PRECONSTRUCTION NOTIFICATION

SURFACE COAL MINE OPERATION
In Ohio County, Kentucky

LEWIS CREEK WEST SITE

Prepared for:

Armstrong Coal Company

407 Brown Road

Madisonville, KY 42431

Prepared by:

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May 15, 2012

(Revised October 12, 2012)

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STANDARD OPERATING PROCEDURES

1. Pre-Application Meeting.

An on-site meeting with a representative from the United States Army Corps of Engineers (USACE) will be conducted, but has not been scheduled.

2. Receipt of Application.

Please refer to ENG Form 4345 and attachments for information related to applicant, authorized agent, project location, project description and purpose, adjoining property owners, summary of impacts and signature authorization. See Vicinity Map for the project location.

A. Detailed description of proposed activity:

(1) Impacts

Under this application, Armstrong Coal Company is proposing the following impacts: 47752 linear feet of ephemeral stream (or 3.657 surface acres), 22045 linear feet of intermittent stream (or 3.463 surface acres) and 200 linear feet of perennial stream (or 0.110 surface acres). There will be 23 wetlands filled with a total area of 17.157 acres (16.260 acres of palustrine forested (PFO) wetlands, 0.518 acres of palustrine emergent (PEM) wetlands, and 0.379 acres of palustrine scrub-shrub (PSS) wetlands). Additionally, there are three ponds to be drained and filled, totaling 0.375 acres.

(a) Direct Impacts

- The proposed activity will involve permanent fills necessary for the realignment and reconstruction of KY1903.
- Six new temporary basins will be utilized for sediment control, impacting approximately 3780 feet of stream.
- Mining will affect 200 feet of perennial stream, 22045 feet of intermittent stream, and 47752 feet of ephemeral stream (totaling 69997 feet), 17.157 acres of wetlands, and 0.375 acres of open waters. All impacts are required to access the coal reserves. Upon completion of mining, the perennial stream crossing will be restored to pre-disturbance conditions; intermittent and ephemeral streams will be returned to their approximate original locations and restored using natural channel design techniques. Wetland mitigation is proposed by creation of approximately 34.3 acres on-site (refer to Mitigation Plan for Wetland Impacts, revised October 12, 2012).

(b) Indirect Impacts

- Water will be diverted within the project boundary. No diversions outside of the project boundary will be needed during the mining process.
- Site excavation will result in impacts to streams and wetlands and will indirectly impact aquatic life movement by creating temporary obstacles.

(2) Drainage Acreage

The total area within the project boundary is 1141.8 acres, which is located within the Lewis Creek and Nelson Creek-Green River watersheds (within twelve-digit HUC's 051100030502 and 051100030505, respectively). Other than the road crossing required for Lewis Creek, there are three general watershed locations where existing drainage leaves the project site. Drainage areas for these watersheds are 521 acres, 417 acres, and 306 acres (INT-1, INT-3, and INT-4 respectively). Refer to the "Stream Habitat Assessment and Wetland Delineation Report" for drainage areas of each impact.

(3) Purpose

The purpose of the proposed activity is to establish a surface coal mine operation to extract coal from the WK #11, #13, and #13A seams in order to meet future energy demands of the United States. The operation is expected to last approximately 112 months. This project will extend employment for eighty-five jobs at the site, twenty-five jobs at the plant/loading facility, and fifteen management and support jobs; as well as a large number of indirect jobs supporting the facility. Business activities associated with the project are expected to boost local economy in a region that has suffered economically since the 1970's.

(4) Schedule

Work is expected to begin in January 2013, with expected completion in fall 2023.

(5) Dredged or Fill Material

Material consisting of native rock and soil will be generated during project development. Streams, wetlands, and ponds will be impacted by excavation during the mining process. The volume of streams, to ordinary high water mark, is approximately 8100 cubic yards. The volume of wetlands is approximately 28,000 cubic yards.

B. Minimal Impact Determination

(1) Loss of Aquatic Functions

Loss of aquatic functions: The primary functions of streams within the project boundary are aquatic habitat and movement, water conveyance, sediment transport and a potential water source for terrestrial animals. In addition, smaller ephemeral streams and headwaters of the larger streams supply organic material to lower reaches and eventually to larger stream systems. At the Lewis Creek West site, there have been impacts to streams from agricultural practices. Streams in these areas that are in, or abut, cropped and pastured fields have reduced riparian zone widths (examples being INT-1MS, INT-2DS, INT-4US, E-1, E-6, E-20DS, E-30, E-51, E-53, and E-61) have a predominantly silt/clay substrate. While RBP scores for streams at the project site were generally not high, the scores for streams associated with agricultural fields were among the lowest determined. Streams that run through undisturbed forest areas tend to have a more diverse mix of substrate material (higher percentage of stable habitat) as well as having the wider desired riparian zones. This is also reflected in comparatively higher RBP scores. In general, streams at Lewis Creek West scored in the mid marginal to low suboptimal range. The primary functions of wetlands within the project boundary include: flood water storage, energy dissipation, nutrient retention, subsurface water storage and wildlife habitat. Most of the wetlands at Lewis Creek West are forested wetlands associated with intermittent streams or with perennial streams adjacent to the permit boundary. The association is either direct or by location within the floodplain of those streams.

Stream and wetland functions will be temporarily lost during project development. Stream functions will be replaced upon project completion. Proposed stream mitigation will include providing active floodplains and floodprone areas along low gradient streams; with in-stream structures and pools for stability and habitat, and a sufficiently wide riparian zone along both streambanks. Wetland functions will be returned to the site by on-site creation of wetlands in conjunction with the proposed stream mitigation.

(2) Gain of Aquatic Functions

Aquatic stream functions will be gained through the proposed compensatory mitigation. Mitigation will result in more intermittent stream length being created. These streams have been designed to promote aquatic diversity by providing a more variable habitat through the use of in-stream structures such as J-hooks and vanes, and more defined pool areas. Aquatic habitat will be enhanced by installing overhanging and submerged log structures and root wads. The

proposed riparian zone will provide the shading and nutrient load presently lacking or reduced along some stream reaches. The proposed riparian zone will have a higher percentage of hard mast trees to provide potential wildlife food sources. Through utilization of natural channel design techniques, these streams should be more stable and more efficient in the transport of sediments. Wetland functions will be compensated for by on-site creation performed in conjunction with the proposed stream mitigation.

Briefly stated, aquatic functions for streams gained with compensatory mitigation include:

- Replacing streams on site at approved mitigation ratios.
- Providing variable flow regimes in the form of riffles, runs, pools and glides.
- Establishing wide riparian zones, using desirable native tree and shrub species.
- Utilizing in-stream structures such as J-hooks and vanes to create variable habitat.
- Creating stable stream systems based on natural channel design techniques and geomorphic principles.
- Providing permanent protection through a protective covenant.

(3) Avoidance and Minimization

The project has been designed to avoid and minimize adverse impacts to waters of the U.S.

(a) Geologic exploration in the region indicates that the proposed surface mine area is the most appropriate based on the amount of coal reserves available and the inadequate overburden cover to recover the WK #11, #13, and #13A seams by other mining techniques; including underground mining.

(b) The project footprint has been reduced to minimize impacts to adjacent, potential jurisdictional waters. Along the southern and eastern boundaries, Armstrong Coal Company has surface and mineral rights to economically recoverable coal reserves where there are existing wetlands and stream reaches. The wetlands consist of approximately 10.637 acres; the streams consist of approximately 544 feet of intermittent and approximately 1630 feet of ephemeral. Armstrong Coal, however, has chosen to avoid these streams to reduce impacts to waters (see Exhibit 13 for locations of streams and wetlands avoided). The only alternative that would result in no impacts to waters of the U.S. is the no-build alternative, which would not meet the purpose and need of the proposed project. Completely avoiding impacts to all streams and wetlands within the project boundary was determined not to be practical.

Erosion control measures during project development will be employed to minimize the increase of suspended solids and turbidity. Erosion control structures will include silt basins

located as close to impact areas as practicable, diversion ditches, rock check dams, temporary seeding and mulching and silt fence. An existing haul road on an adjacent mining operation will be continued into this site and used to move equipment and transport coal to a prep plant, instead of using public roadways. This will result in a minimal additional impact to waters when compared to potential impacts from new haul road construction. Additional measures include timely construction and maintenance of sediment control structures combined with concurrent reclamation and re-vegetation of disturbed areas.

(c) No information has been found that lists any of the aquatic sites as high quality waters. For example, there are no Outstanding Resource Waters, Division of Water Reference Reaches, Class 1-3 Undeveloped or Wild and Scenic Rivers or Cold Water Habitat located within the project boundary.

(d) Six new basins will be utilized for sediment control. They will be located near the project limits and will serve to treat water before it leaves the site. These basins will be used as temporary sediment control; to be removed, and the area restored to existing conditions after project completion.

(4) Cumulative Impacts Analysis:

Refer to the Cumulative Impact Analysis section of the application.

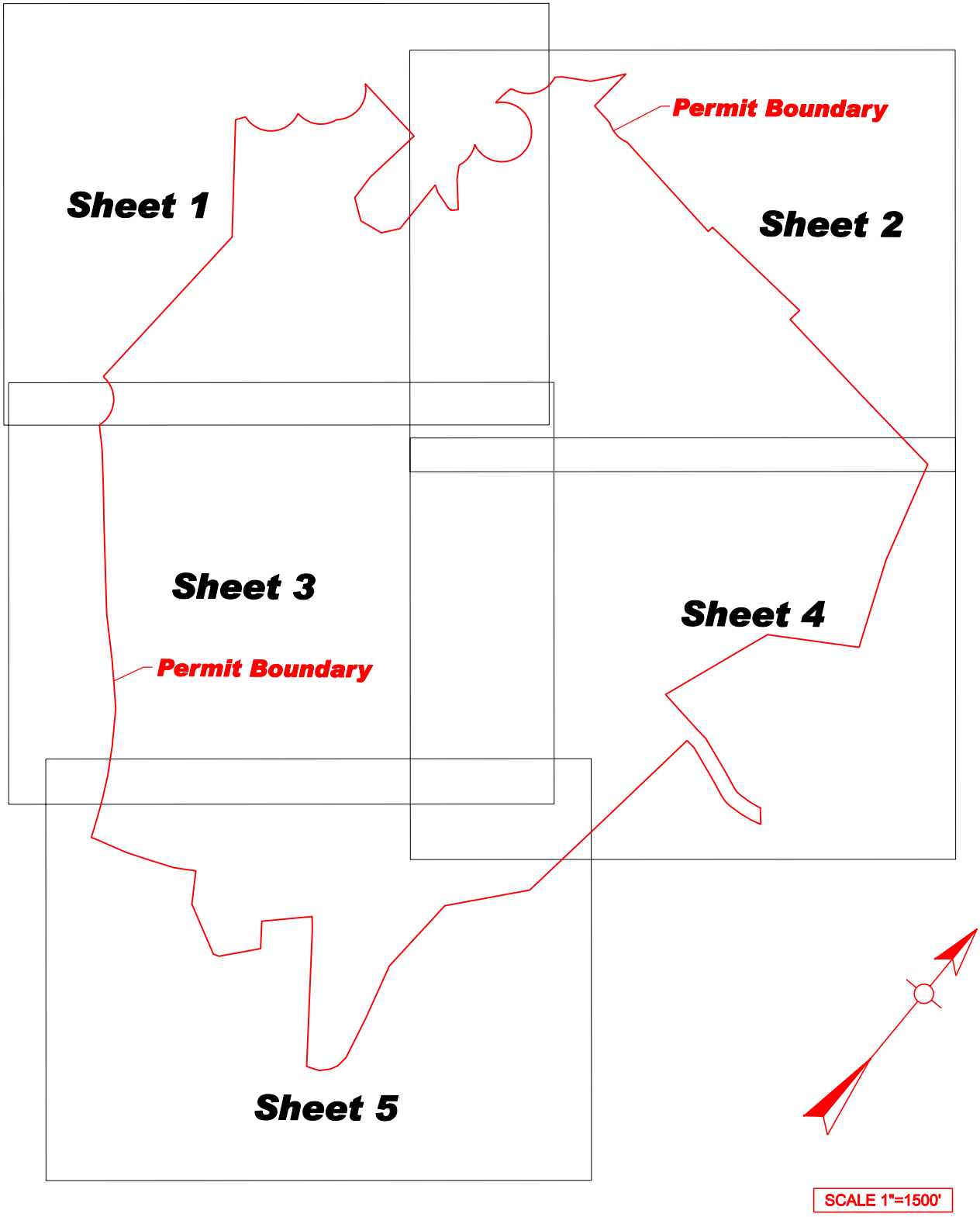
C. Compensatory Mitigation:

Refer to the Stream and Wetland Mitigation Plan section of the application. The proposed stream mitigation design is found in the mitigation plan dated May 17, 2012; the proposed wetland mitigation design is found in the mitigation plan dated “Revised October 12, 2012”.

T.H.E. Engineers, Inc.	PROJECT: LEWIS CREEK WEST-JURISDICTIONAL WATERS DELINEATION			UT'S OF WEST FORK AND LEWIS CREEK & GREEN RIVER	
	COUNTY: OHIO	STATE: KY	NEAR: CENTERTOWN	ITEM: VICINITY MAP	EXHIBIT 1

DATE:

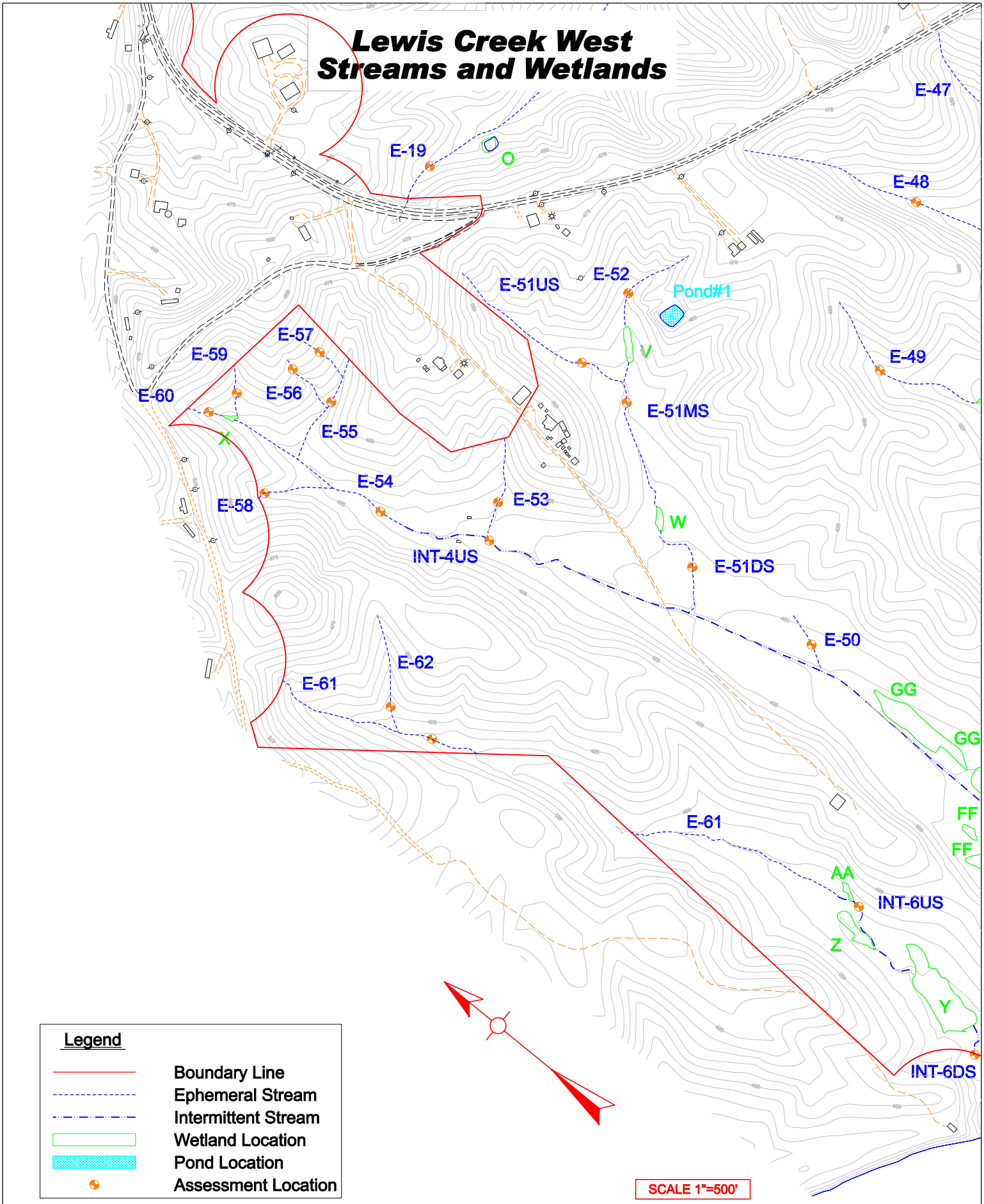
Sheet Index



T.H.E. Engineers, Inc.	PROJECT: LEWIS CREEK WEST SITE - JURISDICTIONAL WATERS DELINEATION				
	COUNTY: OHIO	STATE: KY	NEAR: CENTERTOWN	ITEM: INDEX MAP	EXHIBIT 2

DATE:

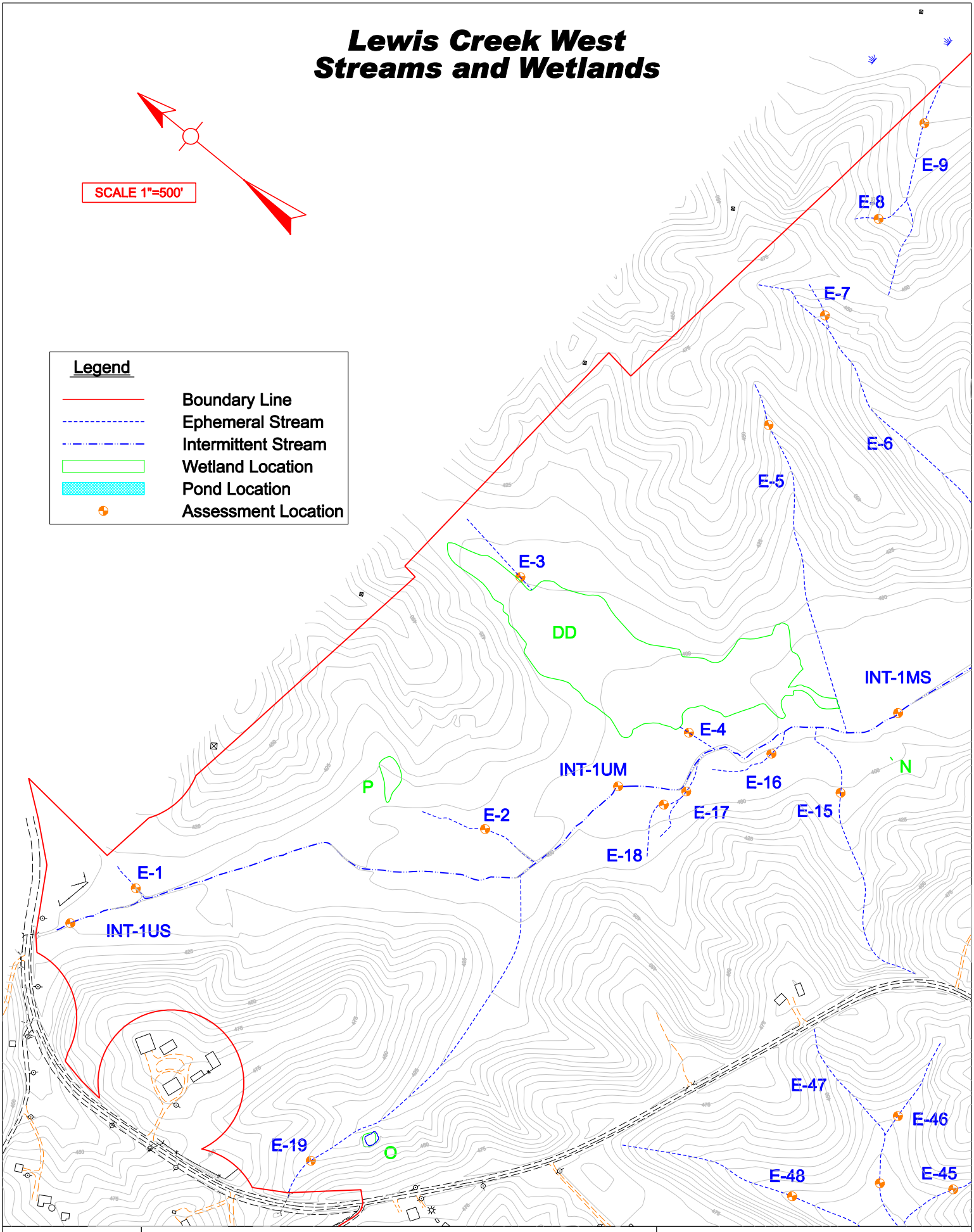
Lewis Creek West Streams and Wetlands



T.H.E. Engineers, Inc.	PROJECT: LEWIS CREEK WEST SITE - JURISDICTIONAL WATERS DELINEATION			UT's OF WEST FORK AND LEWIS CREEK & GREEN RIVER	
	COUNTY: OHIO	STATE: KY	NEAR: CENTERTOWN	ITEM: TOPO MAP	EXHIBIT 3 (SHEET 1)

DATE:

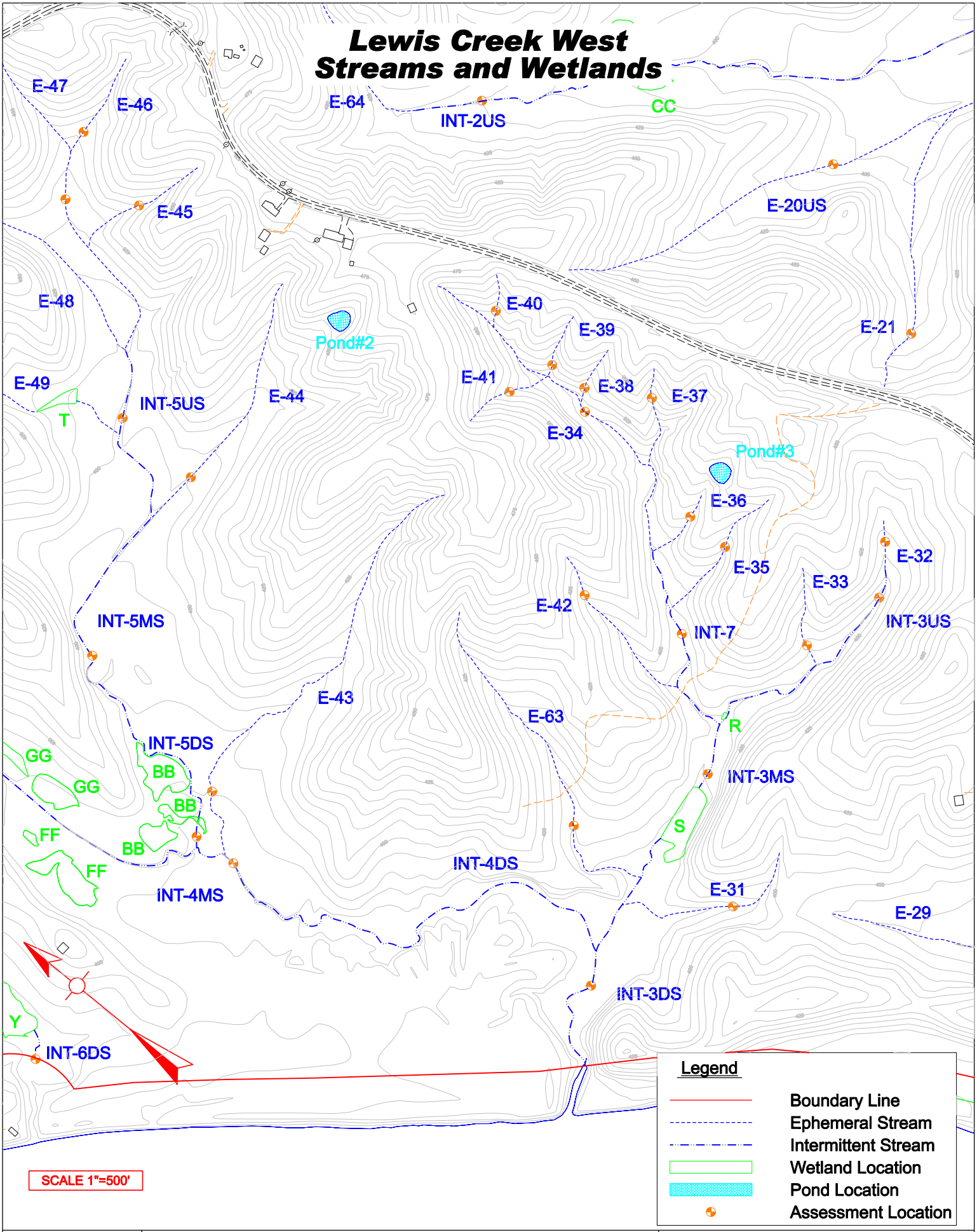
Lewis Creek West
Streams and Wetlands



T.H.E. Engineers, Inc.	PROJECT: LEWIS CREEK WEST SITE - JURISDICTIONAL WATERS DELINEATION			UT's OF WEST FORK AND LEWIS CREEK & GREEN RIVER	
	COUNTY: OHIO	STATE: KY	NEAR: CENTERTOWN	ITEM: TOPO MAP	EXHIBIT 4 (SHEET 2)

DATE:

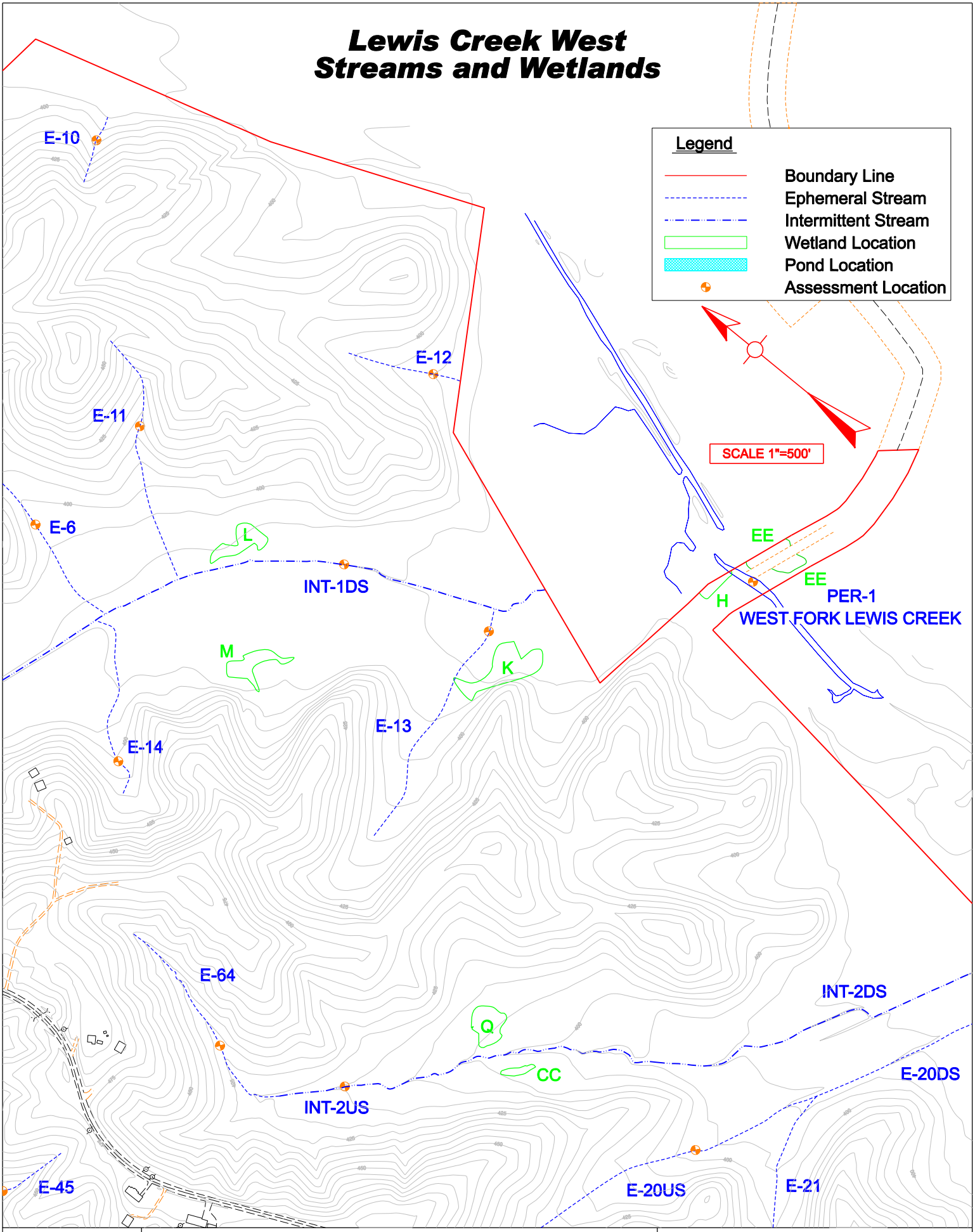
Lewis Creek West Streams and Wetlands



T.H.E. Engineers, Inc.	PROJECT: LEWIS CREEK WEST SITE - JURISDICTIONAL WATERS DELINEATION			UT's OF WEST FORK AND LEWIS CREEK & GREEN RIVER	
	COUNTY: OHIO	STATE: KY	NEAR: CENTERTOWN	ITEM: TOPO MAP	EXHIBIT 5 (SHEET 3)

DATE:

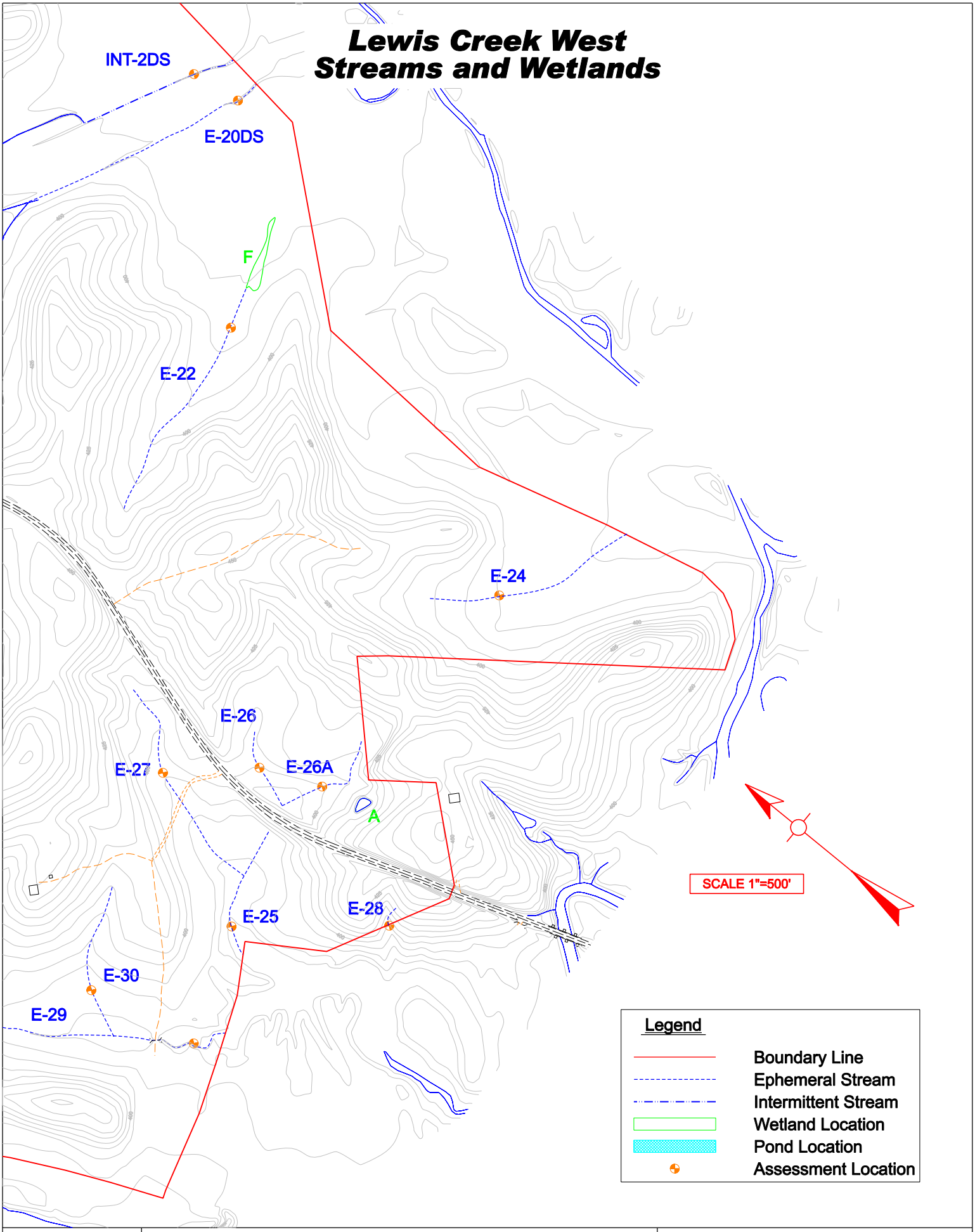
Lewis Creek West
Streams and Wetlands



T.H.E. Engineers, Inc.	PROJECT: LEWIS CREEK WEST SITE - JURISDICTIONAL WATERS DELINEATION			UT's OF WEST FORK AND LEWIS CREEK & GREEN RIVER	
	COUNTY: OHIO	STATE: KY	NEAR: CENTERTOWN	ITEM: TOPO MAP	EXHIBIT 6 (SHEET 4)

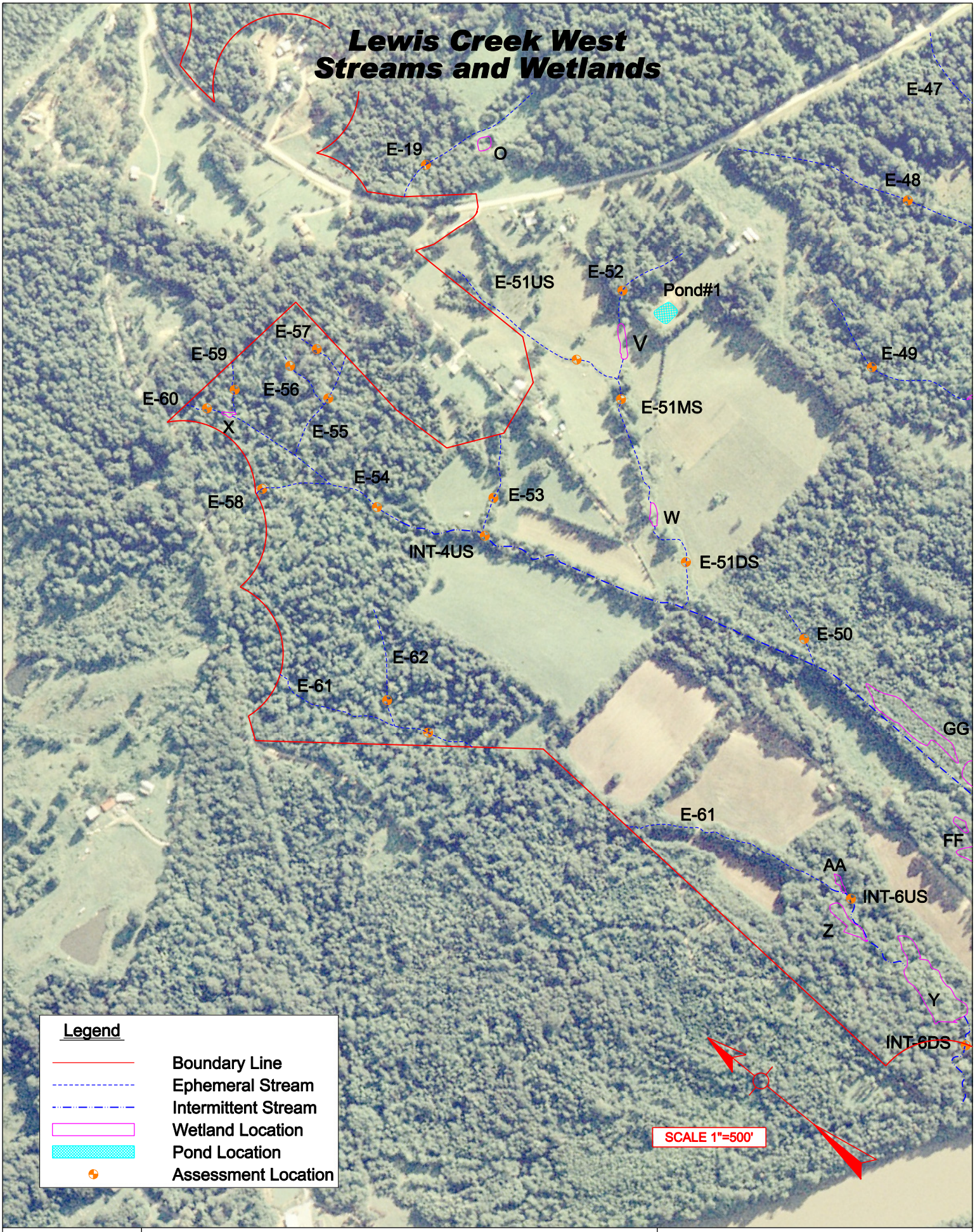
DATE:

Lewis Creek West Streams and Wetlands



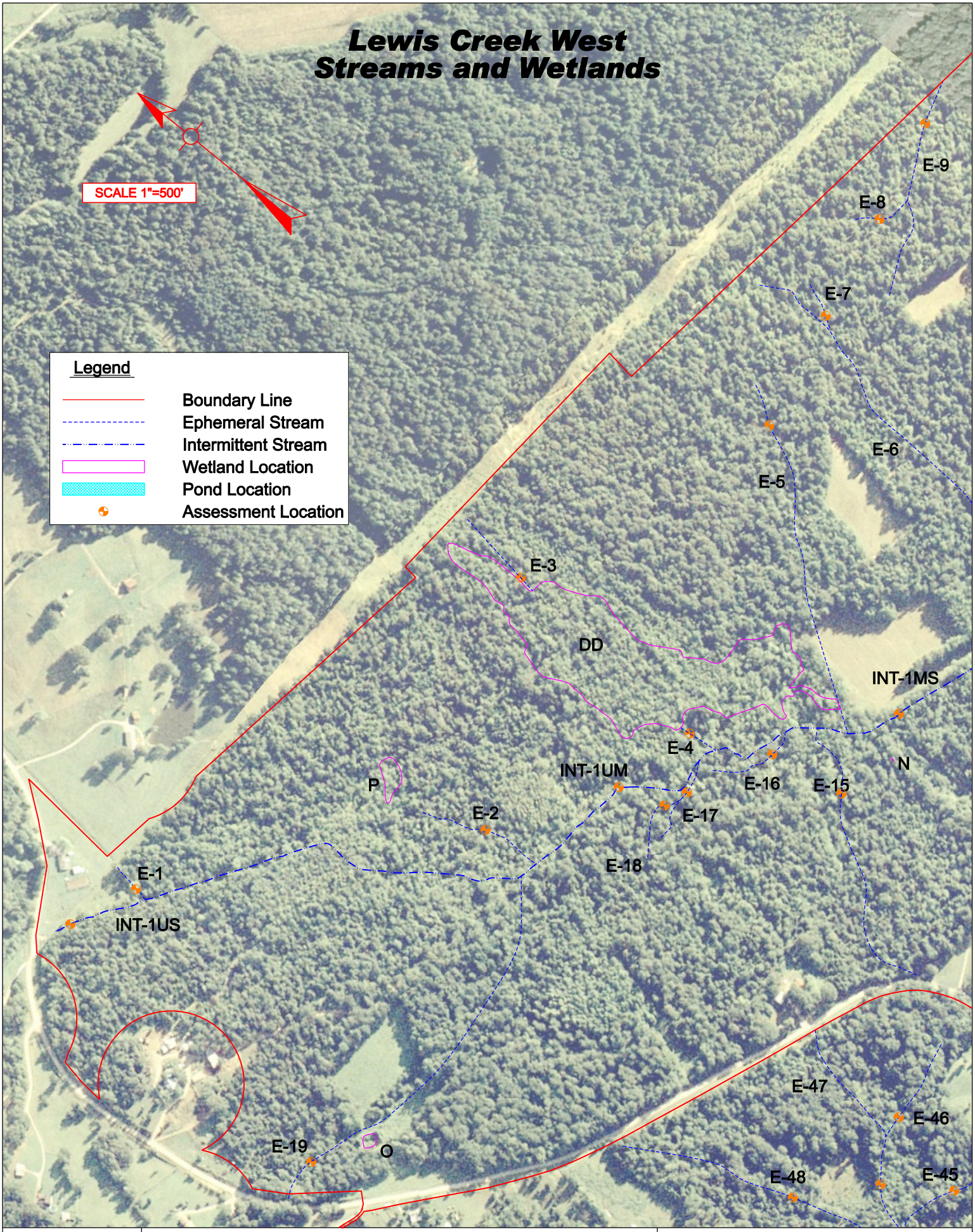
T.H.E. Engineers, Inc.	PROJECT: LEWIS CREEK WEST SITE - JURISDICTIONAL WATERS DELINEATION			UT's OF WEST FORK AND LEWIS CREEK & GREEN RIVER	
	COUNTY: OHIO	STATE: KY	NEAR: CENTERTOWN	ITEM: TOPO MAP	EXHIBIT 7 (SHEET 5)

DATE:



T.H.E. Engineers, Inc.	PROJECT: LEWIS CREEK WEST SITE - JURISDICTIONAL WATERS DELINEATION			UT's OF WEST FORK AND LEWIS CREEK & GREEN RIVER	
	COUNTY: OHIO	STATE: KY	NEAR: CENTERTOWN	ITEM: AERIAL MAP	EXHIBIT 8 (SHEET 1)

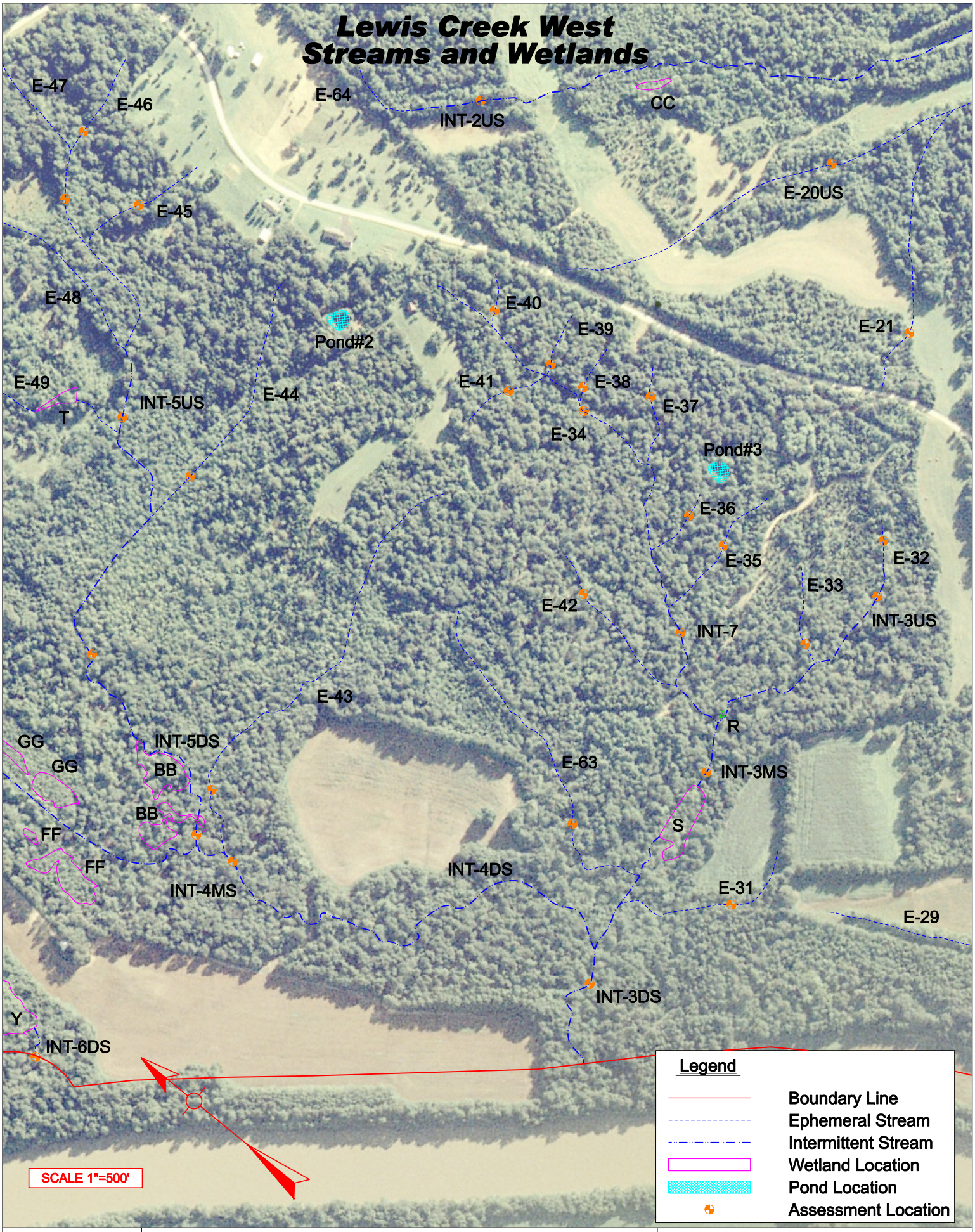
DATE:



T.H.E. Engineers, Inc.	PROJECT: LEWIS CREEK WEST SITE - JURISDICTIONAL WATERS DELINEATION			UT's OF WEST FORK AND LEWIS CREEK & GREEN RIVER	
	COUNTY: OHIO	STATE: KY	NEAR: CENTERTOWN	ITEM: AERIAL MAP	EXHIBIT 9 (SHEET 2)

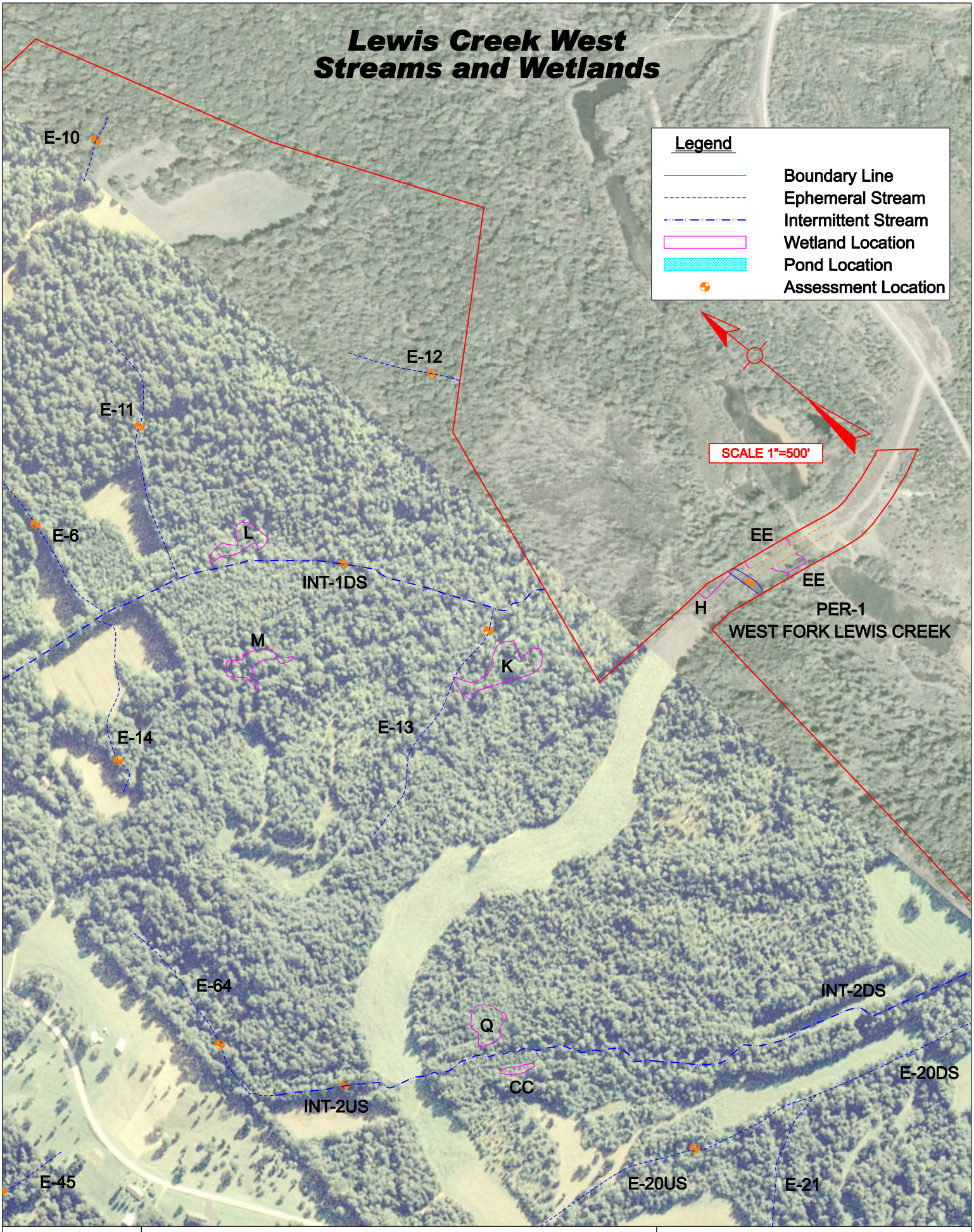
DATE:

Lewis Creek West Streams and Wetlands



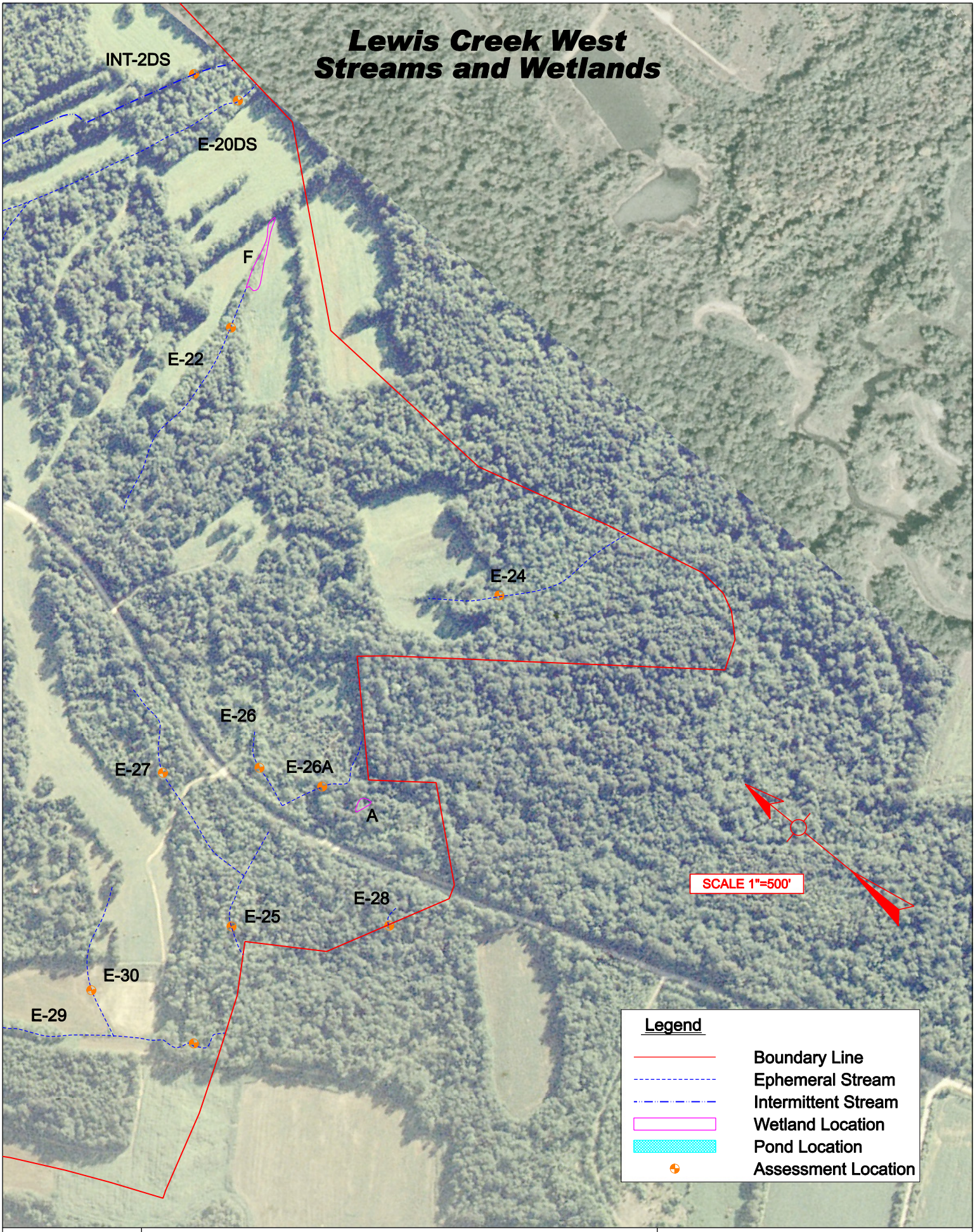
T.H.E. Engineers, Inc.	PROJECT: LEWIS CREEK WEST SITE - JURISDICTIONAL WATERS DELINEATION			UT's OF WEST FORK AND LEWIS CREEK & GREEN RIVER	
	COUNTY: OHIO	STATE: KY	NEAR: CENTERTOWN	ITEM: AERIAL MAP	EXHIBIT 10 (SHEET 3)

DATE:



T.H.E. Engineers, Inc.	PROJECT: LEWIS CREEK WEST SITE - JURISDICTIONAL WATERS DELINEATION			UT's OF WEST FORK AND LEWIS CREEK & GREEN RIVER	
	COUNTY: OHIO	STATE: KY	NEAR: CENTERTOWN	ITEM: AERIAL MAP	EXHIBIT 11 (SHEET 4)

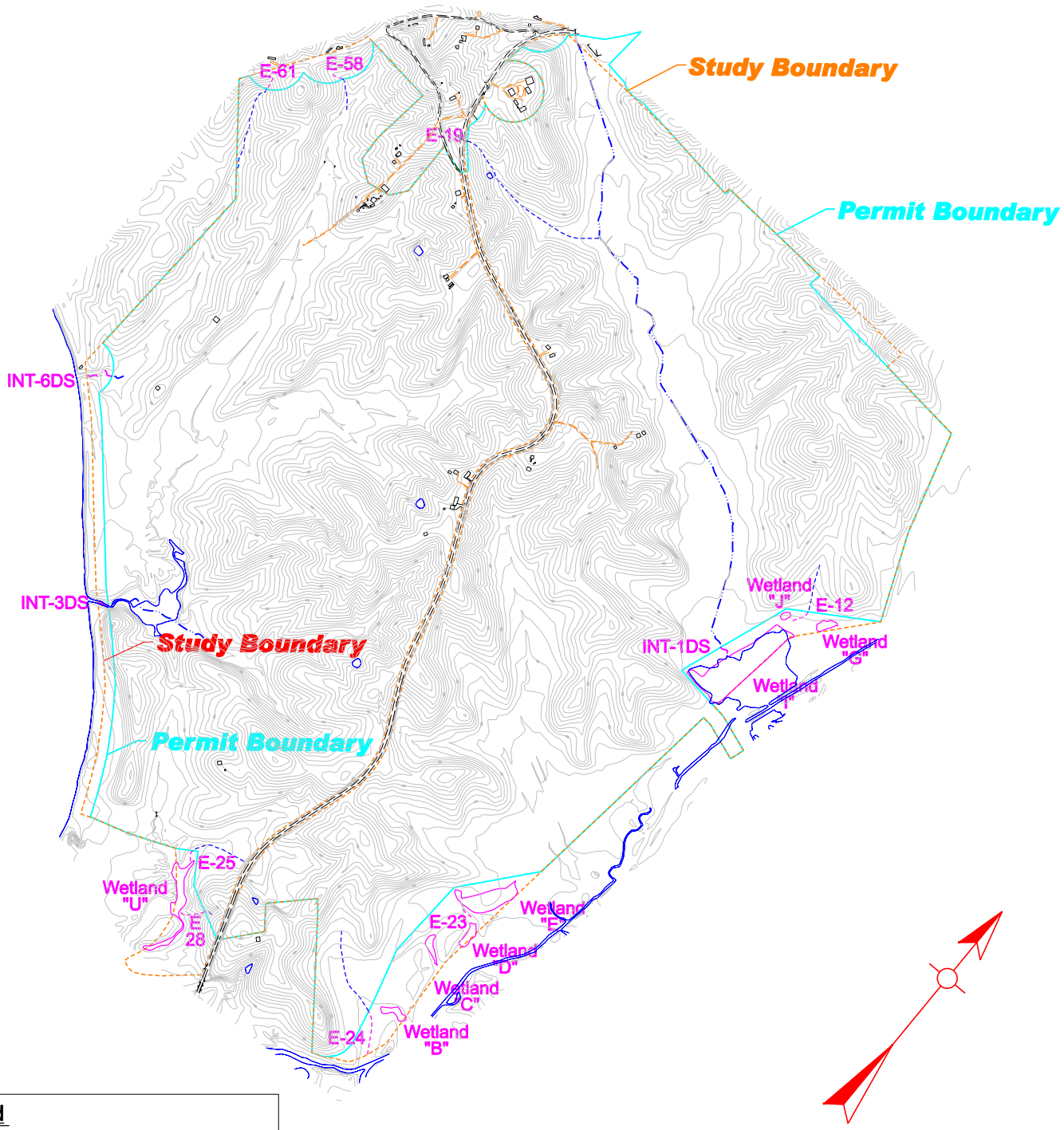
DATE:



T.H.E. Engineers, Inc.	PROJECT: LEWIS CREEK WEST SITE - JURISDICTIONAL WATERS DELINEATION		UT's OF WEST FORK AND LEWIS CREEK & GREEN RIVER	
	COUNTY: OHIO	STATE: KY	NEAR: CENTERTOWN	ITEM: AERIAL MAP	EXHIBIT 12 (SHEET 5)

DATE:

Avoidance Map



Legend

- Study Boundary
- Permit Boundary
- Avoided Streams
- Avoided Wetlands

SCALE 1"=1500'

T.H.E. Engineers, Inc.	PROJECT: LEWIS CREEK WEST SITE - AVOIDANCE AREA DELINEATION				
	COUNTY: OHIO	STATE: KY	NEAR: CENTERTOWN	ITEM: AVOIDANCE MAP	EXHIBIT 13

DATE: