

DEFERRED PLANNING FOR THE HIGH-HAZARD AREAS OF THE ACP

*Submitted as comments on 401 certification to the Virginia Department of Environmental Quality
By Rick Webb, Program Coordinator, Dominion Pipeline Monitoring Coalition
August 22, 2017*

The attached maps concern the proposed Section 401 Water Quality Certification (401 WQC) for the Atlantic Coast Pipeline (ACP). These maps are provided:

- (1) In support of other comments on the proposed 401 WQC submitted on behalf of the DPMC.
- (2) To demonstrate the extent of Dominion Energy's failure to provide detailed site-specific plans for the ACP project.

The 25 maps provided cover the approximately 100-mile section of the proposed ACP extending from the Virginia and West Virginia border (near ACP milepost 84) to the James River (near milepost 184). Four Virginia counties are included, Highland, Bath, Augusta, and Nelson, which comprise the mountain and karst region of Virginia that would be crossed by the ACP.

The 25 maps show the sections of the pipeline construction corridor and access road system that meet the criteria for inclusion in Dominion's "Best in Class" (BIC) program. Dominion is developing the BIC program to address geohazards in the proposed pipeline corridor.¹ The BIC program will apply to all steep-slope construction areas defined as slopes with an inclination greater than 30% and greater than 100 feet in length. For these project sections, which represent the highest risk, most-problematic areas with respect to slope stabilization, erosion and runoff control, and protection of water resource integrity, site-specific plans and analysis have not been made available for review by the public or the State Water Control Board. Instead, as stated in the Stormwater Pollution Prevention Plan for the ACP, "site and hazard specific plans" and erosion and sediment control plans will be submitted at a future date.

We call attention to the following statement provided on DEQ's webpage, titled "[Pipeline Erosion and Sediment Control and Stormwater Management Plan Review](#)."

ACP has submitted the site specific ESC and SWM plans for the entire project. To view these plans, visit the [ACP website](#) then scroll down to the "Index" and select the document you are interested in viewing.

We find the following statement on the indicated ACP website.

¹ Information on the Best in Class program is provided in (1) the Construction, Operations, and Maintenance Plan (Draft) provided as Appendix G in the Final Environmental Impact Statement for the ACP project, prepared by the Federal Energy Regulatory Commission, July 2017, and (2) the Stormwater Pollution Prevention Plan for the Atlantic Coast Pipeline, prepared for Dominion Energy Transmission by Environmental Resources Management, Inc., July 2017.

As required specifically for ACP, ACP submitted detailed, project-specific Plans (ESC / SWPPP) for all land disturbance related to pipeline construction, including access roads, construction lay-down areas and other aboveground facilities in Virginia.

Our examination of the material posted on the ACP website indicates that both the DEQ and ACP website statements are incorrect. Detailed site-specific plan are not provided.

When we examine the provided documents, we find low-resolution alignment sheets with minimal information concerning erosion and sediment control or stormwater management measures. Structural controls are limited to perimeter silt barriers (silt fences and compost socks), water interceptor diversions, and culverts (“where needed”). Sediment traps, rock check dams, and stormwater retention basins are not indicated on the alignment sheets nor in narrative descriptions.

Much of the corridor occurs on extremely steep slopes and is designated for application of the BIC program for which site-specific details are not provided. Therefore site-specific details are not provided for the locations where site-specific details are the most important. We have summed the lengths of the BIC areas, based on the steep-slope criteria. The results of this summation are as follows:

MILES MEETING BEST IN CLASS STEEP SLOPE CRITERIA

	Pipeline Corridor	Access Roads
Highland County	7.6	11.2
Bath County	9.0	4.7
Augusta County	11.3	4.7
Nelson County	11.3	5.1
Total	39.1	25.7

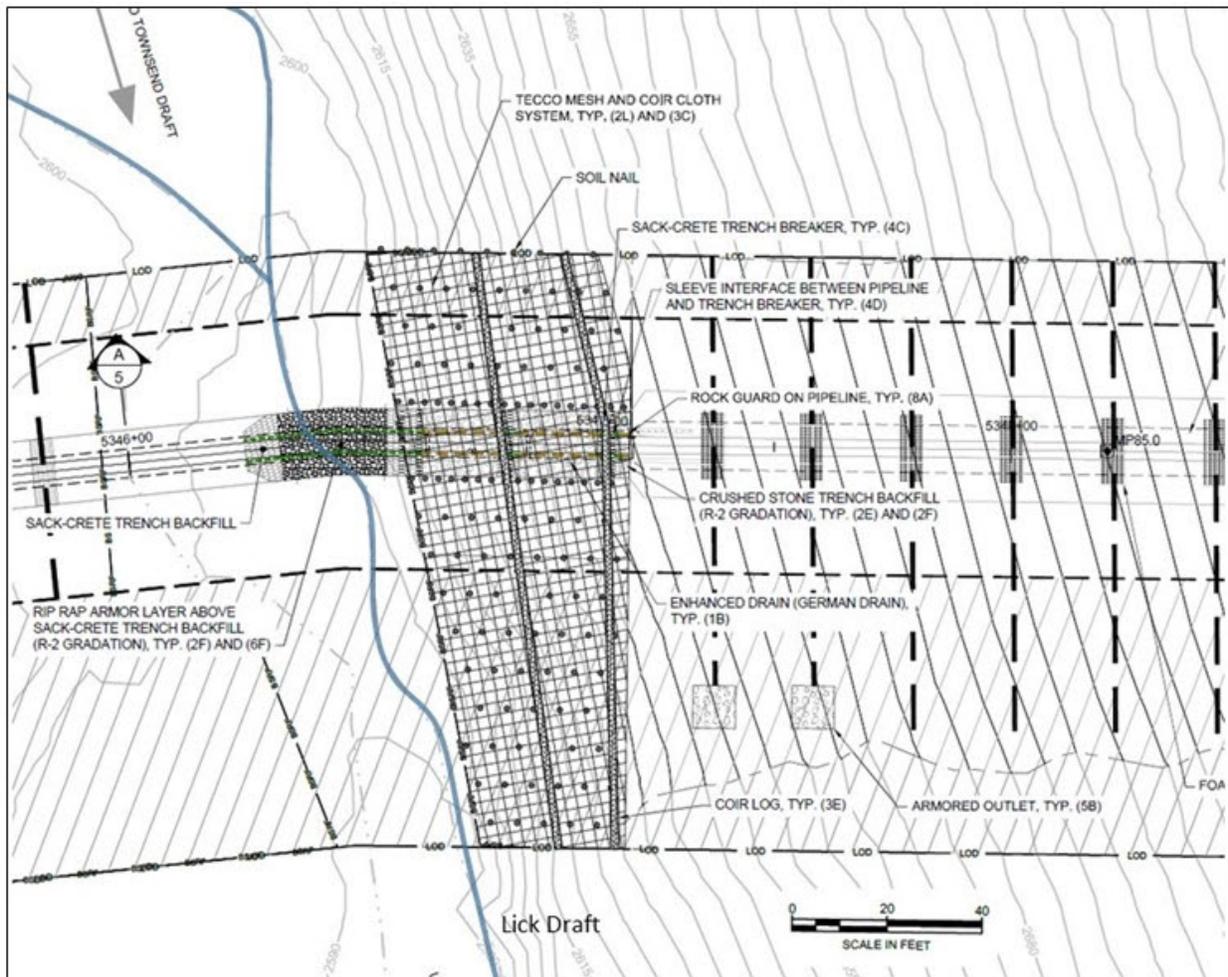
The DPMC and others have objected to the DEQ’s separation of erosion and sediment control, stormwater management, stream crossing, and slope stabilization plan review from the process of 401 WQC review. We contend that partitioning the review process cannot provide reasonable assurance that water quality standards will not be violated and designated water resource uses will be protected. We further contend that the detailed and site-specific erosion and sediment control and stormwater management plans that the DEQ describes as available to the public are not, in fact, available to the public.

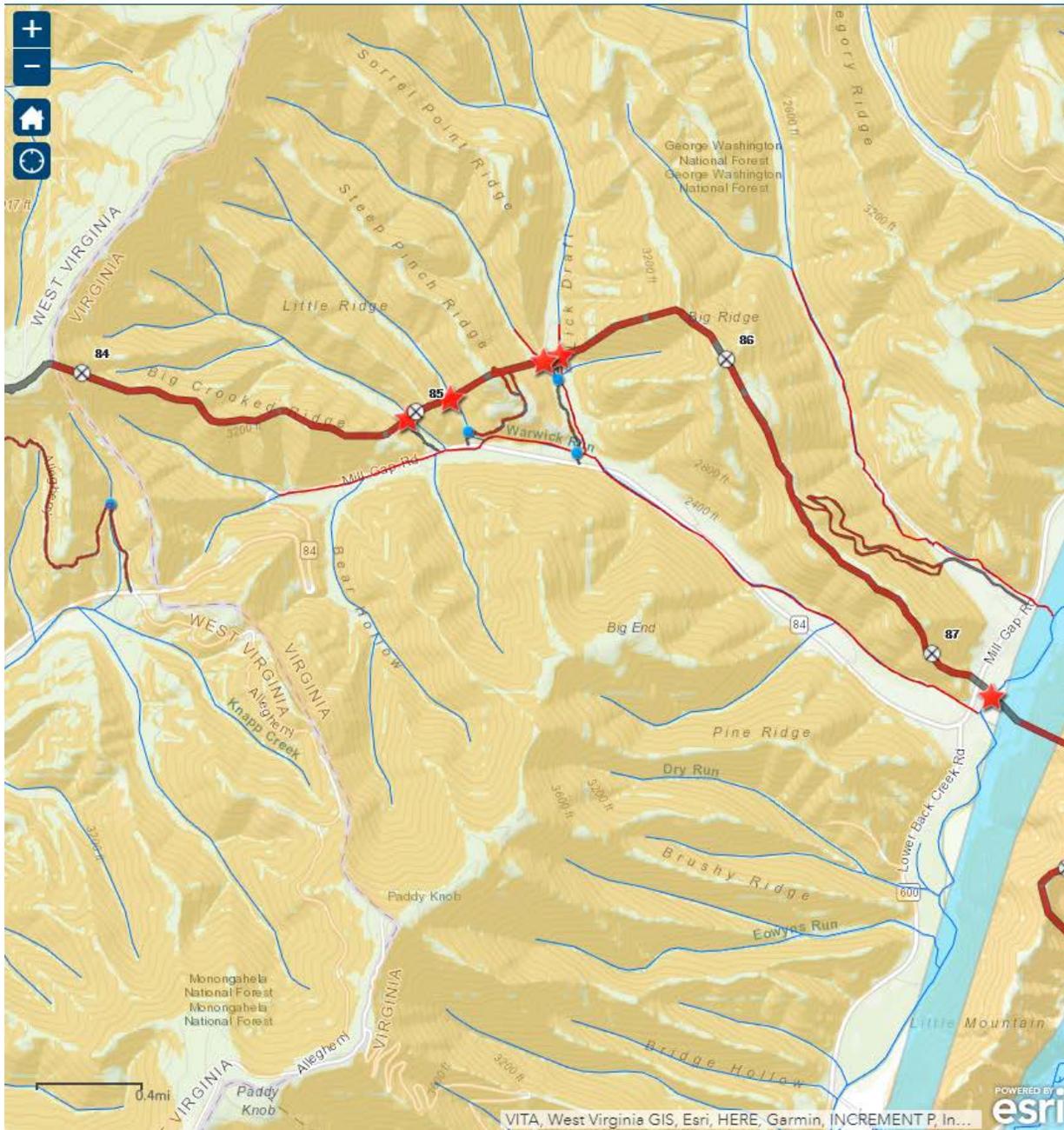
DEQ cannot conduct a meaningful review for 401 certification until the all of the potential water resource impacts of the proposed ACP are considered together and mitigation plans are provided that are site-specific and complete. Promises of future provision of detailed and site-specific plans cannot be the basis for an objective review.

Note 1: the attached maps were prepared using the DPMC Critical Zone Mapping System (CZMS), which can be accessed at www.pipelineupdate.org. The CZMS includes user-selectable map layers that display a number of the key factors that should be considered during 401 WQC review. Among these are layers that indicate slope steepness, soil erodibility, high-excavation areas, stream crossings, surficial

karst, and existing dye traces in karst systems. Map features can be selected to access information on layer sources and development.

Note 2: Site-specific details and high-resolution design drawings for BIC control measures have been provided for only two small sections of the ACP totaling 0.4 miles in length. One of these sections (0.1 miles) is located at Lick Draft in western Virginia between milepost 85 and 86. The control measures proposed for this location are described in the accompanying document, Revised Site Specific Geohazard Mitigation Design Drawings, submitted to FERC by Dominion, January 10, 2017. The description of the Virginia site begins on page 30. As described, a large section of foot slope will be covered with steel-wire mesh (see image below). Additional measures include subsurface drainage systems and concrete back filling of the trench blasted through the stream. Although steep slopes and difficult stream crossings are present at many locations along the ACP route, the extent to which Dominion will deploy the extreme measures indicated for the Lick Draft area is unknown. An opportunity for DEQ and public review of these and other site-specific details of BIC implementation should be provided before proceeding with the 401 WQC review.





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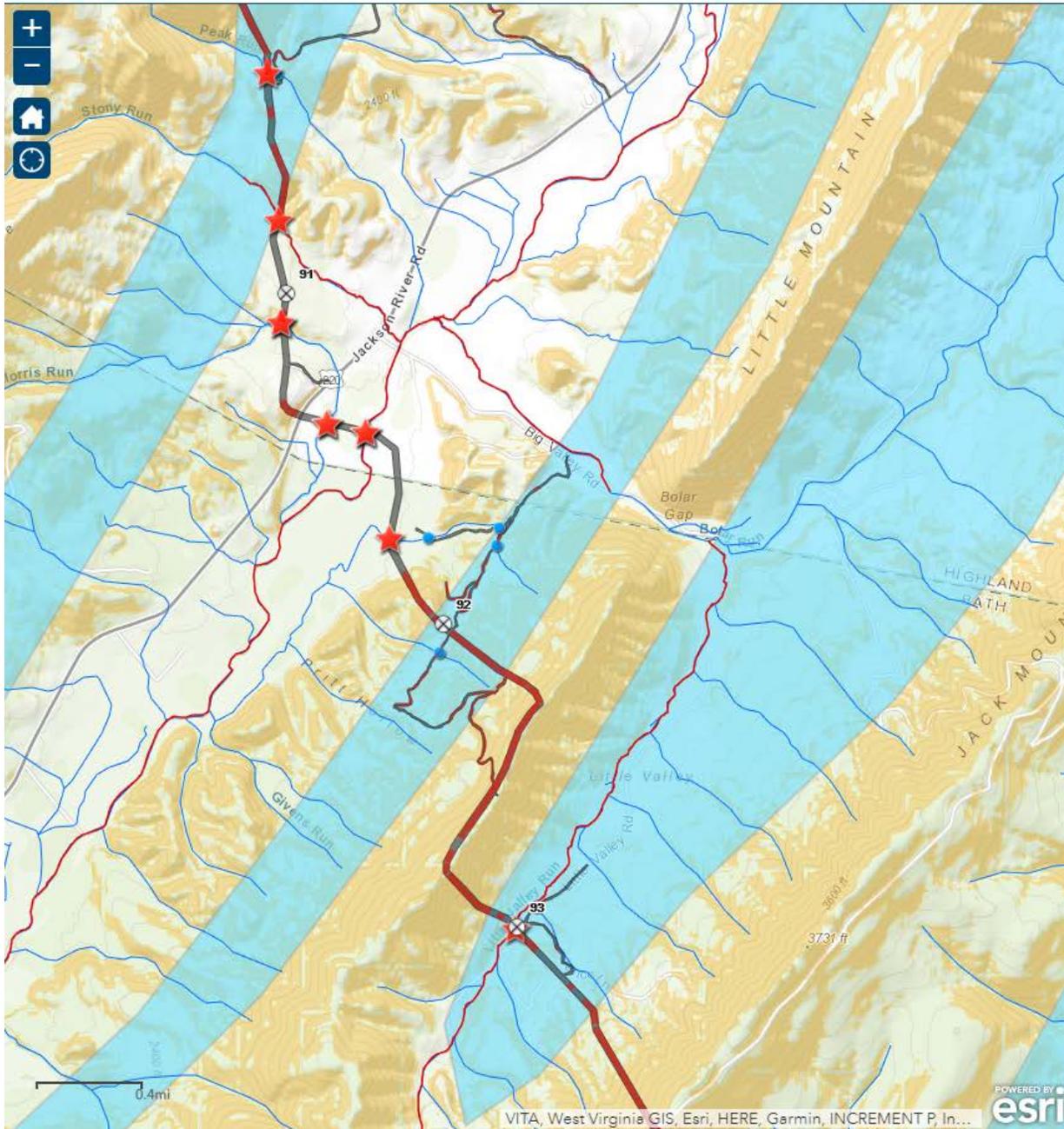
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- Access Road Slopes Greater Than 30% and 100 Feet
- ROW Slopes Greater Than 30% and 100 Feet
- In-Stream Blasting
- ACP Water Crossings
- Right-of-Way & Access Road Corridors
- Trout Streams At Risk From Construction
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 Surficial Karst
- Vicinity Slopes Exceeding 30%
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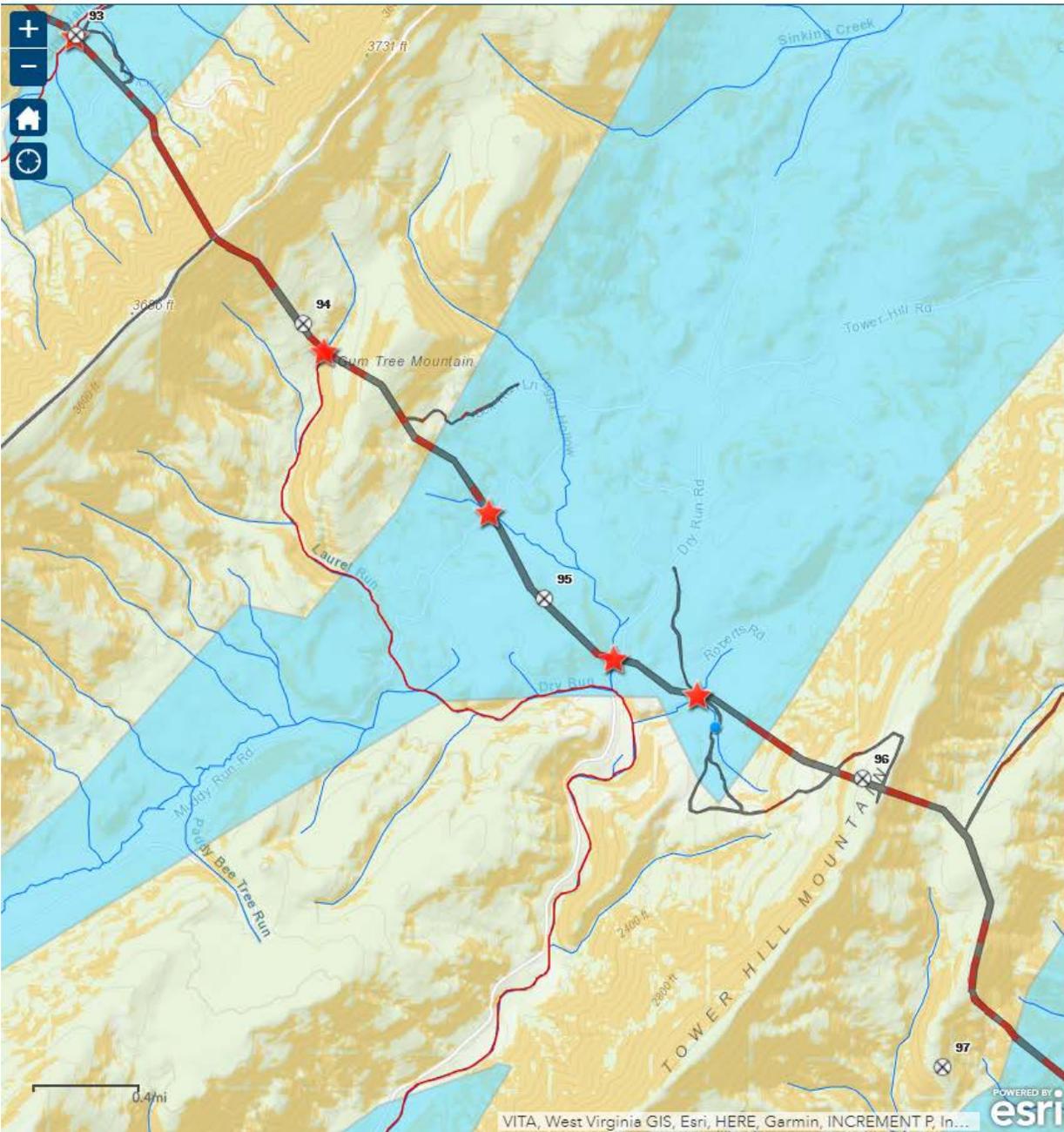
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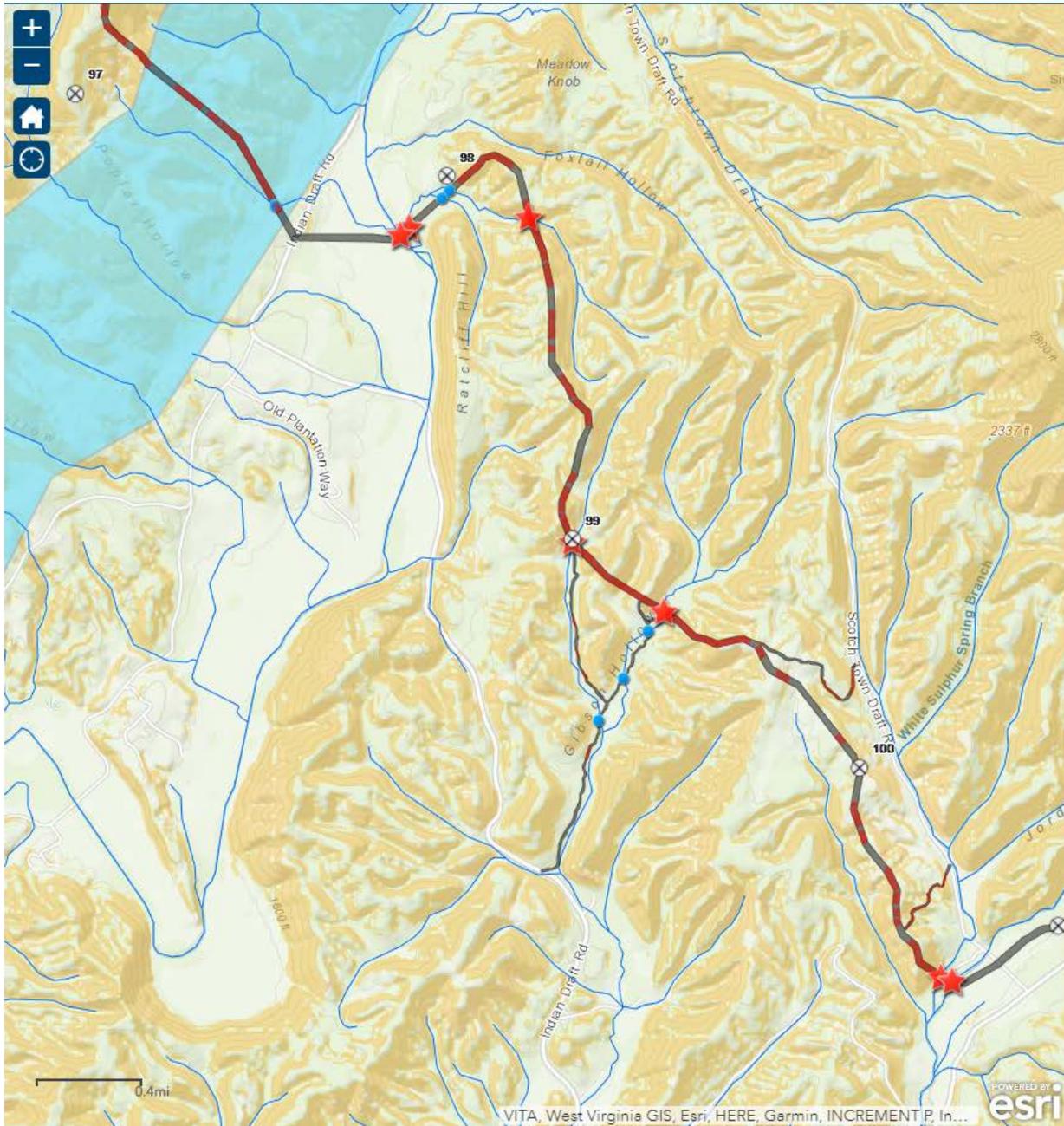
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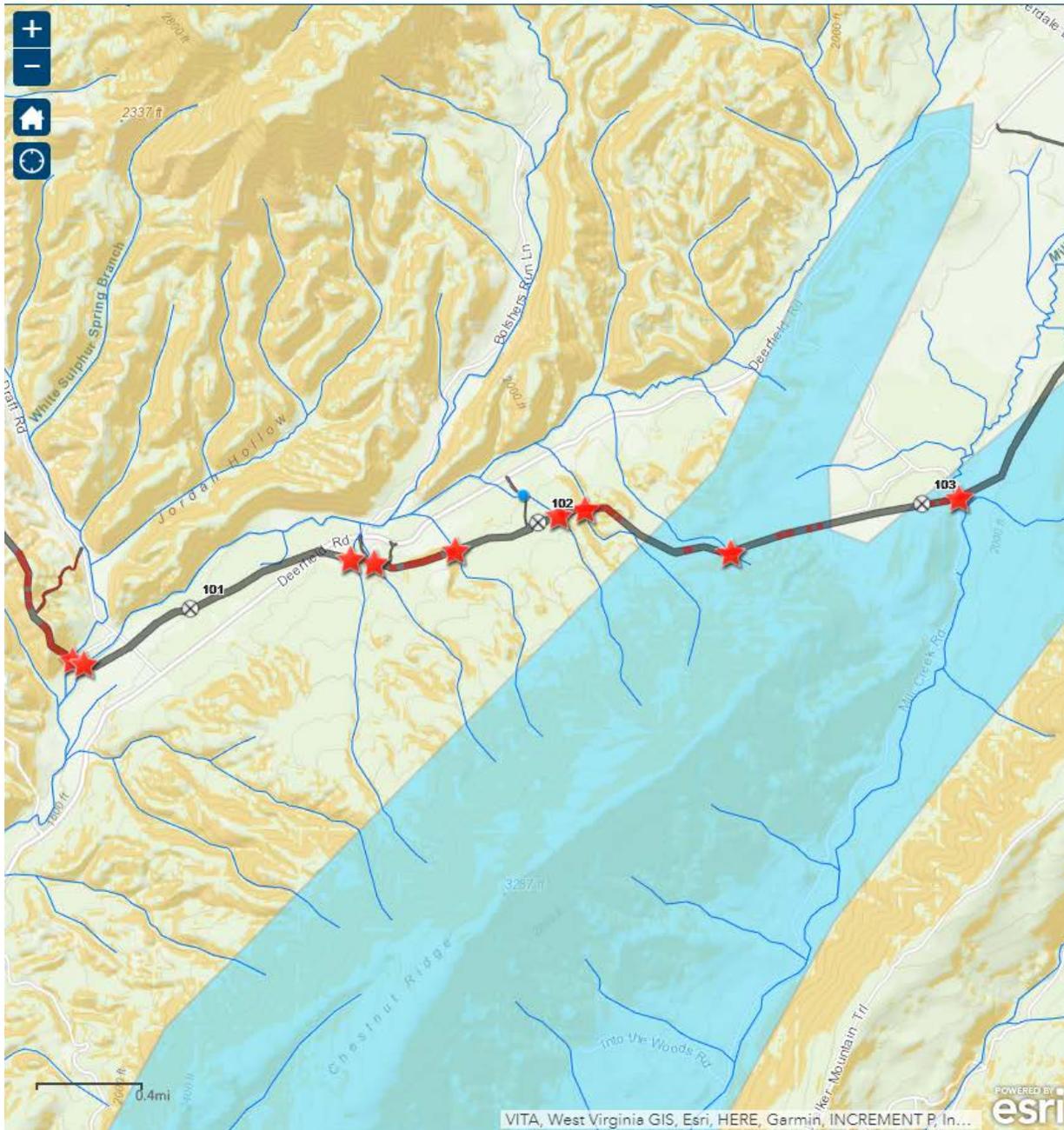
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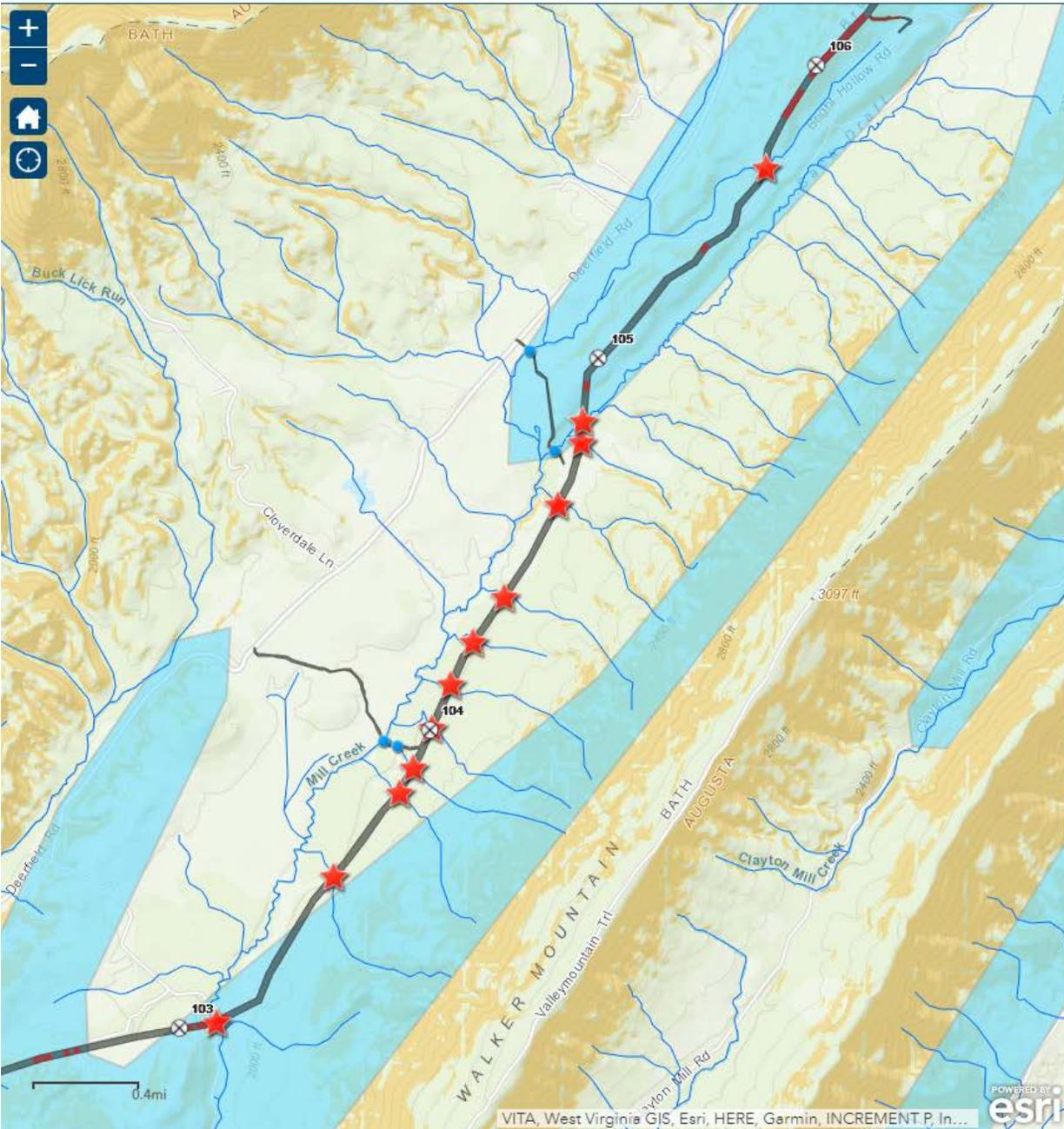
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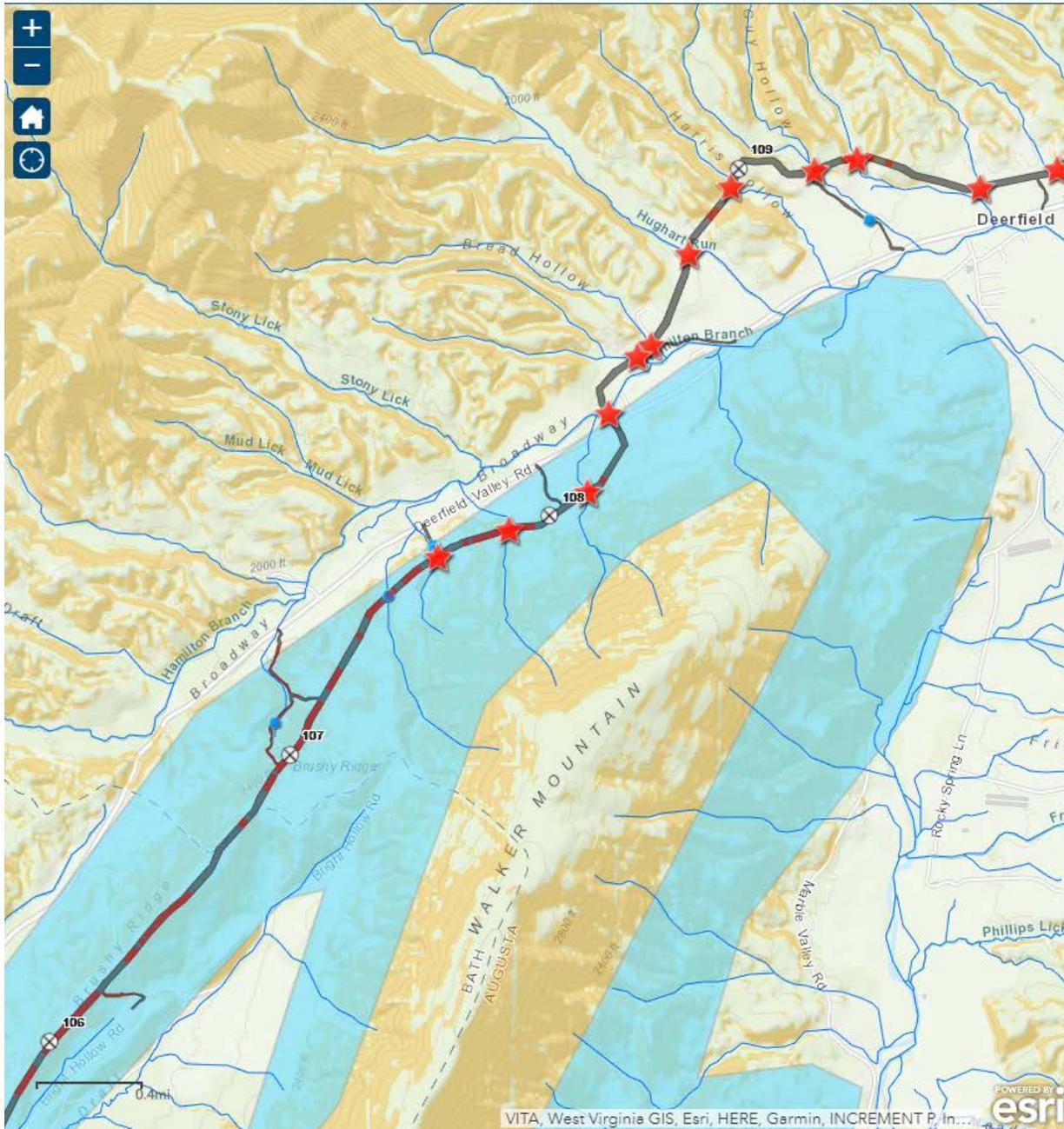
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Legend

ACP MilePosts



Access Road Slopes Greater Than 30% and 100 Feet



ROW Slopes Greater Than 30% and 100 Feet



In-Stream Blasting



ACP Water Crossings



Right-of-Way & Access Road Corridors



Trout Streams At Risk From Construction



NHD Rivers and Streams



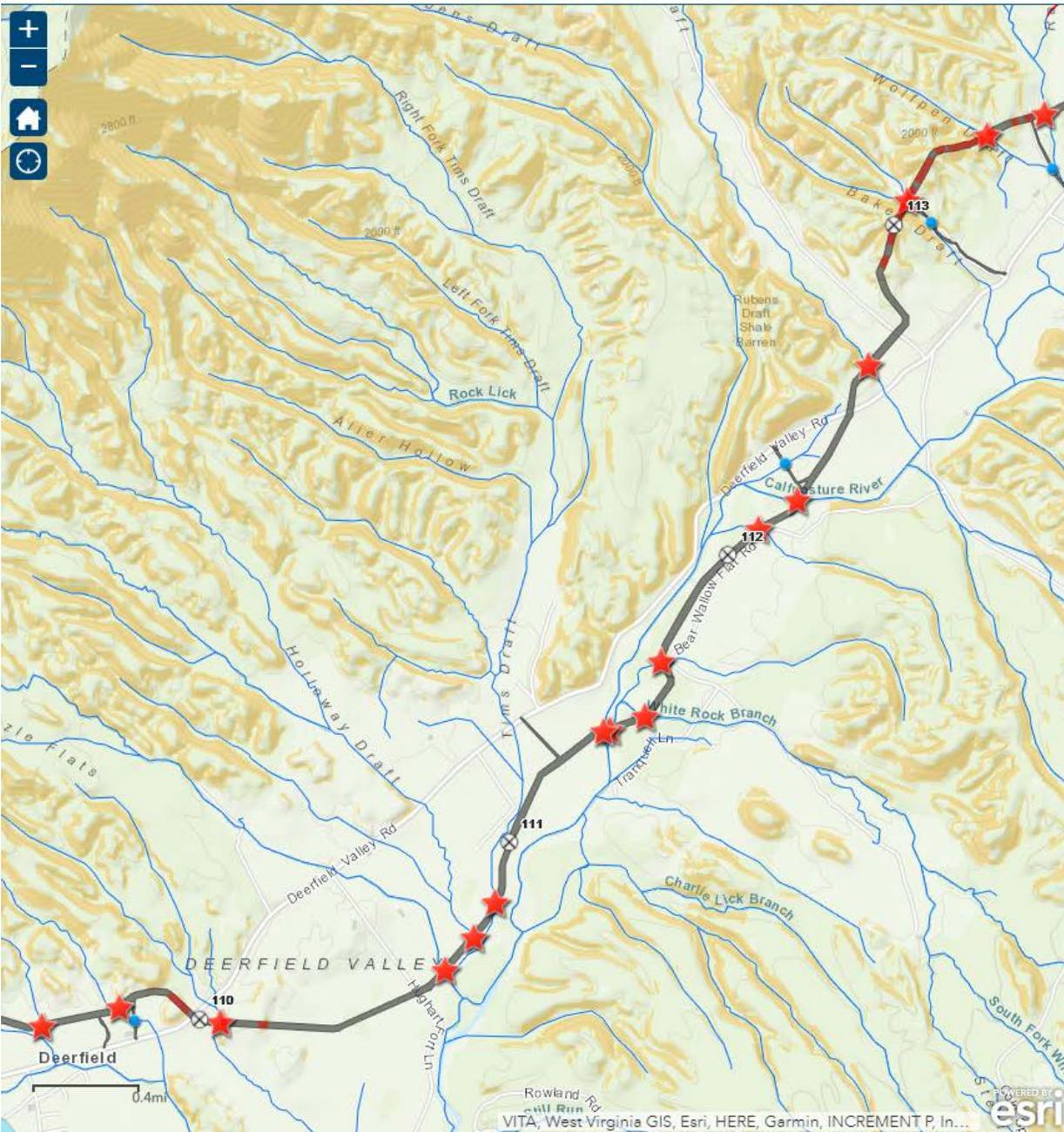
Surficial Karst



Vicinity Slopes Exceeding 30%

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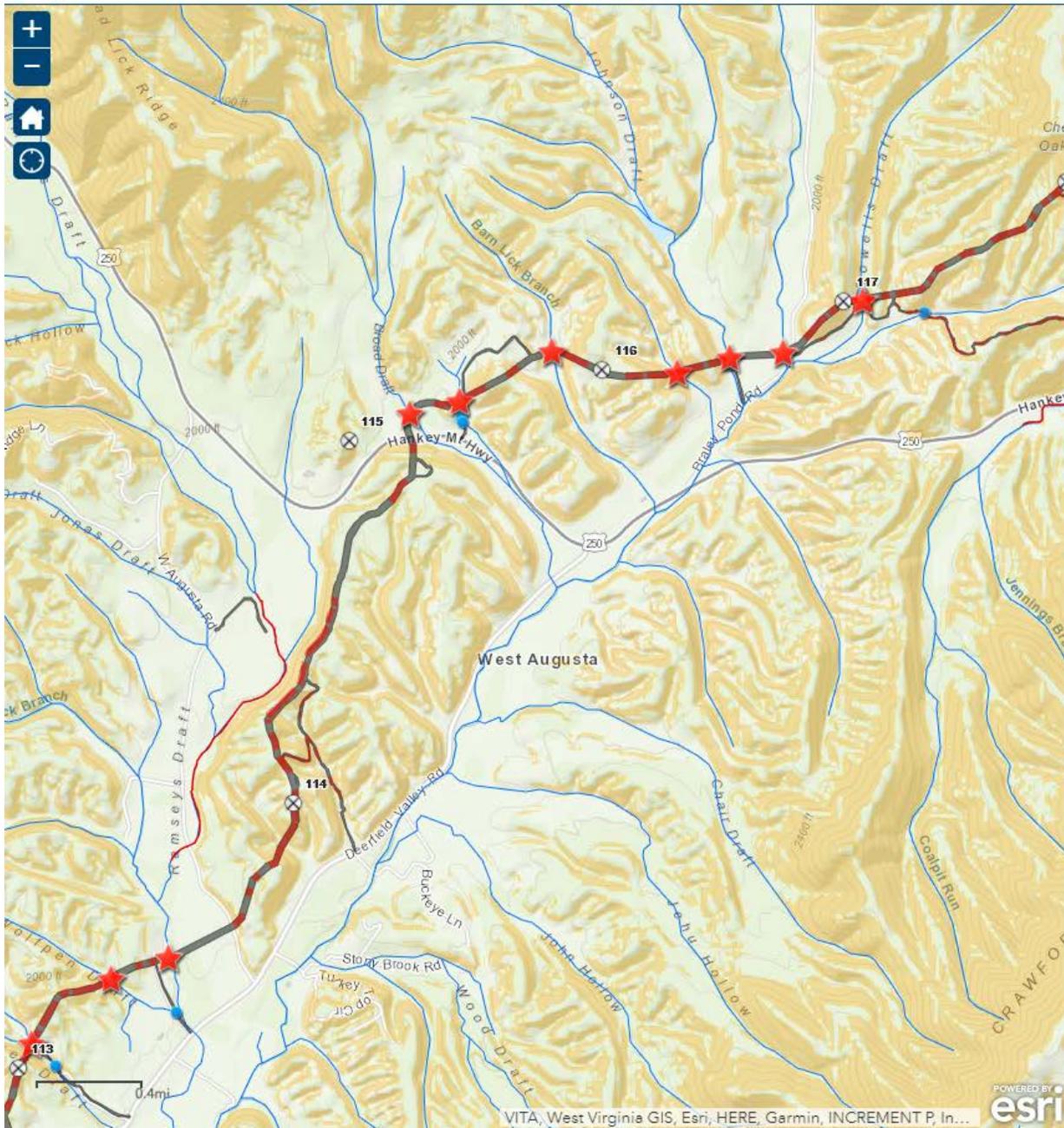




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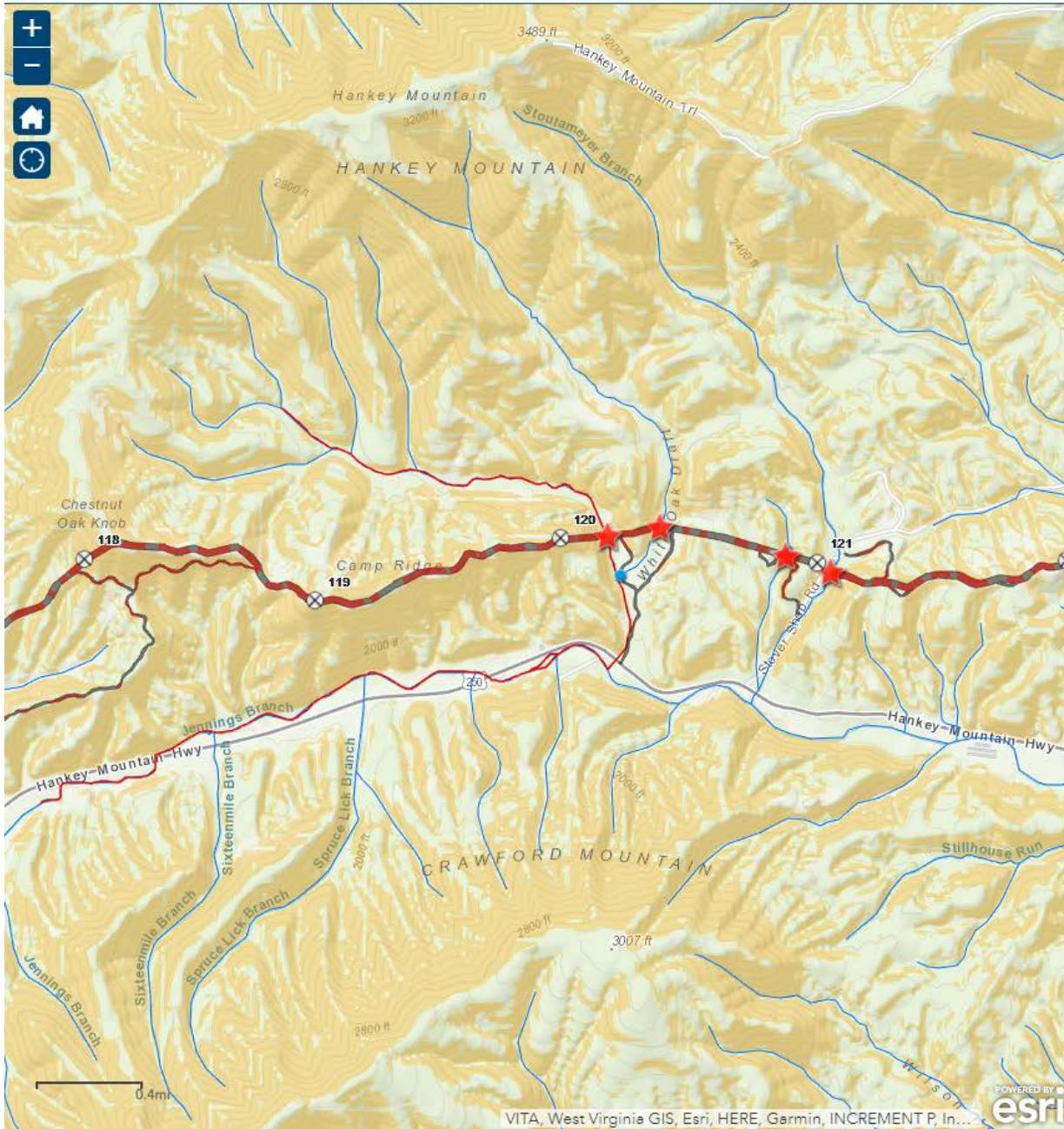
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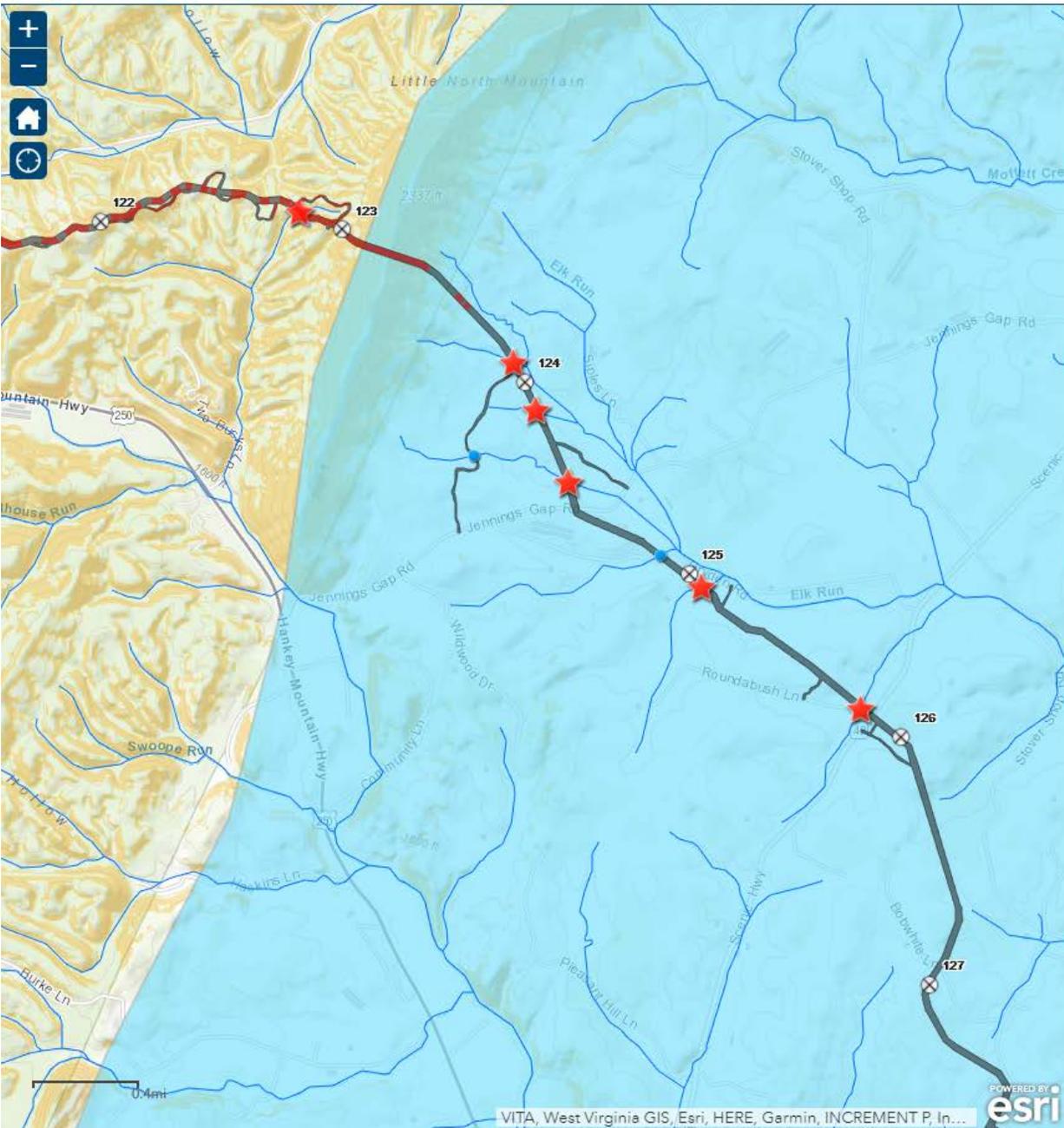
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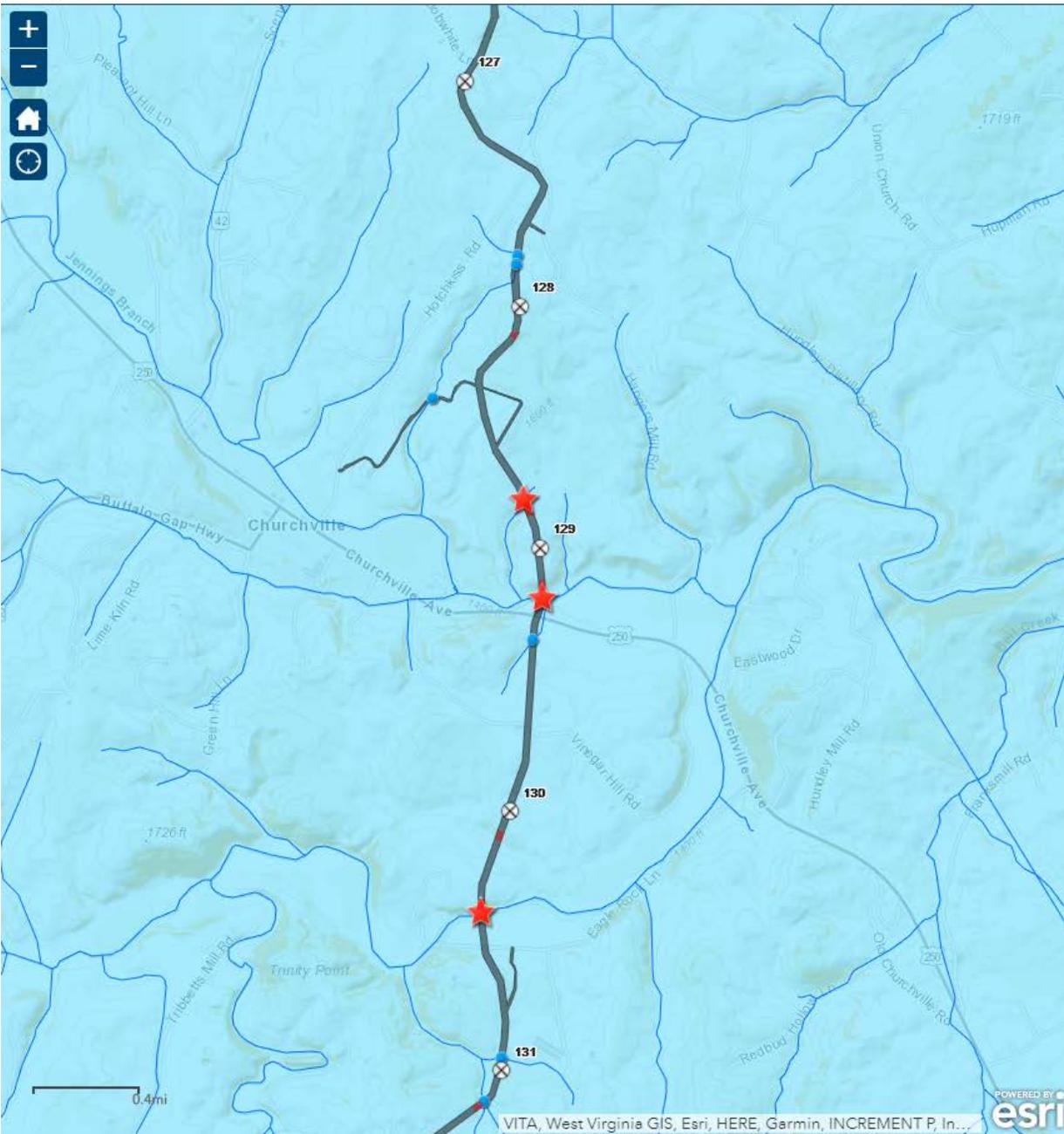
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 - Red shaded area
- ROW Slopes Greater Than 30% and 100 Feet
 - Red shaded area
- In-Stream Blasting
 - Red star
- ACP Water Crossings
 - Blue dot
- Right-of-Way & Access Road Corridors
 - Grey shaded area
- Trout Streams At Risk From Construction
 - Red line
- NHD Rivers and Streams
 - Blue line
- Surficial Karst
 - Light blue shaded area
- Vicinity Slopes Exceeding 30%
 - Orange shaded area

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Legend

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Legend

ACP MilePosts



Access Road Slopes Greater Than 30% and 100 Feet



ROW Slopes Greater Than 30% and 100 Feet



In-Stream Blasting



ACP Water Crossings



Right-of-Way & Access Road Corridors



Trout Streams At Risk From Construction



NHD Rivers and Streams



Surficial Karst



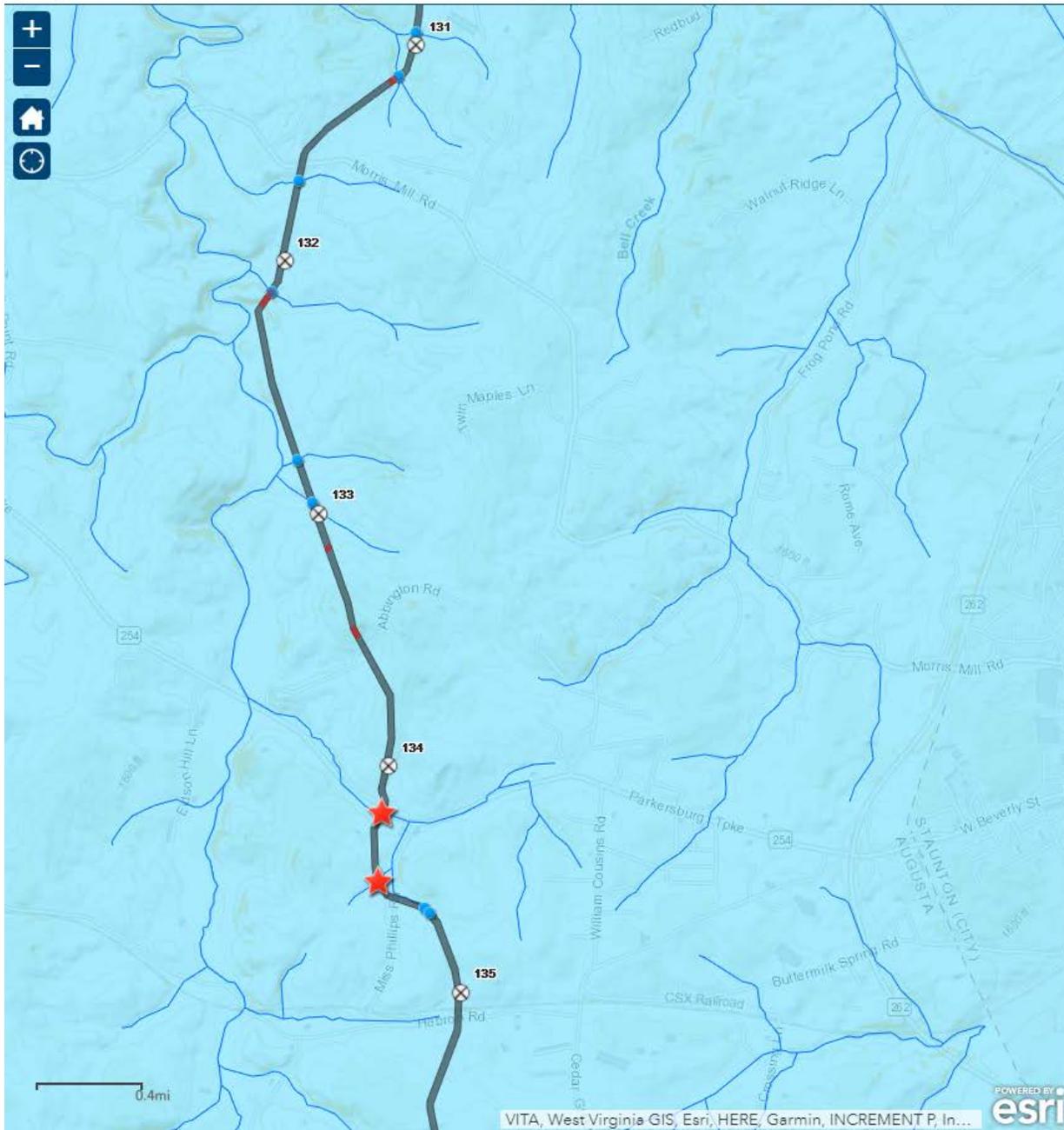
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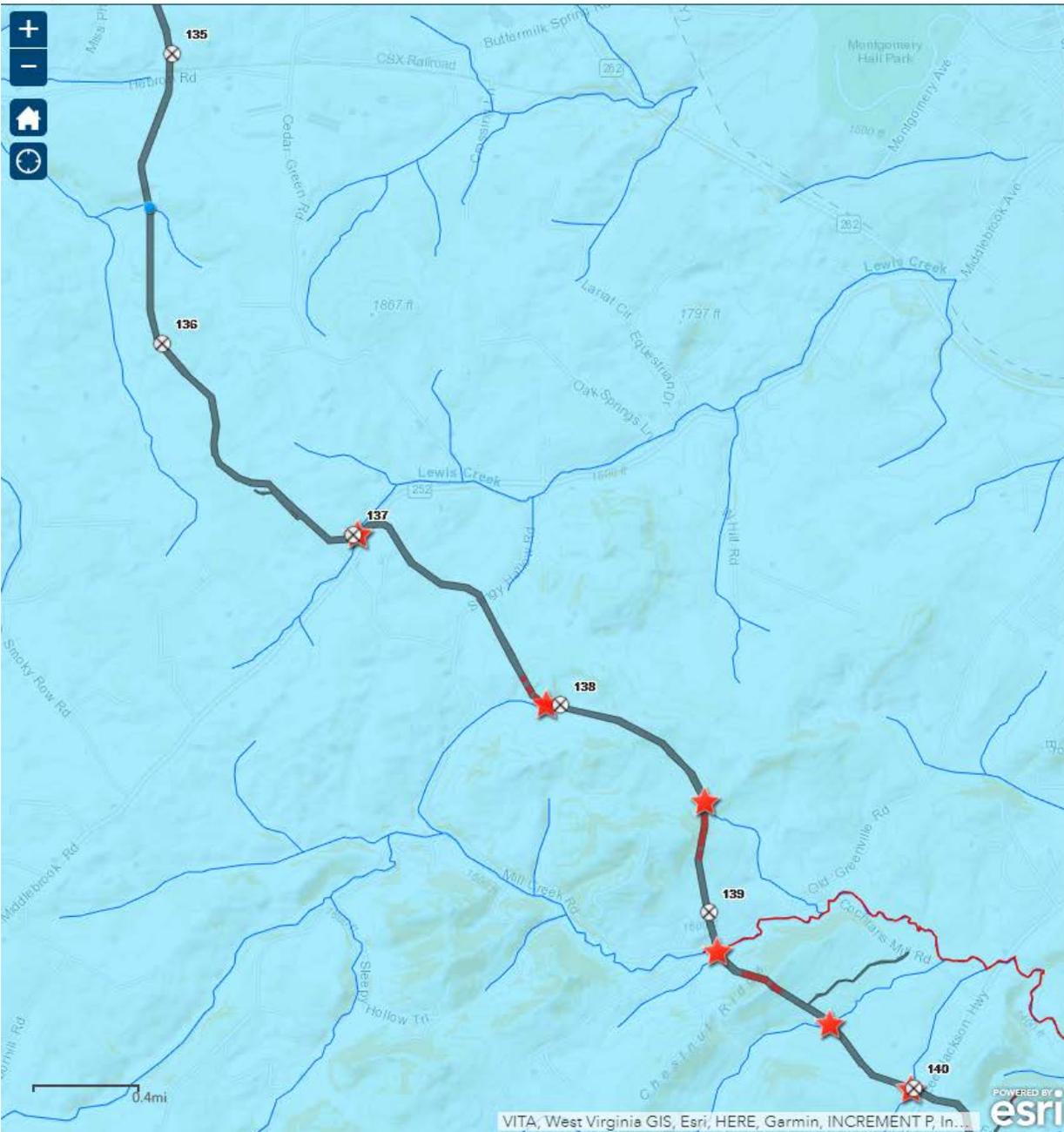
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Legend

ACP MilePosts



Access Road Slopes Greater Than 30% and 100 Feet



ROW Slopes Greater Than 30% and 100 Feet



In-Stream Blasting



ACP Water Crossings



Right-of-Way & Access Road Corridors



Trout Streams At Risk From Construction



NHD Rivers and Streams



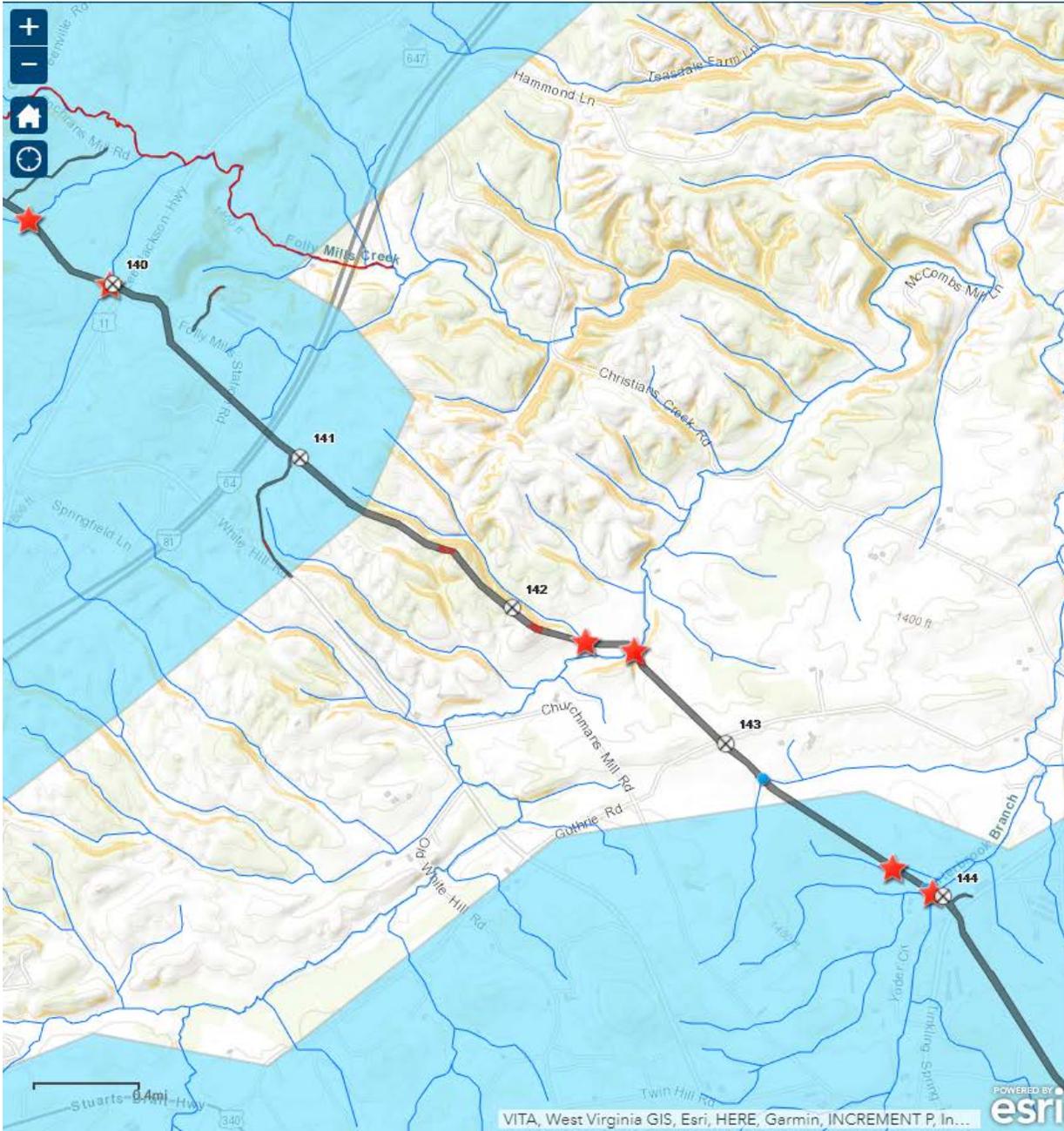
Surficial Karst



Vicinity Slopes Exceeding 30%

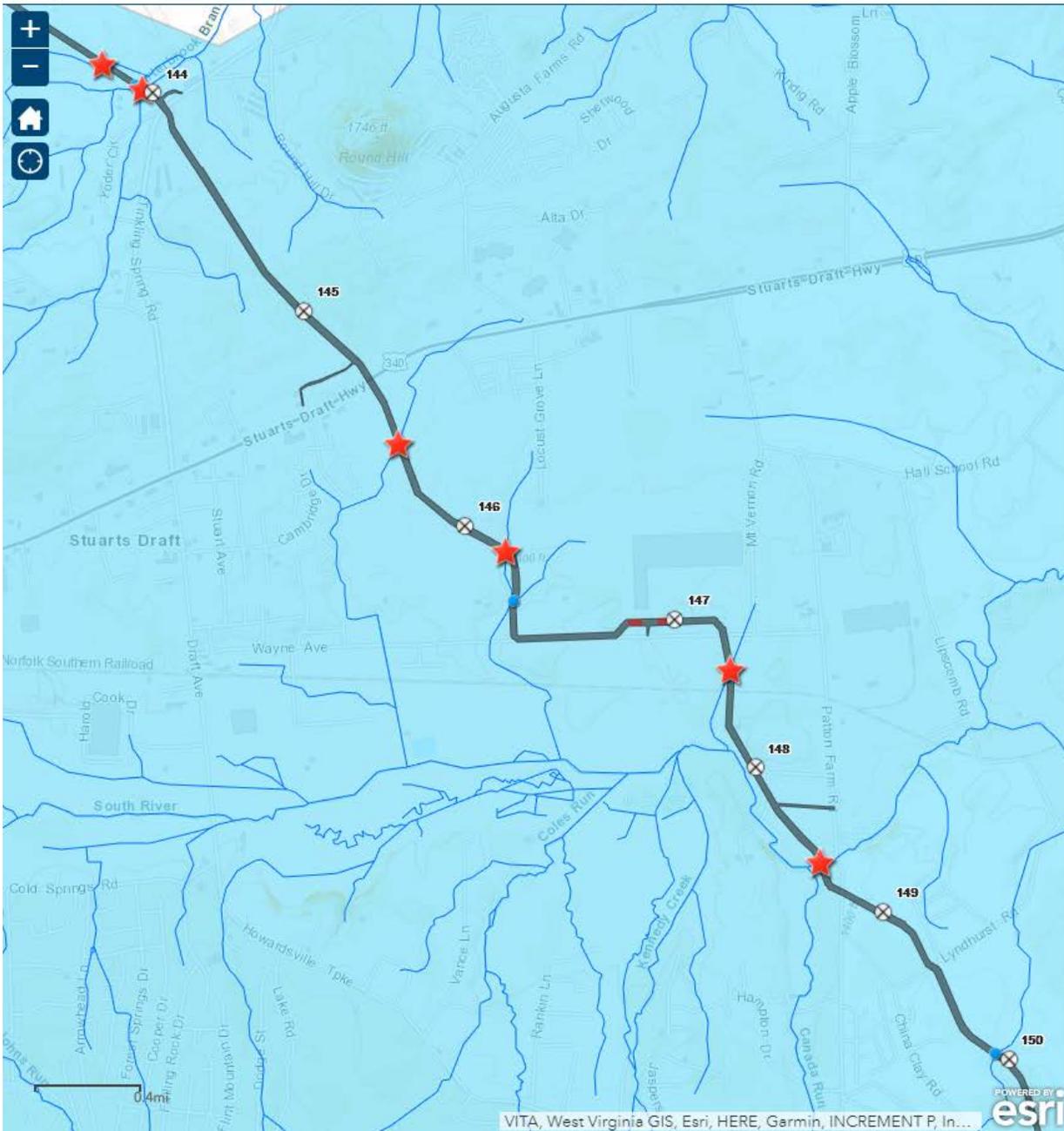
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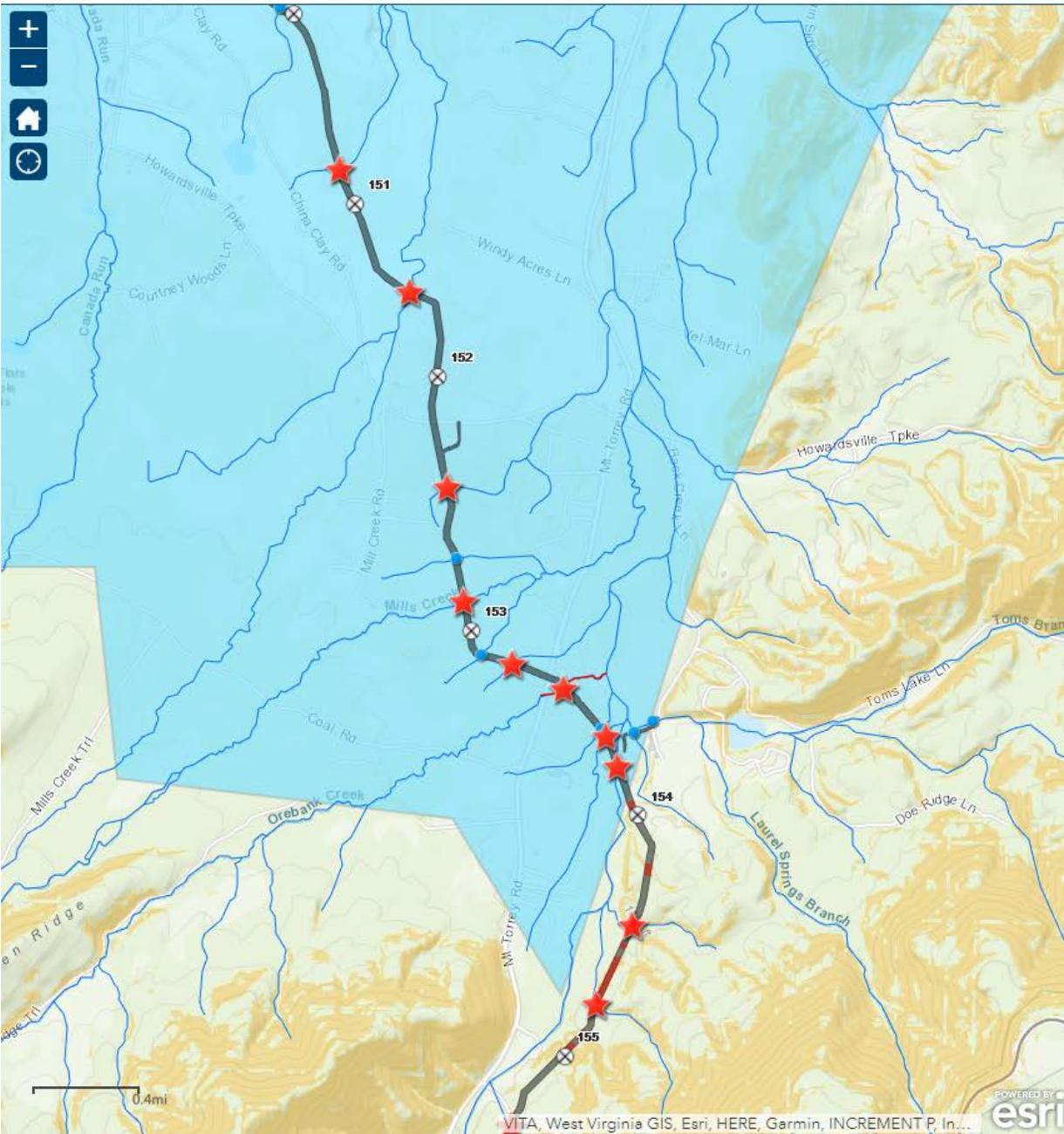
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Legend

ACP MilePosts



Access Road Slopes Greater Than 30% and 100 Feet



ROW Slopes Greater Than 30% and 100 Feet



In-Stream Blasting



ACP Water Crossings



Right-of-Way & Access Road Corridors



Trout Streams At Risk From Construction



NHD Rivers and Streams



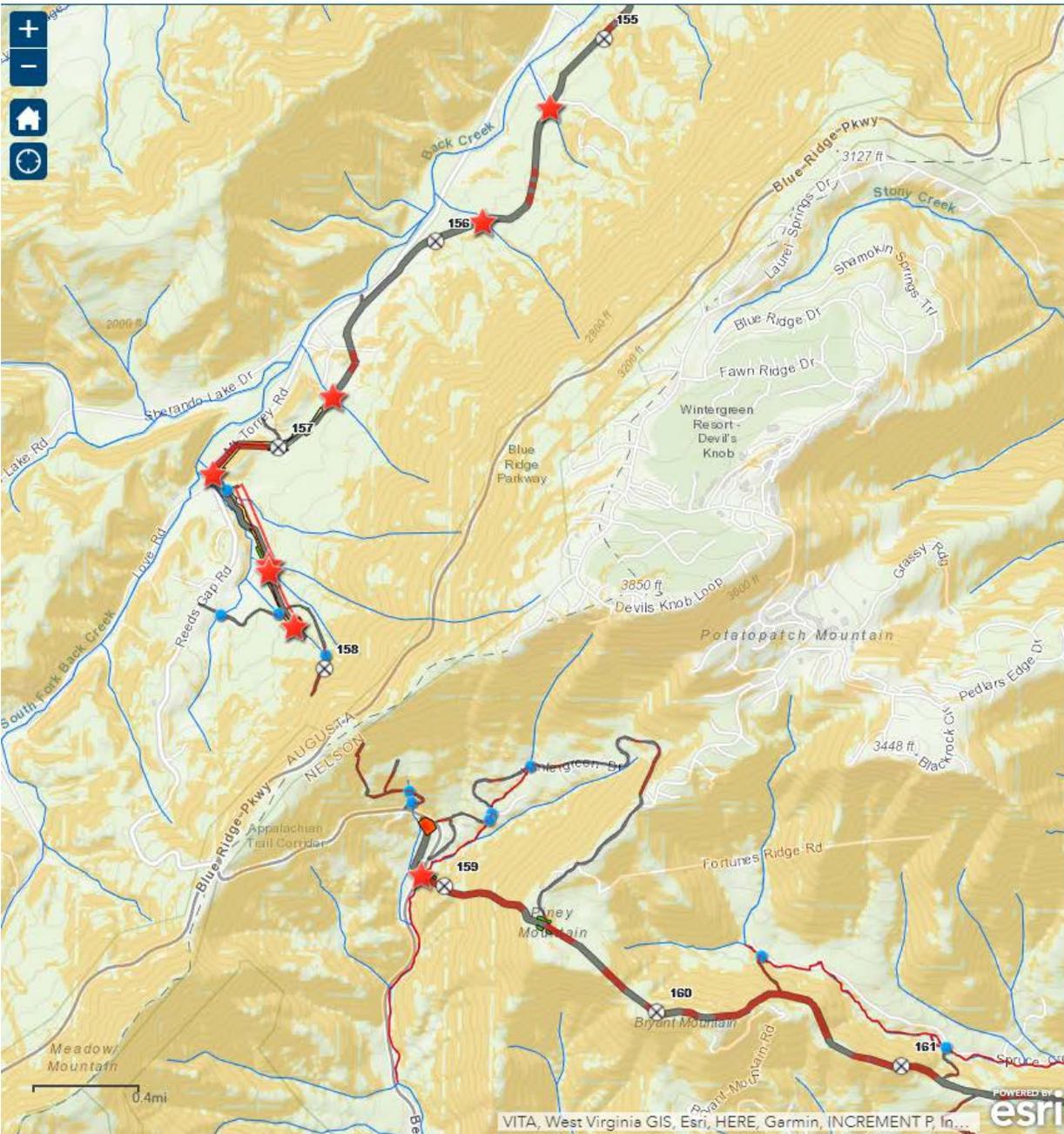
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Vicinity Slopes Exceeding 30%

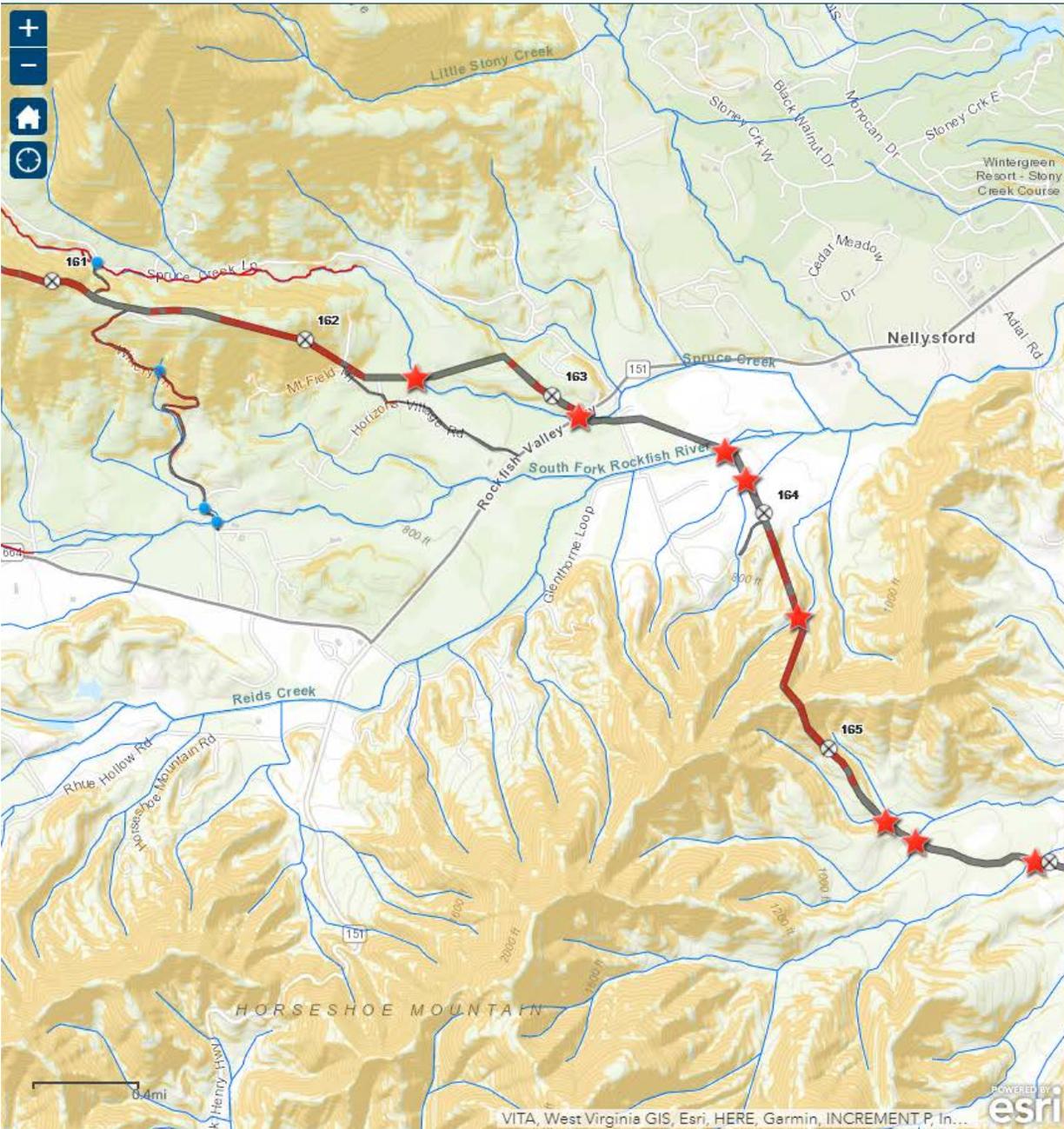
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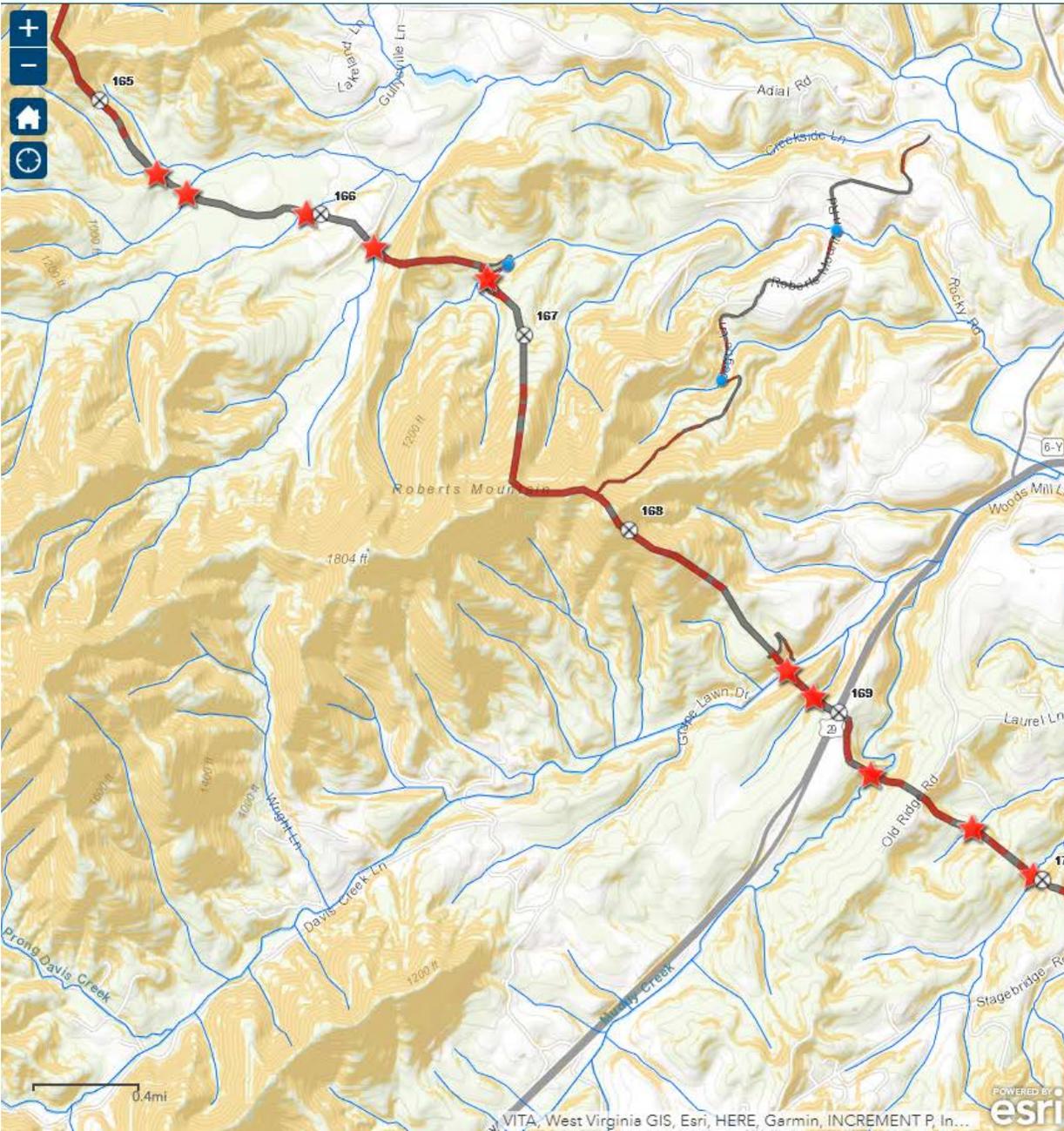
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-  Access Road Slopes Greater Than 30% and 100 Feet
-  ROW Slopes Greater Than 30% and 100 Feet
-  In-Stream Blasting
-  ACP Water Crossings
- HDD Pullback and Temp Workspace**
 -  Additional Workspace
 -  Proposed Temporary Right of Way
 -  Topsoil Segregation Area
 -  Area of No Disturbance?
 -  Designated HDD Entrance Workspace
 -  Designated HDD Exit Workspace
 -  HDD Pullback Area
- Right-of-Way & Access Road Corridors**
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- Trout Streams At Risk From Construction**
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- NHD Rivers and Streams**
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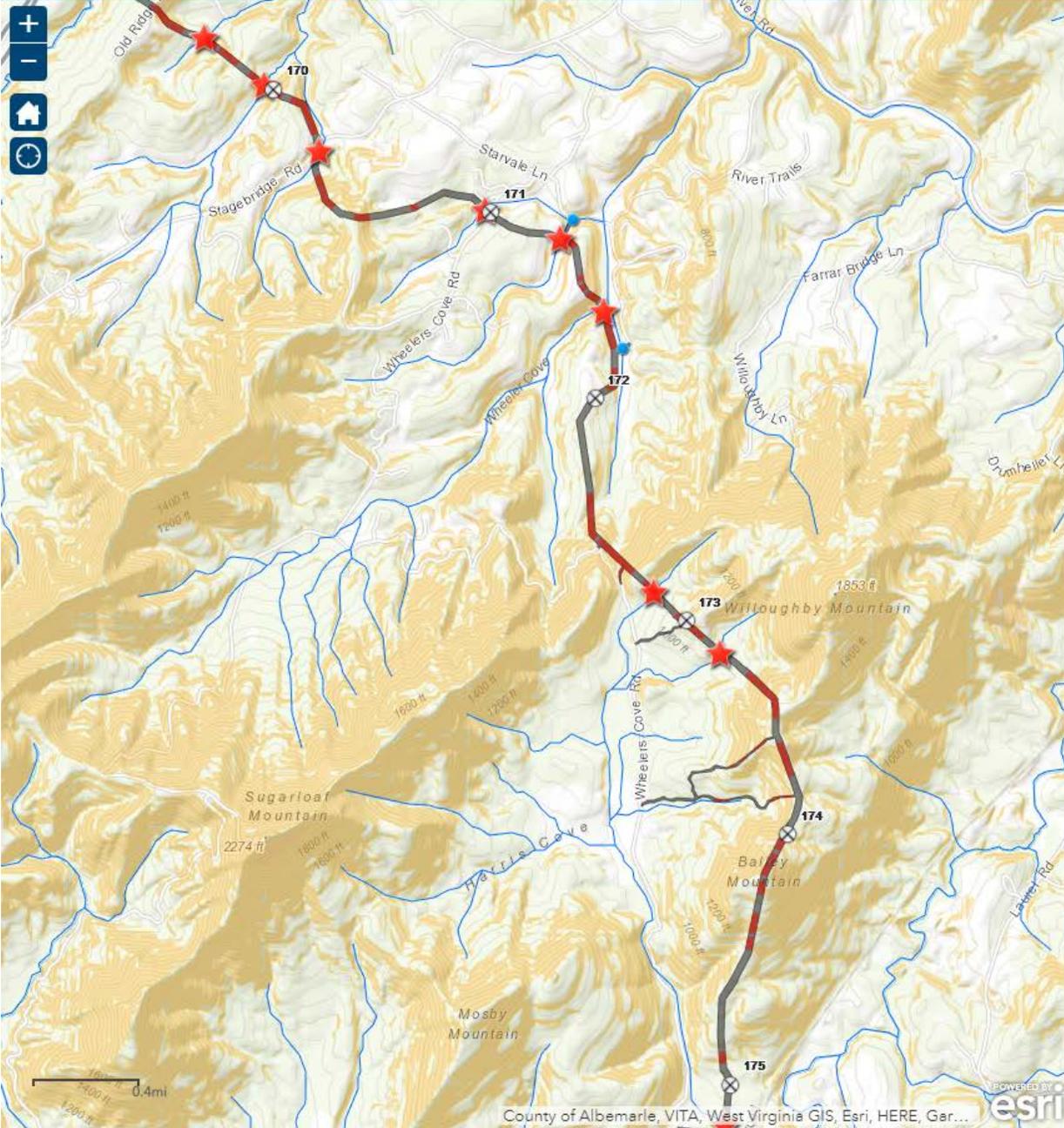
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ACP MilePosts



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ROW Slopes Greater Than 30% and 100 Feet



In-Stream Blasting



ACP Water Crossings



Right-of-Way & Access Road Corridors



Trout Streams At Risk From Construction



NHD Rivers and Streams



Surficial Karst

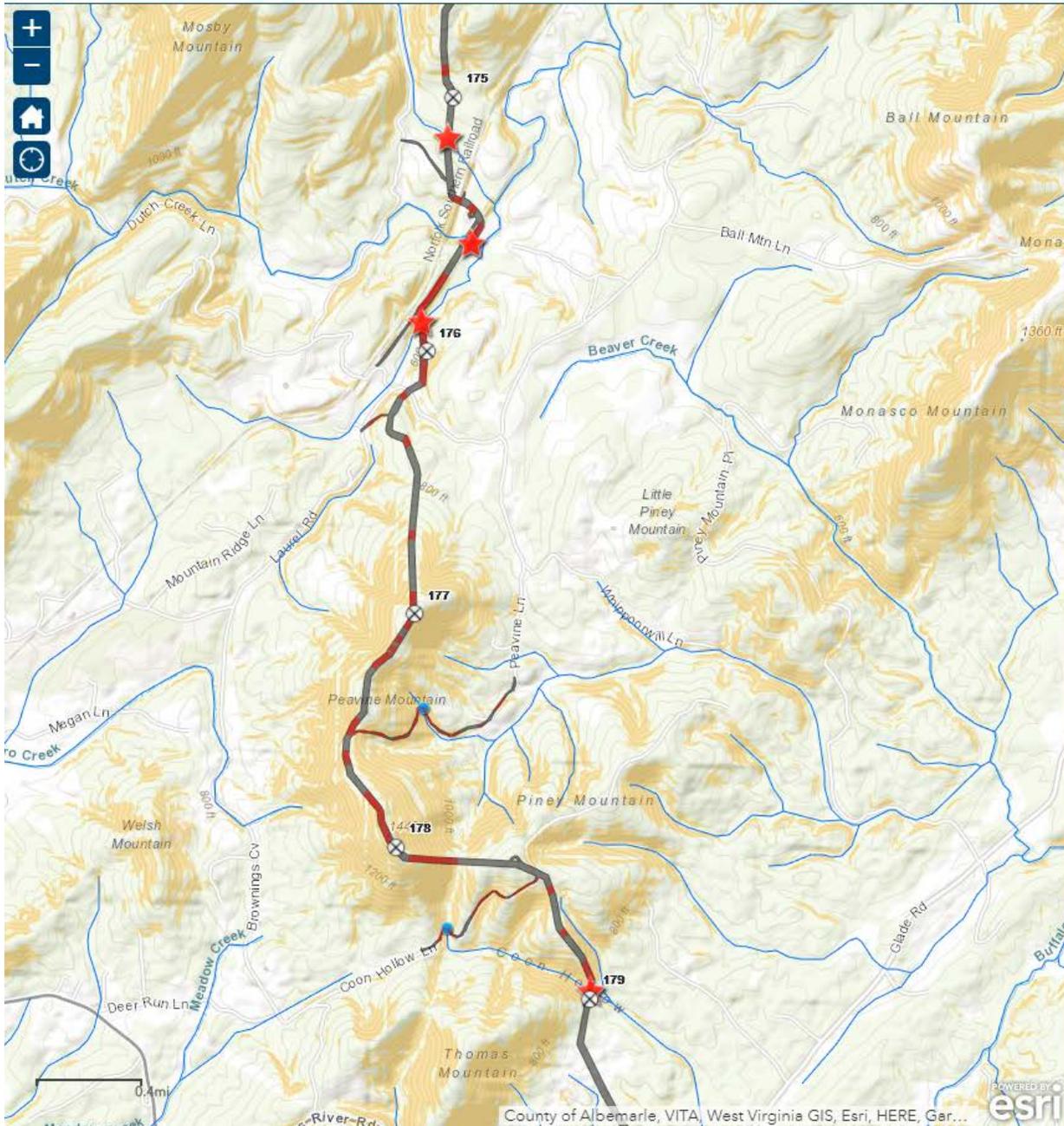


Surficial Karst

Vicinity Slopes Exceeding 30%

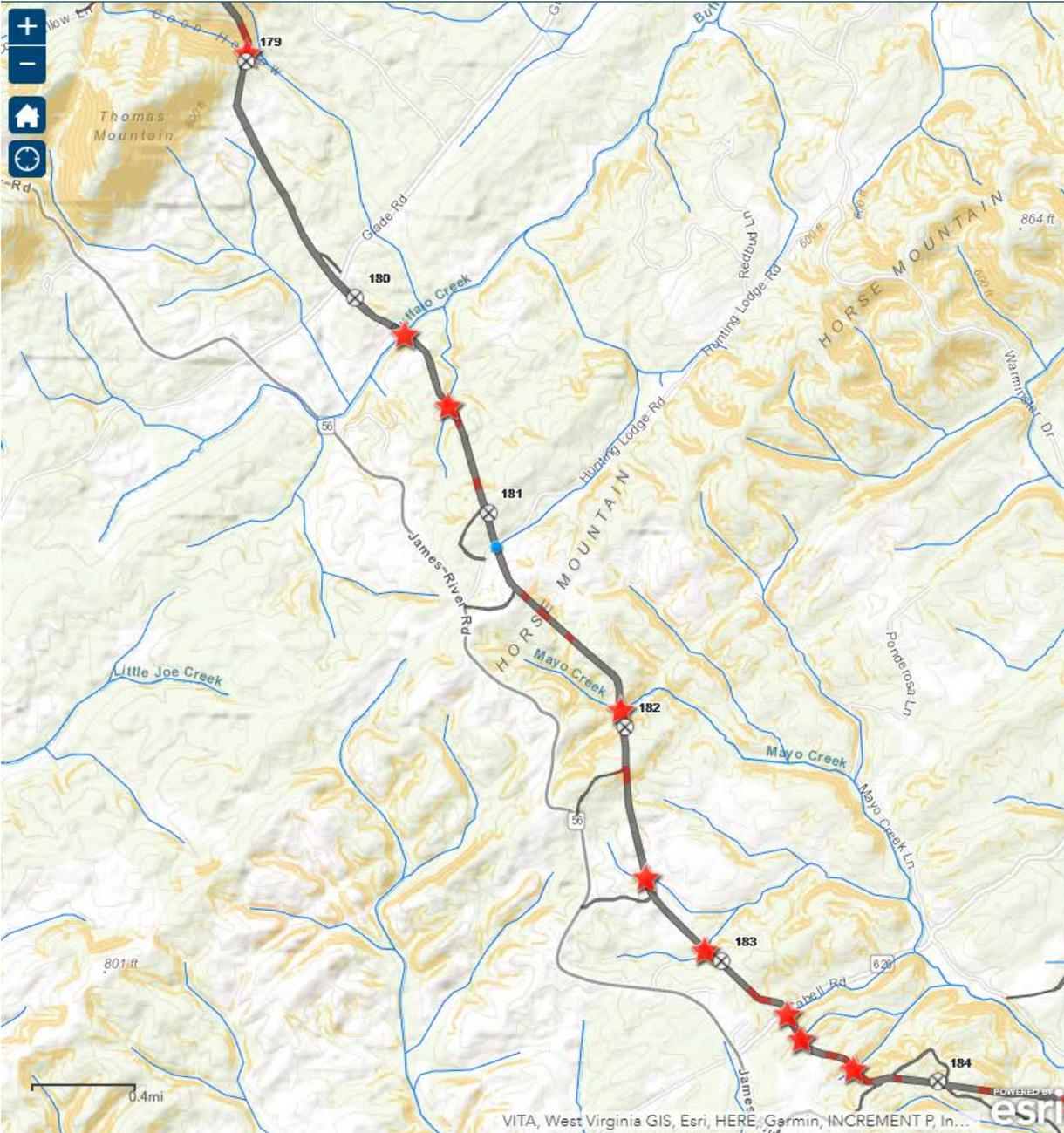
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ACP MilePosts



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ROW Slopes Greater Than 30% and 100 Feet



In-Stream Blasting



ACP Water Crossings



Right-of-Way & Access Road Corridors



Trout Streams At Risk From Construction



NHD Rivers and Streams



Surficial Karst



Surficial Karst

Vicinity Slopes Exceeding 30%

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