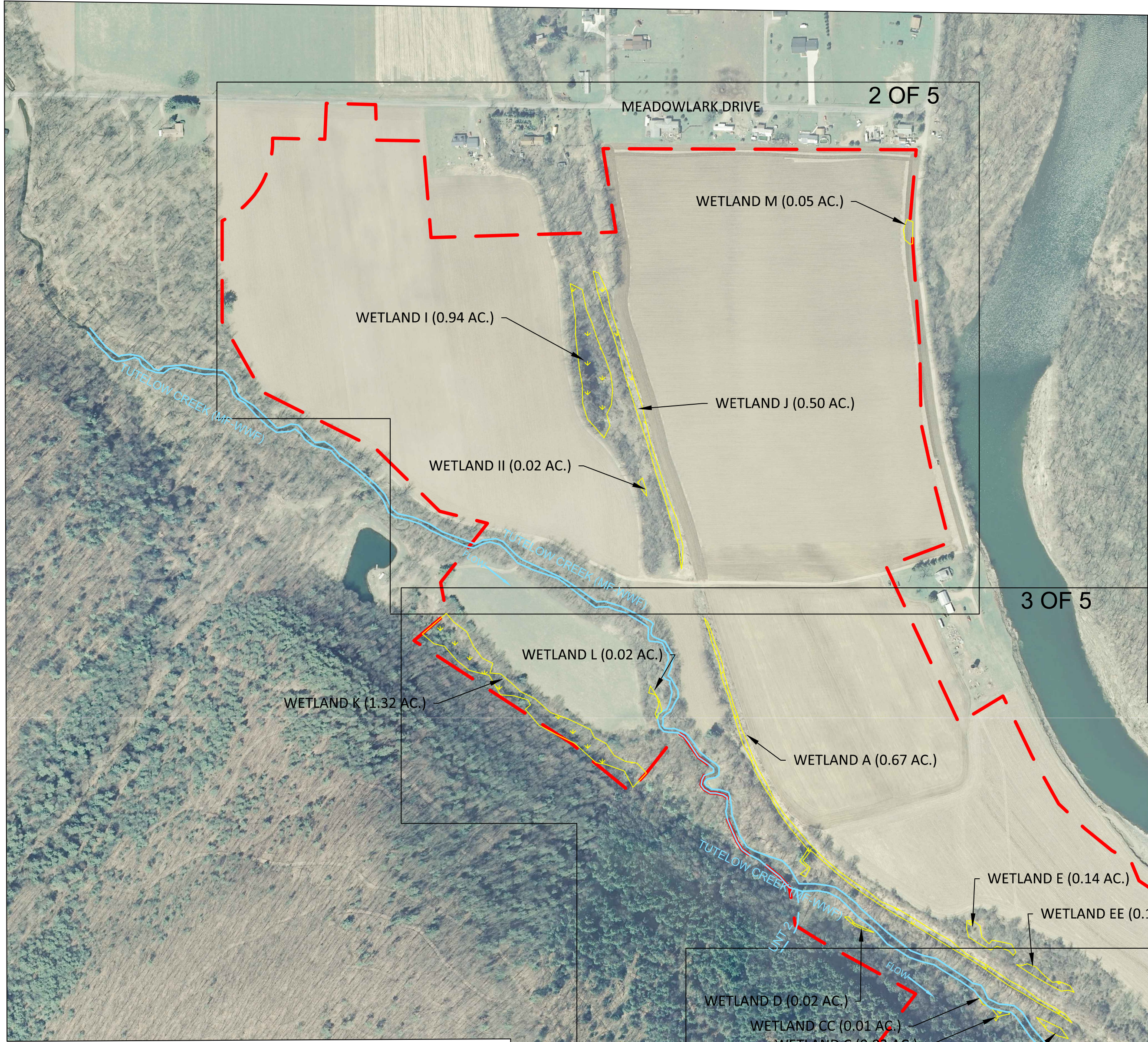




WETLAND CHARACTERISTICS				
Wetland	Area Within Study Limits (acres)	USFWS Classification ⁽¹⁾	Test Site Number	Photograph Number
A	0.67	PEM1E	1	37,42,50-52
AA	0.13	PEM1E		21
B	0.04	PFO1Y	3	19
C	0.02	PFO1Y	5	33
CC	0.01	PFO1Y		35
D	0.02	PFO1E	7	46
E	0.14	PFO1E	9	41
EE	0.11	PFO1E		38-39
F	0.01	PEM1Y	11	18
FF	0.02	PEM1Y		16
G	0.11	PFO1Y	13	13
GG	0.08	PEM1Y		14
H	0.06	PFO1E	15	31
I	0.94	PFO1E	17	60
II	0.02	PFO1E		63
J	0.50	PEM1E	19	59
K	1.32	PFO1/4Y	23	55
L	0.02	PEM1E	25	53
M	0.05	PEM1Y	21	64
Total Area	4.27			

P – palustrine; EM1 – emergent, persistent; F01 – forested, broad-leaved deciduous; F04 – forested, needle-leaf evergreen; E – seasonally flooded/saturated; Y – Saturated/Semipermanent/Seasonal
(1) Based on Cowardin and coworkers, 1979.

①

TS-1

PERENNIAL STREAM

INTERMITTENT STREAM

EPHEMERAL STREAM

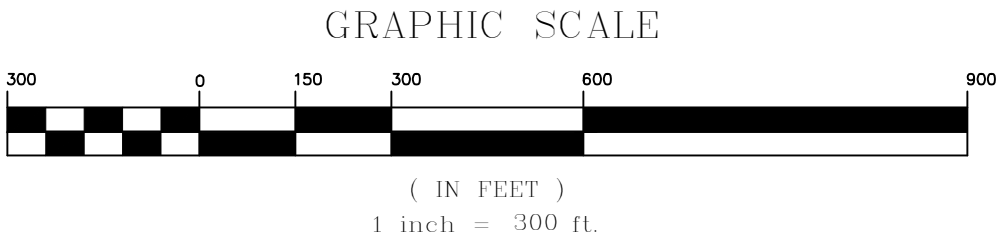
SPRING

DELINEATED WETLAND BOUNDARY

LIMIT OF STUDY (231.2 AC.)

PHOTO LOCATION

SOIL TEST SITE



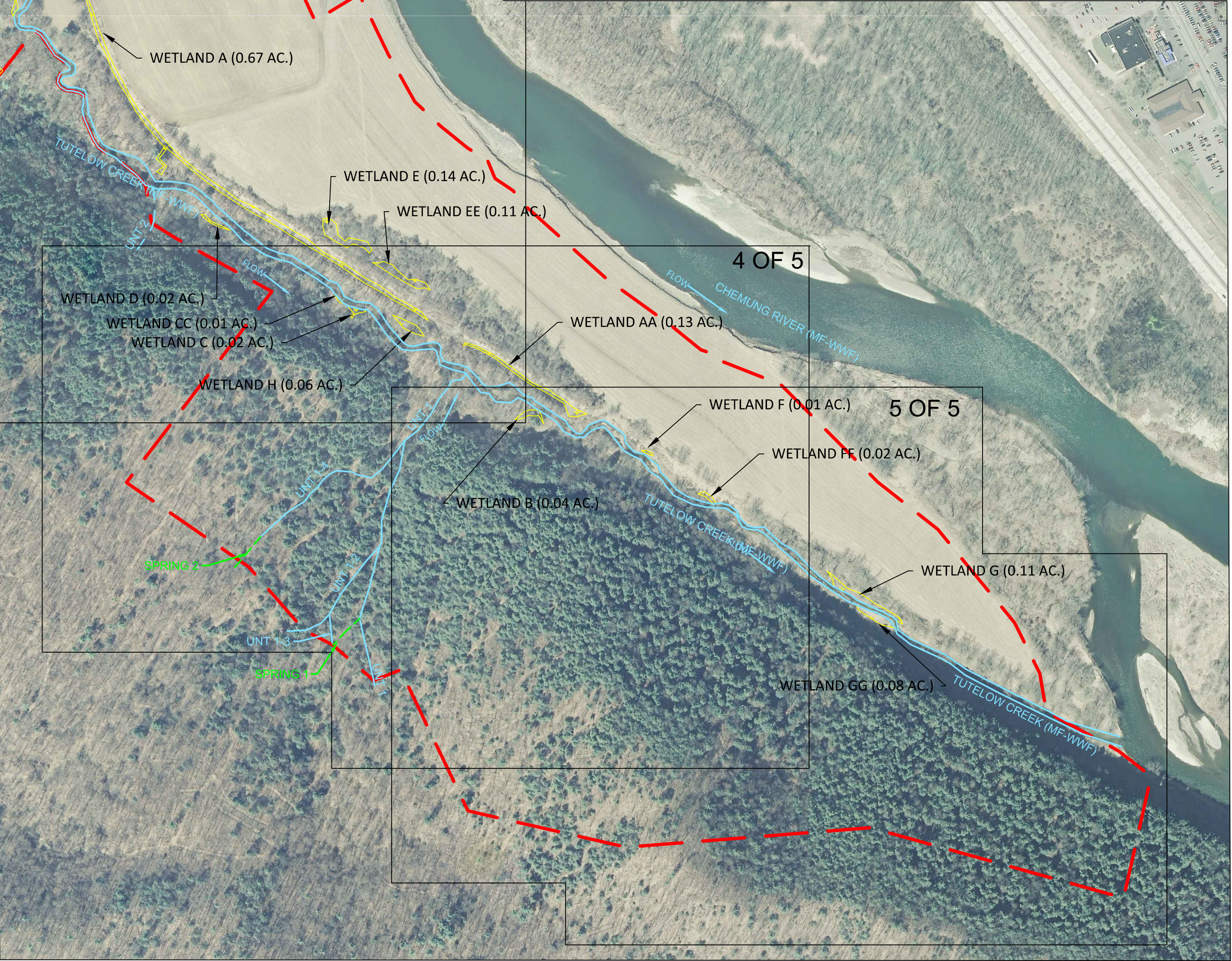
NOTES:
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SPRING SEEP CHARACTERISTICS			
Spring Name	Length of Spring within Study Area (ft)	Spring Classification ⁽¹⁾	Photograph Number
Spring 1	71	Intermittent	24
Spring 2	110	Intermittent	29
Total	181		

Notes:
(1) Determined using multiple lines of evidence as described in Section 1.2.

WATERBODY CHARACTERISTICS				
Stream Name	Length (ft) of Stream within Study Area	Stream Classification ⁽¹⁾	Protected Water Use ⁽²⁾	Photograph Number
Tutelow Creek	6,363	Perennial	MF-WWF	9,10,35,36
UNT 1	1,110	Perennial	MF-WWF	22,23,25
UNT 2	132	Intermittent	MF-WWF	48
UNT 1-2	324	Perennial	MF-WWF	23,27,28
UNT 1-3	28	Perennial	MF-WWF	26
UNT 1-4	675	Perennial	MF-WWF	30
Total	8,632			

Notes:
(1) Determined using multiple lines of evidence as described in Section 1.2.
(2) From Title 25, PA Code Chapter 93, Section 93.9s. WWF - Warm Water Fishes – Maintenance or propagation of fish species and additional flora and fauna which are indigenous to a warm water habitat. MF – Migratory Fishes – Passage, maintenance and propagation of anadromous and catadromous fishes and other fishes which move to or from flowing waters to complete their life cycle in other waters.



Seal

Date

Date

Sheet Revisions

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1" = 300'

Date
3-10-2020

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HCK

Checked By
MVF

Project No.
0270-20-071.02

File No.
MINARD MIND WETLANDS

THE EADS GROUP

ENGINEERING ARCHITECTURE AND DESIGN SERVICES

phone: 814.944.5035 fax: 814.944.4862

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WITH OFFICES IN:

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TRACT ENGINEERING

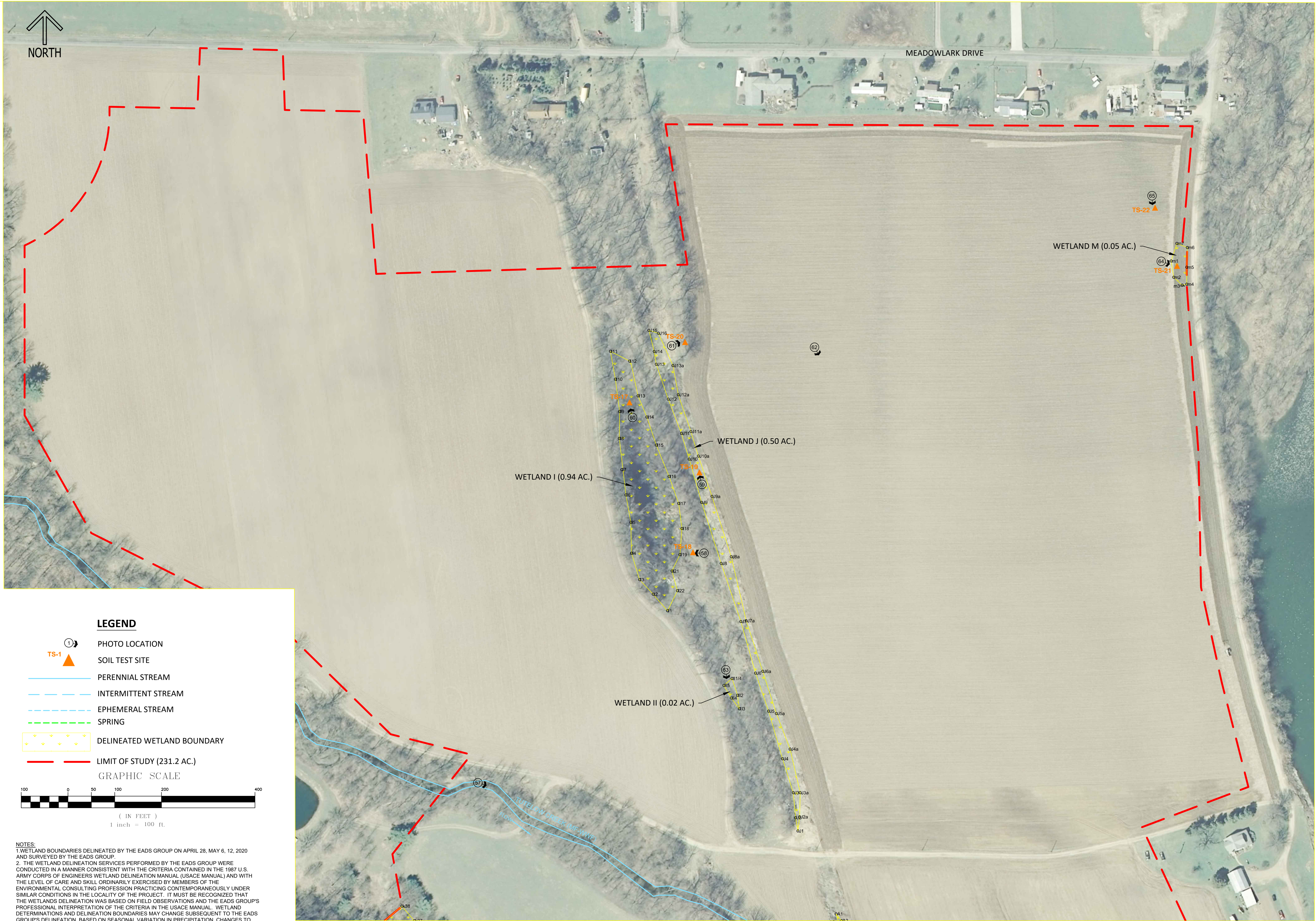
MINARD MINE SITE

WETLAND AND STREAM DELINEATION

ATHENS TOWNSHIP BRADFORD COUNTY

Drawing No.

1 OF 5



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Seal

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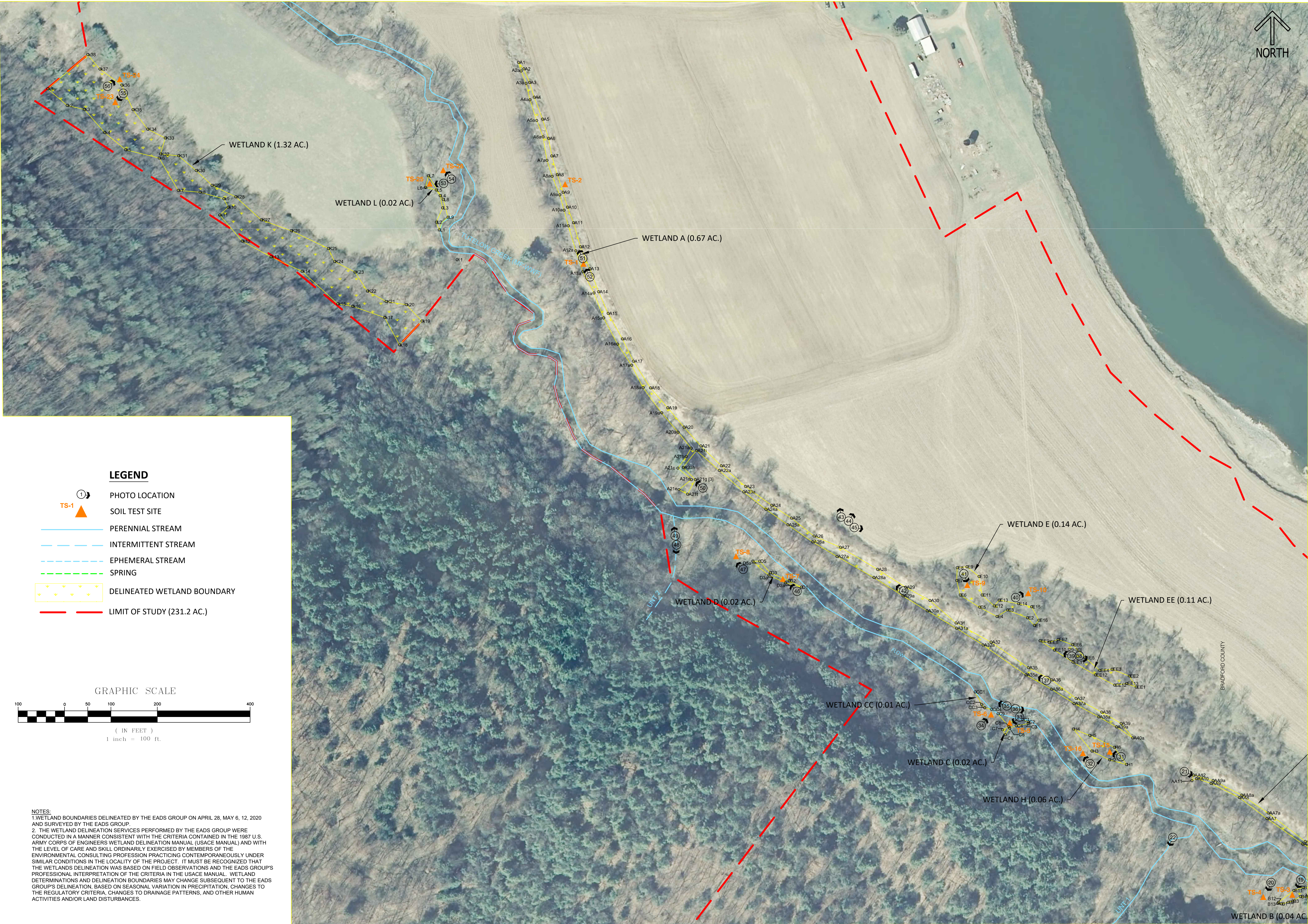
MINARD MINE SITE

WETLAND AND STREAM
DELINEATION

ATHENS TOWNSHIP
BRADFORD COUNTY

Drawing No.

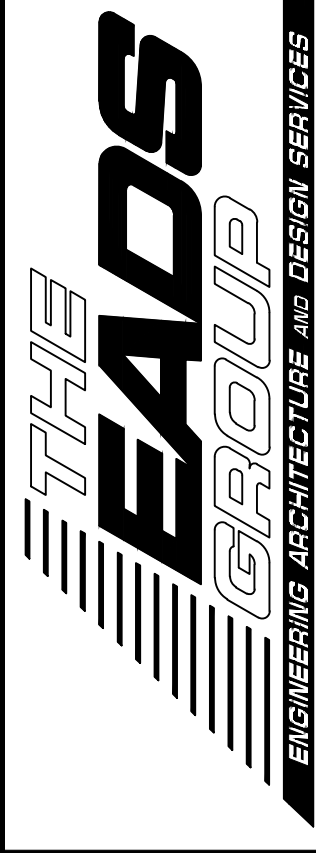
2 OF 5



Seal	Date

No.	Sheet Revisions	Date

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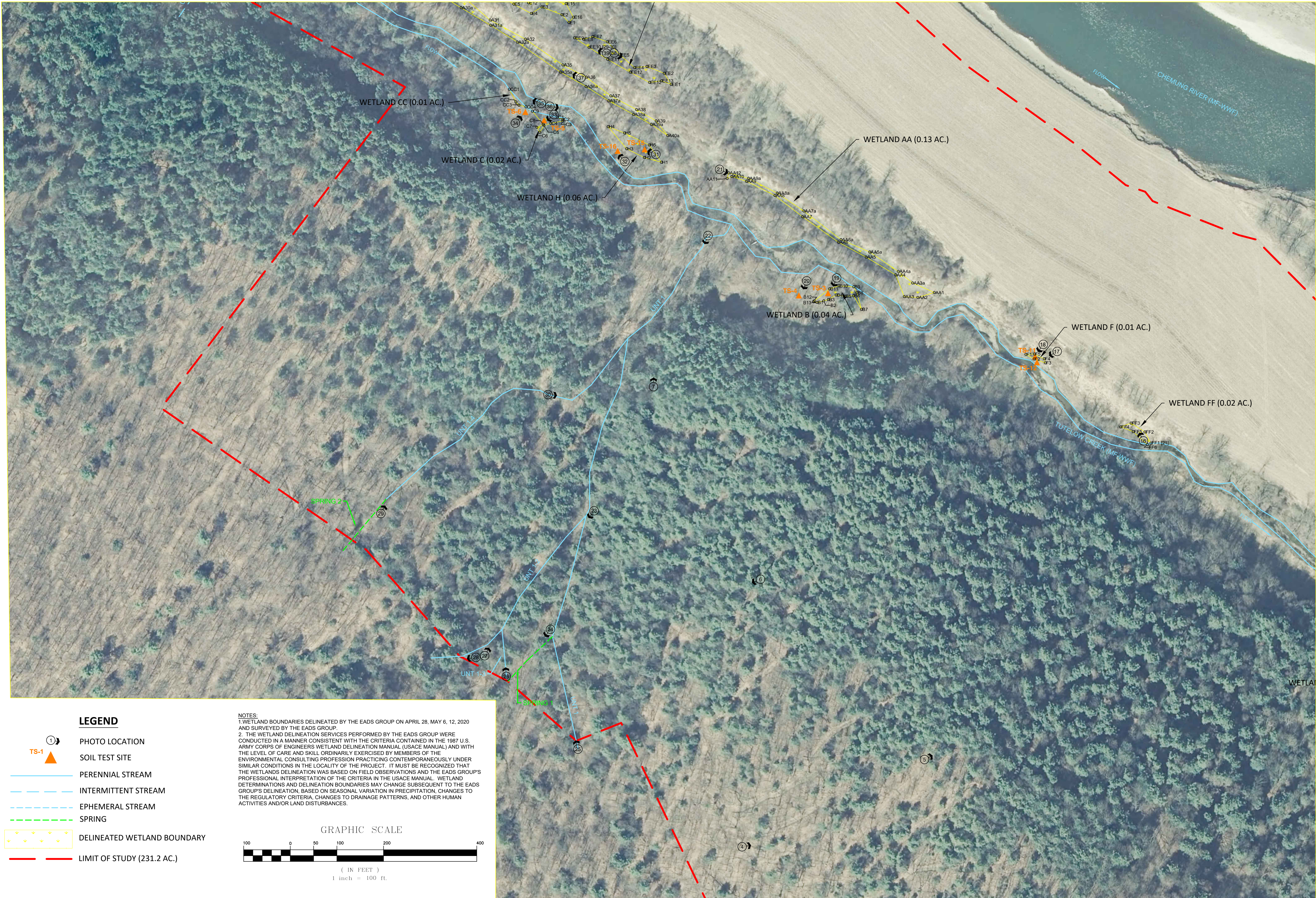
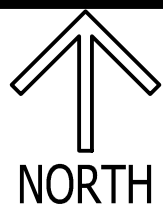


TRACT ENGINEERING

MINARD MINE SITE

**WETLAND AND STREAM
DELINEATION**

ATHENS TOWNSHIP
BRADFORD COUNTY

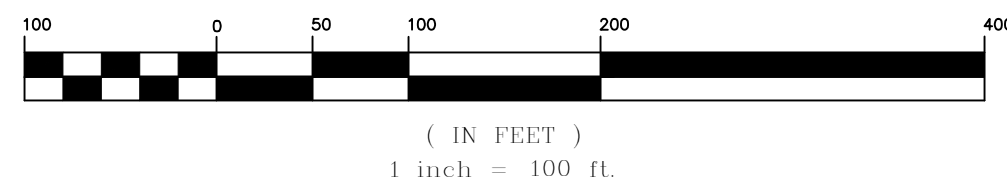


LEGEND

- ① PHOTO LOCATION
- ▲ SOIL TEST SITE
- PERENNIAL STREAM
- - - INTERMITTENT STREAM
- - - EPHEMERAL STREAM
- - - SPRING
- DELINEATED WETLAND BOUNDARY
- LIMIT OF STUDY (231.2 AC.)

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GRAPHIC SCALE



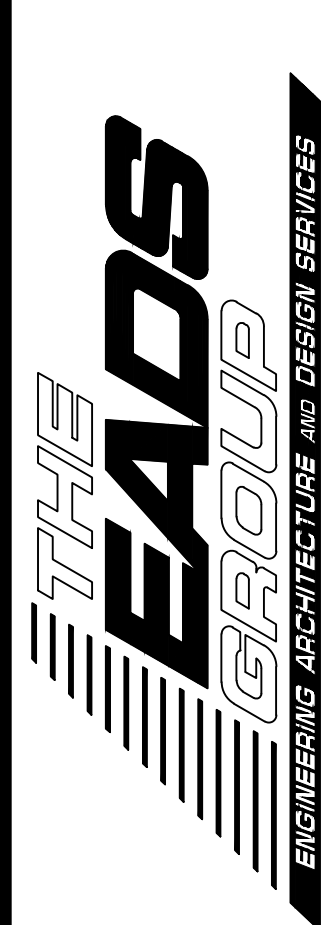
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MINARD MINE SITE

WETLAND AND STREAM
DELINEATION

SANDY CREEK TWP
& FRANKLIN CITY

VENANGO COUNTY

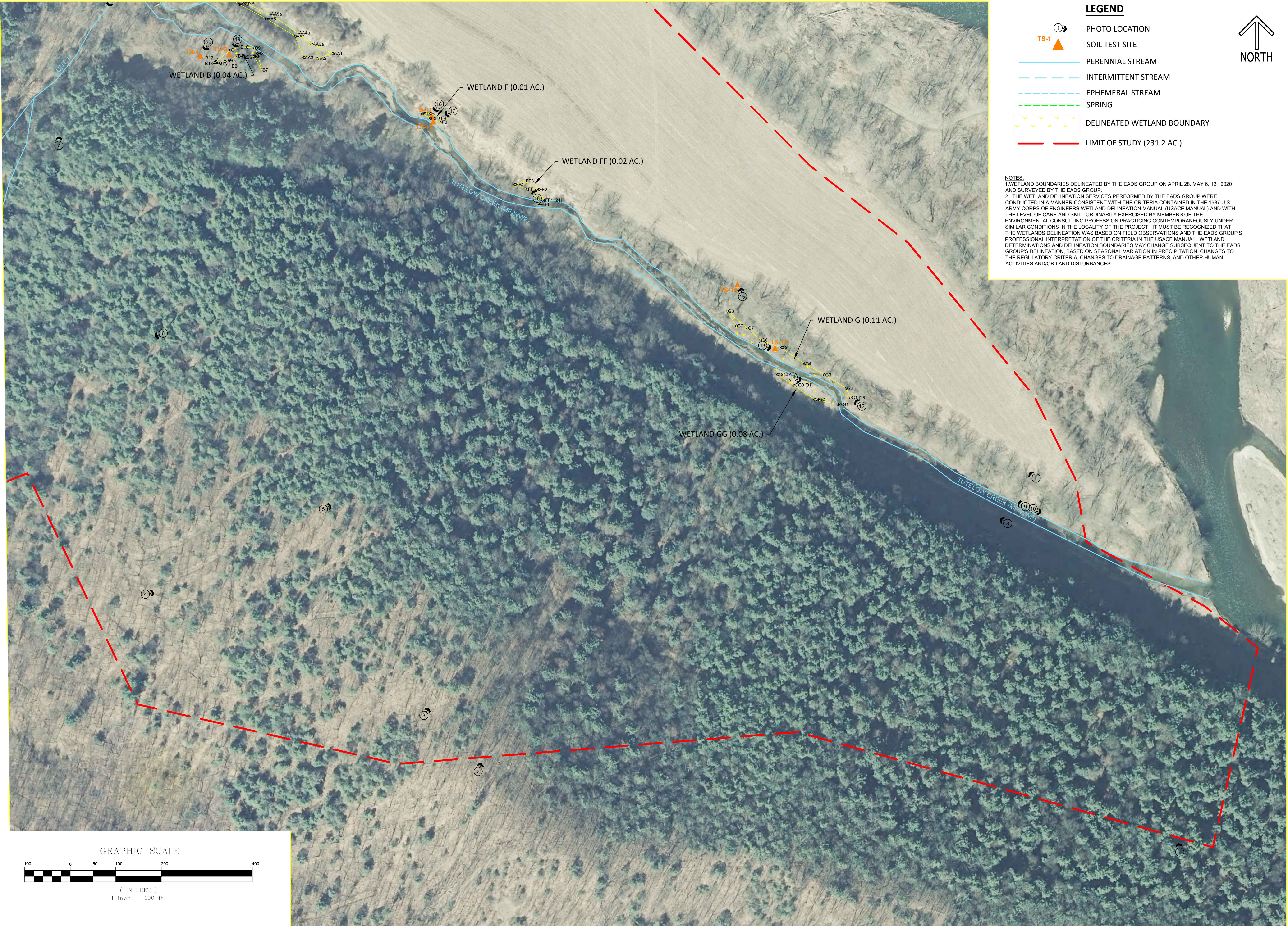


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No.	Sheet Revisions	Date

Seal	Date

Drawing No.
4 OF 5



LEGEND

① PHOTO LOCATION

▲ TS-1 SOIL TEST SITE

— PERENNIAL STREAM

- - - INTERMITTENT STREAM

... EPHEMERAL STREAM

- - - SPRING

↓ ↓ ↓ ↓ ↓ DELINEATED WETLAND BOUNDARY

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Drawing No.

5 OF 5