

*Post-Construction Stormwater Management/Site
Restoration Plan Narrative*

**Rura Field Project
Homer City Generation LP
Black Lick and Center Townships
Indiana County, Pennsylvania**

**POST CONSTRUCTION STORMWATER / SITE RESTORATION PLAN
PROJECT NARRATIVE**

The Post Construction Stormwater Management/Site Restoration (PCSM/SR) Plan has been prepared in accordance with standards and specifications established in the Pennsylvania Department of Environmental Protection (PADEP) *Stormwater Best Management Practices Manual, latest edition*. Indiana County does not have an Act 167 Stormwater Management Plan.

1.0 Project Description

Homer City Generation LP (Homer City) is proposing the Rura Field project located in Black Lick and Center Townships, Indiana County, Pennsylvania. The proposed project consists of two (2) graded pads of approximately 26.7 acres and 65.1 acres, respectively. Development will include but is not limited to: earthwork, site grading, stormwater management and conveyance facilities. Refer to the Site Location Map provided with this application.

The total project area as a result of construction activity is approximately 91.8 acres. Earth disturbance will remain within the project limit-of-disturbance as shown on the E&S Plan drawings. The project will include supporting E&S control BMPs and Post Construction Stormwater Management (PCSM) BMPs.

An Erosion and Sediment Control (E&S) Plan has also been prepared for the proposed project that implements BMPs in accordance with standards and specifications defined by PADEP Technical Guidance Number 363-2134-008 *Erosion and Sediment Control Best Management Practice (BMP) Manual*.

a. Topographic Features

Site topography varies across the project area. Generally, site contour is gentle to steep and ranges from approximately 1% to 15%. The site location and area surrounding the proposed project area is primarily agricultural fields with existing gas wells and overhead electric utility.

b. Soil Characteristics

Soil type within and around the project area has been determined using the United States Department of Agriculture (USDA) Natural Resources Conservation Service Web Soil Survey. The Custom Soil Resource Report identifies seven soil types within the pad areas. The names of the soil type and potential limiting characteristics that may be exhibited are defined in Table 1. Refer to the Custom Soil Resource Report and Soil Limitation Resolutions provided with this

permit application. For the proposed project, it is anticipated that proposed BMPs will be sufficient to manage and control limitations that may be exhibited by the soils contained within the project site during and upon completion of construction.

Table 1
Limitations of Pennsylvania Soils Pertaining to Earthmoving Projects

Soil Name	Cutbanks Cave	Corrosive to Concrete / Steel	Droughty	Easily Erodible	Flooding	Depth to Saturated Zone / Seasonal High Water Table	Hydric / Hydric Inclusions	Low Strength / Landslide Prone	Slow Percolation	Piping	Poor Source of Topsoil	Frost Action	Shrink - Swell	Potential Sinkhole	Ponding	Wetness
Allegheny	X	C		X			X	X	X	X	X	X				
Buchanan	X	C/S	X	X		X	X	X	X	X	X	X				X
Gilpin	X	C	X	X			X	X	X	X	X	X				
Hazleton	X	C	X	X			X	X	X	X	X	X				
Monongahela	X	C/S		X		X	X	X	X	X		X	X			X
Tyler	X	C/S		X		X	X	X	X	X	X	X	X			X
Wharton	X	C/S		X		X	X	X	X	X	X	X	X			X

Note: This is not necessarily an all-inclusive list. Absence of an X does not mean "No Potential Limitation".

c. Earth Disturbance Activity Characterization

Homer City is proposing the Rura Field project located in Black Lick and Center Townships, Indiana County, Pennsylvania. The proposed project consists of two (2) graded pads of approximately 26.7 acres and 65.1 acres, respectively. The total limit of disturbance associated with this NOI is anticipated to be approximately 91.8 acres.

d. Net Change in Volume and Rate of Runoff

A hydrologic analysis has been conducted to determine impacts on stormwater runoff as a result of the proposed project.

Technical Release No. 55 methodology was used to calculate the peak runoff flow rate and volume for the pre-development and post-development site conditions for the areas associated with the graded pad areas. Proposed stormwater management BMPs will be implemented so that the volume difference from the 2-year, 24-hour storm event (pre- to post-) will be stored and so no increase in the post-development total runoff rate for all storms up to and including the 100-year, 24-hour storm event will occur. The BMPs consist of infiltration basin BMPs located downslope of the pad areas.

Volume Analysis

Technical Release No. 55 methodology was used to calculate the pre-development runoff volume, as well as the post development impacts of stormwater runoff for the area associated with the pad

areas. Hydrologic calculations for the areas within the limit of disturbance are provided in with this permit application. A summary of the runoff volumes is provided in the tables below.

2-year 24-hour Volume Summary

Watershed	Pre-development (cf)	Post-development (cf)	Post-development w/BMPs (cf)	Difference (cf)
POI 1 (Two Lick Creek)	76,987	76,178	-	-809
POI 2 (Two Lick Creek)	164,942	163,823	-	-1,120

Peak Rate Analysis

The Volume Analysis for each POI shows a decrease in the 2-year, 24-hour pos-development volume when compared to the 2-year, 24-hour pre-development volume. The pads will returned to meadow, good condition upon completion of construction. The post-development drainage patterns do not change significantly from the pre-development drainage patterns. Given these factors, a peak rate analysis for these POIs is not necessary.

e. Surface Water Classification

Michael Baker International (Michael Baker) prepared a Wetland Delineation and Stream Identification Report for the project site in which streams and wetlands around the project area have been identified and delineated. No aquatic resources were identified on the project site. The project overall is tributary to Two Lick Creek which has a Ch. 93 classification of Trout Stocked Fishes (TSF-Acid Mine Drainage Impaired). No in-stream work is planned for Two Lick Creek and no significant impacts to other sensitive natural resources are anticipated.

f. BMP Description Narrative

Temporary BMPs that will be implemented during construction at the proposed project site to protect water quality will include site specific erosion and sedimentation controls. Controls include, but are not limited to, the implementation of filtration devices such as sediment basins, sediment barriers (compost filter sock), rock construction entrances, pumped water filter bags, and the application of stabilization methods such as establishment of vegetative stabilization, aggregate surfacing, and erosion control blankets (ECBs) or flexible growth medium (FGM).

Permanent BMPs implemented upon completion of construction to protect water quality, and reduce peak discharge and runoff volume will include:

Minimize Total Disturbed Area – Grading: Minimizing total disturbed areas is a non-structural BMP which preserves water quality by minimizing site grading, removal of existing vegetation (clearing and grubbing) and total soil disturbance. This eliminates the need for re-establishment of a new maintained landscape and results in surface conditions that better fit the existing landscape. Refer to additional information on this BMP provided on the drawings and in the calculations provided with this application.

Re-vegetate Disturbed Areas, Using Native Species: Re-vegetated disturbed areas using native species is a non-structural BMP which improves water quality by minimizing application of fertilizers and pesticides/herbicides at newly created and maintained vegetated areas. Reduced fertilizer application is of key importance in improving stormwater quality with this BMP. Reduced landscape maintenance and reduced chemical application to the site are quality improving considerations as well. Refer to additional information on this BMP provided on the drawings and in the calculations provided with this application.

g. BMP Installation Sequence Narrative

Minimize Total Disturbed Area – Grading: During construction, disturbed areas will be minimized and earthmoving activities will be limited during precipitation events and spring thaw. Tree clearing will be limited to the areas shown on the plan drawings.

Re-vegetate Disturbed Areas, Using Native Species: Upon completion of earthmoving activities, disturbed areas will be seeded and considered stable once uniform 70 percent perennial vegetative cover will have been achieved. Erosion and sedimentation BMPs will be removed once tributary areas have achieved stabilization. Restoration of vegetative stabilization will prevent accelerated erosion while controlling sedimentation through filtration.

Immediately upon discovering unforeseen circumstances posing the potential for accelerated erosion and/or sediment pollution, the operator shall implement appropriate best management practices to eliminate the potential for accelerated erosion and/or sediment pollution.

Before implementing any revisions to the approved PCSM Plan, or revisions to other plans which may affect the effectiveness of the approved PCSM Plan, the operator must receive approval of the revision from the PADEP.

Post Construction Stormwater Management / Site Restoration Phase

1. Upon completion of the erosion & sediment control construction sequence and after the site has a uniform 70% perennial vegetative cover, begin the removal of the E&S BMPs.
2. **Remove sediment basin 1, 2 & 3 and collection channels CC 1, CC 4 & CC 5. Return the sediment basin areas to approximate existing contours and seed the newly graded areas.**
3. Relocate CC 3 to the location of CC 7 shown on the plans.
4. Install structure level spreader downstream of CC 7.
5. Install riprap apron downstream of CC 2.
6. Remove all equipment from the site.
7. Once operations are complete, seed and mulch all disturbed areas, using the specified seeding requirements found on the detailed plan. All disturbed areas must be temporarily stabilized if remaining idle, or anticipated to remain idle.
8. Reseed all disturbed areas if vegetation is not established after 30 days.

9. Remove all compost filter sock and rock filters following completion of the above steps and after the site has a uniform 70% perennial vegetative cover on unpaved areas.

*Critical stages of construction are indicated with underlined text. An engineer must be present on-site to monitor the installation of critical stages.

h. Supporting Calculations

Supporting worksheets and calculations are provided with the application submittal.

i. Plan Drawings

PCSM and Site Restoration Plan drawings are provided with the application submittal.

j. Long Term Operation and Maintenance Schedule

The project site will be operated by Homer City Generation LP (Homer City). The following maintenance guidelines are proposed to ensure that stormwater management BMPs operate efficiently and as designed. Homer City shall be responsible for coordinating inspection and maintenance, which shall include, but is not limited to the following recommendations:

General

- Personnel performing inspections shall be qualified, trained, and experienced in application of erosion, sedimentation, and stormwater management BMPs.
- Stormwater management BMPs shall be inspected after each major rainfall event – defined as an event with more than 2-inches of rainfall in 24-hours; but no less than two (2) times per year.
- Stormwater management BMPs shall be maintained in accordance with the project PCSM/SR Plan.
- Sediment removed from BMPs shall be disposed of by spreading onsite and stabilizing.

Minimize Total Disturbed Area - Grading

- Upon completion of construction, any activity that will result in a significant amount of earthwork should be evaluated to minimize associated impacts.

Re-vegetate Disturbed Areas, Using Native Species

- Vegetation shall be maintained to promote soil stability. During routine inspections, revegetated areas shall be inspected for bare spots, washouts and healthy grow. Identified bare spots and washouts shall be repaired within 10 business days upon inspection, weather permitting. Revegetated areas will have necessary soil supplements, permanent seed and mulch applied until a uniform 70% cover regrowth has been achieved. If necessary, soil testing may be performed to determine proper application rates of soil amendments prior to additional seeding.
- Do not use chemical applications or chemical based pest controls in revegetated areas.
- Minimize mowing in revegetated areas.

- Restored areas shall be evaluated for invasive species during routine maintenance activities. If invasive species are found, they will be mowed down to the ground and or removed by hand to the extent practicable. If mowing or mechanical removal is to be conducted, all equipment shall be thoroughly cleaned via power wash or similar, prior to departure from Contractor yard to reduce the spread of invasive species. If a particular invasive becomes established and mechanical means are ineffective in the control of the species, chemical agents may be needed, but consultation with the reviewing Agency should be completed for any recommendation or alternative methods that may be applicable to the species of concern.

Level Spreader

- Structural level spreaders should be monitored for 2 years on a quarterly basis and semi-annually thereafter.
- Inspections are to be made following rain events exceeding 1 inch.
- Inspection and monitoring includes both the level spreader and the down slope area.
- Monitoring should be documented in inspection reports.
- Accumulated sediment shall be removed from the level spreader and properly disposed.

k. Material Recycling and Disposal

Persons Responsible for Recycling and Disposal

It will be the responsibility of the Contractor to provide satisfactory erosion and sedimentation control, and to interface with applicable regulatory agencies.

The Contractor is responsible for having an approved E&S Plan and for verifying that an operating permit approved by the Conservation District or PADEP exists for all offsite borrow and disposal area locations. If an offsite disposal location is necessary, the site must be approved by the Conservation District or PADEP and the Contractor must provide proof of permit approval for the location to the owner and applicable regulatory agencies prior to use. All fill material must be in accordance with PADEP Document No. 258-2182-773 for Management of Fill. Environmental due diligence is defined as: investigative techniques, including, but not limited to, visual property inspections, electronic data base searches, review of property ownership, review of property use history, Sanborn Maps, environmental questionnaires, transaction screens, analytical testing, environmental assessments or audits.

In the event that the Contractor wishes to modify the PCSM/SR Plan, a copy of the revised plan must be submitted to the Engineer and to the Conservation District or PADEP for approval. The use of the term 'Engineer' in this report shall refer to the professional engineer who signed and sealed the NPDES application for the proposed project.

Offsite Disposal Requirements

No earth disturbance activities shall occur outside of the project limit of disturbance. The Contractor must retain records of maintenance logs and inspection reports for the E&S measures at the site. The Contractor shall comply with the maintenance schedule shown on the plans and shall immediately rectify all non-compliance issues observed or cited by inspection report(s).

Excess soil from surface excavations will be removed promptly after excavation to a permitted facility with a fully implemented and Agency approved E&S Plan. Temporary controls that are replaced or removed after stabilization will also be removed for proper disposal. Any sediment collected by the erosion and sedimentation BMPs will be placed back into the construction area in a dry, up-gradient portion of the site.

All garbage disposals will be managed through a local waste management provider or facility. The Contractor will have a dumpster available onsite for the duration of the project, which will be disposed of at a licensed/permitted municipal landfill. The project site will be inspected at the end of each working day for any loose litter or construction materials that may require recycling/disposal. All waste materials found during inspection will immediately be recycled or disposed of at a properly licensed/permitted facility. The Contractor will be responsible for all permits and/or disposal fees and for assuring that all materials are handled and disposed of in accordance with applicable laws, rules, and regulations, including, but not limited to those issued by the U.S. Environmental Protection Agency, PADEP and OSHA.

With regard to site cleanup and handling, storage control, disposal and recycling of waste (including but not limited to fuels, oils, lubricants and other materials brought to the site or used in the process of drilling), all waste, or excess materials not suitable for the onsite stockpiling or backfill, shall be disposed of at the Agency-approved waste site in accordance with the PADEP solid waste management regulations at 25 PA Code chapter 260, §260.1 et seq., 271.1, and 287.1 et. seq. Where feasible, construction waste materials shall be recycled or taken to the nearest PADEP-approved facility for disposal. Excess soil material, if any, will be spread within the limit-of-disturbance and re-vegetated. Off-site spoil and/or borrow sites must be operated under a current NPDES permit. No wastes shall be burned, buried, dumped or discharged at the site.

I. Geologic Formations and Soil Conditions

As per 102.8(f)(12) of the PA Code, the project PCSM Plan shall identify naturally occurring geologic formations or soil conditions that may have the potential to cause pollution after earth disturbance activities are completed and PCSM BMPs are operational and develop a management plan to avoid or minimize potential pollution and its impacts. For the proposed project, it is anticipated that proposed BMPs will be sufficient to manage and control limitations that may be exhibited by the soils contained within the project site during and upon completion of construction. Refer to the Soil Limitations Resolutions provided with this permit application.

At a minimum, BMPs will be installed where indicated on the plan drawings to prevent erosion and sedimentation during and upon completion of construction. Severe erosion hazard limitations will be reduced by soil stabilization through the application of FGM and temporary/permanent vegetative stabilization. Sedimentation and siltation limitations will be prevented through the installation of sediment basins and filtration BMPs, such as compost filter sock. The sediment basins will be utilized to control runoff from the majority of the site during construction and will be equipped with floating skimmer devices that will dewater the facilities within 4-7 days. Special measures to be implemented during earth disturbance activities associated with construction will include the segregation of topsoil. Soils disturbed during construction activities will be replaced, re-vegetated and stabilized.

No acid-producing rock formations are anticipated to be present or encountered. However, if any material is found to be present at the site, the material will be handled in accordance with PADEP Fact Sheet 5600-FS-DEP4284.

Refer to the Project Geotechnical Report for further discussion on geological and soil conditions at the site.

m. Thermal Impacts

As per 102.8(f)(13) of the PA Code, the project PCSM Plan shall identify potential thermal impacts to surface waters from post construction stormwater. For the proposed project, thermal impacts have been avoided, minimized, or mitigated to the greatest extent possible due to the nature of the project scope. No permanent pools are anticipated as a result of proposed earth disturbance activities. Runoff from the site will flow over long stretches of vegetated areas before reaching receiving streams, which will provide for additional cooling and infiltration. Additionally, shade areas will be preserved to the greatest extent possible.

n. Riparian Forest Buffer Management Plan

No riparian forest buffers are located within the project area; therefore, a riparian buffer waiver is not being requested.

o. Antidegradation Requirements

The Project is not located within a special-protection or siltation-impaired watershed, as classified by PA Code Title 25 Chapter 93. The Project does not affect special-protection or siltation-impaired waters or wetlands, therefore no antidegradation analysis is necessary.

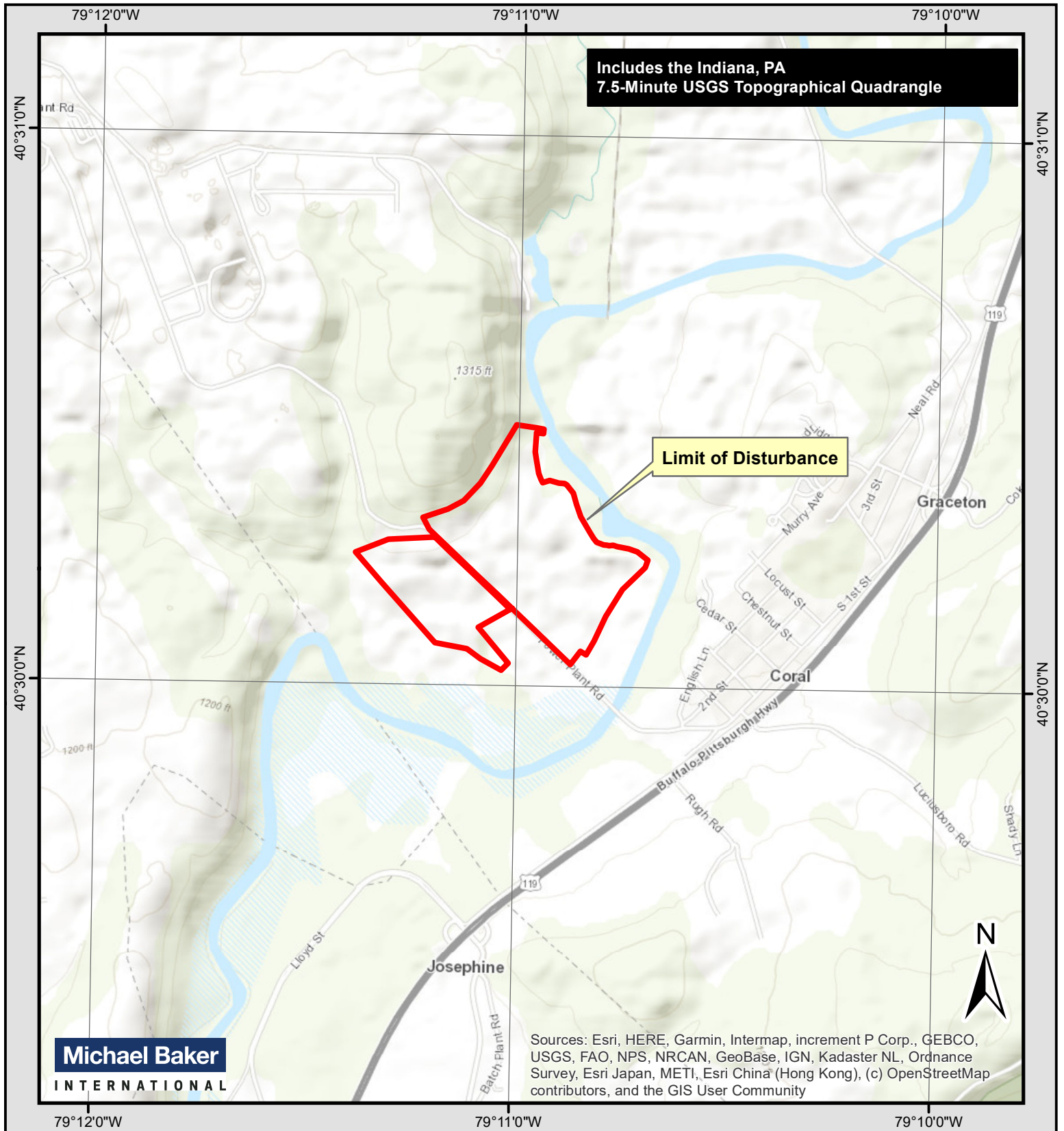
p. PNDI Recommendations

A PNDI receipt was finalized for the project in December 2024 and is provided as a part of this application. No further review was required for the PNDI.

2.0 Conclusion

The project PCSM/SR Plan has been prepared in accordance with standards and specifications defined by the PADEP. Re-establishment of vegetative stabilization upon completion of earth disturbance and installation of BMPs will provide for stormwater runoff flow rate and volume conditions that are similar to those of the pre-development site conditions. It is anticipated that proposed BMPs will be sufficient to manage and control runoff in accordance with PADEP requirements so that no net increase in stormwater runoff will occur as a result of construction. The project PCSM/SR Plan shall be updated as necessary to remain consistent with applicable changes within the E&S Plan, project permits, and/or other project associated documents.

Site Location Map



PROJECT LOCATION MAP

Legend

— LOD

RURA FIELD

Center & Black Lick Township
Indiana County, PA
Latitude: 40.5105
Longitude: -79.1894

0 0.175 0.35 0.7
Miles

prepared for



Homer City Generation LP

Custom Soil Resource Report



United States
Department of
Agriculture

NRCS

Natural
Resources
Conservation
Service

A product of the National
Cooperative Soil Survey,
a joint effort of the United
States Department of
Agriculture and other
Federal agencies, State
agencies including the
Agricultural Experiment
Stations, and local
participants

Custom Soil Resource Report for Indiana County, Pennsylvania



March 25, 2025

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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How Soil Surveys Are Made

Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

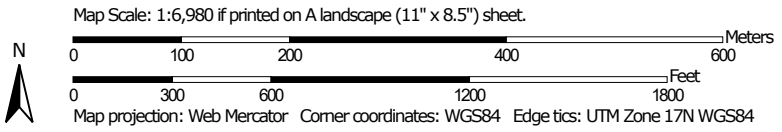
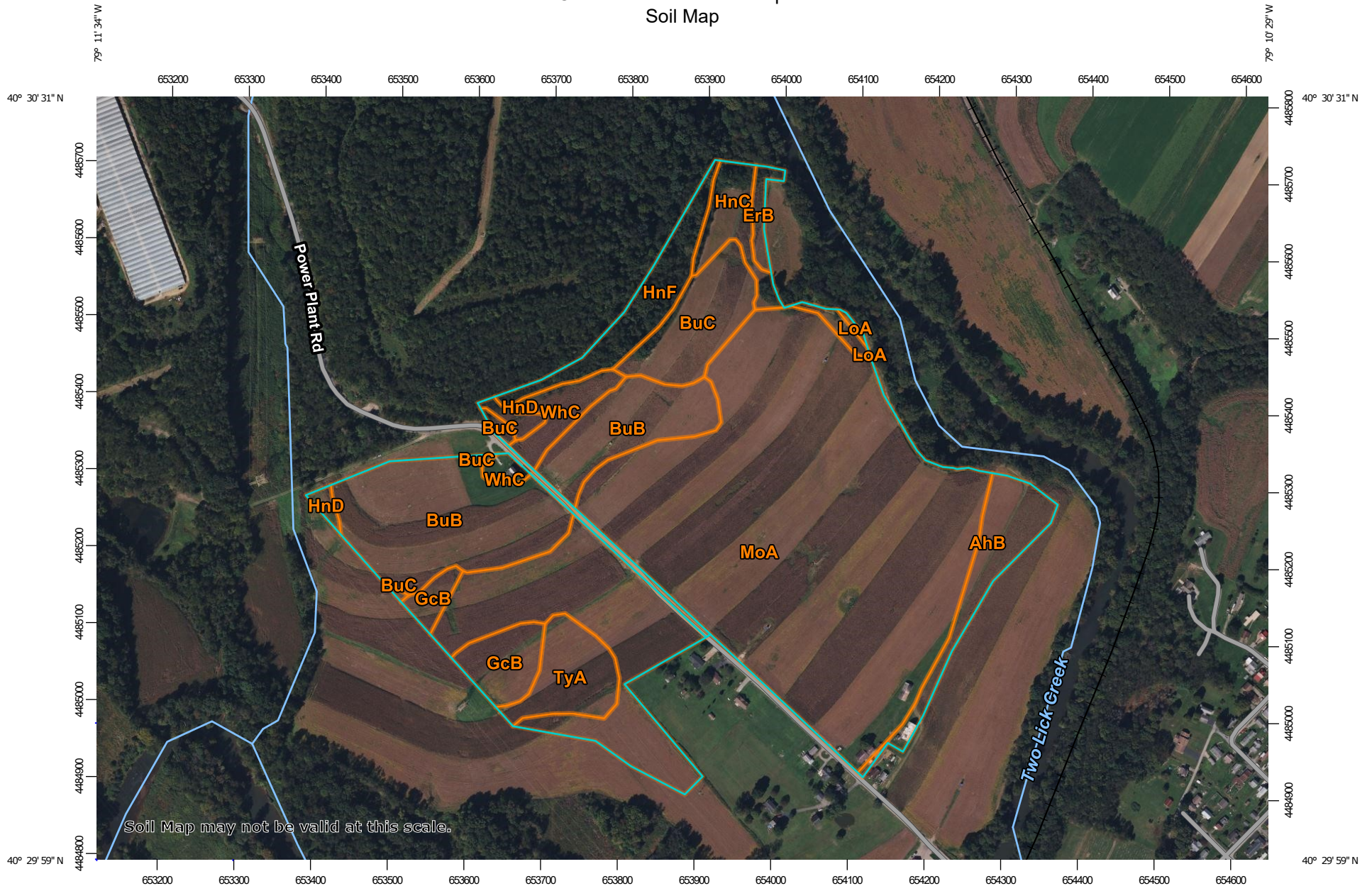
Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Custom Soil Resource Report Soil Map



Custom Soil Resource Report

MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

 Soil Map Unit Polygons

 Soil Map Unit Lines

 Soil Map Unit Points

Special Point Features

 Blowout

 Borrow Pit

 Clay Spot

 Closed Depression

 Gravel Pit

 Gravelly Spot

 Landfill

 Lava Flow

 Marsh or swamp

 Mine or Quarry

 Miscellaneous Water

 Perennial Water

 Rock Outcrop

 Saline Spot

 Sandy Spot

 Severely Eroded Spot

 Sinkhole

 Slide or Slip

 Sodic Spot

 Spoil Area

 Stony Spot

 Very Stony Spot

 Wet Spot

 Other

 Special Line Features

Water Features

 Streams and Canals

Transportation

 Rails

 Interstate Highways

 US Routes

 Major Roads

 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Indiana County, Pennsylvania
Survey Area Data: Version 21, Sep 4, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 11, 2021—Nov 16, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
AhB	Allegheny silt loam, 3 to 8 percent slopes	3.5	3.8%
BuB	Buchanan loam, 3 to 8 percent slopes	13.9	15.1%
BuC	Buchanan loam, 8 to 15 percent slopes	4.4	4.8%
ErB	Ernest silt loam, 3 to 8 percent slopes	0.6	0.7%
GcB	Gilpin channery silt loam, 3 to 8 percent slopes	2.9	3.1%
HnC	Hazleton channery sandy loam, 8 to 15 percent slopes	2.6	2.8%
HnD	Hazleton channery sandy loam, 15 to 25 percent slopes	0.8	0.8%
HnF	Hazleton channery sandy loam, 25 to 70 percent slopes	3.5	3.8%
LoA	Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded	0.1	0.1%
MoA	Monongahela silt loam, 0 to 3 percent slopes	54.2	59.1%
TyA	Tyler silt loam, 0 to 2 percent slopes	3.1	3.4%
WhC	Wharton silt loam, 8 to 15 percent slopes	2.2	2.4%
Totals for Area of Interest		91.7	100.0%

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion

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of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Indiana County, Pennsylvania

AhB—Allegheny silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t320
Elevation: 650 to 1,380 feet
Mean annual precipitation: 37 to 55 inches
Mean annual air temperature: 48 to 53 degrees F
Frost-free period: 161 to 195 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Allegheny and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Allegheny

Setting

Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Parent material: Fine-loamy alluvium derived from sedimentary rock

Typical profile

Ap - 0 to 8 inches: silt loam
BA - 8 to 12 inches: silt loam
Bt1 - 12 to 22 inches: loam
Bt2 - 22 to 33 inches: loam
BC - 33 to 43 inches: loam
C - 43 to 72 inches: loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: More than 80 inches
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 10.6 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: B
Ecological site: F126XY008OH - Tread
Hydric soil rating: No

Minor Components

Monongahela

Percent of map unit: 15 percent

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Landform: Stream terraces
Landform position (three-dimensional): Tread
Down-slope shape: Convex
Across-slope shape: Linear
Other vegetative classification: Acid Loams (AL3)
Hydric soil rating: No

BuB—Buchanan loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2stxy
Elevation: 940 to 2,640 feet
Mean annual precipitation: 38 to 50 inches
Mean annual air temperature: 45 to 49 degrees F
Frost-free period: 126 to 165 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Buchanan and similar soils: 90 percent
Minor components: 10 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Buchanan

Setting

Landform: Mountain slopes, hillslopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Mountainbase, base slope
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Acid fine-loamy colluvium derived from sandstone and siltstone

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
Oe - 1 to 2 inches: moderately decomposed plant material
A - 2 to 4 inches: loam
E - 4 to 6 inches: loam
BE - 6 to 12 inches: loam
Bt - 12 to 23 inches: gravelly loam
Btx - 23 to 62 inches: gravelly loam
C - 62 to 80 inches: very gravelly sandy loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 20 to 32 inches to fragipan
Drainage class: Moderately well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: About 15 to 28 inches

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Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2e

Hydrologic Soil Group: D

Ecological site: F127XY012WV - Convergent Uplands

Hydric soil rating: No

Minor Components

Andover

Percent of map unit: 5 percent

Landform: Mountain slopes

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Mountainbase

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

Philo

Percent of map unit: 3 percent

Landform: Mountain valleys, flood plains

Landform position (two-dimensional): Footslope, toeslope

Landform position (three-dimensional): Mountainbase, base slope

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Hydric soil rating: No

Clymer

Percent of map unit: 2 percent

Landform: Mountain slopes

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Mountainflank

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

BuC—Buchanan loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2vb95

Elevation: 1,030 to 2,500 feet

Mean annual precipitation: 38 to 50 inches

Mean annual air temperature: 45 to 49 degrees F

Frost-free period: 126 to 165 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Buchanan and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Buchanan

Setting

Landform: Mountain slopes, hillslopes

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Mountainbase, base slope

Down-slope shape: Concave

Across-slope shape: Concave

Parent material: Acid fine-loamy colluvium derived from sandstone and siltstone

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material

Oe - 1 to 2 inches: moderately decomposed plant material

A - 2 to 4 inches: loam

E - 4 to 6 inches: loam

BE - 6 to 12 inches: loam

Bt - 12 to 23 inches: gravelly loam

Btx - 23 to 62 inches: gravelly loam

C - 62 to 80 inches: very gravelly sandy loam

Properties and qualities

Slope: 8 to 15 percent

Depth to restrictive feature: 20 to 32 inches to fragipan

Drainage class: Moderately well drained

Runoff class: Low

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 15 to 28 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very low (about 2.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 3e

Hydrologic Soil Group: D

Ecological site: F127XY012WV - Convergent Uplands

Hydric soil rating: No

Minor Components

Laidig

Percent of map unit: 5 percent

Landform: Mountain slopes

Landform position (two-dimensional): Footslope

Landform position (three-dimensional): Mountainbase

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: No

Hazleton

Percent of map unit: 4 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

Philo

Percent of map unit: 3 percent
Landform: Mountain valleys, flood plains
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Mountainbase, base slope
Down-slope shape: Concave, linear
Across-slope shape: Concave, linear
Hydric soil rating: No

Andover

Percent of map unit: 3 percent
Landform: Mountain slopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Mountainbase
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

ErB—Ernest silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t32b
Elevation: 690 to 2,230 feet
Mean annual precipitation: 37 to 55 inches
Mean annual air temperature: 47 to 52 degrees F
Frost-free period: 155 to 191 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Ernest and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Ernest

Setting

Landform: Hillslopes
Landform position (two-dimensional): Footslope, toeslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave, linear
Across-slope shape: Concave

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Parent material: Fine-loamy colluvium derived from sedimentary rock

Typical profile

Ap - 0 to 8 inches: silt loam
Bt1 - 8 to 15 inches: silt loam
Bt2 - 15 to 24 inches: silt loam
Btx1 - 24 to 36 inches: channery silt loam
Btx2 - 36 to 50 inches: channery silt loam
C - 50 to 74 inches: channery silt loam

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 23 to 28 inches to fragipan
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.60 in/hr)
Depth to water table: About 15 to 22 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C/D
Ecological site: F124XY002OH - Acid Mixed Sedimentary Upland
Hydric soil rating: No

Minor Components

Gilpin

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope, footslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Buchanan

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave, linear
Across-slope shape: Concave
Hydric soil rating: No

Brinkerton

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Toeslope, footslope
Landform position (three-dimensional): Base slope, head slope
Down-slope shape: Concave
Across-slope shape: Concave
Other vegetative classification: Wetlands (W3)
Hydric soil rating: Yes

GcB—Gilpin channery silt loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2t1kt
Elevation: 870 to 2,720 feet
Mean annual precipitation: 40 to 53 inches
Mean annual air temperature: 47 to 52 degrees F
Frost-free period: 167 to 179 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Gilpin and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Gilpin

Setting

Landform: Hills
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Linear, convex
Parent material: Acid fine-loamy residuum weathered from shale and siltstone

Typical profile

Ap - 0 to 8 inches: channery silt loam
Bt - 8 to 24 inches: channery silt loam
C - 24 to 30 inches: extremely channery loam
R - 30 to 40 inches: bedrock

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 30 to 36 inches to lithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.20 to 2.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.3 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: C
Ecological site: F126XY001OH - Dry Ridge
Hydric soil rating: No

Minor Components

Wharton

Percent of map unit: 10 percent

Landform: Hills

Landform position (two-dimensional): Summit, backslope, shoulder

Landform position (three-dimensional): Crest

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

Weikert

Percent of map unit: 5 percent

Landform: Ridges

Landform position (two-dimensional): Shoulder

Landform position (three-dimensional): Nose slope

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

HnC—Hazleton channery sandy loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 1vrt1

Elevation: 980 to 2,800 feet

Mean annual precipitation: 35 to 65 inches

Mean annual air temperature: 45 to 55 degrees F

Frost-free period: 110 to 180 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Hazleton and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hazleton

Setting

Landform: Hillsides or mountainsides

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Mountainflank, side slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Acid sandy residuum weathered from noncalcareous sandstone

Typical profile

Ap - 0 to 10 inches: channery sandy loam

Bw - 10 to 34 inches: very channery sandy loam

C - 34 to 58 inches: extremely channery sandy loam

R - 58 to 60 inches: bedrock

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 40 to 72 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.43 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: A
Ecological site: F127XY013WV - Divergent Uplands
Hydric soil rating: No

Minor Components

Cookport

Percent of map unit: 10 percent
Landform: Mountains
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Mountaintop
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

Clymer

Percent of map unit: 10 percent
Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountaintop, interfluvium
Down-slope shape: Linear
Across-slope shape: Linear
Hydric soil rating: No

HnD—Hazleton channery sandy loam, 15 to 25 percent slopes

Map Unit Setting

National map unit symbol: 1vrt2
Elevation: 1,150 to 2,800 feet
Mean annual precipitation: 35 to 54 inches
Mean annual air temperature: 37 to 58 degrees F
Frost-free period: 115 to 165 days
Farmland classification: Not prime farmland

Map Unit Composition

Hazleton and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hazleton

Setting

Landform: Hillsides or mountainsides

Landform position (two-dimensional): Backslope

Landform position (three-dimensional): Mountainflank, side slope

Down-slope shape: Linear

Across-slope shape: Linear

Parent material: Acid sandy residuum weathered from noncalcareous sandstone

Typical profile

Ap - 0 to 10 inches: channery sandy loam

Bw - 10 to 34 inches: very channery sandy loam

C - 34 to 58 inches: extremely channery sandy loam

R - 58 to 60 inches: bedrock

Properties and qualities

Slope: 15 to 25 percent

Depth to restrictive feature: 40 to 72 inches to lithic bedrock

Drainage class: Well drained

Runoff class: Medium

*Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.43 to 6.00 in/hr)*

Depth to water table: More than 80 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 4.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 4e

Hydrologic Soil Group: A

*Ecological site: F124XY002OH - Acid Mixed Sedimentary Upland, F127XY013WV
- Divergent Uplands*

Hydric soil rating: No

Minor Components

Dekalb

Percent of map unit: 15 percent

Landform: Mountain slopes

Landform position (two-dimensional): Summit

Landform position (three-dimensional): Mountainflank

Down-slope shape: Convex

Across-slope shape: Convex

Hydric soil rating: No

HnF—Hazleton channery sandy loam, 25 to 70 percent slopes

Map Unit Setting

National map unit symbol: 2lcr6
Elevation: 1,000 to 2,800 feet
Mean annual precipitation: 36 to 60 inches
Mean annual air temperature: 37 to 59 degrees F
Frost-free period: 110 to 180 days
Farmland classification: Not prime farmland

Map Unit Composition

Hazleton and similar soils: 75 percent
Minor components: 25 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Hazleton

Setting

Landform: Hillsides or mountainsides
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank, side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Acid sandy residuum weathered from noncalcareous sandstone

Typical profile

A - 0 to 5 inches: channery sandy loam
Bw - 5 to 31 inches: channery sandy loam
C - 31 to 59 inches: very channery sandy loam
R - 59 to 60 inches: bedrock

Properties and qualities

Slope: 25 to 70 percent
Depth to restrictive feature: 40 to 60 inches to lithic bedrock
Drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high (0.43 to 6.00 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 5.7 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Ecological site: F124XY002OH - Acid Mixed Sedimentary Upland, F127XY013WV
- Divergent Uplands
Hydric soil rating: No

Minor Components

Dekalb

Percent of map unit: 15 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Mountainflank
Down-slope shape: Convex
Across-slope shape: Convex
Hydric soil rating: No

Cookport

Percent of map unit: 10 percent
Landform: Mountain slopes
Landform position (two-dimensional): Backslope, summit
Landform position (three-dimensional): Mountainflank
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

LoA—Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded

Map Unit Setting

National map unit symbol: 2t326
Elevation: 520 to 1,430 feet
Mean annual precipitation: 39 to 44 inches
Mean annual air temperature: 49 to 53 degrees F
Frost-free period: 167 to 191 days
Farmland classification: All areas are prime farmland

Map Unit Composition

Lobdell and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Lobdell

Setting

Landform: Flood plains
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Fine-loamy alluvium derived from sedimentary rock

Typical profile

Ap - 0 to 6 inches: silt loam
Bw1 - 6 to 20 inches: loam
Bw2 - 20 to 38 inches: loam
C - 38 to 65 inches: stratified loam to silt loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: More than 80 inches

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately high to high
(0.57 to 1.98 in/hr)

Depth to water table: About 16 to 30 inches

Frequency of flooding: Occasional

Frequency of ponding: None

Available water supply, 0 to 60 inches: Very high (about 12.1 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: B/D

Ecological site: F126XY006OH - Well Drained Floodplain

Forage suitability group: Unnamed (G126XYA-5OH)

Other vegetative classification: Unnamed (G126XYA-5OH)

Hydric soil rating: No

Minor Components

Holly

Percent of map unit: 5 percent

Landform: Flood plains

Down-slope shape: Concave

Across-slope shape: Concave

Other vegetative classification: Wetlands (W3)

Hydric soil rating: Yes

Orrville

Percent of map unit: 5 percent

Landform: Flood plains

Down-slope shape: Linear

Across-slope shape: Concave

Hydric soil rating: No

Melvin

Percent of map unit: 5 percent

Landform: Flood plains

Down-slope shape: Concave, linear

Across-slope shape: Concave, linear

Hydric soil rating: Yes

MoA—Monongahela silt loam, 0 to 3 percent slopes

Map Unit Setting

National map unit symbol: 2rfbh

Elevation: 580 to 1,300 feet

Mean annual precipitation: 37 to 54 inches

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Mean annual air temperature: 41 to 62 degrees F

Frost-free period: 130 to 190 days

Farmland classification: All areas are prime farmland

Map Unit Composition

Monongahela and similar soils: 85 percent

Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Monongahela

Setting

Landform: Terraces

Landform position (two-dimensional): Toeslope

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Convex

Parent material: Fine-loamy alluvium derived from sandstone and siltstone

Typical profile

Ap - 0 to 8 inches: silt loam

BA - 8 to 12 inches: silt loam

Bt - 12 to 22 inches: silt loam

Btx - 22 to 51 inches: clay loam

BC - 51 to 65 inches: gravelly clay loam

Properties and qualities

Slope: 0 to 3 percent

Depth to restrictive feature: 18 to 30 inches to fragipan

Drainage class: Moderately well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)

Depth to water table: About 18 to 30 inches

Frequency of flooding: None

Frequency of ponding: None

Available water supply, 0 to 60 inches: Low (about 3.9 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Land capability classification (nonirrigated): 2w

Hydrologic Soil Group: D

Ecological site: F126XY008OH - Tread

Other vegetative classification: Acid Loams (AL3)

Hydric soil rating: No

Minor Components

Allegheny

Percent of map unit: 10 percent

Landform: Stream terraces

Landform position (three-dimensional): Tread

Down-slope shape: Convex

Across-slope shape: Linear

Hydric soil rating: No

Purdy

Percent of map unit: 5 percent

Custom Soil Resource Report

Landform: Terraces
Landform position (three-dimensional): Tread, dip
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

TyA—Tyler silt loam, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: 1vrrf
Elevation: 700 to 1,300 feet
Mean annual precipitation: 36 to 54 inches
Mean annual air temperature: 41 to 62 degrees F
Frost-free period: 130 to 160 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Tyler and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Tyler

Setting

Landform: Terraces
Landform position (three-dimensional): Tread
Down-slope shape: Concave
Across-slope shape: Concave
Parent material: Old, acid, slackwater fine-silty alluvium derived from shale and siltstone

Typical profile

Ap - 0 to 7 inches: silt loam
Btg - 7 to 20 inches: silt loam
Btx1 - 20 to 38 inches: silty clay loam
Btx2 - 38 to 61 inches: silty clay loam

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: 18 to 32 inches to fragipan
Drainage class: Somewhat poorly drained
Runoff class: Very high
Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.23 in/hr)
Depth to water table: About 6 to 12 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.8 inches)

Interpretive groups

Land capability classification (irrigated): None specified

Custom Soil Resource Report

Land capability classification (nonirrigated): 3w

Hydrologic Soil Group: D

Ecological site: F127XY006WV - Terraces, F126XY007OH - Poorly Drained

Tread, F124XY010OH - Fine Terrace and Plain

Hydric soil rating: No

Minor Components

Monongahela

Percent of map unit: 10 percent

Landform: Terraces

Down-slope shape: Linear

Across-slope shape: Linear

Hydric soil rating: No

Purdy

Percent of map unit: 5 percent

Landform: Terraces

Landform position (three-dimensional): Tread, dip

Down-slope shape: Concave

Across-slope shape: Concave

Hydric soil rating: Yes

WhC—Wharton silt loam, 8 to 15 percent slopes

Map Unit Setting

National map unit symbol: 2t5mm

Elevation: 620 to 2,160 feet

Mean annual precipitation: 37 to 51 inches

Mean annual air temperature: 47 to 53 degrees F

Frost-free period: 161 to 205 days

Farmland classification: Farmland of statewide importance

Map Unit Composition

Wharton and similar soils: 80 percent

Minor components: 20 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Wharton

Setting

Landform: Hills

Landform position (two-dimensional): Backslope, shoulder

Landform position (three-dimensional): Side slope

Down-slope shape: Convex

Across-slope shape: Linear

Parent material: Fine-loamy residuum weathered from shale and siltstone

Typical profile

Ap - 0 to 9 inches: silt loam

Bt1 - 9 to 16 inches: silt loam

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Bt2 - 16 to 22 inches: silt loam
Bt3 - 22 to 31 inches: silt loam
BC - 31 to 46 inches: silty clay loam
C - 46 to 69 inches: channery silty clay loam
Cr - 69 to 79 inches: bedrock

Properties and qualities

Slope: 8 to 15 percent
Depth to restrictive feature: 40 to 71 inches to paralithic bedrock
Drainage class: Moderately well drained
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)
Depth to water table: About 16 to 28 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: High (about 9.5 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 3e
Hydrologic Soil Group: C/D
Ecological site: F126XY003OH - Moist Ridge
Forage suitability group: Unnamed (G126XYA-6OH)
Other vegetative classification: Unnamed (G126XYA-6OH)
Hydric soil rating: No

Minor Components

Gilpin

Percent of map unit: 10 percent
Landform: Hillslopes
Landform position (two-dimensional): Backslope, shoulder
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Linear, convex
Hydric soil rating: No

Ernest

Percent of map unit: 5 percent
Landform: Hillslopes
Landform position (two-dimensional): Footslope
Landform position (three-dimensional): Base slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: No

Rarden

Percent of map unit: 5 percent
Landform: Hills
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluvium
Down-slope shape: Convex
Across-slope shape: Linear
Hydric soil rating: No

Soil Information for All Uses

Soil Properties and Qualities

The Soil Properties and Qualities section includes various soil properties and qualities displayed as thematic maps with a summary table for the soil map units in the selected area of interest. A single value or rating for each map unit is generated by aggregating the interpretive ratings of individual map unit components. This aggregation process is defined for each property or quality.

Soil Qualities and Features

Soil qualities are behavior and performance attributes that are not directly measured, but are inferred from observations of dynamic conditions and from soil properties. Example soil qualities include natural drainage, and frost action. Soil features are attributes that are not directly part of the soil. Example soil features include slope and depth to restrictive layer. These features can greatly impact the use and management of the soil.

Hydrologic Soil Group

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

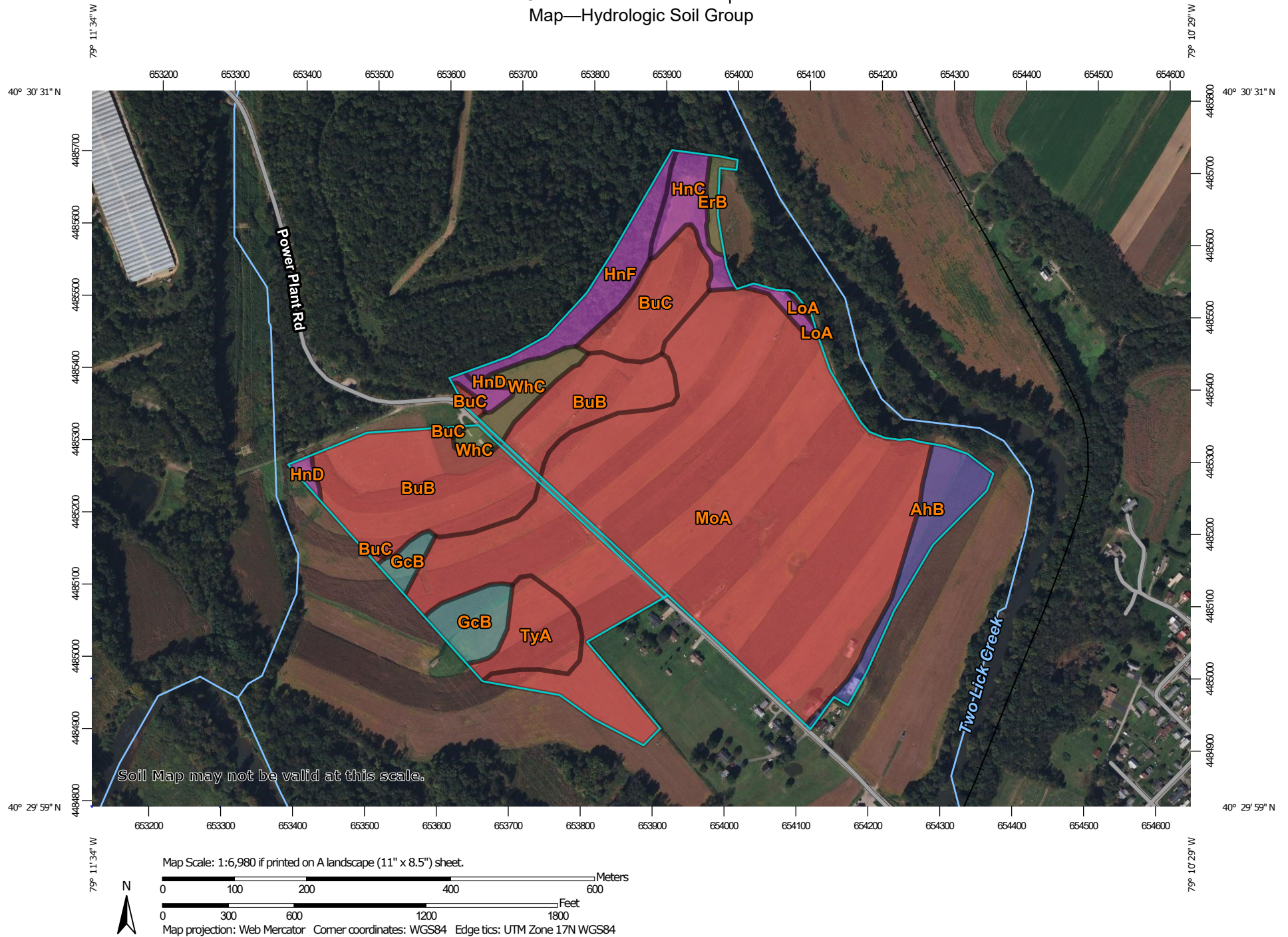
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Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Custom Soil Resource Report Map—Hydrologic Soil Group



MAP LEGEND

Area of Interest (AOI)

 Area of Interest (AOI)

Soils

Soil Rating Polygons

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Lines

 A
 A/D
 B
 B/D
 C
 C/D
 D
 Not rated or not available

Soil Rating Points

 A
 A/D
 B
 B/D

 C
 C/D
 D
 Not rated or not available

Water Features

 Streams and Canals

Transportation

 Rails
 Interstate Highways
 US Routes
 Major Roads
 Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
 Web Soil Survey URL:
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Indiana County, Pennsylvania
 Survey Area Data: Version 21, Sep 4, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 11, 2021—Nov 16, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Table—Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
AhB	Allegheny silt loam, 3 to 8 percent slopes	B	3.5	3.8%
BuB	Buchanan loam, 3 to 8 percent slopes	D	13.9	15.1%
BuC	Buchanan loam, 8 to 15 percent slopes	D	4.4	4.8%
ErB	Ernest silt loam, 3 to 8 percent slopes	C/D	0.6	0.7%
GcB	Gilpin channery silt loam, 3 to 8 percent slopes	C	2.9	3.1%
HnC	Hazleton channery sandy loam, 8 to 15 percent slopes	A	2.6	2.8%
HnD	Hazleton channery sandy loam, 15 to 25 percent slopes	A	0.8	0.8%
HnF	Hazleton channery sandy loam, 25 to 70 percent slopes	A	3.5	3.8%
LoA	Lobdell silt loam, 0 to 3 percent slopes, occasionally flooded	B/D	0.1	0.1%
MoA	Monongahela silt loam, 0 to 3 percent slopes	D	54.2	59.1%
TyA	Tyler silt loam, 0 to 2 percent slopes	D	3.1	3.4%
WhC	Wharton silt loam, 8 to 15 percent slopes	C/D	2.2	2.4%
Totals for Area of Interest			91.7	100.0%

Rating Options—Hydrologic Soil Group*Aggregation Method:* Dominant Condition*Component Percent Cutoff:* None Specified*Tie-break Rule:* Higher

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Hydrologic Calculations



NOAA Atlas 14, Volume 2, Version 3
Location name: Blairsville, Pennsylvania, USA*
Latitude: 40.503°, Longitude: -79.1844°
Elevation: 1006 ft**
 * source: ESRI Maps
 ** source: USGS



POINT PRECIPITATION FREQUENCY ESTIMATES

G.M. Bonnin, D. Martin, B. Lin, T. Parzybok, M. Yekta, and D. Riley

NOAA, National Weather Service, Silver Spring, Maryland

[PF_tabular](#) | [PF_graphical](#) | [Maps & aerals](#)

PF tabular

PDS-based point precipitation frequency estimates with 90% confidence intervals (in inches) ¹										
Duration	Average recurrence interval (years)									
	1	2	5	10	25	50	100	200	500	1000
5-min	0.318 (0.289-0.351)	0.380 (0.345-0.420)	0.459 (0.416-0.507)	0.522 (0.471-0.574)	0.602 (0.542-0.662)	0.664 (0.596-0.729)	0.726 (0.648-0.795)	0.790 (0.775-0.866)	0.878 (0.775-0.960)	0.943 (0.829-1.03)
10-min	0.494 (0.448-0.545)	0.594 (0.539-0.655)	0.714 (0.647-0.787)	0.805 (0.728-0.886)	0.921 (0.829-1.01)	1.01 (0.904-1.11)	1.09 (0.976-1.20)	1.18 (1.05-1.29)	1.29 (1.14-1.41)	1.37 (1.21-1.50)
15-min	0.606 (0.550-0.668)	0.726 (0.659-0.801)	0.876 (0.794-0.967)	0.991 (0.895-1.09)	1.14 (1.02-1.25)	1.25 (1.12-1.37)	1.36 (1.21-1.49)	1.47 (1.30-1.61)	1.61 (1.42-1.76)	1.72 (1.51-1.88)
30-min	0.802 (0.727-0.884)	0.971 (0.882-1.07)	1.20 (1.09-1.32)	1.38 (1.24-1.51)	1.61 (1.45-1.77)	1.78 (1.60-1.96)	1.96 (1.75-2.15)	2.14 (1.90-2.34)	2.38 (2.11-2.61)	2.57 (2.26-2.81)
60-min	0.979 (0.888-1.08)	1.19 (1.08-1.32)	1.51 (1.36-1.66)	1.75 (1.58-1.93)	2.08 (1.88-2.29)	2.35 (2.11-2.58)	2.62 (2.34-2.87)	2.91 (2.58-3.18)	3.30 (2.91-3.61)	3.61 (3.18-3.95)
2-hr	1.14 (1.04-1.26)	1.38 (1.26-1.52)	1.75 (1.59-1.93)	2.04 (1.85-2.24)	2.44 (2.21-2.68)	2.77 (2.49-3.03)	3.12 (2.79-3.40)	3.48 (3.10-3.79)	4.00 (3.52-4.35)	4.41 (3.86-4.80)
3-hr	1.23 (1.12-1.35)	1.49 (1.35-1.64)	1.87 (1.70-2.06)	2.18 (1.98-2.40)	2.62 (2.36-2.87)	2.97 (2.67-3.25)	3.35 (2.99-3.66)	3.76 (3.33-4.09)	4.33 (3.81-4.71)	4.80 (4.18-5.21)
6-hr	1.49 (1.36-1.65)	1.79 (1.63-1.98)	2.23 (2.03-2.47)	2.59 (2.35-2.86)	3.11 (2.81-3.42)	3.54 (3.18-3.89)	4.00 (3.57-4.38)	4.50 (3.98-4.92)	5.21 (4.57-5.68)	5.80 (5.04-6.31)
12-hr	1.80 (1.65-2.00)	2.16 (1.98-2.40)	2.68 (2.44-2.96)	3.10 (2.82-3.42)	3.72 (3.37-4.10)	4.24 (3.82-4.65)	4.80 (4.28-5.25)	5.41 (4.79-5.90)	6.30 (5.51-6.86)	7.04 (6.10-7.65)
24-hr	2.14 (1.98-2.33)	2.56 (2.37-2.79)	3.13 (2.90-3.41)	3.61 (3.33-3.92)	4.29 (3.94-4.65)	4.85 (4.44-5.25)	5.45 (4.96-5.88)	6.08 (5.50-6.56)	6.98 (6.25-7.51)	7.71 (6.86-8.30)
2-day	2.49 (2.31-2.70)	2.96 (2.75-3.22)	3.60 (3.33-3.90)	4.12 (3.81-4.46)	4.85 (4.47-5.24)	5.44 (5.00-5.88)	6.06 (5.54-6.54)	6.71 (6.11-7.24)	7.62 (6.88-8.20)	8.35 (7.48-8.98)
3-day	2.67 (2.48-2.88)	3.17 (2.95-3.43)	3.82 (3.55-4.13)	4.36 (4.04-4.70)	5.10 (4.72-5.50)	5.71 (5.25-6.15)	6.34 (5.81-6.83)	7.00 (6.38-7.53)	7.91 (7.16-8.51)	8.63 (7.76-9.29)
4-day	2.85 (2.65-3.07)	3.38 (3.15-3.64)	4.05 (3.77-4.36)	4.60 (4.27-4.94)	5.36 (4.96-5.76)	5.98 (5.51-6.42)	6.62 (6.08-7.11)	7.28 (6.65-7.82)	8.19 (7.43-8.81)	8.92 (8.04-9.60)
7-day	3.44 (3.22-3.68)	4.06 (3.81-4.35)	4.80 (4.50-5.14)	5.40 (5.06-5.78)	6.22 (5.81-6.64)	6.86 (6.39-7.33)	7.52 (6.97-8.03)	8.18 (7.56-8.74)	9.08 (8.33-9.70)	9.77 (8.92-10.4)
10-day	4.00 (3.78-4.25)	4.72 (4.45-5.00)	5.52 (5.21-5.86)	6.17 (5.81-6.53)	7.03 (6.60-7.44)	7.70 (7.22-8.15)	8.37 (7.82-8.85)	9.05 (8.42-9.57)	9.94 (9.20-10.5)	10.6 (9.79-11.2)
20-day	5.65 (5.36-5.95)	6.62 (6.28-6.99)	7.64 (7.24-8.05)	8.44 (7.99-8.89)	9.48 (8.97-9.99)	10.3 (9.71-10.8)	11.1 (10.4-11.7)	11.8 (11.1-12.5)	12.8 (12.0-13.5)	13.6 (12.7-14.3)
30-day	7.15 (6.82-7.51)	8.35 (7.97-8.79)	9.54 (9.10-10.0)	10.5 (9.99-11.0)	11.7 (11.1-12.3)	12.6 (12.0-13.2)	13.5 (12.8-14.2)	14.4 (13.6-15.1)	15.5 (14.6-16.3)	16.3 (15.3-17.1)
45-day	9.20 (8.79-9.65)	10.7 (10.2-11.3)	12.1 (11.6-12.7)	13.2 (12.6-13.8)	14.5 (13.8-15.3)	15.5 (14.8-16.3)	16.5 (15.7-17.3)	17.4 (16.5-18.2)	18.5 (17.5-19.4)	19.3 (18.2-20.3)
60-day	11.1 (10.7-11.6)	12.9 (12.4-13.5)	14.5 (13.9-15.2)	15.7 (15.0-16.4)	17.2 (16.4-17.9)	18.2 (17.5-19.1)	19.2 (18.4-20.1)	20.2 (19.3-21.1)	21.3 (20.3-22.3)	22.1 (21.0-23.2)

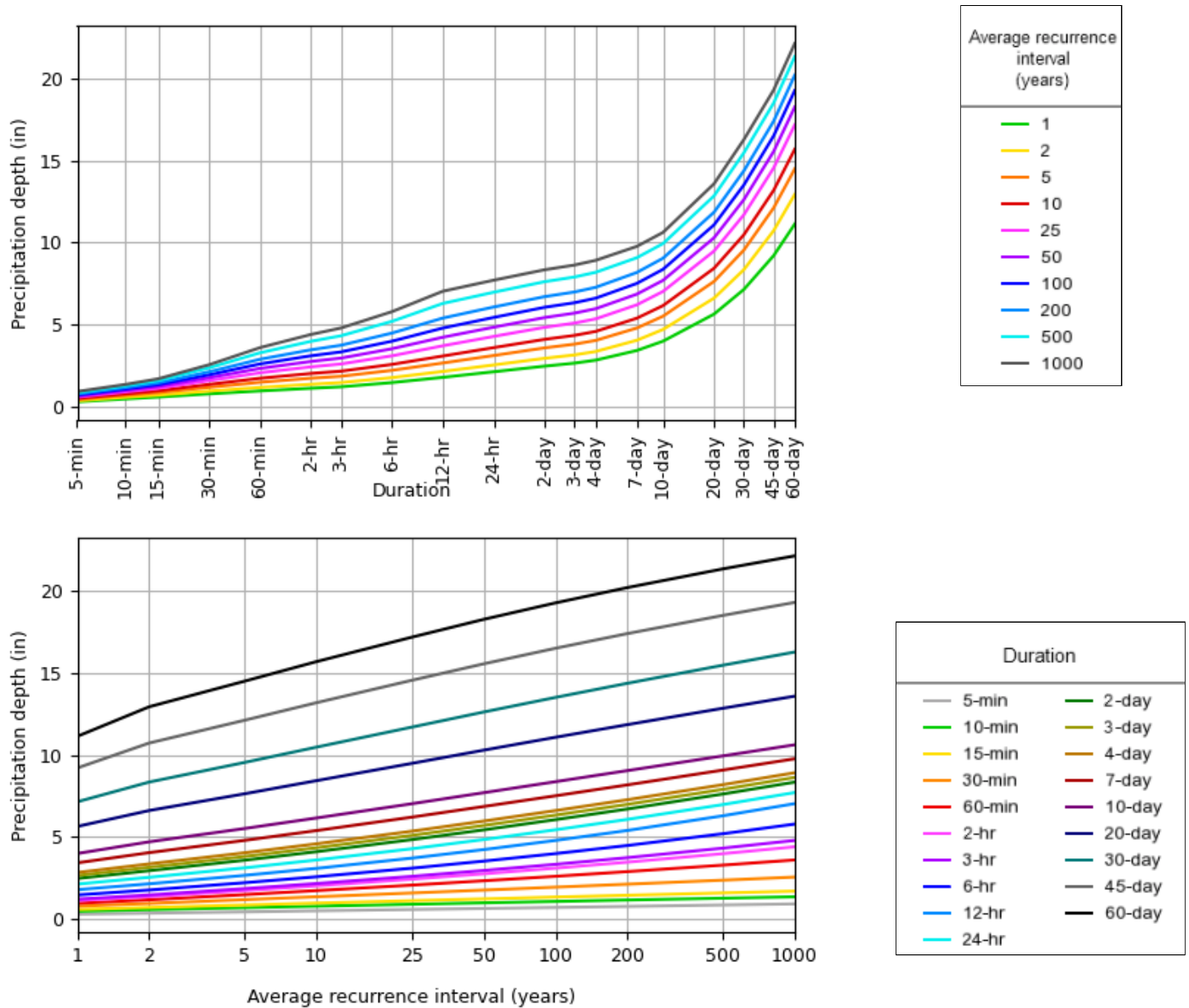
¹ Precipitation frequency (PF) estimates in this table are based on frequency analysis of partial duration series (PDS). Numbers in parenthesis are PF estimates at lower and upper bounds of the 90% confidence interval. The probability that precipitation frequency estimates (for a given duration and average recurrence interval) will be greater than the upper bound (or less than the lower bound) is 5%. Estimates at upper bounds are not checked against probable maximum precipitation (PMP) estimates and may be higher than currently valid PMP values. Please refer to NOAA Atlas 14 document for more information.

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PF graphical

PDS-based depth-duration-frequency (DDF) curves

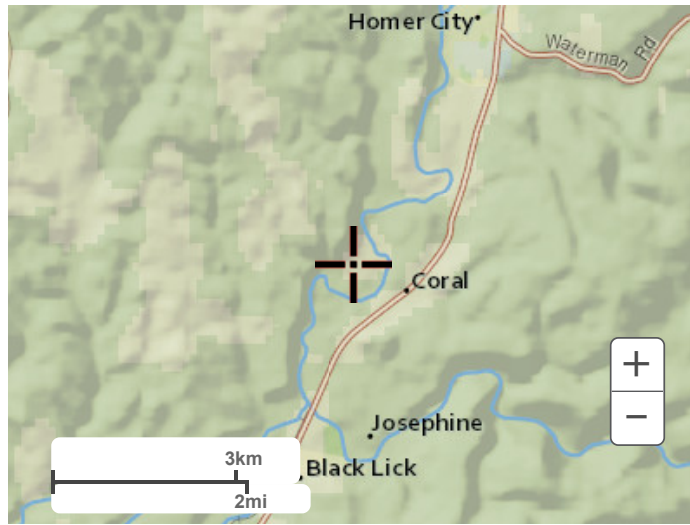
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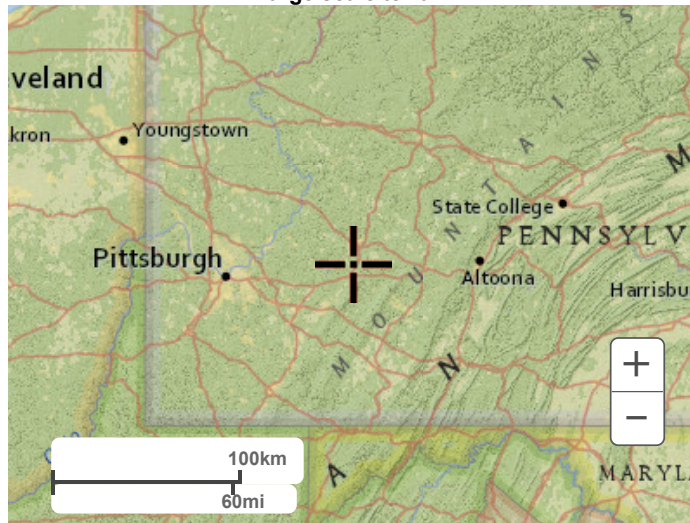
NOAA Atlas 14, Volume 2, Version 3

Created (GMT): Wed Oct 9 12:37:08 2024

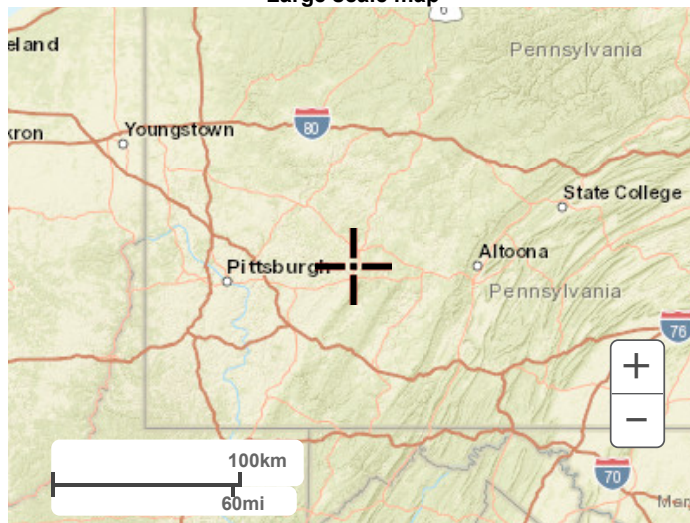
[Back to Top](#)**Maps & aerials****Small scale terrain**



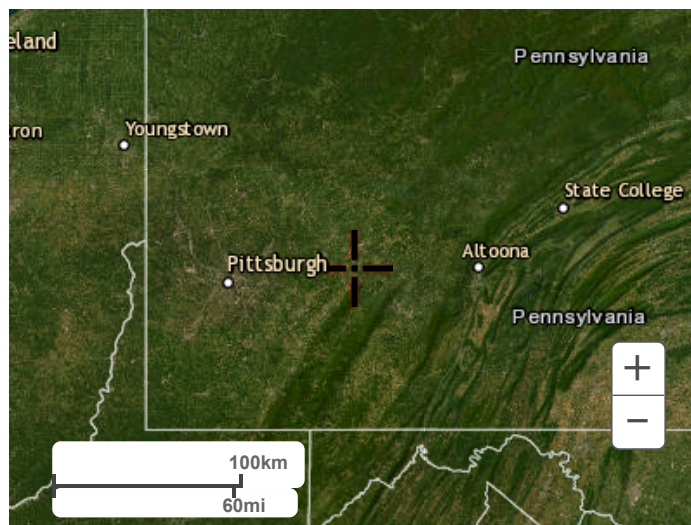
Large scale terrain



Large scale map



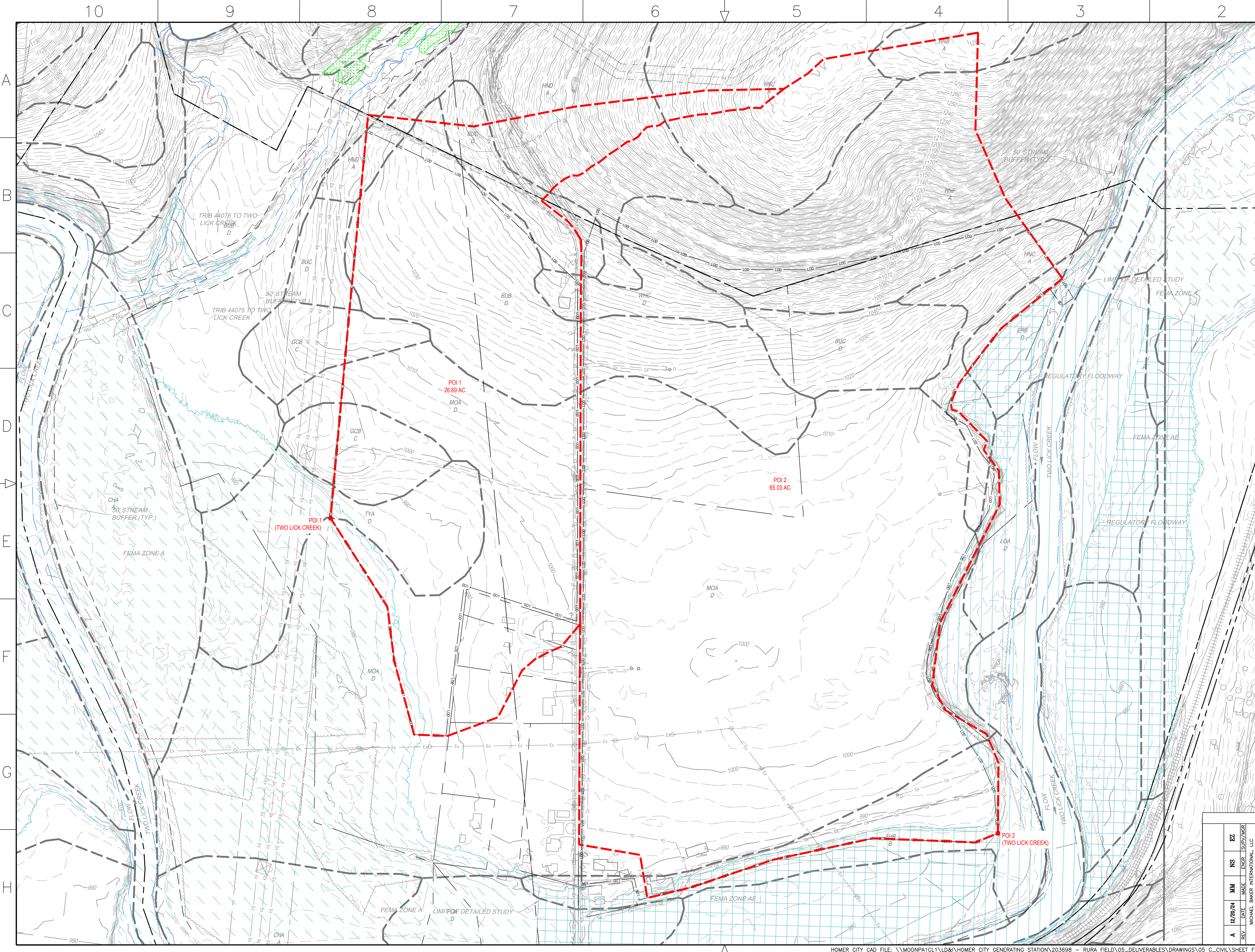
Large scale aerial



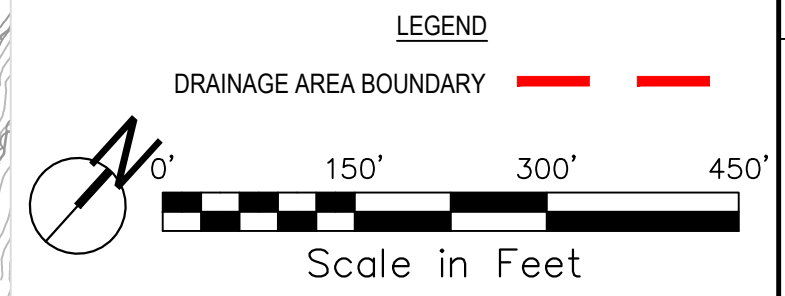
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- NOTES**
1. EXISTING SITE, TOPOGRAPHICAL, AND UTILITY INFORMATION COMPILED FROM HOMER CITY GENERATION AS-BUILTS AND PLANT DESIGN DRAWINGS. LOCATIONS OF EXISTING UTILITIES ARE APPROXIMATE AND SHOULD BE LOCATED IN THE FIELD PRIOR TO CONSTRUCTION. SURVEY OF EXISTING SITE AND UTILITY INFORMATION WAS COMPLETED ON OCTOBER 24, 2024 BY APEX COMPANIES, LLC.
 2. EXISTING STREAMS AND WETLANDS WERE DELINEATED BY MICHAEL BAKER INTERNATIONAL, INC IN JUNE 2024.
 3. HORIZONTAL DATUM IS BASED ON NAD27 PENNSYLVANIA STATE PLANES, SOUTH ZONE(3702), US FOOT (PA-S).
 4. SEE SHEET C-744-3502 FOR COMPOST FILTER SOCK SCHEDULE
 5. SEE SHEET C-744-3503 FOR CHANNEL SCHEDULE

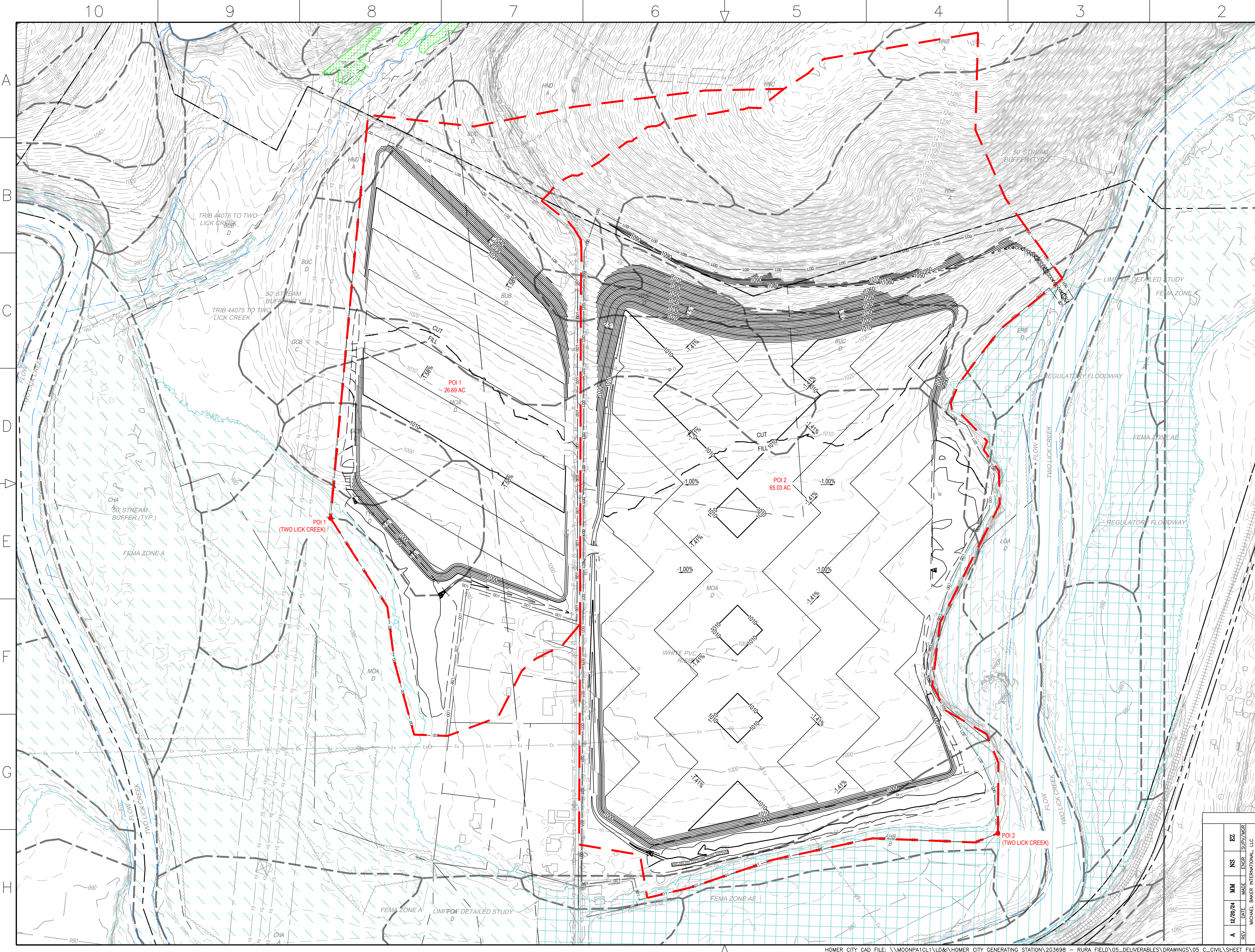


MICHAEL BAKER INTERNATIONAL, LLC
100 ARSIDE DRIVE
MOON TOWNSHIP, PA 15108

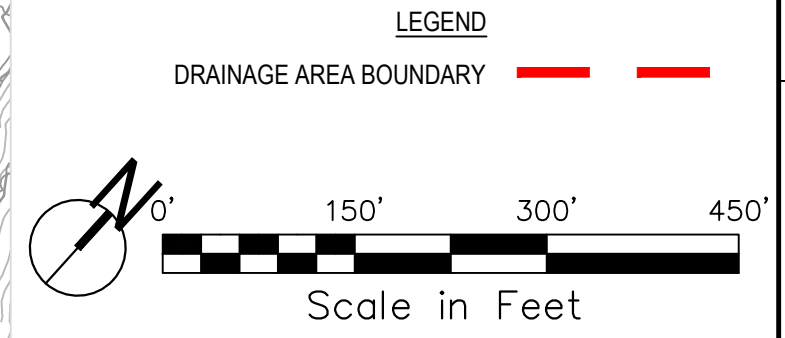
HOMER CITY STATION
1750 POWER PLANT ROAD
HOMER CITY, PA 15748

DWG. TYPE: **CIVIL**
TITLE: **RURA FIELD DRAINAGE MAPS
PRE CONDITION**

PROJECT NAME: RURA FIELD
1"=150' RURA1 C-745-1003 1 A
SCALE PROJECT NO. DRAWING NUMBER SHEET REV



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Michael Baker International

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100 ARSIDE DRIVE
MOON TOWNSHIP, PA 15108

HOMER CITY STATION
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HOMER CITY, PA 15748

DWG. TYPE: **CIVIL**

TITLE: **RURA FIELD DRAINAGE MAPS
POST CONDITION**

PROJECT NAME: RURA FIELD

1"=150' RURA1 C-745-1004 1 A

SCALE PROJECT NO. DRAWING NUMBER SHEET REV