US Army Corps
of Engineers®
Little Rock District

JOINT PUBLIC NOTICE

CORPS OF ENGINEERS – STATE OF ARKANSAS

Application Number: MVK 2018-00275
Date: August 22, 2019
Comments Due: September 16, 2019

TO WHOM IT MAY CONCERN: **Comments are invited on the work described below. Please see the Public Involvement section for details on submitting comments**.

Point of Contact. If additional information is desired, please contact the project manager, Mr. Johnny McLean, telephone number: (501) 340-1382, mailing address: Little Rock District Corps of Engineers, Regulatory Division, PO Box 867, Little Rock, Arkansas 72203 0867, email address: Johnny.L.McLean@usace.army.mil

Project Information. Pursuant to Section 404 of the Clean Water Act (33 U.S. Code 1344), notice is hereby given that

Arkansas Department of Transportation (ArDOT)
PO Box 2261
Little Rock, Arkansas 72203-2261

has requested authorization for the placement of dredged and fill material in waters of the United States associated with construction of two lanes of a future four lane divided roadway connecting Highway 70 East to Highway 7 North. This permit request will evaluate the impacts of the four-lane highway. The project would be constructed entirely on new location. It is commonly referred to as a segment of the Hot Springs Bypass and begins just outside the city limits on the East side of Hot Springs at the intersection of U.S. Highway 70 and East Grand Avenue, and extends northward for 5.5 miles to where it terminates at the junction of State Highways 5 and 7, near the Community of Fountain Lake. More specifically it is located in section 6, T. 3 S., R. 18 W., and in sections 7, 18, 19, 30 and 31, T. 2 S., R. 18 W., and in sections 12, 13, 25 and 36, T. 2 S., R. 19 W., Garland County, Arkansas.

ArDOT initiated the National Environmental Policy Act (NEPA) process for this project in 2003. The Environmental Assessment (EA) was completed and signed by the Federal Highway Administration (FHWA) in February 2005. A Location Public Hearing was held in April 2005, and a Finding of No Significant Impact (FONSI) for the location of the Selected Alternative was approved in June 2005. In 2006, a private well located 5.5 miles east of the Hot Springs National Park (HOSP) and approximately one mile from the proposed highway project was found to have thermal influences. The highway project was put on hold until a study by the U.S. Geological Survey (USGS) could identify the wells that would be impacted and evaluate the degree of hydraulic connectivity between the thermal water in the wells and the hot springs in HOSP. A total of 10 springs that would be directly impacted by the highway project were identified. In 2011, the USGS determined that there were no hydraulic connections between the domestic wells in the project area and the HOSP springs. However, the studies also found that the northern portion of the proposed project was within the probable recharge area for the HOSP springs and the recharge area of the HOSP springs occurs on certain geological formations above

660 feet mean sea level (msl) elevations. The proposed highway project would impact approximately 189 acres (0.8%) of the estimated 23,838-acre recharge area. Of these 189 acres, 59.6 acres are above the 660' msl elevation. For mitigation, ArDOT agreed to purchase 60 acres of mitigation land above 660' msl in the recharge area and permanently protect it from development. Passage of a countywide tax for road improvement bonds in 2016 revitalized the project. The project was redesigned and a Design Public Hearing was held February 27, 2018 showing the preliminary design for the 2018 Selected Alternative. A Re-evaluation was completed for the project in April 2019. The Re-evaluation outlines the changes between the 2005 Selected Alternative and the 2018 Selected Alternative, provides updated purpose and need information, and presents revised information for the environmental impacts. A copy of the NEPA documents is available for viewing at the ArDOT Central Office in Little Rock.

The purpose of the project is to construct a four-lane highway which will function as a bypass, to provide safe and efficient movement of local and through traffic, and to alleviate congestion on Highway 7 by moving through traffic onto the proposed bypass. The project is not water dependent.

The project would eventually be a four-lane divided highway with fully controlled access meeting freeway Standards, with a design speed of 50 mph. Initially, two 12-foot-wide travel lanes (one in each direction) with 8-foot-wide shoulders would be built, with the final typical section being two 12-foot-wide travel lanes in each direction separated by a barrier wall. Right-of-way width would vary from 400 to 600 feet depending on construction cuts and fills.

All construction would be on new location and the project would cross seventeen streams and one herbaceous wetland. The stream crossings would include a total of 20 concrete pipe culverts, 5 concrete box culverts and one bridge. Stream channel relocation along with construction of the stream crossing structures will permanently impact a total of approximately 18,413 linear feet of stream, requiring approximately 10,661 cubic yards of fill material placed in 3.4 acres of waters of the United States. A total of 0.8 acres of wetlands would be permanently impacted for the construction of the Mill Creek interchange, requiring approximately 2,581 cubic yards of fill material.

The project is located in the Central Mountain Ranges and Central Hills, Ridges and Valley subdivisions of the Ouachita Mountains Ecoregion. The majority of the project lies within the Ouachita Headwaters (hydrologic unit code 08040101) watershed and the remainder lies in the Upper Saline River (hydrologic unit code 08040203) watershed. Lands adjacent to the project are primarily forested and sparsely populated with residential homes and a few businesses. Streams that would be impacted are a mix of ephemeral (6,575.3 linear feet), intermittent (2,698 linear feet) and perennial (9,139.7 linear feet). The named streams include Mill Creek and Middle Branch of Gulpha Creek. The primary impact to streams would be filling and relocating for embankment construction. The substrate for all of the streams is generally a mix of sand and gravel and the overall water quality for each stream is generally good.

ArDOT attempted to follow the natural topography with the roadway alignment to reduce the number and size of the cuts and fills, and reduce project costs and environmental impacts. The north/south design required a parallel design to several stream segments and complete avoidance

was not possible. Temporary and permanent erosion control measures would minimize adverse impacts to streams and adjacent wetlands. Additionally, the design speed for the proposed roadway was reduced from 65 mph to 50 mph. This changed both the vertical and horizontal alignments resulting in less cost and impacts to the environment. Control of access measures would be implemented to minimize impacts to the entire route and the HOSP groundwater recharge area, north of Mill Creek Road.

ArDOT proposes to mitigate for unavoidable stream channel impacts by offering 139,808.2 stream credits through permittee-responsible mitigation at the Lockett Creek Mitigation Area and the Blowout Mountain Mitigation Area. The Lockett Creek Mitigation Area is a 232-acre site located in the Upper Saline River watershed near Hot Springs Village and the Blowout Mountain Mitigation Area is a 325-acre site located in the Ouachita Headwaters watershed near Mt. Ida. The wetland impacts would be mitigated with 6.9 wetland credits at ArDOT's Upper Saline River Mitigation Bank near Crows. Stream credit requirements were calculated utilizing the Little Rock District Stream Method and wetland credit requirements were calculated utilizing the 2002 Charleston Method with the Little Rock District Addendum. Copies of the stream impacts table, and stream and wetland credit worksheets are attached. The location and general plan for the proposed work are shown on the enclosed sheets 1 through 14 of 18.

The project would relocate 10 residential owners and 8 residential tenants impacting 2 minority households, 3 elderly households and 6 low income households. The project would relocate 2 businesses and 3 landlord businesses. The aesthetics of the area would be impacted due to cut and fills, vegetation clearing and elevated bridge structures on new location. The project would convert 326 acres of oak-hickory-pine forests to highway right-of-way.

Water Quality Certification. By copy of this public notice, the applicant is requesting water quality certification from the Arkansas Department of Environmental Quality (ADEQ) in accordance with Section 401(a)(1) of the Clean Water Act. Upon completion of the comment period and a public hearing, if held, a determination relative to water quality certification will be made. Evidence of this water quality certification or waiver of the right to certify must be submitted prior to the issuance of a Corps of Engineers permit.

Cultural Resources. There are 22 archeological sites, and one National Register of Historic Places (NRHP) eligible property located within the proposed right-of-way. The proposed impacts to the NRHP property (3GA1079, Cluster Springs Complex) received an adverse effect determination under Section 106 of the National Historic Preservation Act. A Programmatic Agreement (PA) has been approved by the State Historic Preservation Office (SHPO) detailing the mitigation to be performed on the property. Four sites are recommended for Phase II testing with one site avoided by revising design plans. The remaining sites were determined not eligible for the NRHP.

ArDOT staff archeologists have reviewed topographic maps, the National Register of Historic Places, and other data on reported sites in the area. The FHWA has completed coordination with all associated Native American Nations and tribal governments. The District Engineer invites responses to this public notice from Federal, State, and local agencies; historical and

archeological societies; and other parties likely to have knowledge of or concerns with historic properties in the area.

Endangered Species. Six threatened and endangered species potentially occur within the project boundaries. They are the northern long-eared bat (Myotis septentrionalis), Arkansas fatmucket (Lampsilis powellii), Missouri bladderpod (Physaria filiformis), rabbitsfoot mussel (Quadrula cylindrica), pink mucket mussel (Lampsilis abrupta) and harperella (Ptilimnium nodosum). ARDOT determined that the project may affect but is not likely to adversely affect the northern long-eared bat, and the project would have no effect on the five other listed species. The U.S. Fish and Wildlife concurred with ArDOT's determination.

A copy of this notice is being furnished to the U.S. Fish and Wildlife Service and appropriate state agencies and constitutes a request to those agencies for information on whether any other listed or proposed to be listed endangered or threatened species may be present in the area which would be affected by the proposed activity.

Floodplain. The project would impact 457 linear feet of a Special Flood Hazard Area along an unnamed tributary to the South Fork of the Saline River. ArDOT determined that the proposed construction would not cause a significant reduction of floodwater storage or retention functions. Bridges and/or drainage structures have been sized sufficiently to minimize impacts on natural and beneficial floodplain values. ArDOT also determined that adjacent properties should not be impacted nor have a greater flood risk than existed before construction of the project and none of the encroachments would constitute a significant floodplain encroachment or a significant risk to property or life.

We are providing copies of this notice to appropriate floodplain officials in accordance with 44 CFR Part 60 (Floodplain Management Regulations Criteria for Land Management and Use) and Executive Order 11988 on Floodplain Management.

Section 404(b)(1) Guidelines. The evaluation of activities to be authorized under this permit which involves the discharge of dredged or fill material will include application of guidelines promulgated by the Administrator, Environmental Protection Agency, under authority of Section 404(b) of the Clean Water Act. These guidelines are contained in 40 Code of Federal CFR 230.

Public Involvement. Any interested party is invited to submit to the above-listed POC written comments or objections relative to the proposed work on or before **September 16, 2019**. Substantive comments, both favorable and unfavorable, will be accepted and made a part of the record and will receive full consideration in determining whether this work would be in the public interest. The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation,

shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Any person may request in writing within the comment period specified in this notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing. The District Engineer will determine if the issues raised are substantial and whether a hearing is needed for making a decision.

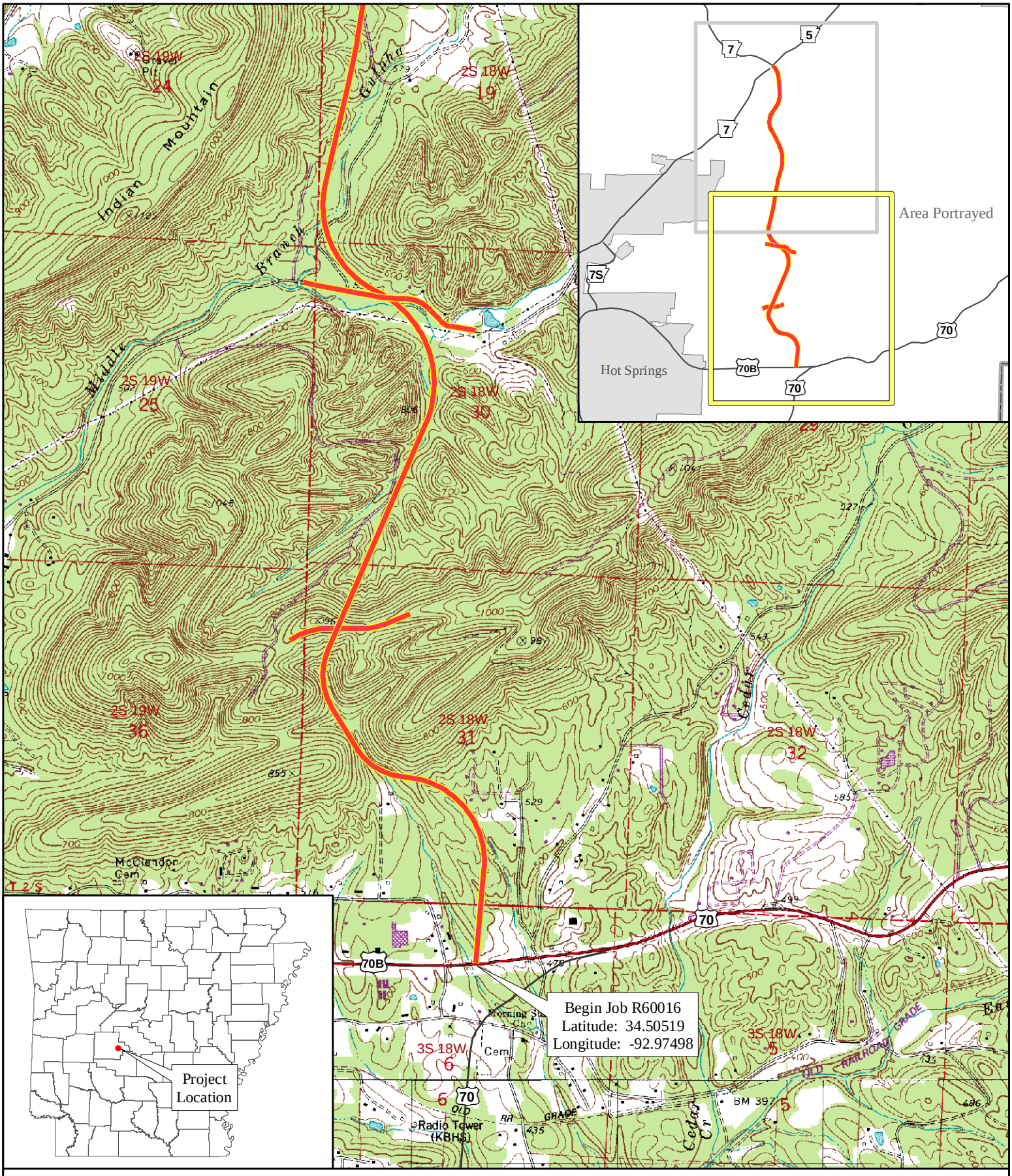
NOTE: The mailing list for this Public Notice is arranged by state and county(s) where the project is located, and also includes any addressees who have asked to receive copies of all public notices. Please discard notices that are not of interest to you. If you have no need for any of these notices, please advise us so that your name can be removed from the mailing list.

Enclosures

Approximate Coordinates of Project Center

Latitude: **34.534085°** Longitude: **-92.979143°**

UTM Zone: **15N** North: **3821376** East: **501914**



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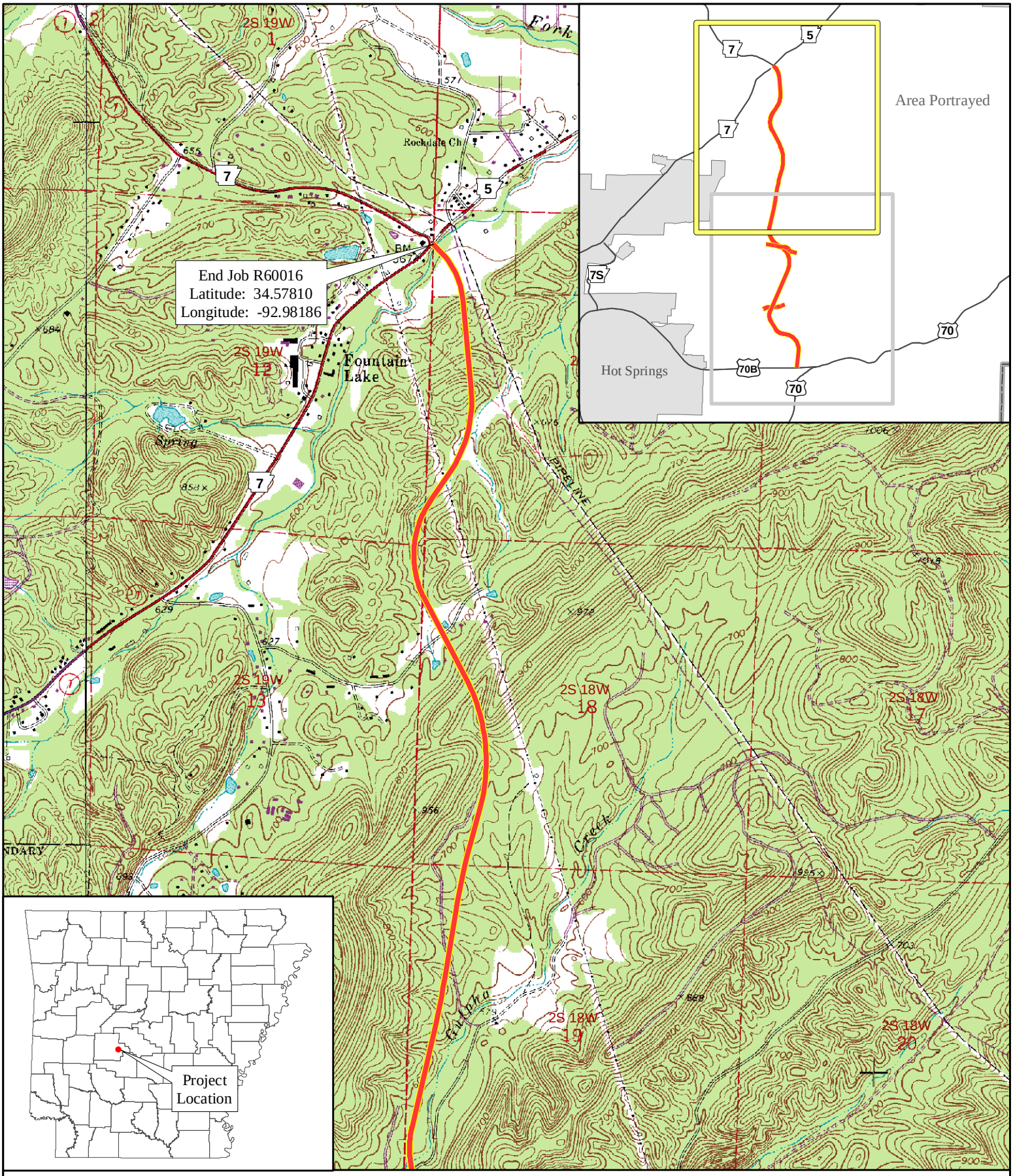
Scale - 1:24,000

Job R60016.
East - West Arterial.
(Hot Springs).
Garland County.
Sheet 1 of 18

Project Location

AHTD - Environmental GIS - Reed
March 10, 2017

Fountain Lake 1988 USGS Topographic Map



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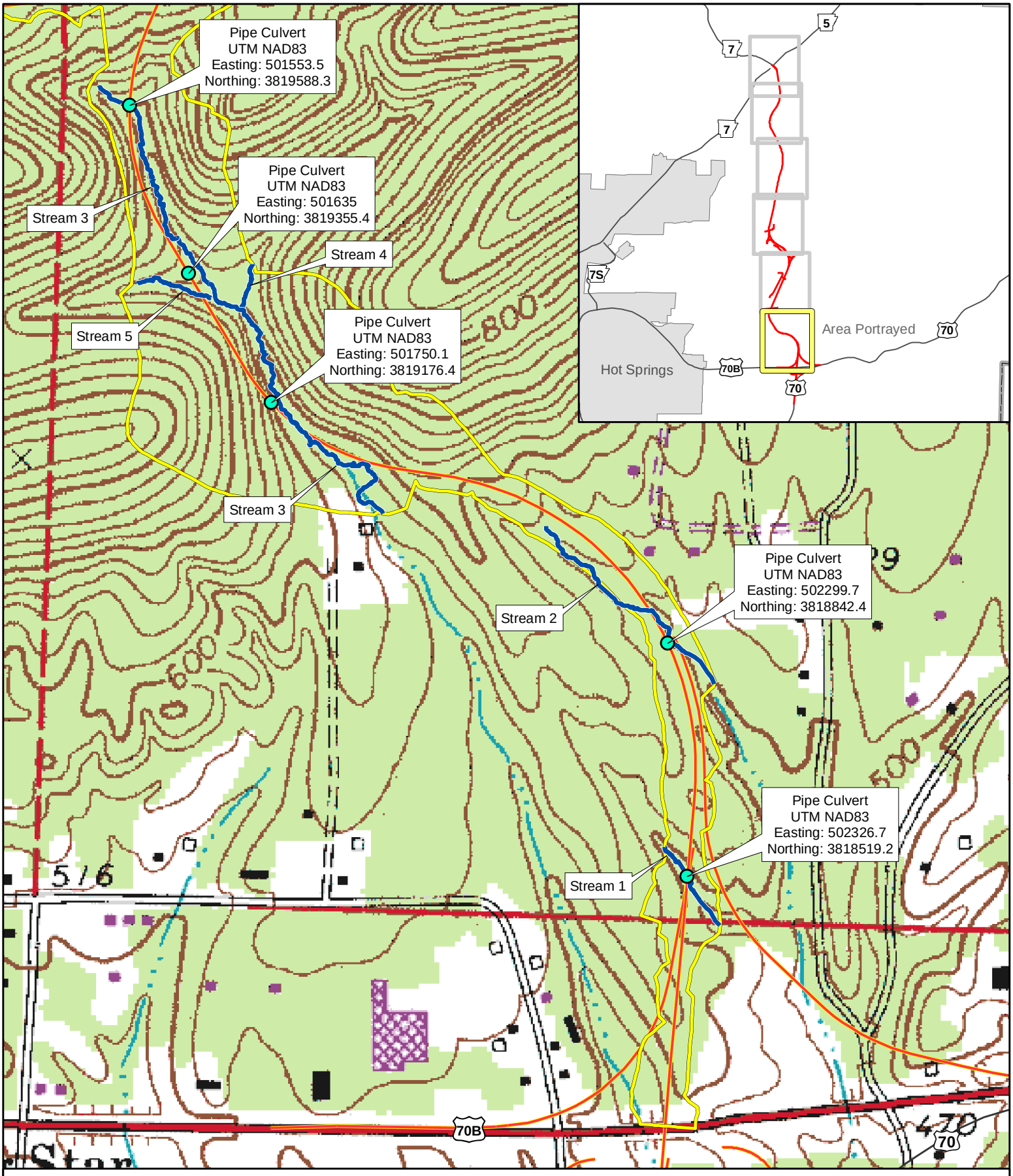
AHTD - Environmental GIS - Reed
March 10, 2017

Job R60016.
East - West Arterial.
(Hot Springs).
Garland County.
Sheet 2 of 18

Project Location

Fountain Lake 1988 USGS Topographic Map



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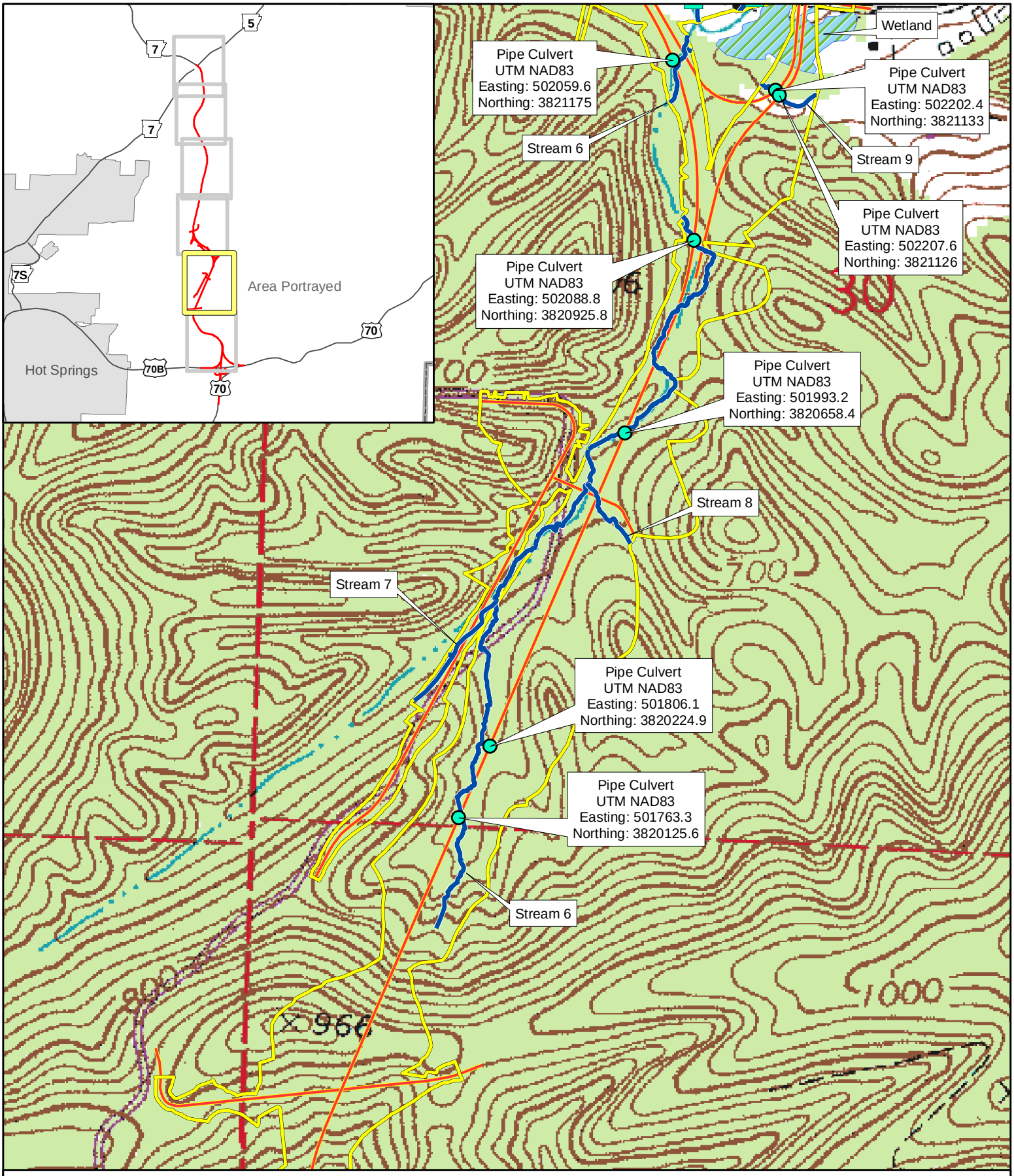
Feet

Job R60140
Hwy. 70 East - Hwy. 7 North
Garland County
Sheet 3 of 18

Stream Impact
Project Location
Construction Limits

ARDOT - Environmental GIS - Reed
June 17, 2019

USGS Topographic Map:
Fountain Lake 1988



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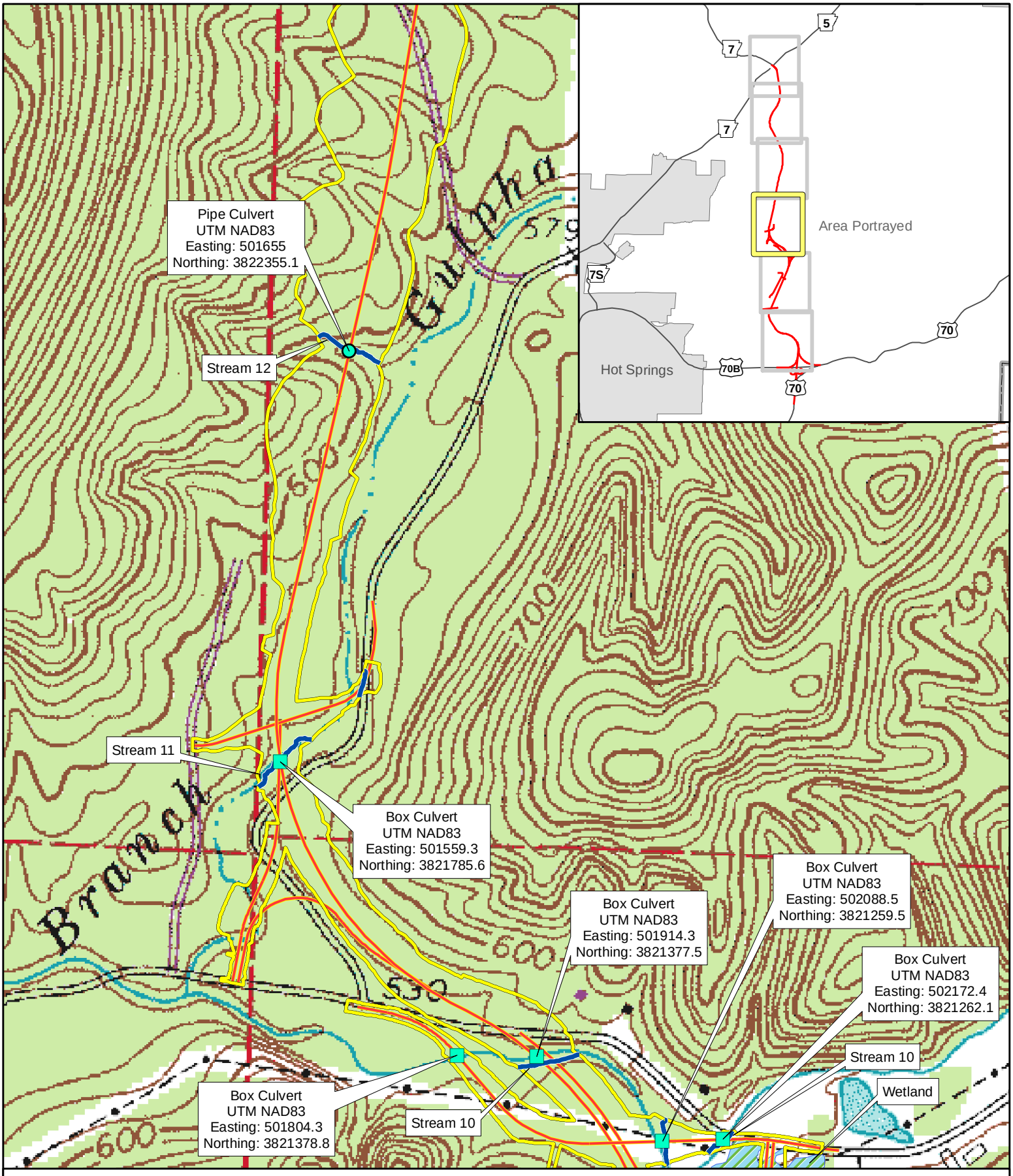
Job R60140
Hwy. 70 East - Hwy. 7 North
Garland County
Sheet 4 of 18

Stream Impact
Project Location
Construction Limits

ARDOT - Environmental GIS - Reed
June 17, 2019

USGS Topographic Map:
Fountain Lake 1988



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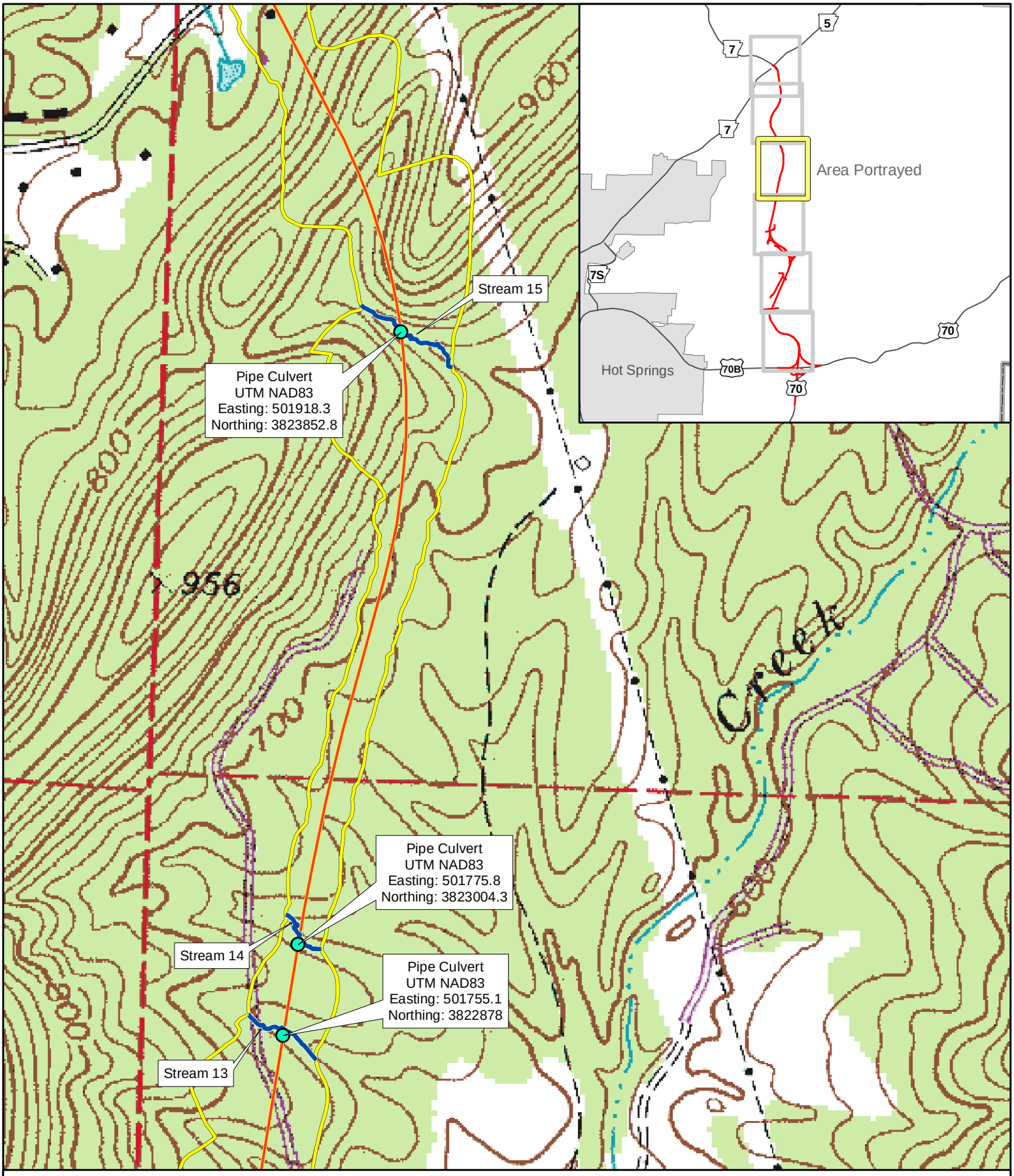
Job R60140
Hwy. 70 East - Hwy. 7 North
Garland County
Sheet 5 of 18

Stream Impact
Project Location
Construction Limits

ARDOT - Environmental GIS - Reed
June 17, 2019

USGS Topographic Map:
Fountain Lake 1988



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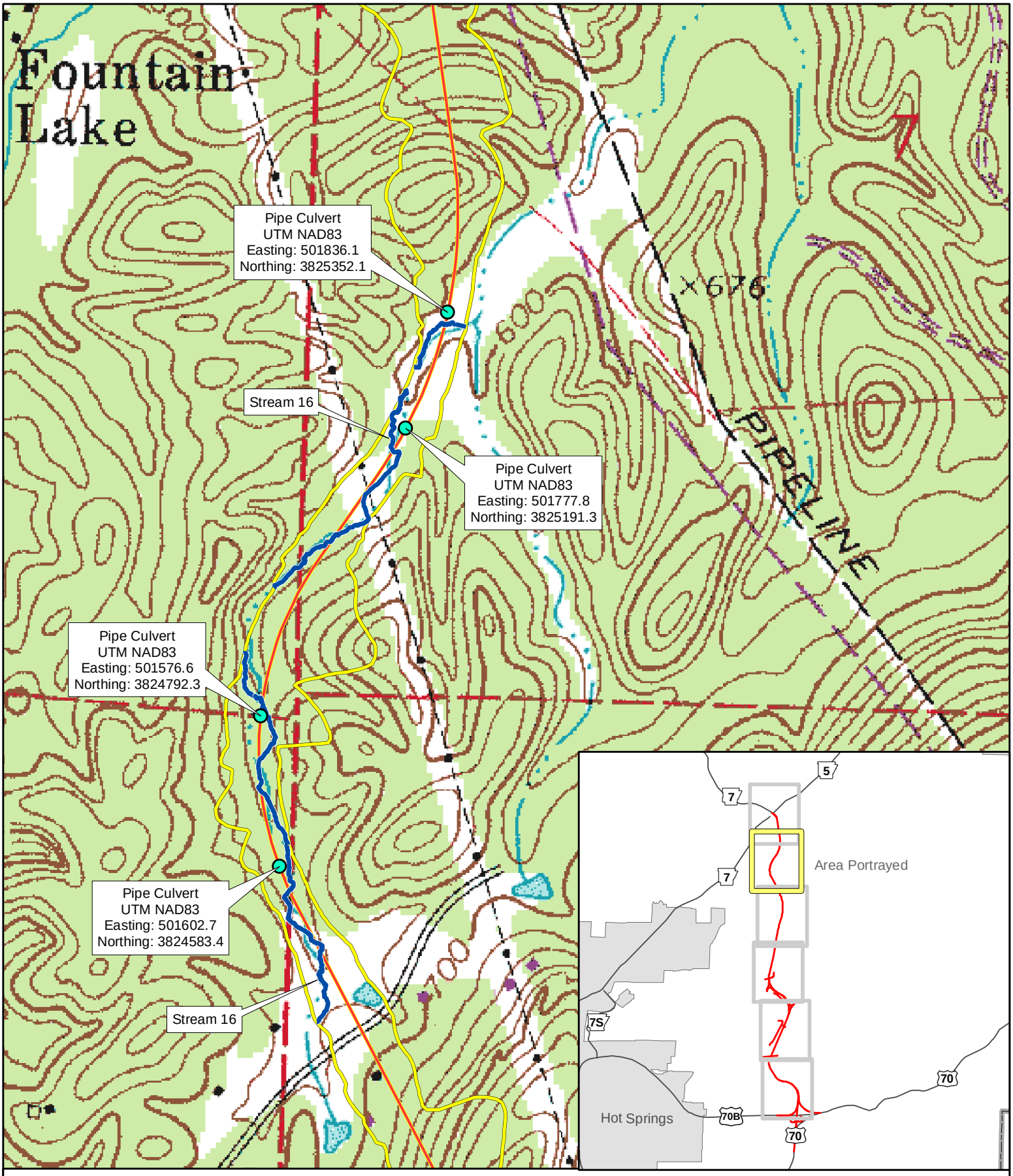
Job R60140
Hwy. 70 East - Hwy. 7 North
Garland County
Sheet 6 of 18

Stream Impact
Project Location
Construction Limits

ARDOT - Environmental GIS - Reed
June 17, 2019

USGS Topographic Map:
Fountain Lake 1988



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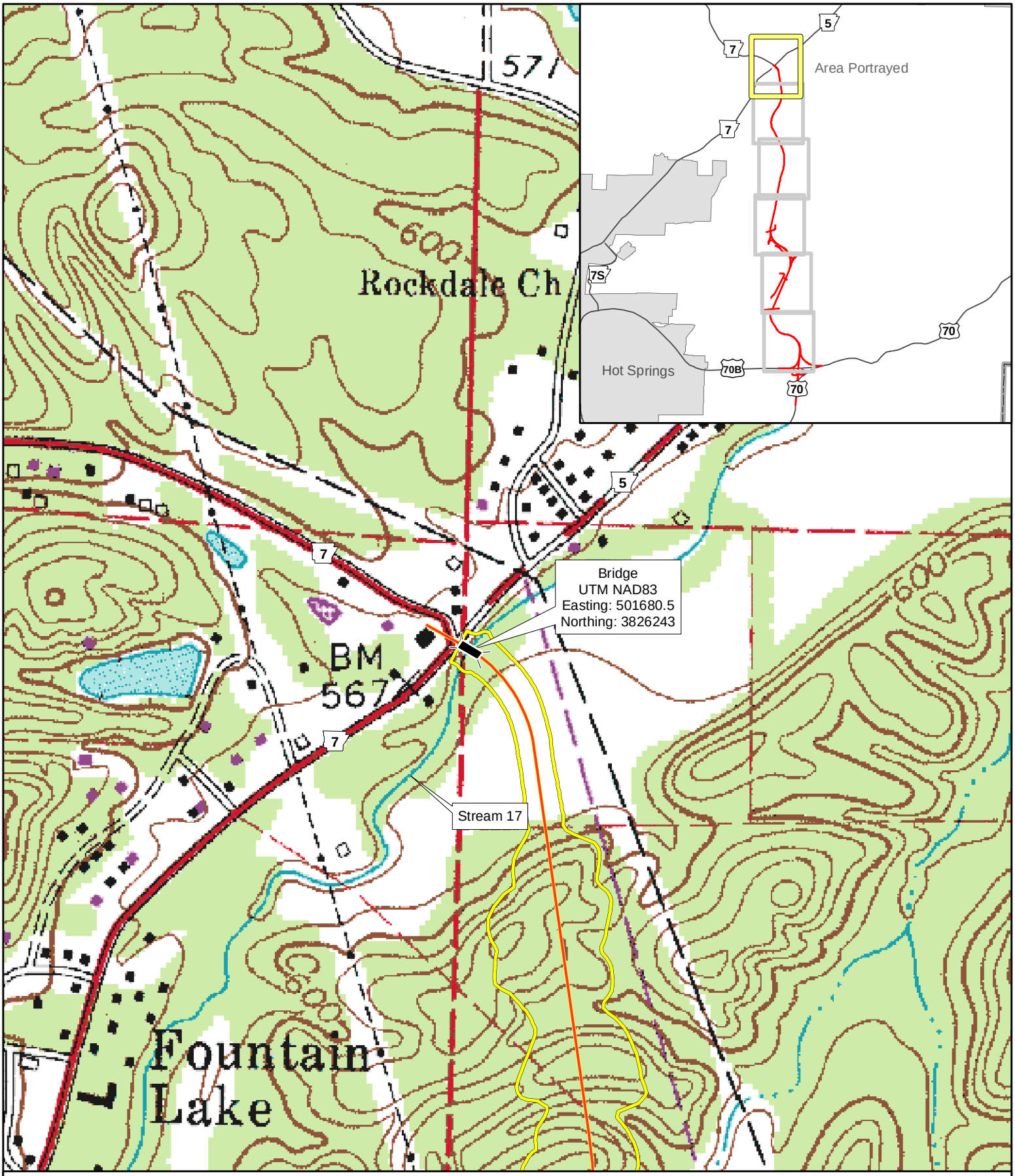
Job R60140
Hwy. 70 East - Hwy. 7 North
Garland County
Sheet 7 of 18

Stream Impact
Project Location
Construction Limits

ARDOT - Environmental GIS - Reed
June 17, 2019

USGS Topographic Map:
Fountain Lake 1988



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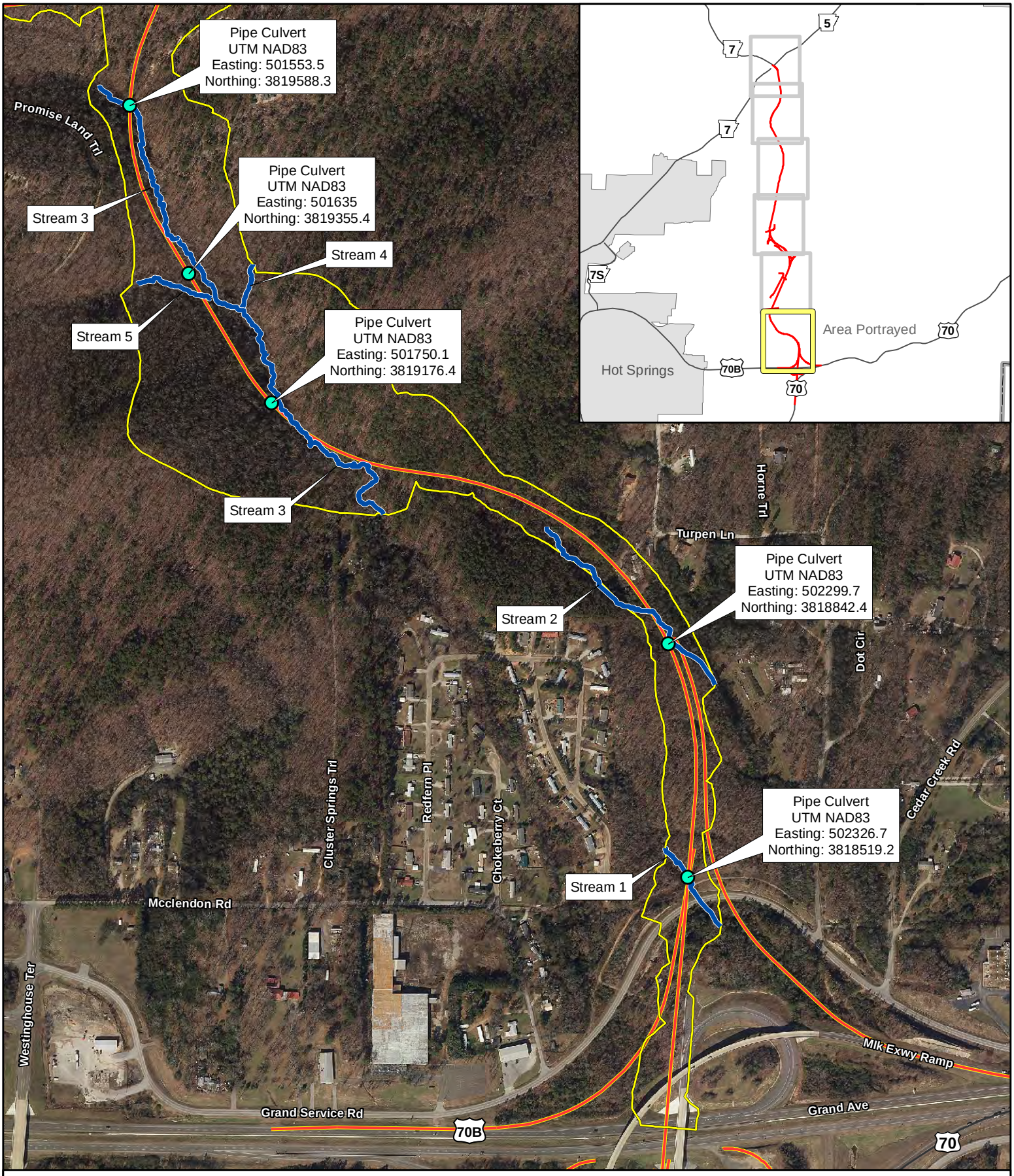
Job R60140
Hwy. 70 East - Hwy. 7 North
Garland County
Sheet 8 of 18

Project Location
Construction Limits

ARDOT - Environmental GIS - Reed
June 17, 2019

USGS Topographic Map:
Fountain Lake 1988



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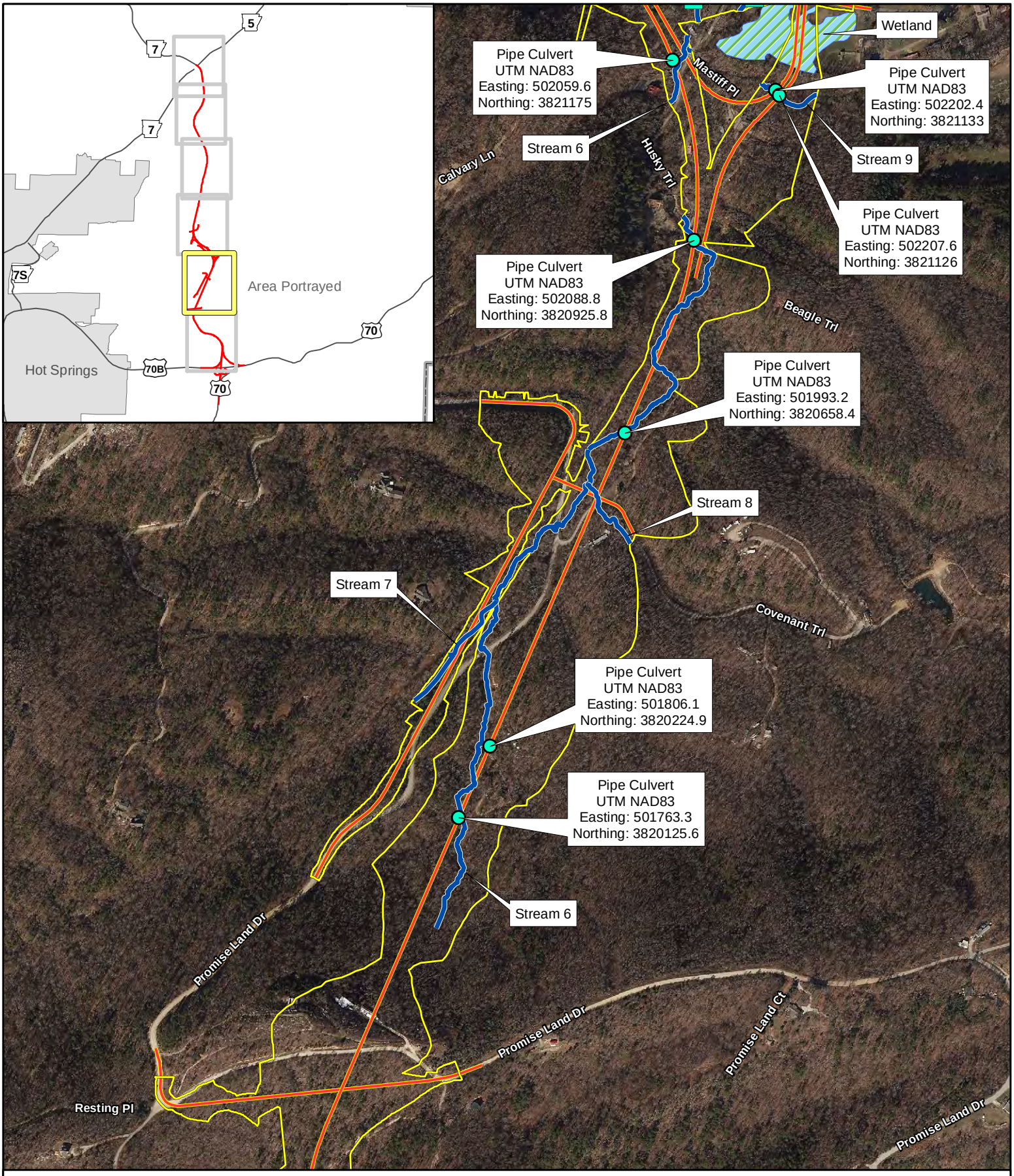
ARDOT - Environmental GIS - Reed
June 17, 2019

Job R60140
Hwy. 70 East - Hwy. 7 North
Garland County
Sheet 9 of 18

Stream Impact
Project Location
Construction Limits

Photography Date: January - February 2017



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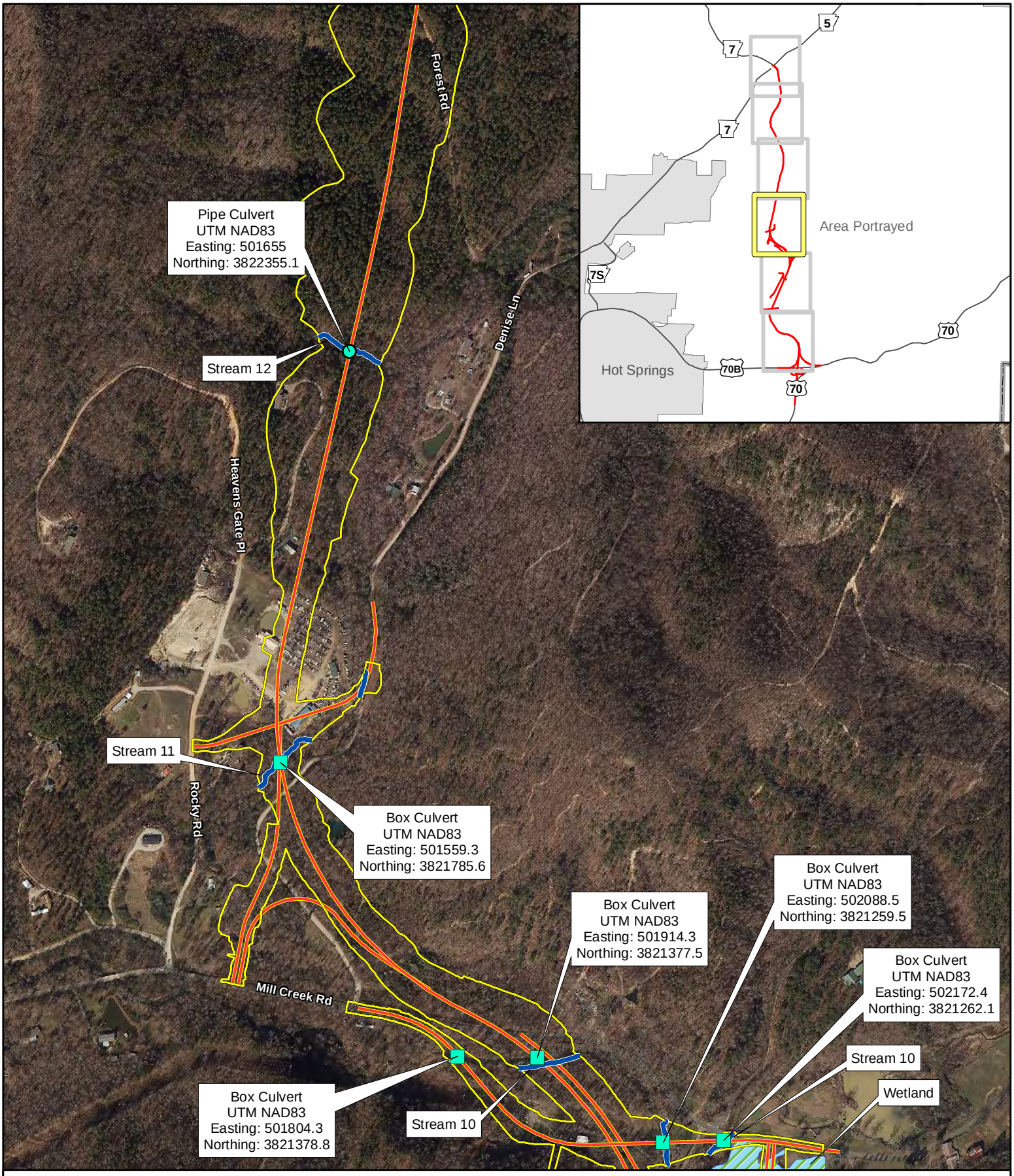
Job R60140
Hwy. 70 East - Hwy. 7 North
Garland County
Sheet 10 of 18

Stream Impact
Project Location
Construction Limits

ARDOT - Environmental GIS - Reed
June 17, 2019

Photography Date: January - February 2017



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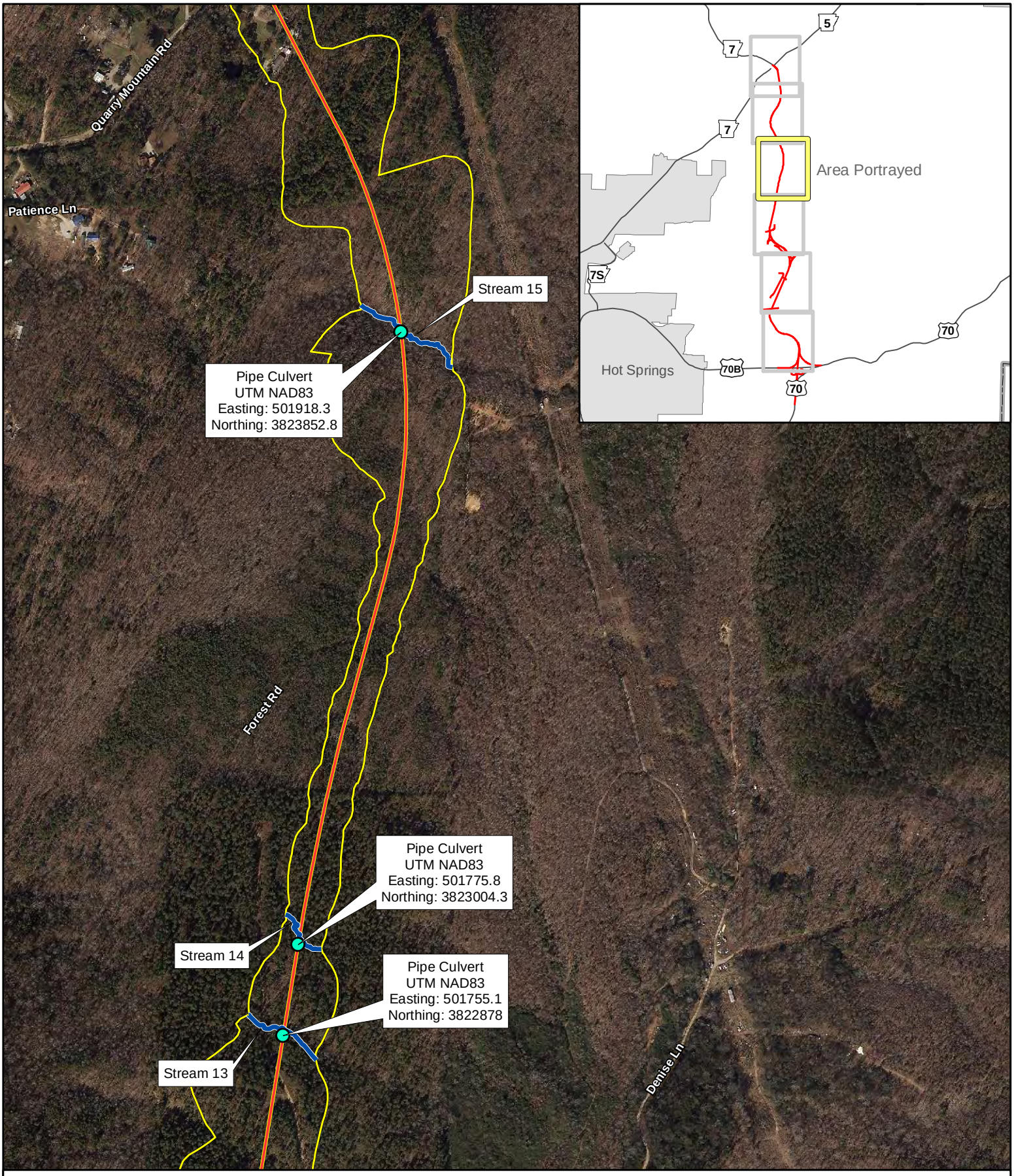
ARDOT - Environmental GIS - Reed
June 17, 2019

Job R60140
Hwy. 70 East - Hwy. 7 North
Garland County
Sheet 11 of 18

Stream Impact
Project Location
Construction Limits

Photography Date: January - February 2017



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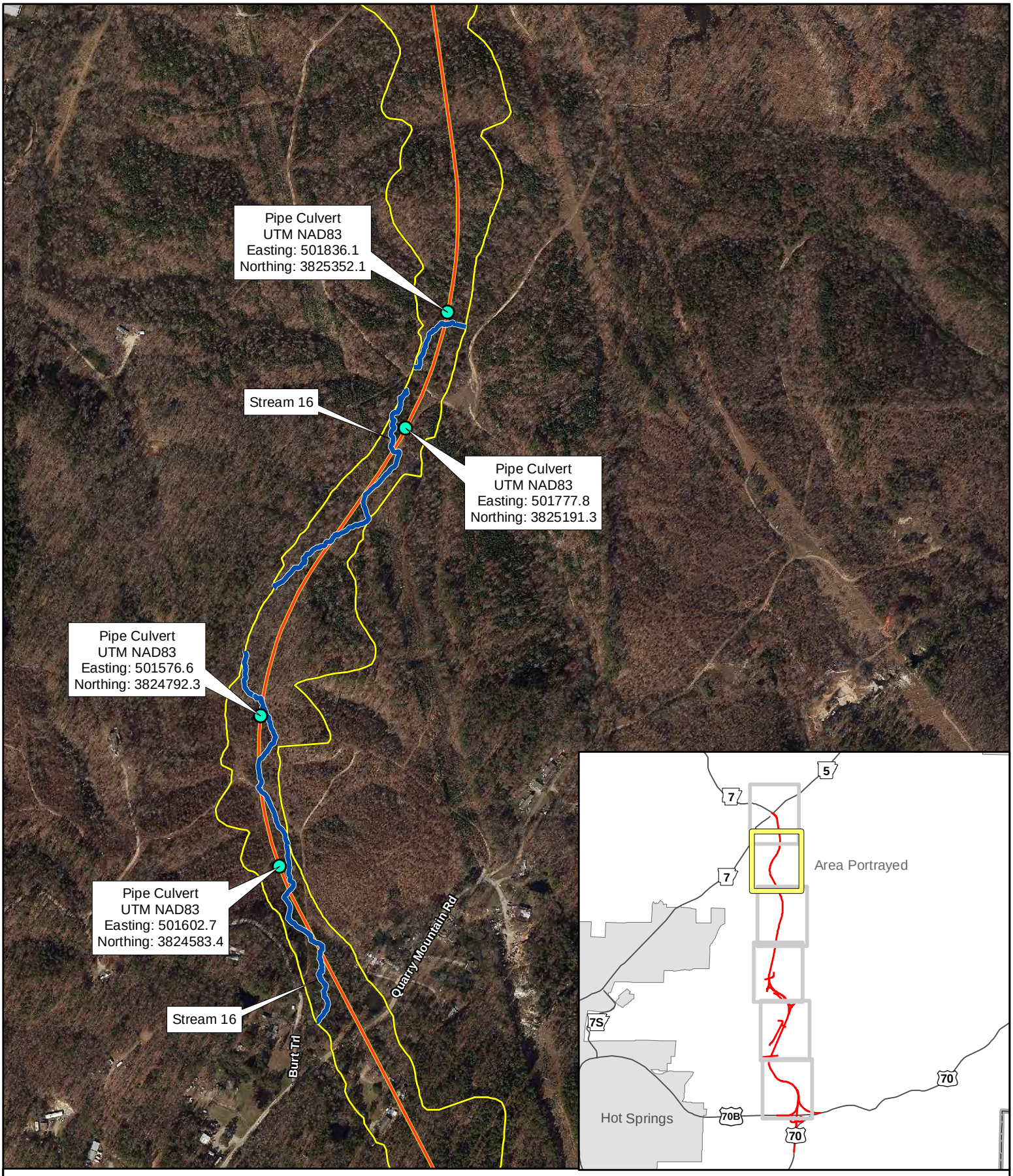
ARDOT - Environmental GIS - Reed
June 17, 2019

Job R60140
Hwy. 70 East - Hwy. 7 North
Garland County
Sheet 12 of 18

Stream Impact
Project Location
Construction Limits

Photography Date: January - February 2017



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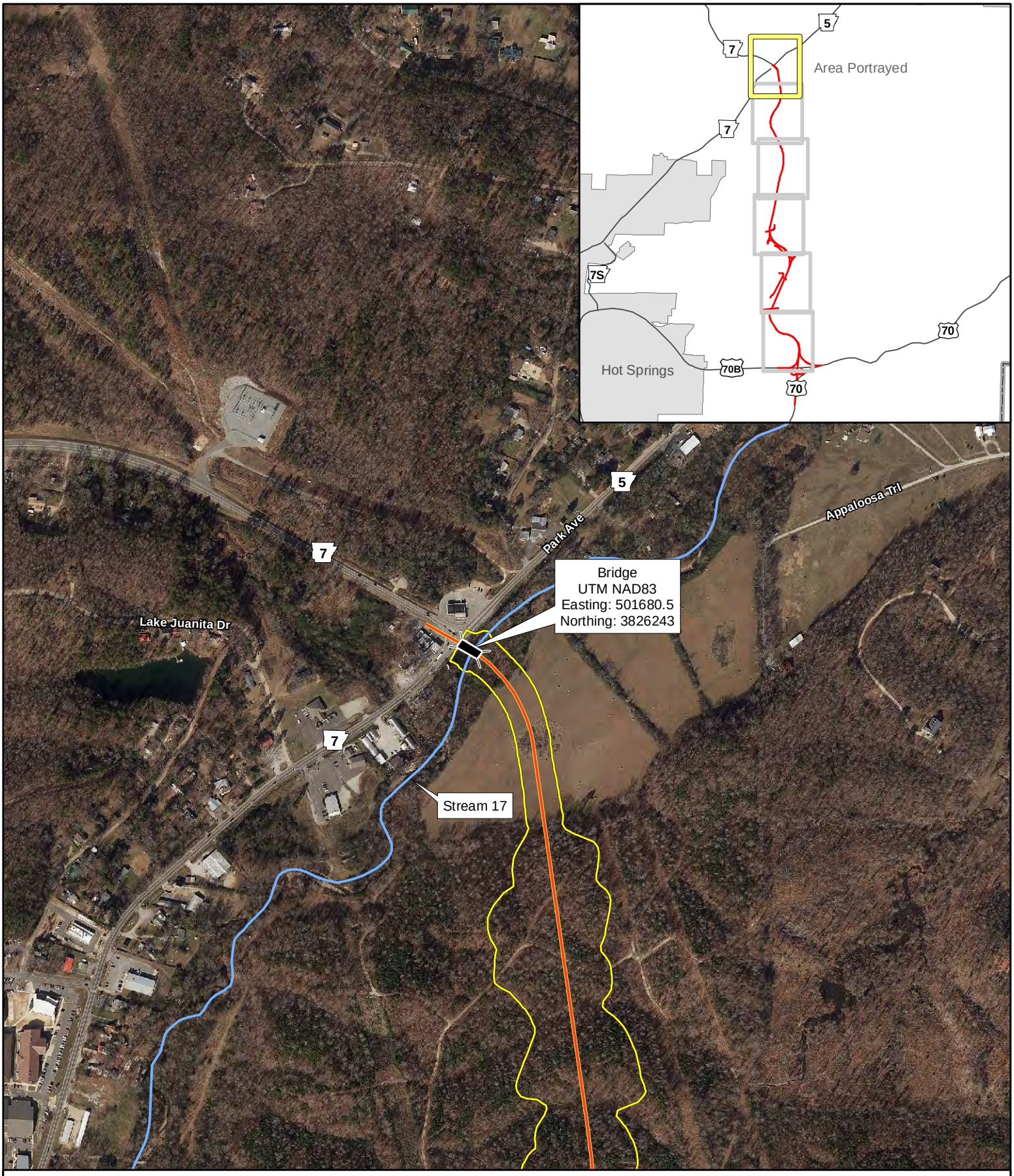
ARDOT - Environmental GIS - Reed
June 17, 2019

Job R60140
Hwy. 70 East - Hwy. 7 North
Garland County
Sheet 13 of 18

Stream Impact
Project Location
Construction Limits

Photography Date: January - February 2017



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ARDOT - Environmental GIS - Reed
June 17, 2019

Job R60140
Hwy. 70 East - Hwy. 7 North
Garland County
Sheet 14 of 18

Project Location
Construction Limits

Photography Date: January - February 2017

R60140 Stream Impacts			
Stream	Stream Name	Stream Classification	Stream Length Impacts (linear feet)
1	Unnamed tributary of East Branch Gulpha	Ephemeral	468.1
2	Unnamed tributary of East Branch Gulpha	Ephemeral	1,191.5
3	Unnamed tributary of East Branch Gulpha	Perennial	3,205.6
4	Unnamed tributary of East Branch Gulpha	Intermittent	236.9
5	Unnamed tributary of East Branch Gulpha	Ephemeral	388.1
6	Unnamed tributary of Mill Creek	Perennial	4,759.2
7	Unnamed tributary of Mill Creek	Ephemeral	633.7
8	Unnamed tributary of Mill Creek	Ephemeral	387.4
9	Unnamed tributary of Mill Creek	Intermittent	366.2
10	Mill Creek	Perennial	665.1
11	Middle Branch Gulpha	Perennial	509.8
12	Unnamed tributary of Middle Branch Gulpha	Ephemeral	350.5
13	Unnamed tributary of Middle Branch Gulpha	Ephemeral	409.3
14	Unnamed tributary of Middle Branch Gulpha	Ephemeral	282.5
15	Unnamed tributary of Middle Branch Gulpha	Ephemeral	587.9
16	Unnamed tributary of South Fork Saline	Ephemeral	1,876.3
16	Unnamed tributary of South Fork Saline	Intermittent	2,094.9
17	Unnamed tributary of South Fork Saline	Perennial	0
			Total 18,413.1

ADVERSE IMPACT
FACTORS FOR RIVERINE SYSTEMS WORKSHEET

Stream Type Impacted	Ephemeral 0.1			Intermittent 0.4			Perennial-OHWM width			
							<15' 0.4	15'-30' 0.6	>30' 0.8	
Priority Area	Tertiary 0.1			Secondary 0.4			Primary 0.8			
Existing Condition	Functionally Impaired 0.1			Moderately Functional 0.8			Fully Functional 1.6			
Duration	Temporary 0.05			Recurrent 0.1			Permanent 0.3			
Activity	Clearing 0.05	Utility Crossing/Bridge Footing 0.15	Below Grade Culvert 0.3	Armor 0.5	Detention 0.75	Morpho-logic Change 1.5	Impound-ment (dam) 2.0	Pipe >100' 2.2	Fill 2.5	
Cumulative Linear Impact	<100' 0	100'-200' 0.05	201-500' 0.1	501-1000' 0.2	>1000 linear feet (LF) 0.1 reach 500 LF of impact (example: scaling factor for 5,280 LF of impacts = 1.1)					

Factor	Dominant Impact Type 1	Dominant Impact Type 2	Dominant Impact Type 3	Dominant Impact Type 4	Dominant Impact Type 5
Stream Type Impacted	Ephermeral	Intermittent	Perennial < 15'	blank	blank
Priority Area	Tertiary	Tertiary	Tertiary	blank	blank
Existing Condition	Moderately Func	Moderately Func	Moderately Func	blank	blank
Duration	Permanent	Permanent	Permanent	blank	blank
Activity	Fill	Fill	Fill	blank	blank
Cumulative Linear Impact	blank 3.6	blank 3.6	blank 3.6	blank	blank
Sum of Factors	M = 7.4	7.7	7.7	0	0
Linear Feet of Stream Impacted in Reach	LF= 4699	603.1	9139.7		0
M X LF	34,772.60	4,644	70,376	0	0

Total Mitigation Credits Required = (M X LF) = 109,792.6

ADVERSE IMPACT
FACTORS FOR RIVERINE SYSTEMS WORKSHEET

Stream Type Impacted	Ephemeral 0.1			Intermittent 0.4			Perennial-OHWM width		
							<15' 0.4	15'-30' 0.6	>30' 0.8
Priority Area	Tertiary 0.1			Secondary 0.4			Primary 0.8		
Existing Condition	Functionally Impaired 0.1			Moderately Functional 0.8			Fully Functional 1.6		
Duration	Temporary 0.05			Recurrent 0.1			Permanent 0.3		
Activity	Clearing 0.05	Utility Crossing/Bridge Footing 0.15	Below Grade Culvert 0.3	Armor 0.5	Detention 0.75	Morpho-logic Change 1.5	Impound-ment (dam) 2.0	Pipe >100' 2.2	Fill 2.5
Cumulative Linear Impact	<100' 0	100'-200' 0.05	201-500' 0.1	501-1000' 0.2	>1000 linear feet (LF) 0.1 reach 500 LF of impact (example: scaling factor for 5,280 LF of impacts = 1.1)				

Factor	Dominant Impact Type 1	Dominant Impact Type 2	Dominant Impact Type 3	Dominant Impact Type 4	Dominant Impact Type 5
Stream Type Impacted	Ephermeral	Intermittent	blank	blank	blank
Priority Area	Tertiary	Tertiary	blank	blank	blank
Existing Condition	Moderately Func	Moderately Func	blank	blank	blank
Duration	Permanent	Permanent	blank	blank	blank
Activity	Fill	2.5	blank	blank	blank
Cumulative Linear Impact	blank 3.6	blank 3.6	blank	blank	blank
Sum of Factors	M = 7.4	7.7	0	0	0
Linear Feet of Stream Impacted in Reach	LF= 1876.3	2094.9			0
M X LF	13,884.62	16,131	0	0	0

Total Mitigation Credits Required = (M X LF) = 30,015.62

R6014O 6/5/19

14. Tables and Worksheets.

14.1. *Adverse Impacts Table.*

ADVERSE IMPACT FACTORS FOR WETLANDS AND OTHER WATERS OF THE U.S. EXCLUDING STREAMS

FACTORS	OPTIONS					
Lost Type	Type C 0.2		Type B 2.0		Type A 3.0	
Priority Category	Tertiary 0.5		Secondary 1.5		Primary 2.0	
Existing Condition	Very Impaired 0.1		Impaired 1.0		Slightly Impaired 2.0	Fully Functional 2.5
Duration	Seasonal 0.1	0 to 1 0.2	1 to 3 0.5	3 to 5 1.0	5 to 10 1.5	Over 10 2.0
Dominant Impact	Shade 0.2	Clear 1.0	Dredge 1.5	Drain 2.0	Impound 2.5	Fill 3.0
Cumulative Impact	$0.05 \times \Sigma AA_i$					

Note: For the **Cumulative Impact** factor, ΣAA_i stands for the sum of the acres of adverse impacts to aquatic areas for the overall project. When computing this factor, round to the nearest tenth decimal place using even number rounding. Thus 0.01 and 0.050 are rounded down to give a value of zero while 0.051 and 0.09 are rounded up to give 0.1 as the value for the cumulative impact factor. **The cumulative impact factor for the overall project must be used in each area column on the Required Mitigation Credits Worksheet below.**

Required Mitigation Credits Sample Worksheet

Factor	Area 1	Area 2	Area 3	Area 4	Area 5	Area 6
Lost Type	2.0					
Priority Category	0.5					
Existing Condition	1.0					
Duration	2.0					
Dominant Impact	3.0					
Cumulative Impact	0.1					
Sum of r Factors	$R_1 =$ 8.6	$R_2 =$	$R_3 =$	$R_4 =$	$R_5 =$	$R_6 =$
Impacted Area	$AA_1 =$ 0.8	$AA_2 =$	$AA_3 =$	$AA_4 =$	$AA_5 =$	$AA_6 =$
R × AA=	6.9					

Total Required Credits = Σ (R × AA) = 6.9