

Appendix III: Elevation Calculations for Bloody Hill Trail

Elevation Calculations for Bloody Hill

Beginning Elevation is at the trail juncture of the first cannon on Bloody Hill approximately 20 feet south of the overlook.

Measured by Dave Velten and Joe Rouse on 2/28/2012

Calculations done by Gary Sullivan on 3/1/2012

1017.7.1 Running Slope. No more than 30 percent of the total length of a trail shall have a running slope steeper than 1:12. The running slope of any segment of a trail shall not be steeper than 1:8. Where the running slope of a segment of a trail is steeper than 1:20, the maximum length of the segment shall be in accordance with Table 1017.7.1, and a resting interval complying with 1017.8 shall be provided at each end of the segment.

Table 1017.7.1 Running Slope and Resting Intervals

Running Slope of Trail Segment		Maximum Length of Segment
Steeper than	But not Steeper than	
1:20	1:12	200 feet (61 m)
1:12	1:10	30 feet (9 m)
1:10	1:08	10 feet (3050 mm)

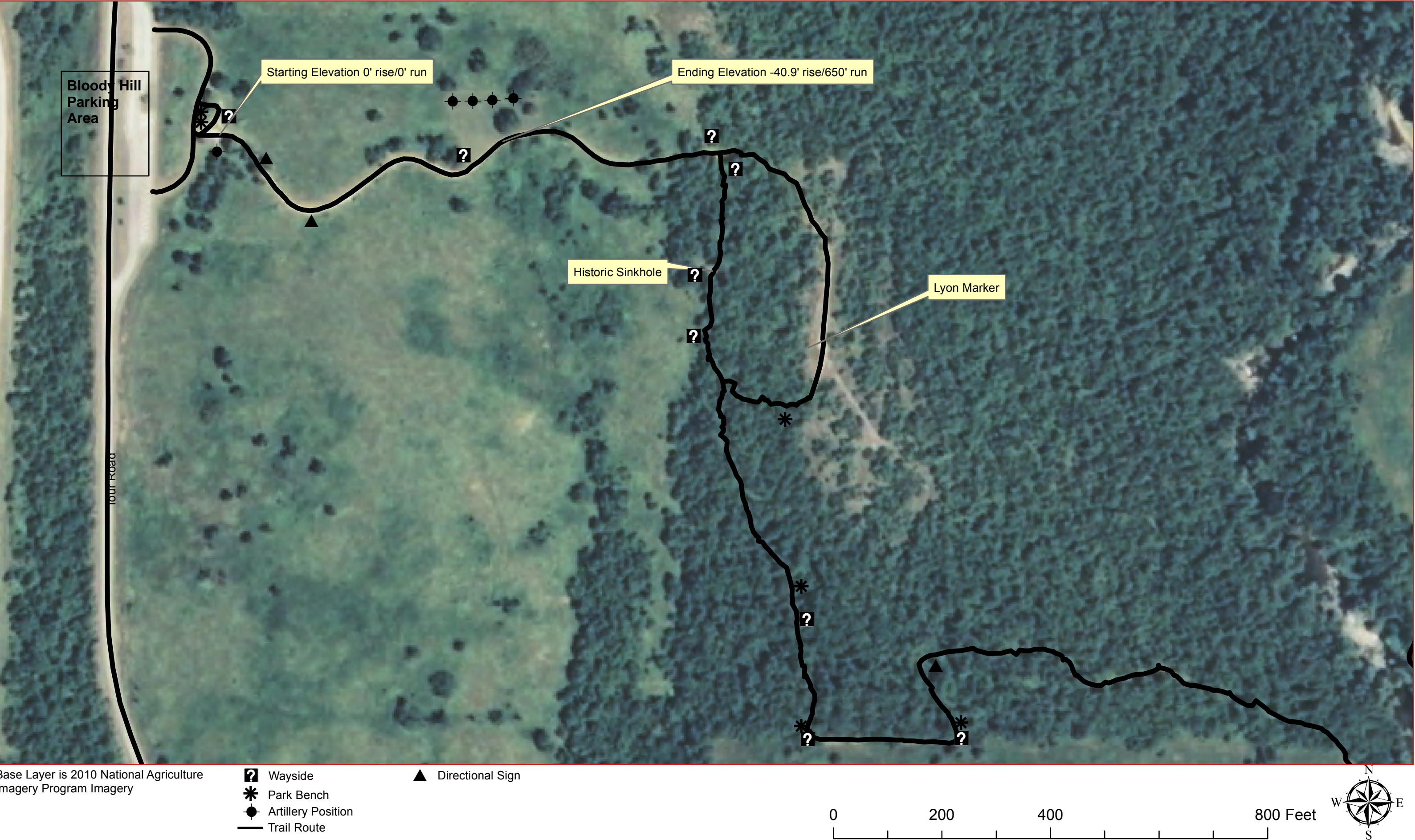
Height (inches) Read on Stick	Transist Level (inches)	Rise (feet)	Run (feet)	% Rise/Run	1:?	Resting Platforms Every (feet)
81.5	41.5	-3.333333333	50	-6.666666667	-15	200
79.5	41.5	-3.166666667	50	-6.333333333	-15.78947	200
82.5	42	-3.375	50	-6.75	-14.81481	200
98	41.5	-4.708333333	50	-9.416666667	-10.61947	30
87	42	-3.75	50	-7.5	-13.33333	200
77.5	43	-2.875	50	-5.75	-17.3913	200
70.25	41	-2.4375	50	-4.875	-20.51282	0
68.5	42	-2.208333333	50	-4.416666667	-22.64151	0
94	42	-4.333333333	50	-8.666666667	-11.53846	30
104.5	42	-5.208333333	50	-10.41666667	-9.6	10
89	42	-3.916666667	50	-7.833333333	-12.76596	200
53.5	41.5	-1	50	-2	-50	0
51.5	44	-0.625	50	-1.25	-80	0
Totals		-40.9375	650	-6.298076923	-15.87786	

Only 23% of the trail exceeds 1:12 and no segments are steeper than 1:8.

This trail will require approximately 15 resting platforms

Appendix IV: Alternative Maps

Environmental Assessment for Resource Preservation and Visitor Interpretation of Bloody Hill - Wilson's Creek National Battlefield
Alternative A – No Action – 3,300' of Existing Non-ADA Trail, 1 Wayside, 8 Numbered Interpretive Posts, 3 Directional Signs, 6 Benches, and 5 Cannon



Environmental Assessment for Resource Preservation and Visitor Interpretation of Bloody Hill - Wilson's Creek National Battlefield

Alternative B – Pave 2,750' of Existing and 490' of New Trail; Rehab 440' of Abandoned Trail; Install Boardwalk on 105' Existing and 45' New Trail, and 120 sq. ft. Viewing Platform; Install 12 Waysides, 6 Directional Signs, 7 Benches, 8 New and Re-located Cannon, 50 sq. ft. Shade Shelter, and 15 ADA Resting Platforms



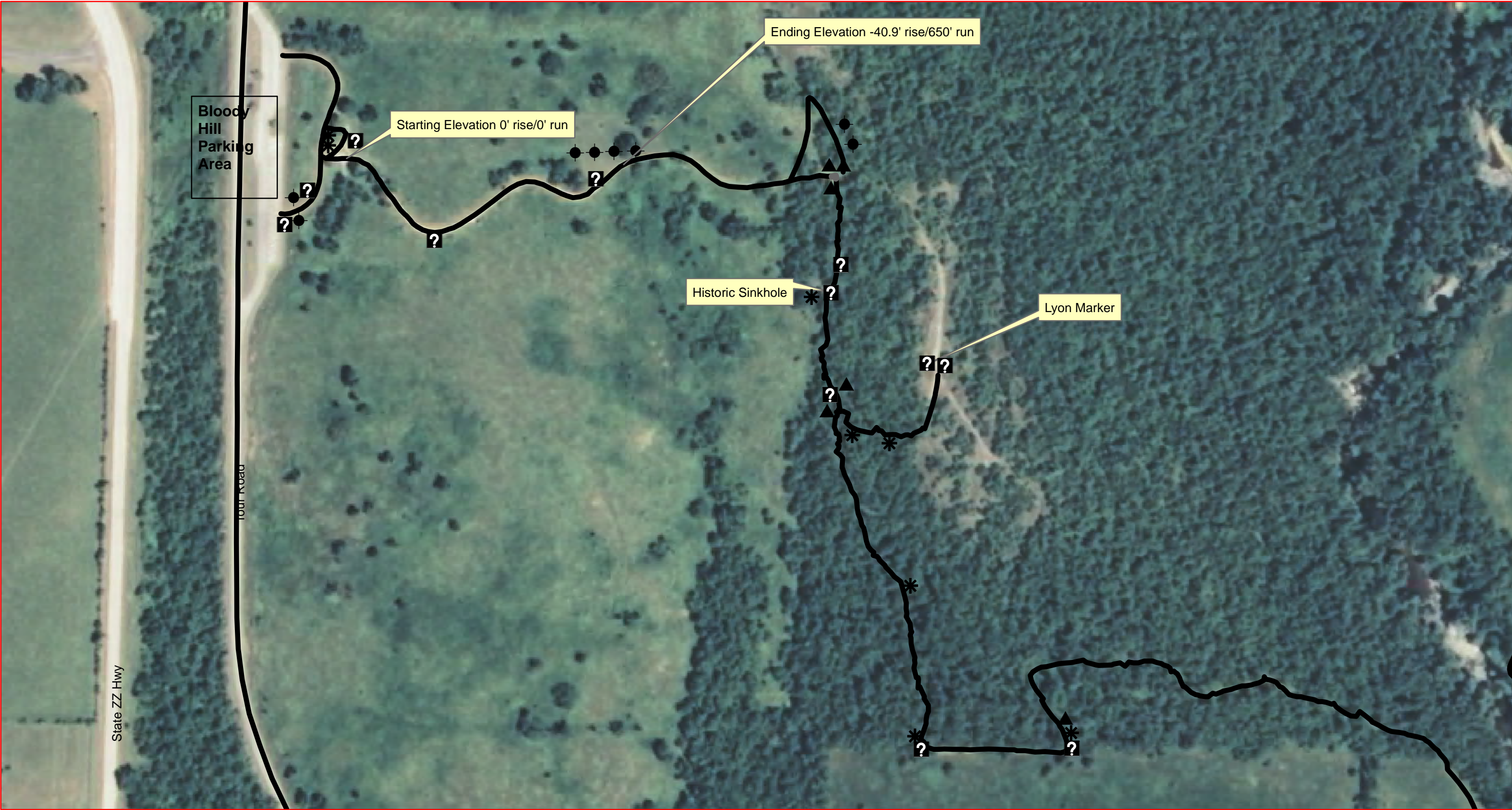
Base Layer is 2010 National Agriculture Imagery Program Imagery

- Wayside
- Park Bench
- Artillery Position
- Directional Sign

- Trail Route
- Low Profile Boardwalk
- Shade Shelter
- Abandoned Trail would be Rehabilitated

0 135 270 540 Feet

Environmental Assessment for Resource Preservation and Visitor Interpretation of Bloody Hill - Wilson's Creek National Battlefield
Alternative C (Preferred) - Harden 2,920' of Existing and 320' of New Trail; Rehab 440' of Abandoned Trail; Install 12 Waysides, 6 Directional Signs, 7 Benches, 8 New and Re-located Cannon, and 15 ADA Resting Platforms



Base Layer is 2010 National Agriculture Imagery Program Imagery

- Wayside
- Park Bench
- Artillery Position
- Directional Sign
- Trail Route
- Abandoned Trail would be Rehabilitated

