

ATTACHMENT A
PROJECT MAP (AMOS TO KEMPTOWN 765 KV
LINE)



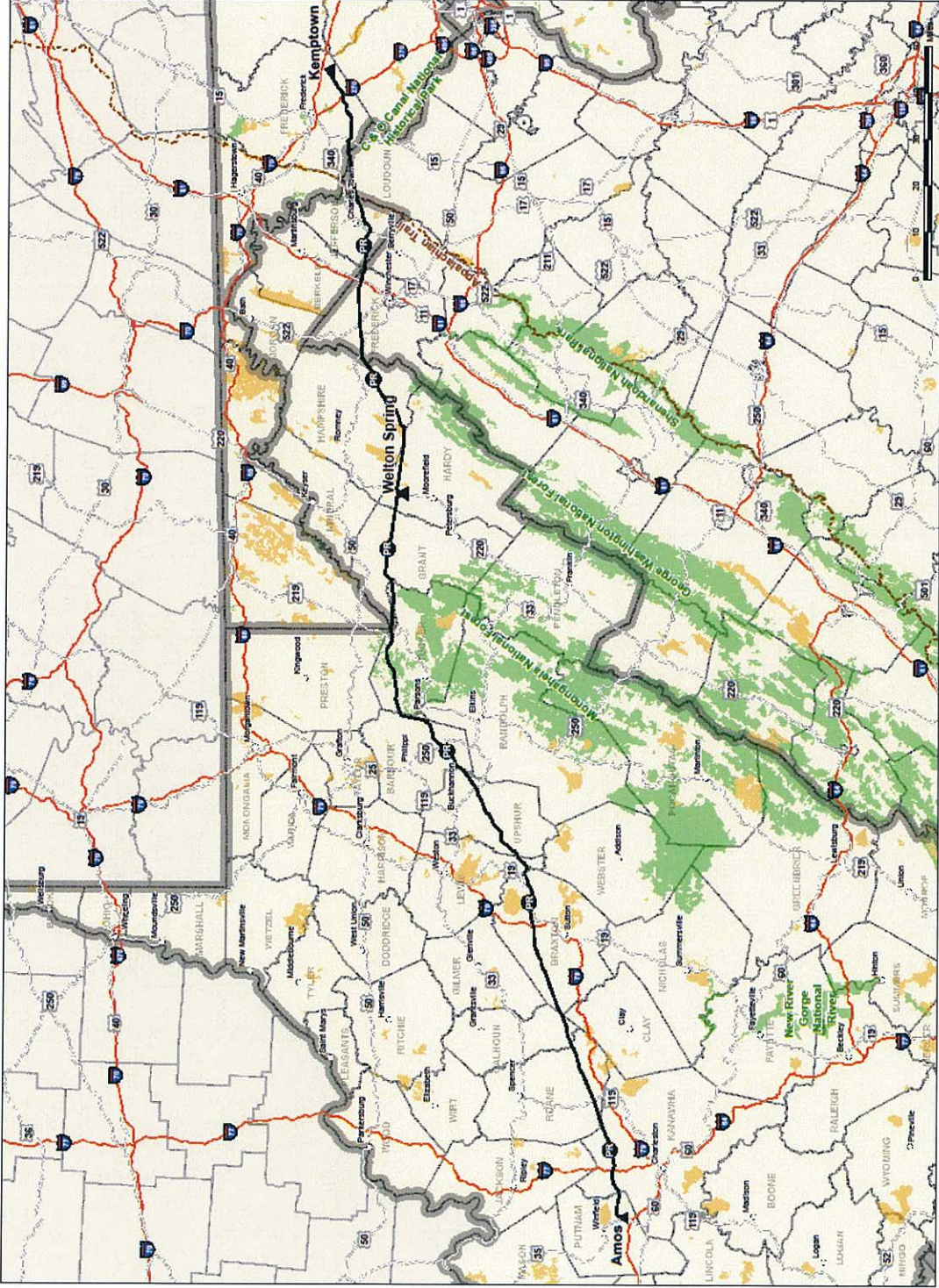
Proposed Route

- Substation
- Populated Places
- Proposed Route
- Federal Land
- State Land
- Appalachian Trail
- Interstate Hwy
- US Hwy



Geographic Coordinate System:
North American Datum of 1983 (NAD83)
Datum: North American Datum of 1983
Projection: Transverse Mercator
Linear Unit: Meter
Datum's Spheroid: Reference System 83

Source: WV Department of Natural Resources, MD Department of Natural Resources, and National Conservation and Natural Resources, WV GAP Analysis, ESRI



ATTACHMENT B

PROPOSED CROSSING OF THE APPALACHIAN TRAIL AND HARPERS FERRY NHP



Proposed Appalachian Trail Crossing

CONCEPTUAL - FOR PLANNING PURPOSES ONLY

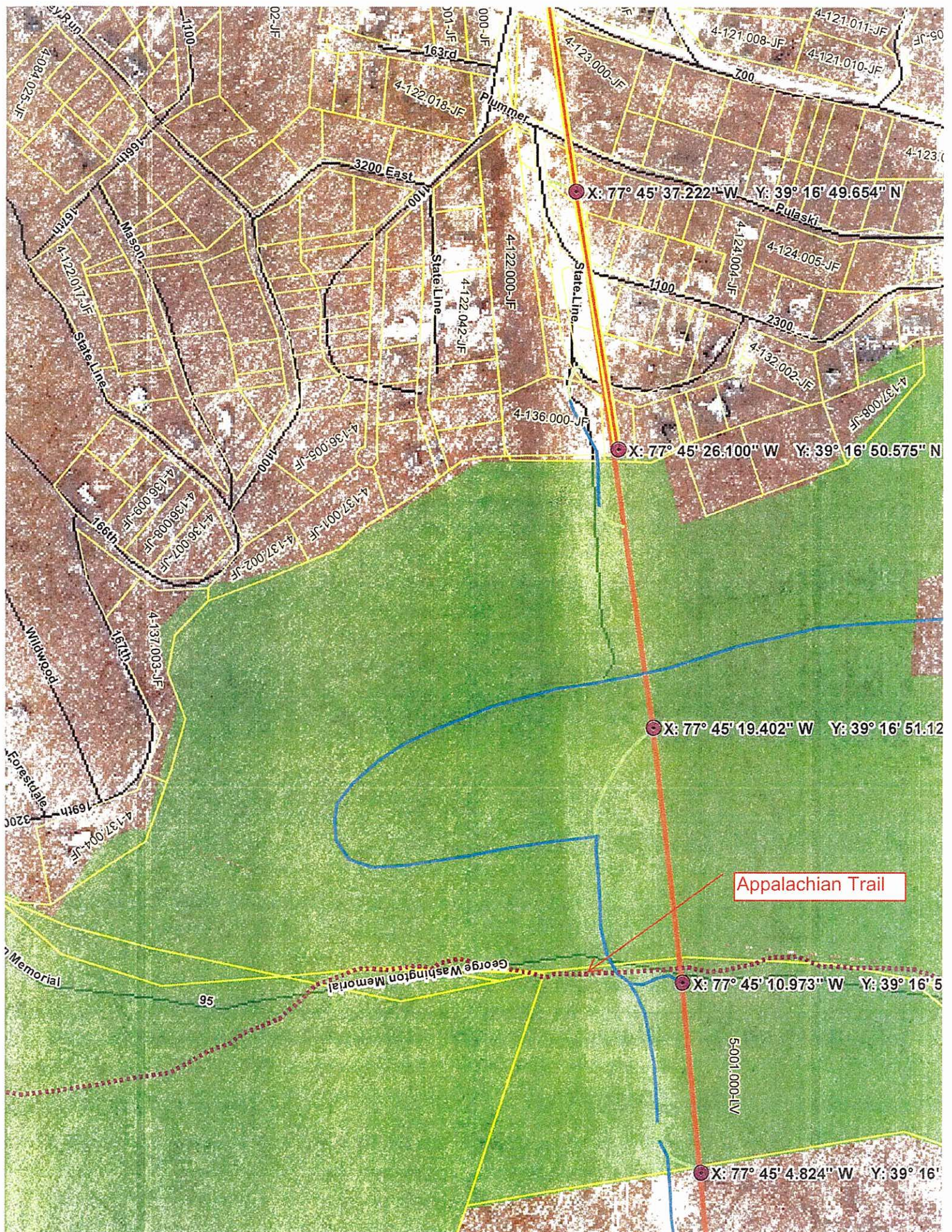
January 22nd 2010
Geographic Coordinate System: Universal Transverse Mercator (UTM)
Datum: North American Datum of 1983 (NAD83)
Projection: Transverse Mercator
Linear Unit: Meter
Ellipsoid: Geocentric Reference System 80

1 inch = 300 feet



- Structures
- Appalachian Trail Centerline
- Shield Wire 200' Above Ground
- Existing Access Rds
- New Access Rds
- Proposed PATH 765KV Centerline
- Digitized Tax Map Parcels
- Federal Lands ATC

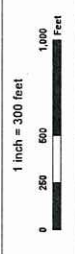




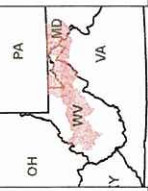


Proposed C&O Canal Crossing

November 23, 2009
 Geographic Coordinate System: Universal Transverse Mercator (UTM)
 Datum: North American Datum of 1983 (NAD83)
 Zone: 17N
 Projection: Transverse Mercator
 Unit: Meter
 Spheroid: GRS80
 Ellipsoid: Geoid Reference System 80



- Structures
- Access Roads
 - Existing Access Rds
 - New Access Rds
 - Trail Streams
 - Original Route (Preferred Route)
 - Existing Transmission
 - Roads
- Parcels
 - C&O Canal



77° 33' 49.6

Shield Wires Over 200' Above Ground

Mt Storm-Doubs 500 kV

Mt Storm-Doubs 500 kV

77° 33' 15.747" W , 39° 1

ATTACHMENT C

EASEMENT AGREEMENTS

of the adjoining owners, as shown upon a print of the Company's Drawing No. 9090-510-ALP, attached hereto and made part hereof.

251
11734

RIGHT OF WAY

Name	
Line	
Company	
District	
State	
Date	
County	

COUNTY LAND RECORDS

STATE OF WEST VA., }
County of LEE, }
In the Clerk's Office of County Court
This 19th day of January 1959
Dated 19th day of January 1959
from James B. Conner & Co.
to Robert D. Conner & Co.
and James B. Conner & Co.
were present in this
office and duly acknowledged.

Robert D. Conner
Notary Public

Recorded in Book No. 229

Page 448

125

MARYLAND
STATE OF WEST VIRGINIA

County of BALTIMORE to-wit:

I, Dorothy O.C. Conner, a Notary Public of the said County of BALTIMORE
do hereby certify that E. Gilbert O'Connor and LEONA M. O'Connor

his wife, whose names are signed to the writing hereto annexed, bearing date the 17th day
of JANUARY 1959, have this day acknowledged the same before me in my said County.

Given under my hand and Notarial Seal this 17th day of JANUARY 1959

My Commission Expires

Dorothy O.C. Conner
Notary Public

STATE OF WEST VIRGINIA

County of _____ to-wit:

I, _____, a Notary Public of the said County of _____
do hereby certify that _____ and _____

his wife, whose names are signed to the writing hereto annexed, bearing date the _____ day
of _____, 19____, have this day acknowledged the same before me in my said County.

Given under my hand and Notarial Seal this _____ day of _____, 19____.

My Commission Expires

Notary Public

Perm T

SKETCH TO ACCOMPANY WORK ORDER

44-38861-29-400075

RODMAN, HENT & POWER Co.
(CONSTRUCTION COMPANY)

Est. No.

Dwg. No. 4040-210-B1

TITLE 132 KV Line (MILLVILLE-FREDERICK) ON PROPERTY (F.E.)

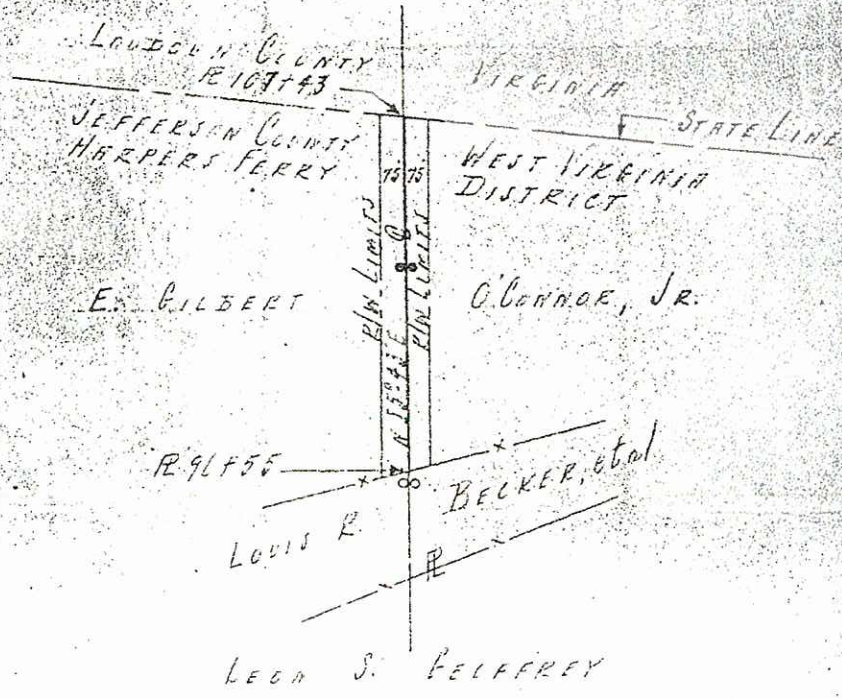
REMARKS: FUGITIVE LONGER W. T. of MILLVILLE, W. VA.

SCALE 1" = 400'

DATE 1-2-21

DRAWN BY W. E. F.

APPROVED BY



STRE MWFI-15

ND 13553

39500

4920

No. 1111

RIGHT OF WAY AGREEMENT

FOR MARYLAND, PENNSYLVANIA AND VIRGINIA ONLY

Know All Men By These Presents, That for and in consideration of Ten

Dollars (\$ 10.00) and other valuable consideration, cash in hand paid, the receipt of which is hereby

acknowledged, we Marilda Jane Campbell, widow, Fleet James, Sr. and H. Hall, and

Trustee George M. Martin, Trustee Daniel Viris, Pauline Viris, and her husband

Sullivan H. Hall, Trustee (last six parties for release purposes as to this easement only) hereinafter called the Grantors, do

hereby grant unto the Northern Virginia Power

Company, a corporation, hereinafter called the Company, with general

warranty, an easement or right of way over, along and upon a certain tract of real estate situated in

Lovettsville Magisterial

Loudoun

County, State of Virginia

Township District of the said tract being the same real

estate that was conveyed to the said John N. Campbell and Marilda J. Campbell, his and wife as tenants in common, with the common law right of survivorship, by two and one-half deeds, one from Daniel Viris and wife, dated March 21, 1958, and one from R. (Robert) Hardy and wife, dated January 20, 1958, and recorded respectively in Deed Books 376 and 374 at pages 33 and 136 in the office of the Clerk of the Circuit Court of Loudoun County, State of Virginia, together with the right of the survivor)

begins at Station No. 107/43 and extends to Station No. 175/43 on the survey line of the

Company, as shown on the Company's Drawing No. 9005-510-A1-E and is more particularly described as follows:--

Station 107/43 is a point in the Grantor's property line (W. Va. - Va. State Line) and Station 175/43 is a point in the property line of the lands of the Grantor where said lands abut upon the western right of way boundary of Virginia Route 655; the course of the right of way is generally east and northeast, and the easement and right of way hereby granted includes the right to erect a three pole structure at Station 158/47, and two pole structures at Stations 108/00, 112/50, 119/00, 123/50, 130/00, 137/20, 147/00, 153/30, 164/50, and 172/00, respectively, all as shown on said plat and survey.

The said right of way is for the purpose of and is of sufficient width for erecting, constructing, reconstructing, maintaining, repairing and operating an electric transmission and distribution pole line, with telephone wires thereon, together with the necessary equipment and appliances, and the right is given the company to remove the same at its discretion, and to cut and trim, and keep cut and trimmed, all trees that may interfere with the safety, proper operation and/or maintenance of said line. A map or plat, showing the center line of the right of way, together with sufficient data to properly identify it, is hereto attached and made part hereof. Trimming rights not to exceed 75 feet on each side of the center of the easement.

The compensation heretofore set out is in full satisfaction for all damages that may be caused to the grantors, their heirs or assigns, by reason of the erection, construction, lawful operation and maintenance of the said pole line; provided, however, that the company will pay for all damages to fences, crops and live stock on said right of way, caused by the operation, maintenance, rebuilding and removal of said line, if notice in writing is given within thirty days after such damages are suffered, otherwise it is understood that such damages are waived, and, provided, further that the grantor shall have the right to cross, recross, pass over and upon and farm said easement or right of way continuously, with the understanding that such use shall not interfere with the use for which the right of way is acquired, and, further, that the grantors may erect and maintain, if they so desire, the necessary fences across said right of way, with the understanding that the company shall have the right to open said fences for proper purposes, but keep the same closed when not necessary for its proper purposes.

WITNESS the following signatures and seals, this 5th day of February in the year 1959.

WITNESS:

Marilda Jane Campbell
Fleet James, Sr.
H. Hall

Marilda Jane Campbell (SEAL)

Fleet James, Sr. (SEAL)

H. Hall (SEAL)

George M. Martin Trustee (SEAL)

Daniel Viris Trustee (SEAL)

Pauline Viris (SEAL)

Sullivan H. Hall Trustee (SEAL)

ND 13553

(SEAL)

BOTH 385 PAGE 596

State of Virginia
County of Loudoun to-wit:
I hereby certify that on this 3rd day of March A. D. 19 59 before me,
of Virginia at large, Matilda Jane Campbell, widow
Notary Public in and for the State and personally appeared
Stilson H. Hall, Trustee, George A. Herbin, Trustee, Daniel Virts,
Pauline Virts, and Stilson H. Hall, Trustee,

known to me to be the person(s) whose name(s) are signed to the written instrument hereto annexed, bearing date the 5th day of February, 1959; and this day acknowledged before me in San said County that the Y executed this same for the purposes therein contained.

Given under my hand and seal this 3rd day of March, 1959.

My Commission Expires
Apr 11 6, 1960

State of Florida
County of Monroe do-wit:
I hereby certify that on this 28th day of February A.D. 19 59 before me, a
Notary Public in and for the State and County aforesaid, personally appeared Fleet James
Fleet James

known to me to be the person(s) whose name(s) is/are signed to the written instrument hereto appended, bearing date the 5th day of February, 1959, and this day acknowledged before me in my said County that he executed the same for the purposes therein contained.

Given under my hand and seal this 28th day of February, 1959.

My Commission
April 6, 1960

VIRGINIA: In the office of the Clerk of the Circuit Court of Loudoun County
Mand. 1959 at 4:15 P.M. Notary Public
 presented in said office and, with certificate annexed, admitted to record.
 Teste: [Signature] Clerk

1992, 1993, 1994, 1995, 1996, 1997, 1998, 1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 26

Est. No.

Dwg. No. 20050101

TIT: Primo incontro con il "C" di Milano

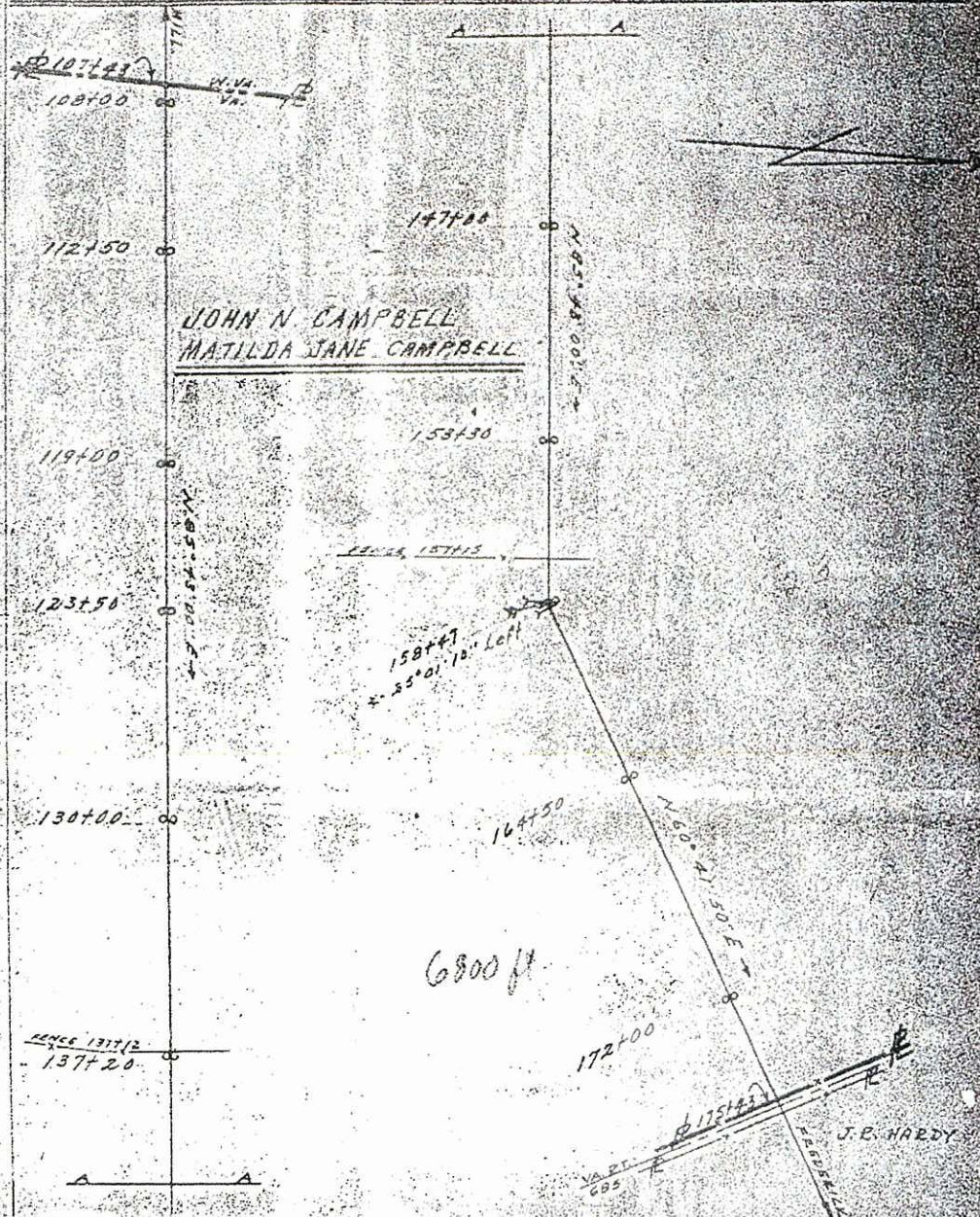
REMARKS: MILLVILLE - FLEETWICK 132 KV TRANSMISSION LINE

SCALE 1"=400'

DATE Oct 24 1957

DRAWN BY *A. K. Liao*

APPROVED BY



AT

ND 13553

SD 11734

G 130KV

G 500KV

VEAKO Agm

1021/2025

120

80

1/4

1/4

75

76

1990

1356

7-500KJ
VLPK Agent
4-21-85

103 108

32 33

51, 51

44


124

ATTACHMENT D

PLAN AND PROFILE DRAWINGS (ON NPS PROPERTY)



PRELIMINARY

REV	REVISION DESCRIPTION	DATE	BY	SCALE:	ENGR:	T. RAO	R/W DWG:		<small>*THIS DRAWING IS THE PROPERTY OF PATH WV, LLC, AND IS LOANED UPON CONDITION THAT IT IS NOT TO BE COPIED OR REPRODUCED IN WHOLE OR IN PART, OR USED FOR FURNISHING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN CONSENT OF PATH WV, LLC. (OR FOR ANY PURPOSE RETRIBUTAL TO THEIR INTEREST) AND IS TO BE RETURNED UPON REQUEST*</small>	CONSTRUCTION APPROVED:
				400.0 ft. Horiz. Scale	DRAWN:		R/W MAP:			ROW APPROVED:
				80.0 ft. Vert. Scale	CHECKED:		ISSUED FOR CONSTRUCTION:			DWG:
					APPROVED:					SHEET 1 OF 1

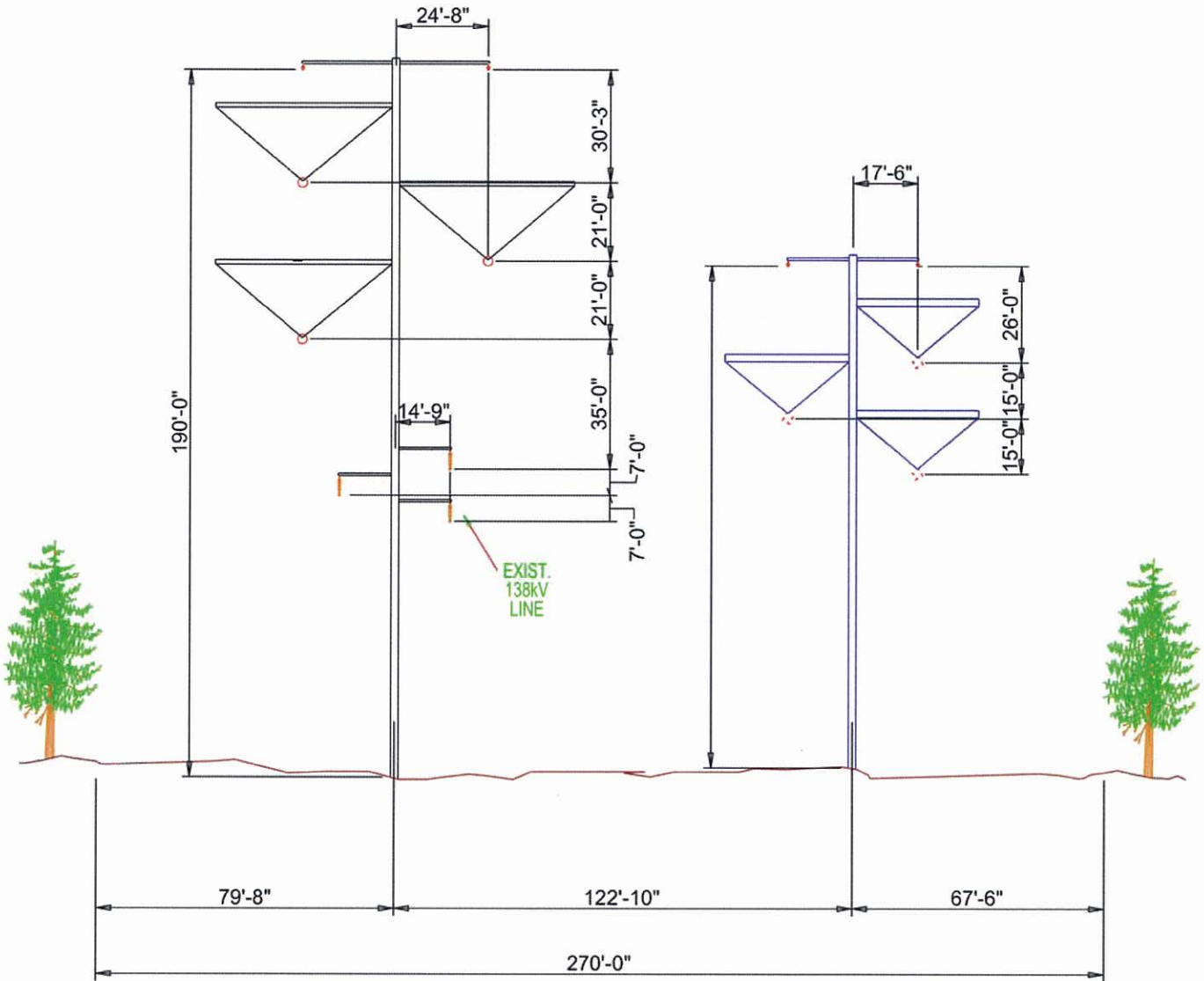


EF Archive ID:

ATTACHMENT E

STRUCTURE DIAGRAMS and VISUAL SIMULATIONS

Structures 12-98, 12-101, 14-3 and 14-4 will be located adjacent to
but not on NPS property.



PROPOSED 765kV

PROPOSED 500kV REBUILD

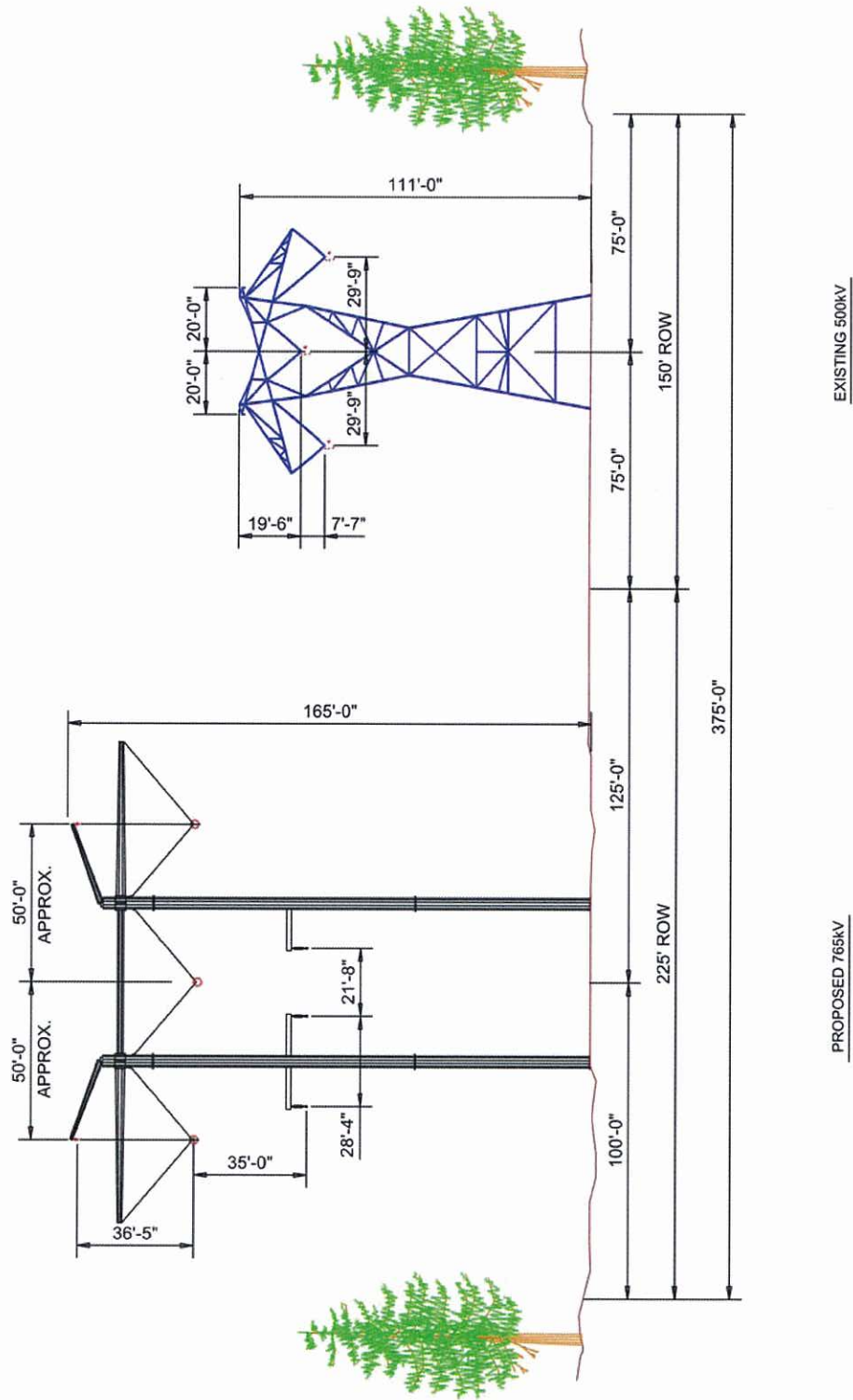
* EXACT HEIGHT OF STRUCTURE WILL BE SITE SPECIFIC BASED ON ENGINEERING CONSIDERATIONS.

"THIS DRAWING IS THE PROPERTY OF PATH WEST VIRGINIA TRANSMISSION COMPANY, LLC AND IS LOANED UPON CONDITION THAT IT IS NOT TO BE REPRODUCED OR COPIED, IN WHOLE OR IN PART, OR USED FOR FURNISHING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN CONSENT OF THE PATH WEST VIRGINIA TRANSMISSION COMPANY, LLC OR FOR ANY PURPOSE DETRIMENTAL TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST."



CONCEPTUAL HARPER'S FERRY NHP
CROSSING STRUCTURE 12-98
765KV SINGLE CIRCUIT POLE W/138KV UNDERBUILD &
500KV SELF-SUPPORTING VERTICAL STEEL POLE

DESCRIPTION	APPR	DATE	APPROVED BY:	DATE: 12-7-2009	DRAWING No.	SHEET No.	REV. No.
			DRAWN BY: McP	SCALE:	EXHIBIT HARPERS FERRY	1	



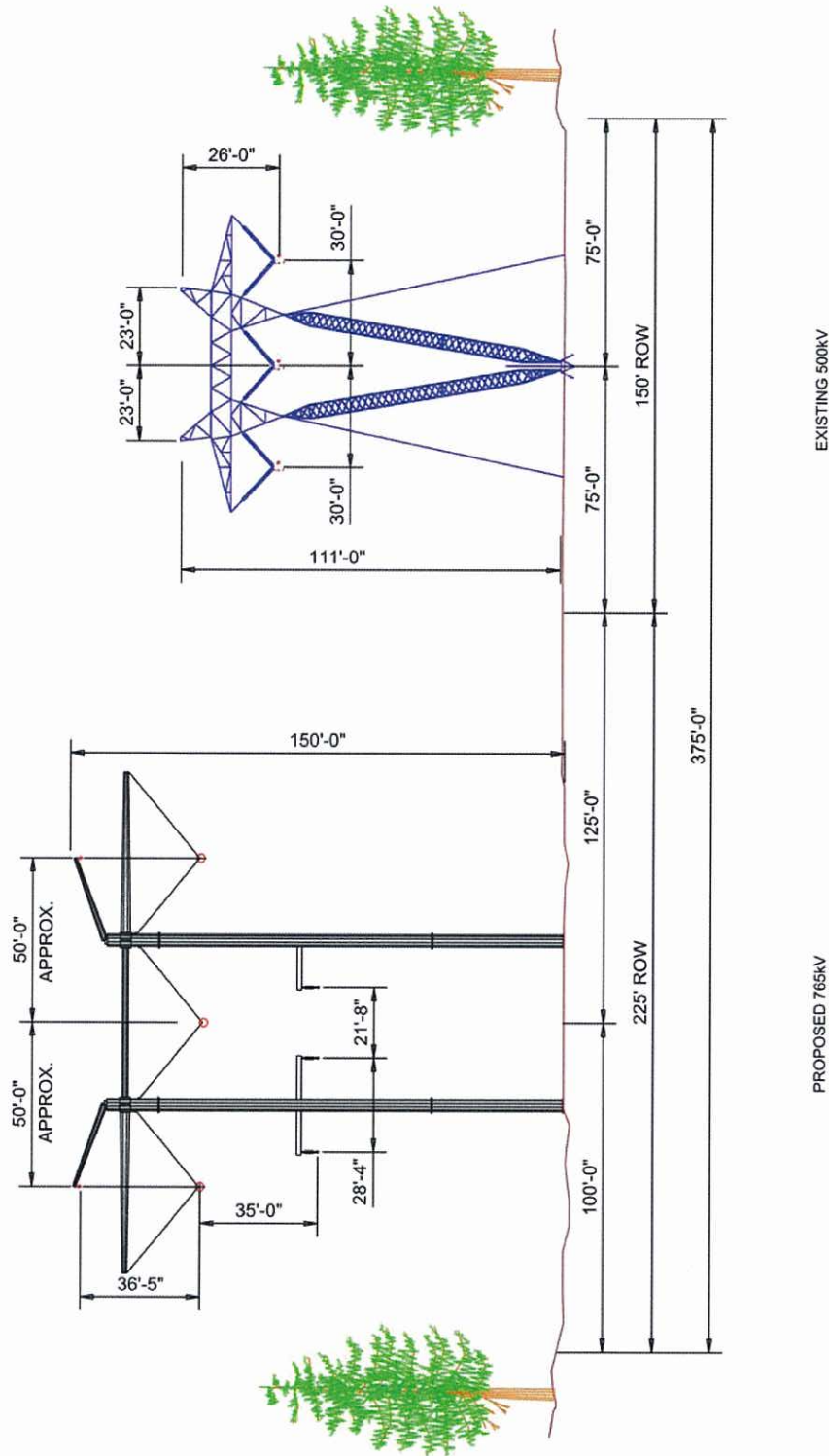
* EXACT HEIGHT OF STRUCTURE WILL BE SITE SPECIFIC BASED ON ENGINEERING CONSIDERATIONS.

"THIS DRAWING IS THE PROPERTY OF PATH WEST VIRGINIA TRANSMISSION COMPANY, LLC AND IS LOANED UPON CONDITION THAT IT IS NOT TO BE REPRODUCED OR COPIED, IN WHOLE OR IN PART, OR USED FOR FURNISHING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN CONSENT OF THE PATH WEST VIRGINIA TRANSMISSION COMPANY, LLC OR FOR ANY PURPOSE DETRIMENTAL TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST."



CONCEPTUAL HARPER'S FERRY NHP
CROSSING STRUCTURE 12-99
765KV SINGLE CIRCUIT H-FRAME W/
138KV UNDERBUILD & 500KV SELF-SUPPORTING LATTICE

DESCRIPTION	APPR	DATE	APPROVED BY: DRAWN BY: McP	DATE: 12/7/2009 SCALE:	DRAWING No. EXHIBIT HARPERS FERRY	SHEET No. 2	REV. No.
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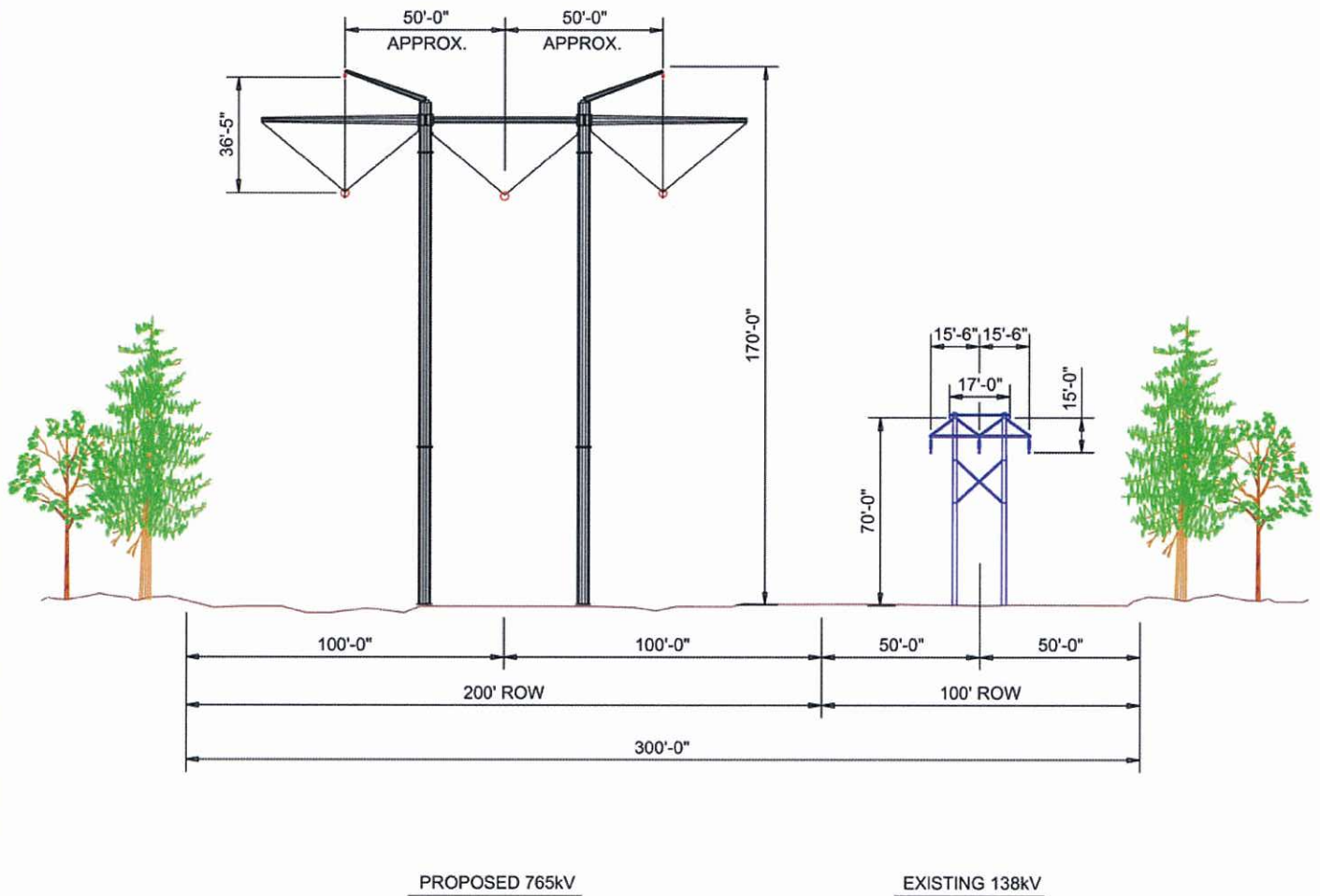
* EXACT HEIGHT OF STRUCTURE WILL BE SITE SPECIFIC BASED ON ENGINEERING CONSIDERATIONS.

"THIS DRAWING IS THE PROPERTY OF PATH WEST VIRGINIA TRANSMISSION COMPANY, LLC AND IS LOANED UPON CONDITION THAT IT IS NOT TO BE REPRODUCED OR COPIED, IN WHOLE OR IN PART, OR USED FOR FURNISHING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN CONSENT OF THE PATH WEST VIRGINIA TRANSMISSION COMPANY, LLC OR FOR ANY PURPOSE DETRIMENTAL TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST."



CONCEPTUAL APPALACHIAN TRAIL NHP
CROSSING STRUCTURES 12-100 & 12-101
765kV SINGLE CIRCUIT H-FRAME
W/ 138kV UNDERBUILD & 500kV GUYED VEE

DESCRIPTION	APPR	DATE	APPROVED BY:	DATE: 12/7/2009	DRAWING No.	SHEET No.	REV. No.
			DRAWN BY: McP	SCALE:	EXHIBIT APP TRAIL	1	



* EXACT HEIGHT OF STRUCTURE WILL BE SITE SPECIFIC BASED ON ENGINEERING CONSIDERATIONS.

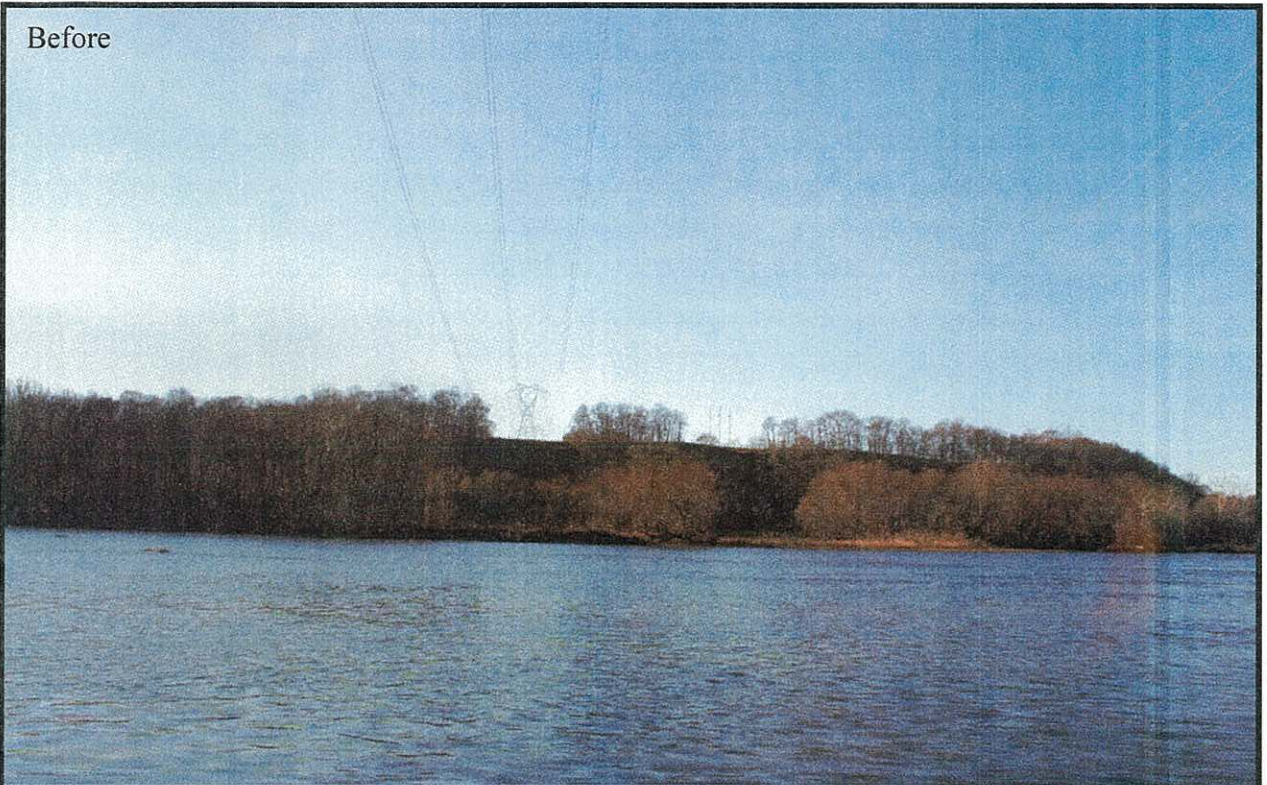
"THIS DRAWING IS THE PROPERTY OF PATH WEST VIRGINIA TRANSMISSION COMPANY, LLC AND IS LOANED UPON CONDITION THAT IT IS NOT TO BE REPRODUCED OR COPIED, IN WHOLE OR IN PART, OR USED FOR FURNISHING INFORMATION TO ANY PERSON WITHOUT THE WRITTEN CONSENT OF THE PATH WEST VIRGINIA TRANSMISSION COMPANY, LLC OR FOR ANY PURPOSE DETRIMENTAL TO THEIR INTEREST, AND IS TO BE RETURNED UPON REQUEST."



CONCEPTUAL C & O CANAL CROSSING
STRUCTURES 14-3 & 14-4
765kV SINGLE CIRCUIT SELF-SUPPORTING H-FRAME
& 138kV H-FRAME

			APPROVED BY:		DATE: 12/7/2009	DRAWING No.	EXHIBIT C & O	SHEET No. 1	REV. No.
DESCRIPTION	APPR	DATE	DRAWN BY: McP		SCALE:				

Before



After



Description of Photo Location:
Frederick County, Maryland
C&O Canal National Historic Park
Looking West



Welton Spring - Kempton

PATH

COPYRIGHT © 2010 BURNS & MCDONNELL ENGINEERING COMPANY, INC.

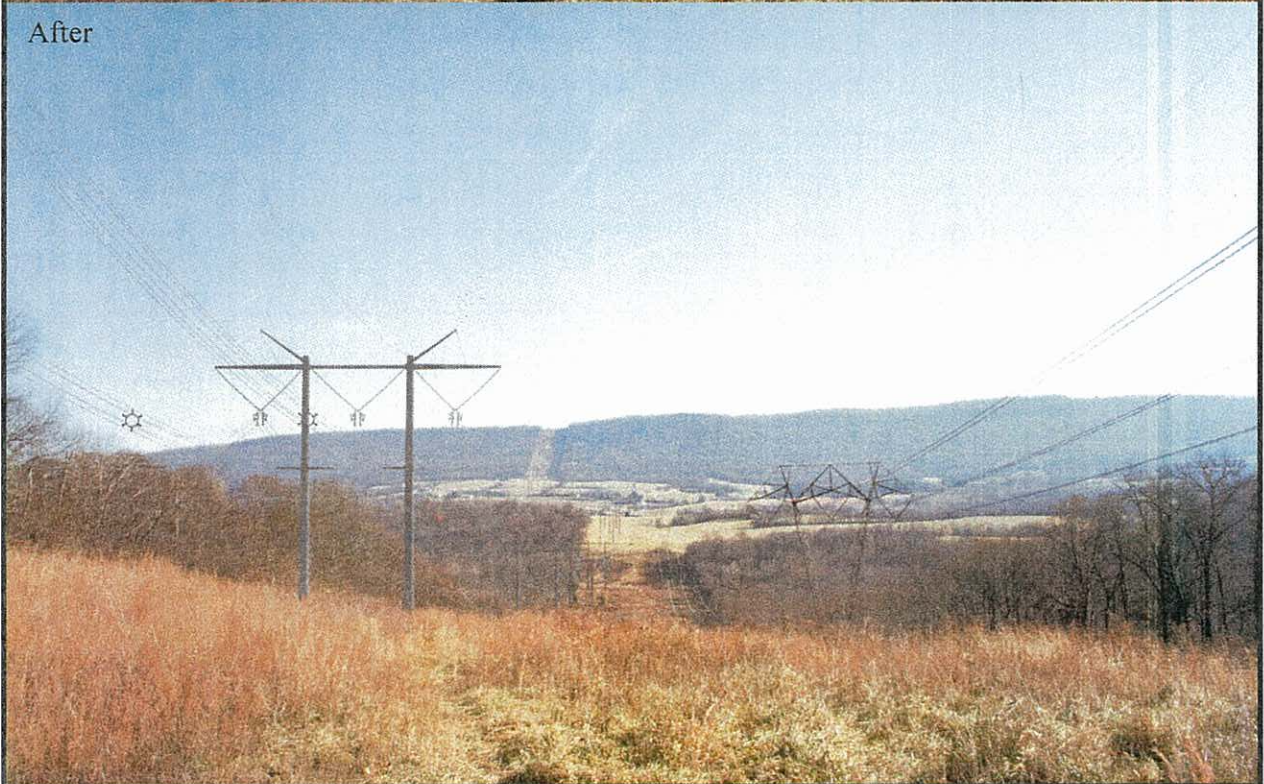
Source: Trinity Animation, Inc.

Structure placements as shown are for photo simulation purposes only. Actual structure placement will be determined during detailed design and engineering of the route selected and approved.

Before



After



Description of Photo Location:

Loudoun County, Virginia
Appalachian Trail
Looking East



Welton Spring - Kempton

PATH

COPYRIGHT © 2010 BURNS & MCDONNELL ENGINEERING COMPANY, INC.

Source: Trinity Animation, Inc.

Structure placements as shown are for photo simulation purposes only. Actual structure placement will be determined during detailed design and engineering of the route selected and approved.

ATTACHMENT F

EROSION AND SEDIMENTATION CONTROL SPECIFICATIONS

The Applicant will follow the erosion and sediment control requirements set forth in the Virginia Erosion and Sediment Control Handbook, the Maryland Standards and Specifications for Soil Erosion and Sediment Control and the West Virginia Erosion and Sediment Control Best Management Practice Manual. In addition, per Commonwealth of Virginia requirements, Erosion and Sediment Control Specifications will be developed and submitted for approval by December 31 of the year preceding the start of construction. Upon development such specifications will be included as part of Attachment F of this Plan.

ATTACHMENT G

WARNING SIGNAGE

CAUTION

CONSTRUCTION AREA AHEAD

DO NOT LEAVE TRAIL

FOLLOW CONSTRUCTION CREW
DIRECTIONS

PATH-Allegheny is reconstructing and expanding the transmission line that crosses the Appalachian Trail at the construction site ahead. Hikers may experience minor delays through the work area. For your safety, please do not leave the trail in the construction area, and follow all directions provided by the construction crew.

For more information, call TBD
of PATH-Allegheny
at 724-838-XXXX.

PATH-Allegheny is
reconstructing and expanding
the transmission line that crosses
the Appalachian Trail at the
construction site ahead. Hikers
may experience minor delays
through the work area. For your
safety, please do not leave the
trail in the construction area, and
follow all directions provided by
the construction crew.
For more information, call TBD of
PATH-Allegheny
at 724-838-XXXX.

ATTACHMENT H

LANDSCAPE PLAN

1. Summary

The Appalachian National Scenic Trail ("AT"), Harpers Ferry National Historical Park ("HF-NHP") and Chesapeake & Ohio Canal National Historical Park ("C&O Canal") are important resources. Protecting these resources is of high importance to the PATH Project. Accordingly, the PATH Companies (a) have implemented extensive siting and engineering measures to protect National Park Service ("NPS") resources and (b) are further committed to working with the NPS during design, construction and long-term maintenance to develop an appropriate and practicable landscape plan for the crossing of the NPS properties. The following is a description of the PATH Companies' planned landscape measures for the NPS properties and adjacent land that can be further developed in conjunction with NPS objectives and guidance. To further assist those discussions, page 2 and 3 of this document provide site-specific crossing depictions for the NPS properties.

As an overview, the PATH Companies propose to maintain the right-of-way ("ROW") clearing for the AT and HF-NHP properties as an open meadow consistent with existing conditions—including maintaining open vistas to the east and west. For the C&O Canal, the crossing primarily involves an aerial crossing with clearing activity, if any, on the NPS property to be confined to trimming or removal of any "danger trees" (as defined in Attachment I).

1.1. Siting and Design: Paralleling existing ROWs was given priority during siting to minimize land-use conflicts and visual contrast. At the crossing of the AT and HF-NHP, the proposed line parallels existing transmission facilities. The PATH Companies propose leaving the existing 500-kV line in place, removing the existing 138-kV line, adding a new 765-kV transmission line to the north side of the ROW and under building the existing 138-kV line on the new 765-kV structures. This will result in a net decrease of one structure each on both the HF-NHP property and AT property. The ROW will be expanded slightly in this area by approximately 105 feet to accommodate the space needed to operate the 765-kV line. At the crossing of the C&O Canal, applicants propose leaving the existing 500-kV and 138-kV lines in place, expanding the ROW by 200 feet to the north and constructing the new PATH 765-kV transmission line. This is being done to minimize the required structure height. The resulting 765-kV line only requires a 400' aerial crossing of the C&O Canal and no structures will be located on NPS property.

1.2. Low-Reflectivity Materials: Darkened or low-reflective materials for structures and conductors reduce the visual impact of transmission facilities. This is of particular benefit when the project is first constructed, when it is most prominent. In contrast, a traditional shiny, galvanized finish would appear synthetic at first, especially when contrasted with a natural landscape.

1.3. Vegetation Clearing Plan: Minimizing ROW clearing is an important landscape design element. To this end, a LIDAR-based vegetation clearing plan will be prepared, in cooperation with the NPS, to direct the clearing operations and to avoid over-clearing for the entire project. Generally, trees are not cleared where there is 100 feet or greater of conductor to ground clearance unless they are determined to be tall enough to threaten the safety and reliability of the line. Frequently, low-growing species such as redbud and dogwood are compatible with transmission line operations and left in the ROW at sensitive areas such as NPS land. During any required clearing of trees and vegetation, activities will be limited to the ROW area and to danger trees (as defined in Attachment I). Trees not identified for removal should be protected to the extent practicable. Tree debris from ROW clearing should be scattered randomly onto non-seeding areas to maintain a more appropriate texture and low contrast with adjacent vegetation patterns. Furthermore, clearing for ROW, access roads, and staging yards should use curvilinear and natural appearing boundaries instead of straight lines to the extent practical and grading should be performed in a manner that minimizes erosion and conforms to the natural topography. Additionally, alignment of any access roads or cross-country routes should follow the land-form contours to minimize ground disturbance and/or reduce scarring (visual contrast) of the landscape.

1.4. Construction Plan: The construction management team will determine, mark, and enforce the limits of construction activity to prevent unnecessary impacts to landscape elements and other NPS resources. For example, all construction vehicle movement outside the ROW will be restricted to pre-designated access, contractor-acquired access, or public roads. Equipment and debris will be kept off the existing trails (i.e., both the AT and C&O Canal towpath) to the extent practicable.

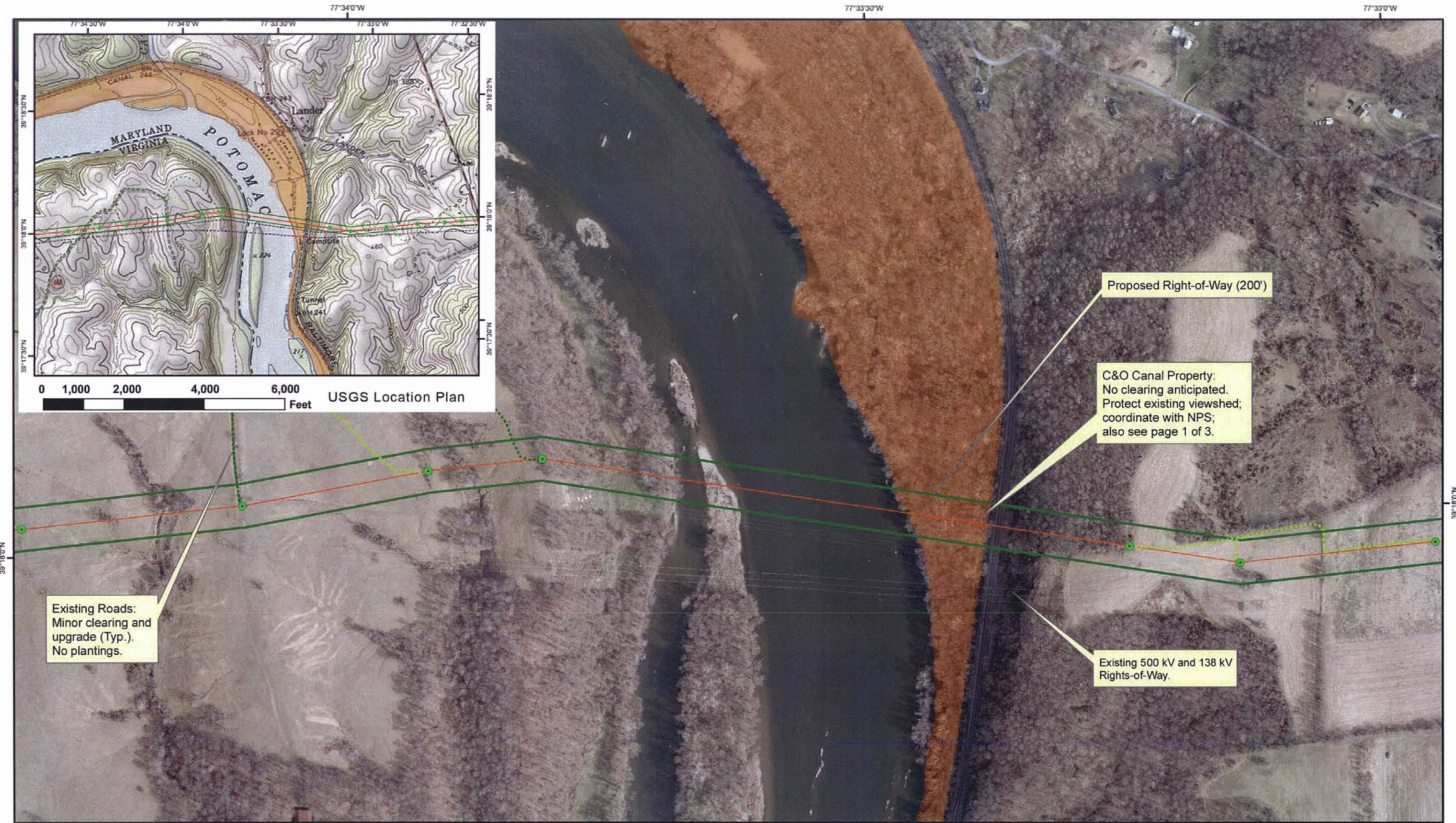
1.5. Erosion and Sediment Control Plan: Erosion and sediment control measures will be adopted for the NPS properties (see Attachment F of the Construction Plan) and will be implemented and strictly adhered to throughout construction.

1.6. Scenery Management and Monitoring: The PATH Companies will monitor construction activity on and near NPS properties to ensure protection of any identified critical scenic or aesthetic landscape elements.

1.7. Detailed Landscape Plan: The PATH Companies' Arborists, in consultation with a representative of the NPS, will develop a proposed landscape plan for the full width of the 200-foot-wide corridor (minus the vehicle access area) for each of the crossings of NPS properties. Any required tree removal will be identified and a species list for plantings will be adopted based on discussions between the PATH Companies' Arborists and the NPS. The plan's effectiveness will be reviewed periodically and updated as necessary.

1.8. Long-term Right-of-Way Maintenance Plan: The PATH Companies will implement a comprehensive, systematic integrated vegetation management program designed to ensure vegetation along the transmission line is managed at the proper time, and in the most cost-effective, environmentally sound manner to meet NPS goals and objectives. The plan will be reviewed periodically, in coordination with NPS, to ensure the goals and objectives are being addressed.





ATTACHMENT I

PATH PROJECT RIGHT-OF-WAY CLEARING AND MAINTENANCE SPECIFICATIONS

PATH
Right-of-Way Clearing and Maintenance Specification

1.0. OBJECTIVES

The primary objective of the PATH Right-of-Way Clearing and Maintenance Specification is to provide for the safe, reliable operation of the PATH transmission line. The key measures of success are 1) maintaining public safety and 2) zero (0) vegetation contact outages or operations on the PATH transmission line.

Other objectives include:

- Minimizing adverse environmental impacts
- Complying with laws and regulations
- Maintaining a harmonious relationship with landowners and the public

Upon completion of the initial clearing, PATH will conduct aerial and ground inspections and develop vegetation management plans to ensure that these objectives are achieved during maintenance operations in an efficient, environmentally-sensitive, and economical manner.

2.0. DEFINITIONS

Brush: Woody stem vegetation less than four inches DBH.

Clearing: The physical cutting and/or removal of woody stem vegetation within the right-of-way.

Compatible species: Vegetation that will grow to a height of no more than 15 feet tall, at maturity.

Conductor path: The conductor path is considered that ground surface area of the right-of-way which is below the conductors. This area is generally located in the center of the right-of-way and occupies approximately 50% of right-of-way area.

DBH: (Diameter at Breast Height). The diameter of a tree measured at the height of 4-1/2 feet above the ground on the uphill side.

Danger Tree: A tree or portion of a tree outside the cleared ROW that, if it fell, would contact or come within 28 feet of the conductor. Danger trees may be dead, or live with a physical defect, growth characteristic, or inherent species weakness such that it may reasonably be expected to affect the safe operation of a line.

Edge Tree: Trees with bases outside the right-of-way and any portion of the top in the right-of-way.

Fallen Tree: A tree lying on the ground not cut by persons associated with operation or maintenance of the line.

Hangers: A limb cut from a parent stem or bole of a tree as part of the line clearance pruning procedure left aloft caught and held by the other branches of the tree.

Hazard Tree: A tree considered a potential threat to the safety and reliability of the PATH growing within the normally maintained right-of-way.

Log: The merchantable portion of a tree as designated by PATH.

Lopping: The cutting of limbs and slash so that they lie in contact with the ground or as otherwise designated by PATH.

Mowing: The mechanical cutting of woody stemmed vegetation within the right-of-way.

Property Owner: Party from whom easements or right of way authorizations have been secured, their successors or assigns.

Removal: The complete cutting down of trees at or near the ground line. PATH shall specify the disposal method.

Slash: The un-merchantable portion of a tree as designated by PATH.

Tree: Woody stemmed vegetation with a DBH of four inches or more.

INITIAL CLEARING OF PATH

3.0 SCOPE

This portion of the specification includes procedures for initial clearing of the PATH right-of-way and the related removal of trees that might otherwise threaten line operation as detailed in Section 7.0.

4.0 GENERAL

All initial clearing shall be in accordance with this specification and applicable Federal, State, and other political subdivision (i.e., local) regulations. A vegetation inventory and survey will be conducted to identify areas to be cleared, stream crossings, road crossings, and other environmentally sensitive areas that may require special mitigation.

5.0 CLEARING STANDARDS

- 5.1 The specified width of the right-of-way for the PATH is 200 feet.
- 5.2 All woody vegetation shall be removed from the full width of the right-of-way (200 feet). Edge trees will be removed. Compatible species such as grasses, ferns, herbaceous plants and shrubs shall remain. Exceptions are:
 - 5.2.1 Native compatible woody stemmed vegetation will be permitted to remain in certain designated areas of the right-of-way.
- 5.3 All trees four inches DBH (diameter breast high) and larger shall be limbed flush and the top removed immediately upon being felled. Felled trees will be left in tree length and piled at the edge of the right-of-way. Brush and log piles shall have a 100 foot break every 300 feet.
- 5.4 All trees less than four inches in DBH, tops, and limbs shall be considered as brush. Brush shall be piled at the edge of the right-of way. Brush and log piles shall not exceed five feet in height.
- 5.5 Stump surfaces shall be cut parallel to and within three inches of the ground.

- 5.6 Felled trees and brush shall be kept out of streams and springs.
- 5.7 Trees will be felled where possible to protect crops, fences and other facilities.
- 5.8 No clearing will be done where the line crosses valleys or ravines when the conductor profile indicates a height of 100 feet or greater above the ground. The exceptions to this are as follows:

5.11.1. Trees that do not have at least 50' of clearance between conductors and tree under maximum sag conditions will be removed.

5.11.2. Where a conductor stringing path is specified by PATH.

5.11.3. Wire set-up areas

5.11.4. Work areas, access roads, etc.

- 5.9 Right-of-way widths are measured horizontally. A tree shall be considered in the right-of-way if any part of the tree extends into the right-of-way. All such trees shall be removed.

6.0 SCREENS

Species that will not exceed 15' in height at maturity will be preserved at designated road and stream crossings for a depth not exceeding 100 feet, where clearance permits.

7.0 TREES THAT THREATEN LINE OPERATION

- 7.1 Hazard and danger trees that pose an undue threat to the electric facilities due to health, growth pattern or defect will be removed.
- 7.2 A PATH Representative shall designate such trees for removal during the clearing activities by marking them at eye and ground level with timber marking paint facing the right-of-way centerline.
- 7.3 Such trees shall be felled into the cleared right-of-way and disposed of as stated in Sections 5 and 8.

8.0 BRUSH AND LOG DISPOSAL

8.1 Cut and Windrow: Brush and logs shall be piled, separately, along the edges of the cleared right-of-way. The brush shall also be cut and compacted, if necessary, to maintain neat and orderly piles. Slope percentages should not exceed 30%.

8.1.1 Brush and log piles shall have a 100 foot fire break every 300 feet.

8.1.2 Brush and log piles shall not exceed five feet in height.

8.1.3 Brush and logs shall not be placed within 25 feet of improved roads, or river and stream banks.

8.1.4 Brush and logs shall not be piled in flood plains.

8.1.5 Brush and logs shall not be placed in fields unless authorized by the property owner.

8.1.6 Brush and logs shall not be placed where it will obstruct ingress or egress on other rights-of-way such as roadways or trails.

8.2 Alternatives to the above standard are the following:

8.2.1 Cut and Compact: Brush may be reduced in height by cutting and by compacting in piles with crawler-type equipment at selected locations (depressions in topography) on the right-of-way outside of the conductor path.

8.2.2 Cut and Scatter: Brush may be reduced in height by cutting and scattering on the right-of-way outside of the conductor path or roadway, but as close to the edge of right-of-way as possible.

8.2.3 Cut and Pile: Where required by right-of-way agreement, brush shall be piled or scattered off the right-of-way.

8.2.4 Let Lay: On steep slopes (generally greater than 30%) felled trees may be limbed flush with the main stem, the limbs reduced in size to maintain a low profile, and both main stem and brush left on the right-of-way. A 20-ft. wide conductor path shall be left free of debris as much as possible.

8.2.5 Burning: Brush burning shall only be done if it is specified in the right-of-way agreement and is in accordance with applicable regulations.

8.2.5.1 An air curtain destructor may be used for brush disposal, when designated by the PATH Representative and in accordance with right-of-way agreement and applicable regulations.

8.2.6 Chipping/Shredding: Chipping/shredding or other viable methods may be utilized when specifically stated in the right-of-way agreement and where it is safely accessible by equipment.

8.3 Topography, land use and property owner preference may influence the method utilized.

9.0 PROPERTY OWNER CONTACT

To maintain good public relations, a PATH Representative will contact the property owner or tenant before any work is started. As the work progresses, the PATH Representative shall keep in touch with the property owner or tenant, as necessary. If any difficulty with a property owner or tenant is encountered, the PATH Representative will be immediately advised.

10.0 DAMAGE CLAIMS

If damage claims arise, the PATH Representative will promptly work with the property owner to amicably resolve the claim.

11.0 EROSION AND SEDIMENTATION CONTROL

All clearing activities will be in compliance with the appropriate state Erosion and Sedimentation Rules, Best Management Practices (BMP's) and other applicable standards and permits.

12.0 WILD CHERRY

Wild cherry, when in leaf and growing in a pasture or any area where domestic animals may be present, will require special handling. At no time will domestic animals be permitted to have access to the cut branches or foliage of the cherry.

ON-GOING MAINTENANCE OF PATH

13.0 MAINTENANCE CLEARING

- 13.1 The ultimate goal of vegetation maintenance is to provide for the safe, reliable operation of the PATH line. When performing maintenance the objective for areas with less than 100' vertical clearance at maximum sag from conductor to ground is removal of all woody stemmed vegetation to the appropriate width leaving the cleared area of the right-of-way populated with grasses and herbaceous growth. In maintained areas (i.e. mowed yards, lawns and public areas), other environmentally sensitive or unique areas, trees deemed compatible with safe operation of the line may remain, although PATH strongly discourages this practice. Compatible species are limited to those that grow no more than 15' tall at maturity.
- 13.2 Areas with greater than 100' vertical clearance shall have nothing encroaching closer than 50' to the conductor. The desired clearance will be measured from the maximum design sag of the conductor. Vegetation exceeding this limitation shall be removed or trimmed to achieve the desired clearance.
- 13.3 Application of herbicides is considered an important tool in establishing and maintaining a stable environment. All applications will be made in accordance with applicable Federal, State and Local regulations and label directions. For Virginia, there will be no aerial herbicide applications.

14.0 PROPERTY OWNER RIGHT OF WAY MAINTENANCE

The West Virginia Public Service Commission and West Virginia Department of Agriculture regulations require PATH to provide private property owners with an option of maintaining vegetation within the easement on their property. This option will be administered through contractual agreement with PATH on a case by case basis.

15.0 WORK PLANNING/NOTIFICATION

- 15.1 Landowners are normally notified prior to vegetation management activities on their properties. Contractor personnel are often utilized to perform this notification and are trained to evaluate vegetation management requirements so that they can communicate these requirements to property owners.
- 15.2 West Virginia law requires legal advertisements to be posted to advise non-resident property owners of impending vegetation management activity.
- 15.3 Should a property owner refuse to allow the contractor to perform the required work, a PATH representative is promptly notified and the necessary steps to complete the work are undertaken, up to and including legal action against the property owner. If a property owner refuses PATH access to clear trees on an valid transmission easement or right-of-way authorization, or if the easement/right-of-way rights are insufficient to ensure the Objectives are obtainable, then PATH representatives (Foresters, asset managers, right of way agents, legal and public policy personnel and others as required) will document the condition and direct mitigating actions.

16.0 TREE REMOVAL

16.1 In maintained areas (i.e. mowed yards, lawns and public areas), trees and other vegetation deemed compatible with safe operation of the line may remain, although PATH strongly discourages this practice. PATH strongly encourages landowners to maintain the right-of-way in grasses and low-growing compatible species. Compatible species are limited to those that grow no more than 15' tall, at maturity.

16.2 PATH representatives and contractor personnel inspect for danger trees (those trees considered a potential threat to the PATH facilities growing outside of the normally maintained right-of-way), during scheduled maintenance and they are removed, or “made safe”, when found. If necessary, damage payments may be made to the property owner for the removal of these off-Right-of-Way trees. Suspected danger trees discovered by other parties or brought to the attention of PATH foresters by property owners are addressed on a case-by-case basis with the appropriate forester having the final decision on what action is appropriate.

17.0 TREE PRUNING

17.1 Tree pruning will generally be limited to trees on the edge of the right of way or in locations designated as environmentally-sensitive; tree pruning will ensure that required clearances are achieved.

17.2 Manual pruning operations will utilize qualified line clearance arborists, as defined by ANSI Z133.1-2000, and seek to prune trees according to standards set by the International Society of Arboriculture, the American National Standards Institute and the Tree Care Industry Association. The American National Standard for Tree Care Operations – Tree, Shrub, and Other Woody Plant Maintenance – Standard Practices (Pruning), ANSI A300 (Part 1) – Pruning, is a part of the PATH Forestry Operations' contract with all tree-pruning contractors.

17.3 Mechanical pruning operations employ a variety of configurations of boom-mounted saws mounted on vehicles capable of traversing the rights-of-way. Access, terrain and tree heights influence the type of equipment used. In very difficult terrain or inaccessible areas, an aerial saw may be employed for side trimming on rights-of-way.

18.0 CLEARING

- 18.1 Manual clearing is employed where the terrain is too steep or rough for mechanized equipment, where the vegetation is too tall for herbicide applications and aerial application is not possible, or where the immediate clearing of vegetation is necessary.
- 18.2 Contract employees use chainsaws or brush saws to selectively clear vegetation from the rights-of-way. In many situations, due to the ability of the tree species present on PATH's rights-of-way to re-sprout, manual clearing actually increases the amount and growth rate of the vegetation present.
- 18.3 Mechanical clearing may be employed where terrain and access allow and where the vegetation is not too large for mechanical equipment to handle, where the vegetation is too tall for herbicide applications, aerial application is not possible, or where the immediate clearing of vegetation is necessary. As with manual clearing, mechanical clearing often results in increased growth rate and density of incompatible vegetation on the rights-of-way, unless follow-up applications of herbicides are made.

19.0 DEBRIS CLEANUP

Debris from these operations is left on the rights-of-way to decompose and return nutrients to the soil and to reduce the possibility of soil erosion. Any brush that falls into roadways, waterways, fences, lawns or pastures is moved to a wooded area of the right-of-way or may, at times, be chipped and/or otherwise removed. Logs may be left in tree lengths or as designated by PATH foresters. The merchantable value of logs will be preserved as much as possible.

20.0 HERBICIDE APPLICATION

- 20.1 Manual and mechanical clearing without follow-up herbicide applications does not control the root systems of incompatible vegetation and often increases the future maintenance requirements in the areas where it is employed. PATH's ROW Clearing and Maintenance Specification goal is to convert the vegetative cover types on its rights-of-way to low growing grass-forbs-herb covers that inhibit the germination, establishment and growth of most undesirable, tall-growing tree species.

- 20.2 More than 50 years of research has shown that selective herbicide applications or the application of selective herbicides are the most effective means to bring about this conversion. That same research has also shown that herbicide applications are more beneficial to wildlife than clearing operations.
- 20.3 Aerial (where authorized), hydraulic or high volume foliar, low volume foliar, ultra-low volume foliar, cut stubble, stumps, basal and granular applications are all employed.
- 20.4 United States Environmental Protection Agency registered herbicides are applied by licensed pesticide application businesses employing trained applicators.
- 20.5 PATH will identify domestic wells, springs, and other water bodies used as drinking water sources within the corridor. These drinking water sources will be protected in accordance with requirements listed on herbicide label directions for use.

21.0 AUDITING/INSPECTION/RECORD KEEPING

PATH Forestry personnel inspect work on a routine basis to insure that contract crews have maintained adequate clearances to help prevent tree contact outages, follow proper arboricultural techniques, and perform their work safely. Inspection logs and copies of inspections are retained as documentation.

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