACREAGE OF WETLAND BUFFERS	0.00
ACREAGE OF STREAM BUFFERS	2.46
ACREAGE OF FORESTED STREAM BUFFER	2.46
LINEAR EXTENT OF STREAMS	615
AVERAGE WIDTH OF STREAM BUFFER	200'

CERTIFICATION OF QUALIFIED PROFESSIONAL

I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE WITH MARYLAND STATE, MNCP&PC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.

07.16.2025
DATE

MICHAEL A. NORTON
MDNR / COMAR 08.19.06.01

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. F20250450 including, financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: TORCATO ROMANO
Printed Company Name

Contact Person or Owner: TORCATO ROMANO OWNER
Printed Name

Address: 15900 WOODS CENTER RD SILVER SPRING MD 20906

Phone and Email:

Signature:

TITLE
PRELIMINARY FOREST CONSERVATION PLAN
MNCPPC F20250450

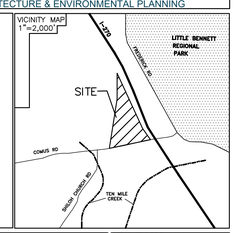
PROJECT
COMUS ROAD PARCEL 420
L.10932/F.0091
14301 COMUS ROAD
CLARKSBURG, MD 20871
ELECTION DISTRICT 02

PREPARED FOR
TORCATO ROMANO
15900 WOODS CENTER ROAD
SILVER SPRING, MD 20906
TONY@AJRCI.COM | 301.362.0080

NORTON LAND DESIGN
5146 DORSEY HALL DRIVE 2ND FLOOR ELLICOTT CITY, MD 21042
O 443.542.9199
NORTONLANDDESIGN.COM
LANDSCAPE ARCHITECTURE & ENVIRONMENTAL PLANNING

REVISIONS

VICINITY MAP 1"=2,000'



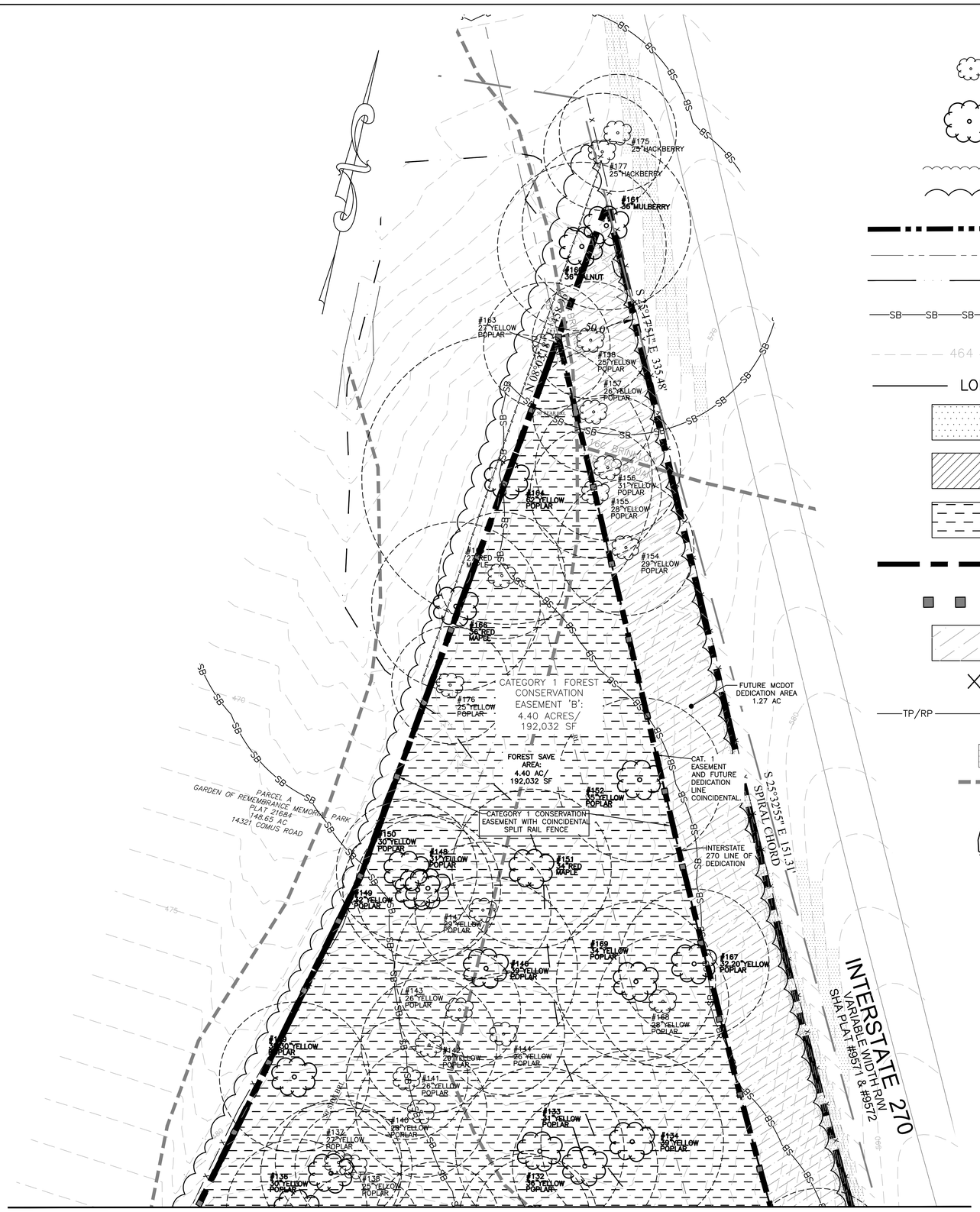
WATER CLASS I,P	WATERSHED LITTLE BENNETT CREEK & 10 MILE CREEK		FEMA FLOODPLAIN MAP PANEL # 24031C0160D
TRIBUTARY N/A			
TAX MAP EW122	200 SHEET 233NW14		ADC MAP PAGE 8 GRID K-2 K-3
SCALE AS SHOWN	DATE DEC 2024	PROJ. NO. 17-040	SHEET NO. L-1.3

* BOLD TYPE DENOTES SPECIMEN TREES

Condition Scoring System	
No Apparent Problems	Excellent
Minor Problems	Good
Major Problems	Fair
Extreme Problems	Poor

Significant/SpecimenTree Summary 24" +

Tree #	Species (Scientific Name)	Species (Common Name)	D.B.H (inches)	CRZ (SF)	IMPACT (SF)	IMPACTS (%)	Tree Condition	Comments	Status	Variance	Mitigation
1	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	25	4418	4418	100	POOR	HOLE IN BASE OF TRUNK	REMOVE	N/A	N/A
2	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	28	5542	0	0	GOOD		SAVE/PROTECT	N/A	N/A
3	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0	GOOD		SAVE/PROTECT	N/A	N/A
4	PRUNUS SEROTINA	BLACK CHERRY	26	4778	0	0	POOR	LEANING. DEAD LIMBS	SAVE/PROTECT	NO	NO
5	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**30**	**6362**	**827**	**13**	**GOOD**		**SAVE/PROTECT**	**N/A**	**N/A**
6	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	25.5	4596	4418	96	GOOD		REMOVE	N/A	N/A
7	**ACER SACCHARINUM**	**SILVER MAPLE**	**30.5**	**6576**	**6362**	**100**	**FAIR**		**REMOVE**	**YES**	**YES**
8	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**35**	**8659**	**1623**	**19**	**GOOD**		**SAVE/PROTECT**	**YES**	**NO**
9	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	29	5945	5945	100	GOOD		REMOVE	N/A	N/A
10	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**30**	**6362**	**6362**	**100**	**GOOD**		**REMOVE**	**YES**	**YES**
11	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	27	5153	367	7	GOOD		SAVE/PROTECT	N/A	N/A
12	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**35,24**	**8659**	**8659**	**100**	**GOOD**	**TWIN**	**REMOVE**	**YES**	**YES**
13	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**30**	**6362**	**6362**	**100**	**GOOD**		**REMOVE**	**YES**	**YES**
14	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	28,19,24	5542	5542	100	FAIR	TRIPLE	REMOVE	N/A	N/A
15	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	29	5945	5945	100	GOOD		REMOVE	YES	NO
16	VOID	VOID	VOID	VOID	VOID	VOID	VOID	DEAD	REMOVE	N/A	N/A
17	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0	GOOD		SAVE/PROTECT	N/A	N/A
18	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**30**	**6362**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**N/A**	**N/A**
19	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	28	5542	0	0	GOOD		SAVE/PROTECT	N/A	N/A
20	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	27	5153	0	0	GOOD		SAVE/PROTECT	N/A	N/A
21	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	28	5542	0	0	GOOD		SAVE/PROTECT	N/A	N/A
22	VOID	VOID	VOID	VOID	VOID	VOID	VOID	DEAD	REMOVE	N/A	N/A
23	**QUERCUS RUBRA**	**RED OAK**	**39**	**10751**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
24	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**42**	**12469**	**0**	**0**	**GOOD**	**OFFSITE**	**SAVE/PROTECT**	**NO**	**NO**
25	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**29,27,31**	**5344**	**0**	**0**	**GOOD**	**OFFSITE. TRIPLE**	**SAVE/PROTECT**	**NO**	**NO**
26	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	26	4778	4778	100	FAIR		REMOVE	N/A	N/A
27	**ACER SACCHARINUM**	**SILVER MAPLE**	**51.5**	**18748**	**18748**	**100**	**POOR**		**REMOVE**	**YES**	**YES**
28	**ACER RUBRUM**	**RED MAPLE**	**37,18**	**9677**	**5153**	**53**	**FAIR**	**TWIN**	**REMOVE**	**YES**	**YES**
29	VOID	VOID	VOID	VOID	VOID	VOID	VOID	REMOVED	**SAVE/PROTECT**	**NO**	**NO**
30	VOID	VOID	VOID	VOID	VOID	VOID	VOID	REMOVED	SAVE/PROTECT	N/A	N/A
100	ACER RUBRUM	RED MAPLE	24	4072	4072	100	GOOD		REMOVE	N/A	N/A
101	ACER RUBRUM	RED MAPLE	28.5,20	5945	4072	68	GOOD		REMOVE	N/A	N/A
102	**ACER RUBRUM**	**RED MAPLE**	**30,30**	**6362**	**2786**	**44**	**GOOD**	**TWIN**	**REMOVE**	**YES**	**YES**
103	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	29	5945	0	0	GOOD	MODERATE VINE COVER	SAVE/PROTECT	N/A	N/A
104	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	25	4418	0	0	FAIR	DEAD BRANCHES IN CANOPY	SAVE/PROTECT	N/A	N/A
105	VOID	VOID	VOID	VOID	VOID	VOID	VOID	LESS THAN 24"	SAVE/PROTECT	N/A	N/A
106	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**39**	**10751**	**0**	**0**	**GOOD**	**SPLIT @ 6'**	**SAVE/PROTECT**	**NO**	**NO**
107	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	28,15	5542	0	0	GOOD	TWIN	SAVE/PROTECT	N/A	N/A
108	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0	GOOD		SAVE/PROTECT	N/A	N/A
109	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	27,10	5153	1067	21	GOOD	SPLIT @ 4'	SAVE/PROTECT	N/A	N/A
110	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0	GOOD		SAVE/PROTECT	N/A	N/A
111	**PLATANUS OCCIDENTALIS**	**SYCAMORE**	**36**	**9161**	**0**	**0**	**POOR**	**LARGE CAVITY IN TRUNK**	**SAVE/PROTECT**	**NO**	**NO**
112	VOID	VOID	VOID	VOID	VOID	VOID	VOID	LESS THAN 24"	SAVE/PROTECT	N/A	N/A
113	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	26.5	4964	0	0	GOOD		SAVE/PROTECT	N/A	N/A
114	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0	GOOD		SAVE/PROTECT	N/A	N/A
115	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	28	5542	0	0	GOOD		SAVE/PROTECT	N/A	N/A
116	VOID	VOID	VOID	VOID	VOID	VOID	VOID	LESS THAN 24"	SAVE/PROTECT	N/A	N/A
117	VOID	VOID	VOID	VOID	VOID	VOID	VOID	SKIPPED IN FIELD	VOID	VOID	VOID
118	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	27	5153	1150	22	GOOD		SAVE/PROTECT	N/A	N/A
119	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**30**	**6362**	**0**	**0**	**FAIR**	**DEAD SPLIT TRUNK**	**SAVE/PROTECT**	**NO**	**NO**
120	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	4072	100	GOOD		REMOVE	N/A	N/A
121	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	26	4778	71	1	GOOD		SAVE/PROTECT	N/A	N/A
122	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	29	5945	0	0	GOOD		SAVE/PROTECT	N/A	N/A
123	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	24	4072	0	0	GOOD	CORRECTIVE LEAN	SAVE/PROTECT	N/A	N/A
124	VOID	VOID	VOID	VOID	VOID	VOID	VOID	LESS THAN 24"	REMOVE	N/A	N/A
125	VOID	VOID	VOID	VOID	VOID	VOID	VOID	LESS THAN 24"	SAVE/PROTECT	N/A	N/A
126	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	27.5	5346	197	4	GOOD		SAVE/PROTECT	YES	NO
127	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	26	4778	0	0	GOOD		SAVE/PROTECT	N/A	N/A
128	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	29	5945	0	0	GOOD		SAVE/PROTECT	N/A	N/A
129	VOID	VOID	VOID	VOID	VOID	VOID	VOID	LESS THAN 24"	SAVE/PROTECT	N/A	N/A
130	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	26	4778	0	0	GOOD		SAVE/PROTECT	N/A	N/A
131	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**28**	**5542**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
132	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**36**	**9161**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
133	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**31**	**6793**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
134	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**39**	**10751**	**0**	**0**	**GOOD**	**CORRECTIVE LEAN**	**SAVE/PROTECT**	**NO**	**NO**
135	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**30**	**6362**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**N/A**	**N/A**
136	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**30**	**6362**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
137	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**27**	**5153**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
138	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	25	4418	0	0	GOOD		SAVE/PROTECT	N/A	N/A
139	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**32,30**	**7238**	**0**	**0**	**GOOD**	**SPLIT @ 2'**	**SAVE/PROTECT**	**NO**	**NO**
140	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	28	5542	0	0	GOOD		SAVE/PROTECT	N/A	N/A
141	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	26	4778	0	0	GOOD		SAVE/PROTECT	N/A	N/A
142	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**29**	**5945**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
143	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	26	4778	0	0	GOOD		SAVE/PROTECT	N/A	N/A
144	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	26	4778	0	0	GOOD		SAVE/PROTECT	N/A	N/A
145	**VOID**	**VOID**	**VOID**	**VOID**	**VOID**	**VOID**	**VOID**	**DEAD**	**SAVE/PROTECT**	**NO**	**NO**
146	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**39**	**10751**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
147	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	29	5945	0	0	GOOD		SAVE/PROTECT	NO	NO
148	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**31**	**6793**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
149	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**32**	**7238**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
150	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**30**	**6362**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**N/A**	**N/A**
151	**ACER RUBRUM**	**RED MAPLE**	**34**	**8171**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**N/A**	**N/A**
152	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**35**	**8659**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
153	VOID	VOID	VOID	VOID	VOID	VOID	VOID	FALLEN SINCE LAST SURVEY	SAVE/PROTECT	NO	NO
154	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	29	5945	0	0	FAIR	SMALL CAVITY IN TRUNK	SAVE/PROTECT	N/A	N/A
155	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	28	5542	0	0	GOOD		SAVE/PROTECT	N/A	N/A
156	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**31**	**6793**	**0**	**0**	**FAIR**	**DEAD SPLIT TRUNK**	**SAVE/PROTECT**	**N/A**	**N/A**
157	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	26	4778	0	0	GOOD		SAVE/PROTECT	N/A	N/A
158	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	25	4418	0	0	GOOD		SAVE/PROTECT	N/A	N/A
159	VOID	VOID	VOID	VOID	VOID	VOID	VOID	SKIPPED IN FIELD	VOID	VOID	VOID
160	**JUGLANS NIGRA**	**BLACK WALNUT**	**36**	**9161**	**0**	**0**	**POOR**	**TRUNK DAMAGE, EROSION UNDER ROOTS**	**SAVE/PROTECT**	**NO**	**NO**
161	**MORUS RUBRA**	**RED MULBERRY**	**36**	**9161**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
162	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	VOID	VOID	VOID	VOID	VOID	LESS THAN 24"	SAVE/PROTECT	N/A	N/A
163	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	27	5153	0	0	GOOD	MINOR CAVITY IN TRUNK	SAVE/PROTECT	N/A	N/A
164	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**60**	**25447**	**0**	**0**	**POOR**	**LARGE CAVITY IN TRUNK, EXTENDING FROM BASE TO 20' IN HEIGHT**	**SAVE/PROTECT**	**NO**	**NO**
165	ACER RUBRUM	RED MAPLE	27	5153	0	0	GOOD		SAVE/PROTECT	NO	NO
166	**ACER RUBRUM**	**RED MAPLE**	**36**	**9161**	**0**	**0**	**FAIR**	**CAVITY IN BASE**	**SAVE/PROTECT**	**NO**	**NO**
167	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**32,20**	**7238**	**0**	**0**	**GOOD**	**TWIN**	**SAVE/PROTECT**	**NO**	**NO**
168	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	28	5542	0	0	GOOD		SAVE/PROTECT	NO	NO
169	**LIRIODENDRON TULIPIFERA**	**YELLOW POPLAR**	**34**	**8171**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
170	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	VOID	VOID	VOID	VOID	VOID	LESS THAN 24"	SAVE/PROTECT	N/A	N/A
171	**QUERCUS RUBRA**	**RED OAK**	**34/10**	**13685**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
172	**QUERCUS PALUSTRIS**	**PIN OAK**	**42**	**12469**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
173	**ACER RUBRUM**	**RED MAPLE**	**32**	**7238**	**0**	**0**	**GOOD**		**SAVE/PROTECT**	**NO**	**NO**
174	ACER RUBRUM	RED MAPLE	24	4072	0	0	GOOD		SAVE/PROTECT	N/A	N/A
175	CELTIS OCCIDENTALIS	HACKBERRY	25	4418	1	0	GOOD		SAVE/PROTECT	N/A	N/A
176	LIRIODENDRON TULIPIFERA	YELLOW POPLAR	25	4418	2	0	POOR		SAVE/PROTECT	N/A	N/A
177	CELTIS OCCIDENTALIS	HACKBERRY	25	4418	3	0	GOOD		SAVE/PROTECT	N/A	N/A
178	CELTIS OCCIDENTALIS	HACKBERRY	27	5153	4	0	GOOD		SAVE/PROTECT	N/A	N/A
179	PRUNUS SEROTINA	BLACK CHERRY	27	5153	5	0	GOOD		SAVE/PROTECT	N/A	N/A



MATCHLINE SHEET L-1.3

LEGEND

- EXISTING SIGNIFICANT TREE ≥24" AND <30"DBH W/ CRZ
- EXISTING SPECIMEN TREE ≥30"DBH W/ CRZ
- SCRUB/SHRUB AREA
- FOREST TREELINE
- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- EX. STREAM
- SB — 100' STREAM BUFFER
- 464 — EX. CONTOUR
- LOD — LIMITS OF DISTURBANCE
- FOREST CLEARING AREA
- FOREST CLEARING AREA (FOR COMPUTATIONS ONLY)
- FOREST SAVE AREA
- CATEGORY 1 FOREST CONSERVATION EASEMENT WITH COINCIDENTAL SPLIT RAIL FENCE
- PERMANENT FOREST CONSERVATION SIGNAGE
- FUTURE MCDOT DEDICATION AREA
- X — REGULATED TREE TO BE REMOVED
- TP/RP — TEMPORARY TREE PROTECTION FENCE/ ROOTPRUNING
- STEEP SLOPES 25% AND >
- BRINKLOW / 16C BRINKLOW — SOIL BOUNDARY
- AR — MITIGATION TREE

TITLE

PRELIMINARY FOREST CONSERVATION PLAN MNCPPC F20250450

PROJECT

COMUS ROAD PARCEL 420
L.10932/F.0091
14301 COMUS ROAD
CLARKSBURG, MD 20871
ELECTION DISTRICT 02

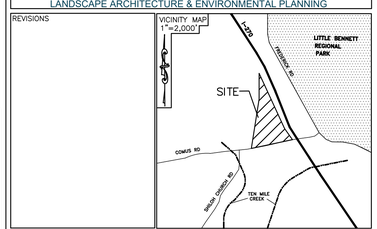
PREPARED FOR

TORCATO ROMANO
15900 WOODS CENTER ROAD
SILVER SPRING, MD 20906
TONY@AJRCI.COM | 301.362.0080

NORTON LAND DESIGN
5146 DORSEY HALL DRIVE
2ND FLOOR
ELLICOTT CITY, MD 21042
O.443.542.9199
NORTONLANDDESIGN.COM
LANDSCAPE ARCHITECTURE & ENVIRONMENTAL PLANNING

REVISIONS

VICINITY MAP 1" = 2,000'



WATER CLASS	I,P	WATERSHED	LITTLE BENNETT CREEK & 10 MILE CREEK	FEMA FLOODPLAIN MAP PANEL #	24031C0160D
TRIBUTARY	N/A				
TAX MAP	EW122	200 SHEET	233NW14	ADC MAP PAGE	8 GRID K-2 K-3
SCALE	AS SHOWN	DATE	DEC 2024	PROJ. NO.	17-040
SHEET NO.	L-1.4				

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. F20250450 including, financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: TORCATO ROMANO
Printed Company Name

Contact Person or Owner: TORCATO ROMANO
OWNER
Printed Name

Address: 15900 WOODS CENTER RD
SILVER SPRING MD 20906

Phone and Email:

Signature:

CERTIFICATION OF QUALIFIED PROFESSIONAL

I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE WITH MARYLAND STATE, MNCP&PC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.

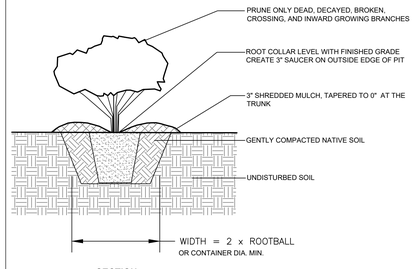
07.16.2025
DATE

MICHAEL A. NORTON
MDNR / COMAR 08.19.06.01

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.



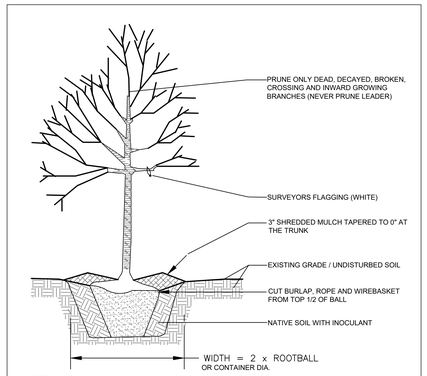
SECTION
N.T.S.

NOTES:

1. REMOVE ALL POTS AND WIRE AND CUT CONTAINER CLEANLY WAY FROM ROOTS.
2. REMOVE BURLAP FROM TOP HALF OF ROOT BALL.
3. CONTAINER PLANTINGS MAKE 4 TO 5 VERTICAL CUTS TO THE ROOT BALL BEFORE SETTING IN PLACE.
4. PRUNE ALL DAMAGED, DISEASED, OR WEAK LIMBS AND ROOTS.
5. CLEANLY PRUNE ALL DAMAGED ROOT ENDS TEASE ROOTS OF CONTAINER GROWN STOCK.
6. DO NOT ALLOW ROOTS TO DRY OUT DURING INSTALLLATION PROCESS.
7. DEEP WATER AFTER PLANTING.

LANDSCAPE SHRUB
The Maryland-National Capital Park and Planning Commission
Montgomery County Department of Parks

Detail No.
SEPTEMBER 2008



NOTES:

1. PLANTING HOLE SHALL BE DUG BY A BACKHOE OR OTHER MACHINE AND FINISHED BY HAND.
2. IF SURROUNDING SOIL IS COMPACTED AS DETERMINED BY M-NCPPC PLANNING DEPT INSPECTOR OR PARKS DEPT FOREST ECOLOGIST, AN AREA UP TO 5 TIMES THE DIA. OF THE ROOT MASS SHALL BE EXCAVATED OR ROTOTILLED TO A 1' DEPTH AND THE SOIL SHALL BE AMENDED.
3. DO NOT DAMAGE OR CUT LEADER.
4. ROOT FLAIR EVEN WITH LEVEL OF UNDISTURBED GROUND.

DECIDUOUS PLANTS - (2" Caliper or Larger)
The Maryland-National Capital Park and Planning Commission
Montgomery County Department of Parks

Detail No.
SEPTEMBER 2008

PLANTING SCHEDULE

TASKS	MONTHS											
	JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC
TRANSPLANT OF 2" DBH OR GREATER												
PLANTING SEEDINGS, WHIPS												
MINIMUM MONITORING			*				*				*	
FERTILIZER * (IF NEEDED)												
WATER **												
PRUNING												

KEY

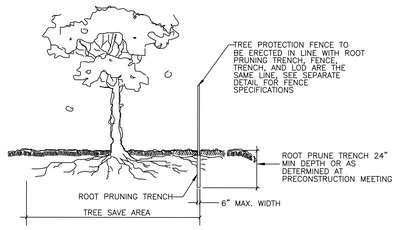
*	ACTIVITIES DURING THESE MONTHS ARE DEPENDENT UPON GROUND CONDITIONS
	GREATLY RECOMMENDED
	RECOMMENDED WITH ADDITIONAL CARE
	RECOMMENDED
*	DEPENDENT UPON SITE CONDITIONS
**	DEPENDENT UPON SITE CONDITIONS; WEEKLY WATERING IS GREATLY RECOMMENDED FROM MAY THROUGH OCTOBER UNLESS WEEKLY RAINFALL EQUALS 1"

NOTES:

The planting and care of trees is most successful when coordinated with the local climatic conditions. This calendar summarizes some of the recommended time frames for basic reforestation and stress reduction activities.

STRESS REDUCTION MEASURE

ROOT PRUNING

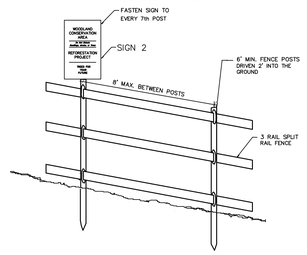


NOTE:

1. Retention Areas will be set as part of the review process and preconstruction meeting
2. Boundaries of Retention Areas must be staked at the preconstruction meeting and flagged prior to trenching.
3. Exact location of trench shall be determined in the field in coordination with the Forest Conservation (FC) Inspector.
4. Trench should be immediately backfilled with excavated soil removed or other organic soil as specified per plan or by the FC Inspector.
5. Roots should be cleanly cut using vibratory knife of other acceptable equipment.
6. All pruning must be executed with LOD shown on plans or as authorized in writing by the FC Inspector

NOT TO SCALE

PERMANENT THREE BOARD FENCE

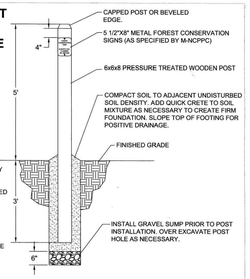


NOTE:

1. Retention area will be set as part of the review process.
2. Boundaries of Retention Area should be staked prior to installing protective device.
3. Root damage should be avoided.
4. Protective signage is required.

TREE PROTECTION #4 NO SCALE

PERMANENT FOREST CONSERVATION EASEMENT SIGNAGE



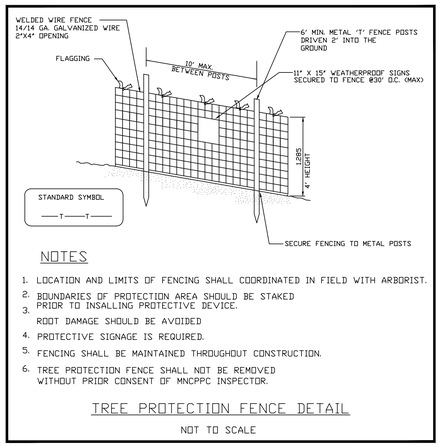
NOTES:
POST TO BE INSTALLED IN A VERTICALLY PLUMB POSITION.

ALL WOOD SHALL BE PRESSURE TREATED SOUTHERN YELLOW PINE OR CEDAR.

ALL FASTENERS SHALL BE STAINLESS STEEL 1-2" IN LENGTH.

ALL POSTS TO BE INSTALLED ALONG FOREST CONSERVATION EASEMENT LINE AS SPECIFIED PER APPROVED FINAL FOREST CONSERVATION PLAN OR M-NCPPC FIELD INSPECTOR'S INSTRUCTIONS.

MONTGOMERY COUNTY PLANNING DEPT. 12/23/2008



NOTES

1. LOCATION AND LIMITS OF FENCING SHALL COORDINATED IN FIELD WITH ARBORIST.
2. BOUNDARIES OF PROTECTION AREA SHOULD BE STAKED
3. PRIOR TO INSALLING PROTECTIVE DEVICE.
   ROOT DAMAGE SHOULD BE AVOIDED
4. PROTECTIVE SIGNAGE IS REQUIRED.
5. FENCING SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.
6. TREE PROTECTION FENCE SHALL NOT BE REMOVED WITHOUT PRIOR CONSENT OF MNCPPC INSPECTOR.

TREE PROTECTION FENCE DETAIL

NOT TO SCALE

FOREST RETENTION AREA SIGNAGE

NOTE:
SIGNAGE FOR FOREST RETENTION AREA TO BE PLACED 50' O.C. WHEN PLACED ON FENCE

1. Attachment of signs to trees is prohibited.
2. Signs should be properly maintained.
3. Avoid injury to roots when placing posts for the signs.

PROPOSED SPECIMEN TREE MITIGATION PLANT SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	SIZE	FORM	SPACING	QUANTITY
	TREES					
QA	QUERCUS ALBA	WHITE OAK	3" CAL	B&B	SHOWN	7
AR	ACER RUBRUM	RED MAPLE	3" CAL	B&B	SHOWN	8
NS	NYSSA SYLVATICA	BLACK GUM	3" CAL	B&B	SHOWN	8

SPECIMEN TREE REMOVALS #7, #10, #12, #13, #27, #28, & #102	
TOTAL DBH INCHES OF SPECIMEN TREES REMOVED	274
X 0.25 = REQUIRED CALIPER INCHES MITIGATION	68.5
TOTAL AMOUNT OF 3" CAL. TREES FOR SPECIMEN TREE MITIGATION	23

NOTE: MITIGATION TREE LOCATIONS AND SPECIES SUBJECT TO ADJUSTMENT IN THE FIELD WITH INSPECTOR'S APPROVAL

CERTIFICATION OF QUALIFIED PROFESSIONAL

I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE WITH MARYLAND STATE, MNCP&PC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.

12.3.2024
DATE

MICHAEL A. NORTON
MDNR / COMAR 08.19.06.01

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. F20250450 including, financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: TORCATO ROMANO
Printed Company Name

Contact Person or Owner: TORCATO ROMANO
OWNER
Printed Name

Address: 15900 WOODS CENTER RD
SILVER SPRING MD 20906

Phone and Email:

Signature:

TITLE
PRELIMINARY FOREST CONSERVATION PLAN
MNCPPC F20250450

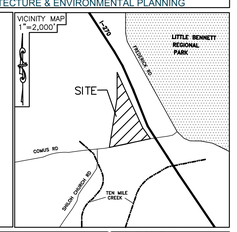
PROJECT
COMUS ROAD PARCEL 420
L.10932/F.0091
14301 COMUS ROAD
CLARKSBURG, MD 20871
ELECTION DISTRICT 02

PREPARED FOR
TORCATO ROMANO
15900 WOODS CENTER ROAD
SILVER SPRING, MD 20906
TONY@AJRCI.COM | 301.362.0080

NORTON LAND DESIGN
5146 DORSEY HALL DRIVE
2ND FLOOR
ELLICOTT CITY, MD 21042
O.443.542.9199
NORTONLANDDESIGN.COM
LANDSCAPE ARCHITECTURE & ENVIRONMENTAL PLANNING

REVISIONS

VICINITY MAP
1"=2,000'



WATER CLASS I,P	WATERSHED LITTLE BENNETT CREEK & 10 MILE CREEK		FEMA FLOODPLAIN MAP PANEL # 24031C0160D
TRIBUTARY N/A			
TAX MAP EW122	200 SHEET 233NW14	ADC MAP PAGE 8 GRID K-3	K-3
SCALE AS SHOWN	DATE DEC 2024	PROJ. NO. 17-040	SHEET NO. L-1.5

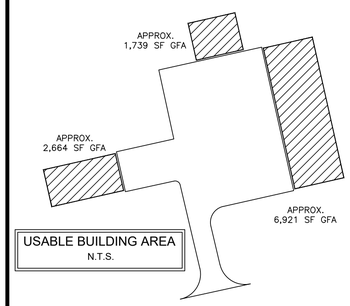
Docusign Envelope ID: 3BFDE303-E8F4-4862-A23D-39A458A60C14

Attachment B

Proposed Conditions & Conditional Use notes

1. Proposed setbacks are in accordance with the Montgomery County Zoning Ordinance. All buildings and parking lots are set back at least 50 feet from all lot lines in accordance with the requirements for a conditional use approval within the AR zone. See Zoning Data Table, this sheet, for additional details/information related to relevant bulk and zoning regulations.
2. Stormwater Management Concept Plan #286223 has been approved for this development. The approval letter and plan have been submitted with this Conditional Use package.
3. All on-site grading is conceptual. Final grading shall be developed during final engineering drawing development.
4. The primary well location is shown hereon. A Well Permit Plan has been submitted to MCDPS. Approval is anticipated following final plat recordation.
5. The on-site septic reserve area and associated septic system was approved by MCDPS on 9.11.2020.
6. Proposed retaining wall is for schematic only. Final wall design shall be completed during final engineering design. The proposed wall shall have a maximum height of 5.75'.
7. A Traffic Statement, prepared by Lenhart Traffic Consulting, Inc., has been included with this submission package.
8. The proposed development shall be completed in accordance with a preliminary Forest Conservation Plan, prepared by Norton Land Design. The limits of forest clearing are shown on this sheet. See associated PFCP for areas of conservation and their associated computations.
9. The required number of parking spaces and anticipated operations, as detailed by the Applicant, was determined using the Montgomery County Code of Ordinances. See Statement of Operations and Proposed Parking Tabulation, this sheet. Parking spaces and lot lines shall be lined in accordance with MCDOT standards.
10. Suitable emergency services access and equipment access shall be provided for the proposed development. See relevant Fire Access Plan and Circulation Plan for Details.
11. The proposed lot and use are in compliance with the requirements for a Conditional Use Approval on AR zoned land that are spelled out in Chapter 59 of the Montgomery County Code of Ordinance.
    - The proposed site is exempt from lot size requirements since the existing property was created before January 6, 1981. A copy of this deed has been included with this submission.
    - Buildings and parking areas are set back at least 50' from all lot lines.
    - A sufficient number of parking spaces have been provided for the use (see parking lot requirements summary table, this sheet).
    - The Owner shall be in compliance with the sales restrictions that pertain to plant materials, garden supplies, or equipment.
    - The Owner will comply with hours of operation regulations set forth by the Hearing Examiner.
12. All proposed access points on the proposed driveway shall be at grade with the proposed sidepath. See Site Layout for approximate grading, this sheet. Final design and grading shall occur during the final permit stage.
13. As part of the future subdivision, the Owner has agreed to dedicate 11,141.30 SF to Montgomery County to provide a 40' ROW width from the Centerline of Comus Road. See area of dedication, this sheet.
14. The Owner has identified a certain area of potential dedication (55,397.84 SF) to MDOT as requested during the Review process. While the Owner has deferred committing to this dedication at this time, the potential dedication area is shown hereon, and the layout of the site is designed in the event this area is dedicated.
15. See Cross-Section exhibit for road cross-sections for Comus Road and I-270. See complete streets viewport (this sheet) for plan view of sidepath, maint. buffer, and stret buffer area on WB Comus Road Lanes.

AREAS SHOWN IN ▨ ARE PROPOSED TO BE USED BY THE LANDSCAPE CONTRACTING BUSINESS

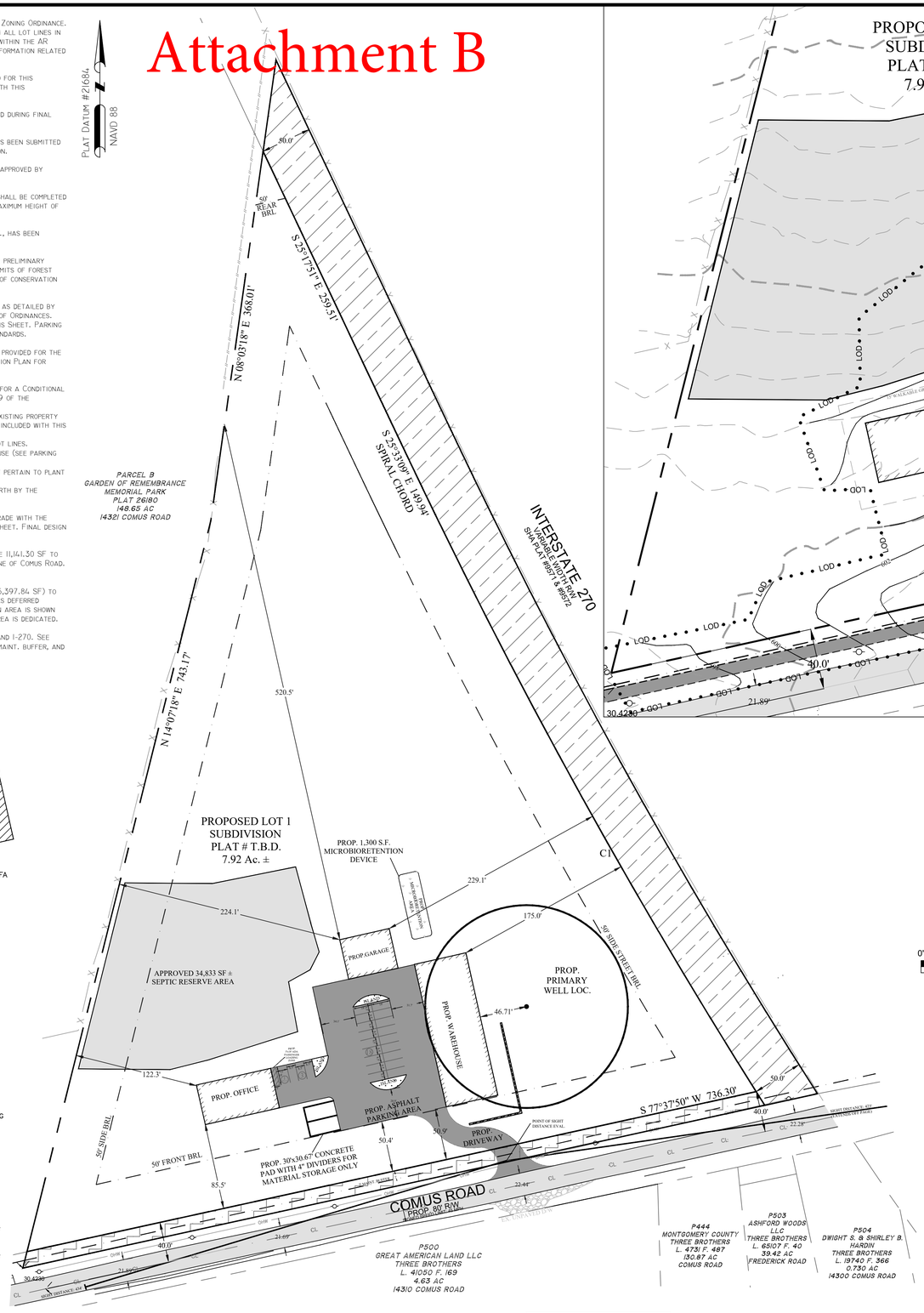


USABLE BUILDING AREA
N.T.S.

LEGEND

THESE STANDARD SYMBOLS MAY BE FOUND IN THE DRAWING

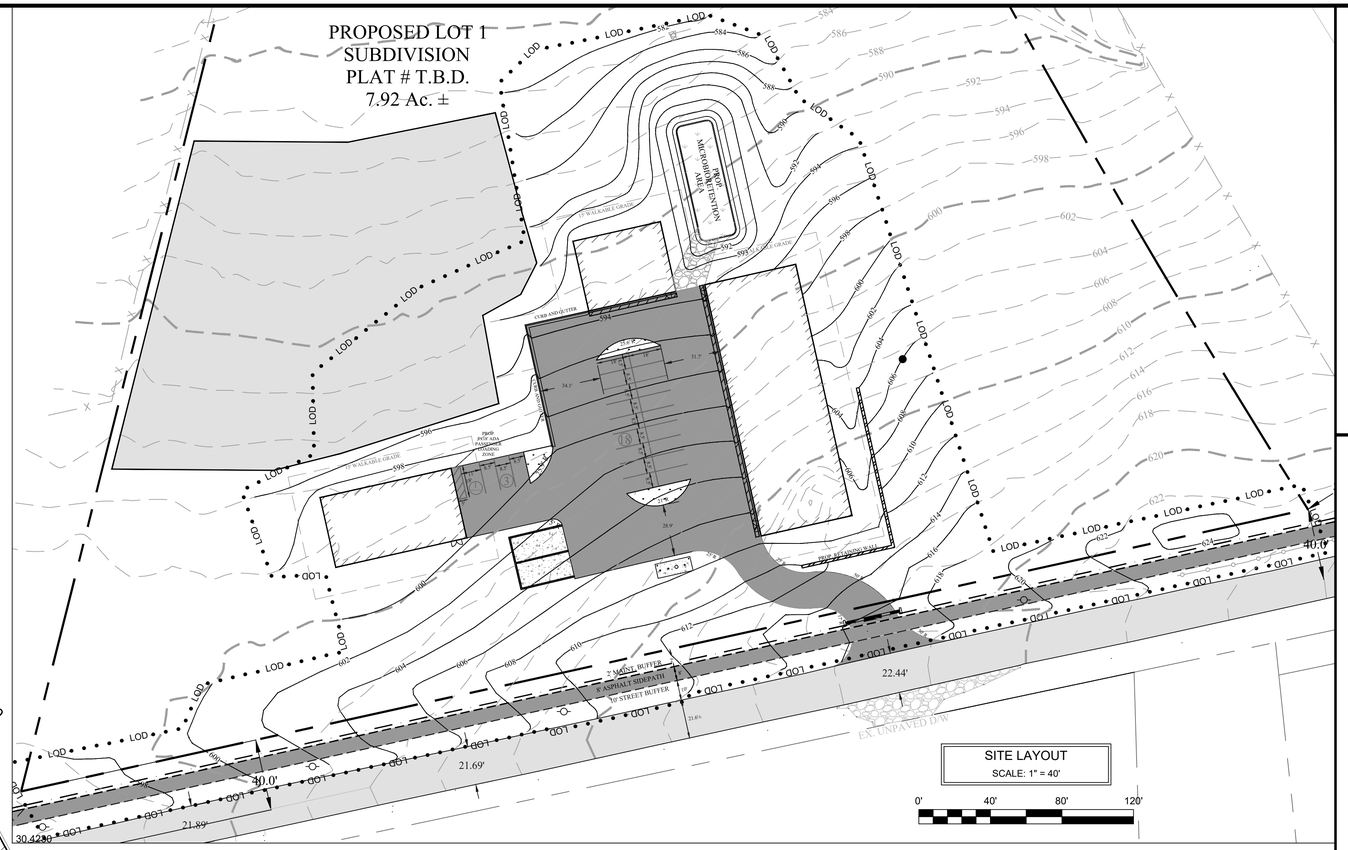
- PROP. PROPERTY LINE
- LOD — PROP. LIMITS OF DISTURBANCE
- PROP. SETBACKS
- 610 — PROP. CONTOUR
- PROP. STORM DRAIN
- W — PROP. WATER LINE
- S — PROP. SANITARY CONNECTION
- OHW — PROP. OVERHEAD WIRE
- EX. CENTERLINE PER PLAT
- PROP. 8 FT SIDEPATH
- PROP. 2 FT MAINT. BUFFER
- 611.00 — PROP. GRADE SHOT
- PROP. TRENCH DRAIN
- PROP. RETAINING WALL (MAX. HEIGHT: 5.75')
- PROP. RIPRAP
- PROP. MICROBIO RETENTION AREA
- PROP. ASPHALT DRIVEWAY/PARKING AREA
- PROP. SEPTIC RESERVE AREA
- PROP. FOREST CLEARING AREA (2.45 Ac.)
- PROP. SIDEWALK
- POTENTIAL MDOT DEDICATION AREA (55,397.84 SF or 1.27 Ac.±)
- PROP. MCDOT DEDICATION AREA (11,141.30 SF or 0.26 Ac.±)
- PROP. 10 FT STREET BUFFER
- POWER POLE



PROPOSED CONDITIONS
SCALE: 1" = 60'
0' 60' 120' 180'

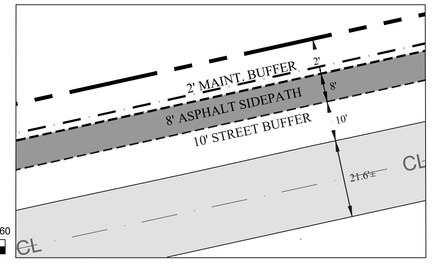
PROPOSED CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	5829.58'	636.52'	636.21'	S 29°08'56" E	6°12'10"



SITE LAYOUT
SCALE: 1" = 40'
0' 40' 80' 120'

COMPLETE STREETS
COMUS ROAD LAYOUT
SCALE: 1" = 20'
0' 20 40 60



PARKING LOT REQUIREMENTS SUMMARY

	REQUIRED	PROPOSED LOT
PARKING SPACE REQUIREMENT	25 EMPLOYEES*(0.5/EMPLOYEE) +7 VEHICLES*(1/OPERATION VEHICLE) =19.5 SPACES	21 SPACES 1 ADA SPACE
PERPENDICULAR PARKING SPACES		
WIDTH	8.5' (MIN)	8.5'
LENGTH	18' (MIN)	18' – 18.33'
DRIVE AISLE (TWO WAY)	20' (MIN)	VAR. > 30'
*ADA PARKING SPACE		
WIDTH	11' (MIN)	11'
LENGTH	18' (MIN)	18'
PARKING SPACE ACCESS AISLE	5' (MIN)	5'

*PER 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

CONCEPTUAL BUILDING SUMMARY TABLE

STRUCTURE	FOOTPRINT (S.F.)	GROUND FLOOR AREA (S.F.)*	FFE (FT)	HEIGHT (FT)
OFFICE	3,000	2,719	600	20
GARAGE	2,000	1,781	594	25
WAREHOUSE	7,500	7,016	VARIES	30

*GROUND FLOOR AREAS ARE APPROXIMATE

ZONING REQUIREMENTS SUMMARY

	AR DESIGN STANDARDS		PROPOSED LOT
SITE AREA REQUIREMENT	25 AC. (MIN)		7.92 AC.*
LOT RESTRICTIONS			
LOT AREA	40,000 SF (MIN)		345,038 SF±
LOT WIDTH AT FRONT LOT LINE	25' (MIN)		736.30'
LOT WIDTH AT FRONT BUILDING LINE	125' (MIN)		693.55'
LOT COVERAGE	10% (MAX)		3.62%
PRINCIPAL BUILDING SETBACKS	AR ZONE	LANDSCAPE CONTRACTOR	
FRONT SETBACK	50' (MIN)	50' (MIN)	50.9' (PROP.)
SIDE SETBACK	20' (MIN)	50' (MIN)	122.3' (PROP.)
SIDE STREET SETBACK	50' (MIN)	50' (MIN)	175.0' (PROP.)
REAR SETBACK	35' (MIN)	50' (MIN)	520.5' (PROP.)
ACCESSORY STRUCTURE SETBACKS			
FRONT SETBACK	50' (MIN)		
SIDE SETBACK	15' (MIN)		
SIDE STREET SETBACK	15' (MIN)		
REAR SETBACK	15' (MIN)		
PRINCIPAL BUILDING HEIGHT	50' (MAX)		SEE TABLE
PARKING LOT SETBACK**	50' (MIN)		50.4'
USAGE AND AMOUNT	1 OFFICE		3,000 SF
	1 GARAGE		2,000 SF
	1 WAREHOUSE		7,500 SF

*THIS PROPERTY FALLS UNDER THE EXEMPTION SPELLED OUT IN CHAPTER 59.7.7.1.D.9 IN THE MONTGOMERY COUNTY ZONING ORDINANCE.
**PER CONDITIONAL USE REQUIREMENTS.

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 42417, EXPIRATION DATE: JUNE 6, 2026.

Docusigned by:
Douglas G. Tilley
DESIGN ENGINEER SIGNATURE — MD LICENSE # 42417
DOUGLAS G. TILLEY — 7/2/2025
PRINTED NAME — DATE

STATE OF MARYLAND
DOUGLAS G. TILLEY
No. 42417
PROFESSIONAL ENGINEER
7/2/2025

O'C&L
O'CONNELL & LAWRENCE, INC.
Construction Consultants, Engineers, Surveyors
17904 Georgia Avenue, Suite 302
Olney, Maryland 20832
Tel: (301) 924-4570
Fax: (301) 924-5872

P420
PLEASANT PLAIN
14301 COMUS ROAD
LIBER 10932, FOLIO 91
TAX MAP EW12
2ND ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

CONDITIONAL USE PLAN - EXHIBIT 11A PROPOSED CONDITIONS

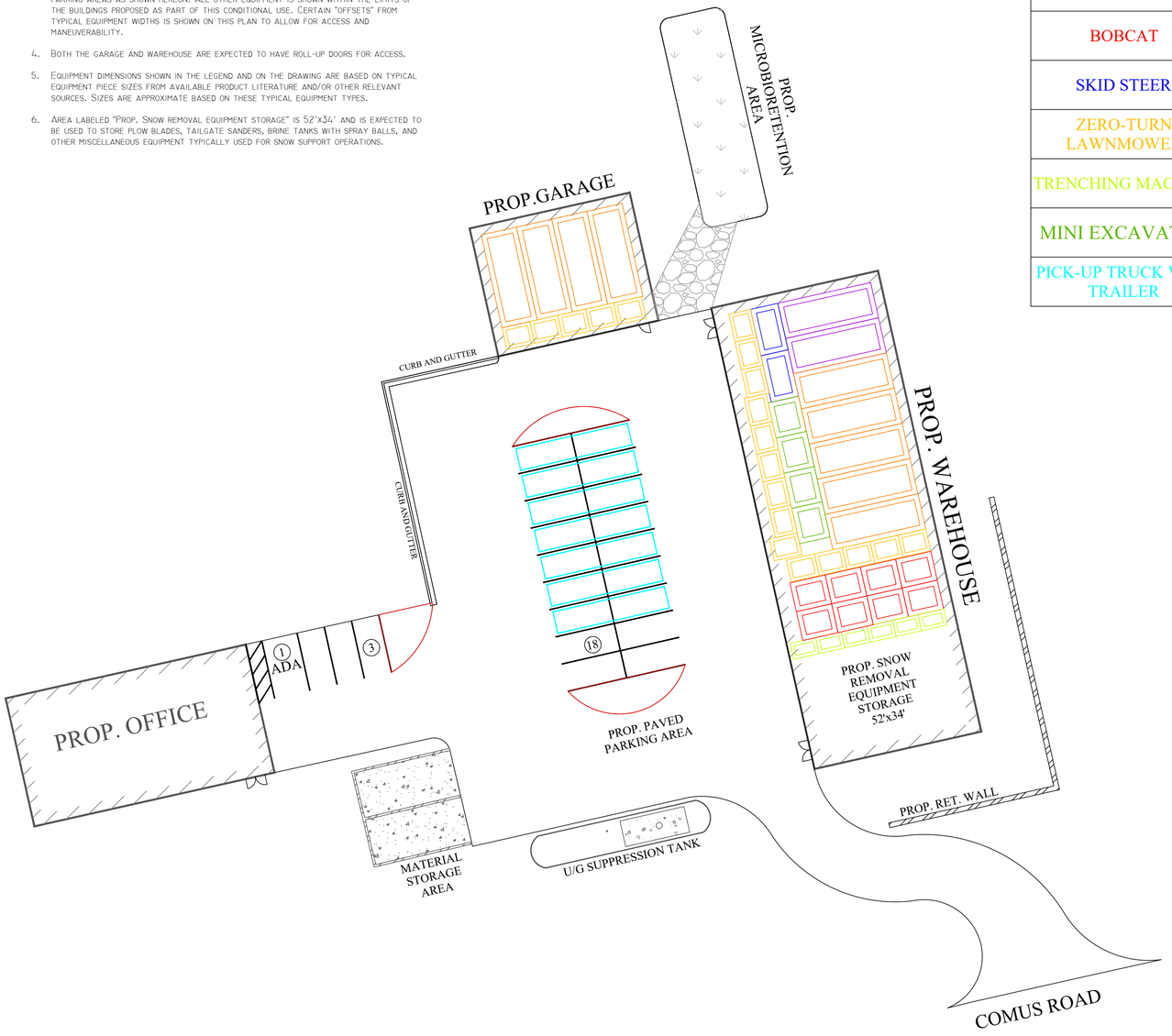
ITEM	REVISION	DATE	BY
1	UPDATED FOR RESUBMISSION	7.2.25	DGT

DESIGN BY:	MBO
DRAWN BY:	GH
CHECKED BY:	DGT
DATE:	12/13/2023
SCALE:	AS NOTED
PROJECT/FILE NO.	018-016
SHEET NO.	1 of 1

Docusign Envelope ID: DE54B100-D994-4D35-9FFF-8FA69FB06AF0

Equipment Storage Exhibit Notes

1. This exhibit is prepared and filed in conjunction with an application for a Conditional Use for a Landscape Contractor on the Subject Property.
2. This exhibit is intended to show the maximum number of pieces of equipment typically used for a Landscape Contracting business that are able to be stored on-site to establish an approximation of the number of pieces of equipment that will be used. The exact number/type of equipment that will be stored on-site is likely to change based on the exact operations of the business occupying the site.
3. A total of seven (7) trucks with trailers are proposed to be stored in the striped parking areas as shown hereon. All other equipment is shown within the limits of the buildings proposed as part of this conditional use. Certain "offsets" from typical equipment widths is shown on this plan to allow for access and maneuverability.
4. Both the garage and warehouse are expected to have roll-up doors for access.
5. Equipment dimensions shown in the legend and on the drawing are based on typical equipment piece sizes from available product literature and/or other relevant sources. Sizes are approximate based on these typical equipment types.
6. Area labeled "Prop. Snow removal equipment storage" is 52'x34' and is expected to be used to store plow blades, tailgate sanders, brine tanks with spray balls, and other miscellaneous equipment typically used for snow support operations.



EQUIPMENT STORAGE EXHIBIT
SCALE: 1" = 20'

0' 20' 40' 60'

EQUIPMENT LEGEND

EQUIPMENT TYPE	NOTATION	EQUIPMENT DIMENSIONS	OFFSET	TOTAL QUANTITY SHOWN	ADDITIONAL NOTES
DUMP TRUCK		26' x 8'	1.5'	8	
BUCKET TRUCK		26' x 8'	1.5'	2	
BOBCAT		8' x 6'	1.5'	8	
SKID STEER		11.5' x 5.5'	1.5'	2	
ZERO-TURN LAWNMOWER		6.7' x 4.8'	1.0'	19	
TRENCHING MACHINE		6' x 3'	1.0'	6	
MINI EXCAVATOR		8' x 6.5'	1.5'	4	
PICK-UP TRUCK WITH TRAILER		6.67' x 34.87' (TOTAL)	NONE (TO BE STORED OUTSIDE)	7	7 TRUCKS ARE INCLUDED IN REQUIRED PARKING COMPUTATIONS

Engineer/Surveyor:

O'Connell & Lawrence, Inc.
17904 Georgia Avenue, Suite 302
Olney, Maryland 20832

Contact: Doug Tilley, P.E., R.P.L.S.
Phone: (301) 924-4570

Owner/Applicant:

Mr. Torcato Romano
15900 Woods Center Road
Silver Spring, MD 20906

Contact: Tony Romano
Phone: (301) 362-0080

Construction Consultants, Engineers, Surveyors
17904 Georgia Avenue, Suite 302
Olney, Maryland 20832
Tel: (301) 924-4570
Fax: (301) 924-5872

O'C&L
O'Connell & Lawrence, Inc.

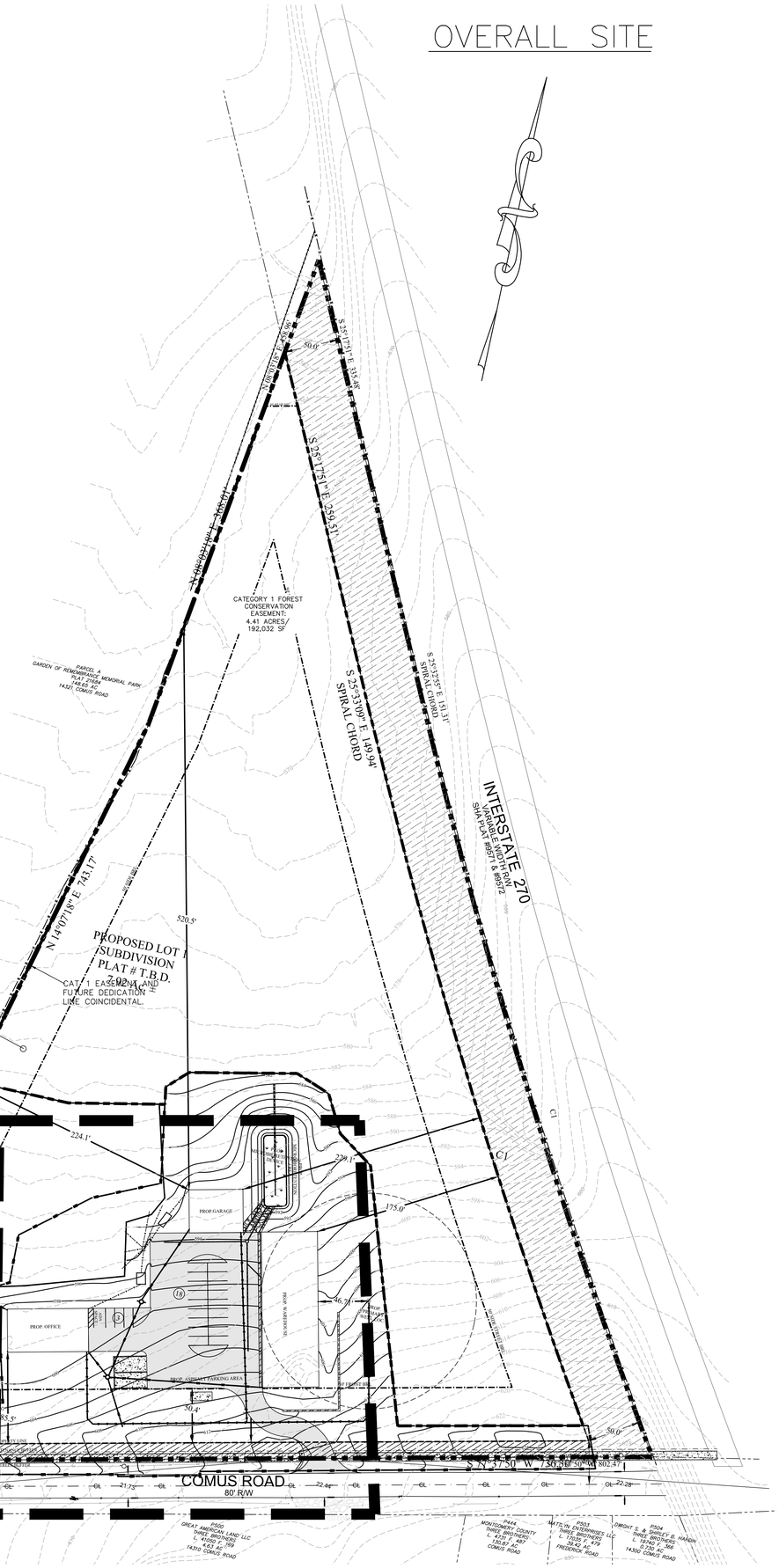
P420
PLEASANT PLAIN
14301 COMUS ROAD
LIBER 10932, FOLIO 91
TAX MAP EW12
2ND ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

EXHIBIT #11K
EQUIP. STORAGE FOR LANDSCAPE CONTRACTOR

ITEM	REVISION	DATE	BY
1	PER COMMENTS RECEIVED	7.2.25	DGT

DESIGN BY:	NM
DRAWN BY:	NM
CHECKED BY:	DGT
DATE:	12/6/2024
SCALE:	1"=20'
PROJECT/FILE NO.	018-016
SHEET NO.	1 of 1

OVERALL SITE



LEGEND

- FOREST TREELINE
- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- EX. STREAM
- 100' STREAM BUFFER
- EX. CONTOUR
- LIMITS OF DISTURBANCE
- CATEGORY 1 FOREST CONSERVATION EASEMENT

GRAPHIC SCALE

50 0 25 50 100 200

(IN FEET)
1 inch = 50 ft.

LANDSCAPE ARCHITECT 9370 STATE OF MARYLAND
07.01.2025

TITLE
LANDSCAPE & LIGHTING PLAN
– OVERALL

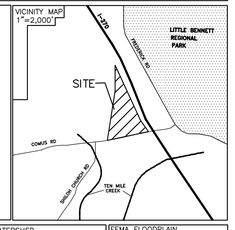
PROJECT
COMUS RD
PARCEL P420
14301 COMUS RD
CLARKSBURG, MD 20871

PREPARED FOR
TORCATO ROMANO
15900 WOODS CENTER ROAD
SILVER SPRING, MD 20906

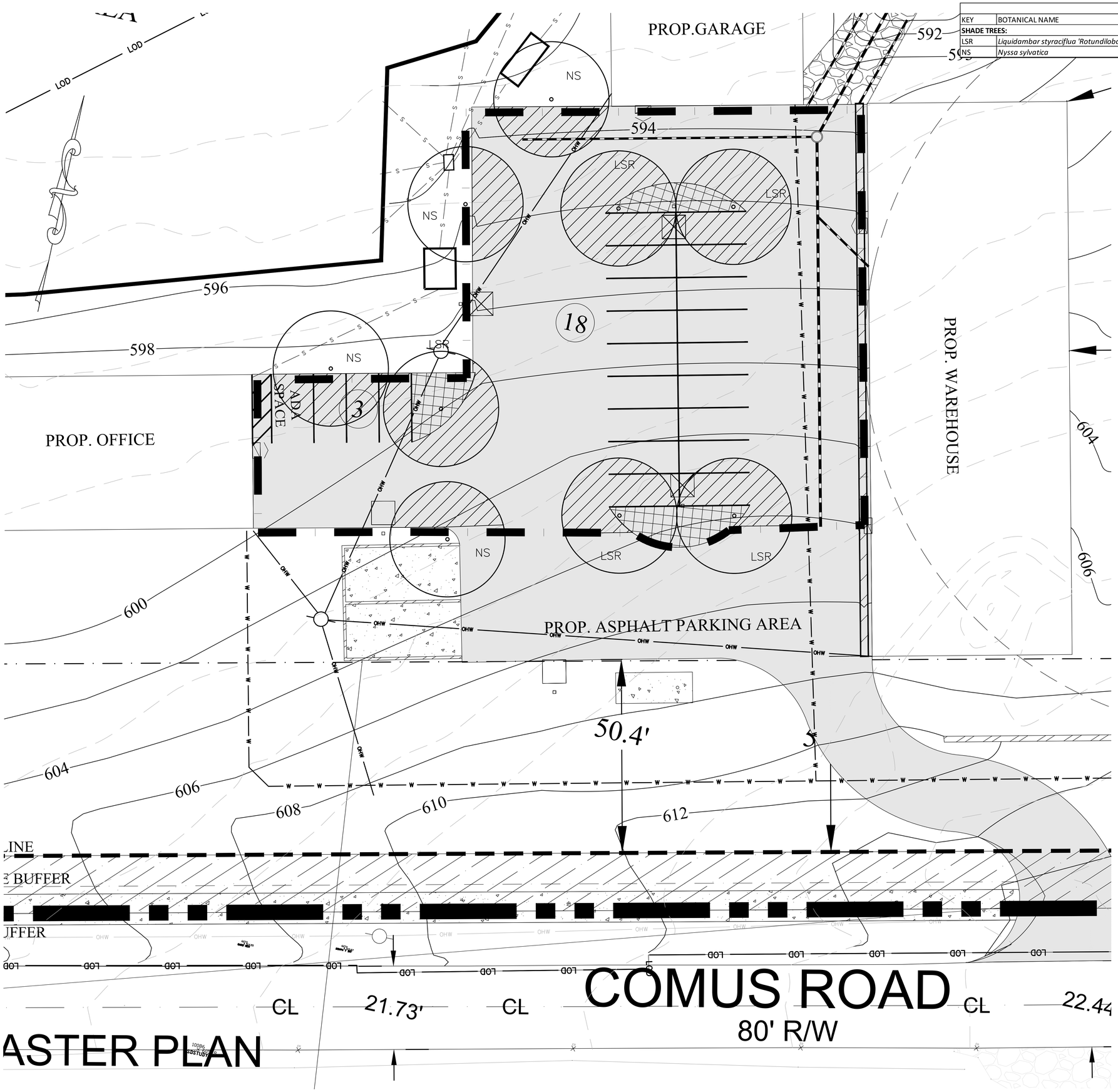
NORTON LAND DESIGN
LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING
5146 DORSEY HALL DRIVE, 2ND FLOOR ELLICOTT CITY, MD 21042
BALT.443.542.9199 WWW.NORTONLANDDESIGN.COM

REVISIONS

VICINITY MAP 1"=2,000'



WATER CLASS I,P	WATERSHED LITTLE BENNETT CREEK & 10 MILE CREEK		FEMA FLOODPLAIN MAP PANEL # 24031C0160D
TRIBUTARY N/A			
TAX MAP EW122	200 SHEET 233NW14		ADC MAP PAGE 8 GRID K-2 K-3
SCALE AS SHOWN	DATE DEC 2024	PROJ. NO. 17-040	SHEET NO. L-2.1



LANDSCAPE PLANTING PLAN SCHEDULE								
KEY	BOTANICAL NAME	COMMON NAME	SIZE	FORM	20-YR CANOPY DIAMETER	SPACING	QUANTITY	COMMENTS
SHADE TREES:								
LSR	*Liquidambar styraciflua 'Rotundiloba'*	Fruitless Sweet Gum	2" cal.	B&B	26'	AS SHOWN	5	
NS	*Nyssa sylvatica*	Black Gum	2" cal.	B&B	26'	AS SHOWN	4	

6.2.9.C1 PARKING LOT REQUIREMENTS CALCULATION

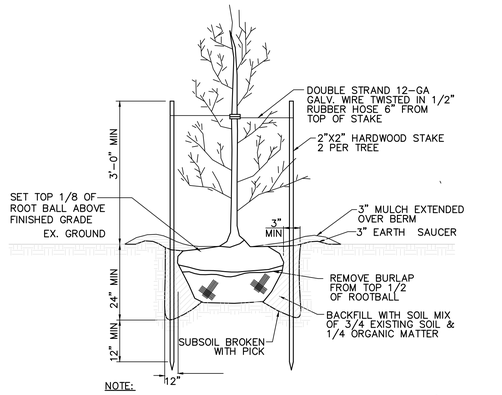
TOTAL PROPOSED PARKING AREA	13,516 S.F.
TOTAL LANDSCAPED ISLANDS WITHIN PARKING AREA	679 S.F.
TOTAL LANDSCAPED ISLANDS COVERAGE WITHIN PARKING AREA	5.0%
TOTAL REQUIRED LANDSCAPED ISLANDS COVERAGE FOR PARKING	5.0%

6.2.9.C2 CANOPY COVERAGE CALCULATION

TOTAL PROPOSED PARKING AREA	13,516 S.F.
TOTAL PROPOSED CANOPY COVERAGE AREA WITHIN THE PARKING	3,533 S.F.
TOTAL PROPOSED CANOPY COVERAGE (%)	26.1%
TOTAL REQUIRED CANOPY COVERAGE (%)	25.0%

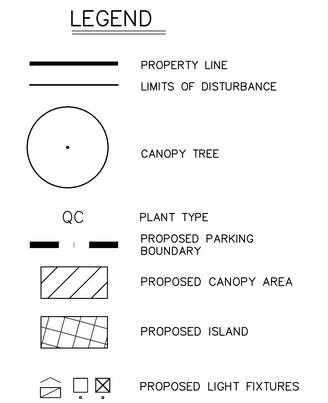
6.4.3. GENERAL LANDSCAPING REQUIREMENTS

STANDARD	REQUIREMENT
CANOPY TREE SPREAD (MIN.)	30'
CANOPY TREE MATURE HEIGHT (MIN.)	40–70'
CANOPY TREE SIZE AT TIME OF PLANTING (MIN.)	2" CAL. OR 14' HEIGHT



NOTE:
THIS DETAIL FOR EVERGREEN AND DECIDUOUS TREES UNDER 12' IN HEIGHT.

PLANTING DETAIL
NOT TO SCALE



GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

07.01.2025

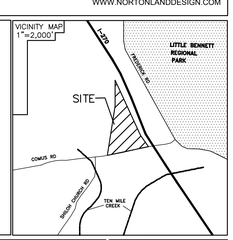
TITLE
DETAILED LANDSCAPE & LIGHTING PLAN

PROJECT
COMUS RD
PARCEL P420
14301 COMUS RD
CLARKSBURG, MD 20871

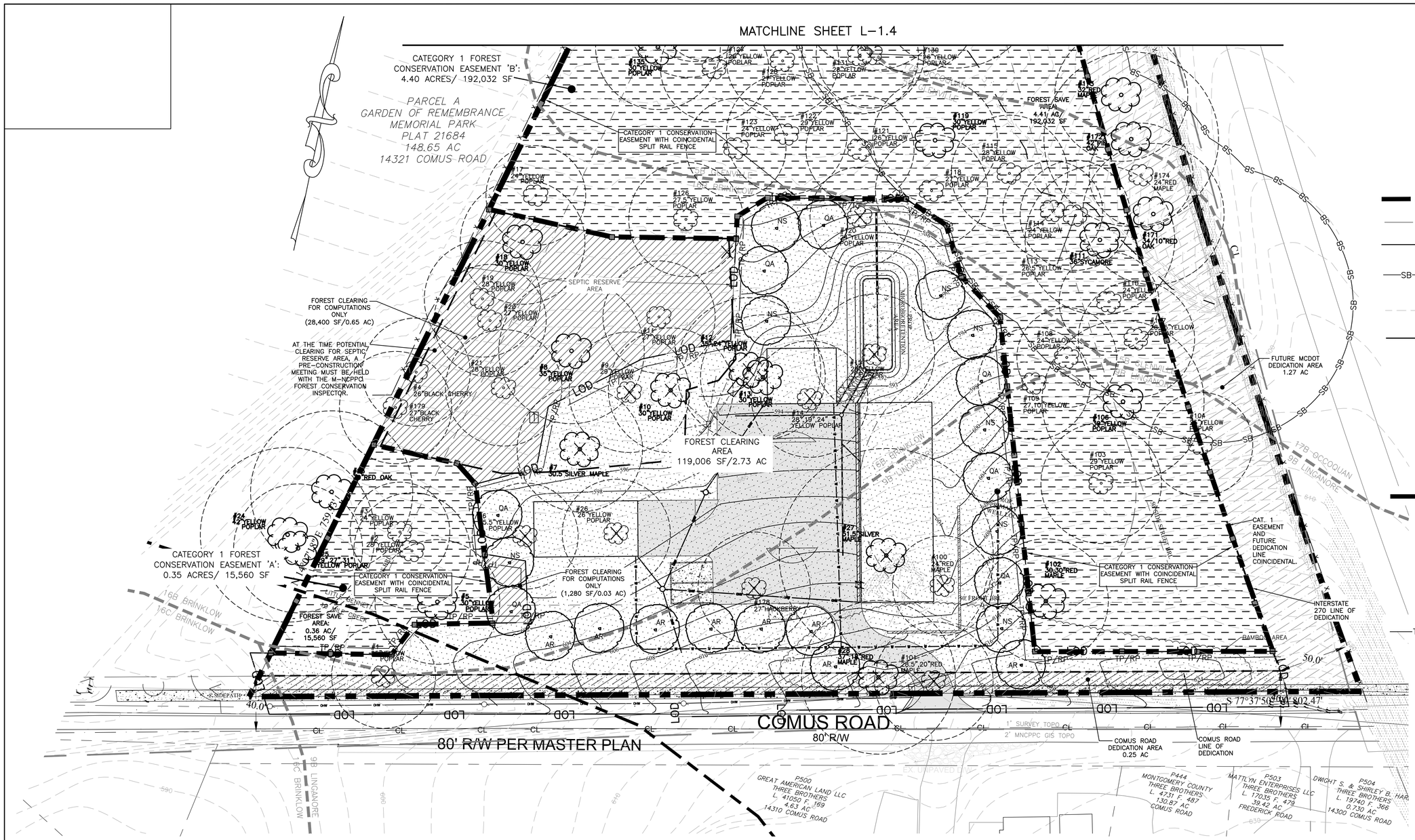
PREPARED FOR
TORCATO ROMANO
15900 WOODS CENTER ROAD
SILVER SPRING, MD 20906

NORTON LAND DESIGN
LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING
5146 DORSEY HALL DRIVE, 2ND FLOOR
ELLICOTT CITY, MD 21042
BALT.443.542.9199
WWW.NORTONLANDDESIGN.COM

REVISIONS



WATER CLASS I,P	WATERSHED LITTLE BENNETT CREEK & 10 MILE CREEK	FEMA FLOODPLAIN MAP PANEL # 24031C0160D	
TRIBUTARY N/A			
TAX MAP EW122	200 SHEET 233NW14	ADC MAP PAGE 8 GRID K-2 K-3	
SCALE AS SHOWN	DATE DEC 2024	PROJ. NO. 17-040	SHEET NO. L-2.2



LEGEND

- EXISTING SIGNIFICANT TREE ≥24" AND <30"DBH W/ CRZ
- EXISTING SPECIMEN TREE ≥30"DBH W/ CRZ
- SCRUB/SHRUB AREA
- FOREST TREELINE
- PROPERTY BOUNDARY
- ADJACENT PROPERTY BOUNDARY
- EX. STREAM
- 100' STREAM BUFFER
- EX. CONTOUR
- LIMITS OF DISTURBANCE
- FOREST CLEARING AREA
- FOREST CLEARING AREA (FOR COMPUTATIONS ONLY)
- FOREST SAVE AREA
- CATEGORY 1 FOREST CONSERVATION EASEMENT WITH COINCIDENTAL SPLIT RAIL FENCE
- PERMANENT FOREST CONSERVATION SIGNAGE
- FUTURE MCDOT DEDICATION AREA
- REGULATED TREE TO BE REMOVED
- TEMPORARY TREE PROTECTION FENCE/ ROOTPRUNING
- STEEP SLOPES 25% AND >
- SOIL BOUNDARY
- MITIGATION TREE

GENERAL NRI/FSD NOTES

1. THIS PROPERTY IS ZONED AR.
2. THE TAX IDENTIFICATION NUMBER ASSOCIATED WITH THIS PLAN IS: 00023661.
3. THE TOTAL TRACT AREA IS 9.45 ACRES.
4. SITE FIELD WORK WAS PERFORMED IN DECEMBER 2019 & JUNE 2020 AND UPDATED JULY 2024 BY MICHAEL NORTON, NORTON LAND DESIGN LLC.
5. THIS PROPERTY IS NOT WITHIN A PMA OR SPA.
6. THE PROPERTY LIES WITHIN THE LITTLE BENNETT AND 10 MILE CREEK WATERSHEDS, USE I,P.
7. FEMA FLOODPLAIN MAP PANEL #24031C0160D AND MNCPPC ULTIMATE FLOODPLAIN MAP NOTES NO FLOODPLAIN ONSITE.
8. ACCORDING TO MD MERLIN ONLINE, US FISH & WILDLIFE SERVICE: NWI, AND FIELD OBSERVATION; THERE ARE NO WETLANDS OR ASSOCIATED BUFFERS WITHIN 100' OF THE PROPERTY.
9. THERE ARE NO PRIME AGRICULTURAL, HYDRIC, HIGHLY EROSIVE, OR SERPENTINE SOILS ON THE PROPERTY (SEE SOIL TABLE).
10. 1' TOPOGRAPHY AND BOUNDARY SURVEY FROM O'CONNELL & LAWRENCE.
11. THERE IS NO PRIME AGRICULTURAL SOILS ON THE PROPERTY (SEE SOIL TABLE).
12. ALL TREES 24" AND GREATER ON THE PROPERTY ARE SURVEY LOCATED AND MEASURED WITH A FORESTERS DIAMETER TAPE MEASURE.
13. ALL TREES 24" AND GREATER OFFSITE ARE LOCATED AND MEASURED BY OCCULAR ESTIMATE ONLY. ALL MANMADE STRUCTURES OFFSITE ARE LOCATED BY AVAILABLE AERIAL PHOTOGRAPHS AND/OR OCCULAR ESTIMATE.
14. ALL TREES 24" AND GREATER ON THE SUBJECT PROPERTY ARE SURVEYED AND MEASURED WITH A FORESTERS DIAMETER TAPE MEASURE.
15. ALL TREES 24" AND GREATER OFFSITE ARE LOCATED AND MEASURED BY OCULAR ESTIMATE ONLY. ALL MANMADE STRUCTURES OFFSITE ARE LOCATED BY AVAILABLE AERIAL PHOTOGRAPHS AND/OR OCCULAR ESTIMATE.
16. NO RARE, THREATENED OR ENDANGERED SPECIES WERE OBSERVED ON OR OFFSITE AT THE TIME OF THE FIELD INVESTIGATION, AND CONFIRMED BY DNR LETTER DATED AUGUST 6, 2024.
17. NO TREES OCCUR WITHIN THE STUDY AREA WHICH ARE RECOGNIZED AS CURRENT NATIONAL, STATE, OR COUNTY CHAMPION TREES, OR TREES THAT ARE AT LEAST 75% OF THE CURRENT STATE CHAMPION.
18. THE SUBJECT PROPERTY IS NOT LISTED AS INDIVIDUAL HISTORIC SITES AS FOUND IN THE MNCPPC HISTORIC PROPERTIES INTERACTIVE MAP.
19. OWNER NAME AND ADDRESS: TORCATO ROMANO 15900 WOODS CENTER ROAD SILVER SPRING, MD 20906

SOIL TABLE

SOILS	ERODIBLE	HYDRIC	CONTAINS 15-25% SLOPES	CONTAINS > 25% SLOPES	CAPABILITY SUBCLASS SYMBOL	PRIME AGRICULTURAL SOIL
16B BRINKLOW-BROCKTOWN SILT LOAM 3-8% SLOPES	NO	NO	N/A	NO	e	NO
16C BRINKLOW-BROCKTOWN SILT LOAM 8-15% SLOPES	NO	NO	N/A	NO	e	NO
5B GLENVILLE SILT LOAM 3-8% SLOPES	NO	NO	N/A	YES	e	NO
17B OCCOQUAN LOAM 3-8% SLOPES	NO	NO	N/A	YES	e	NO
9B LINGANORE-HYATTSTOWN CHANNERY SILT LOAM 3-8% SLOPES	NO	NO	N/A	YES	e	NO

RESOURCE DATA TABLE

ACREAGE OF EX. FOREST:	8.18
ACREAGE OF 100 YEAR FLOODPLAIN	0.00
ACREAGE OF FORESTED 100 YEAR FLOODPLAIN	0.00
ACREAGE OF EXISTING WETLANDS	0.00
ACREAGE OF FORESTED WETLANDS	0.00
ACREAGE OF WETLAND BUFFERS	0.00
ACREAGE OF STREAM BUFFERS	2.46
ACREAGE OF FORESTED STREAM BUFFER	2.46
LINEAR EXTENT OF STREAMS	615
AVERAGE WIDTH OF STREAM BUFFER	200'

CERTIFICATION OF QUALIFIED PROFESSIONAL

I HEREBY CERTIFY THAT THE PLAN SHOWN HEREON HAS BEEN PREPARED IN ACCORDANCE WITH MARYLAND STATE, MNCP&PC AND MONTGOMERY COUNTY FOREST CONSERVATION LAWS.

07.16.2025
DATE

MICHAEL A. NORTON
MDNR / COMAR 08.19.06.01

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

DEVELOPER'S CERTIFICATE

The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. F20250450 including, financial bonding, forest planting, maintenance, and all other applicable agreements.

Developer's Name: TORCATO ROMANO
Printed Company Name

Contact Person or Owner: TORCATO ROMANO
OWNER
Printed Name

Address: 15900 WOODS CENTER RD
SILVER SPRING MD 20906

Phone and Email:

Signature:

TITLE
PRELIMINARY FOREST CONSERVATION PLAN
MNCPPC F20250450

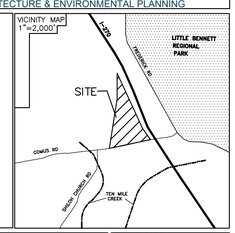
PROJECT
COMUS ROAD PARCEL 420
L.10932/F.0091
14301 COMUS ROAD
CLARKSBURG, MD 20871
ELECTION DISTRICT 02

PREPARED FOR
TORCATO ROMANO
15900 WOODS CENTER ROAD
SILVER SPRING, MD 20906
TONY@AJRCI.COM | 301.362.0080

NORTON LAND DESIGN
5146 DORSEY HALL DRIVE
2ND FLOOR
ELLICOTT CITY, MD 21042
O 443.542.9199
NORTONLANDDESIGN.COM
LANDSCAPE ARCHITECTURE & ENVIRONMENTAL PLANNING

REVISIONS

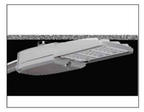
VICINITY MAP 1"=2,000'



WATER CLASS I,P	WATERSHED LITTLE BENNETT CREEK & 10 MILE CREEK		FEMA FLOODPLAIN MAP PANEL # 24031C0160D
TRIBUTARY N/A			
TAX MAP EW122	200 SHEET 233NW14		ADC MAP PAGE 8 GRID K-2 K-3
SCALE AS SHOWN	DATE DEC 2024	PROJ. NO. 17-040	SHEET NO. L-1.3

Autobahn Series ATB0
Roadway Lighting

PRODUCT OVERVIEW



Features:

OPTICAL

Same Light: Performance is comparable to 70-200W HPS roadway luminaires.

White Light: Correlated color temperature - 4000K, 70 CRI minimum, 3000K, 70 CRI minimum or optional 5000K, 70 CRI minimum.

Unique IP66 rated LED light engines provided 6% uplight and restrict backlight to within sidewalk depth, providing optimal application coverage and optimal pole spacing. Available in Type II, III, IV, and V roadway distributions.

ELECTRICAL

Expected Life: LED light engines are rated >100,000 hours at 25°C, L70. Electronic driver has an expected life of 100,000 hours at a 25°C ambient.

Lower Energy: Saves an expected of 40-60% over comparable HID luminaires.

Robust Surge Protection: Three different surge protection options provide a minimum of IEEE/ANSI C62.41 Category C (10kV/5kA) protection. 20kV/10kA protection is also available.

MECHANICAL

Includes standard AEL lineman-friendly features such as tool-less entry, 3 station terminal block and quick disconnects. Bubble level located inside the electrical compartment for easily leveling at installation.

Rugged die-cast aluminum housing and door are polyester powder-coated for durability and corrosion resistance. Rigorous five stage pre-treating process ensures paint adhesion. Finish is tested to withstand the creepage test of 8 (per ASTM D1654) after over 1000 hours exposure to salt fog chamber (operated per ASTM B117). Optional Enhanced Corrosion Resistant finish (CR) increases the salt spray exposure over 5000 hours.

Most arm mount is adjustable for arms from 1-1/4" to 2" (1-5/8" to 2-3/8" O.D.) diameter. Provides a 3G vibration rating per ANSI C136.31

Wildlife shield is cast into the housing (not a separate piece).

CONTROLS

NEMA 3 pin photocontrol receptacle is standard, with the Acuity designed ANSI standard 5 pin and 7 pin receptacles optionally available.

Premium solid state locking style photocontrol - PCSS (10 year rated life) Extreme long life solid state locking style photocontrol - PCLL (20 year rated life).

Multi-level dimming available to provide scheduled dimming as specified by the customer.

Optional onboard Adjustable Output module allows the light output and input wattage to be modified to meet site specific requirements, and also can allow a single fixture to be flexibly applied in many different applications.

STANDARDS

DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Rated for -40°C to 40°C ambient

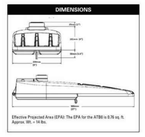
CSA Certified to U.S. and Canadian standards

Complies with ANSI: C136.2, C136.10, C136.14, C136.31, C136.15, C136.37

Applications:

- Roadways
- Off ramps
- Residential streets
- Parking lots

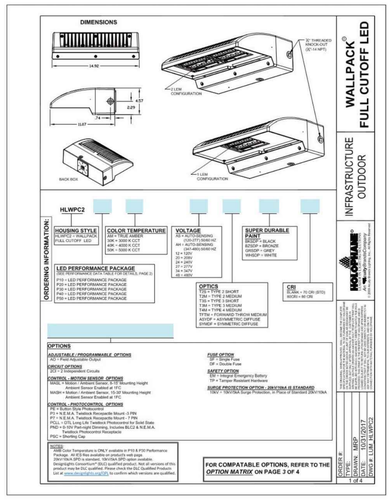
DIMENSIONS

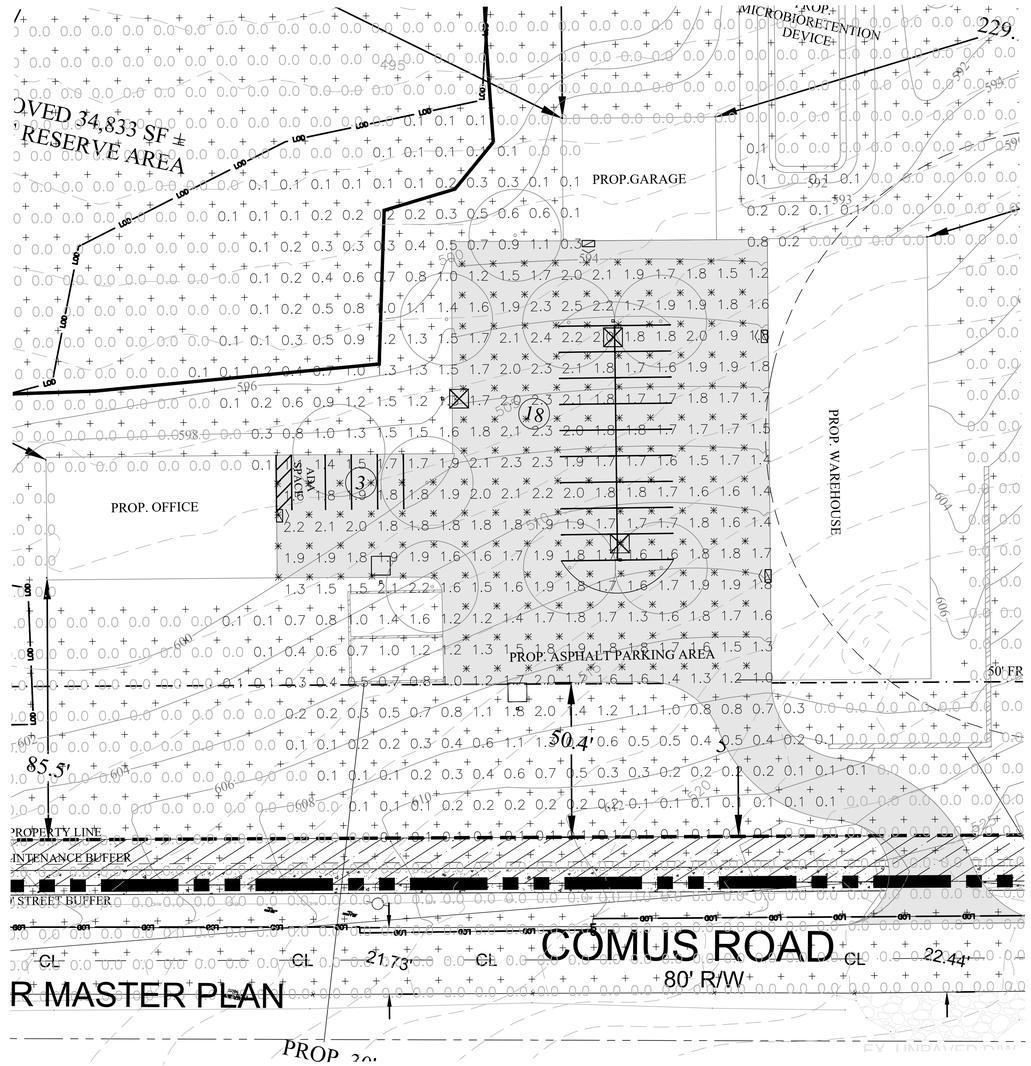


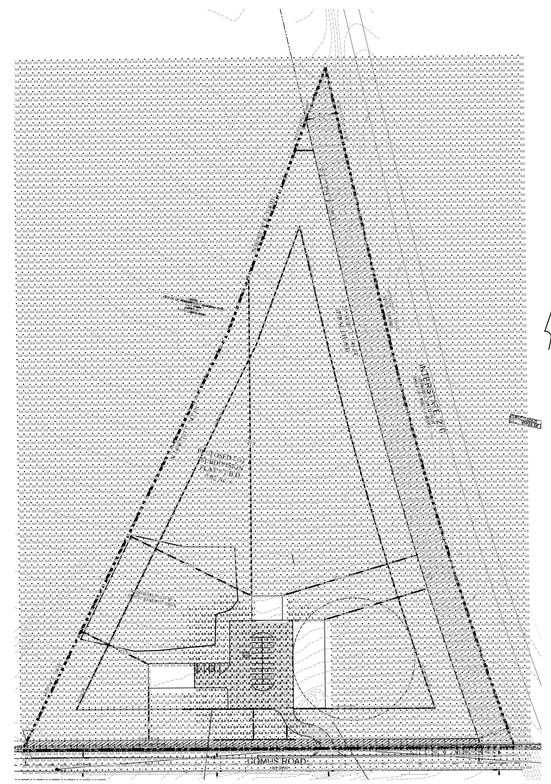
Effective Projected Area (EPA): The EPA for the ATB0 is 0.76 sq. ft. Approx. 9ft. = 14 lbs.

Note: Specifications subject to change without notice. Actual performance may differ as a result of end-user environment and application.

© 2014-2016 Acuity Brands Lighting, Inc. 08/01/16







OVERALL PROPERTY PHOTOMETRICS

HOLOPHANE
As a Acuity Brands Company

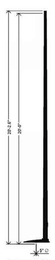
Catalog Number	ATB0 30BLEDE81 MVOLT R3 BK RTA2050G PL ND BK (A8)
Type:	Notes:

RTA2050G - 20FT, 5.0 x 3.0 x .188 Wall
Autobahn LED Roadway - Small (ATB0)

SPECIFICATIONS

POLE
Round Tapered Aluminum
20FT, 5.0 x 3.0 x .188 Wall
qRTA2050G PL ND BK
Pole:
Prefix: RTA2050G
Pole Top Style: Plain Top
Pole Top Drill Pattern: None
Finish: Black Paint
Pole Mounting: Anchor Base
Fastener: None
Base Cover: None
Tamper Resistant Fasteners: None
Dampener: None

FIXTURE
Autobahn LED Roadway - Small
qATB0 30BLEDE85
Prefix: ATB0
Prefix: ATB0
Performance Packages: 30B Chips, 850mA Drive
Voltage: Multi-Volt (120-277V)
Optics: Roadway Type IV
Color Temperature: 4000K (Standard)
Finish: Black
Finish: Black
Surge Protection: SPD-10k V/5kA
Terminal Block: Terminal Block (Standard)
Photocontrol: None
House Side Shield: None
NEMA Label: None
CSA Listing: CSA Listed
Arm: None
Photocontrol: Receptacle 3 Pin NEMA
Photocontrol Receptacle (Standard)
Output: Adjustable Output: None
Dimming: None
Photocontrol: None
Packaging: Standard Pack



Anchorage/Orientation Plan

Bolt Circle Dia.	Min. Base Size "D"	Base Thk. "T"	Bolt Projection	Anchor Bolt Set	Bolt Circle Template
8.50	9.25	0.56	3.00 – 3.50	AB-26-4	TN3P-40

HOLOPHANE
As a Acuity Brands Company

RTA2050G - 20FT, 5.0 x 3.0 x .188 Wall
Autobahn LED Roadway - Small (ATB0)

POLE ATTRIBUTES:

RTA2050G - 20FT, 5.0 x 3.0 x .188 Wall

Intended Use: City Streets, Parking Lots, Campuses, Commercial Developments, Plazas, Historic Districts, Village Squares, Residential Areas, Parks, Walkways, Boulevards, Roadways

Features: Pole shaft is one piece, 6063 aluminum alloy, heat-treated to a T6 temper. Pole base shall be 356 or A356 aluminum alloy, heat-treated to a T6 temper after welding. Hand hole is 2" x 4" minimum, cover and fasteners are included. Nut covers shall be provided as standard. Finish shall match pole non-structural fasteners shall be stainless steel. The following are product attributes:

Anodized, painted, or satin brush finish. Painted poles shall be semi-gloss powder paint; Grounding provision shall be immediately accessible through hand hole. 3/8-16 threads; Steel anchor bolts shall be per AASHTO M314 or ASTM F 1554 – Grade 55, hot dip galvanized. Nuts and washers shall be per AASHTO M314-90 or ASTM F 1554 – hot dip galvanized

Listings: Round Tapered Aluminum poles shall be fabricated to meet AASHTO 1994 requirements. Welds conform to applicable AWS structural welding code.

When Festoon Box Is Ordered The Standard Location Is On The Same Side As Hand Hole, and Is 36" Above Pole Base

FIXTURE ATTRIBUTES:

Quick Facts:
- Standard Color Gray
- 4000K Standard Color Temperature
- Class C Surge Protection
- Designed to operate at 40C ambient
- Reduce Energy costs by 60%
- Reduce Maintenance costs by 50%
- Reduce CO2 emission by 65%
- 20 to 30% more efficient than comparable LED luminaires
- Leading-edge optics improve visibility on roadways
- Sleek dayform with dimensions similar to a cobrahead
- Tool-less features and 0% uplight

Finish/Material Rugged die-cast aluminum housing is polyester powder-coated for durability and corrosion resistance. Rigorous five stage pre-treated and painding process yields a finish that achieves a scribe creepage rating of 8 (per ASTM D1654) after over 1000 hours exposure to salt fog chamber (operated ASTM B117)**Luminaire includes: 4 Bolt Internal Mounting, Terminal Block and NEMA Locking Style Photocontrol Receptacle.**

1 / L-2.1 LIGHTING FIXTURE & ALUMINUM POLE DETAIL
NOT TO SCALE

LEGEND

- PROPERTY LINE
- LOD — LIMITS OF DISTURBANCE
- PROPOSED PARKING LIGHT

PARKING LOT OUTDOOR LIGHTING

OUTDOOR LIGHTING MUST BE DIRECTED, SHIELDED, OR SCREENED TO ENSURE THAT THE ILLUMINATION IS 0.1 FOOTCANDLES OR LESS AT ANY LOT LINE

General Notes – Exterior
1. Readings shown are based on a total LLF of as shown at grade. Data references the extrapolated performance projections in a 25c ambient based on 10,000 hrs of LED testing (per IESNA LM–80–08 and projected per IESNA TM–21–11).
2. Please refer to the fixture labels for product type and mounting height.
3. Product information can be obtained at https://www.acuitybrands.com/ or through your local agency.

Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
PARKING SUMMARY	✕	1.8 fc	2.5 fc	1.0 fc	2.5:1	1.8:1
SPILL SUMMARY	+	0.0 fc	2.5 fc	0.0 fc	N/A	N/A

Schedule

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor	Total Lamp Lumens	Wattage	Distribution
	C	2	American Electric Lighting	ATB0 P201 R4 4K	Autobahn Small P201 Package Roadway Type IV 4000K/5000K	1	5346	0.9	5346	36	TYPE IV, MEDIUM, BUG RATING: B1 – U0 – G2
	WP	4	Holophane	HLWPC2 P10 40K XX T4M	Wallpack Full Cutoff LED, LED Performance Package P10, 4000 series CCT, Voltage, Type IV Medium	1	3079	0.9	3079	28	TYPE IV, MEDIUM, BUG RATING: B1 – U0 – G1
	X	3	American Electric Lighting	ATB0 P203 R5 4K	Autobahn Small P203 Package Roadway Type V 4000K/5000K	1	9735	0.9	9735	70	TYPE VS, BUG RATING: B4 – U0 – G2

07.01.2025

TITLE
LIGHTING – PHOTOMETRICS PLAN

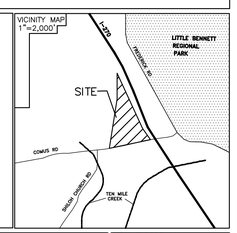
PROJECT
COMUS RD
PARCEL P420
14301 COMUS RD
CLARKSBURG, MD 20871

PREPARED FOR
TORCATO ROMANO
15900 WOODS CENTER ROAD
SILVER SPRING, MD 20906

NORTON LAND DESIGN
LANDSCAPE ARCHITECTURE + ENVIRONMENTAL PLANNING
5146 DORSEY HALL DRIVE, 2ND FLOOR ELLICOTT CITY, MD 21042
BALT.443.542.9199 WWW.NORTONLANDDESIGN.COM

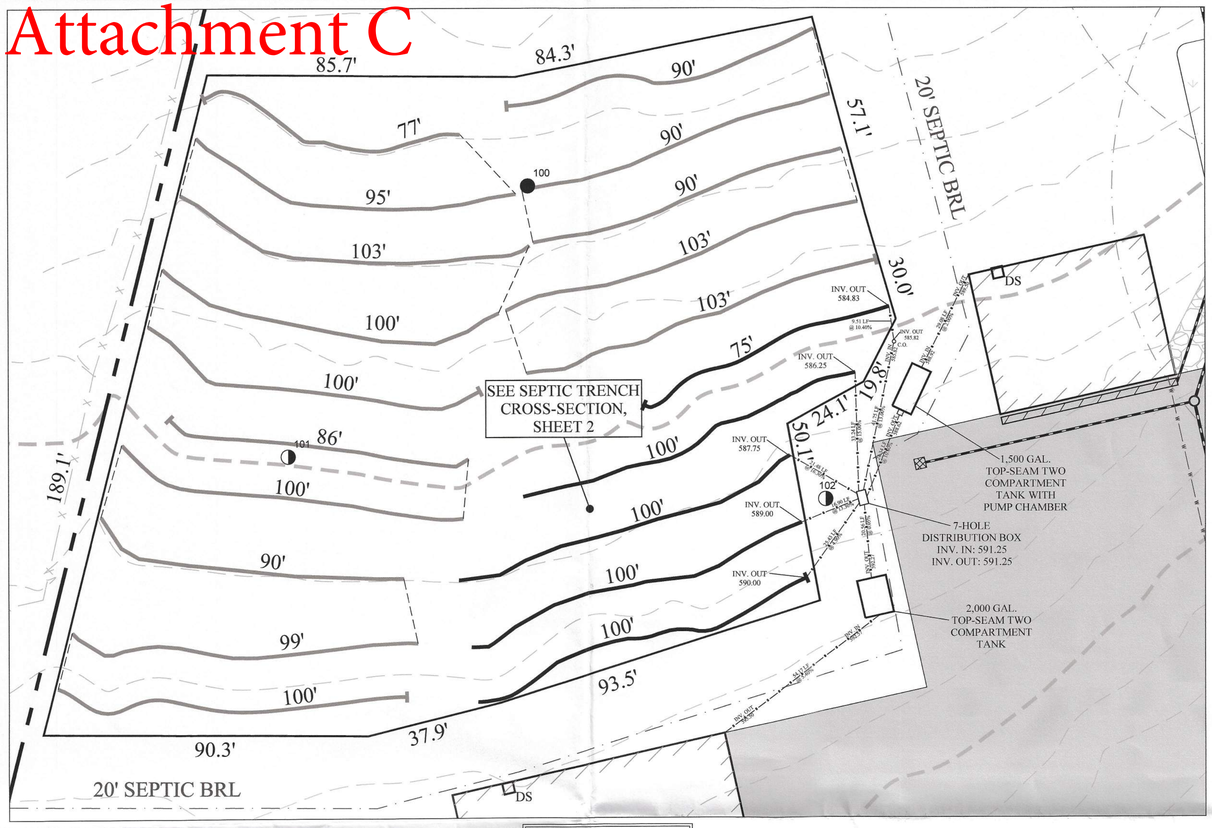
REVISIONS

VICINITY MAP 1"=2,000'



WATER CLASS I,P	WATERSHED LITTLE BENNETT CREEK & 10 MILE CREEK	FEMA FLOODPLAIN MAP PANEL # 24031C0160D	
TRIBUTARY N/A			
TAX MAP EW122	200 SHEET 233NW14	ADC MAP PAGE 8 GRID K-2 K-3	
SCALE AS SHOWN	DATE DEC 2024	PROJ. NO. 17–040	SHEET NO. L-3.1

Attachment C



SEPTIC AREA DETAIL
SCALE: 1" = 20'
0' 20' 40' 60'

General Notes

1. Property Data
   Legal Reference: Pleasant Plain
   Parcel Area: 418,611.6 Sq. Ft. or 9.61 Acres
   (Note: Plan shows anticipated lot size following assumed Right-of-Way dedications)
   Tax Map Grid EW12 - Tax Acct: 00023661
   Zoning: AR - Agricultural Reserve
   Watershed: Little Bennett Creek
   WSSC 200 Sheet: 233NW14
   ADC Map Page 22 Grid C2 (2014 Edition)
   Ex. Water and Sewer Categories: W-6 & S-6: Private On-Site Water & Sewer

2. Existing Site Data
   Property lines shown hereon were taken from field observations and available records. This plan has been prepared without the benefit of a title examination.
   Boundery features shown hereon per a field-run survey conducted by O'C&L Inc. in the summer/fall of 2018.
   There are no streams within 150' of the reserve area.
   The site is not located in a flood zone of the national flood insurance program, per the federal emergency management agency flood insurance rate map #24031C0160D with effective date 9-29-2006. There are no floodplains, tidal wetlands, or non-tidal wetlands near the subject property.
   Existing Site Use: Undeveloped
   Existing Site Coverage: Wooded

3. Utilities Data
   Utilities locations shown hereon are available plans and field observations where surface indications exist. Digging of test pits at all future utility crossings is recommended. Contact "Miss Utility" at 1-800-257-7777, 48 hours prior to any excavation or construction.

4. Soils Data
   Data shown hereon was obtained from a the NRCS Web Soil Survey for Montgomery County, Maryland and includes:
   Type: 5B (Glenville Silt Loam, 3-8% slopes - soil type "C/D", Restricted Soil)
   Type: 9B (Linganore-Hyattstown Channery Silt Loams, 3-8% slopes - soil type "C", Restricted Soil)
   Type: 16B (Brinklow-Blocktown Channery Silt Loams, 3-8% slopes - soil type "C")
   Type: 16C (Brinklow-Blocktwon Channery Silt Loams. 8-15% slopes - soil type "D")
   Type: 17B (Occoquan Loam, 3-8% slopes - soil type "B").

General Notes (Cont.)

5. Relevant Septic System Setback Requirements:
   Property Lines: 5 Feet
   Septic Tank: 5 Feet
   Bldg: 20 Feet
   Well: 100 Feet

6. Proposed Site Data
   Proposed Septic Reserve Area: 35,400 SF
   Proposed Tank: 2,000-gallon top-seam two compartment tank
   1,500-gallon top-seam two compartment tank
   Proposed Pump: 72 GPM Sump Pump
   All models to be selected by contractor with Owner approval. Install in accordance with manufacturer's recommendations.

7. The proposed primary and reserve trench lengths are established based on the results of percolation testing at test sites 100, 101, and 102. A single reserve area is proposed on the subject property.

8. Any sanitary lines under hardscape shall be sleeved.

9. Effluent from the garage is proposed to be pumped via a pump and tank chamber.

10. The subject property is expected to go through the Conditional Use and Subdivision Process. No septic area construction is anticipated until that time. No property dedication is anticipated in the area of septic design. This plan shows the final anticipated property size following anticipated ROW dedication; however, the exact amount of dedication shall be determined at the time of Preliminary Plan approval.

11. The primary and secondary well locations as shown on the design plan are the Owner's preferred locations. A separate well permit application and plan has been submitted to MCDPS for review and approval.

12. All wells and septic within 100' of property lines have been shown.

Legend

These standard symbols will be found in the drawing

- EX. PROPERTY LINE
- 590 EX. CONTOUR
- 15B/17C EX. SOIL DIVIDE
- S S PROP. SEPTIC LINE
- 100' PROP. INITIAL TRENCH (SEE DETAIL)
- 100' PROP. RESERVE TRENCH (SEE DETAIL)
- PROP. STORM DRAIN
- PROP. MICROBIORETENTION POND
- EX. SEPTIC RESERVE AREA
- PROP. DRIVEWAY
- PROP. SEPTIC RESERVE AREA
- PROP. TRENCH DRAIN
- C.O. PROP. CLEANOUT
- 100 EX. WATER TABLE & PERCOLATION TEST LOCATION
- 101 EX. PERCOLATION TEST LOCATION

Percolation Test Results

TEST SITE	TEST RATE (MPI)	TEST DEPTHS	AVERAGE TEST RATE (MPI)	TOTAL TRENCH LENGTH	STONE DEPTH
100	22.5	6.5' & 15'	24	1,900'	4.0'
101	27	6' & 15'			
102	22.5	5' & 15'			

NOTE: Depth of stone in deep unbraced trenches must be no more than four feet from finished grade before placement of pipe. Absorption systems with approved percolation below four feet can be credited only for sidewall area within the area established by percolation tests.

Water Table Test Results

TEST SITE	WATER TABLE INFORMATION	DEPTH OF TEST
100	DRY @ 16.5'	16.5'

Septic System Details

Minimum gallons per day = 0.18 G.P.D/Sq. Ft. x 3,000 Sq. Ft = 540 G.P.D.
0.06 G.P.D./Sq. Ft x 2,000 Sq. Ft. = 120 G.P.D.
5 G.P.D./Worker x 20 Field Workers = 100 G.P.D.
Σ = 760 G.P.D.

Volume of stone* = 4 Ft. x 2 Ft. x 1 Ft. = 8 C.F.
*NOTE: 6 Feet of stone provided due to percolation results, but only credited for 4 feet of stone.

Allowable daily application rate = 0.200 Gal./Sq. Ft./Day x 8 C.F. = 1.600 Gal./L.F./Day

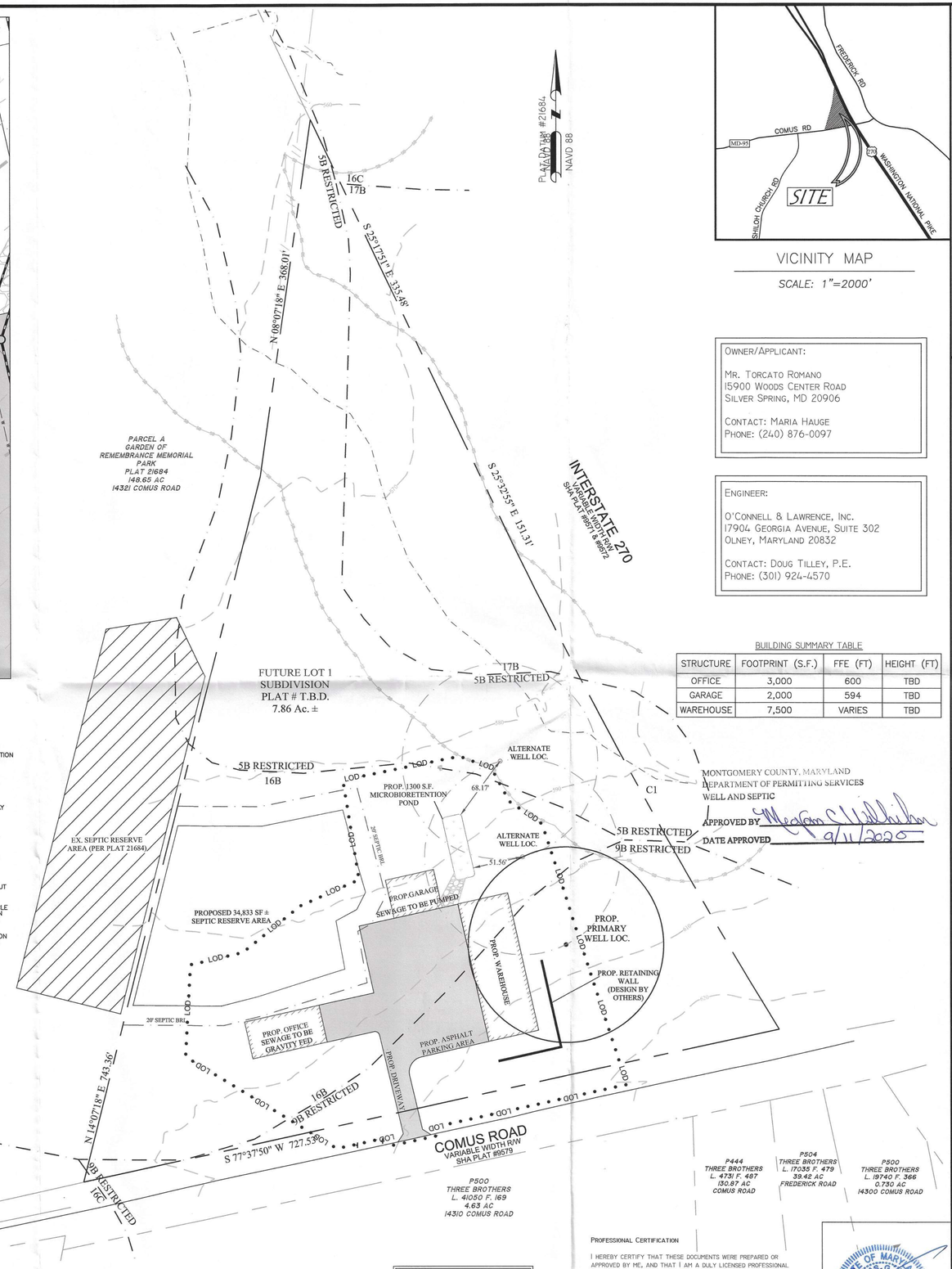
Initial trench length = 760 G.P.D. / 1.600 Gal./L.F./Day = 475 L.F.

Septic Area Summary Table

Septic Field	Trench Length Required
Initial	475 LF
Reserve 1	475 LF
Reserve 2	475 LF
Reserve 3	475 LF
Total	1,900 LF
Total Provided	1,900 LF

Curve Table

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	5825.58'	558.90'	558.69'	S 28°47'38" E	5°29'35"



SEPTIC DESIGN PLAN
SCALE: 1" = 60'
0' 60' 120' 180'

Proposed Curve Table

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	5825.58'	558.90'	558.69	S 28°47'38" E	5°29'35"

VICINITY MAP
SCALE: 1"=2000'

Owner/Applicant:
Mr. Torcato Romano
15900 Woods Center Road
Silver Spring, MD 20906
Contact: Maria Hauge
Phone: (240) 876-0097

Engineer:
O'Connell & Lawrence, Inc.
17904 Georgia Avenue, Suite 302
Olney, Maryland 20832
Contact: Doug Tilley, P.E.
Phone: (301) 924-4570

Building Summary Table

STRUCTURE	FOOTPRINT (S.F.)	FFE (FT)	HEIGHT (FT)
OFFICE	3,000	600	TBD
GARAGE	2,000	594	TBD
WAREHOUSE	7,500	VARIES	TBD

Montgomery County, Maryland
Department of Permitting Services
Well and Septic
Approved By: Mehran C. Vakilzadeh
Date Approved: 9/11/2020

Professional Certification
I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 42417, Expiration Date: June 6, 2022.
Design Engineer Signature — 42417 MD License #
Douglas G. Tilley — 9/4/2020
Printed Name — Date

State of Maryland — Douglas G. Tilley — 42417 — Professional Engineer — 9/4/2020

Construction Consultants, Engineers, Surveyors
17904 Georgia Avenue, Suite 302
Olney, Maryland 20832
Tel: (301) 924-4570
Fax: (301) 924-5872
O'C&L
O'Connell & Lawrence, Inc.

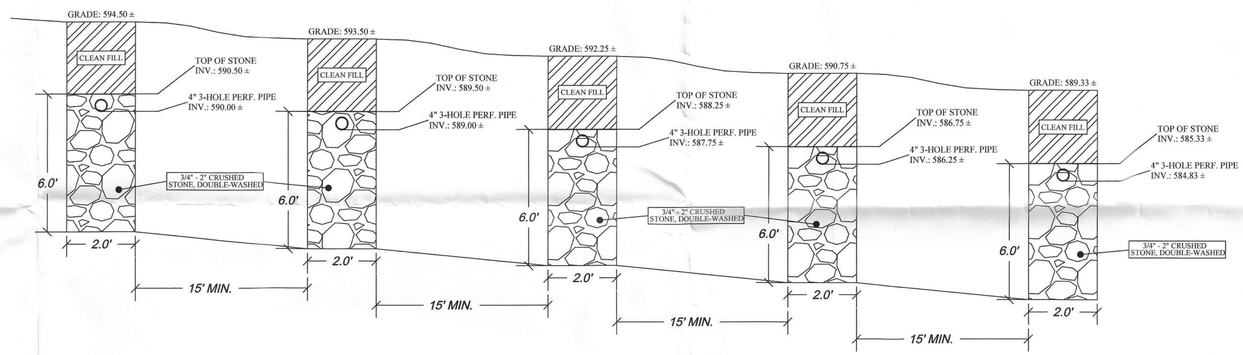
P420
PLEASANT PLAIN
14301 COMUS ROAD
LIBER 10832, FOLIO 91
TAX MAP EW12
2ND ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

SEPTIC DESIGN PLAN

ITEM	REVISION	DATE	BY
3	PER MCDPS COMMENTS	9/4/20	MBO
2	PER MCDPS COMMENTS	8/21/20	MBO
1	PER MCDPS COMMENTS	7/10/20	DGT

DESIGN BY: MBO
DRAWN BY: GH
CHECKED BY: DGT
DATE: 9/4/2020
SCALE: AS NOTED
PROJECT/FILE NO. 018-016
SHEET NO. 1 of 2

P:\018-2018s\018-016 COMUS ROAD\SURV\Comps\018-016 COMUS CONCEPT PLAN.dwg Sep 04, 2020-10:09am



SEPTIC TRENCH CROSS SECTION
N.T.S.

Construction Consultants, Engineers, Surveyors
17904 Georgia Avenue, Suite 302
Olney, Maryland 20832
Tel: (301) 924-4570
Fax: (301) 924-5872

O'C&L
O'CONNELL & LAWRENCE, INC.

P420
PLEASANT PLAIN
14301 COMUS ROAD
LIBER 10932, FOLIO 91
TAX MAP EW12
2ND ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

SEPTIC DESIGN PLAN

ITEM	REVISION	DATE	BY
3	PER MCDPS COMMENTS	9/4/20	MBO
2	PER MCDPS COMMENTS	8/21/20	MBO
1	PER MCDPS COMMENTS	7/10/20	DGT

DESIGN BY:	MBO
DRAWN BY:	GH
CHECKED BY:	DGT
DATE:	9/4/2020
SCALE:	N.T.S.
PROJECT/FILE NO.	018-016
SHEET NO.	2 of 2

STATE OF MARYLAND
DOUGLAS GLENN TAYLOR
12417
PROFESSIONAL ENGINEER

P:\018-2018\018-016 COMUS ROAD\SURV\Comps\018-016 COMUS CONCEPT PLAN.dwg Sep 04, 2020-09:59am

DocuSign Envelope ID: 77D27174-6717-4911-B74E-8CA0CC7CA14F

APPROVED
Department of Permitting Services
Permit # STORMWATER-286223
Date 04/05/22

General Notes

1. Property Data
   Legal Reference: Pleasant Plain
   Lot Area: 418,611.6 Sq. Ft. or 9.61 Acres
   Tax Map Grid EW12 - Tax Acct: 00023661
   Zoning: AR - Agricultural Reserve
   Watershed: Little Bennett Creek
   WSSC 200 Sheet: 233NW14
   ADC Map Page 22 Grid C2 (2014 Edition)
   Ex. Water and Sewer Categories: W-6 & S-6: Private On-Site Water & Sewer

2. Existing Site Data
   Property lines shown hereon were taken from field observations and available records.
   This plan has been prepared without the benefit of a title examination.
   Boundery features shown hereon per a field-run survey conducted by O'C&L Inc. in the summer/fall of 2018.
   There are no streams within the proposed area of disturbance.
   The site is not located in a flood zone of the national flood insurance program, per the federal emergency management agency flood insurance rate map #24031C0160D with effective date 9-29-2006. There are no known floodplains, tidal wetlands, or non-tidal wetlands near the subject property.
   Existing Site Use: Undeveloped
   Existing Site Coverage: Wooded

3. Utilities Data
   Utilities locations shown hereon are available plans and field observations where surface indications exist. Digging of test pits at all future utility crossings is recommended. Contact "Miss Utility" at 1-800-257-7777, 48 hours prior to any excavation or construction.

4. Soils Data
   Data shown hereon was obtained from a the NRCS Web Soil Survey for Montgomery County, Maryland and includes:
   - Type: 5B (Glenville Silt Loam, 3-8% slopes - soil type "C/D", Restricted Soil)
   - Type: 9B (Linganore-Hyattstown Channery Silt Loams, 3-8% slopes- soil type "C", Restricted Soil)
   - Type: 16B (Brinklow-Blocktown Channery Silt Loams, 3-8% slopes - soil type "C")
   - Type: 16C (Brinklow-Blocktwon Channery Silt Loams. 8-15% slopes - soil type "D")
   - Type: 17B (Occoquan Loam, 3-8% slopes - soil type "B")

5. Proposed Site Data
   This plan shall be used only as a Concept/Site Development Plan for the creation of a new lot and subsequent development of an office building, garage, and warehouse for a landscape service business.
   Proposed usage: Office building, Garage, Warehouse, driveway, and adjoining parking lot for a landscape service business.

6. Proposed office, garage, warehouse, parking lot, retaining wall, and driveway sizes and configurations shown on Sheet 2 of this plan are conceptual and subject to modification during final design.

7. The required ESD volume of stormwater management is proposed to be treated via one (1) microbioretention area. The percentage of proposed impervious area within the limits of disturbance is 28%. See the associated Conceptual Stormwater Management Report for details of methodology and calculations.

8. The exact size and location of the proposed microbioretention area may be altered at final design to suit final design.

9. The Applicant is anticipated to subdivide the subject property and apply for a Conditional Use Approval for the proposed use. As of the time of the submission of this plan, those applications have not been filed.

10. The primary well location as shown on Sheet 2 of this plan is the Owner's preferred location. A separate well permit application and plan has been submitted to MCDPS for review and approval.

11. The septic reserve area as shown on Sheet 2 of this plan is the Owner's preferred location. A separate septic permit application and plan has been submitted to MCDPS for review and approval.

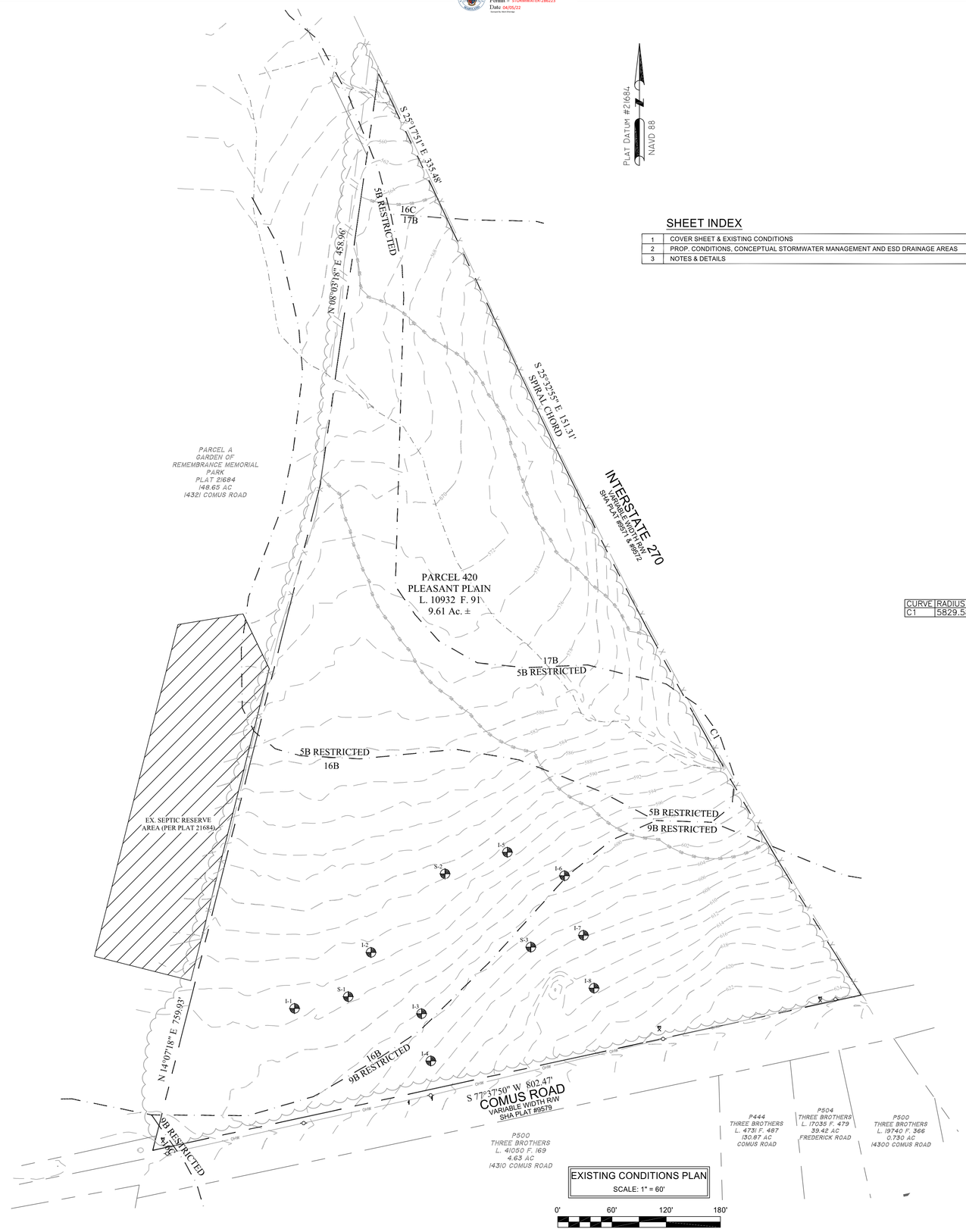
12. The proposed retaining wall location and configuration is shown on Sheet 2 of this plan. Final retaining wall design shall be by others. Proposed grade shots are subject to modification during final design and are conceptual at this time.

13. Infiltration Tests were conducted by ECS Mid-Atlantic, LLC on 12/27/2019. Test locations were field-staked by O'C&L and are shown on this sheet. For results, see geotechnical report, prepared by ECS Mid-Atlantic, LLC, dated 2/4/2020

LEGEND

THESE STANDARD SYMBOLS WILL BE FOUND IN THE DRAWING

- EX. PROPERTY LINE
- EX. OVERHEAD WIRE
- EX. CONTOUR
- EX. SEPTIC RESERVE AREA
- EX. SOIL DIVIDE
- EX. TREELINE
- EX. METAL FENCE
- STRUCTURAL BORING LOCATION
- EX. WOOD FENCE
- INFILTRATION TEST PIT LOCATION
- EX. STREAM
- EX. SIGN
- EX. STREAM BUFFER
- EX. GUY WIRE
- EX. ELECTRIC POLE



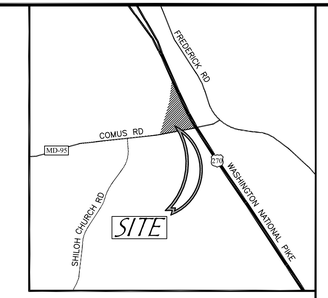
EXISTING CONDITIONS PLAN
SCALE: 1" = 60'

SHEET INDEX

1	COVER SHEET & EXISTING CONDITIONS
2	PROP. CONDITIONS, CONCEPTUAL STORMWATER MANAGEMENT AND ESD DRAINAGE AREAS
3	NOTES & DETAILS

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	5829.58'	665.17'	664.81'	S 29°18'58.39" E	6°32'15"



VICINITY MAP
SCALE: 1"=2000'

Owner/Applicant:
Mr. Torcato Romano
8970 Maier Place
Laurel, MD 20723
Contact: Maria Hauge
Phone: (240) 876-0097

Engineer:
O'Connell & Lawrence, Inc.
17904 Georgia Avenue, Suite 302
Olney, Maryland 20832
Contact: Doug Tilley, P.E.
Phone: (301) 924-4570

O'C&L
O'Connell & Lawrence, Inc.
Construction Consultants, Engineers, Surveyors
17904 Georgia Avenue, Suite 302
Olney, Maryland 20832
Tel: (301) 924-4570
Fax: (301) 924-5872

P420
PLEASANT PLAIN
14301 COMUS ROAD
LIBER 10932, FOLIO 91
TAX MAP EW12
2ND ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

CONCEPT / SITE DEVELOPMENT PLAN

MCDPS APPROVED
STORMWATER MANAGEMENT
CONCEPT DOCUMENT
JEAN KAPUSNICK 9/17/2020
Sheet 1 of 3

ITEM	REVISION	DATE	BY
REV2	MCDPS COMMENTS	9/11/20	MBO
REV1	MCDPS COMMENTS	8/20/20	MBO

Professional Certification

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 42417, Expiration Date: June 6, 2022.

DocuSigned by:
Douglas G Tilley — 42417
Design Engineer Signature — MD License #
Douglas G. Tilley — 9/11/2020
Printed Name — Date

STATE OF MARYLAND — DOUGLAS G. TILLEY — No. 42417 — PROFESSIONAL ENGINEER
9/11/2020

DESIGN BY:	MBO
DRAWN BY:	GH
CHECKED BY:	DGT
DATE:	9/11/2020
SCALE:	1"=60'
PROJECT/FILE NO.	018-016
SHEET NO.	1 of 3

DocuSign Envelope ID: 4282C0A2-292B-4FE5-AF7D-6752C899F0A2

APPROVED
Department of Permitting Services
Permit # STORMWATER-286223
Date 04/05/22

CONCEPT NOTES

1. PROPOSED MICROBIORETENTION AREA SHALL BE CONSTRUCTED IN ACCORDANCE WITH APPLICABLE MDE AND MCDPS STANDARDS. FINAL DESIGN FOR MICROBIORETENTION AREAS SHALL BE COMPLETED AT THE TIME OF DESIGN DEVELOPMENT.
2. FINAL PIPE/TRENCH DRAIN DESIGN SHALL BE COMPLETED AT THE TIME OF FINAL DESIGN. PIPE TYPES SHALL BE SPECIFIED AT SEDIMENT CONTROL PERMIT PLAN PREPARATION.
3. FINAL SITE GRADING SHALL BE COMPLETED AT THE TIME OF FINAL SITE DEVELOPMENT PREPARATION. FOR THE PURPOSES OF THIS DESIGN, IT IS ASSUMED THAT THE DRAINAGE AREAS TO INDIVIDUAL STORMWATER MANAGEMENT CONTROLS ARE PRELIMINARY AND MAY CHANGE AS SITE DEVELOPMENT PROGRESSES. CONCEPTUAL GRADING IS AS SHOWN.
4. ROOF DRAIN LOCATIONS SHALL BE COORDINATED WITH THE ARCHITECT DURING THE DESIGN DEVELOPMENT PROCESS. THE EXACT LOCATION OF THE DOWNSPOUTS MAY CHANGE. HOWEVER, THE BUILDING IS EXPECTED TO DRAIN TO THE REAR. THE EXACT DOWNSPOUT LOCATIONS ARE NOT ANTICIPATED TO ALTER THE OVERALL SITE DESIGN.
5. FOR CONCEPTUAL STORMWATER MANAGEMENT COMPUTATIONS, SEE ASSOCIATED CONCEPT STORMWATER MANAGEMENT REPORT.
6. PROPOSED PROPERTY LINES SHOWN ON THIS PLAN ADJACENT TO COMUS ROAD AND INTERSTATE-270 ARE APPROXIMATED BASED ON RECENT SUBDIVISION INFORMATION AND DEDICATIONS OF ADJACENT PROPERTIES. FINAL PROPERTY LINE LOCATIONS FOLLOWING DEDICATIONS SHALL BE IN PLACE AT THE TIME OF FINAL DESIGN.

PLAT DATUM #21684
NAVD 88

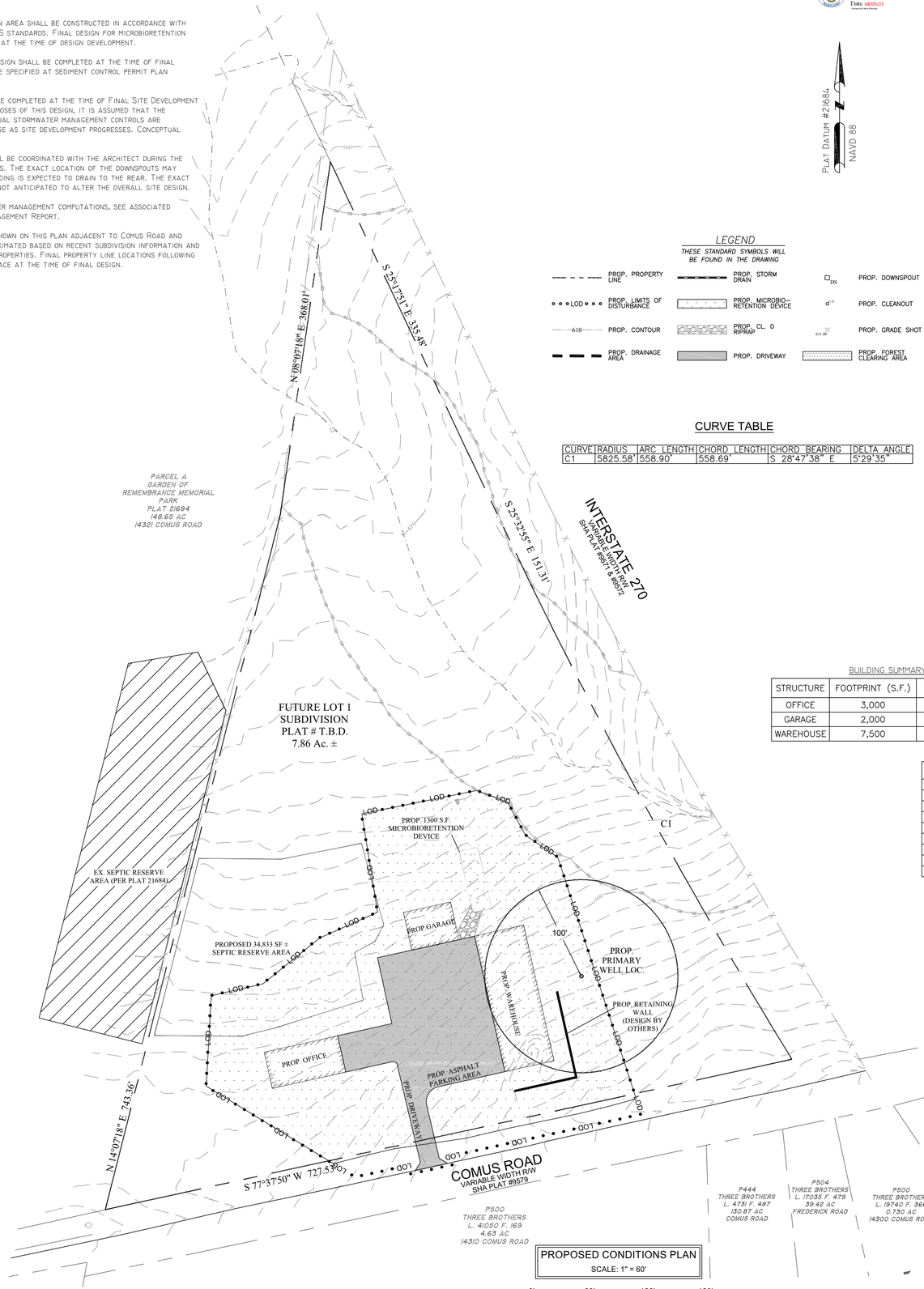
LEGEND

THESE STANDARD SYMBOLS WILL BE FOUND IN THE DRAWING

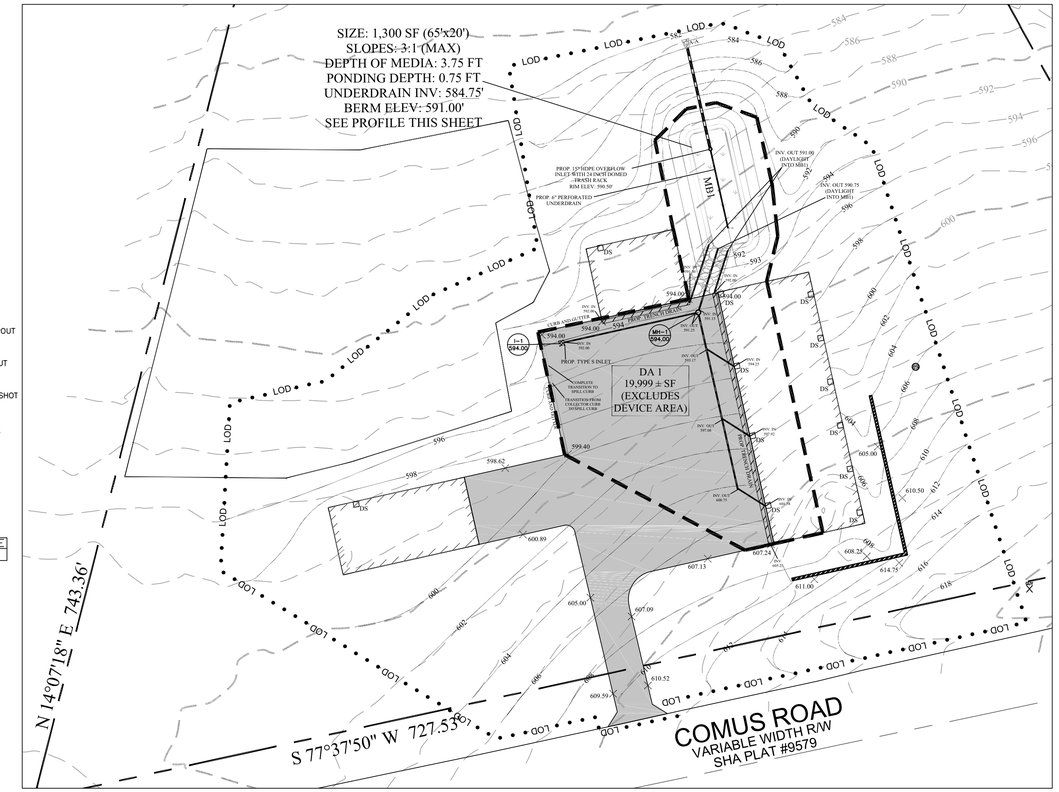
PROP. PROPERTY LINE	PROP. STORM DRAIN	PROP. DOWNSPOUT
LOD PROP. LIMITS OF DISTURBANCE	PROP. MICROBIO-RETENTION DEVICE	PROP. CLEANOUT
610 PROP. CONTOUR	PROP. CL. 0 RIPRAP	611.00 PROP. GRADE SHOT
PROP. DRAINAGE AREA	PROP. DRIVEWAY	PROP. FOREST CLEARING AREA

CURVE TABLE

CURVE	RADIUS	ARC LENGTH	CHORD LENGTH	CHORD BEARING	DELTA ANGLE
C1	5825.58'	558.90'	558.69'	S 28°47'38" E	5°29'35"



PROPOSED CONDITIONS PLAN
SCALE: 1" = 60'
0' 60' 120' 180'



PROPOSED STORMWATER MANAGEMENT & ESD DRAINAGE AREA MAP
SCALE: 1" = 40'
0' 40' 80' 120'

BUILDING SUMMARY TABLE

STRUCTURE	FOOTPRINT (S.F.)	FFE (FT)	HEIGHT (FT)
OFFICE	3,000	600.00	TBD
GARAGE	2,000	594.00	TBD
WAREHOUSE	7,500	VARIES	TBD

MICROBIORETENTION AREA 1 – CONCEPT SUMMARY TABLE	
FEATURE	MB1
FILTRATION AREA	1,300 SF
FACILITY LENGTH	65 LF±
FACILITY WIDTH	20 LF±
FACILITY DEPTH	3.75 LF (TOTAL)
PONDING DEPTH	0.75 LF
EMBANKMENT SIDE SLOPES	3:1 (MAX)
EMBANKMENT TOP WIDTH	2 LF (MIN)
DRAINAGE AREA (EXCLUDING AREA OF DEVICE)	19,999 SF

LAYER	TOP ELEVATION	THICKNESS
PONDING DEPTH	590.50'	0.75'
MULCH*	590.00'	0.25'
PLANTING MEDIA	589.75'	3.25'
SAND	586.50'	0.50'
GRAVEL	586.00'	1.50'
UNDERDRAIN INVERT	584.75'	–

*DEPTH OF MULCH INCLUDED IN PONDING DEPTH

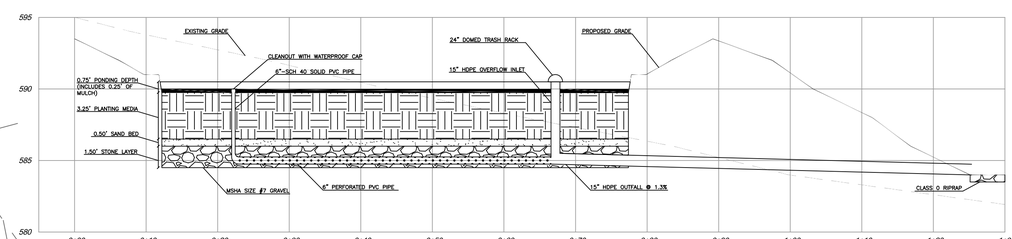
DESIGN SUMMARY TABLE

	AREA SIZE (SF)	AREA SIZE (ACRES)	PERCENTAGE	REQUIRED	PROVIDED
TOTAL AREA OF DISTURBANCE	112,260.47	2.58	–	–	–
EXISTING IMPERVIOUS AREA WITHIN LOD	0.00	0.00	0%	–	–
PROPOSED IMPERVIOUS AREA WITHIN LOD	31,411.97	0.72	28%	–	–
ENVIRONMENTAL SITE DESIGN VOLUME (ESDv)	–	–	–	2,825 CF	2,925 CF

STORMWATER MANAGEMENT FACILITY CONCEPT SUMMARY TABLE

DRAINAGE AREA ID	DRAINAGE AREA SIZE (SF)	FACILITY ID	FACILITY TYPE	FACILITY SIZE (SF)	ESDvPROVIDED (CF)
DA1	19,999*	MB1	MICROBIORETENTION AREA	1,300**	2,925
					TOTAL: 2,925

*EXCLUDES AREA OF DEVICE
**PERCENTAGE OF CONTRIBUTING DRAINAGE AREA = 6.1%



MICROBIORETENTION DEVICE CROSS SECTION A-A
SCALE: 1" = 10' (H) 1" = 5' (V)
0' 10' 20' 30'

Construction Consultants, Engineers, Surveyors
O'C&L
O'CONNELL & LAWRENCE, INC.
17904 Georgia Avenue, Suite 302
Olney, Maryland 20832
Tel: (301) 924-4570
Fax: (301) 924-5872

P420
PLEASANT PLAIN
14301 COMUS ROAD
LIBER 10832, FOLIO 91
TAX MAP EW12
2ND ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

CONCEPT / SITE DEVELOPMENT PLAN

ITEM	DATE	BY
REV2	9/11/20	MBO
REV1	8/20/20	MBO

REVISION
MCDPS COMMENTS
MCDPS COMMENTS

STATE OF MARYLAND
DOUGLAS G. TILTON
No. 42417
PROFESSIONAL ENGINEER
9/11/2020

DESIGN BY:	MBO
DRAWN BY:	GH
CHECKED BY:	DGT
DATE:	9/11/2020
SCALE:	AS NOTED
PROJECT/FILE NO.	018-016
SHEET NO.	2 of 3

DocuSign Envelope ID: 9007EDAB-FF27-49E4-97DE-A1D67D2589CC

APPROVED
Department of Permitting Services
Permit # STORMWATER-286223
Date 04/05/22
Issued by: Ben Berlage

Department of Permitting Services
255 Rockville Pike, 2nd Floor
Rockville, MD 20850-4166
Phone: 311 in Montgomery County or (240) 777-0311
http://www.montgomerycountymd.gov/permittingservices/

DPS

MICRO-BIORETENTION

The Micro-Bioretention methods described in the following section are based on the Micro-Bioretention design found in Chapter 5 of the Maryland Storm Water Design Manual and the ESD Process A Computations Supplement dated July 2010. Where deemed appropriate, the design specifications have been modified by the Montgomery County Department of Permitting Services (DPS). DPS requires that all Micro-Bioretention devices shall include a PVC pipe underdrain system.

A. Facility Description

Micro-Bioretention is a filtration system that treats runoff by passing it through a filter bed mixture of sand, soil, and organic matter. Principal components of the system include: a) surface planting with woody and herbaceous plant species, b) a surface 3 inch thick mulch layer, c) a 2-4 foot planting medium, d) a 6 inch thick sand layer, and e) perforated PVC pipe underdrain within a gravel bed. The facilities should be well landscaped to enhance their function and appearance. When providing additional storage for recharge below the underdrain, refer to the enhanced filter design specifications for additional requirements.

B. System Design Considerations

1. **Applicability**

   The Micro-Bioretention device is appropriate for both new and redevelopment applications. The entire system fits into a relatively small space, making it applicable to: concave parking lot islands, linear roadway or median filters, terraced slope facilities, and urban planter boxes. Currently, Micro-Bioretention devices are not permitted in residential cul-de-sac islands due to fire truck access concerns. The total drainage area to the facility, including pervious and impervious areas, is limited to 20,000 square feet. Micro-Bioretention facilities should not be located in areas which contain mature trees or other environmentally sensitive site features, or where existing slopes exceed 15 percent.

2. **Conveyance**

   Micro-Bioretention facilities should be designed offline whenever possible. A flow splitter should be used to safely convey flows in excess of the design treatment volume around the facility. If bypassing the facility is impractical, an internal overflow device must be used to safely convey the runoff to a stable outfall while providing adequate freeboard within the facility, as discussed in section C.3. (Overflow Design Criteria). Runoff shall enter, flow through, and exit the facility in a non-erosive manner. All Micro-Bioretention facilities shall include a PVC underdrain system to convey treated flows to a suitable outfall location.

3. **Groundwater**

   Micro-Bioretention facilities shall not be located where the water table is within 2 feet of the bottom of the facility. If the 2 ft. clearance requirement cannot be met, an alternative stormwater practice must be proposed. An impervious liner may be used in some cases.

4. **Setbacks**

   Micro-Bioretention practices shall be located at least 30 feet from water supply wells and 25 feet from septic systems. Practices should be located down gradient and setback at least 10 feet from building foundations. Micro-Bioretention variants (e.g., planter boxes) that must be located within 10 ft of building foundations must include an impermeable liner and shall not be a structural component of the building. Structural design of concrete planter box enclosures is required.

C. Specifications and Details

1. **Sizing**

   The facility shall be sized to capture and store 100% of the target treatment volume. A minimum of 6" and maximum of 12" of surface ponding must be provided above the filter media. The surface area (A) of a Micro-Bioretention practice shall be at least 2% of the contributing drainage area. Planting media shall be between 24 and 48 inches deep. The total storage provided in the facility shall be computed as the storage provided in the temporary ponding area and the storage provided in the planting media and sand layers. Computations shall account for the porosity (n = 0.40) of the planting media and sand. Storage provided in excess of that required to treat the runoff for the 1 year, 24-hour design storm shall not be counted towards the total ESDv provided.

   See "Enhanced Filter" design guidelines if additional storage is proposed below the underdrain pipe.

   To the extent possible, facilities should have irregular outlines to blend naturally into the environment. Rectangular is not natural.

2. **Inflow Design Criteria**

   Runoff shall enter the Micro-Bioretention facility in a non-erosive manner (less than 2 fps). Inflow may be through depressed curbs with wheel stops, curb cuts, level spreaders, bubblers, or conveyed directly using downspouts, covered drains, catch basins, over grass, or other acceptable conveyance methods. Particular care must be taken to prevent erosion of the surface mulch layer.

3. **Overflow Design Criteria**

   If an internal overflow device is needed, a yard inlet or dome cap inlet may be used. Dome inlet caps may be stacked on top of clean-outs to serve as the overflow devices. When this method is used, the overflow invert of the domed cap must be set at the design storage level. Overflow devices cannot lead into perforated pipe sections.

   A safe non-erosive outlet below the outfall must be provided. Safe conveyance of the developed 10-year storm through the facility must be demonstrated.

4. **Underdrain Pipe**

   The underdrain pipe consists of 6-inch diameter schedule 40 or stronger perforated PVC pipe at 0.00% slope. The underdrain pipe will be placed within the gravel layer. A minimum of three inches of gravel must be placed under the pipe, with a minimum of 6 inches of gravel over the pipe. Perforations must be 3/8 inch in diameter and must be located 4 inches on center, every 90 degrees around the pipe. Perforated pipe must begin at least 12" inside the filter media. If this cannot be achieved, then sides of the filter media must be lined with filter fabric. Filter fabric must not be wrapped around the underdrain pipe. An acceptable alternative to perforated pipe is 6" diameter schedule 40 slotted PVC pipe with 0.125 inch slots. Slots shall be 0.125 inches wide and a minimum of 1.9 inches in length, with a minimum of 4 slots per row and 4 rows per linear foot of pipe.

Access for cleaning all underdrain piping is needed. Watertight clean-outs for each pipe shall be level with the top of the mulch. All cleanouts shall have a removable waterproof cap. Cleanouts must be capped immediately after the filter medium is in place.

The required number of perforated underdrain pipes is proportional to the surface area of the Micro-Bioretention facility. The length of perforated pipe shall be 0.05 times the surface area of the facility, rounded to the nearest foot. In no case shall less than 2 ft. of perforated pipe be provided.

5. **Gravel Bed**

   The gravel layer surrounding the underdrain pipe(s) must meet MSHA size #7 (Table 903A), and must provide a minimum of 6 inches cover over the pipe(s), and minimum 3 inches under the pipe. No geotextile or filter fabric is allowed to be placed horizontally anywhere within the filter media. The gravel must be clean and must be stored and installed in such a manner that it does not become contaminated with sediment before or after installation.

6. **Sand Bed**

   A minimum 6-inch fine aggregate sand layer shall be provided below the planting medium. ASTM C33 or AASHTO M6 Fine Aggregate Concrete Sand is required per Montgomery County sand specifications.

7. **Planting Medium**

   The planting medium shall be 24"-48" thick and shall consist of 1/3 perlite or Soilite, 1/3 compost and 1/3 topsoil. The perlite shall be coarse grade horticultural perlite. The compost shall be high grade compost free of stones and partially composted woody material. The topsoil component shall meet the following criteria: contain no more than 10% clay, 15-25% silt and 60-75% sand and be free of stones, stumps, roots or other similar objects larger than 2 inches.

   The first layer of the planting medium shall be lightly tilled to mix it into the 6-inch sand layer, so as not to create a definitive boundary. The planting bed shall be flooded after placement. Any settlement that occurs shall be filled back to the design elevation.

8. **Mulch**

   The mulch layer is an important part of the Micro-Bioretention device. Much of the pollutant removal capacity of the Micro-Bioretention system is within the mulch layer. The surface mulch layer will consist of standard double shredded aged hardwood mulch. The mulch should be applied uniformly to a depth of 3 inches. Yearly replenishing may be necessary. Pine bark is not acceptable.

9. **Plant Materials**

   Plants, through their pollutant uptake and evapo-transpiration of stormwater runoff, play a key role in the overall effectiveness of the Micro-Bioretention device. Both the number and type of tree and shrub plantings for the system may vary, especially where aesthetics or other considerations are critical to site development. While native plants are encouraged, they are not always appropriate in all situations. While no hard planting rule exists, the plants should be a mix of trees, shrubs and herbaceous materials. However, there should be 2 to 3 shrubs planted per tree and herbaceous plantings shall make up 40% of the total number of plants. Trees shall be a minimum of 1 ½ in. caliper, shrubs shall be minimum 2 gal. size and herbaceous plants shall be a minimum 1 gal size. Mature plant canopy should cover 85% of the Micro-Bioretention device. Alternative planting schemes, including use of grasses, may be considered in some situations, so long as the planting plan is designed by a Registered Landscape Architect registered in the State of Maryland, however lawn grasses are not appropriate for these facilities. All plantings shall be in accordance with the Montgomery County landscape guidelines. All landscape plans must be sealed by a registered landscape architect. Since

the plants are an integral part of the Micro-Bioretention system, no changes to the approved landscape plan will be allowed unless an alternate plant list, prepared by a registered landscape architect, has been approved by DPS prior to installation. Since plant availability can change, DPS suggests including an alternate plant list on the landscaping plans.

D. Micro-Bioretention Sizing Example

A Micro-Bioretention facility is being designed to treat the runoff from a parking lot that is part of a larger development. The target ESD_v for the overall project has already been determined. The total treatment area to the facility is 20,000 square feet (17,500 square feet impervious area and 2,500 square feet of pervious area, yielding an impervious percentage of 88%).

Calculate the maximum volume that can be stored in the facility.

$ESDv(MAX) = [(Pe)\ (Rv)\ (A)]/12 \qquad Rv = 0.05 + (.009 \times I)$

$= [(2.6")(0.84)(20,000sf)]/12 \qquad = 0.05 + (.009*88) = 84$

$= 3,640\ cf$

Calculate the minimum volume that must be stored in the facility:

$ESDv(MIN) = [(Pe)\ (Rv)\ (A)]/12 \qquad Rv = 0.05 + (.009 \times I)$

$= [(1.0")(0.84)(20,000sf)]/12 \qquad = 0.05 + (.009*88) = 84$

$= 1,400\ cf$

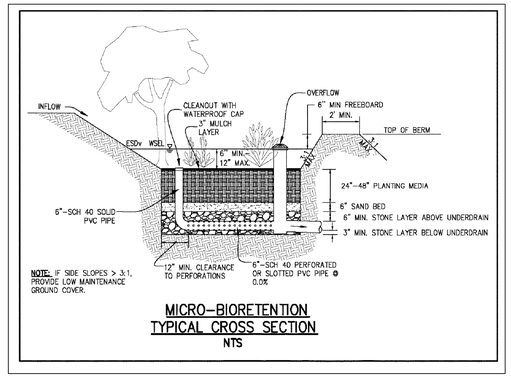
To calculate the ESDv provided by this facility we will assume a ponding depth of 0.75' and a 2.5' thick media layer (2' planting media and 0.5' sand). The porosity for the media layer is n = 0.40. Assume the area of the filter bed (Af) is 2,500 sf.

$ESDv = \text{Ponding Depth} \times \text{Storage in Filter Media}$

$= (2.500'\ 0.75) + [0.4*(2.500'2.5)] = 4,375\ cf$

Since the proposed ESDv exceeds the maximum allowable storage of 3,640 cf the facility must be reduced in size. In this case, reducing the filter area to 1,500 sf will yield a treatment volume of 2,625 cf, which is larger than the minimum required storage in the facility. Therefore the design is acceptable.

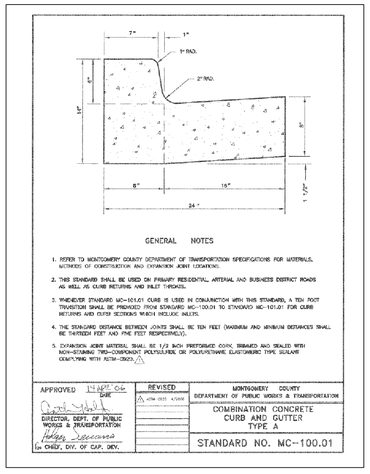
SOURCE: MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES



SAMPLE MICROBIORETENTION CROSS-SECTION

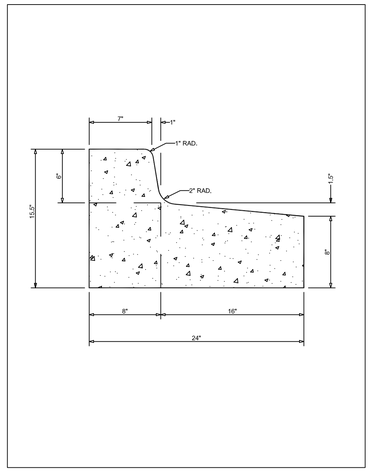
N.T.S.

MICROBIORETENTION DESIGN SPECIFICATIONS



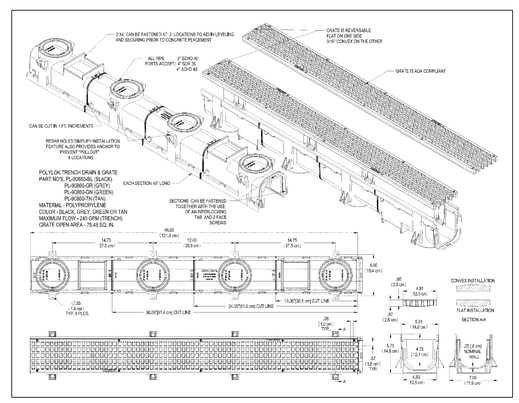
CURB AND GUTTER DETAIL

N.T.S.



MODIFIED MCDOT STD. MC-100.01 (SPILL CURB AND GUTTER DETAIL)

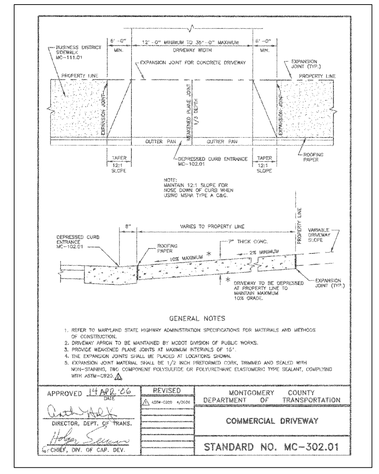
N.T.S.



TRENCH DRAIN DETAIL

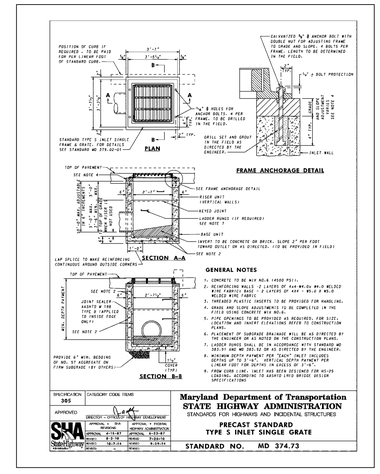
N.T.S.

Note: PolyLock trench drain detail shown for information only. Exact make, model, and size of trench drain to be selected at time of final site development.



DRIVEWAY DETAIL

N.T.S.



MCDOT TYPE S INLET DETAIL

N.T.S.

Construction Consultants, Engineers, Surveyors
17904 Georgia Avenue, Suite 302
Olney, Maryland 20832
Tel: (301) 924-4570
Fax: (301) 924-5872
O'C&L
O'CONNELL & LAWRENCE, INC.

P420
PLEASANT PLAIN
14301 COMUS ROAD
LIBER 10932, FOLIO 91
TAX MAP EW12
2ND ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

CONCEPT / SITE DEVELOPMENT PLAN

REV#	ITEM	REVISION	BY	DATE
REV2	MCDPS COMMENTS		MBO	8/XX/20
REV1	MCDPS COMMENTS		MBO	8/20/20

DESIGN BY:	MBO
DRAWN BY:	GH
CHECKED BY:	DGT
DATE:	9/11/2020
SCALE:	AS NOTED
PROJECT/FILE NO.	018-016
SHEET NO.	3 of 3

STATE OF MARYLAND · DOUGLAS G. TILLEY · No. 24241 · PROFESSIONAL ENGINEER
9/11/2020

DEPARTMENT OF PERMITTING SERVICES

Marc Elrich
County Executive

Mitra Pedoeem
Director

March 21, 2024

Mr. Douglas G. Tilley, P.E.
O'Connell & Lawrence, Inc.
17904 Georgia Avenue, Suite 302
Olney, MD 20832

Re: REVISED **COMBINED STORMWATER MANAGEMENT *REVISED* CONCEPT/*SITE DEVELOPMENT STORMWATER MANAGEMENT PLAN*** for
14301 Comus Road
Preliminary Plan #: N/A (Was 120210100)
SM File #: 286223
Tract Size/Zone: 411,476.78 sf /9.45 Ac
Total Concept Area: 128,302.46 sf/2.95 Ac
Parcel(s): P 420 Pleasant Plain
Watershed: Little Bennett Creek

Dear Mr. Tilley:

Based on a review by the Department of Permitting Services Review Staff, the **revised** stormwater management concept for the above-mentioned site is **acceptable**. The stormwater management concept proposes to meet required stormwater management goals via microbioretention and non-rooftop disconnection.

The purpose of this revision is to remove reference to Preliminary Plan No. 120210100. It is our understanding that this Preliminary Plan application has been withdrawn.

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

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

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

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

4. **This approval supersedes the approval letter dated April 5, 2022.**

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

Payment of a stormwater management contribution in accordance with Section 2 of the Stormwater Management Regulation 4-90 **is not required**.

This letter must appear on the sediment control/stormwater management plan at its initial submittal. The concept approval is based on all stormwater management structures being located

outside of the Public Utility Easement, the Public Improvement Easement, and the Public Right of Way unless specifically approved on the concept plan. Any divergence from the information provided to this office; or additional information received during the development process; or a change in an applicable Executive Regulation may constitute grounds to rescind or amend any approval actions taken, and to reevaluate the site for additional or amended stormwater management requirements. If there are subsequent additions or modifications to the development, a separate concept request shall be required.

If you have any questions regarding these actions, please feel free to contact me at mark.etheridge@montgomerycountymd.gov or at 240-777-6338.

Sincerely,

Mark Etheridge

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

cc: N. Braunstein
SM File # 286223

ESD: Required/Provided 3.315 cf / 3,394 cf
PE: Target/Achieved: 1.0”/1.0”
STRUCTURAL: 0.0 cf
WAIVED: 0.0 ac.

Department of Permitting Services
Fire Department Access and Water Supply Comments

DATE: 24-Oct-25

TO: Douglas Tilley - tilld@oclinc.com
O'Connell & Lawrence

FROM: Marie LaBaw

RE: Pleasant Plain
14301 Comus Road

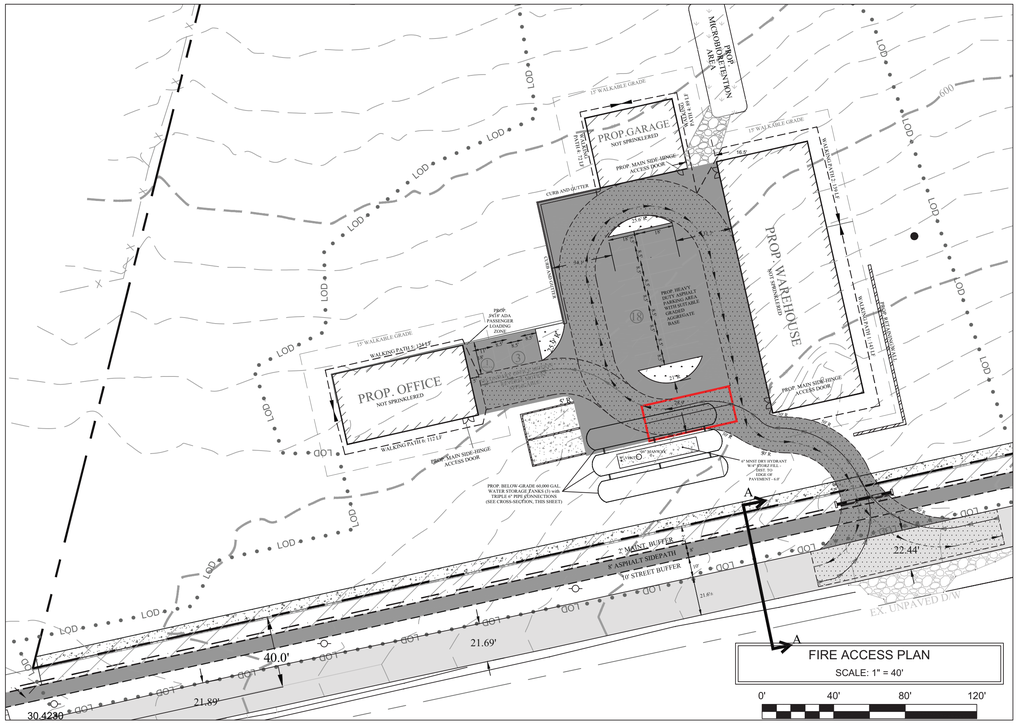
PLAN APPROVED

1. Review based only upon information contained on the plan submitted **23-Oct-25** .Review and approval does not cover unsatisfactory installation resulting from errors, omissions, or failure to clearly indicate conditions on this plan.

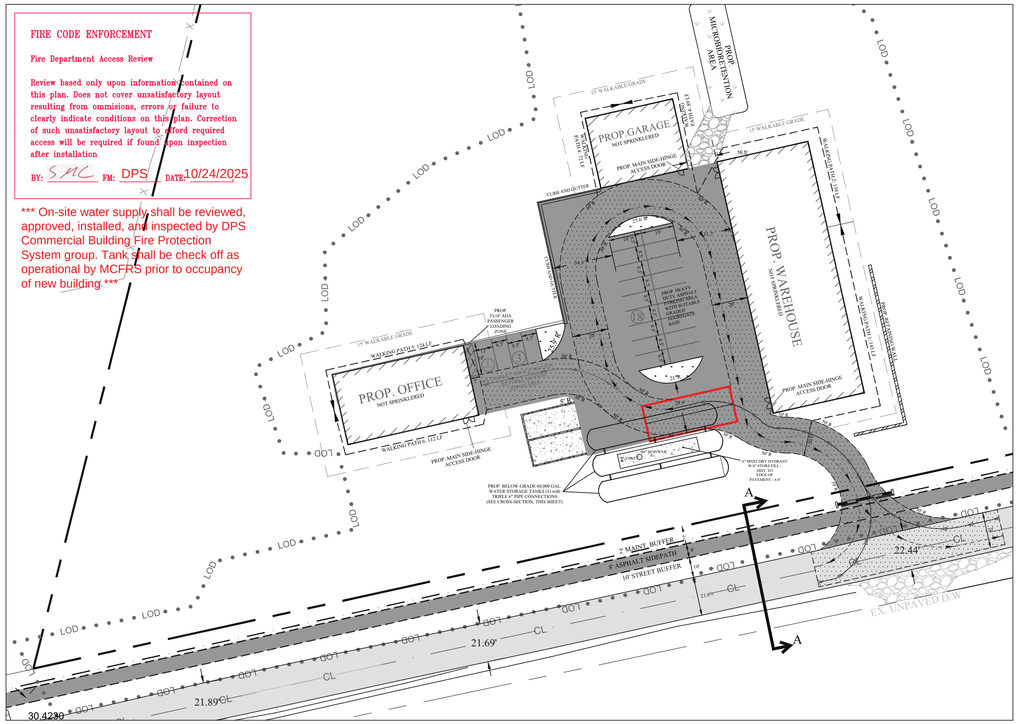
2. Correction of unsatisfactory installation will be required upon inspection and service of notice of violation to a party responsible for the property.

***** On-site water supply shall be reviewed, approved, installed, and inspected by DPS Commercial Building Fire Protection System group. Tank shall be check off as operational by MCFRS prior to occupancy of new building *****

Docusign Envelope ID: ABC946AF-9155-4251-A0A3-648982FEF95B



FIRE ACCESS PLAN
SCALE: 1" = 40'
0' 40' 80' 120'



FIRE CODE ENFORCEMENT

Fire Department Access Review

Review based only upon information contained on this plan. Does not cover unsatisfactory layout resulting from ommisions, errors or failure to clearly indicate conditions on this plan. Correction of such unsatisfactory layout to afford required access will be required if found upon inspection after installation

BY: SMC FM: DPS DATE: 10/24/2025

*** On-site water supply shall be reviewed, approved, installed, and inspected by DPS Commercial Building Fire Protection System group. Tank shall be check off as operational by MCFRS prior to occupancy of new building. ***

EMERGENCY APPARATUS MOTION PLAN
SCALE: 1" = 40'
0' 40' 80' 120'

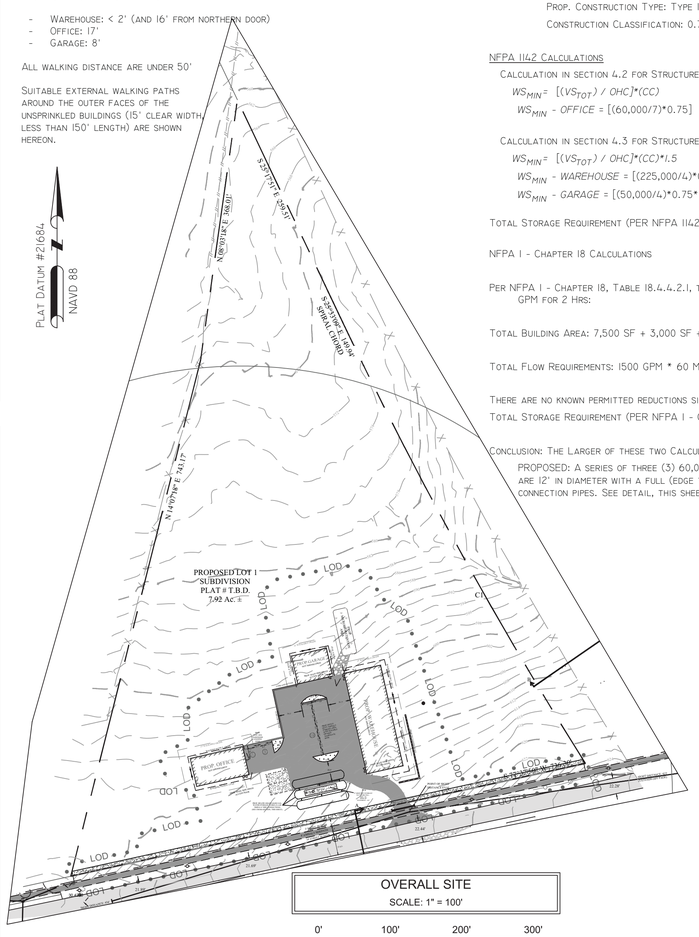
Fire Access Plan Notes

1. See detail, this sheet for motion to enter/exit site. Note that a minor backing motion from Operational Bay as shown hereon is required to re-enter Motion 1 as shown below.
2. At this time, no buildings are known to be proposed to be sprinkled. The anticipated Use Classes (per the 2018 IBC) are as follows:
   - Office - Class B
   - Garage - Class S-1 (less than 5,000 SF Fire Area)
   - Warehouse - Class S-2

   These uses are not required to be sprinkled per the 2018 IBC. No FDCs are shown hereon.
3. Comus Road is a signed 45 MPH Road.
4. The nearest fire station is Fire Station #35 - Clarksburg - located at 22610 Gateway Center Drive, which is 1.9 miles along Public Roads from the Site.
5. As part of this development, the Applicant hereby proposed the installation of three (3) 60,000 Gallon Fire Suppression Tanks on the Subject Property in the location shown hereon. See typical detail and cross-section, this sheet. Shop drawings for tank system approval shall be required to be submitted to the engineer and reviewed prior to purchase or development.
6. This plan is filed as part of a conditional use submission package for a Landscape Contractor and may further be used as part of a future preliminary plan of subdivision and/or building permit submission for the proposed development as shown hereon. Significant modifications to the site layout from those shown hereon will require modification to this plan.
7. The walking distance from the Apparatus access path to the main side hinge doors for each building are as follows:
   - Warehouse: < 2' (and 16' from northern door)
   - Office: 17'
   - Garage: 8'

   All walking distance are under 50'

   Suitable external walking paths around the outer faces of the unsprinkled buildings (15' clear width, less than 150' length) are shown hereon.



OVERALL SITE
SCALE: 1" = 100'
0' 100' 200' 300'

Apparatus Access Path Motions

Proposed path of travel

1. Motion 1
   The Apparatus enters the site, bears left, and stops in the operational bay. This motion allows access to all proposed buildings.
2. Motion 2 -
   From here, the apparatus leaves the site by bearing right, circling the parking area and exiting straight ahead.

Secondary motion providing walkable path access to the Office shown hereon. Apparatus will turn into office parking area and, when leaving, reverse to reach the point on Motion 2 where it started secondary motion. Shown thusly: --

Note: Motions shown herein are designed to show suitable access to the entirety of the site and do not demonstrate the limits of all permissible Apparatus motions utilizing the proposed layout.

Engineer/Surveyor:

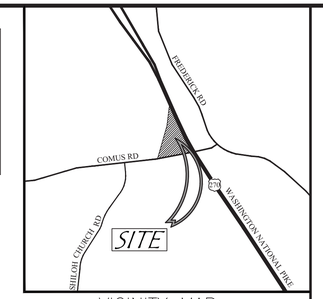
O'Connell & Lawrence, Inc.
17904 Georgia Avenue, Suite 302
Olney, Maryland 20832

Contact: Doug Tilley, P.E., R.P.L.S.
Phone: (301) 924-4570

Owner/Applicant:

Mr. Torcato Romano
15900 Woods Center Road
Silver Spring, MD 20906

Contact: Tony Romano
Phone: (301) 362-0080



VICINITY MAP
SCALE: 1"=2000'

FIRE SUPPRESSION SYSTEM CALCULATIONS - TANK SIZING

Proposed Buildings - UNSPRINKLED

Building 1 - Warehouse — Building Area: 7,500 SF - Volume: 225,000 CF (7,500 SF x 30' Bldg Height)
Prop. Construction Type: Type II - Occupancy Hazard Classification #4 (Per NFPA 1142 - 5.2.2.2)
Construction Classification: 0.75 (Per NFPA 1142, Table 6.2.1) - Exposure Hazard: Yes (Per NFPA 1142 - 4.1.5)

Building 2 - Office — Building Area: 3,000 SF - Volume: 60,000 CF (3,000 SF x 20' Bldg Height)
Prop. Construction Type: Type II - Occupancy Hazard Classification #7 (Per NFPA 1142 - 5.2.2.2)
Construction Classification: 0.75 (Per NFPA 1142, Table 6.2.1) - Exposure Hazard: No (Per NFPA 1142 - 4.1.5)

Building 3 - Garage — Building Area: 2,000 SF - Volume: 50,000 CF (2,000 SF x 25' Bldg Height)
Prop. Construction Type: Type II - Occupancy Hazard Classification #4 (Per NFPA 1142 - 5.2.2.2)
Construction Classification: 0.75 (Per NFPA 1142, Table 6.2.1) - Exposure Hazard: Yes (Per NFPA 1142 - 4.1.5)

NFPA 1142 Calculations

Calculation in section 4.2 for Structures Without Exposure Hazards shown below applies to OFFICE:

$WS_{MIN} = [(VS_{TOT}) / OHC]*(CC)$

WS_{MIN} - *OFFICE* = [(60,000/7)*0.75] = 6,429 GAL

Calculation in section 4.3 for Structures With Exposure Hazards shown below applies to WAREHOUSE and GARAGE:

$WS_{MIN} = [(VS_{TOT}) / OHC]*(CC)*1.5$

WS_{MIN} - *WAREHOUSE* = [(225,000/4)*0.75*1.5] = 63,282 GAL

WS_{MIN} - *GARAGE* = [(50,000/4)*0.75*1.5] = 14,063 GAL

Total Storage Requirement (per NFPA 1142): 83,774 GAL

NFPA 1 - Chapter 18 Calculations

Per NFPA 1 - Chapter 18, Table 18.4.4.2.1, the Minimum Flow Duration/Flow for Construction Type II (less than 22,700 SF) is 1,500 GPM for 2 hrs:

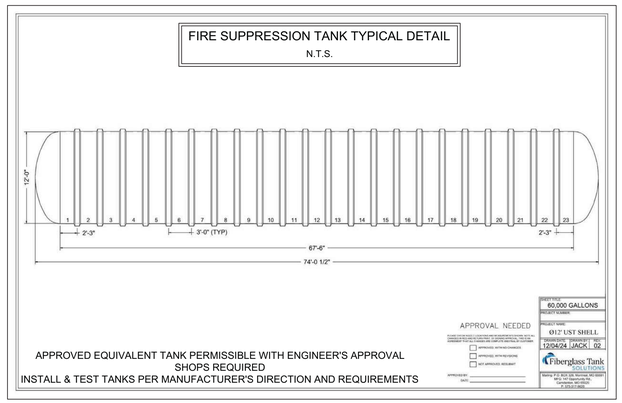
Total Building Area: 7,500 SF + 3,000 SF + 2,000 SF = 12,500

Total Flow Requirements: 1500 GPM * 60 Min/hr * 2 Hrs = 180,000 GAL

There are no known permitted reductions since buildings are not sprinkled.
Total Storage Requirement (per NFPA 1 - Chapter 18): 180,000 GAL

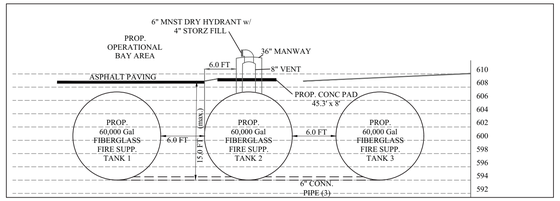
Conclusion: The larger of these two calculated volumes applies - a total of 180,000 GAL of tank storage is required for this site.
Proposed: A series of three (3) 60,000 gallon U/G Fiberglass storage tanks with triple pipe connection. All tanks proposed are 12' in diameter with a full (edge to edge) length of 74.04'. Tanks are proposed to be connected using three (3) 6" connection pipes. See detail, this sheet, and cross-section, this sheet.

FIRE SUPPRESSION TANK TYPICAL DETAIL
N.T.S.



APPROVED EQUIVALENT TANK PERMISSIBLE WITH ENGINEER'S APPROVAL
SHOPS REQUIRED
INSTALL & TEST TANKS PER MANUFACTURER'S DIRECTION AND REQUIREMENTS

FIRE SUPPRESSION TANK SYSTEM PROFILE
N.T.S.



INSTALL & TEST TANKS PER MANUFACTURER'S DIRECTION AND REQUIREMENTS

Professional Certification

I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 42417, Expiration Date: June 6, 2026.

DocuSigned by: Douglas G. Tilley 9F4155F3CA034C9... — 42417
Design Engineer Signature — MD License #
Douglas G. Tilley — 10/23/2025
Printed Name — Date

STATE OF MARYLAND — DOUGLAS G. TILLEY — 42417 — PROFESSIONAL ENGINEER — 10/23/2025
DocuSigned by: Douglas G. Tilley 9F4155F3CA034C9...

Construction Consultants, Engineers, Surveyors
17904 Georgia Avenue, Suite 302
Olney, Maryland 20832
Tel: (301) 924-4570
Fax: (301) 924-5872

O'C&L
O'Connell & Lawrence, Inc.

P420
PLEASANT PLAIN
14301 COMUS ROAD
LIBER 10932, FOLIO 91
TAX MAP EW12
2ND ELECTION DISTRICT
MONTGOMERY COUNTY, MARYLAND

FIRE ACCESS PLAN

ITEM	REVISION	BY	DATE
3	PER COMMENTS RECEIVED	DGT	10.23.25
2	PER COMMENTS RECEIVED	RPW/DGT	10.22.25
1	PER COMMENTS RECEIVED	DGT	7.2.25

DESIGN BY:	MBO/DGT
DRAWN BY:	GH
CHECKED BY:	DGT
DATE:	12/6/2024
SCALE:	AS NOTED
PROJECT/FILE NO.	018-016
SHEET NO.	1 of 1

CU202506 Torcado Romano Landscape Contractor
MCDOT Reviewer: Brenda Pardo
brenda.pardo@montgomerycountymd.gov
240-777-7170

In an effort to improve our responsiveness and streamline development reviews, we will not be preparing a formal letter for Plan. These comments reflect MCDOT's official comments on this Plan.

Comments

1. Can we get planning to sign off on the transportation adequacy form?
2. Driveway should be at grade with the sup
3. There are poles shown in the sup. They need to show that the sup can be located in the right-of-way.
4. Explain why the hours are until 9 p.m. when the employees leave at 5 p.m.
5. Better delineate the forest conservation easement.
6. Explain why there are state drawings in the plans.
7. Comus Road:
    a. Under its existing condition, Comus Road is an open-section road. The applicant might need additional right-of-way to include a swale(flat bottom) and a 8-foot sidepath with buffer along the frontage to accommodate an open section road within the ROW.
    b. The swale needs to be shown in the cross section of the roadway.
8. Sight distance:
    a. They need to show us what the final distance will be when the vegetation is cleared.
    b. Show the Vertical sight distance
    c. Per the green book. The intersection sight distance on tables for cases B is for a stopped passenger car to turn onto or to cross a 2 large roadway with no median and with grades of 3 % or less; for other conditions, the time gap should be adjusted and the sight distance recalculated.
    d. The sight distance form needs a plan sheet to show the distance and where they need to clear. Also it should show a profile of the street to ensure it's just horizontal issues and not vertical.
9. Storm Drain:
    a. If any portion of the subject site drains to an existing storm drain system maintained by Montgomery County, submit storm drain and/or flood plain studies, with computations, for review and approval at the Preliminary Plan stage. Analyze the capacity of the existing downstream public storm drain system and the impact of the post-development ten (10) year storm runoff on same. If the proposed subdivision drains to an existing closed section street, include spread computations in the impact analysis.
        i. The limits of the floodplain and the building restriction lines are to be shown on the plan where applicable. The floodplain is to be dimensioned from the property line.
10. Underground utilities and ensure adequate Public Utility Easements.

11. Forest Conservation Easements are NOT ALLOWED to overlap any easement.
12. Relocation of utilities along existing roads to accommodate the required roadway improvements shall be the responsibility of the applicant.
13. Trees in the County rights of way – spacing and species to be in accordance with the applicable MCDOT standards. Tree planning within the public right of way must be coordinated with DPS Right-of-Way Plan Review Section.
14. Show all existing topographic details (existing and proposed right-of ways, paving, centerlines of roads, storm drainage, driveways adjacent and opposite the site, sidewalks and/or bikeways, utilities and easements, etc.).
15. Posting of the ROW permit bond is a prerequisite to DPS approval of the record plat.
16. ***At the preliminary plan plan*** stage:
    a. Show pavement width, existing and proposed right-of-way width on the existing and proposed plans. How much is being dedicated?
    b. Show property line.
    c. Show roadway cross sections for all public roadways.
    d. Show existing pavement marking.
    e. Provide driveway dimensions.
    f. Design all access points and alleys to be at-grade with the sidewalk / sidepath, dropping down to street level between the sidewalk / sidepath and roadway.
    g. Show existing adjacent and opposite driveway entrances in the vicinity of the site.
    h. Design all access points and alleys to be at-grade with the sidewalk, dropping down to street level between the sidewalk and roadway.
    i. Show all existing topographic details (paving, storm drainage, driveways adjacent and opposite the site, sidewalks and/or bikeways, utilities, rights of way and easements, etc.).
    j. Ensure there are no obstructions or impedances along Walkways & Bikeways. Identify any utility appurtenances & vaults and ensure that they are ADA accessible. Grates are prohibited in areas where walking users are expected.
    k. Underground utilities and ensure adequate Public Utility Easements.
    l. Submit a storm drain study if any portion of the subject site drains to the Montgomery County public storm drain system.
        i. Please refer to the following link to complete Storm Drain Design: https://www.montgomerycountymd.gov/dot-dir/Resources/Files/StormDrainRevChecklist.pdf
    m. Submit a completed, executed MCDOT Sight Distances Evaluation certification form, for all existing and proposed site entrances onto County-maintained roads, for our review and approval.
        i. Confirm sight distance for all new intersections, access points, and crossings, accounting for blockages such as parked cars and full-grown foliage.
        ii. Ensure trees are removed for sight distance.
        iii. Ensure adequate sight distance between any garages / loading bays / driveways and peds/bikes on walkways.