

Exhibit B

28 March 2016

Ellen Gerhart
15357 Trough Creek Valley Pike
Huntingdon, PA 16652

In re: Sunoco Mariner East 2 Pipeline Project

Dear Ms. Gerhart,

You have informed me that a major new petroleum products pipeline is proposed for construction across your property and adjacent properties to the east and west of yours. You voiced concern about the potential short- and long-term impacts that this project will have on your property, environmental resources, and the welfare of your family. You provided me with copies of information related to the project from the files of various regulatory agencies and asked me to inspect your property and comment on the accuracy of the data known to you at this time, particularly with respect to wetlands and other water resources. This letter summarizes my observations and findings.

Summary and Recommendations

On 17 March 2016, my colleague ecologist Stephen Kunz and I investigated conditions on and immediately adjacent to your property and took the on-ground photographs displayed in this report. We focused our attention on areas within the proposed pipeline right-of-way and other areas proposed for temporary or permanent disturbance, and in particular on areas mapped and/or flagged and described by the pipeline project proponents as being potential wetlands or waterbodies.

According to Sheet 21 of 51, "Site Plan for Sunoco Pennsylvania Pipeline Project", Huntingdon County, PA, the following features were identified on your property and are shown on pipeline drawings:

Pond 14	(9,770 square feet)
Stream S-L41	(intermittent)
Stream S-L42	(intermittent)
Stream S-L43	(ephemeral)
Stream S-L44	(intermittent)
Stream S-L45	(intermittent)
Wetland L-24	(4,676 square feet)
Wetland L-25	(832 square feet)

According to the pipeline consultant, the two wetlands total 0.13 acre, the pond is 0.22 acre, and the five stream segments identified onsite together total 706 linear feet by my

measurement. The consultant also characterizes the wetland characteristics of L-24 as “poor” but provides no explanatory justification for this conclusion.

Based on our site investigation and available resource information, we have determined that some of these features have been mismapped, that some are mischaracterized, and that there are additional wetland and water resources at risk from proposed pipeline construction not yet identified by pipeline proponents on your property. The under-identification is not minor. Only half the stream segments and one seventh of the wetlands present within the designated construction corridor on your land have been acknowledged. We have determined further that the proposed impacts to wetlands and other features on your property, insofar as they have been addressed at all, have been significantly understated.

You recently have advised us that surveyor stakes have shown revised and expanded locations affecting streams and wetlands outside the limits previously shown on pipeline drawings and marked by stakes in the field. The comments in this report are based on drawings prepared by the applicant and flags and stakes visible to us onsite on 17 March 2016. Your oral comments to us suggest that additional impacts beyond those discussed here now are likely on your property if activity proceeds according to recent surveying.

It is our recommendation that qualified technical investigators revisit your property on behalf of the pipeline sponsor and revise the onsite identification of wetlands, watercourses, and other water features located there after careful field investigation in order to make resource flagging and pipeline drawings factually accurate. Following that, a surveyed map of the revised extent of State and federally-regulated wetlands and waters should be prepared and submitted to the Baltimore District, United States Army Corps of Engineers, for formal review, field verification, and ultimate confirmation through a Preliminary Jurisdictional Determination (JD). This no-fee service is offered by the Corps to landowners seeking to determine the extent of wetlands and other waters on their land in which regulated activities are being proposed. Pennsylvania has adopted by regulation the Corps methodology for wetland identification and delineation. We can participate in the Corps field inspection on your behalf, once the applicant has prepared standard documentation and an accurate depiction of jurisdiction on your property.

Stringent regulations that compel consideration of all practicable alternative measures to avoid, minimize, and (where impacts are truly unavoidable) compensate for impacts on such resources are in effect implementing the federal Clean Water Act and the Pennsylvania Dam Safety and Encroachments Act. The extent of temporary and permanent impacts to wetlands and other water resources proposed as part of the pipeline project within your property must be revised in all applicable permit applications, because these documents currently are both internally inconsistent and in factual conflict with onsite conditions. From past conversations with federal regulatory staff we are aware that lack of precision in site inventory has been one source of unnecessary, avoidable, and irreparable damage to water resources necessitating enforcement action at other petroleum resource project sites in Pennsylvania. For impacts on streams and wetlands as great as those proposed on your property the Sate cannot issue federal

approval pursuant to Pennsylvania Statewide Programmatic General Permit 4. We presume that the pipeline will require federal as well as State approval, inasmuch as your property is but one of many with streams and wetlands to be affected.

Finally, we recommend that no disturbance of any kind (including cutting of trees and shrubs, clearing of vegetation, or earth disturbance) should be allowed on your property until the above steps have been taken to correct the identification of onsite water resources and to reassess the potential impacts to them, along with all practicable alternative measures to avoid, minimize, and compensate for such impacts. From our site inspection it was clear that all of the proposed impacts, especially to currently unrecognized streams and wetlands, can be avoided or minimized by relatively minor adjustments in the published site plan. If adjustments are not made, we anticipate major damage to your pond as well as to the streams and wetlands through which water passes in route to your pond and to LittleTrough Creek. All these are regulated Waters of the United States and Waters of the Commonwealth. They are part of a tightly linked ecosystem that extends to the Atlantic Ocean via Chesapeake Bay. Once destroyed by unauthorized construction activities, it is at minimum quite expensive, and often actually impossible, to restore such water resources and the ecosystems they presently support. Some of the proposed impacts include permanent conversion of any (restored) wetlands above the pipeline from forest to herbaceous vegetation.

Discussion

Property Location

Your property is located on the east side of Trough Creek Valley Pike in rural Union Township, Huntingdon County, Pennsylvania (Figure 1). It is in the Ridge and Valley physiographic province of the Appalachian Highlands in central Pennsylvania in a valley just east of Sideling Hill. Onsite surface elevations range from about 1,200 to 1,240 feet above sea level. Your property encompasses approximately 27 acres and is mostly forested by deciduous trees forming a closed canopy. In places we noted stands of tall, evergreen pine trees. We saw no evidence of recent logging; most of the trees on your property are many decades old.

Your property is within the Little Trough Creek watershed of the Juniata River / Susquehanna River basin. Little Trough Creek flows from north to south just to the west of your property on the opposite side of Trough Creek Valley Pike (Figure 2). Not all regulated waterways are identified on United States Geological Survey (USGS) maps, including the unnamed tributaries to Little Trough Creek which flow across your property from east to west.

Waterways

As listed above, the pipeline drawings identify five stream segments on this property (Figure 3, top), all of which are identified as being intermittent except for Stream S-L43, which is identified as ephemeral. These onsite waterways are shown as disconnected

segments rather than as a single linked aquatic system. Together, the five pipeline-identified stream segments extend 706 linear feet. S-L41 and S-L42 are segments of the same watercourse (which we call the southern stream). The pipeline drawing also shows a short tributary to S-L 41, which is not otherwise identified. This small, unlabeled feature had no flow on 17 March, and we judged it to be ephemeral. All the other watercourses identified by the pipeline drawing had flowing water on 17 March. Absent any visible stormwater runoff or recent precipitation, their only source was groundwater discharge at the time of our inspection.

In fact, there are two main bed-and-bank watercourses on the subject property that feed your pond, plus at least one smaller connected tributary drainageway (Figure 3, bottom). The two main streams can be described as relatively permanent, inasmuch as they have prolonged flow of groundwater and a diverse streambed community of benthic invertebrate organisms. The two main streams converge within wetlands about 100 feet upslope from your pond. As noted in State technical guidance, ponds in Pennsylvania generally constitute evidence that their tributary streams have permanent flow. State regulations apply equally to permanent and intermittent streams. West of the pond a single stream flows through a culvert beneath Trough Creek Valley Pike and converges with Little Trough Creek within a large wetland downstream from your land. Your northern onsite stream is of less concern at present because it is largely remote from currently-proposed pipeline activities. We do not focus on it here. The pipeline-designated S-L41 and S-L42 are upstream segments of the southern stream that feeds your pond. The northern stream is not shown on the pipeline drawing at all, even though its confluence with the southern stream lies immediately outside the edge of the ATWS rectangle shown on the pipeline drawing.

The onsite streams as depicted by us at the bottom of Figure 3 are taken from the PADCNr LiDAR-based topographic mapping¹ of drainageways for this area. During Schmid & Company field investigations on 17 March 2016 Mr. Kunz and I confirmed the general accuracy of the LiDAR topographic and streamcourse mapping. We added one short tributary which arises as a bed-and-banks feature in the existing Buckeye pipeline ROW along the south side of the property. A very short segment of this same waterway is identified by the pipeline consultant and labeled Stream S-L43. The pipeline mapping of this waterway is deficient in two respects: (1) it does not show the full extent of the intermittent channel on your property, and (2) it describes this stream as ephemeral. On the day of our field inspection, we observed this waterway to have an established bed and banks, as well as water within or just below the streambed, from its connection with the southern main onsite watercourse up to and into the existing Buckeye pipeline ROW (Photos 1 and 2). This flow originated from groundwater, not from surface runoff.

The online USGS StreamsStats Program for Pennsylvania identifies the watershed that drains to your pond. It calculates the area of the drainage network upstream from the

¹ LiDAR (Light Detection and Ranging) is a dataset of elevation points produced for the PAMAP Program by the PA Department of Conservation and Natural Resources, Bureau of Topographic and Geologic Survey. It consists of a raster digital elevation model with a horizontal ground resolution of 3.2 feet, based on color aerial photographs taken during 2005.

dam of the onsite pond as 65 acres, 24 acres (37%) of which are your lands (Figure 4). The two main onsite streams are clearly shown as intermittent watercourses on Sheet 40 of the cooperative soil survey for Huntingdon County (Figure 5).

Wetlands

The wetlands on your property are significantly more extensive than shown on the pipeline consultant's inaccurate drawings. This conclusion is supported by Huntingdon County soil survey mapping, State topographic mapping, and our own on-site field investigation focused on the southern section of the property in the vicinity of the proposed pipeline route. We identified wetlands on the basis of field evidence of hydrophytic plants, hydric soils, and soil saturation in accordance with the 1987 Wetlands Delineation Manual and the Eastern Mountains and Piedmont Regional Supplement (Environmental Laboratory 1987, US Army Corps of Engineers 2012).

Two small riparian wetlands were identified on your property by the pipeline consultant² (L24 and L25), and together they encompass 0.13 acre. They show another small riparian wetland (L26) just offsite to the west adjacent to your pond. As mapped, Wetland L26 encompasses 0.02 acre. All three of these palustrine wetlands are described by the pipeline consultant as having PEM (palustrine emergent) herbaceous marsh vegetation.

The two onsite wetlands (L24 and L25) are not herb-dominated PEM, but in fact are palustrine forested wetlands (PFO)³. Both of these wetlands are within forest in the eastern section of the property where the tree canopy is generally closed. There are scattered very small openings in the tree canopy where individual trees have fallen, and this may be what led the pipeline's delineators to incorrectly characterize these wetlands as emergent. Indeed, in Photo 38 which shows Wetland L24 ("Aquatic Resource Report for the Pennsylvania Pipeline Project", July 2015), one fallen tree clearly is visible.

As discussed below, Wetlands L24 and L25 are in fact much larger than shown on the pipeline drawing and extend well into the surrounding forest at a distance from the stream bank. The consequence of mischaracterizing the nature of Wetland L24 (L25 was not identified as within the proposed limit of disturbance [LOD]) is that any proposed clearing and permanent maintenance of the right of way (ROW) will result in conversion of this forested wetland to emergent herbaceous vegetation, an adverse impact, even if the reestablishment of wetland hydrology and soil is successful here. The nearby offsite wetland (L26) was not examined closely in the field by us, and it may be correctly identified

² Resumes are provided for all of the Tetra Tech wetland delineators who performed the delineations for the pipeline sponsor on the subject property except for K. Keat . Some prior experience in wetland identification is claimed.

³ A similar mischaracterization was made for the offsite wetland to the west in the floodplain of Little Trough Creek. That wetland (L27) is listed as being partly PEM (the existing Buckeye pipeline ROW, which prevents reestablishment of shrubs) and partly PSS (palustrine scrub/shrub; the proposed Sunoco ROW) in Table 1 of the July 2015 "Aquatic Resource Report" for Huntingdon County. In the table of impacts, however, only PEM is listed, and no impact is ascribed to it, inasmuch as the pipeline here is proposed to be installed by HDD.

as PEM. Pipeline-identified Wetlands L24, L25, and offsite L26 and L27 are all at risk of damage by sediment from proposed construction on the nearby slopes. Absent accurate and conspicuous flagging of their limits, all the onsite riparian wetlands anywhere near the pipeline are at risk of unnecessary damage by construction crews and equipment once any site work begins.

According to the county soil survey, poorly drained hydric soils are mapped in the flatter areas of the property primarily along the two major streams (see Figure 5). Hydric soil map units mapped on this property include Brinkerton silt loam, 0-3% slopes (BrA) and Andover extremely stony loam, 0-8% slopes (AoB), which map units together cover 12.6 acres (46%) of the subject property (Figure 6). Pipeline consultant-delineated wetlands L24 and L25 are within the mapped Andover soils, and the pond encompasses 0.22 acre within the mapped Brinkerton soils. Actual hydric soils, as we encountered in the field and sketched on Figure 7 (bottom) are somewhat less extensive than county soil survey map polygons suggest, but are significantly more extensive along the watercourses than the tiny wetlands mapped on the pipeline drawing (Figure 7, top). Finding the precise limits of the hydric soils in the field here is a laborious and time-consuming task as a result of the abundant stones that render augering a challenge. In particular, wetland conditions extend well upslope beyond the upper end of pipeline consultant-delineated wetland L24 (Photos 3 and 4). We left pink flags around the wetlands in this upper section of the southern watercourse. Our flagging was conservative, and we may not have included all the actual wetlands.

Upslope from the hydric soils, the predominant soils of Berks-Weichert (BMF), Calvin (CaD), and Klinesville (KIC and KID) map units are quite distinct in morphology from Andover and Brinkerton, and they are not easily mistaken for those hydric series where soil cores can be extracted. Their C, D, and F slope classes indicate a high potential for erosion upon disturbance of the forest vegetation that presently covers these steep slopes.

We also observed wetlands within the 100-foot wide State-regulated floodway along one side or the other (and sometimes both sides) of the southern unnamed stream on the property between L24 and L25 and downstream from L25 to the pond (Photo 5). We left occasional pink tracer flags at the edge of observed wetlands along this middle section of the watercourse, but did not attempt to flag the entire extent of wetlands along this reach.

A relatively large area of wetland exists at the confluence of the two main onsite streams just upstream from the pond (Photo 6). We left pink flags around the wetlands in this area, beginning at the upper end of the pond, extending through the confluence area, and then a short distance up each of the two watercourses. The proposed ATWS rectangle extends into this area.

Emergent wetlands (PEM) dominated by cattails (*Typha latifolia*, OBL hydrophyte) occupy the upper section of the open water (POW) in the pond itself (Photo 7). Emergent wetlands dominated by reed canarygrass (*Phalaris arundinacea*, FACW hydrophyte) and other herbaceous hydrophytes occupy an area about 75 to 100 feet in length along the watercourse just upstream from the end of the pond's open water. Beyond that, the

wetlands along the onsite watercourses would be characterized as palustrine forested riparian wetlands (PFO; Photo 8) throughout the subject property.

Impacts

The outer limit of disturbance (LOD) for proposed pipeline activities is depicted in yellow on Figure 8, based on the temporary and permanent disturbance areas shown on Site Plan Drawing Sheet 21 of 51 for Huntingdon County. Within the pond watershed the pipeline proposes to disturb 4.5 acres for construction. We measure the proposed disturbance area within the subject property itself to be 2.97 acres. As shown on Figure 8, the LOD is virtually all forested and is largely characterized by steep slopes, such as the nearly 0.5 acre of Klinesville (KID) soils ranging from 15 to 25% slopes on the immediate south side of the pond and the 1.5 acres of Buchanan (BxD) soils on 8 to 25% slopes at the top of the watershed. Proposed tree cutting and clearing of surface vegetation within these forested and steep slope areas is likely to result in significant short-term erosion and sedimentation unless extraordinary measures are successfully implemented to avoid it. Construction activities in those areas probably will cause significant degradation of the adjacent waterways and the balance of the downslope pond in addition to the areas directly destroyed by clearing and grading.

Of particular concern is the proposed rectangular, 0.83-acre ATWS work area just upstream from the pond. That area contains some of the steepest slopes on the property and extends into the stream and associated wetlands where the two unnamed tributaries converge. Because the pipeline drawings identify no stream or wetlands there, however, those impacts have not yet been included in the acknowledged totals. I understand that the pond provides recreational and aesthetic benefits to your family, as well as habitat for fish and for resident and migratory wildlife. The proposed drilling under Little Trough Creek as currently planned will not avoid any impacts on your pond.

The first two columns in the table below highlight the different extent of wetlands and other water features on the subject property as identified by the pipeline consultant and as determined by Schmid & Company. The last two columns highlight the differences in the extent of wetland and other impacts within the identified Limit of Disturbance (LOD) between the pipeline's consultant and Schmid & Company.

Feature	Total on Subject Property		Total within LOD	
	per pipeline*	per Schmid & Co.	per pipeline	per Schmid & Co.
Pond	0.22 ac.	0.22 ac.	0.034 ac.	0.034 ac.
Streams	706 lin. ft.	2,349 lin. ft.**	151 lin. ft.	381 lin. ft.
Wetlands	0.13 ac.	1.6+ ac.***	0.027 ac.	0.208 ac.

* Did not examine entire property, only southern section near proposed LOD.

** Based on LiDAR-derived waterways and Schmid & Company onsite inspection.

*** Wetlands along the northern unnamed tributary were not investigated.

The pipeline consultant focused on the southern section of the property, and in particular, on the areas within and immediately adjacent to the proposed limits of disturbance. That narrow focus, however, has the effect of minimizing the full extent of and hydrologic connections between the wetlands and watercourses on this property. If the features are viewed as small, disconnected pieces, then the impacts to them cannot be fully appreciated or adequately assessed. Significantly, just within the LOD, we have identified 2.5 times the length of streams (381 linear feet vs. 151 linear feet) at risk from pipeline activities. Similarly, we have identified nearly 8 times as much wetland area at risk (0.208 acre vs. 0.027 acre) of direct pipeline construction impact as has been conceded in the available application materials.

The pipeline consultant did not mention any biota in the stream network on your property. During our inspection we noted fish in the pond and a diverse community of streambed organisms in at least 1,000 linear feet of the southern stream. Pipeline construction as currently proposed will cause drastic damage to the streams and to the pond on your property, with sedimentation probable well outside the LOD. We have not seen any plans for post-pipeline site restoration, although we understand that additional pipeline construction in this right of way is anticipated following completion of the Mariner East 2 project, necessitating further disruption of the corridor in the foreseeable future.

Other impacts not directly quantifiable at this time include probable sedimentation and runoff into the onsite streams and pond due to unknown proposed construction and sediment control activities on very steep slopes in the 4.5 acre LOD within the pond drainage area, and longer-term impacts due to maintaining the now-forested pipeline corridor in a non-wooded condition to facilitate pipeline inspections. These impacts will affect more than 1,200 linear feet of stream, eight times the length of stream that the pipeline consultant has identified within the direct LOD.

We note that the pipeline report characterizes Wetland L24 as having “poor” quality. No basis for this characterization is proffered. We contend, based on our field observations, that Wetlands L24 and L25, as well as the wetlands linking them along the riparian corridor of the southern stream, have high value. There are about 2 acres of mature, closed-canopy, forested riparian wetlands on the subject property, a significant area,

adjacent to mature upland forest. These wetlands protect water quality in the stream and provide habitat for wildlife, precisely as wetlands are expected to do. Their functional values currently are high. Those values will be destroyed outright by proposed clearing and excavation. Atop the proposed pipeline any restored wetlands will have vegetation development arrested at the stage of low-growing herbs in order to facilitate future inspection; forested wetlands will not be allowed.

In conclusion, we have determined that the wetlands and waters on your property have not been accurately or fully identified by the proponents of the Mariner East 2 pipeline project. The significance of their destruction has not been discussed at all. The extent to which currently proposed damages can be avoided, minimized, or compensated has not been addressed. If sensitive resources such as these are not recognized, they cannot and will not be protected during project review by regulatory agencies or during the conduct of construction activities.

We recommend, therefore, that no onsite construction or pre-construction activities (including the cutting of trees and shrubs, clearing of vegetation, or earth disturbance) be done until these resources have been reexamined and re-identified in the field, inspected and formally confirmed by the appropriate regulatory agency (Corps of Engineers), and added to revised project drawings. At that time, the permitting agencies should review closely the proposed action in this vicinity to ensure that all practicable measures have been taken to avoid or minimized water resource impacts.

In light of the extent of inaccuracies we have found in the mapping of wetlands and waters on your property, the accuracy of the delineations on other properties in Huntingdon County must be questioned. Indeed, the extent of wetlands and waters located throughout the entire length of the proposed pipeline route should be examined in detail and confirmed by formal Corps Jurisdictional Determination before any permit applications are deemed complete for review.

To the extent that plan modifications or other information becomes available, Mr. Kunz and I reserve the right to revise our conclusions and recommendations.

Yours truly,



James A. Schmid, Ph.D.
President
Certified Senior Ecologist (ESA)
Professional Wetland Scientist (SWS)
Certified Wetland Delineator (USACE)

Attachments (figures and photos referenced in the text)

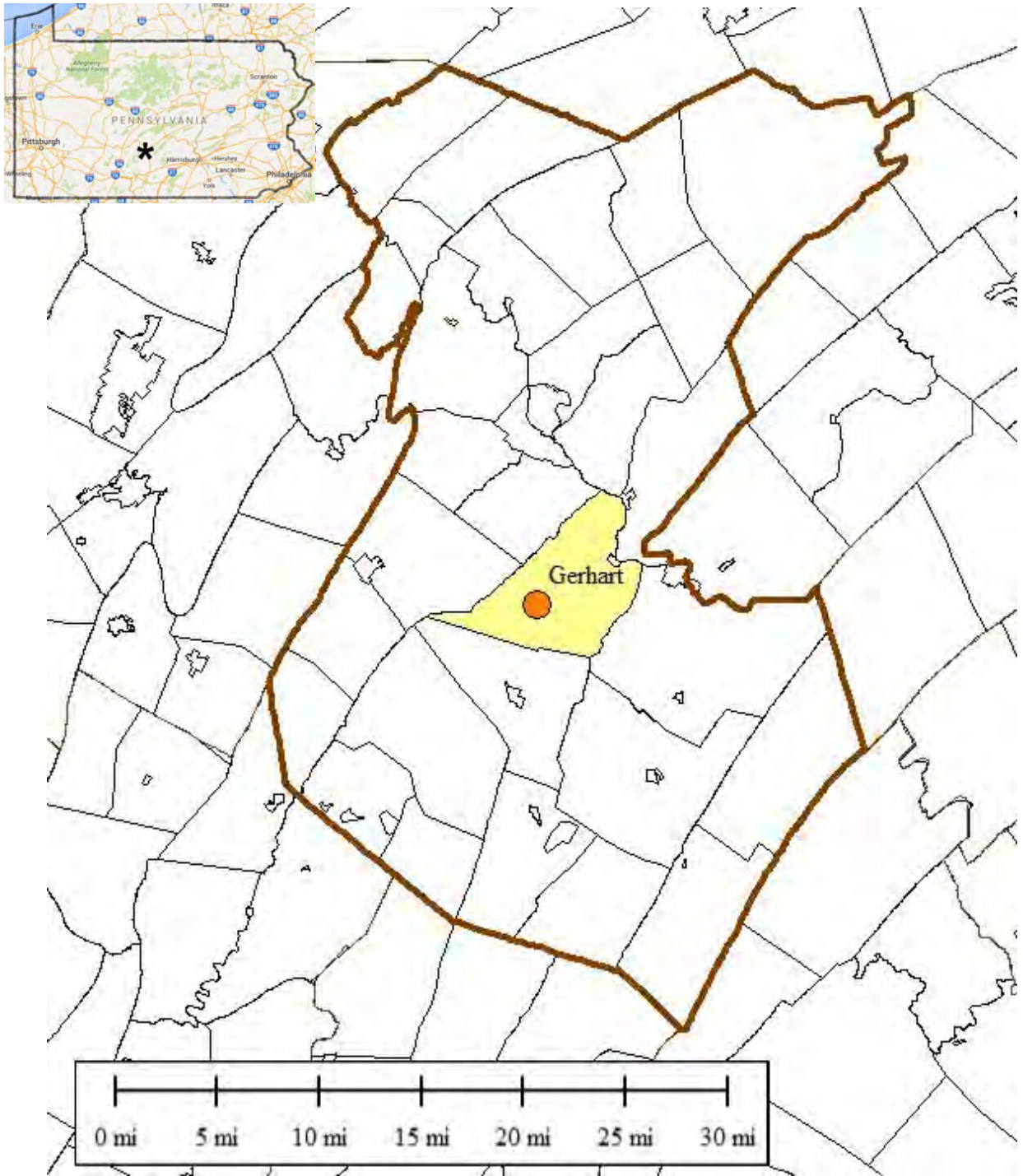


FIGURE 1. Approximate location of the Gerhart property (orange dot) in rural Union Township (yellow), Huntingdon County (brown outline), Pennsylvania. The property is along the east side of Trough Creek Valley Pike, and is shown on Sunoco Site Plan Drawing Sheet 21 of 51 for Huntingdon County. Black star on inset map at upper left shows site location in Pennsylvania.

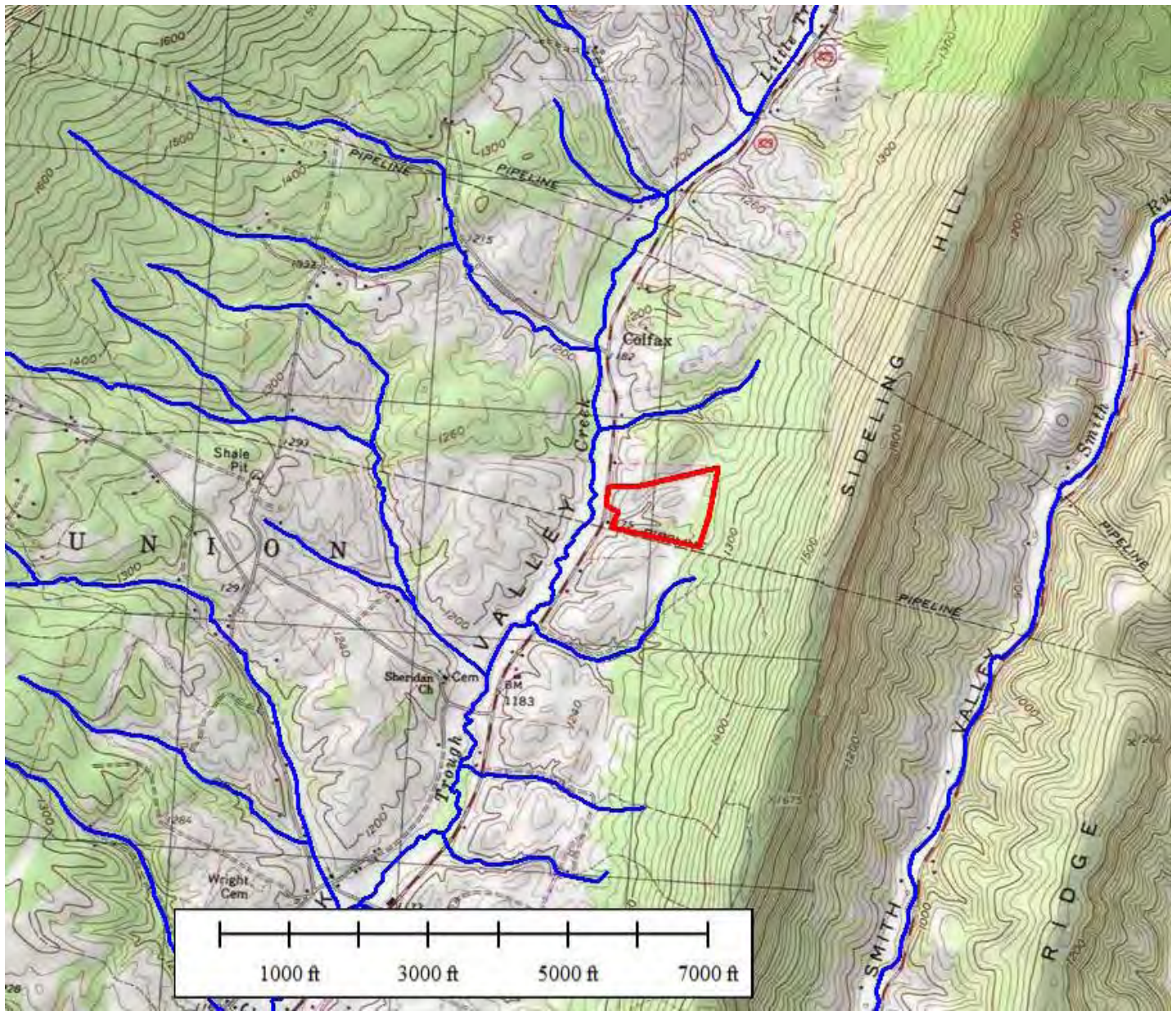


FIGURE 2. Location of the Gerhart property (red outline) as depicted on the Huntington PA 7.5-minute USGS topographic quadrangle. Streams depicted on the topo quad are highlighted in blue.

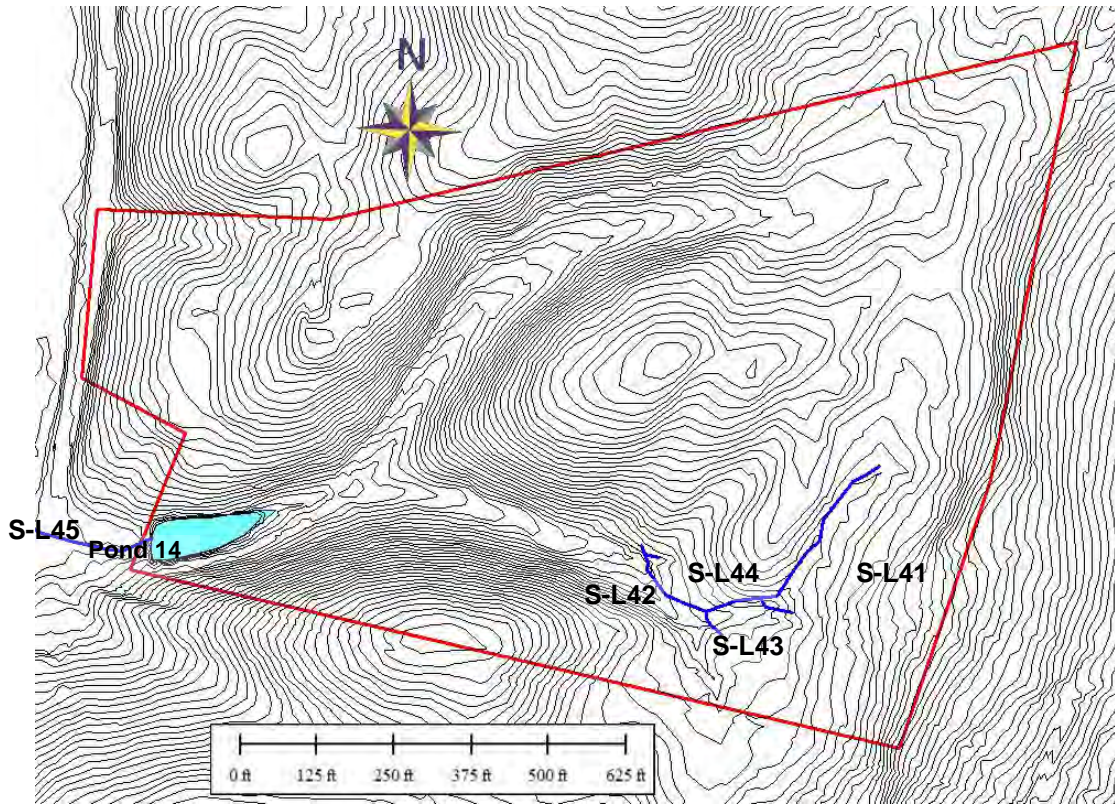


FIGURE 3. Comparison of streams (blue lines) identified on the property by Sunoco pipeline consultant (above) versus what the LiDAR-based data show and the Schmid & Company field inspection confirms (below). The subject property is outlined in red. The LiDAR 2-foot contour lines cluster together in areas of steep slopes.

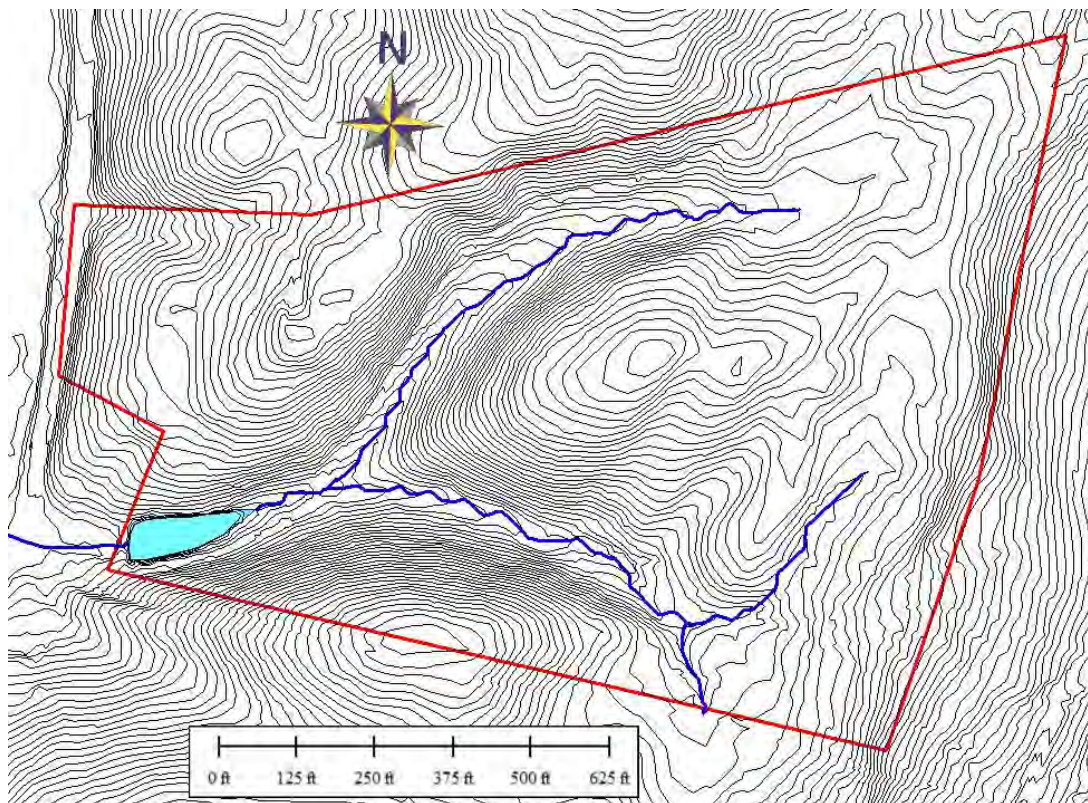


FIGURE 4. Identification of the drainage area (subwatershed; red shading) of the onsite streams upstream from the dam on the pond, according to the USGS StreamStats program for Pennsylvania. The total drainage area shown is 65 acres; the portion of the drainage area on the subject property (red outline) is 24 acres (37% of the total pond watershed). The proposed limit of disturbance is shown in yellow.

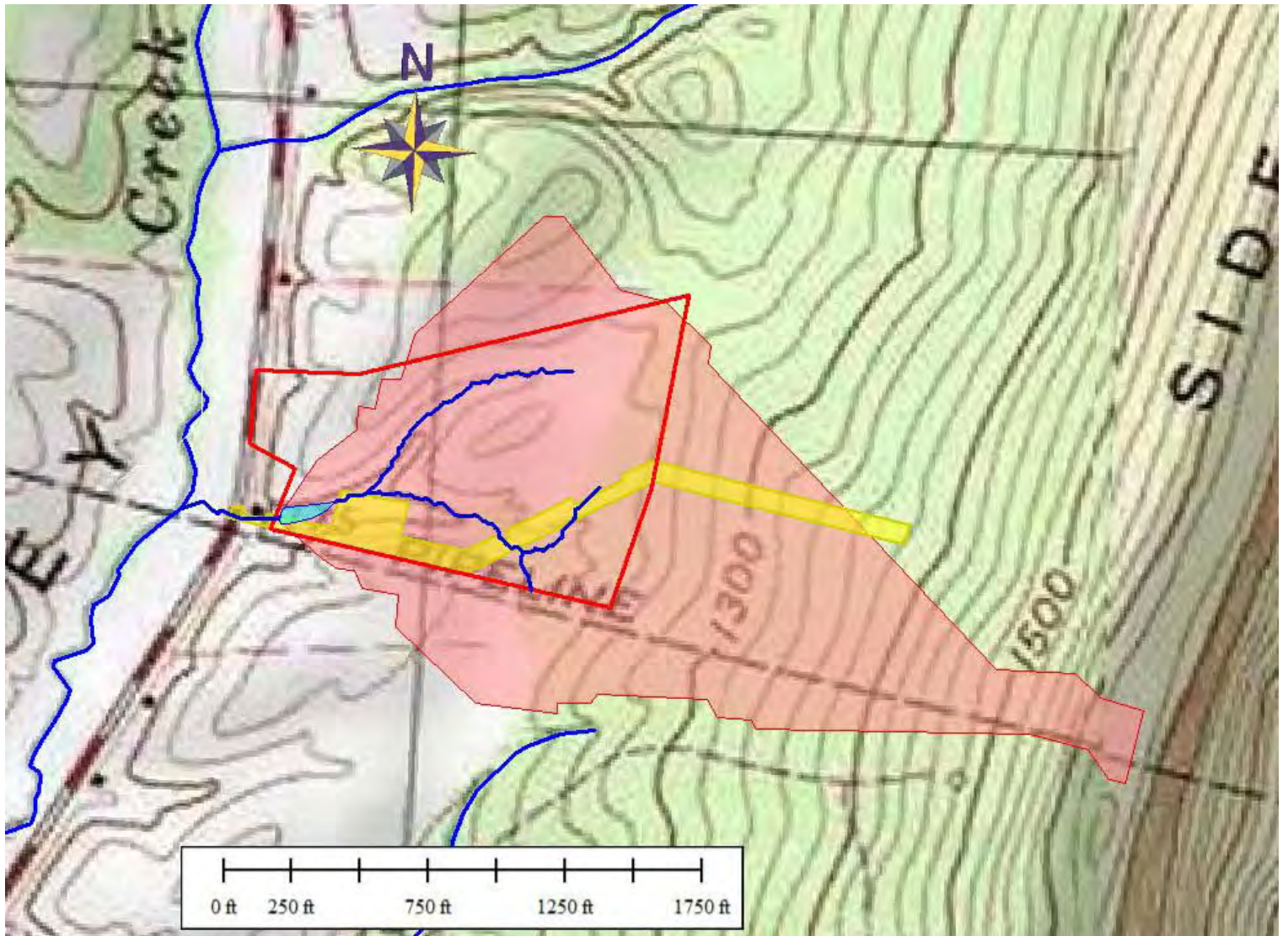
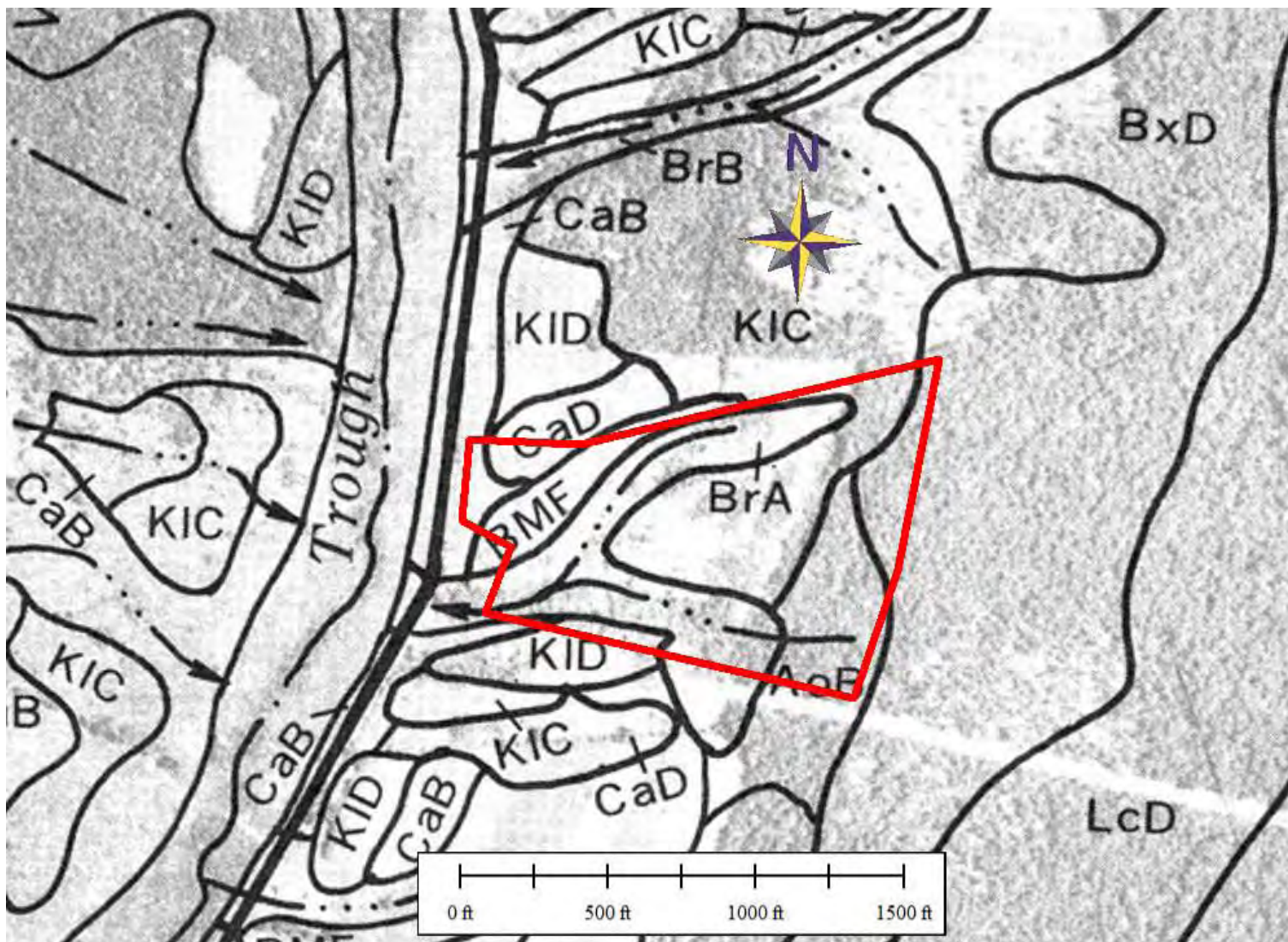


FIGURE 5. Soils on and near the subject property (red outline) according to the published Huntington County soil survey (Merkel 1978). The two main watercourses on the subject property are clearly shown within the two hydric soil types mapped here (BrA and AoB). See also Figure 6. The clearcut corridor of the Buckeye Pipeline is clearly visible along the southern border of the subject property.



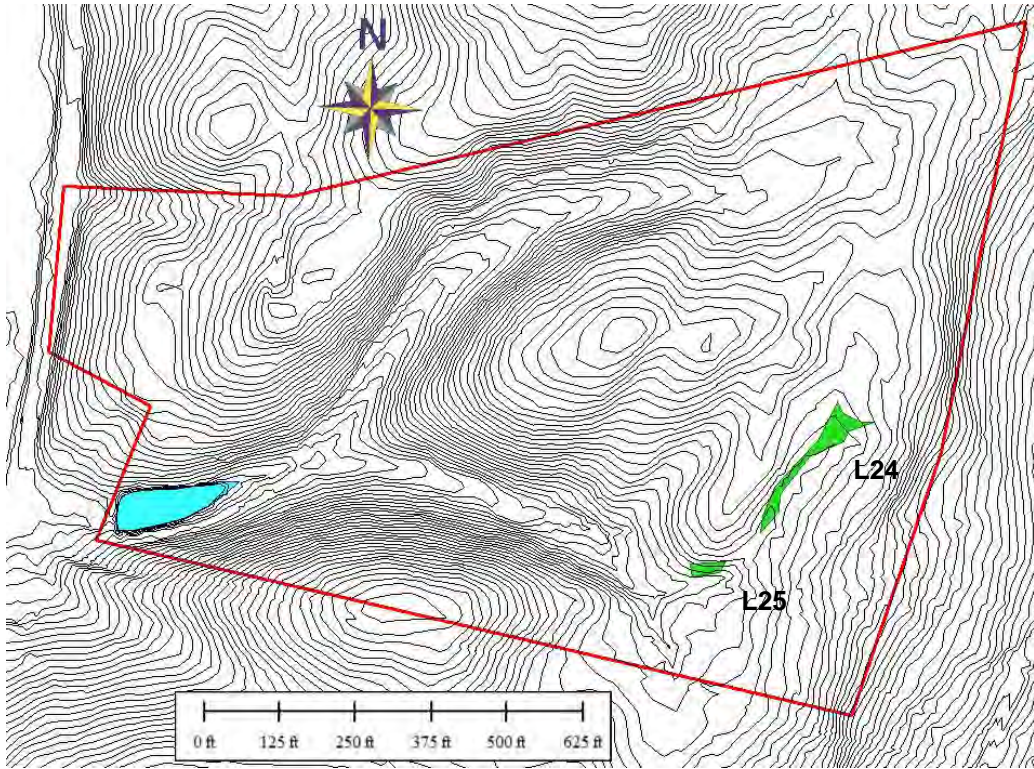
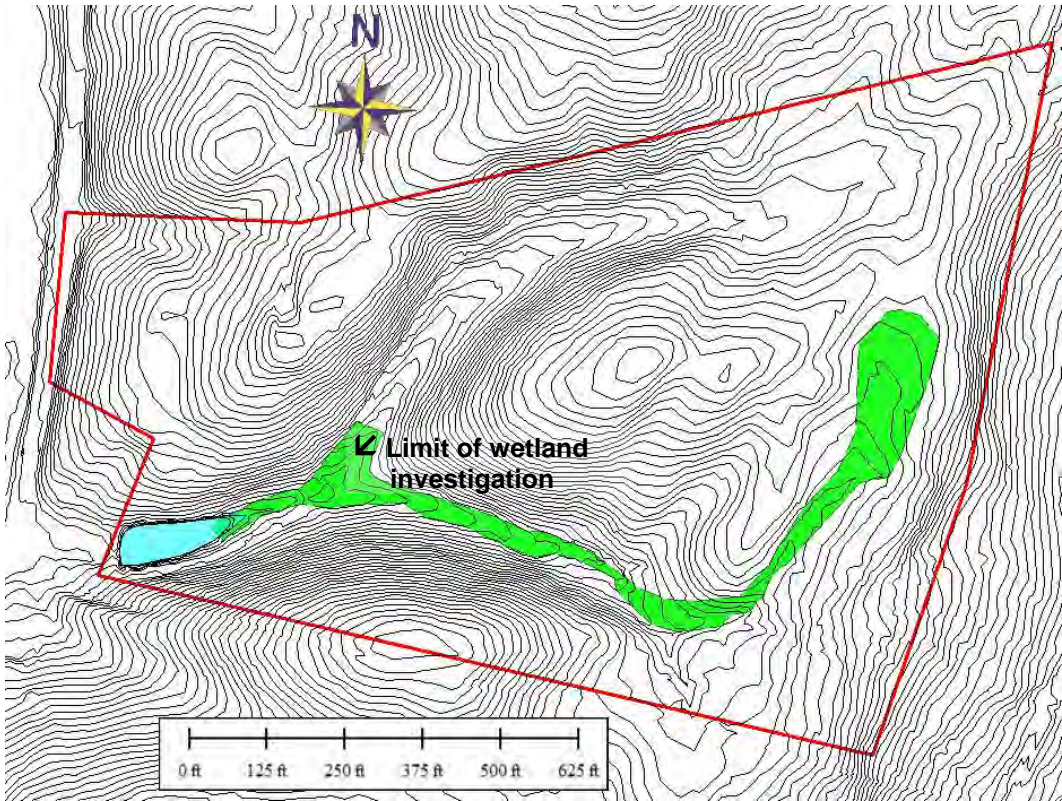


FIGURE 7. Comparison of wetlands (green, 0.13 acre) identified on the subject property (red outline) by Sunoco consultant (above) versus likely extent based on Schmid & Company field investigation (1.6 acres, below). Pond also is shown (blue). Schmid & Company did not investigate wetlands along the entire northern unnamed stream, but only near its confluence with the southern stream.



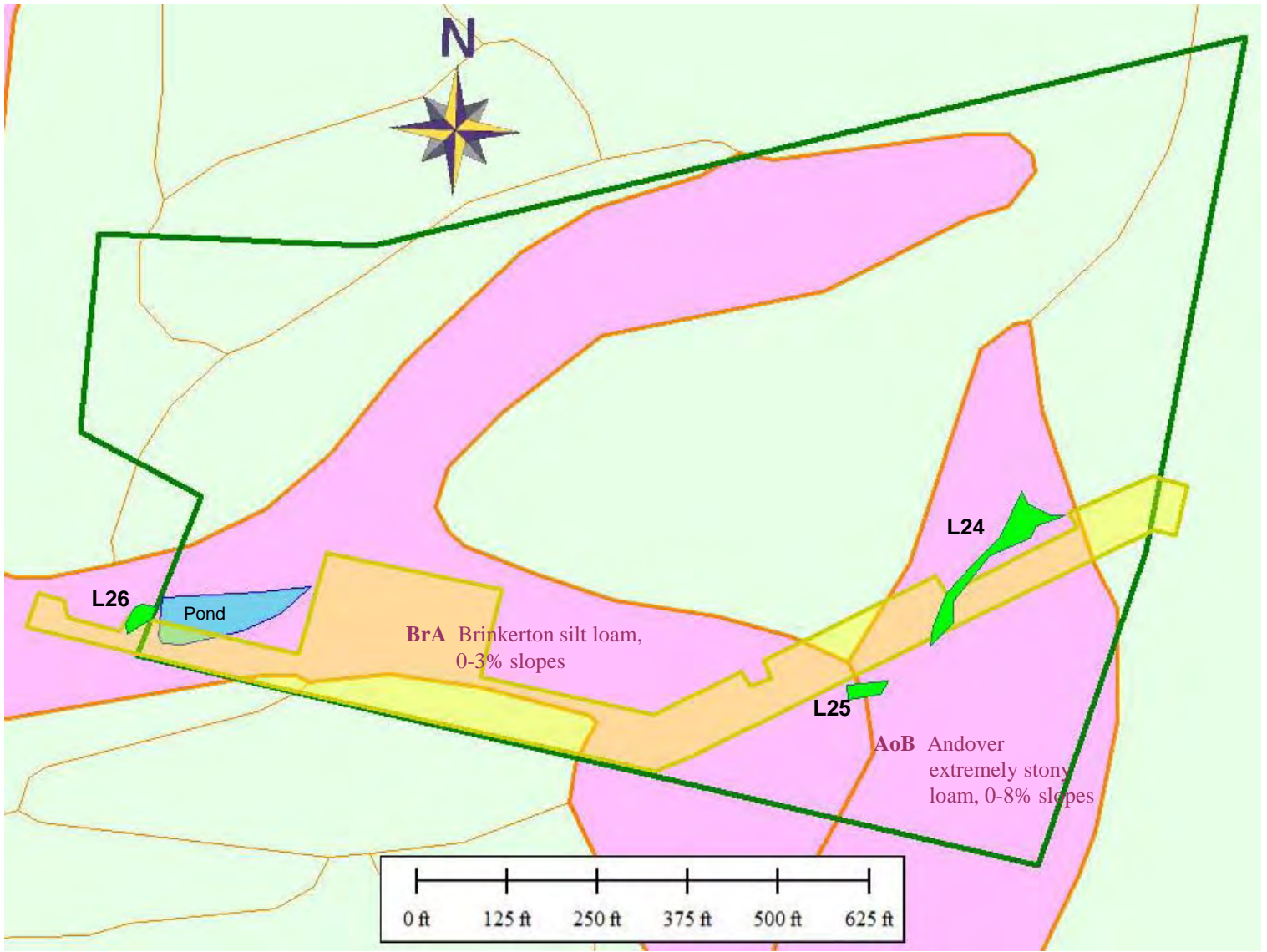


FIGURE 6. Hydric soils (BrA and AoB; pink) mapped on and near the subject property (dark green outline) compared with Sunoco consultant wetlands (green) and pond (blue) delineated in and near the proposed limit of disturbance (yellow). County-mapped hydric soils cover 12.6 acres of the property. Pipeline consultant-delineated onsite wetlands cover 0.13 acre and the pond covers another 0.22 acre. The pipeline consultant seriously undermapped streams and wetlands at risk on the subject property.



FIGURE 8. The proposed limit of disturbance (yellow) in the southern section of the subject property (red outline) is both heavily wooded (above) and largely consists of very steep slopes (below). The cutting of forest on steep slopes can cause immediate and long-term impacts to the downslope waterbodies. Streams are indicated in dark blue; pond, in pale blue. The clearcut corridor of the Buckeye Pipeline is conspicuous along the southern border of the subject property. USDA airphoto.

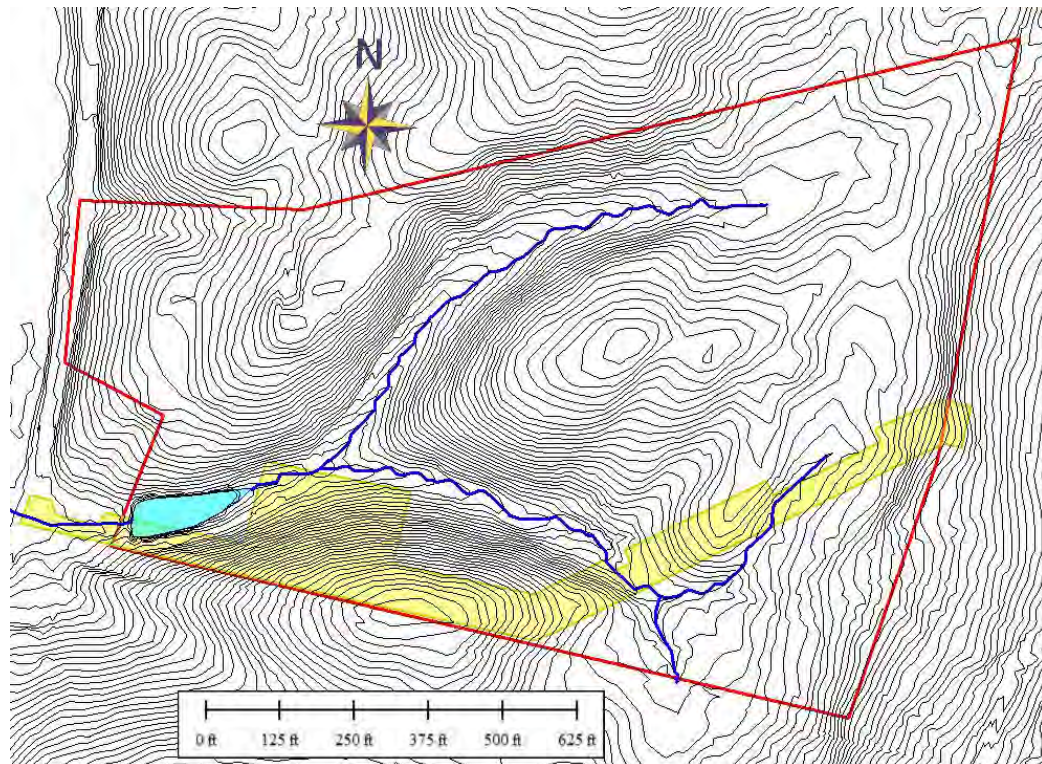




Photo 1. View northward from the Buckeye Pipeline ROW into the upper section of an unnamed tributary incorrectly mapped by Sunoco consultant as ephemeral (S-L43). Water within the defined bed and banks can be seen here near where it meets the existing ROW.



Photo 2. View northward on same drainageway as above except further downgradient, just upslope from where Sunoco consultant stopped its mapping of S-L43 (blue flag, midground).



Photos 3 (above) and 4 (below). Views northward of wetlands extending beyond the end of pipeline-consultant mapped Wetland L24. The fallen branch in the foreground in Photo 4 is the same as the one in the background in Photo 3 (yellow arrows). The bed and banks of the stream here becomes a swale, but the surface hydrology is evident, and the soils are clearly hydric (low chroma matrix, prominent mottles).





Photo 5. View eastward on the southern stream between the pond and pipeline consultant-mapped Wetland L-25. The area between the man and the stream channel exhibits all three wetland field characteristics but has not been identified on project drawings as a wetland. Similar patches of wetland are found along one or both sides of this entire stream.



Photo 6. View eastward of a wetland not identified by the pipeline consultant at the confluence of the two main onsite streams. The incised channel of the southern stream is visible in upper right (arrow). Part of this wetland is within the proposed ATWS disturbance area.



Photos 7 (looking west, above) **and 8** (looking east, below). Views are near the upper end of the onsite pond. Note in Photo 7 cattails (PEM) in the open water (POW) of the upper pond, and emergent marsh (PEM) extending an additional 75 to 100 feet upstream from the pond. Beyond that to the east (Photo 8) the wetlands along the watercourse are forested (PFO).

