MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ZION ROAD BRIDGE REPLACEMENT BRIDGE NO. M-0121

FOREST CONSERVATION PLAN F20240870

INDEX OF SHEETS

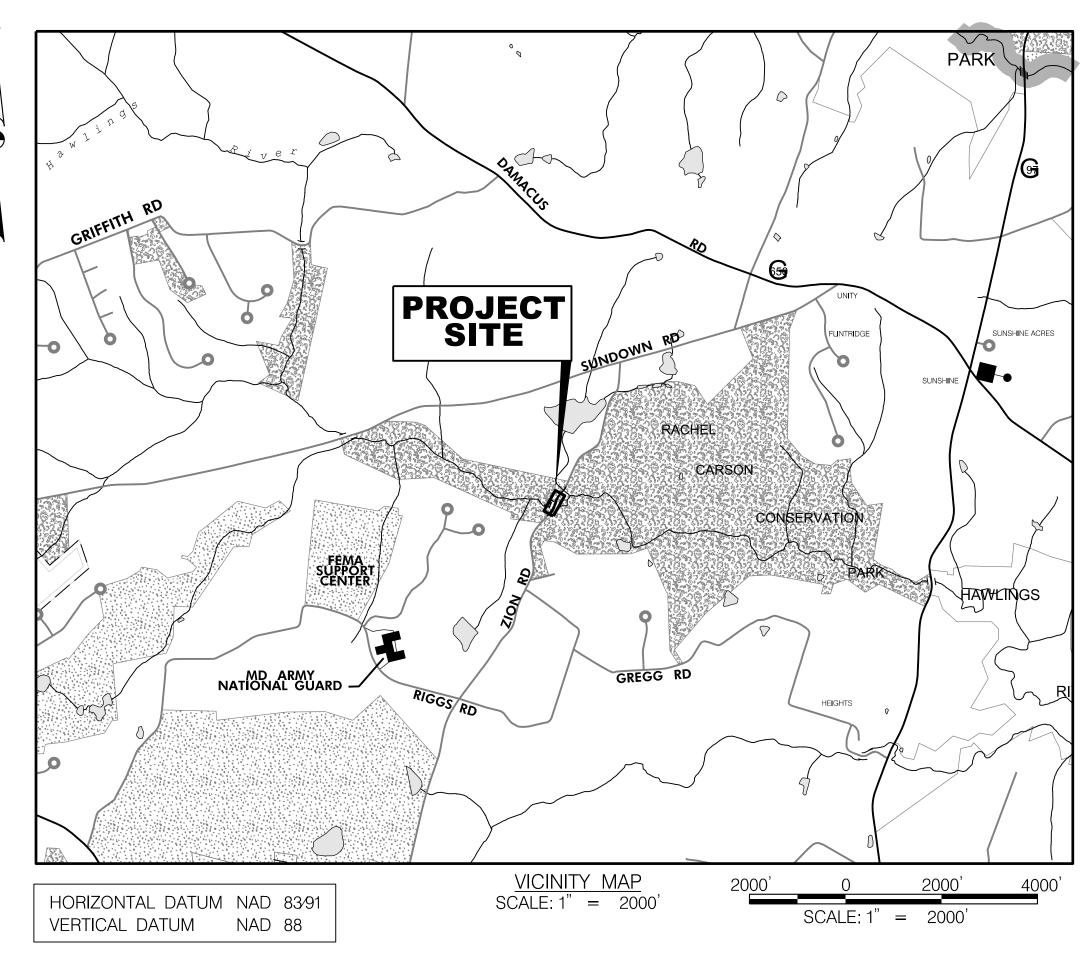
- 1. COVER SHEET
- 2. APPROVAL SHEET
- 3. FOREST CONSERVATION PLAN
- 4. NOTES AND DETAILS SHEET

DEVELOPER'S CERTIFICATE The Undersigned agrees to execute all the features of the Approved Final Forest Conservation Plan No. F20240870 including, financial bonding, forest planting, maintenance, and all other applicable agreements. Montgomery County DOT Contact Person or Owner: 100 EDISON PARK DRIVE Address: Phone and Email: Joseph Moges 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.

QUALIFIED PROFESSIONAL

Joanna Hieble 08/14/2025 DATE JOANNA HIEBLER MDNR / COMAR 08.19.06.01



FOREST CONSERVATION WORKSHEET	FOREST CONSERVATION WORKSHEET WITHIN Same Priority Watershed - Zion Road Bridge Replacement Project					
OUTSIDE Same Priority Watershed - Zion Road Bridge Replacement Project						
NET TRACT AREA:		NET TRACT AREA:				
A. Total tract area	1.90	A. Total tract area	1			
3. Additions to tract area (Off-Site Work, etc.; construction required by this plan)	0.00	B. Additions to tract area (Off-Site Work, etc.; construction required by this plan)				
C. Land dedication acres (parks, county facility, etc.)		C. Land dedication acres (parks, county facility, etc.)				
D. Land dedication for roads or utilities (construction not required by this plan)		D. Land dedication for roads or utilities (construction not required by this plan)				
E. Area to remain in commercial agricultural production/use		E. Area to remain in commercial agricultural production/use F. Other deductions (specify)				
T. Other deductions (specify)						
G. Net Tract Area=		G. Net Tract Area				
AND USE CATEGORY: (from Chapter 22A-3. Definitions) Input the number "1" under the appropriate land use, limit to only one entry.		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		ARA CDR MDR IDA HDR MPD CIA 1 0 0 0 0 0 0				
G. Afforestation Threshold 20% x G =	0.38	G. Afforestation Threshold 20% x G =	(
H. Conservation Threshold 55% x G =	1.05	H. Conservation Threshold 55% x G =	•			
EXISTING FOREST COVER:		EXISTING FOREST COVER:				
. Existing forest cover=	1.10	I. Existing forest cover=				
. Area of forest above afforestation threshold=		$\mathbb{P}\left[J. Area of forest above afforestation threshold \ldots \right]$				
K. Area of forest above conservation threshold=	0.06	K. Area of forest above conservation threshold=	(
BREAK EVEN POINT:		BREAK EVEN POINT:				
Forest retention above threshold with no mitigation=	1.06	6 L. Forest retention above threshold with no mitigation=				
M. Clearing permitted without mitigation=	0.04	M. Clearing permitted without mitigation=				
PROPOSED FOREST CLEARING:		PROPOSED FOREST CLEARING:				
N. Total area of forest to be cleared=	0.42	N. Total area of forest to be cleared=				
D. Total area of forest to be retained=	0.68	O. Total area of forest to be retained=				
PLANTING REQUIREMENTS:		PLANTING REQUIREMENTS:				
P. Reforestation for clearing above conservation threshold=	0.06	P Reforestation for clearing above conservation threshold=				
Q. Reforestation for clearing below conservation threshold=	0.91	1 $ $ Q. Reforestation for clearing below conservation threshold=				
R. Credit for retention above conservation threshold=	R. Credit for retention above conservation threshold=					
5. Total reforestation required=	S. Total reforestation required=					
Г. Total afforestation required=	$\mathbf{O} T$. Total afforestation required=					
J. Credit for landscaping (may not be used to meet reforestation requirement if	U. Credit for landscaping (may not be used to meet reforestation requirement if					
and the base of a state of the form of the form of the first of the state of the st		project is located outside an Equity Focus Area (EFA). For projects within EFA, may				
project is located outside an Equity Focus Area (EFA). For projects within EFA, may		1 2004 (1881)				
not exceed 20% of "S")=	0.00	not exceed 20% of "S")=	- 1			
	0.00 0.97		(

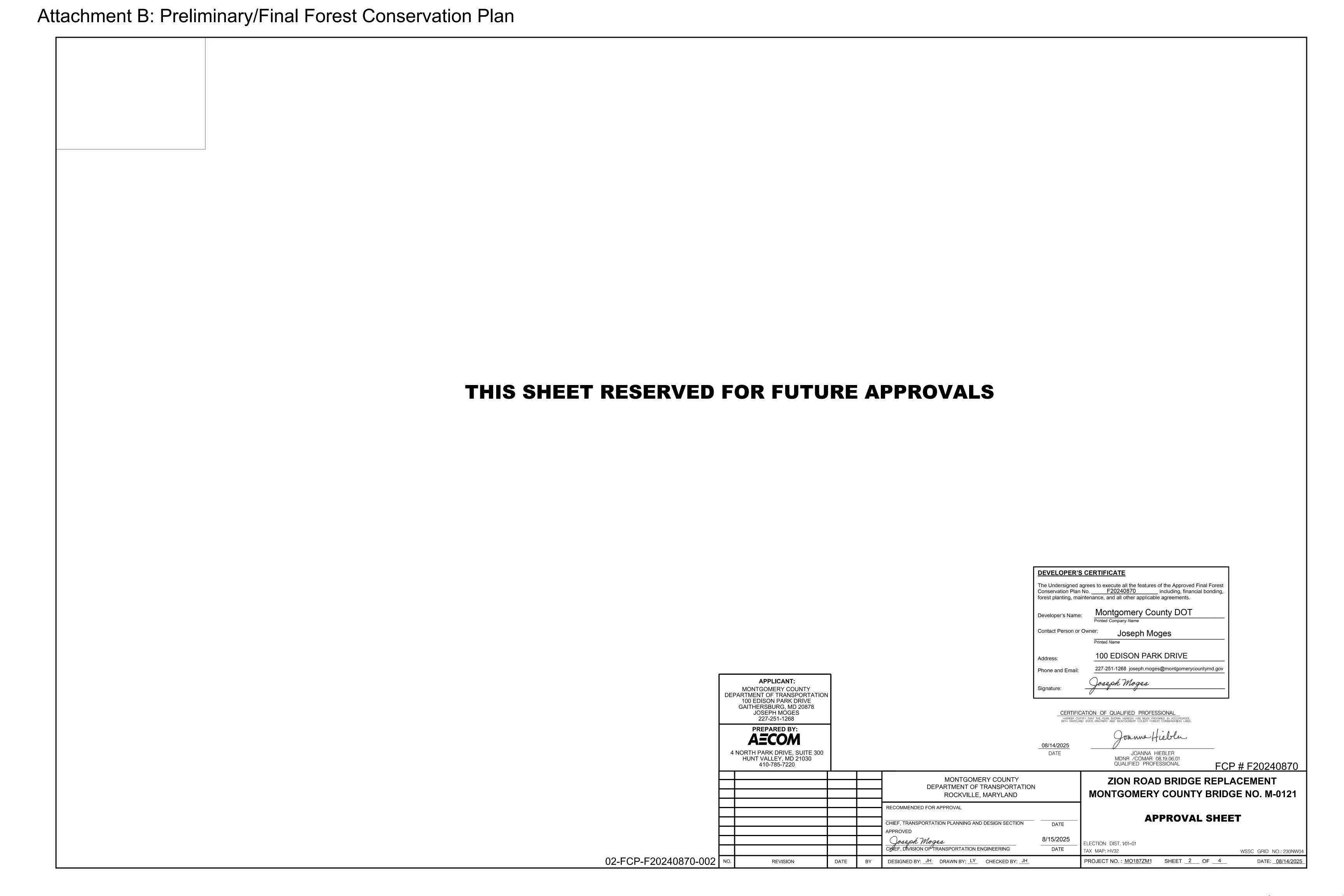
- 1. THE TRACT AREA FOR THIS LINEAR ROADWAY PROJECT IS A TOTAL OF 1.9 ACRES FOR THE LIMIT OF DISTURBANCE (LOD).
- 2. THE PROJECT INCLUDES 0.62 ACRE OF REFORESTATION ON SITE WITHIN THE LIMITS OF DISTURBANCE. THIS TOTALS 82% OF THE PROJECT'S REFORESTATION REQUIREMENT (0.76 ACRE) PER THE FOREST CONSERVATION WORKSHEET WITHIN THE SAME PRIORITY WATERSHED. THE ADDITIONAL 18% OF REFORESTATION THAT IS NOT PROPOSED ON SITE WILL BE COMPLETED THROUGH A FEE IN LIEU OF PLANTING FOR A TOTAL OF 0.17 ACRE (18% OF THE REQUIRED 0.97 ACRE OF REFORESTATION FOR PLANTING OUTSIDE THE SAME PRIORITY WATERSHED).
- 3. THE PROJECT ALSO PROVIDES 0.45 ACRE OF RIPARIAN ENHANCEMENTS ASSOCIATED WITH THE PROJECT. THIS AREA IDENTIFIED ON THE FCP WILL NOT HAVE ANY TREE REMOVAL.

APPLICANT: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE GAITHERSBURG, MD 20878 JOSE MOGES 227-251-1268 PREPARED BY: **AECOM**

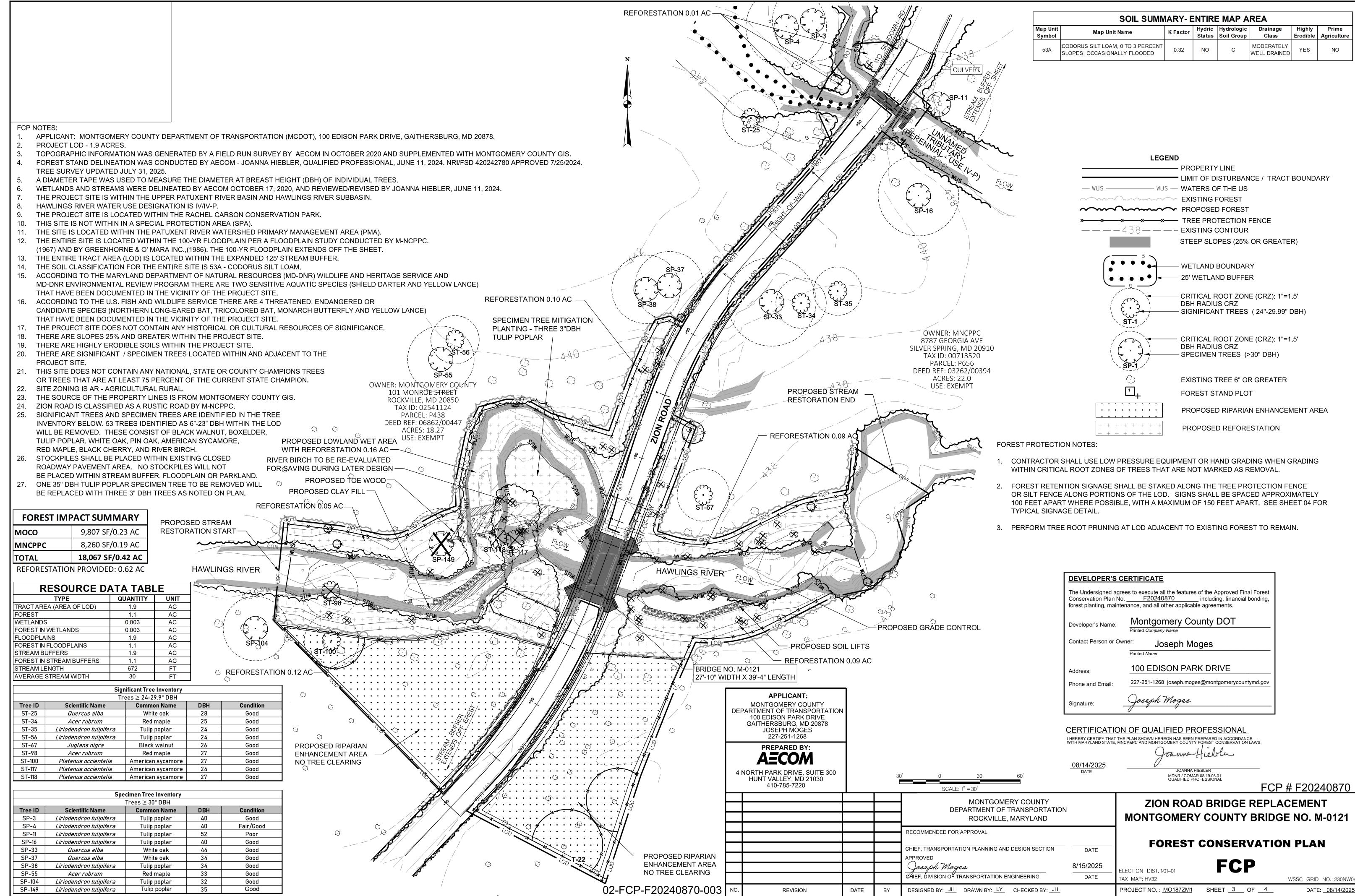
4 NORTH PARK DRIVE, SUITE 300 HUNT VALLEY, MD 21030 410-785-7220

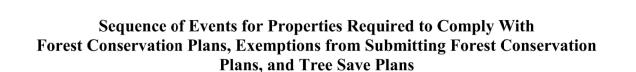
FCP # F20240870

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					MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND			D BRIDGE REPLA COUNTY BRIDG	
					RECOMMENDED FOR APPROVAL CHIEF, TRANSPORTATION PLANNING AND DESIGN SECTION	DATE		COVER SHEET	
					APPROVED Joseph Moges CHIEF, DIVISION OF TRANSPORTATION ENGINEERING	8/15/2025 DATE	ELECTION DIST. 1/01-01 TAX MAP: HV32		WSSC GRID NO.: 230NW04
02-FCP-F20240870-001	NO.	REVISION	DATE	BY	DESIGNED BY: JH DRAWN BY: LY CHECKED BY: JH		PROJECT NO. : MO187ZM1	SHEET <u>1</u> OF <u>4</u>	DATE: <u>08/14/2025</u>



Attachment B: Preliminary/Final Forest Conservation Plan





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

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

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

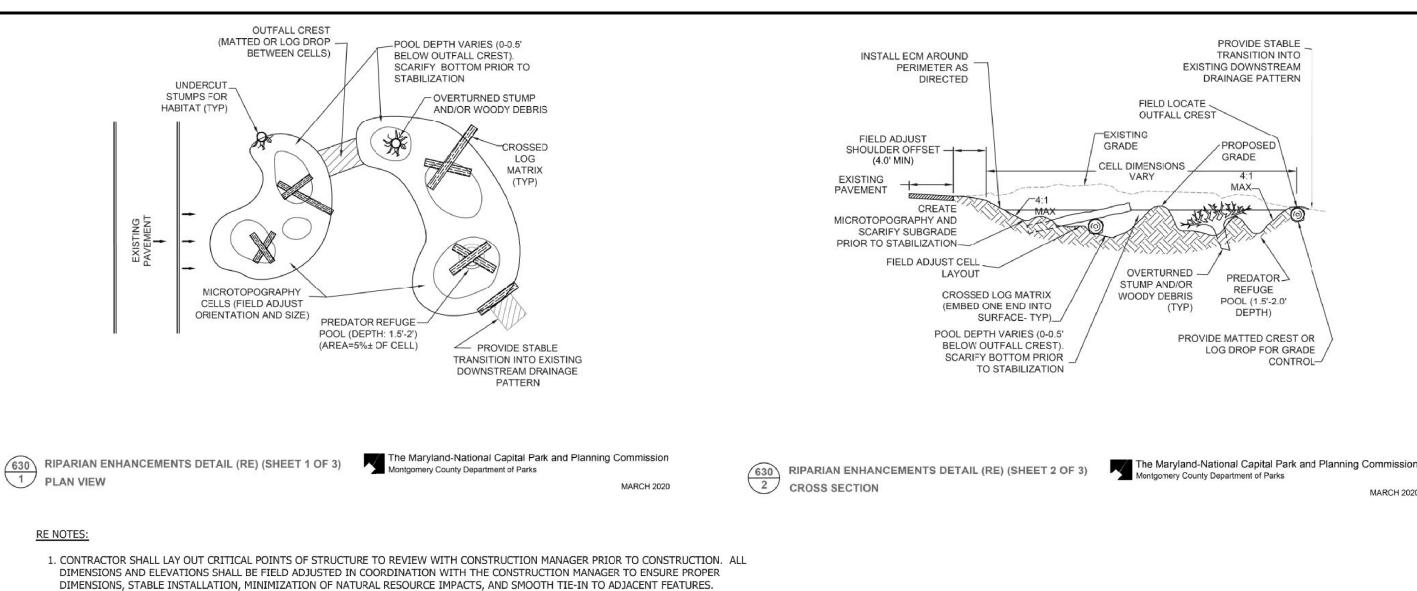
- 4. Temporary tree protection devices must be installed per the approved Forest Conservation Plan, Exemption Plan, or Tree Save Plan and prior to any land disturbance. The Forest Conservation Inspector, in coordination with the DPS Sediment Control Inspector, may make field adjustments to increase the 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

During Construction

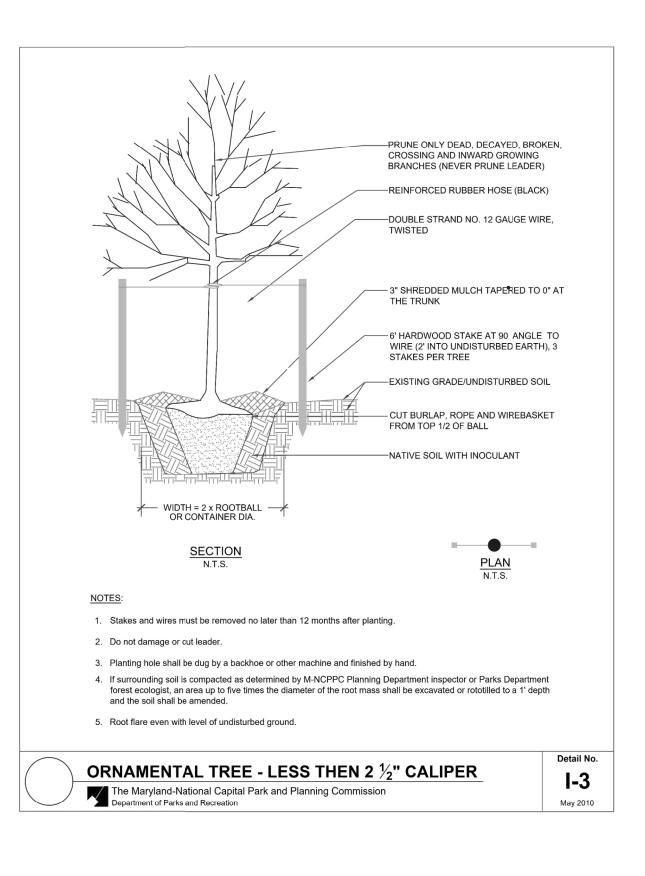
- 7. Periodic inspections will be made by the Forest Conservation Inspector. Corrections and repairs to tree protection devices must be completed within the timeframe given by the
- 8. The property owner must immediately notify the Forest Conservation Inspector of any damage to trees, forests, understory,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



REFORESTATION SUMMARY TREES PROVIDED: 62 NATIVE REFORESTATION PROVIDED 0.62 AC 0.62 AC X 100 STEMS / ACRE = 62 TREES **CANOPY TREES** NOTE: AN ADDITIONAL 66 NATIVE UNDERSTORY TREES PROVIDED



2. INSTALL TOPSOIL AND NATIVE RIPARIAN SEED MIX (WITH ANNUAL RYE) WITH WEED-FREE STRAW MULCH. IF SEED MIX IS UNSUCCESSFUL IN

4. FIELD ADJUST CELL GRADING AND WOODY MATERIAL PLACEMENT TO ENHANCE HABITAT VALUE AS DIRECTED BY THE CONSTRUCTION MANAGER.

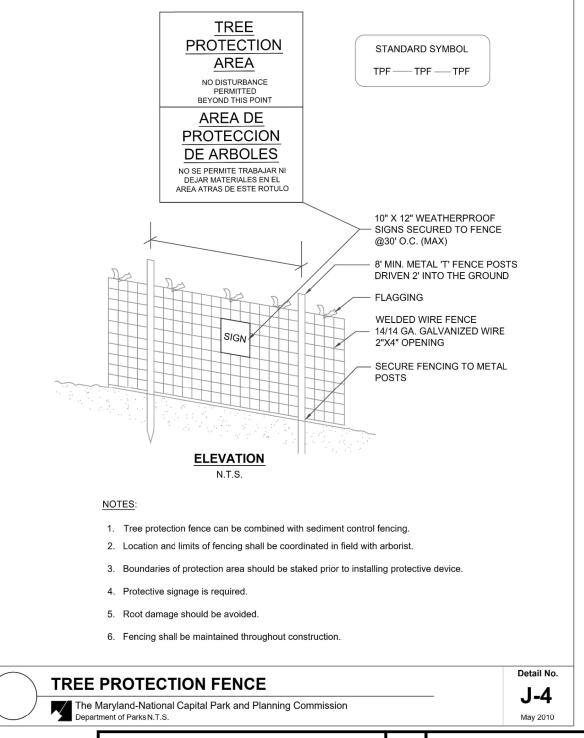
TAKING FROM INITIAL APPLICATION, SEED MIX TO BE REAPPLIED UNTIL SUCCESSFUL (GERMINATION) TAKES PLACE.

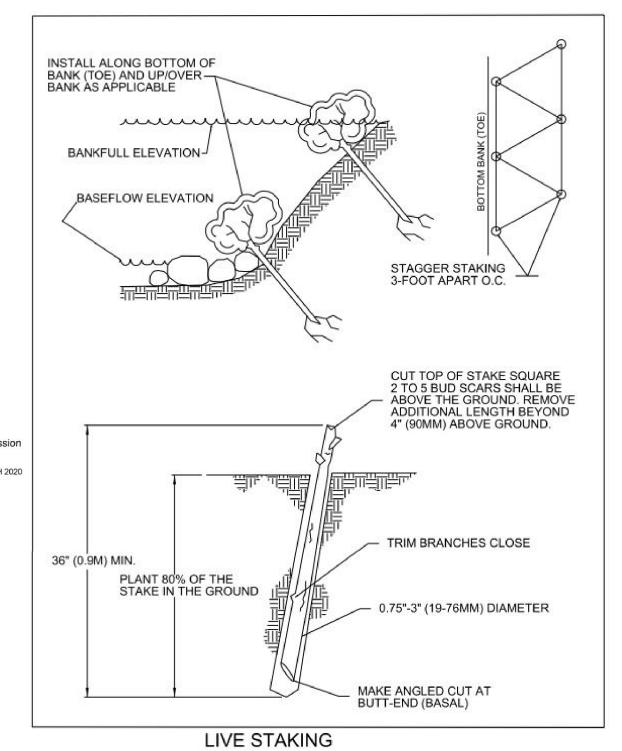
7. WHEN ROCKS (LARGER THAN 6" ACROSS) ARE AVAILABLE ONSITE, INCORPORATE INTO SURFACE AND IN SMALL PILES.

3. COORDINATE PLANTINGS WITH CONSTRUCTION MANAGER AND GRADE PLANTING AREAS TO VARYING DEPTHS.

5. UTILIZE ON-SITE WOODY MATERIAL TO CREATE LOG MATRIX.

6. LOCATE PREDATOR REFUGE POOL AS FAR FROM ACTIVE USE AREAS AS FEASIBLE.





NOT TO SCALE

PLANT SCHEDULE								
TOTAL QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE	CONDITION	SPACING	REMARKS		
	REFORESTATION CANOPY TREES							
12	ACER RUBRUM	RED MAPLE	1.5" CAL.	B&B OR 15 GAL. CONT.	20' O.C.			
18	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	1.5" CAL.	B&B OR 15 GAL. CONT.	20' O.C.			
8	QUERCUS PALUSTRIS	PIN OAK	1.5" CAL.	B&B OR 15 GAL. CONT.	20' O.C.			
12	ACER NEGUNDO	BOX ELDER	1.5: CAL.	B&B OR 15 GAL. CONT.	20' O.C.			
12	BETULA NIGRA	RIVER BIRCH	8' HT.	B&B OR 15 GAL. CONT.	20' O.C.	MULTI-STEM, 3 STEMS MIN.		
	REFORESTATION UNDERSTORY TREES							
25	AMELANCHIER 'AUTUMN BRILLIANCE'	AUTUMN BRILLIANCE SERVICEBERRY	6' HT.	B&B OR 7 GAL. CONT.	15' O.C.	MULTI-STEM, 3 STEMS MIN.		
41	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA	6' HT.	B&B OR 7 GAL. CONT.	15' O.C.			
	WETLAND HERBACEOUS PERENNIAL PLUGS							
250	POLYSTICHUM ACROSTICHOIDES	CHRISTMAS FERN	2 IN. DIAM., 5 IN. DEPTH	CELLS	24" O.C.			
540	ONOCLEA SENSIBILIS	SENSITIVE FERN	2 IN. DIAM., 5 IN. DEPTH	CELLS	24" O.C.			
540	CAREX STRICTA	TUSSOCK SEDGE	2 IN. DIAM., 5 IN. DEPTH	CELLS	24" O.C.			
540	EUPATORIUM PURPUREUM	JOE-PYE WEED	2 IN. DIAM., 5 IN. DEPTH	CELLS	24" O.C.			
540	JUNCUS EFFUSUS	SOFT RUSH	2 IN. DIAM., 5 IN. DEPTH	CELLS	24" O.C.			
	STREAM BANK LIVE STAKES							
225	CORNUS AMOMUM	SILKY DOGWOOD	0.75" TO 3.0" X 36"	LS	3' O.C.			
225	CORNUS SERICEA	RED OSIER DOGWOOD	0.75" TO 3.0" X 36"	LS	3' O.C.			
225	SALIX SERICEA	SILKY WILLOW	0.75" TO 3.0" X 36"	LS	3' O.C.			
	SEEDING							
917 SY	WET MEADOW ESTABLISHMENT							
2279 SY	LOWLAND MEADOW ESTABLISHMENT							
533 SY	TURFGRASS ESTABLISHMENT							
533 SY	TYPE D SOIL STABILIZATION MATTING							

DEVELOPER'S CERTIFICATE forest planting, maintenance, and all other applicable agreements. **Montgomery County DOT** Developer's Name: Contact Person or Owner: Joseph Moges 100 EDISON PARK DRIVE Address: 227-251-1268 joseph.moges@montgomerycountymd.gov Phone and Email Joseph Moges 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

Joanna Hiebler 08/14/2025 MDNR / COMAR 08.19.06.01 QUALIFIED PROFESSIONAL

FCP # F20240870

1-3 ()	Maryland-National Capital Park and Planning Commission tment of Parks N.T.S.		J-4 May 2010				MDNR / COMAR 08.19.06.01 QUALIFIED PROFESSIONAL FCF
	APPLICANT: MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION 100 EDISON PARK DRIVE					MONTGOMERY COUNTY DEPARTMENT OF TRANSPORTATION ROCKVILLE, MARYLAND	ZION ROAD BRIDGE REPLA MONTGOMERY COUNTY BRIDG
	GAITHERSBURG, MD 20878 JOSEPH MOGES 227-251-1268					RECOMMENDED FOR APPROVAL	NOTES AND DETAILS
	PREPARED BY: AECOM 4 NORTH PARK DRIVE, SUITE 300					CHIEF, TRANSPORTATION PLANNING AND DESIGN SECTION APPROVED Joseph Woges CHIEF, DIVISION OF TRANSPORTATION ENGINEERING DATE	ELECTION DIST. 1/01-01 TAX MAP: HV32
02-FCP-F20240870-004	HUNT VALLEY, MD 21030	NO.	REVISION	DATE	BY	DESIGNED BY: _JH_ DRAWN BY: _LY_ CHECKED BY: _JH_	PROJECT NO. : MO187ZM1 SHEET 4 OF 4

ZION ROAD BRIDGE REPLACEMENT IONTGOMERY COUNTY BRIDGE NO. M-0121

NOTES AND DETAILS SHEET

WSSC GRID NO.: 230NW04

DATE: <u>08/14/2025</u>

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