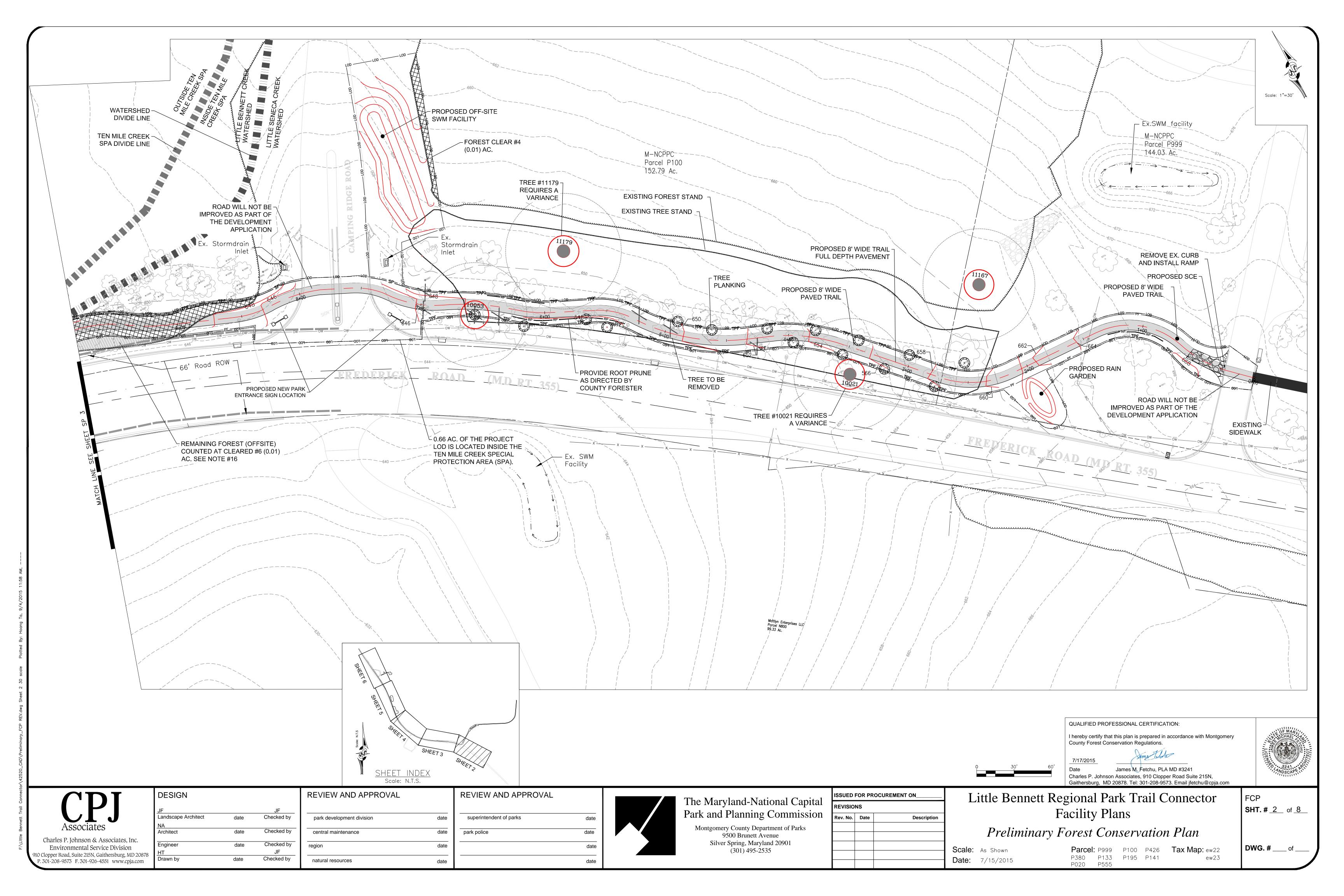
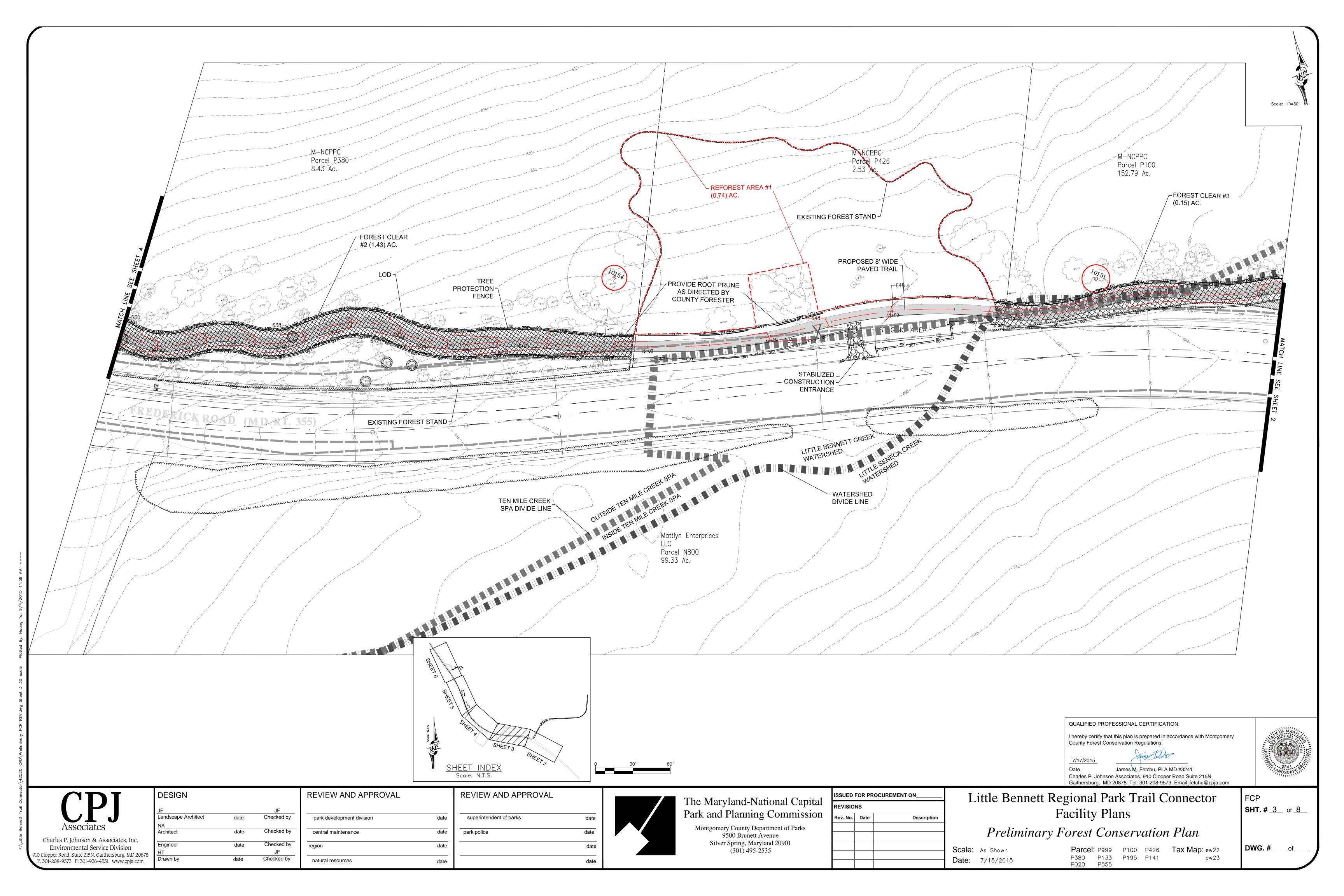
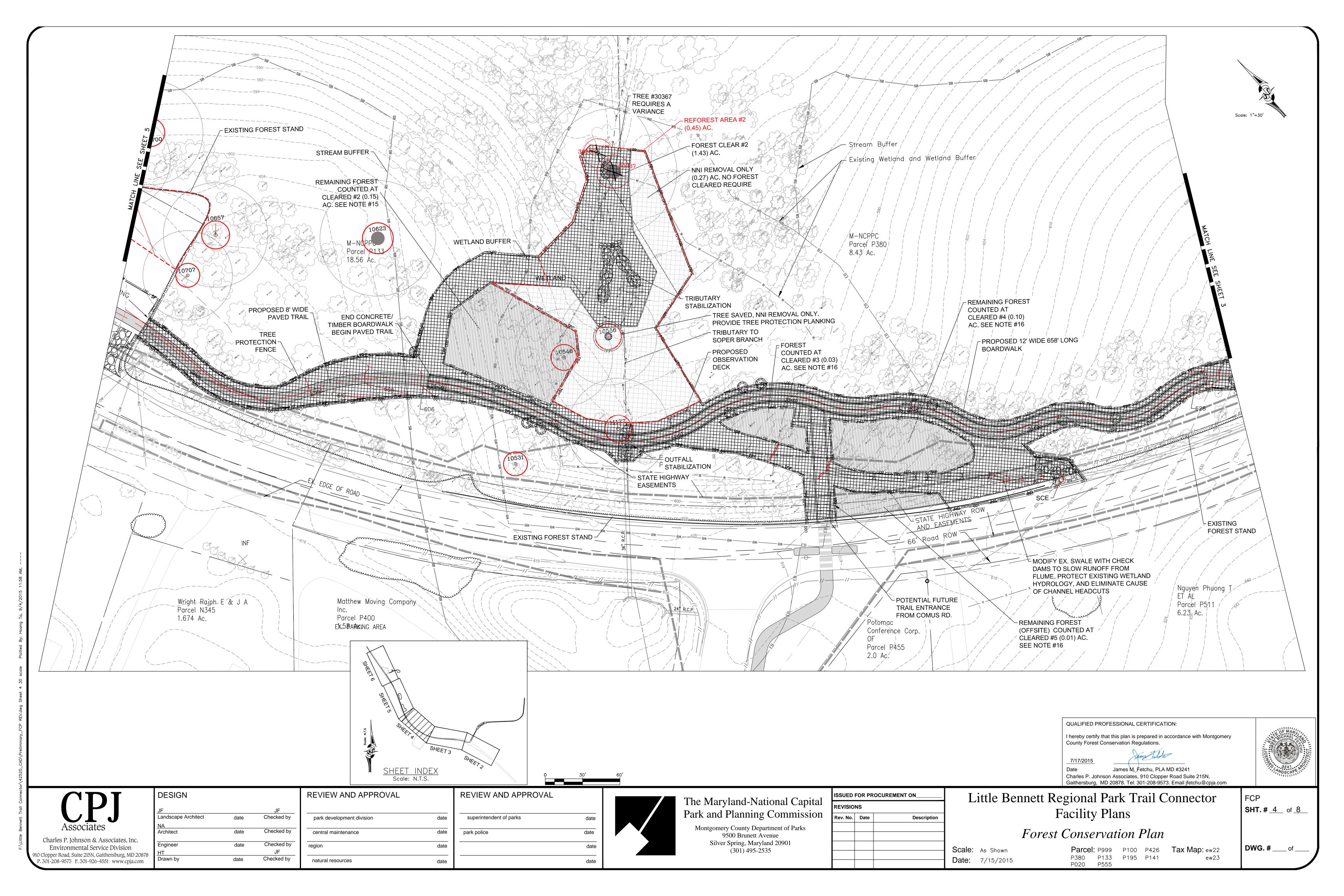
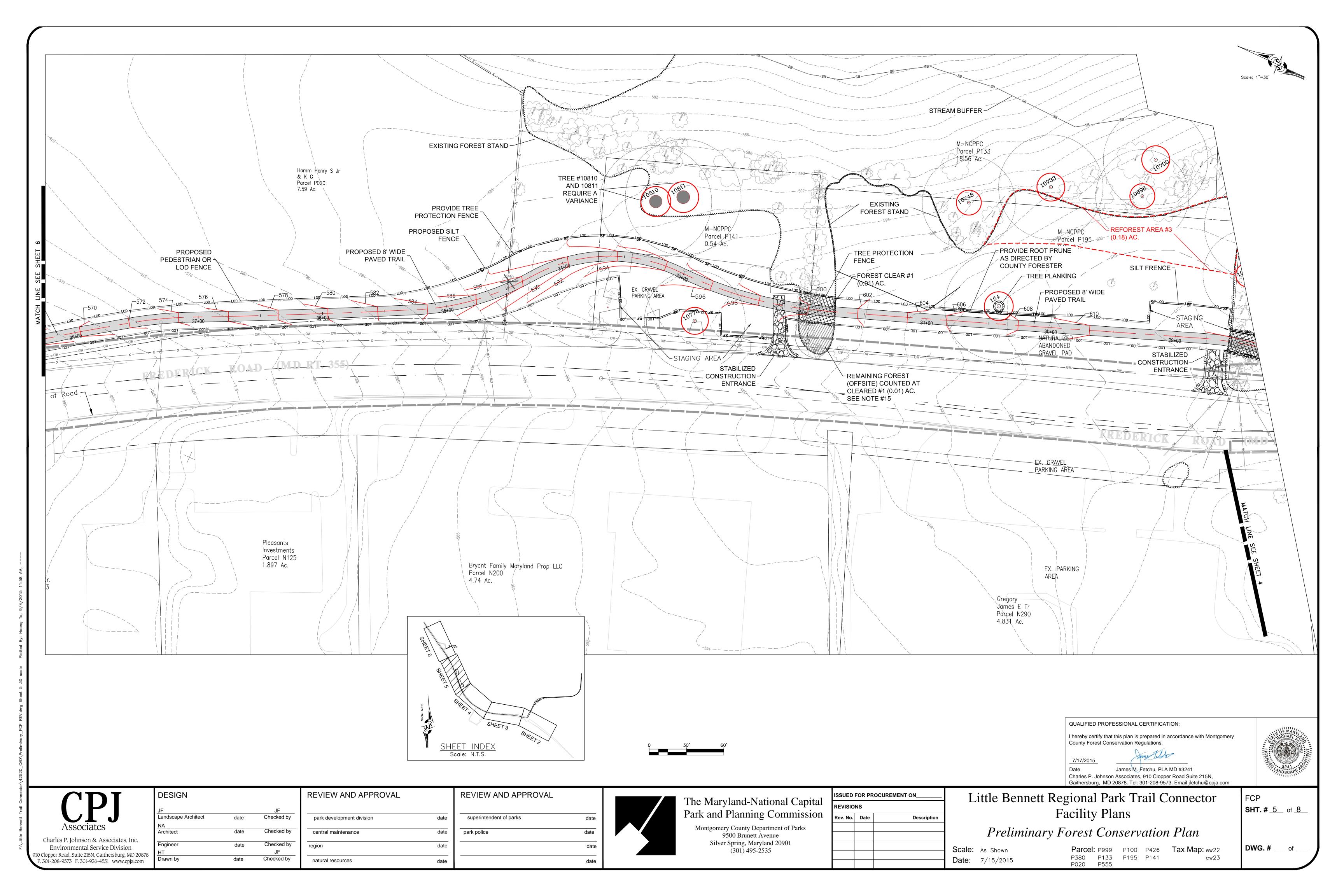
The Maryland National Capital Park and Planning Commission LITTLE BENNETT TRAIL CONNECTOR PRELIMINARY FOREST CONSERVATION PLANS MONTGOMERY COUNTY, MARYLAND AREA LIMIT OF LITTLE BENNETT TRAÎL P-FCP = 3.74 AC. Parcel P987 SHEET INDEX **GENERAL NOTES** 1. Full NRI/FSD #420131910 that covers a linear study area that encompasses 26.66 acres in size was approved on 11/03/2014. Parcel N093 PLAN VIEW 2. Topography shown is per GIS data received from the Montgomery County Department of Parks and per field survey performed by . PLAN VIEW CPJ between January 21 - June, 2014. 4. PLAN VIEW 3. Existing utilities are based on field survey performed by CPJ between January 21 - March 1, 2013. . PLAN VIEW Pleasants inv 4. Planimetric data shown outside the project study area is per GIS data received from the Montgomery County Department of Parks. 6. PLAN VIEW Parcel N125 NOTES 5. There are no 100-year floodplain mapped within the study area per FEMA # 24031C0160D and 24031C0045D. 8. DETAILS 6. Non-tidal wetlands within the study area were field delineated by Hoang Ta and Gabrielle Myers of Charles P. Johnson & Associates, Inc. on January 21, 2013. Non-tidal wetland boundaries delineated within the project study area were field surveyed between January 21 - March 1, 2013. 7. Horizontal and Vertical Datum using MD State Grid NAD 83 and NAVD 88. Bryant Family Marylo Farcel N200 8. The project area is zoned a Rural Density Transfer Zone (RDT). The surrounding land use category is medium density residential, agriculture, forest & institutional. The size of the plan property (LOD) is 3.74 Acres. 9. Waters of the US limits are from top of bank to top of bank. 10. The limit of study is located within the Little Bennett Creek Watershed (Use III-P) & Great Seneca Watershed (Use I-P). Streams within the project area are designated as Use III-P, Natural Trout Waters. In-stream work may not be conducted during the period October 1 - April 30, inclusive, during any year. 11. A portion of this project is located within the 10 Mile Creek SPA and the Clarksburg East Environmental Overlay Zone. 12. The contractor shall notify "Miss Utility" at 1-800-257-7777 at least 48 hours prior to any excavation work. 13. All quantities hereon are estimates only, the contractor is responsible for verifying quantities through a field visit and their own 14. These plans were prepared with the field information at the time of project survey. It is possible that field conditions at the date of 70 construction may vary from these plans. It is the contractor's responsibility to verify field conditions such as elevations, depths, etc prior to proceeding with work. It is the contractor's responsibility to verify with the supplier/manufacturer of any proprietary product that their product will function per the design for the field conditions at time of construction. The County Project Manager and Designer should be notified immediately if any deviations from the design plan are found. LEGEND 15. All specified and/or proprietary products shown hereon may be subject to substitution with other products recommended by the OUTSIDE 10 MILE contractor, subject to written review and approval of the County Project Manager. Wright Rajph F Parcel N345 1.674 Ac. CREEK SPA 16. Remaining forest areas that are fragmented by the LOD where they no longer meet the definition of "forest" counted as forest 17. This paved trail project is exempt from the impervious surface restrictions in the Clarksburg East Overlay zone since it is publically SHEET 3 EXISTING OVERHEAD WIRE funded and will serve the area as an important bikeway. POLE AND GUIDE WIRE EXISTING FENCE EXISTING STREAMS TREE TO BE REMOVED Ex. Trees < 24" CERTIFICATE OF COMPLIANCE TREES 24" AND GREATER WITH CRITICAL ROOT ZONE I do hereby certify, to the best of my knowledge, information, and reasonable belief, that all TREES 30" AND GREATER of the information and data provided with this application is accurate, and all of the WITH CRITICAL ROOT ZONE features and elements provided on the plans is consistent with the standards of the applicable zone. The certification includes, but is not limited to boundary information, TREE PROTECTION PLANKING property information and ownership, topography, historic resources, etc. I agree that the ENVIRONMENTAL BUFFERS submitted plans may be rejected or returned by the Maryland-National Capital Park and Planning Commission if the plans are found to be inaccurate, false or misleading. Applicant or Applicant's Representative WETLAND BUFFERS INSIDE 10 MILE ČREEK SPA LIMITS OF CLARKSBURG SPA Print Name: Print Company: __ ELEVATED CONCRETE/TIMBER BOARDWALK Plan Number: REMAIN FOREST COUNTED AS FOREST CLEARED QUALIFIED PROFESSIONAL CERTIFICATION: STABILIZED CONSTRUCTION ENTRANCE (SCE) I hereby certify that this plan is prepared in accordance with Montgomery County Forest Conservation Regulations Call "Miss Utility" at 1-800-257-7777 48 hours prior to the start of work. The excavator must notify all public utility companies with underground facilities in the area of proposed excavation and have those facilities located by the utility James M. Fetchu, PLA MD #3241 companies prior to commencing excavation. The excavator is responsible for Charles P. Johnson Associates, 910 Clopper Road Suite 215N, compliance with requirements of Chapter 36A of the Montgomery County Code. Gaithersburg, MD 20878. Tel: 301-208-9573. Email jfetchu@cpja.com **REVIEW AND APPROVAL REVIEW AND APPROVAL** DESIGN ISSUED FOR PROCUREMENT ON_ Little Bennett Regional Park Trail Connector The Maryland-National Capital **SHT. #** <u>1</u> of <u>8</u> Facility Plans Park and Planning Commission Landscape Architect Checked by Description park development division superintendent of parks Montgomery County Department of Parks Preliminary Forest Conservation Plan Checked by Architect central maintenance park police 9500 Brunett Avenue Charles P. Johnson & Associates, Inc. Silver Spring, Maryland 20901 Checked by date **DWG. #** ____ of _ Environmental Service Division Parcel: P999 P100 P426 Tax Map: ew22 (301) 495-2535 10 Clopper Road, Suite 215N, Gaithersburg, MD 20878 P380 P133 P195 P141 Checked by **Date:** 7/15/2015 natural resources P. 301-208-9573 F. 301-926-4551 www.cpja.com date

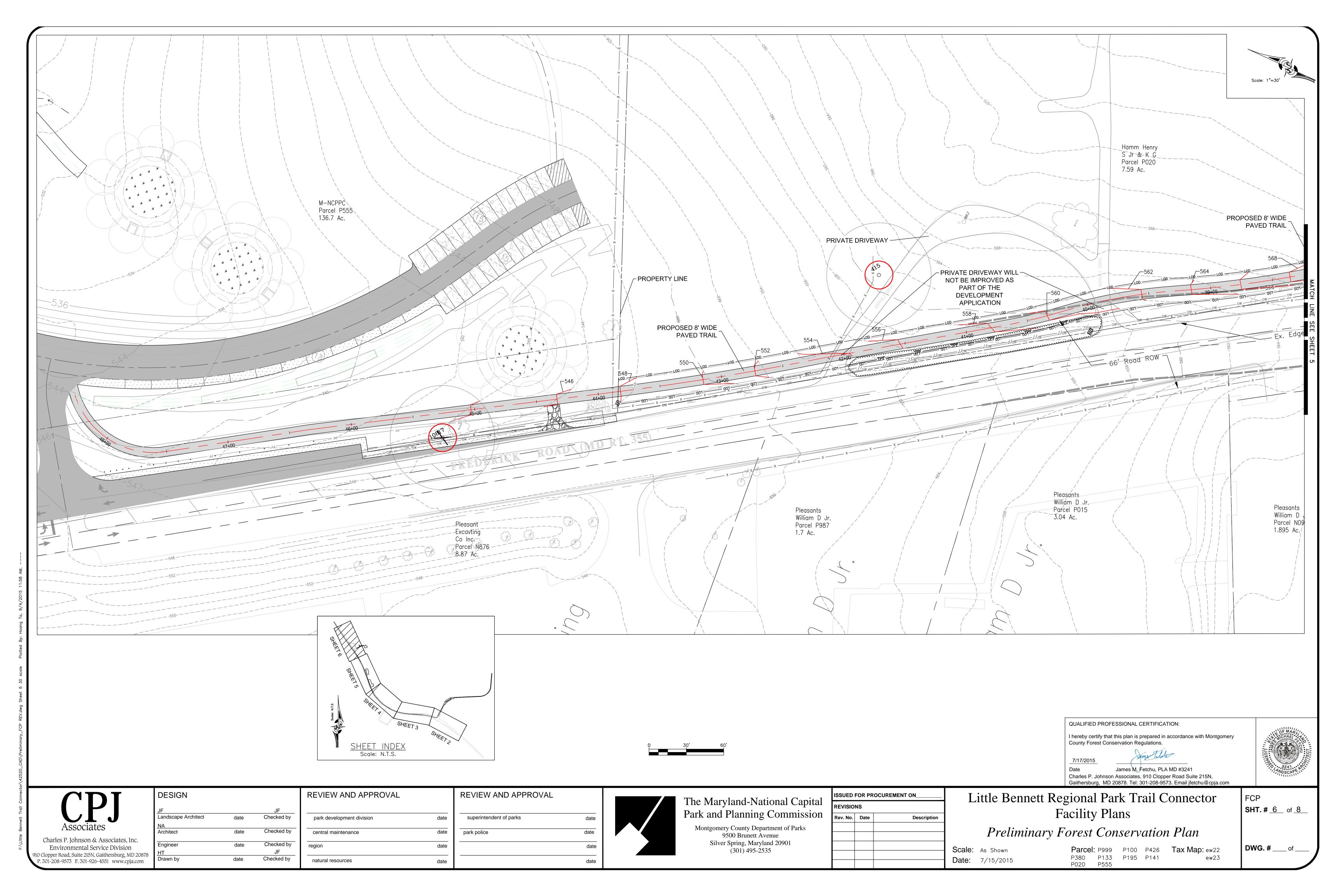
P020 P555











3.77 A. Total tract area ... 0.00 B. Land dedication acres (parks, county facility, etc.) ... 0.00 C. Land dedication for roads or utilities (not being constructed by this plan) ... 0.00 D. Area to remain in commercial agricultural production/use ... 0.00 E. Other deductions (specify) 3.77 F. Net Tract Area ...

LAND USE CATEGORY: (from Input the number limit to only one e	"1" under the	<i>al Manual</i>) appropriate land us	se,			
ARA	MDR	IDA	HDR	MPD	CIA	
0	0	1	0	0	0	
G. Afforestation Threshold				15%	x F =	0.57
H. Conservation Threshold				20%	x F =	0.75
EXISTING FOREST COVER:						
I. Existing forest cover						1.90
J. Area of forest above afforesta						1.33
K. Area of forest above conserva	ation threshold	d=				1.15
BREAK EVEN POINT:						
L. Forest retention above thresh	old with no mi	itigation=				0.98
M. Clearing permitted without m	nitigation	=				0.92
PROPOSED FOREST CLEARIN	NG:					
N. Total area of forest to be clea						1.63
O. Total area of forest to be reta	ained	=				0.27
PLANTING REQUIREMENTS:						
P. Reforestation for clearing abo	ove conservatio	on threshold=				0.29
 Q. Reforestation for clearing bel 						0.97
R. Credit for retention above cor						0.00
S. Total reforestation required						1.25
T. Total afforestation required						0.00
U. Credit for landscaping (may r	not exceed 20	% of "S")=				0.00

Planting Note:

1.25 Ac. of planting area to be provided on the final forest conservation plan set.

Forest Conservation Data Table

	Number of Acres
Tract	3.77
emaining in Agricultural Use	
Road & Utility ROWs ¹	-
Total Existing Forest	1.90
Forest Retention	.=
Forest Cleared	1.63

V. Total reforestation and afforestation required=

Land Use & Thresholds²

ina osc & inicsilolas		
Land Use Category	IDA	ARA, MDR, IDA, HDR, MDP, or CI
onservation Threshold	15%	percent
forestation Threshold	20%	percent

	Total Channel Length (ft.)	Average Buffer Width (ft.) ³	
Stream(s)	205	150	
es of Forest in	Retained	Cleared	Pla
Motlande		0.24	

Acres of Forest in	Retained	Cleared	Planted
Wetlands	-	0.24	0.24
100-Year Floodplain	-	-	
Stream Buffers	-	1.36	1.36
Priority Areas	-		

¹ Only Road or Utility ROWs not to be improved as part of development application.

Significant Tree Removal

Survey Tree#	Common Name	Botanical Name	DBH (in.)	CRZ (ft.)	Condition	Notes
11177	DEAD		27	40.5	DEAD	
30368	American Elm	Ulmus americana	29	43.5	Fair	Triple, Suckers

Tree Variance Request for CRZ Impacts & Removal

Mitigation: Five (5) 3" caliper trees shall be planted on-site to mitigate for variance tree removal of tree # 30367 and tree #10021 which has a CRZ impact >30%. Mitigation for tree #10021 is being calculated in case this tree does do not survive construction; even with the implementation of protection measures.

ID	Common Name	DBH (in.)	Condition	Planview %	Remove/ Retain	Tree Within LOD	FCP Sheet		IAL PROTE RES FOR T REMAIN	REES TO		
				ONE Impacts			No.	RP	TPF	PL	Remarks	Reason for Impact
10021	Red Oak	30	Fair	32	Retain	No	2	Yes	Yes	No	Leaning	Full Depth Trail, Grading
10810	Silver Maple	30	Good	4	Retain	No	5	Yes	Yes	No	Broken branches	Full Depth Trail, Grading
10811	Silver Maple	31	Good	1	Retain	No	5	Yes	Yes	No	Vines	Full Depth Trail, Grading
11179	White Oak	31	Good	4	Retain	No	2	Yes	Yes	No		Full Depth Trail
30367	Tulip Poplar	34	Poor	100	Remove	Yes	4	No	No	No	Twin, UC, BB, Hole, Split	Stream Bank Grading/ Step Pool

<u>Terminology:</u>

(RP) Root pruning is to be performed inside the tree protection fence. It is to be accomplished by a vibratory plow with a serrated cutting edge or a root cutter with a 36" wheel to a depth of 24". Chain driven

(TPF) Tree Protection Fence

(PL) Tree Protection Planking. Wooden planking is attached to trees along the access route to protect the tree trunk from passing machinery & construction equiptment.

Significant and Specimen Trees List

Survey Tree#	Common Name	Botanical Name	DBH (in.)	CRZ (ft.)	Condition	Disposition	Notes
154	Red Maple	Acer rubrum	29	43.5	Poor		1/2 tree split off
415	Red Maple	Acer rubrum	28	42	Good		Private Property
10021	Red Oak	Quercus rubra	30	45	Fair		Leaning
10053	White Oak	Quercus alba	28	42	Good	Remove	
10131	Red Maple	Acer rubrum	28	42	Fair		Dead Branches
10154	Norway Spruce	Picea abies	25	37.5	Good		
10531	Red Maple	Acer rubrum	24	36	Poor		Basal damage
10546	Tulip poplar	Liriodendron tulipifera	26	39	Fair		Vines
10556	Red Maple	Acer rubrum	26	39	Fair		Heavy vines
10623	Pin Oak	Quercus palustris	31	46.5	G		Edge of new forest to stream
10657	Black Locust	Robinia pseudoacacia	28	42	Poor		
10698	American Elm	Ulmus americana	25	37.5	Good		
10700	American Elm	Ulmus americana	28	42	Fair		Vines
10707	Black Locust	Robinia pseudoacacia	24	36	Poor		Double, almost dead
10733	Red Maple	Acer rubrum	28	42	Fair		
10748	American Sycamore	Platanus occidentalis	25	37.5	Good		Vines
10778	Silver Maple	Acer saccharinum	28	42	Poor		Broken branches
10810	Silver Maple	Acer saccharinum	30	45	Good		Broken branches
10811	Silver Maple	Acer saccharinum	31	46.5	Good		Vines
10817	White Mulberry	Morus Alba	28	42	Fair		OH wires
11167	Black Oak	Quercus velutina	30	45	Fair		Vines/Broken Branches
11177	DEAD		27	40.5	DEAD	Remove	Safety
11179	White Oak	Quercus alba	31	46.5	Good		
30367	Tulip Poplar	Liriodendron tulipifera	34	51	Poor	Remove	Twin, UC, BB, Hole, Split
30368	American Elm	Ulmus americana	29	43.5	Fair	Remove	Triple, S

QUALIFIED PROFESSIONAL CERTIFICATION:

I hereby certify that this plan is prepared in accordance with Montgomery County Forest Conservation Regulations.

James M. Fetchu, PLA MD #3241 Charles P. Johnson Associates, 910 Clopper Road Suite 215N, Gaithersburg, MD 20878. Tel: 301-208-9573. Email jfetchu@cpja.com



Charles P. Johnson & Associates, Inc. Environmental Service Division 10 Clopper Road, Suite 215N, Gaithersburg, MD 20878 P. 301-208-9573 F. 301-926-4551 www.cpja.com

DESIGN Landscape Architect Checked by NA Architect Checked by Checked by Checked by REVIEW AND APPROVAL park development division date date central maintenance date natural resources date

1.25

REVIEW AND APPROVAL superintendent of parks date date park police date date



The Maryland-National Capital Park and Planning Commission

Montgomery County Department of Parks 9500 Brunett Avenue Silver Spring, Maryland 20901 (301) 495-2535

SSUED	FOR PR	OCUREMENT ON	
REVISIO	NS		
Rev. No.	Date	Description	
			Sc

Little Bennett Regional Park Trail Connector Facility Plans

Preliminary Forest Conservation Plan

 Parcel:
 P999
 P100
 P426
 Tax Map:
 ew22

 P380
 P133
 P195
 P141
 ew23

 P020
 P555

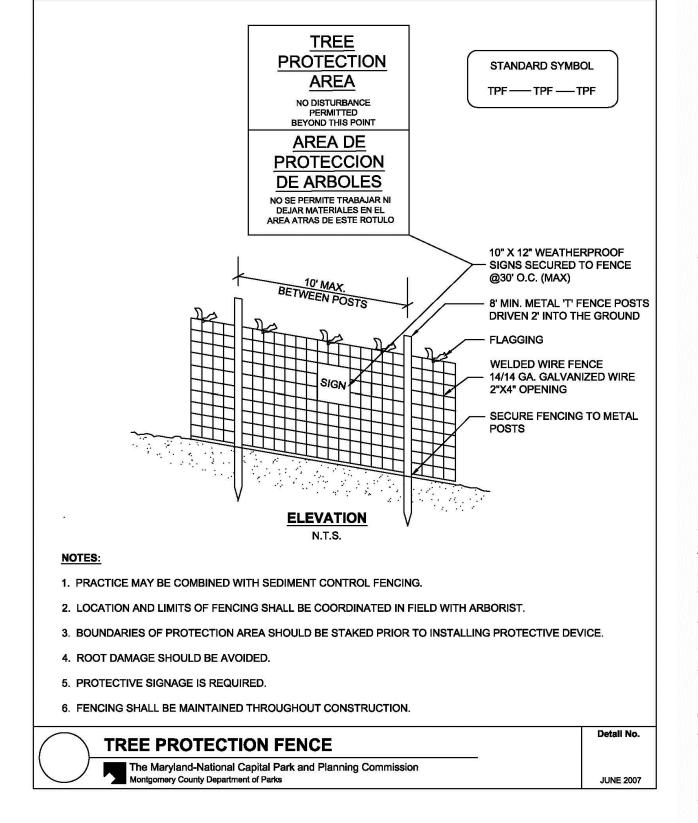
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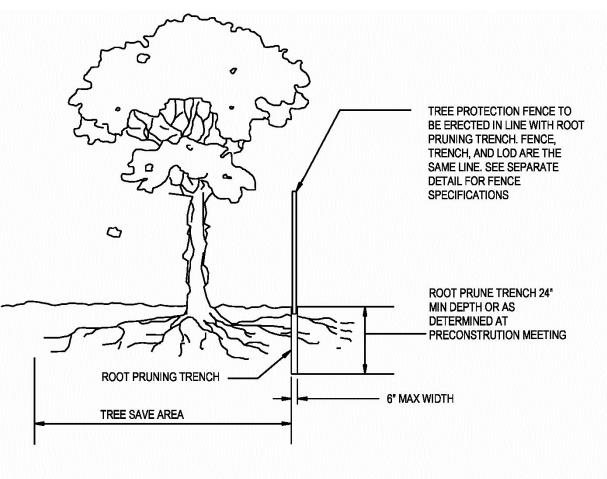
SHT. # 7 of 8

DWG. # ____ of ___

² Information from FC Land Use Categories & Thresholds document.

³ Measured from stream edge to buffer edge.





1. RETENTION AREAS WILL BE SET AS PART OF THE REVIEW PROCESS AND PRECONSTRUCTION

2. BOUNDARIES OF RETENTION AREAS MUST BE STAKED AT THE PRECONSTRUCTION MEETING AND FLAGGED PRIOR TO TRENCHING.

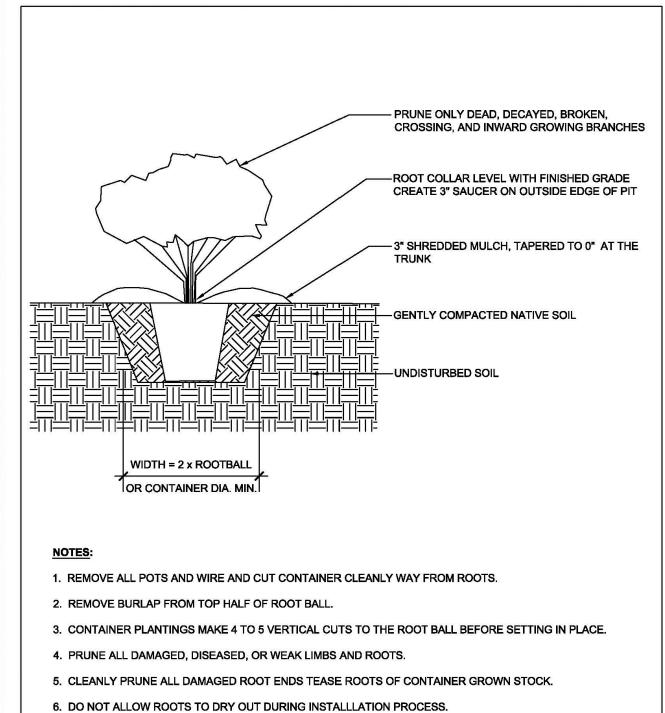
3. EXACT LOCATION OF TRENCH SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE FOREST CONSERVATION (FC) INPECTOR.

4. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH EXCAVATED SOIL OR OTHER ORGANIC SOIL AS SPECIFIED PER PLAN OR BY THE FC INSPECTOR.

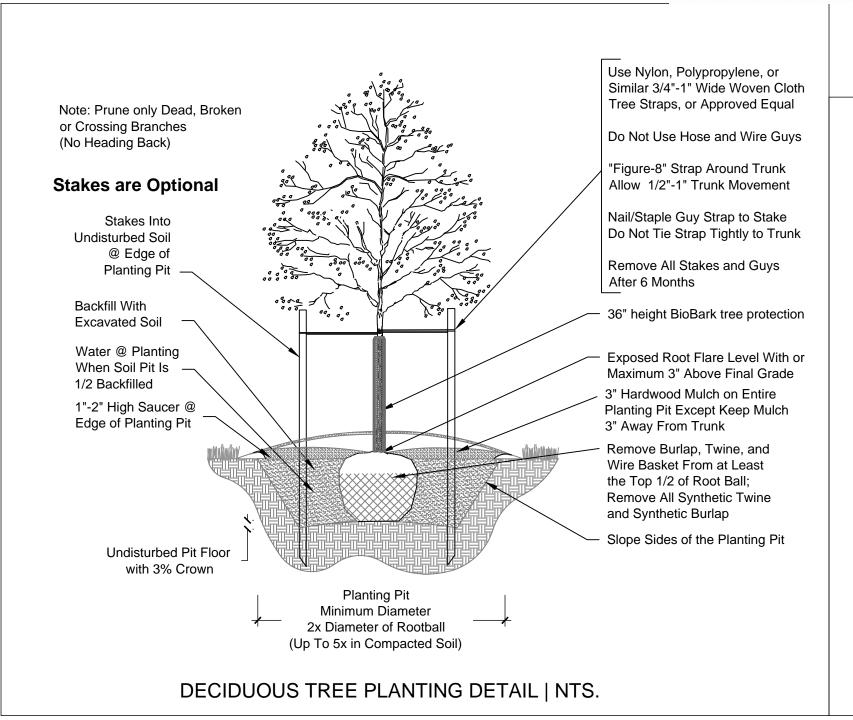
5. ROOTS SHALL BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE

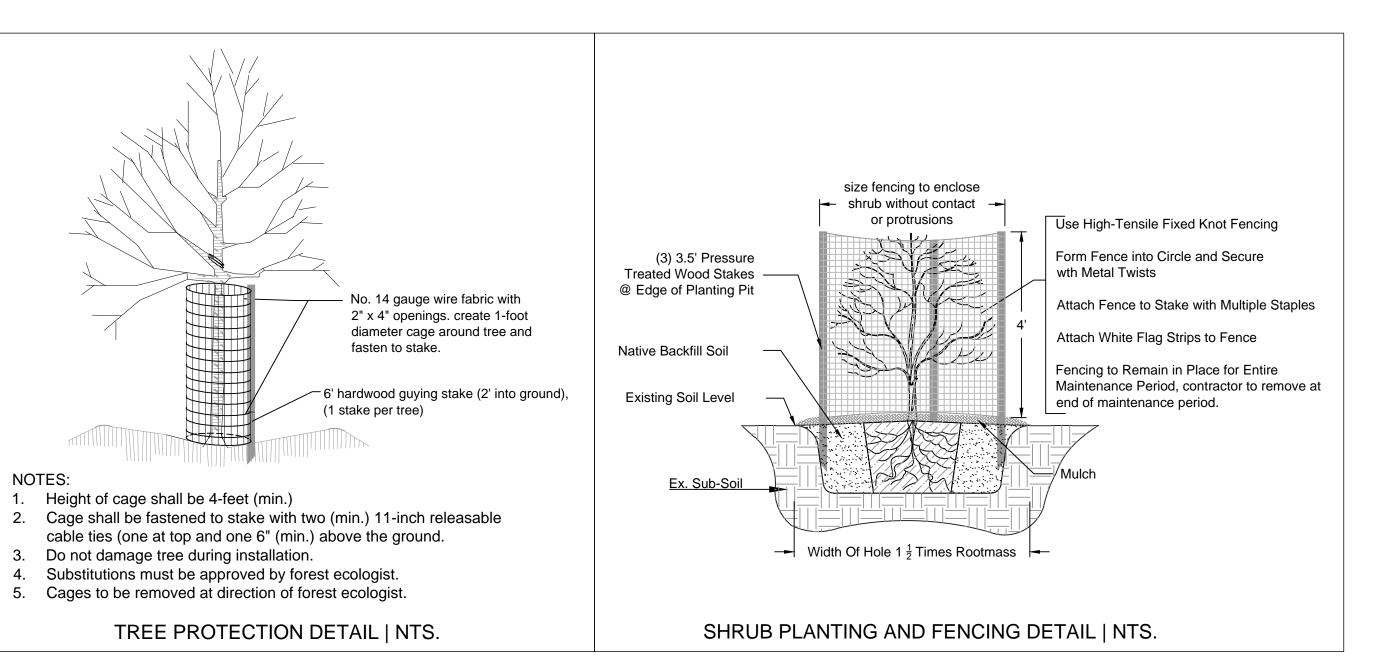
6. ALL PRUNING MUST BE EXECUTED WITH LOD SHOWN ON PLANS OR AS AUTHORIZED IN WRITING BY THE FC INSPECTOR.

ROOT PRUNING DETAIL









7. DEEP WATER AFTER PLANTING.

LANDSCAPE SHRUB

Montgomery County Department of Parks

The Maryland-National Capital Park and Planning Commission

QUALIFIED PROFESSIONAL CERTIFICATION: I hereby certify that this plan is prepared in accordance with Montgomery

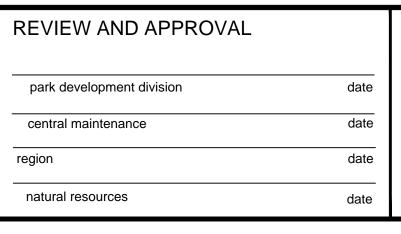
County Forest Conservation Regulations.

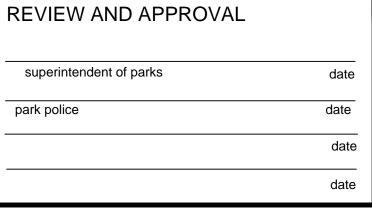
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DESIGN		
JF		JF
Landscape Architect	date	Checked by
NA		
Architect	date	Checked by
Engineer	date	Checked by
Engineer	uale	, I
HT		JF
Drawn by	date	Checked by







The Maryland-National Capital Park and Planning Commission Montgomery County Department of Parks 9500 Brunett Avenue

Silver Spring, Maryland 20901

(301) 495-2535

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on	Rev. No.	Date	Description						

ISSUED FOR PROCUREMENT ON_

Little Bennett Regional Park Trail Connector Facility Plans

Preliminary Forest Conservation Plan

Parcel: P999 P100 P426 Tax Map: ew22 Scale: As Shown P380 P133 P195 P141 **Date:** 7/15/2015 P020 P555

SHT. # <u>8</u> of <u>8</u>

DWG. # ____ of ___

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