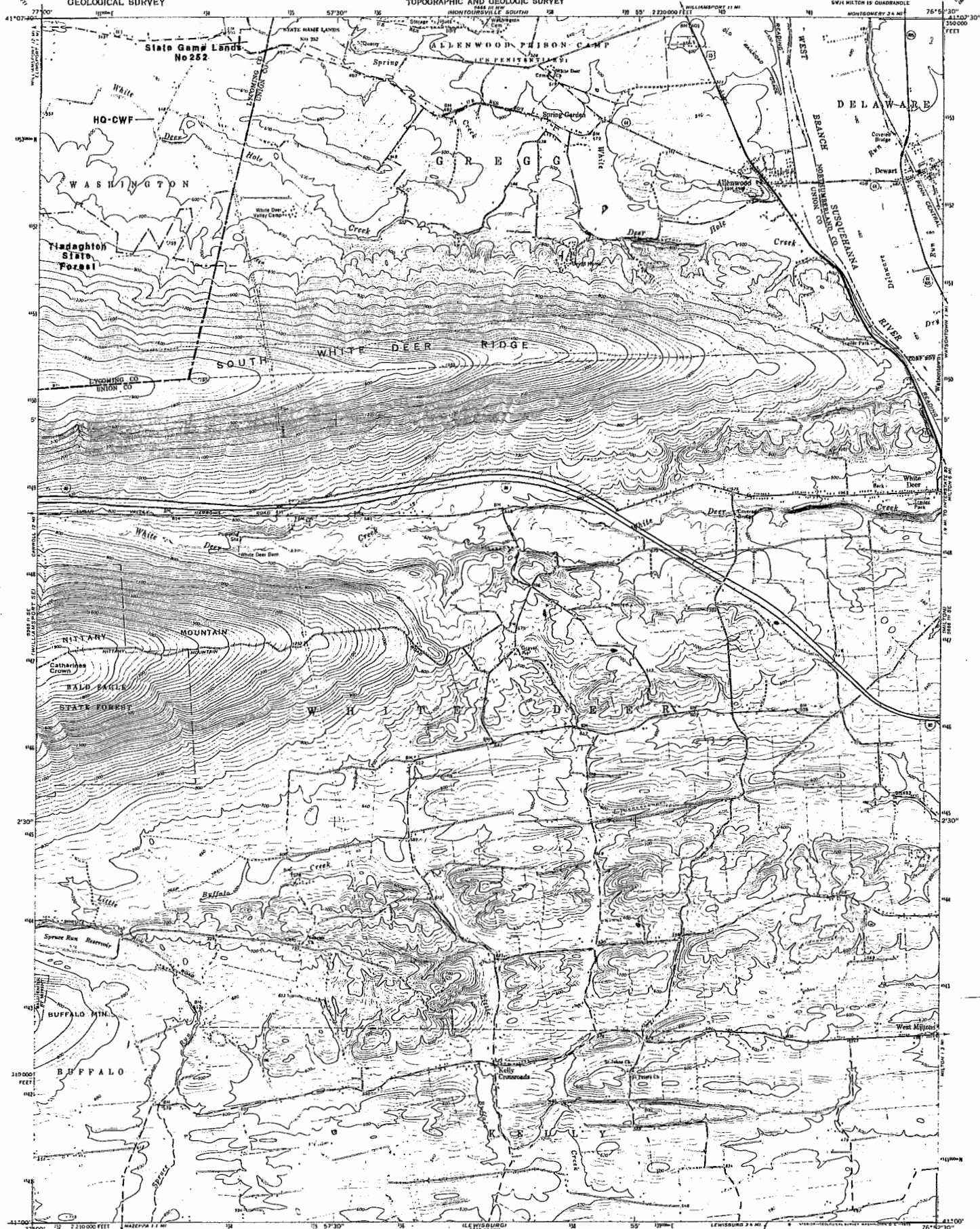




Mapas edited, and published by the Geological Survey

Control by USGS and USGS

Topography by photogrammetric methods from aerial

photographs taken 1963. Field checked 1965

Photocopy edition. 1967 North American datum

15 000 foot grid based on Pennsylvania coordinate system, north zone

1000-meter Universal Transverse Mercator grid lines,

zone 18, shown in blue

If red dashed lines indicate selected fence and field lines where

generally visible on aerial photographs. This information is uncorrected

for use of Pennsylvania agencies from aerial photographs

are 1973. This information not field checked

UTM GRID AND 1983 MAGNETIC NORTH

DECLINATION AT CENTER OF SHEET

SCALE 1:24,000

CONTOUR INTERVAL 20 FEET

DATUM IS MEAN SEA LEVEL

1:24,000

1:24,000

1:24,000

1:24,000

1:24,000

1:24,000

1:24,000

1:24,000

PENNSYLVANIA

QUADRANGLE LOCATION

ROAD CLASSIFICATION

Heavy duty

Medium duty

Unimproved dirt

Interstate Route

U.S. Route

State Route

ALLENWOOD, PA.

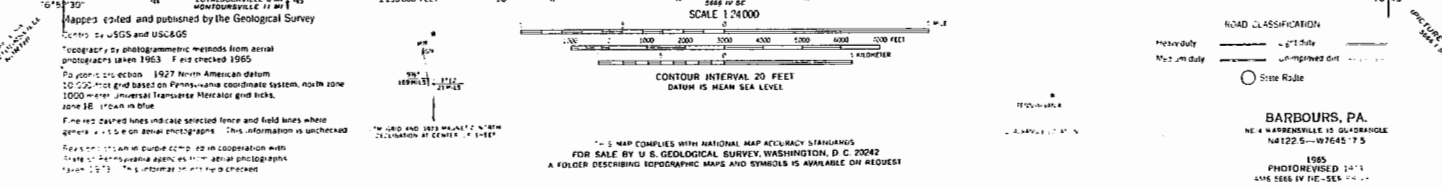
SW 1/4 SECTION 19 QUADRANGLE

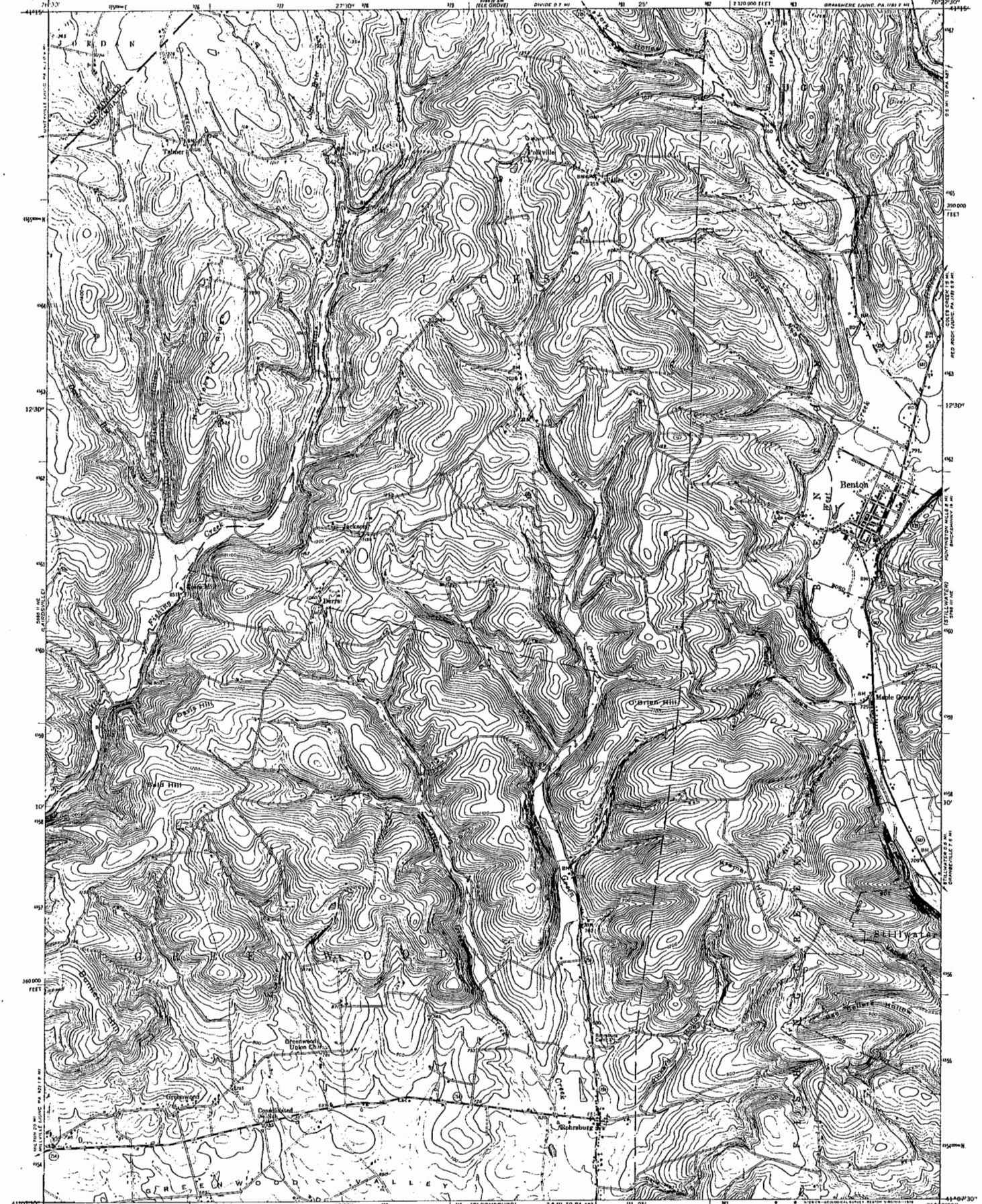
N4100-W7652-7.5

1965

PHOTOREVISED 1973

THIS MAP COMPLETES NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY WASHINGTON, D.C. 20542
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST





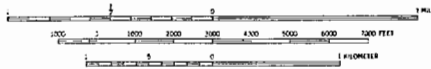
Maped, edited, and published by the Geological Survey
Center of USGS and USGAS

Topography from aerial photographs by multiplex methods
Aerial photographs taken 1942. Field check 1944.
Culture revised 1953.

Figure: projection, 1927 North American datum
10,000-foot grid based on Pennsylvania coordinate system,
north zone
1:250,000 Transverse Mercator grid ticks,
12° 16' 16" shown on blue

Revisions shown in purple completed in cooperation with
State of Pennsylvania agencies from aerial photographs
1949, 1953 and 1975. This information not been checked

1" IN GRID AND 1975 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET



CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1959

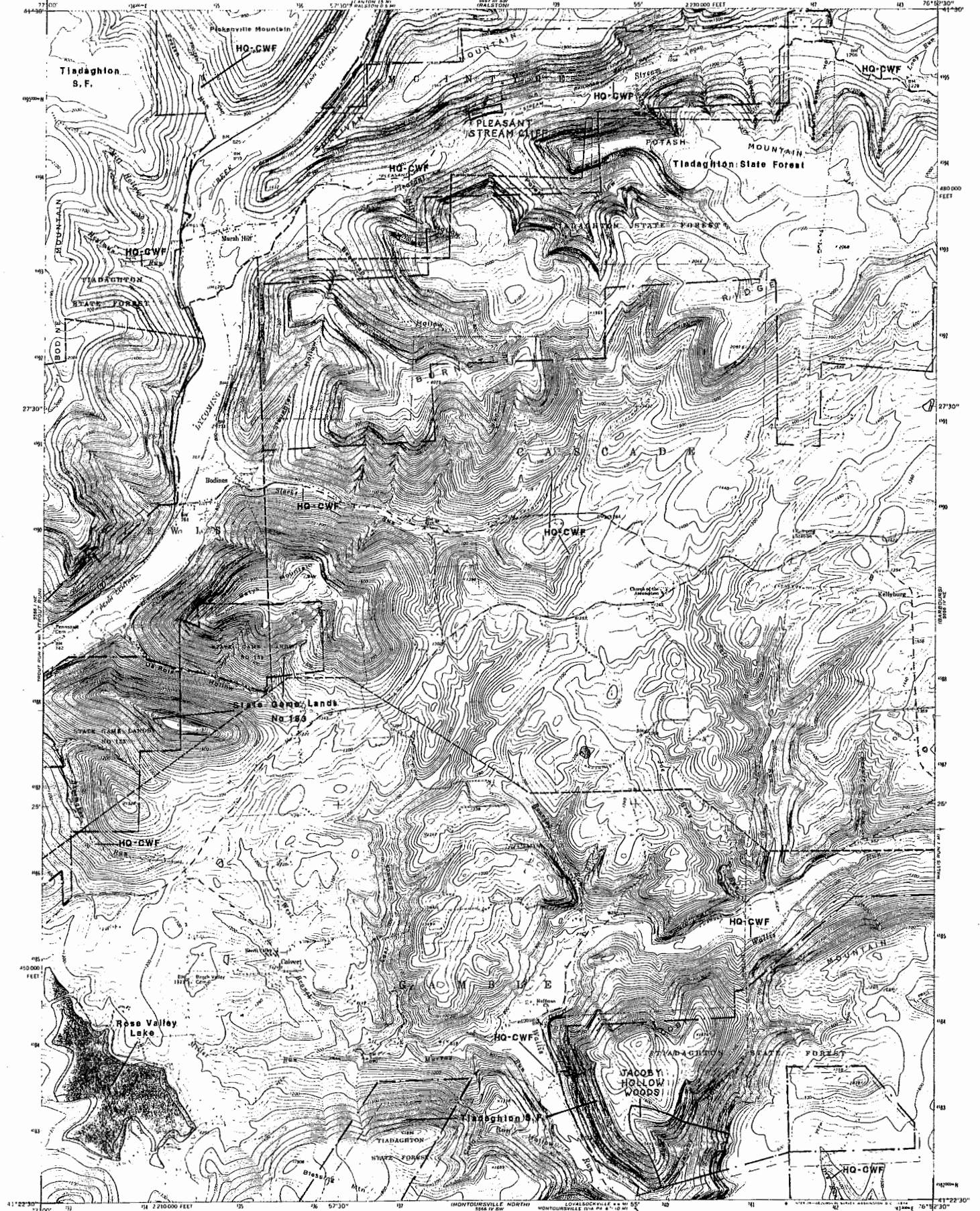
"THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY REGION VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



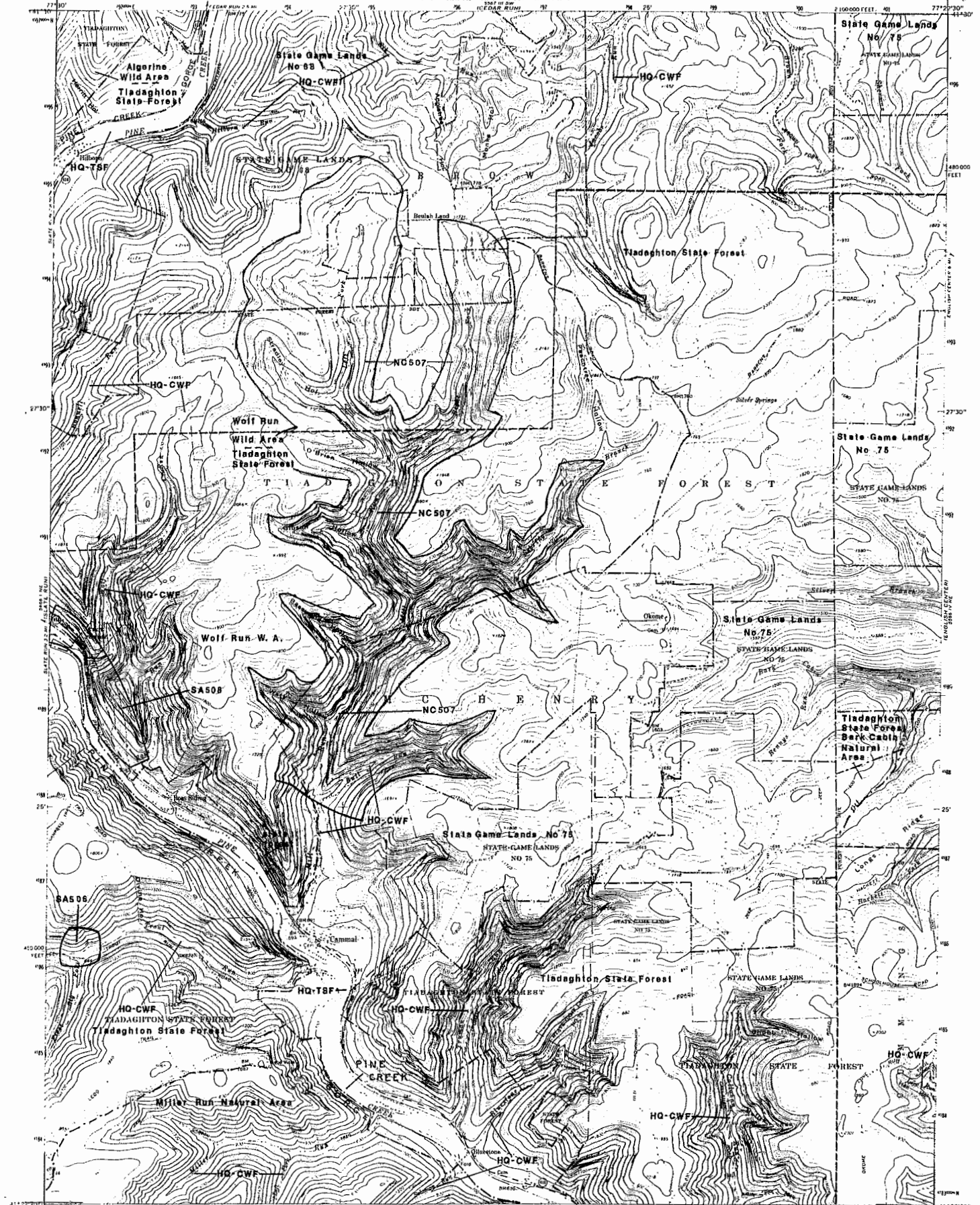
ROAD CLASSIFICATION
Heavy duty ——— Light duty ———
Medium duty ——— Unimproved dirt ———
U. S. Route ——— State Route ———

BENTON, PA.
NW1/4 BLOOMSBURG 1° QUADRANGLE
H4107.5-W7672.5/7.5

1953
PHOTOREVISED 1969 AND 1975



Map edited, and published by the Geological Survey
Contract by USGS and USFWS
Topography by photogrammetric methods from aerial
photographs taken 1953. Fair checked 1965
Projection: 1927 North American datum
10,000-foot grid based on Pennsylvania coordinate system; north zone
1000 meter Universal Transverse Mercator grid ticks
Zone 18, shown in blue
Fire red dashed lines indicate selected fence and land lines where
generally visible on aerial photographs. This information is unverified
Data is shown in purple combined in conformation with
State of Pennsylvania agencies from aerial photographs
Scale: 1:24,000
CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL
ROAD CLASSIFICATION
Main duty Light duty
Medium duty Unimproved dirt
State Route
BODINES, PA.
H/W WARRENSVILLE IS QUADRANGLE
H/1225--W7652.5.75
1965
PHOTOGRAPHED 1-1-1

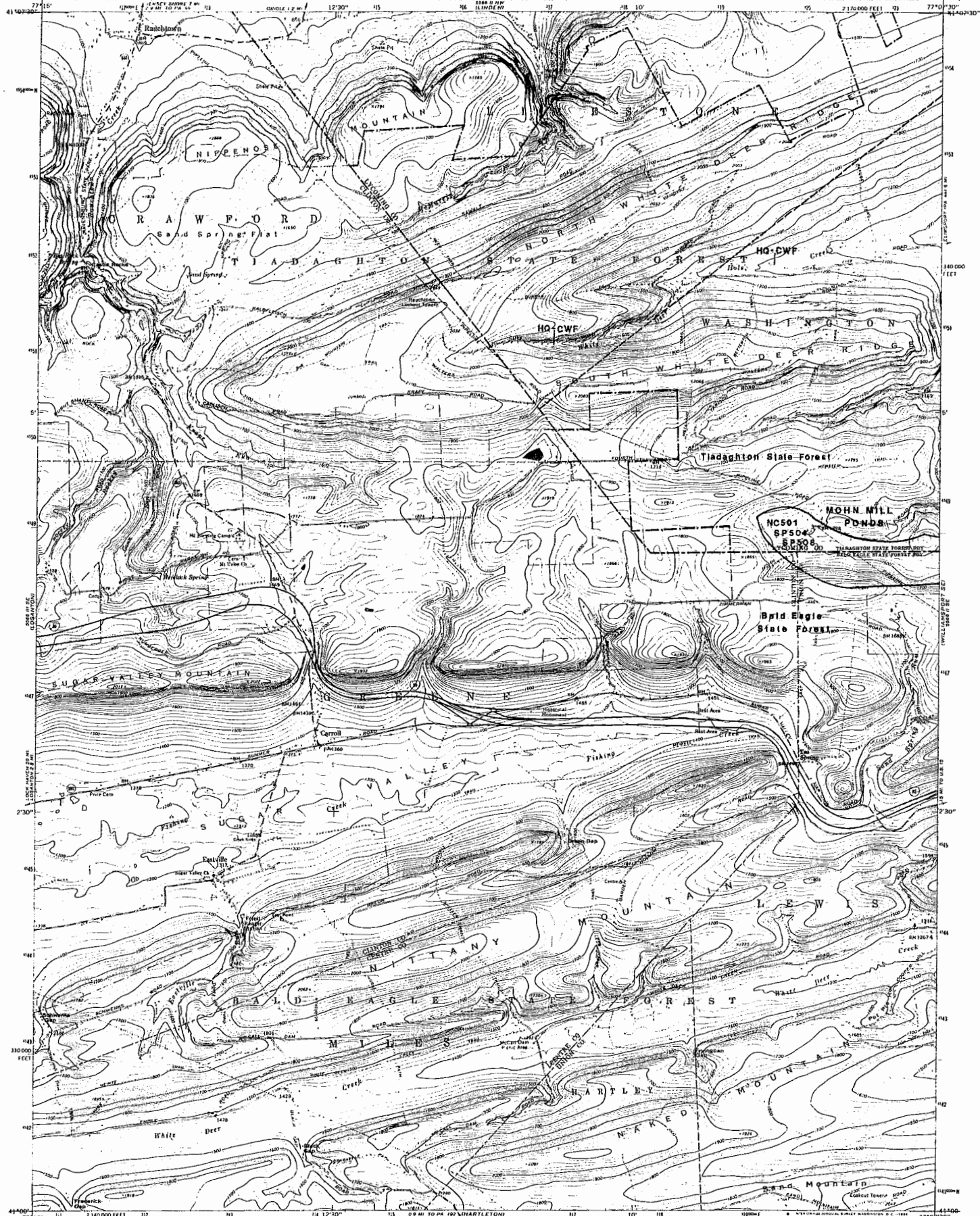


Map compiled and published by the Geological Survey
Contractors USGS and USCAOS
Topography by photogrammetric methods from aerial
photographs taken 1968. Field checks 1965
Photocopy of 1968 edition. 1972 Fourth American datum.
1:25,000 scale map based on Pennsylvania coordinate system, north zone
1000 meter Universal Transverse Mercator grid ticks.
June 18, 1974
If a red arrow points to a location on the map and the word "check" is written
there, it is a check mark. This information is unclassified.
The map is a photocopy of a map compiled in cooperation with
the U.S. Geological Survey, and the map is a photocopy of a map
compiled in cooperation with the U.S. Geological Survey.

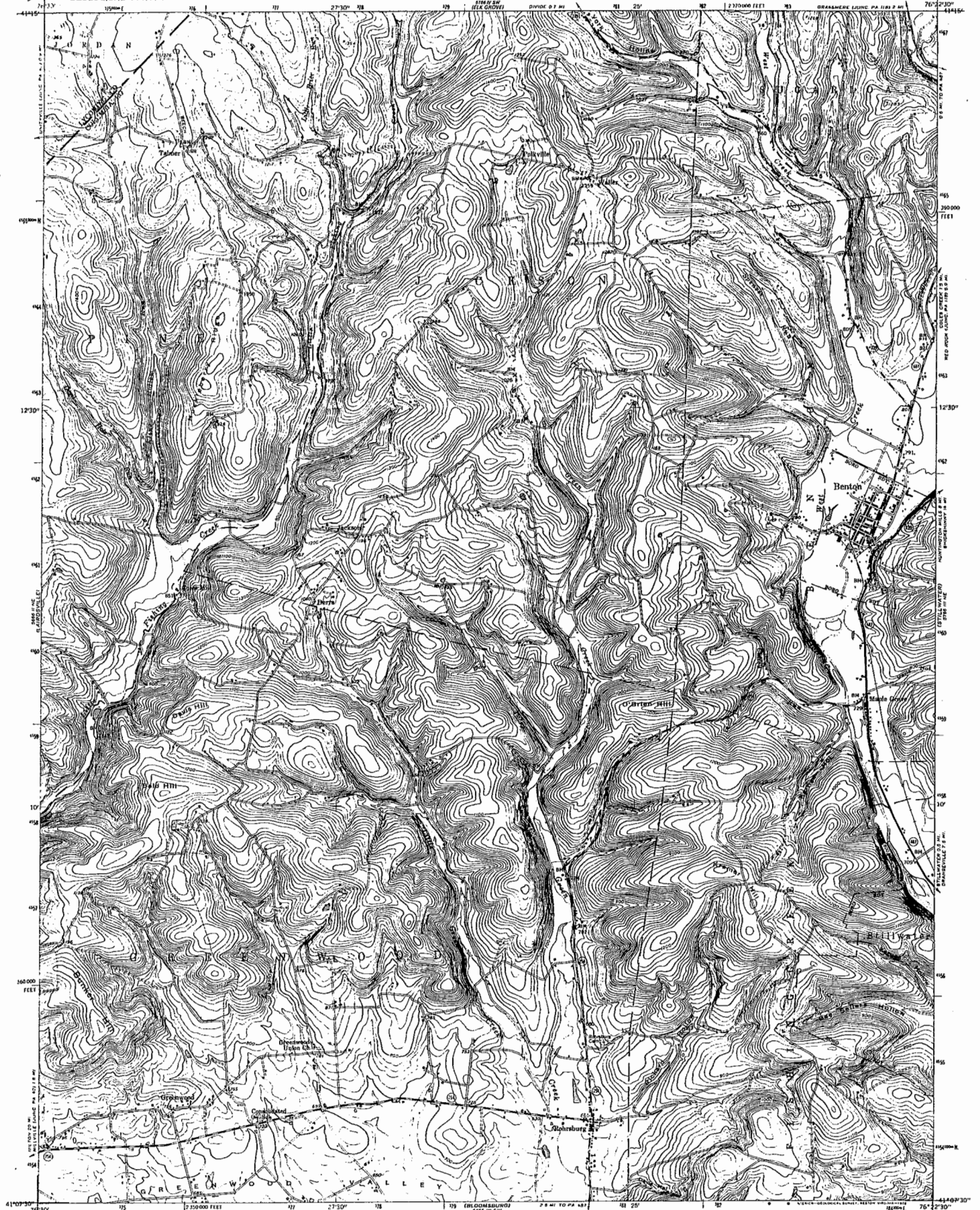
SCALE 1:24,000
CONTINUOUS INTERVAL 20 FEET
NATIONAL GEOGRAPHIC VERTICAL DATUM OF 1929
UTM GRID AND 1983 MAGNETIC N. 1983
DECLINATION AT CENTER 1° 13' 12" E
Map photocopied 1983
No major culture or drainage changes observed

ROAD CLASSIFICATION
Medium duty
Light duty
Unimproved dirt
Scale Route
CAMMAL, PA.
41077-04-1F-024
PHOTOINSPECTED 1983
1:25,000

THIS MAP COMPLETES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER COLORADO 80226 OR RESTON VIRGINIA 22092
To place on the projected North American Datum 1983,
move the projection lines 4 meters south and



Maped, edited, and published by the Geological Survey
Control by USGS and USCA&S
Topography by photogrammetric methods from aerial
photographs taken 1962. Field checked 1965
Polyconic projection. 1927 North American datum
10,000 foot grid based on Pennsylvania coordinate system. UTM zone
18QD. UTM grid and 1983 magnetic north
declination at center of sheet
UTM GRID AND 1983 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET
This map complies with National Map Accuracy Standards
FOR SALE BY U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST
1965
NATIONAL GEOGRAPHIC SOCIETY



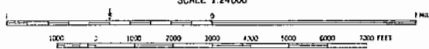
Mapped, edited, and published by the Geological Survey
Contract by USGS and USC&GS

Topography from aerial photographs by multiframe methods
Aerial photographs taken 1942. Field check 1944.
Culture revised 1953

Projection: projection, 1927 North American datum,
10,000-foot grid based on Pennsylvania coordinate system,
North zone
1:25,000 United States Transverse Mercator grid ticks,
Zone 18, shown in blue

Boundaries shown in purple computed in cooperation with
State of Pennsylvania agencies from aerial photographs
taken 1959 and 1975. This information not field checked

1:25,000 and 1:50,000 magnetic north
declination at center of sheet



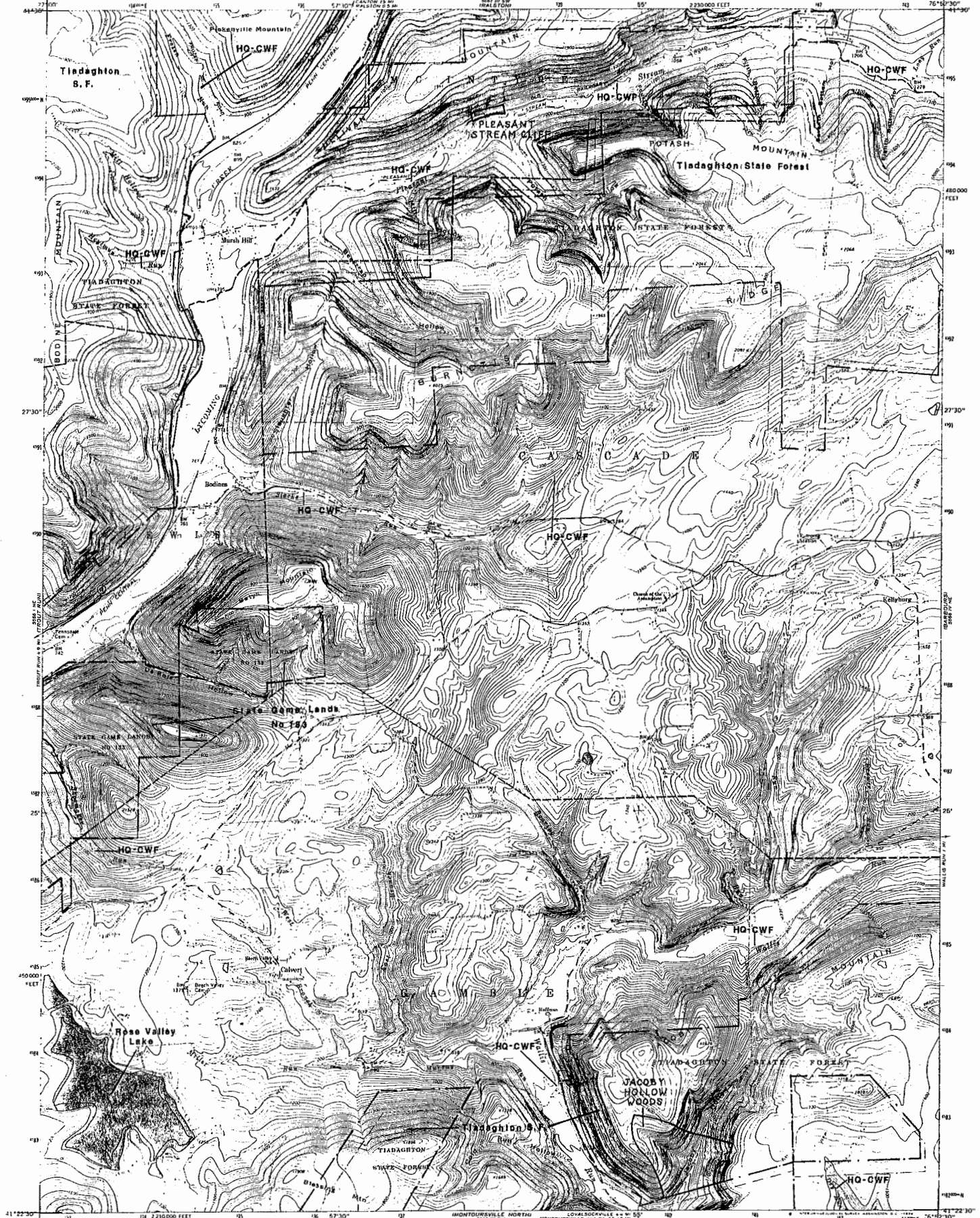
CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

"THIS MAP COMPLETES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



ROAD CLASSIFICATION
Heavy-duty ——— Light-duty ———
Medium-duty ——— Unimproved dirt ———
U.S. Route ——— State Route ———

BENTON, PA.
NW14 BLOOMSBURG 15' QUADRANGLE
14107 S-W7622.5/7.5
1953
PHOTOREVISED 1968 AND 1975



Map edited and published by the Geological Survey
Control by USGS and USACGS

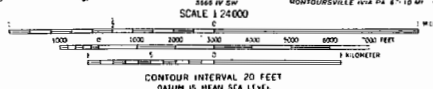
Topography by photogrammetric methods from aerial
photographs taken 1963. Field checked 1965.

Projection: 1927 North American datum
10,000-foot grid based on Pennsylvania coordinate system: north zone
1500-meter Universal Transverse Mercator grid ticks
Data 10 shown in blue

Red dashed lines indicate sheeted fence and field lines where
generally visible on aerial photographs. This information is uncheckered

Red dashed lines indicate sheeted fence and field lines where
generally visible on aerial photographs. This information is uncheckered

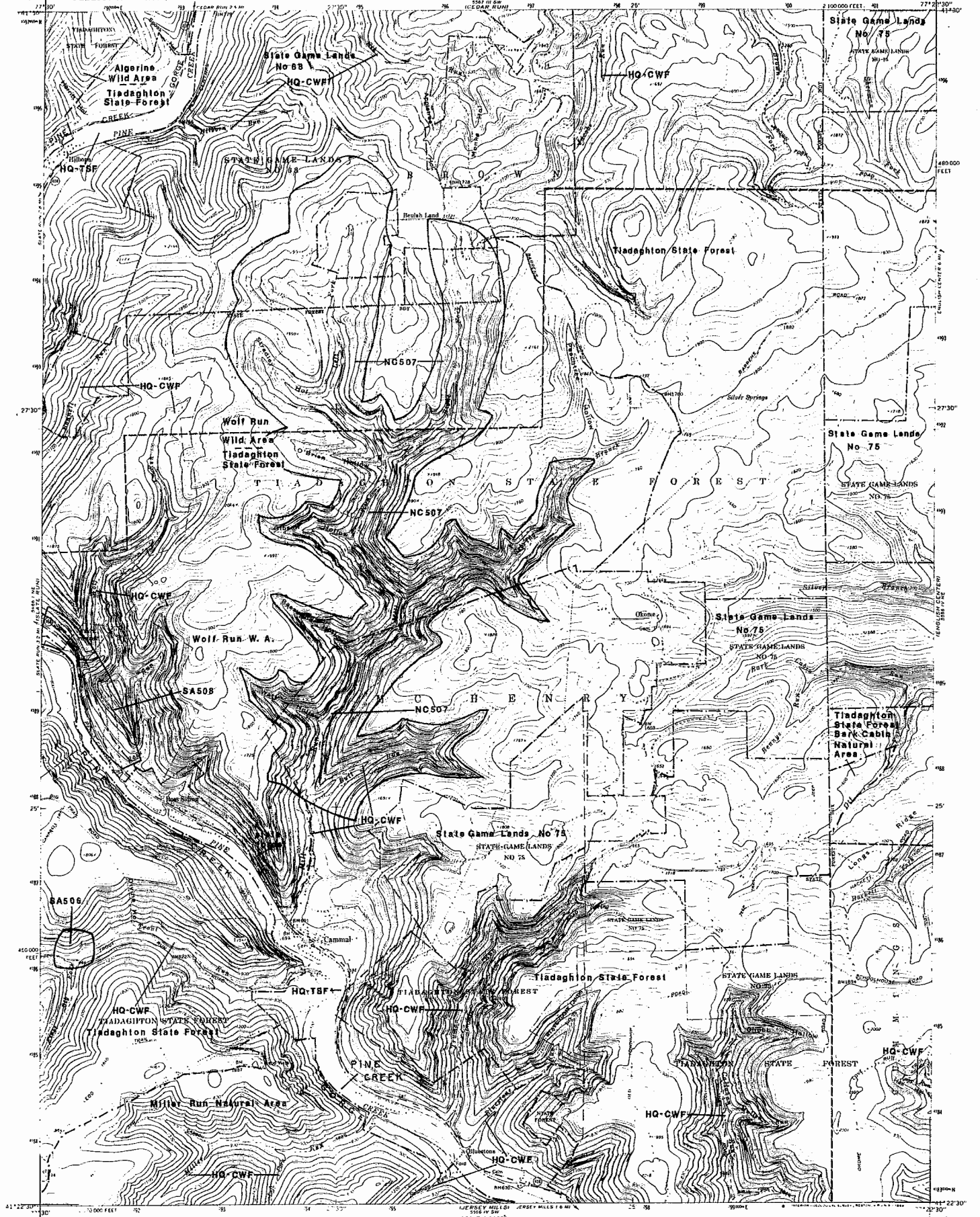
Red dashed lines indicate sheeted fence and field lines where
generally visible on aerial photographs. This information is uncheckered



ROAD CLASSIFICATION	
Fein duty	Light duty
Medium duty	Unimproved dirt
State Route	

BODINES, PA.
NEVA WARRENVILLE IS QUADRANGLE
M81 22-5--W7552 5-75
1965
PHOTOGRAPHED 1963

This map complies with National Map Act, 1947, standards
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D.C. 20542
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



Map prepared and published by the Geological Survey
Control by USGS and USCAOS

Topography by photogrammetric methods from aerial
photographs taken 1963. F and checked 1965

Revised projection: 1927 North American Datum
1:500,000 feet per inch based on Pennsylvania coordinate system, north zone
1000 meter Universal Transverse Mercator grid ticks
Zone 18, 19 shown in blue

Thin red dashed lines indicate restricted fence and land areas where
owners are listed on the photographs. This information is uncorrected
and does not show in a state compiled in cooperation with
state or Pennsylvania agencies from aerial photographs
taken 1963. This information was checked

Map photostereographed
No major culture or drainage changes observed

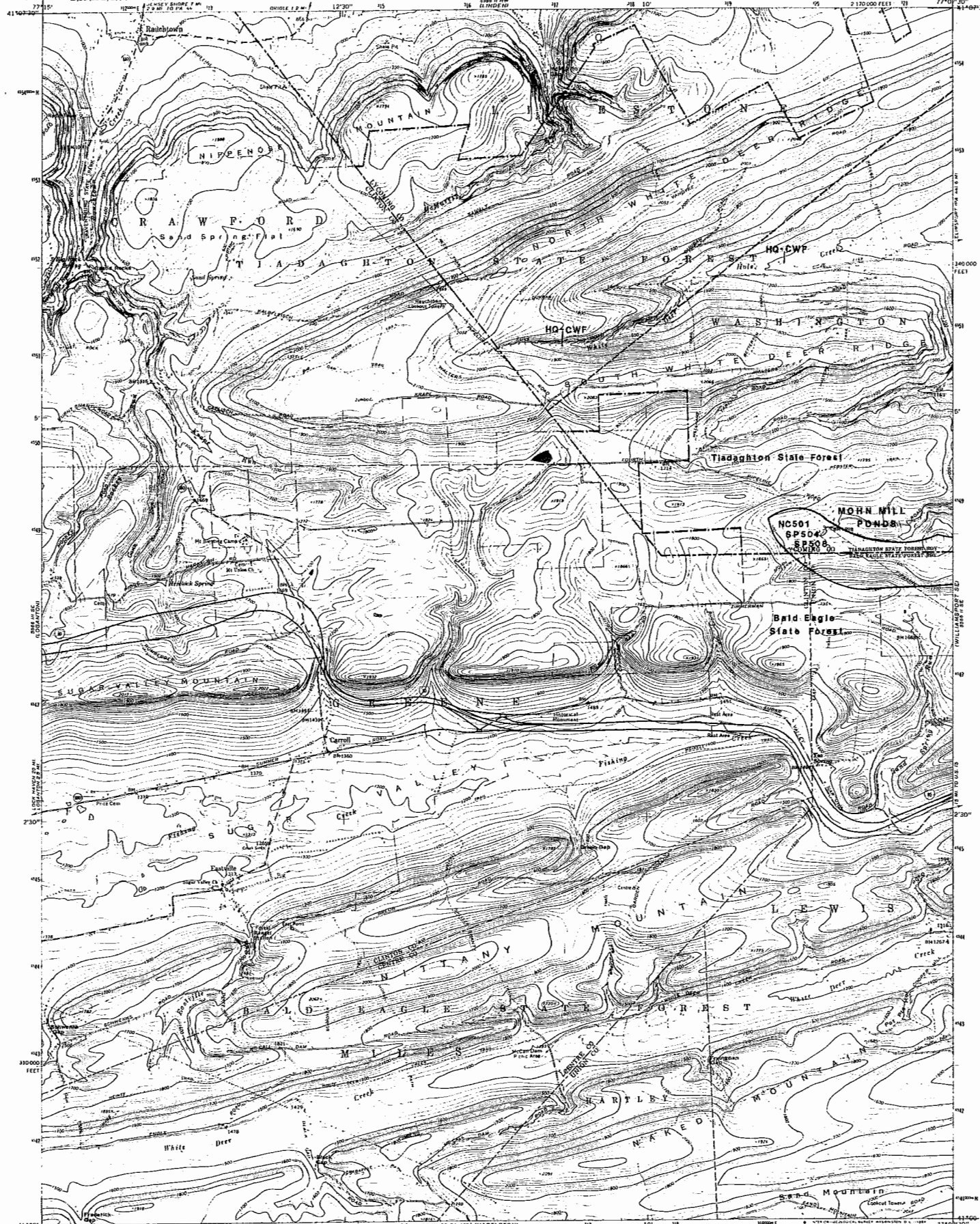
THIS MAP COMPLETES NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY
RENEWAL: CELEBRATED 88796 OR REVISION VIRGINIA 22020

To place on the predicted North American Datum 1983,
move the projection lines 4 meters south and

ROAD CLASSIFICATION
Medium duty Light duty
Unimproved dirt
State Route

CAMMAL, PA.

41077-D4-11-024
PHOTOINSPECTED 1983
1984



Mapped, edited, and published by the Geological Survey
Control by USGS and USACEGS

Topography by photogrammetric methods from aerial
photographs taken 1962. Field checked 1965
Polyconic projection. 1927 North American datum
10 000-foot grid based on Pennsylvania coordinate system. north zone
1000-meter Universal Transverse Mercator grid ticks
zone 18 shown in blue

The red dashed lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is uncollected
Revisions shown in purple compiled in cooperation with
State of Pennsylvania agencies from aerial photographs
1:250 000. This information not field checked



SCALE 1:24 000

CONTOUR INTERVAL 20 FEET

DATUM IS MEAN SEA LEVEL



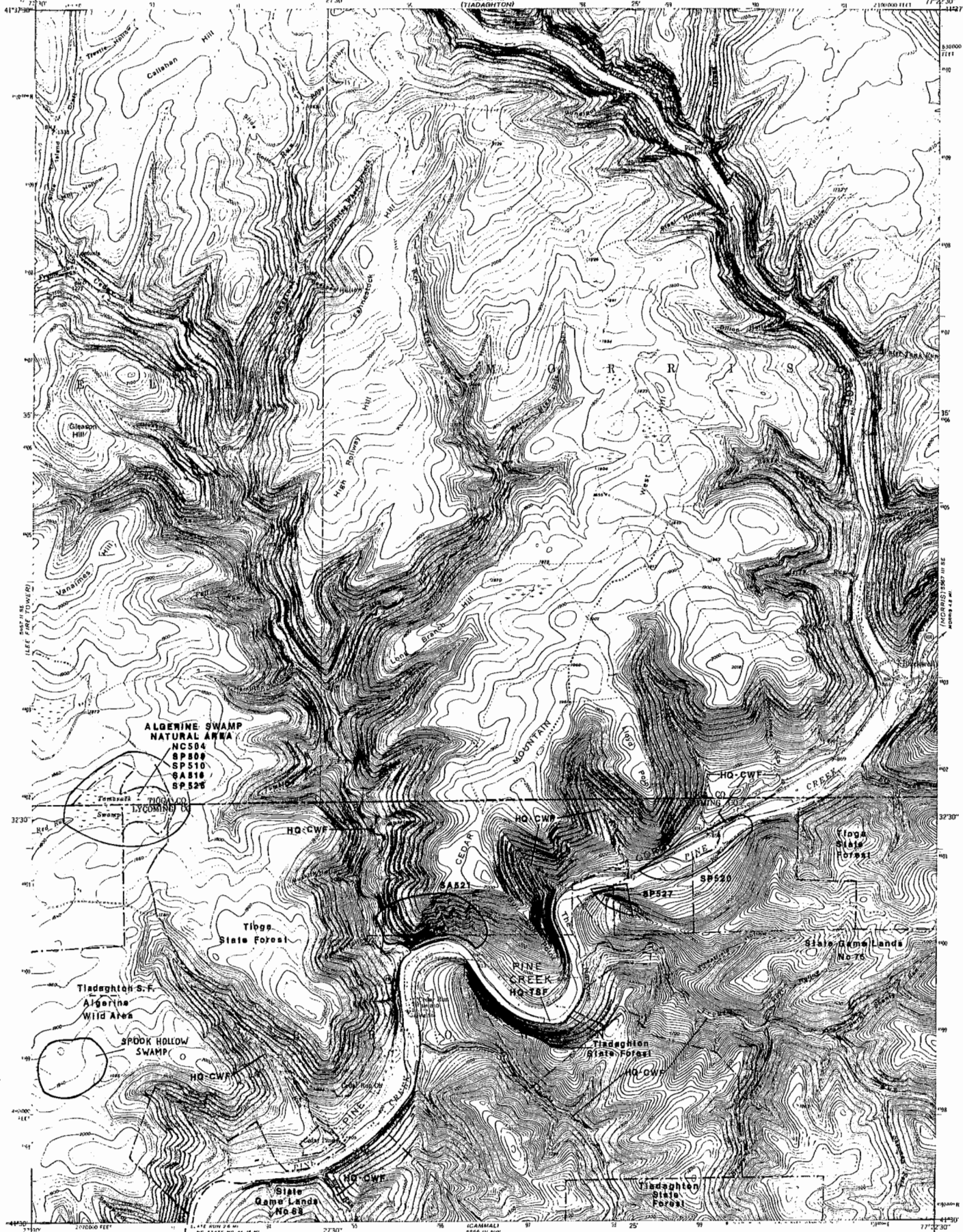
ROAD CLASSIFICATION

Main-city Light-duty
Unpaved dirt State Route

CARROLL, PA.
SW 1/4 WILLIAMSPORT 15 QUADRANGLE
1:6100—W7107 5 7.5

1965
REPRODUCTION 1:10 000

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
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A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



ALGERINE SWAMP
NATURAL AREA
NC504
SP500
SP510
SP519
SP526

Tiadaghton S.F.
Algerine
Wild Area

SPOOK HOLLOW
SWAMP

Tibbs
State Forest

PINE
CREEK

Tiadaghton
State Forest

Tibbs
State Forest

State Game Lands
No. 76

State Game Lands
No. 61

Tiadaghton
State Forest

Map compiled, edited, and published by the Geological Survey
for the USGS

Topography from aerial photographs by multiple methods
and stereophotographs taken 1954. Field check 1956.

Projection: 1983 North American Datum
1. CC: Not used based on Pennsylvania coordinate system
2. UTM: 18Q

Water: Generalized from aerial photographs
and other sources.

Boundaries shown in blue. Contour interval 20 feet.
Contours are based on aerial photographs taken 1954.

SCALE 1:24,000

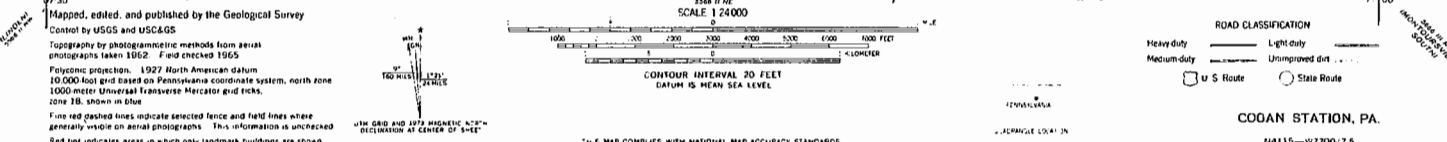
CONTOUR INTERVAL 20 FEET
ELEVATION IN FEET

MAP COMPILED BY THE GEOLOGICAL SURVEY
FOR SALE BY U.S. GEOLOGICAL SURVEY WASHINGTON, D.C. 20502
A FOLDER TECHNIQUE FOR PRODUCING MAPS AND CHARTS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION

ROAD SURFACE ALL WEATHER ROADS DRY WEATHER ROADS
Heavy-duty surface Improved dirt
Medium-duty surface Unimproved dirt
Loose surface or narrow hard surface
U.S. Route
State Route

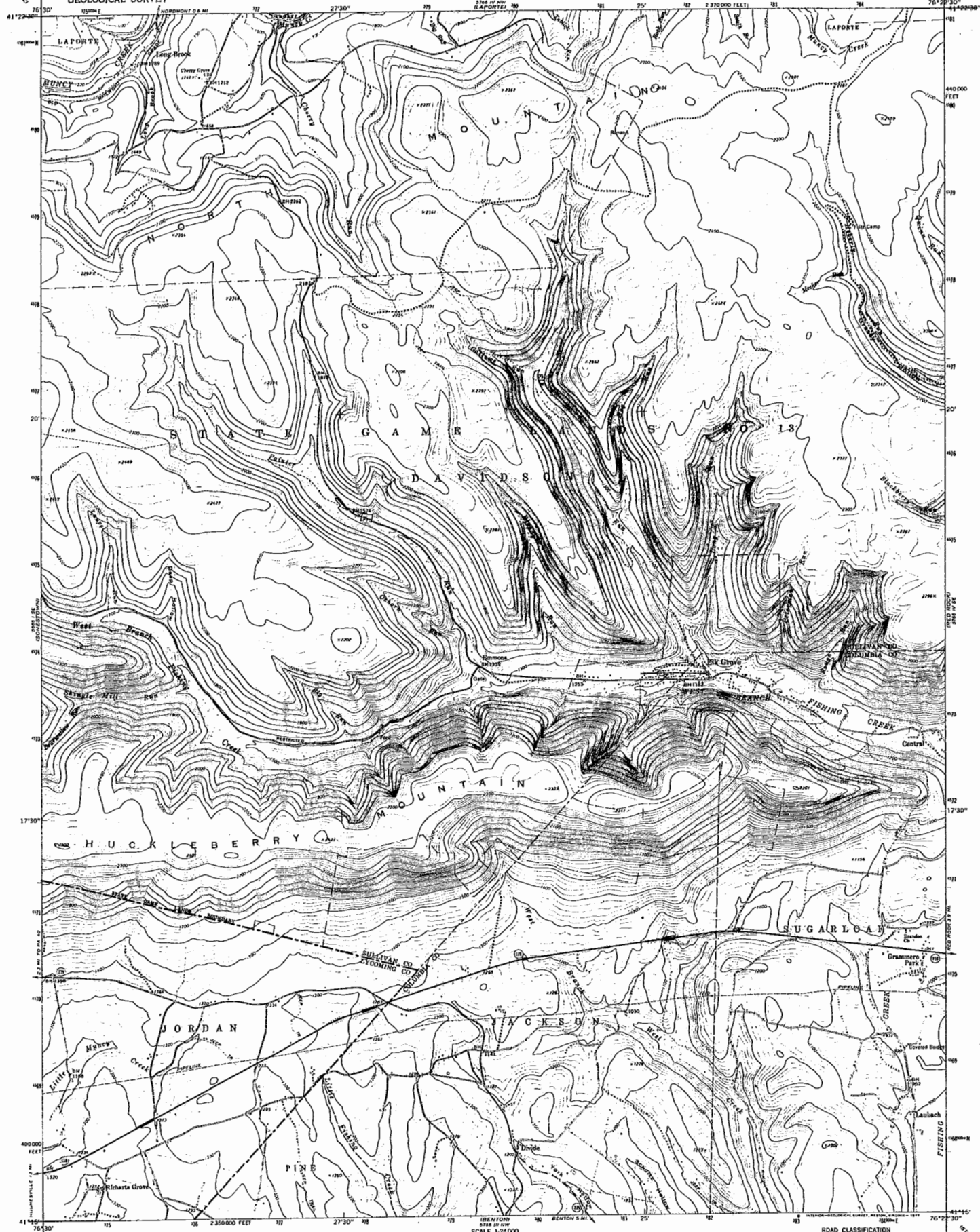
CEDAR RUN, PA.



CODAN STATION, PA

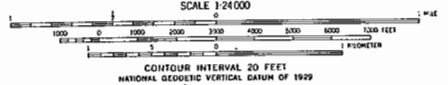
44115—W7700/7.6

1965



Mapped, edited, and published by the Geological Survey
Control by USGS and USGAS
Topography by photogrammetric methods from aerial photographs
taken 1969. Field checked 1969.
Polyconic projection. 1927 North American datum
10,000-foot grid based on Pennsylvania coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks, zone 18,
shown in blue.
Fine red dashed lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is unchecked

UTM GRID AND TRUE MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

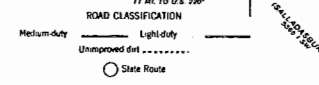
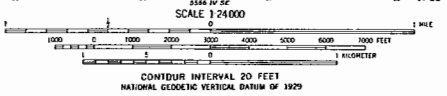


ROAD CLASSIFICATION
Primary highway, hard surface
Secondary highway, hard surface
Unimproved road
Interstate Route
U. S. Route
State Route

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 20192
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ELK GROVE, PA.
SW 1/4 LAPORTE 15 QUADRANGLE
N4135-W7622 5/7 5

1969
1:62,500 SCALE



Maped, edited, and published by the Geological Survey
Consent by USGS and USGARS
Topography by photogrammetric methods from aerial
photographs taken 1953. Field checked 1965
Polyconic projection. 1927 North American datum
10,000-foot grid based on Pennsylvania coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks,
zone 18, shown in blue
Fine red dashed lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is uncheck
Area covered by dashed light blue pattern is subject
to controlled inundation by Little Pine Dam
Revisions shown as purple computed in cooperation with
State of Pennsylvania agencies from aerial photographs

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

To place on the predicted North American Datum 1983,
move the projection lines 4 meters south and
25 meters west as shown by dashed corner ticks

ENGLISH CENTER, PA.
41077-03-11-024
1965
PHOTO REPRODUCED 1973

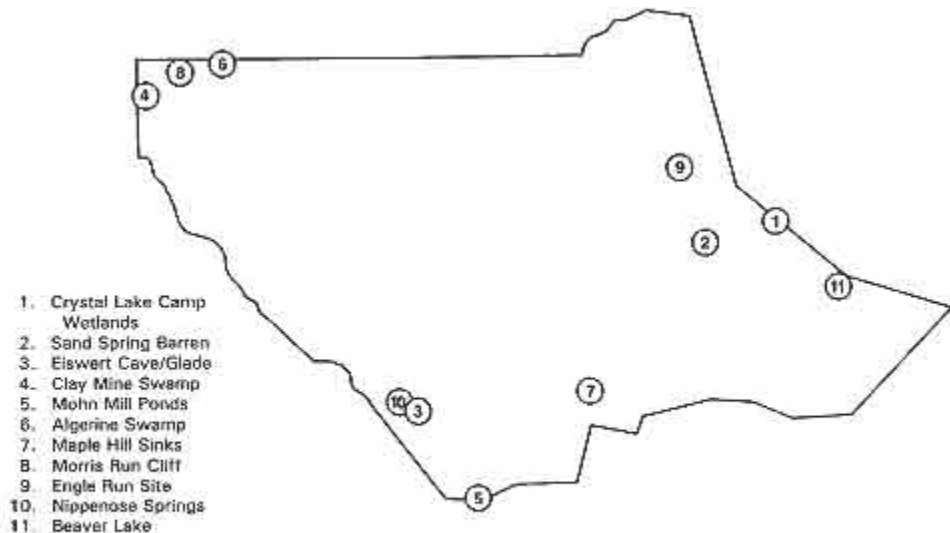


Figure 1. Locations of the top sites for the preservation of biological diversity in Lycoming County.

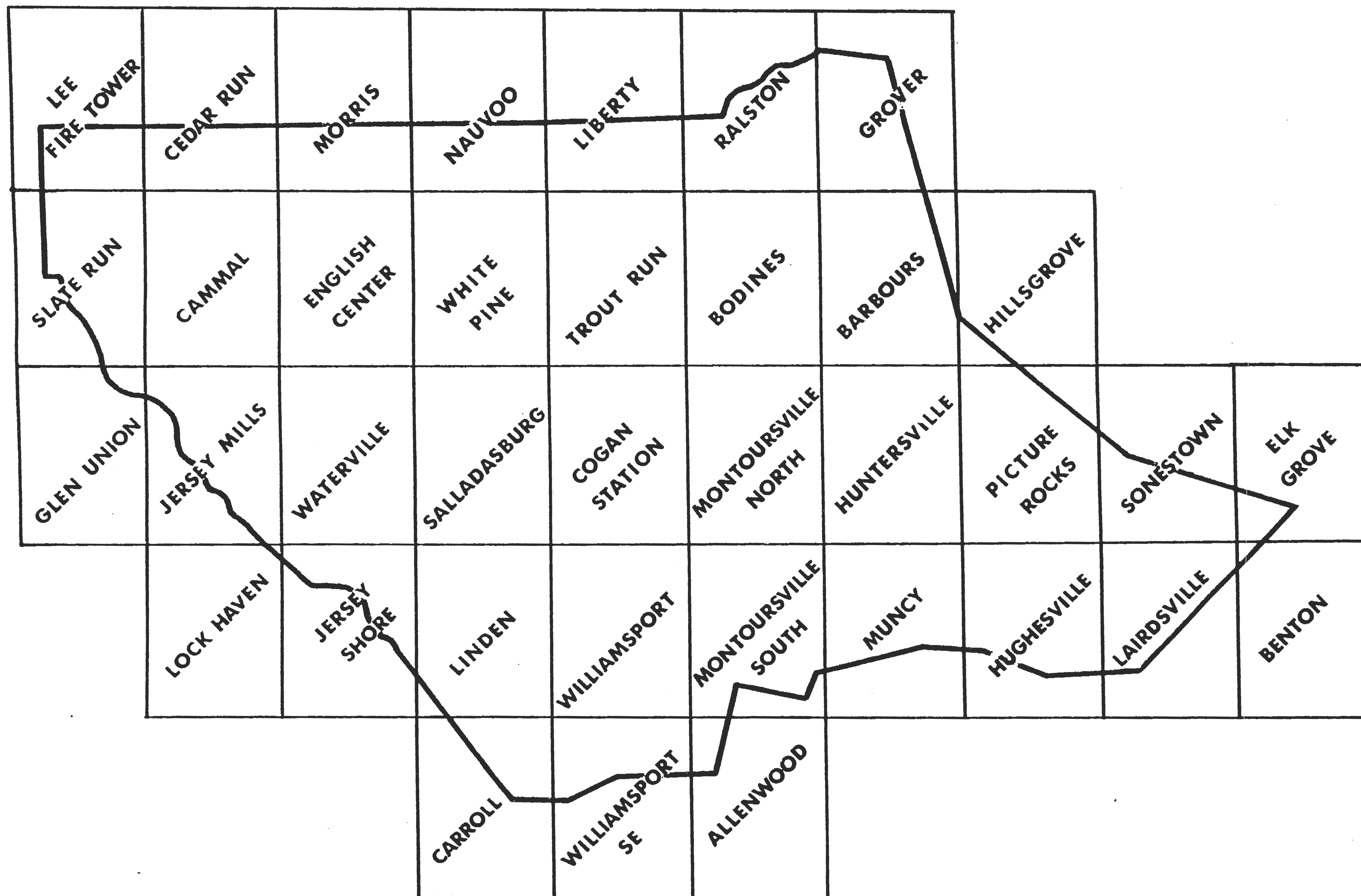


Figure 2. Lycoming County outline with names and locations of the USGS topographic quadrangle maps of the county.

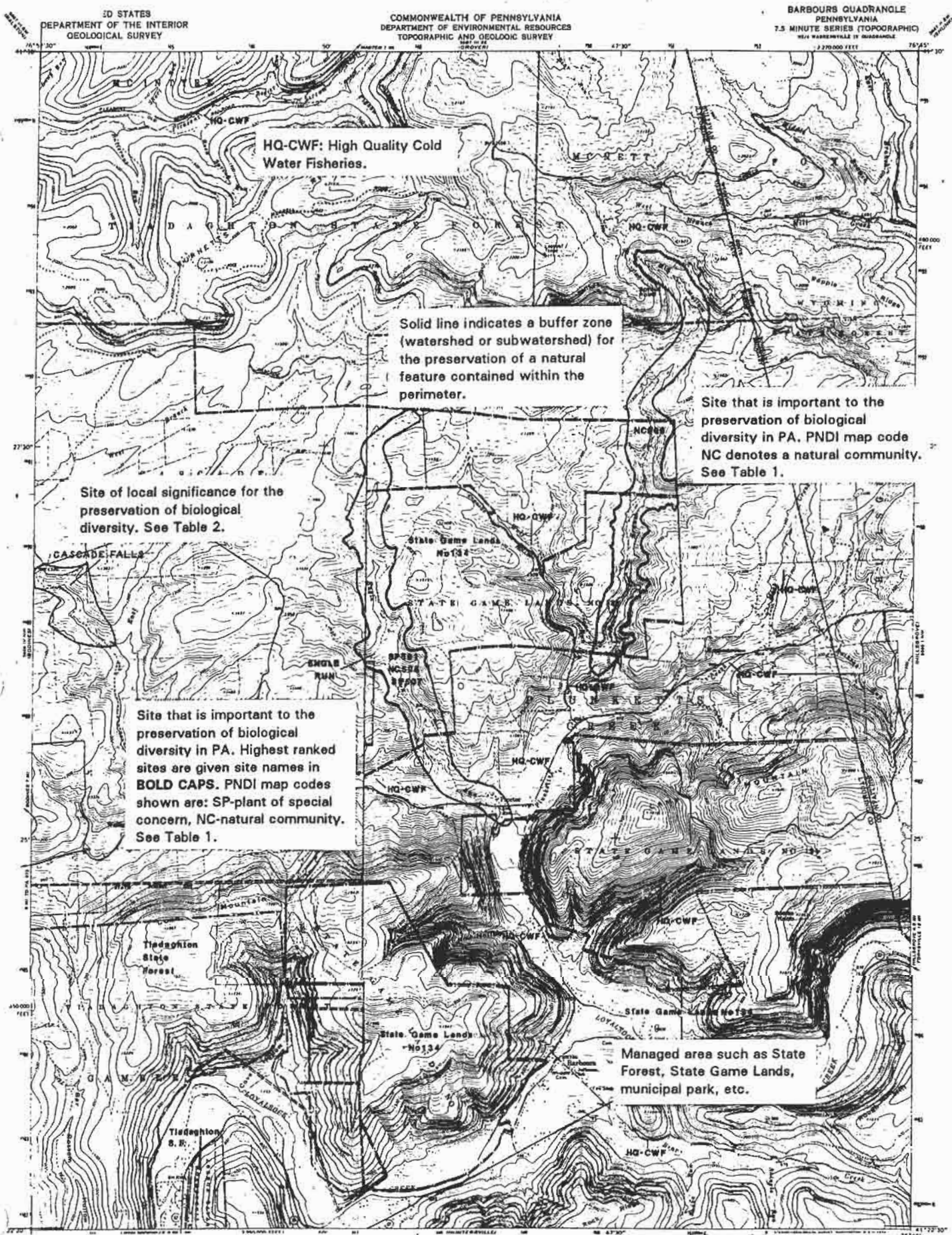


Figure 3. Sample USGS topographic map with explanations of the various types of County Natural Areas Inventory information added.



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
TOPOGRAPHIC AND GEOLOGIC SURVEY

GLEN UNION QUADRANGLE
PENNSYLVANIA
7.5 MINUTE SERIES (TOPOGRAPHIC)

Map published by the Geological Survey
Compiled by USGS and USGS
Topography from aerial photographs by multiple methods
Aerial photography taken 1944 Field check 1946
Projection: 1927 North American datum
1000-foot grid based on Pennsylvania coordinate system
Datum: 1927
1927 meter Universal Transverse Mercator grid ticks
Zone 16 shown in blue

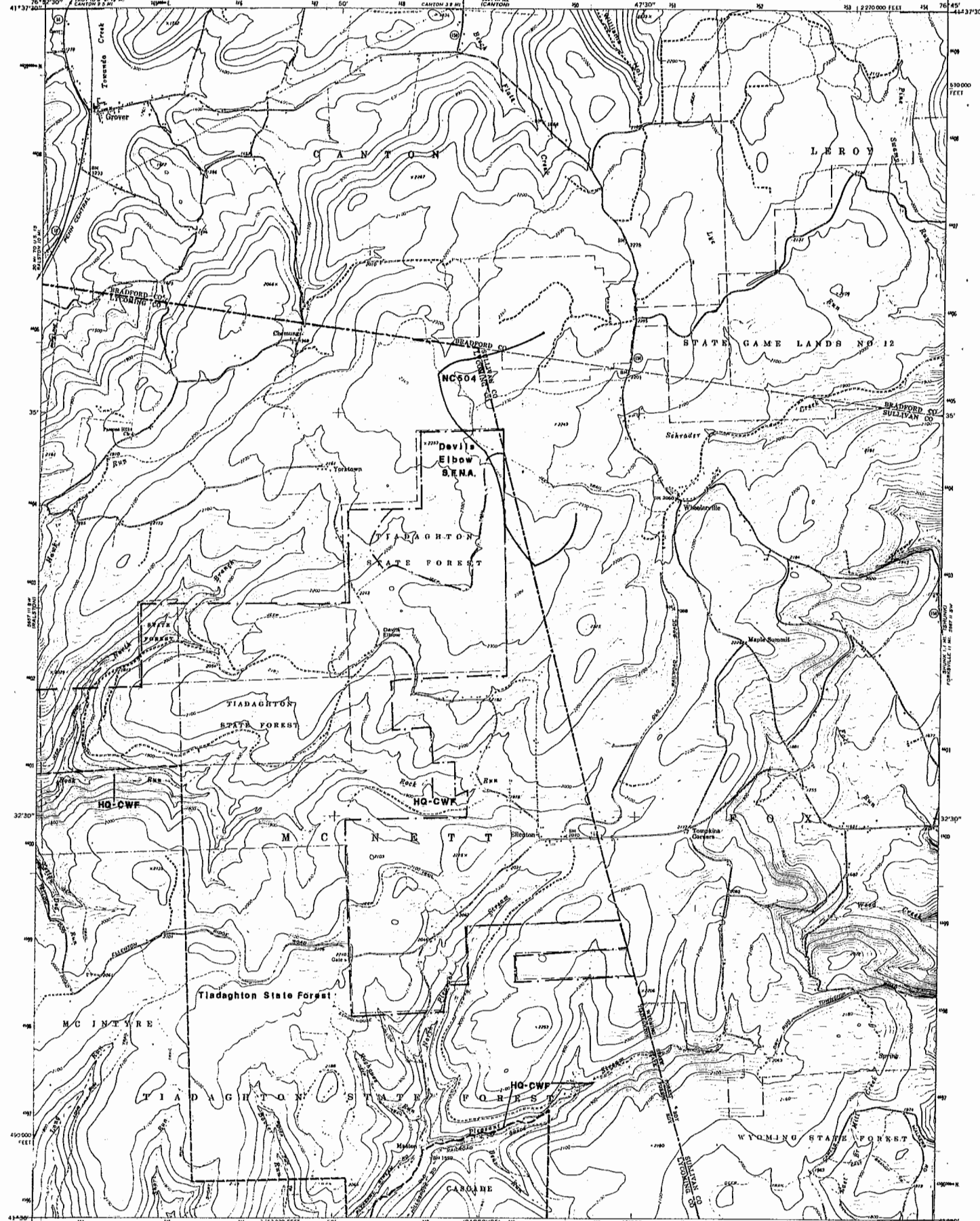
SCALE 1:24000
NATIONAL GEOLOGIC VERTICAL DATUM OF 1929
CONTOUR INTERVAL 20 FEET

ROAD CLASSIFICATION
Heavy duty
Light duty
Unimproved dirt
State Route

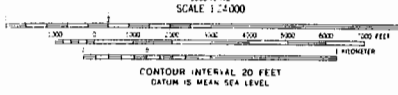
GLEN UNION, PA.

THIS MAP COMPLETES NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 20192
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

14815- (9773) 7
1946
14815- (9773) 7



Maped, edited, and published by the Geological Survey
Control by USGS and USCAAS
Topography by photogrammetric methods from aerial
photographs taken 1959. Field checked 1969
Polyconic projection. 1927 North American datum.
10,000-foot grid based on Pennsylvania coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks.
Zone 18, shown in blue
Fine red dashed lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is uncorrected



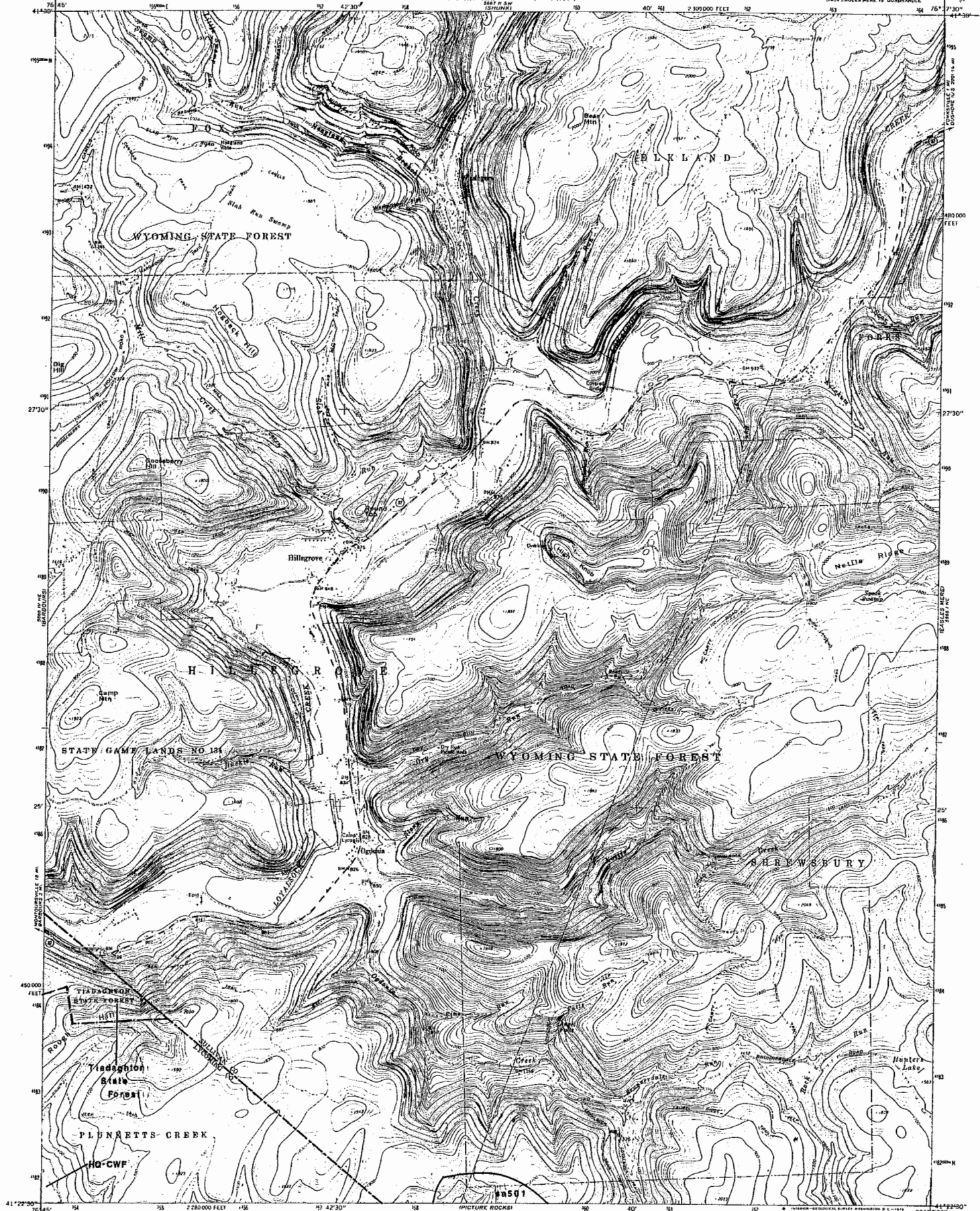
ROAD CLASSIFICATION

Primary highway, hard surface	Light-duty road, hard or improved surface
Secondary highway, hard surface	Unimproved road
Interstate Route	U. S. Route
	State Route

"THIS MAP COMPLETES WITH NAT. C&G. MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20542
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

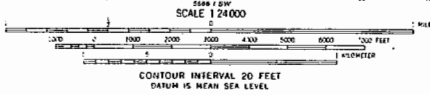
OVERLOOK, PA.
SEA CANTON 15 QUADRANGLE
1:2270000 FEET

1969
AMS 5667 III 62-SERIES 9831

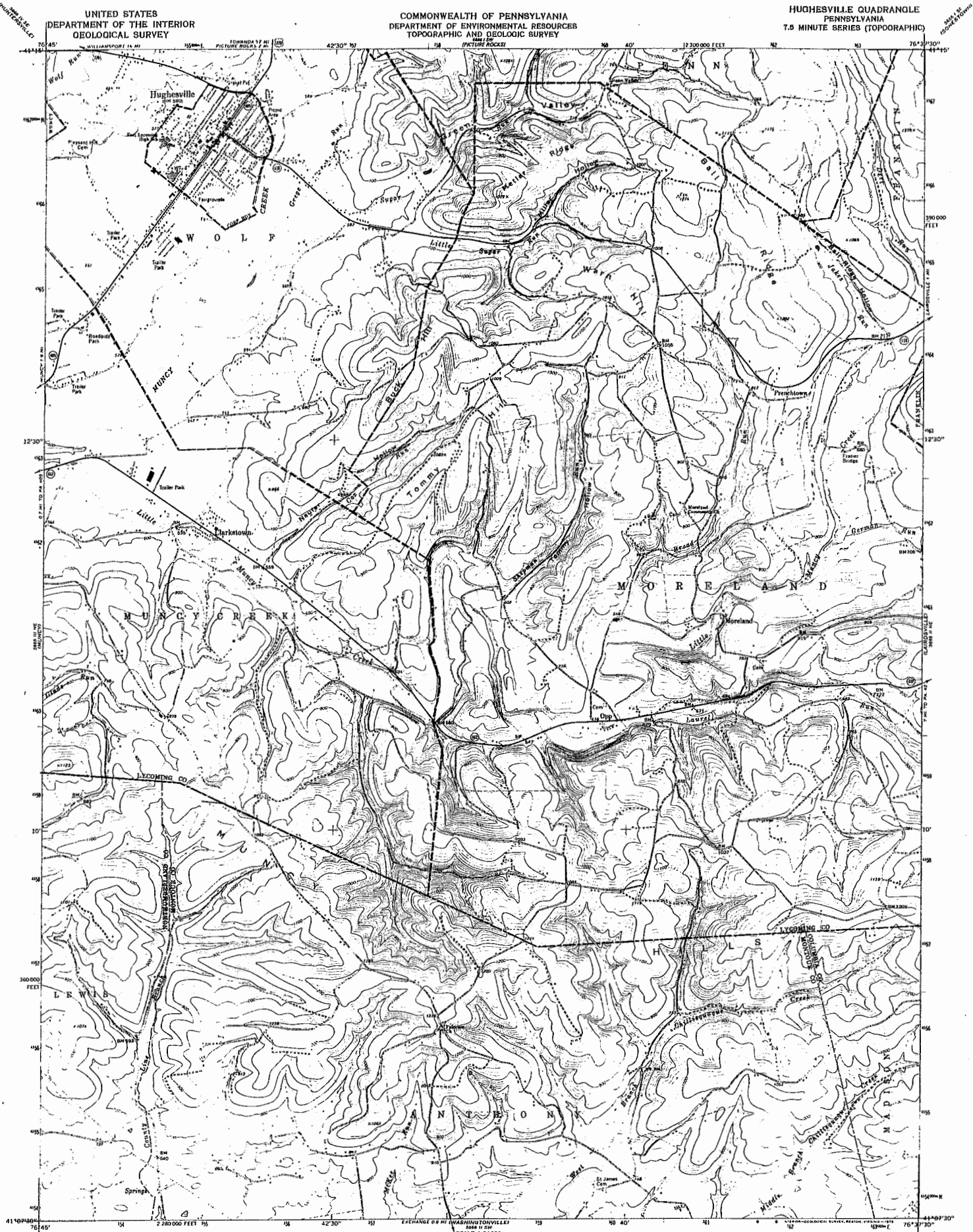


Maped, edited, and published by the Geological Survey
Control by USGS and USCGS

Topography by photogrammetric methods from aerial photographs
taken 1969. Field checked 1970
Polyconic projection. 1927 North American datum
10,000 foot grid based on Pennsylvania coordinate system, north zone
1000 meter Universal Transverse Mercator grid ticks.
Zone 18, shown in blue



ROAD CLASSIFICATION
Primary highway: hard surface
Secondary highway: hard surface
Light duty road: hard or improved surface
Unimproved road
Interstate Route
U.S. Route
State Route



Maped, edited, and published by the Geological Survey

Control by USGS and USCSGS

Topography by photogrammetric methods from aerial photographs

taken 1956 and 1967. Field checked 1968

Photocopy conversion. 1927 North American datum

10,000 foot grid based on Pennsylvania coordinate system, north zone

1000-meter Universal Transverse Mercator grid ticks, zone 18,

shown in blue

Fine red dashed lines indicate selected fence and field lines where

generally visible on aerial photographs. This information is unchecked

Reviews shown as purple compined in cooperation with

State of Pennsylvania agencies from aerial photographs

taken 1975. This information not field checked

1" = 24,000'

1" = 24,000'

1" = 24,000'

1" = 24,000'

1" = 24,000'

1" = 24,000'

SCALE 1:24000

SCALE 1:24000

SCALE 1:24000

SCALE 1:24000

SCALE 1:24000

SCALE 1:24000

SCALE 1:24000

SCALE 1:24000

SCALE 1:24000

SCALE 1:24000

SCALE 1:24000

SCALE 1:24000

SCALE 1:24000

CONTOUR INTERVAL 20 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

NATIONAL GEODETIC VERTICAL DATUM OF 1929

NATIONAL GEODETIC VERTICAL DATUM OF 1929

NATIONAL GEODETIC VERTICAL DATUM OF 1929

NATIONAL GEODETIC VERTICAL DATUM OF 1929

NATIONAL GEODETIC VERTICAL DATUM OF 1929

NATIONAL GEODETIC VERTICAL DATUM OF 1929

NATIONAL GEODETIC VERTICAL DATUM OF 1929

NATIONAL GEODETIC VERTICAL DATUM OF 1929



QUADRANGLE LOCATION

ROAD CLASSIFICATION

Primary highway, hard surface

Light-duty road, hard or improved surface

Secondary highway, hard surface

Unimproved road

U.S. Route

State Route

Interstate Route

U.S. Route

State Route

Interstate Route

U.S. Route

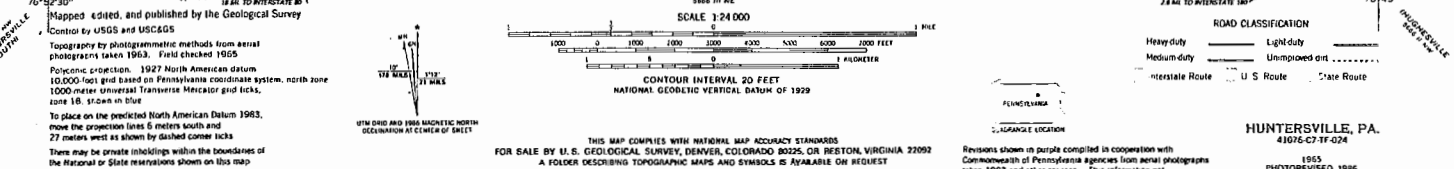
State Route

HUGHESVILLE, PA.

N4307 S-W7637 S/7.6

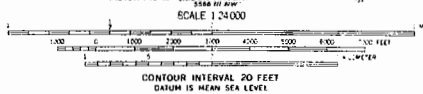
1967

PHOTOREVISED 1976





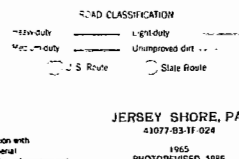
Mapped, edited, and published by the Geological Survey
Control by USGS and USC&GS
Topography by photogrammetric methods from aerial
photographs taken 1963. Field checked 1965.
Polyconic projection 1927 North American datum
10 000 foot grid based on Pennsylvania coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks
zone 18, shown in blue
Fine red dashed lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is uncorrected
Persons shown in maps compiled in cooperation with
State of Pennsylvania agencies from aerial photographs
taken 1973. This information not field checked

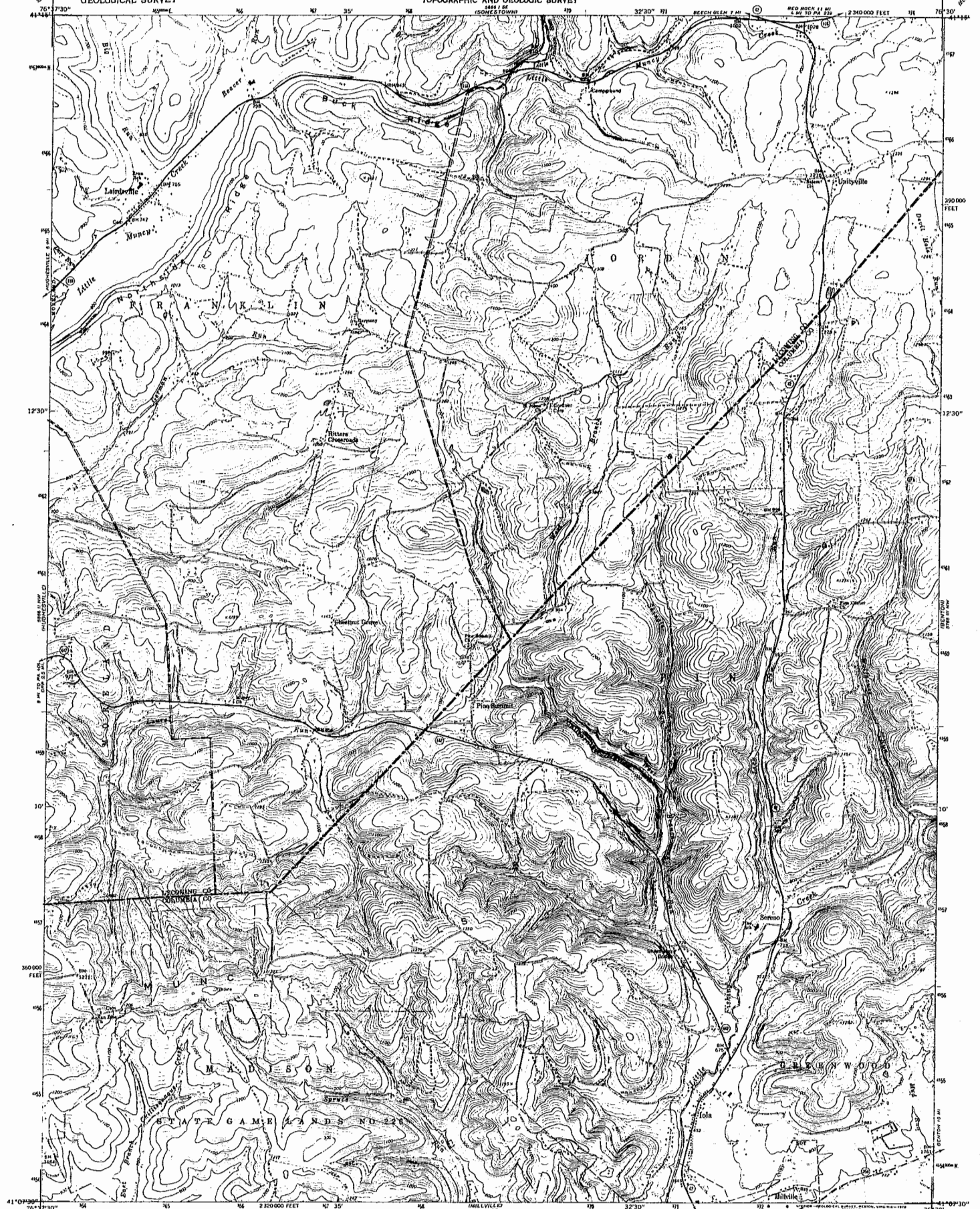


ROAD CLASSIFICATION
Medium duty Light duty
Unimproved dirt
State Route

JERSEY MILLS, PA.
A-1115-A-1722 5/75
1965
REVISED 1973

THIS MAP COMPLETES WITH NATIONAL MAP ACCURACY STANDARDS
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A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST





Maped, edited, and published by the Geological Survey
Control by USGS and USGAS
Topography by photogrammetric methods from aerial
photographs taken 1956. Field checked 1958
Polyconic projection. 1927 North American datum
10,000-foot grid based on Pennsylvania coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks,
zone 18, shown in blue
Fine red dashed lines indicate selected fence and field lines which
generally visible on aerial photographs. This information is unchecked
Revisions shown in purple compiled in cooperation with
State of Pennsylvania agencies from aerial photographs
taken 1975. This information not field checked

UTM GRID AND 1983 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

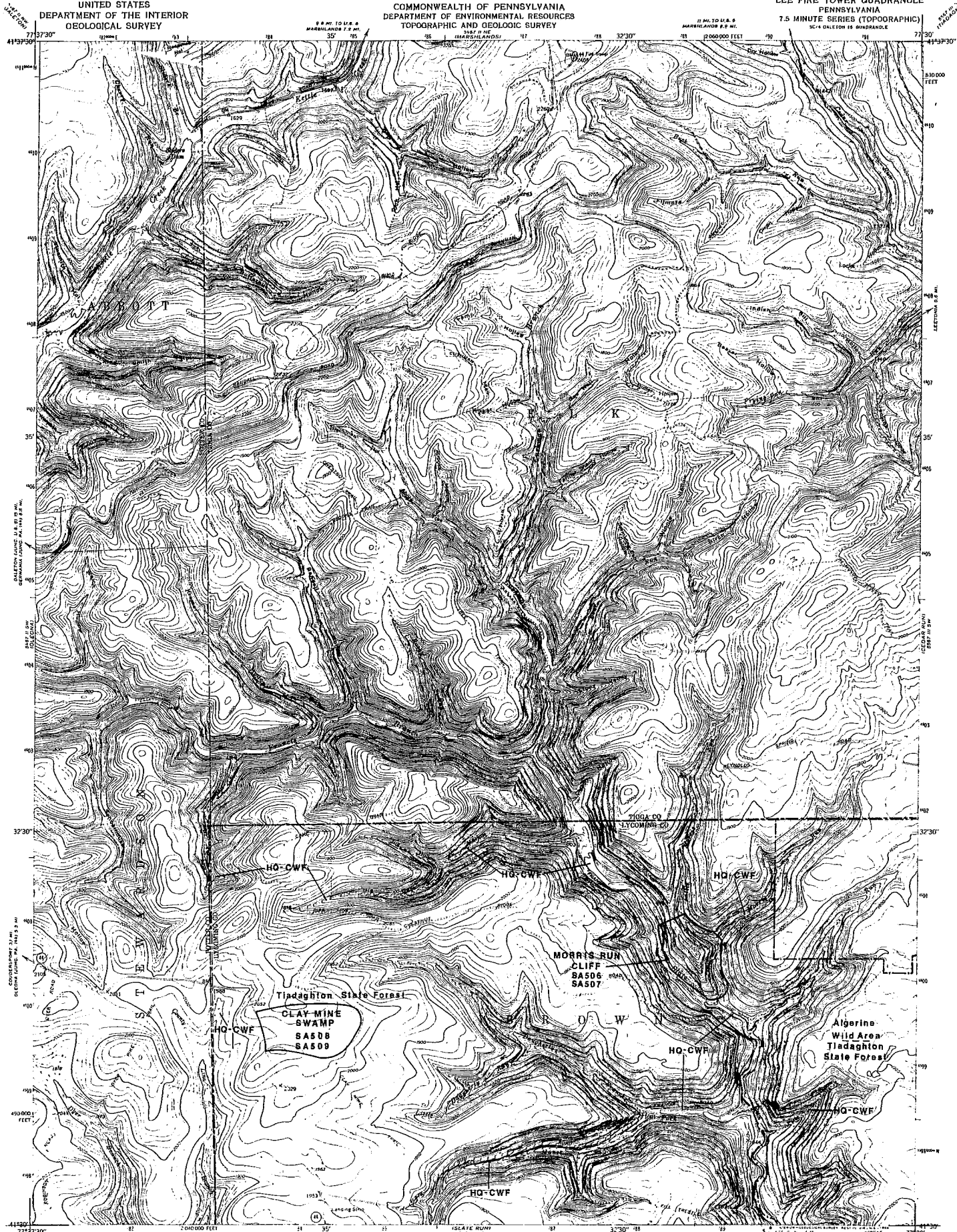
SCALE 1:24,000
1 2 3 4 5 6 7 8 9 10 11 12
0 1000 2000 3000 4000 5000 6000 7000 8000 9000 10000
FEET
1 KILOMETER
CONTOUR INTERVAL 20 FEET
NATIONAL GEOLOGIC DATUM OF 1929



ROAD CLASSIFICATION
Primary highway, hard surface ——— Light duty road, hard or improved surface ———
Secondary highway, hard surface ——— Unimproved road ———
Interstate Route ——— U.S. Route ——— State Route ———

LAIRDSDALE, PA.
N4107.5-W7630.7.5
1958
PHOTOREVISED 1975
AUG. MADE IN U.S. © 1975 U.S. GEOLOGICAL SURVEY

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
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Maped, edited, and published by the Geological Survey
Control by USGS and USCGS

Topography from aerial photographs by multiple methods
Aerial photographs taken 1942 Field Check 1947
Polyconic projection 1927 North American datum
10,000-foot grid based on Pennsylvania coordinate system,
north zone

1000-meter Universal Transverse Mercator grid ticks,
zone 18, shown on blue

Place names in blue, compiled in cooperation with State of
Pennsylvania, and as from aerial photographs taken 1971

Map photoreduced 1983

WATERVILLE 20 MI.
TO LEES FPO
SCALE 1:24,000

CONTOUR INTERVAL 20 FEET
NATIONAL GEOLOGIC VERTICAL DATUM OF 1929

ROAD CLASSIFICATION

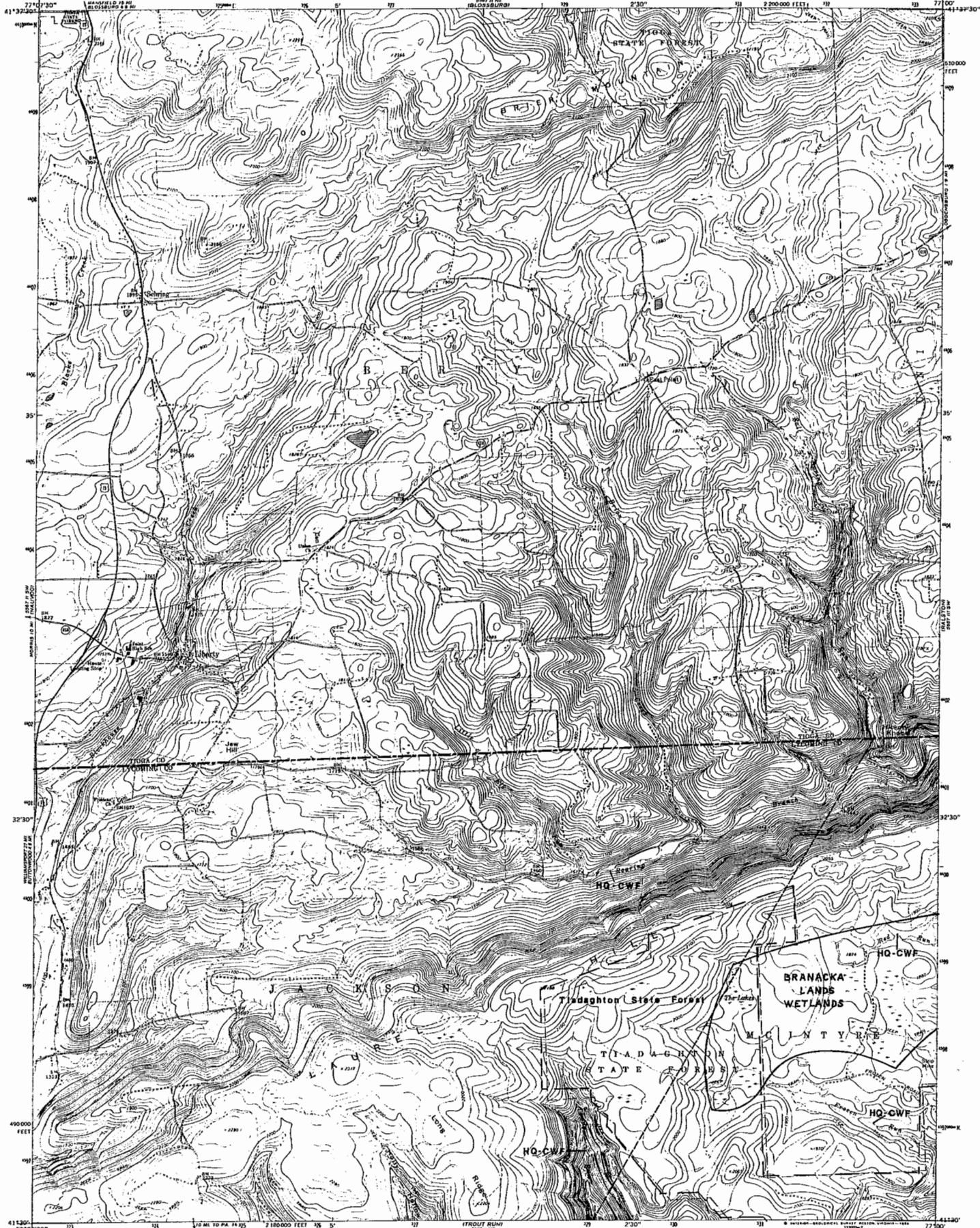
HARD SURFACE ALL WEATHER ROADS DRY WEATHER ROADS
Heavy duty Improved dirt
Medium duty Unimproved dirt
Lighter surface, graded, or narrow hard-surface
State Route

LEE FIRE TOWER, PA.

PHOTOINSPECTED 1983

THIS MAP COMPLETES NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY
DENVER, COLORADO 80226, OR RESTON, VIRGINIA 22092

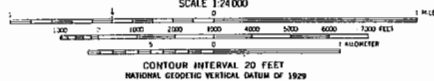
To place on the predicted North American Datum 1983,
move the projection lines 4 meters south and
25 meters west as shown by dashed corner ticks



Maped, edited, and published by the Geological Survey
Control by USGS and USC&GS
Topography by photogrammetric methods from aerial photographs
taken 1969. Field checked 1969.
Polyconic projection. 1927 North American datum.
10 000-foot grid based on Pennsylvania coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks, zone 18,
shown in blue.

Thin red dashed lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is uncharted
in place on the projected North American Datum 1983,
move the projection lines 4 meters south and
26 meters west as shown by dashed corner ticks.
There may be private inholdings within the boundaries of
the National or State reservations shown on this map.

UTM GRID AND 1983 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

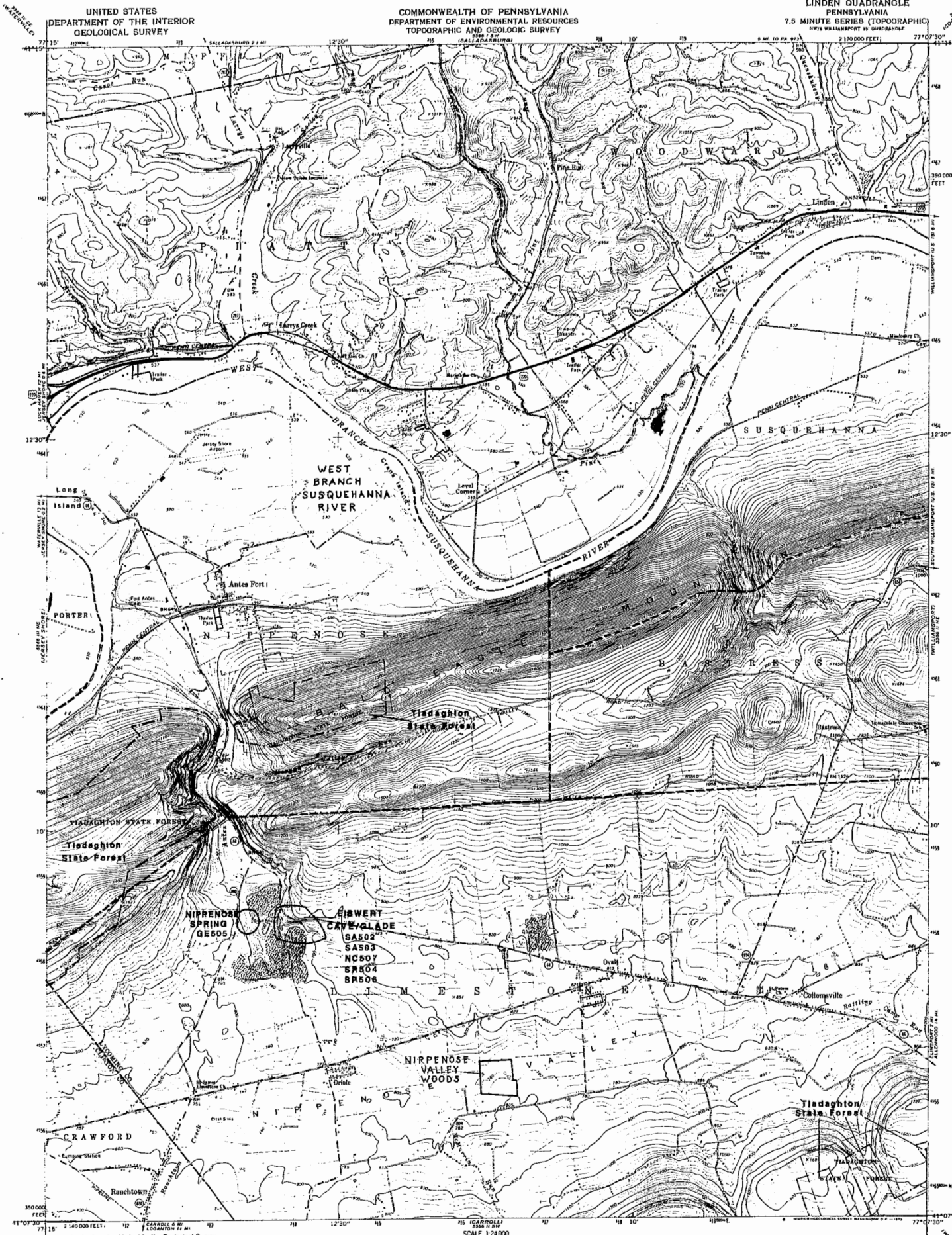


Revisions shown in purple compiled in cooperation with
Commonwealth of Pennsylvania agencies from aerial photographs
taken 1983 and other sources. This information not
field checked. Map edited 1986.

ROAD CLASSIFICATION
Primary highway, hard surface
Secondary highway, hard surface
Unimproved road
Interstate Route
U.S. Route
State Route

LIBERTY, PA.
41077-11-10-024

1969
PHOTO-REVISED 1986
THIS MAP IS IN THE PUBLIC DOMAIN



Maped, edited, and published by the Geological Survey

Compiled by USGS and USACE
Topography by photogrammetric methods from aerial
photographs taken 1962 and 1963. Field checked 1965
As of 1965 projection, 1927 North American datum
1:50,000-foot grid based on Pennsylvania coordinate system, north zone
1:50,000-meter Universal Transverse Mercator grid ticks, zone 18
Contours in blue
Red dashed lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is uncheckered
Data shown in purple compiled in cooperation with
State of Pennsylvania agencies from aerial photographs
1967-1973 This information was field checked

SCALE 1:24,000
CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
ELEVATION IS MEAN SEA LEVEL
THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D.C. 20242
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION
Heavy-duty Light-duty
Medium-duty Unimproved dirt
U.S. Route State Route
LINDEN, PA.
SW14 WILLIAMSPORT 15 QUADRANGLE
N41075-W77075/75
1965
PHOTOREVISED 1973
1:50,000-SCALE MAP



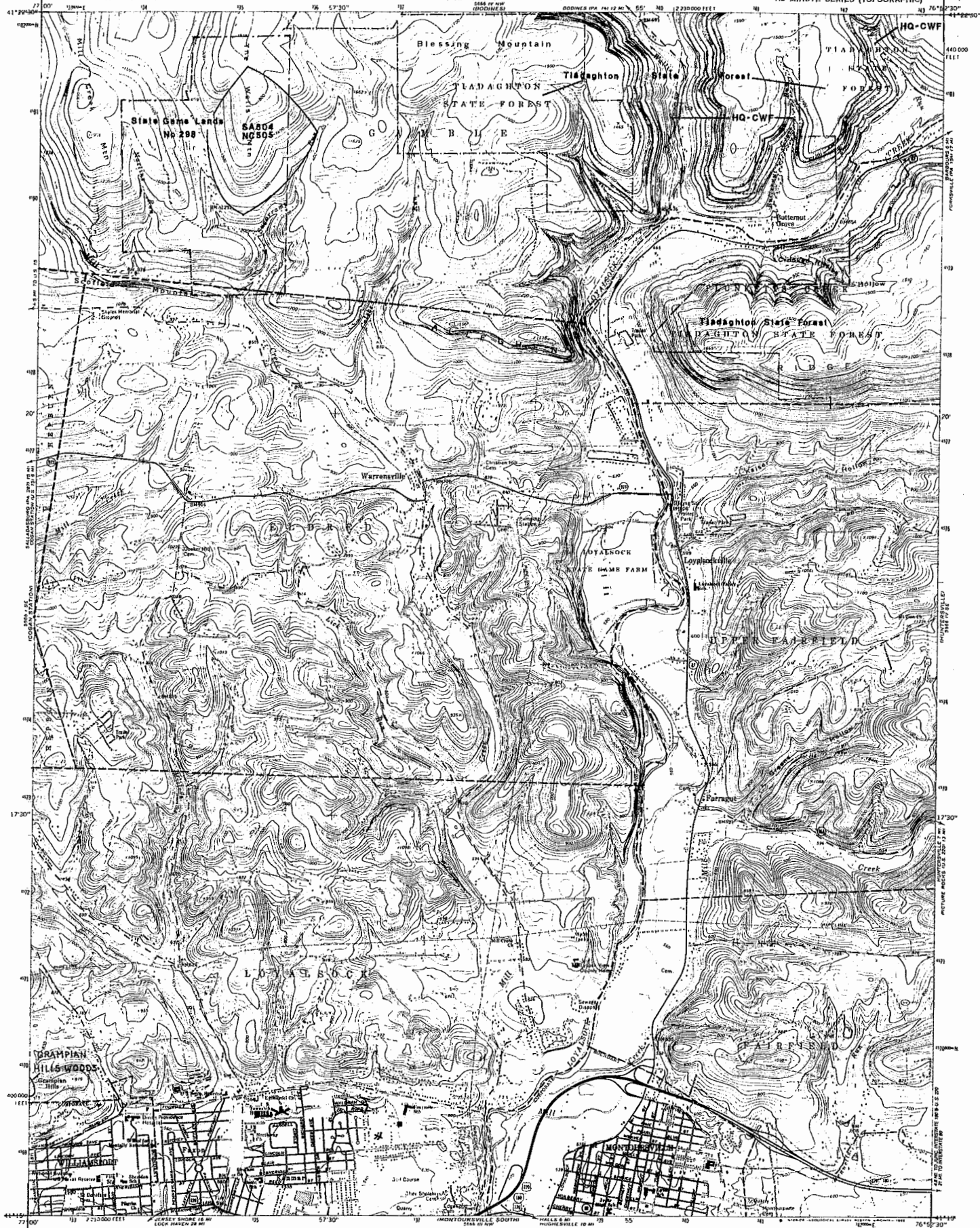
Mappees edited and published by the Geological Survey
Control by USGS and USCAOS
Topography by photogrammetric methods from aerial photographs
taken 1963. Field checked 1965.
Projection: 1927 North American datum
10,000-foot grid based on Pennsylvania coordinate system, north zone
1000 meter Universal Transverse Mercator grid ticks, zone 18,
shown in blue.
To place on the predicted North American Datum 1983,
move the projection lines 5 meters south and
25 meters west as shown by dashed corner ticks.
There may be private inholdings within the boundaries of
the National or State reservations shown on this map.
Red tint indicates areas in which only landmark buildings are shown.

SCALE 1:24,000
CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 1000 CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929

THIS MAP COMPLETS WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80226, OR HIGHTON, VIRGINIA 22002
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION
Heavy duty Medium-duty Light-duty
Unimproved dirt
U.S. Route State Route

LOCK HAVEN, PA.
41077-B4-1F-024
1965
PHOTOGRAPHED 1966
DMA 8506 II NEW 11/19/66



Maped, edited, and published by the Geological Survey
Control by USGS and USCGS
Topography by photogrammetric methods from aerial photographs
taken 1963. Field checked 1965.
Polyconic projection, 1927 North American datum.
10,000 foot grid based on Pennsylvania coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks, zone 18,
shown in blue.
To place on the predicted North American Datum 1983,
move the projection lines 5 meters south and
27 meters west as shown by dashed corner ticks.
There may be private inholdings within the boundaries of
the National or State reservations shown on this map.



SCALE 1:24,000
CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929
THIS MAP COMPLETES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE BY REQUEST

ROAD CLASSIFICATION
Heavy duty Light duty
Medium duty Unimproved dirt
Interstate Route U.S. Route State Route
MONTGOMERY COUNTY, PA.
41076 CB 17-024
1965
PHOTOREVISED 1986



Map compiled and published by the Geological Survey
Control by USGS, USCGS, and USCE
Topography by photogrammetric methods from aerial photographs
taken 1953. Field checked 1955.
Polyconic projection, 1927 North American datum
15' 000' grid based on Pennsylvania coordinate system, north zone
1500' water Universal Transverse Mercator grid ticks, zone 18,
shown in blue.
To place on the unperfected North American Datum 1983,
move the projection lines 5 meters south and
27 meters west as shown by dashed corner ticks.
There may be some variations within the boundaries of
the National or State boundaries shown on this map.
Red line indicates areas in which only landmark buildings are shown.

USGS GRID AND 1983 MAGNETIC NORTH
DEVIATION AT CENTER OF SHEET

SCALE 1:24,000
CONTOUR INTERVAL 20 FEET
NATIONAL GEOLOGIC DATUM OF 1929

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

Revisions shown in purple compiled in cooperation with
Commonwealth of Pennsylvania agencies from aerial photographs
taken 1983 and other sources. This information not
available in this edition.

ROAD CLASSIFICATION
Heavy duty Light duty
Medium duty Unimproved dirt
Interstate Route U.S. Route State Route

MONTGOMERY SOUTH, PA.
NW 14 MILTON 13 QUADRANGLE
41076-BB-T-024

1985
PHOTOREVISED 1985
DATA FROM USGS 1983

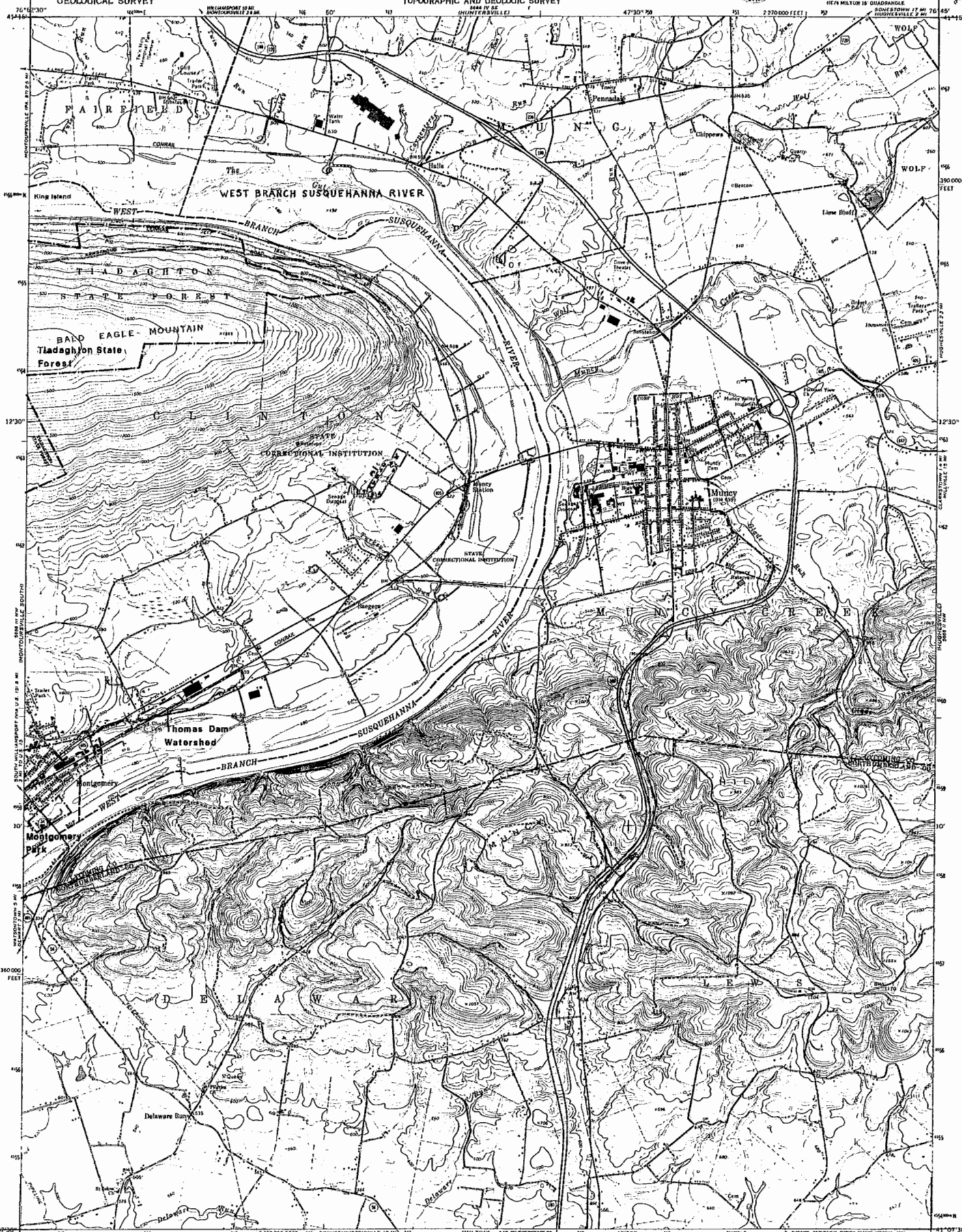


5. AD CLASSIFICATION

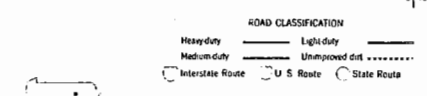
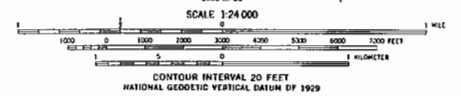
ROAD SURFACE ALL WEATHER ROADS DRY WEATHER ROADS
Heavy duty 2 LANE 10 LANE Improved dirt
Medium duty 2 LANE 10 LANE Unimproved dirt
Loose surface graded, or narrow hard surface
□ U.S. Route ○ State Route

Revisions shown in purple compiled in cooperation with Commonwealth of Pennsylvania agencies from aerial photographs taken 1983 and other sources. This information not

1916
PHOTOREVISED 1985

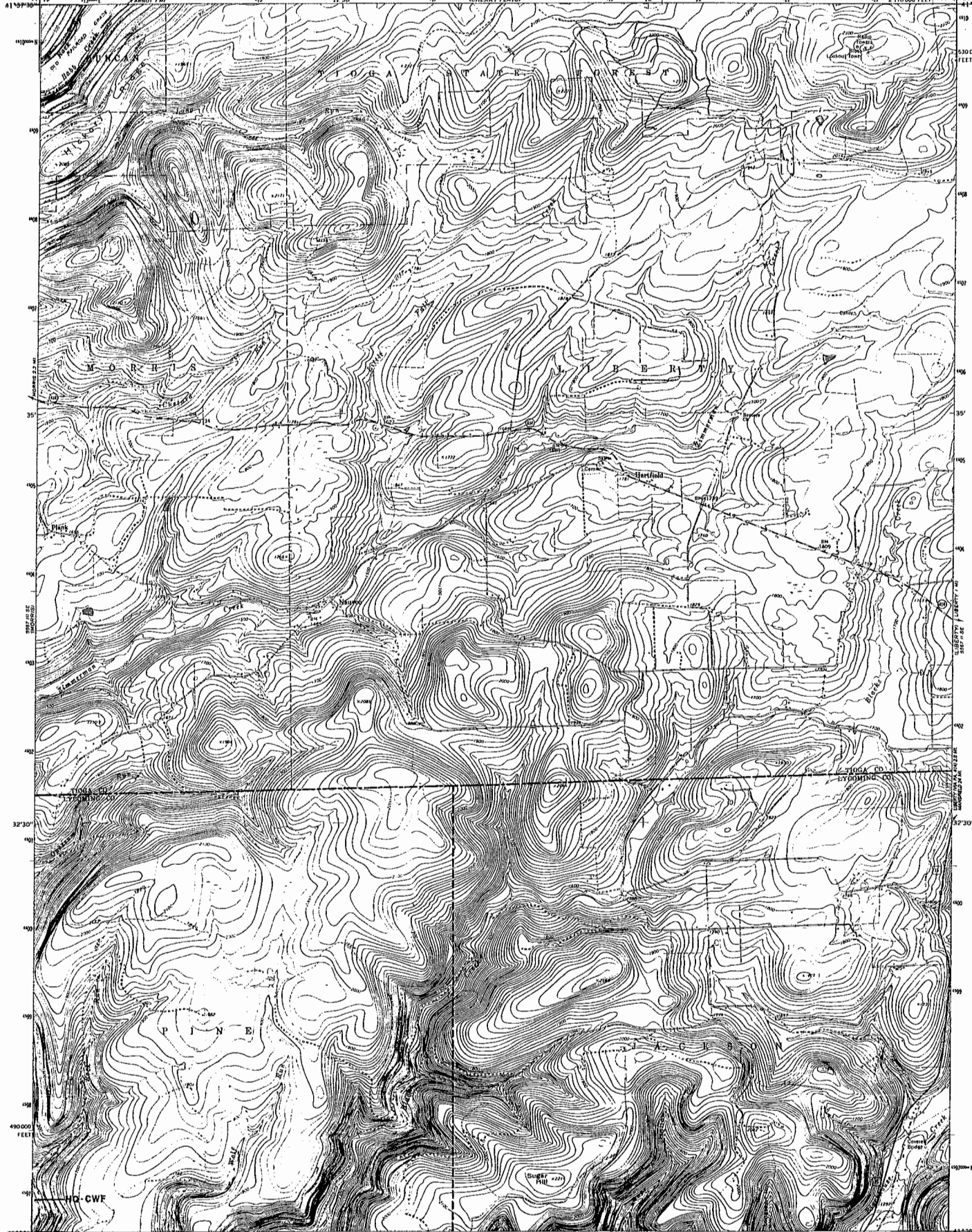


Maped, edited, and published by the Geological Survey
Control by USGS and USCGS
Topography by photogrammetric methods from aerial photographs
taken 1962 and 1963. Field checked 1965
Polyconic projection. 1927 North American datum
10,000 foot grid based on Pennsylvania coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks, zone 18,
shown in blue
To place on the predicted North American Datum 1983,
move the projection lines 6 meters south and
27 meters west as shown by dashed corner ticks.
There may be private inholdings within the boundaries of
the National or State reservations shown on this map.



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A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

Revisions shown in purple compiled in cooperation with
Commonwealth of Pennsylvania agencies from aerial photographs
MUNCY, PA.
NEAR MILTON 18 QUADRANGLE
41076-87-1F 424
1965

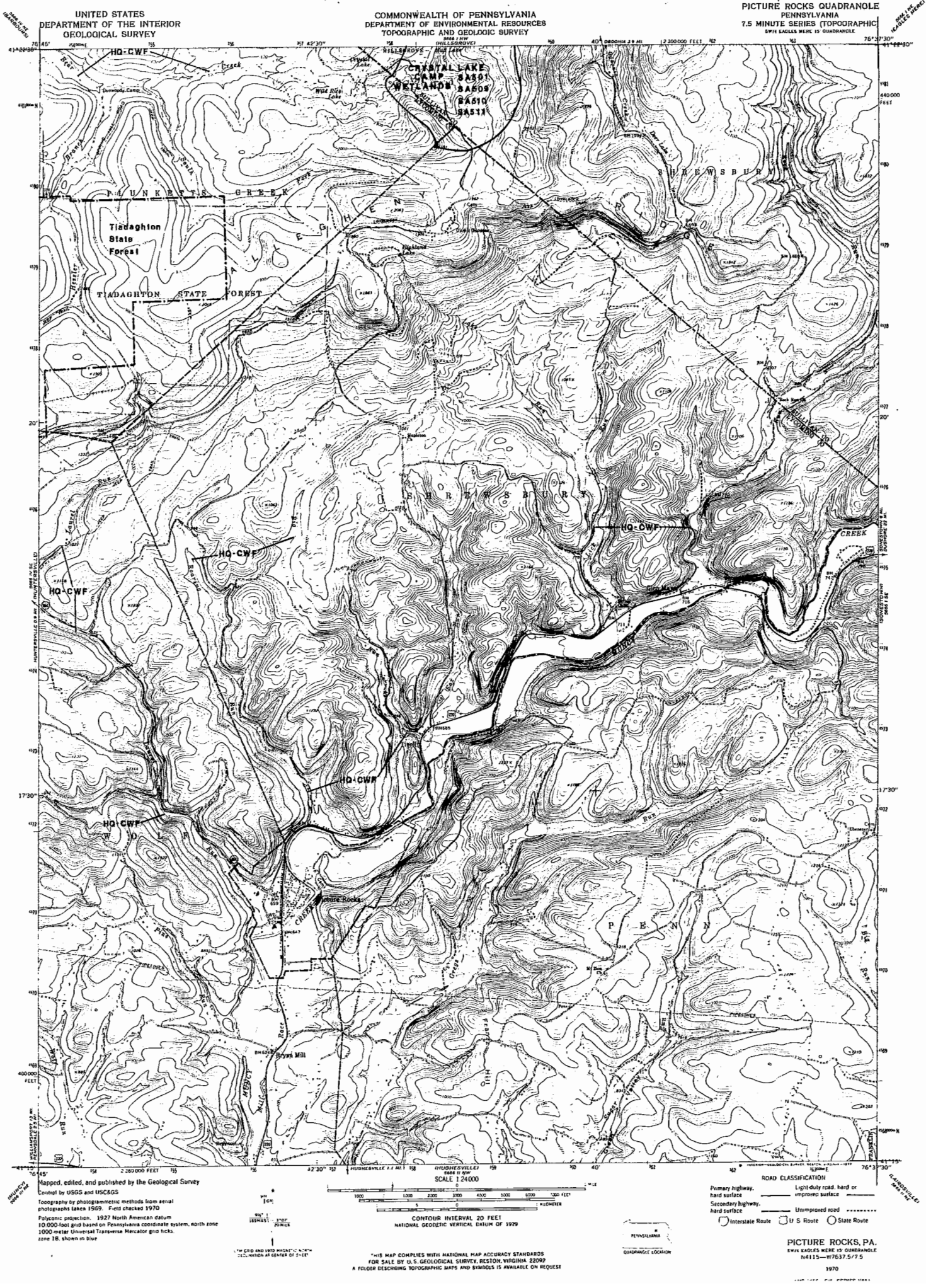


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Control by USGS and USCGS
Topography by photogrammetric methods from aerial
photographs taken 1969. Field checked 1969
Polyconic projection. 1927 North American datum
10,000-foot grid based on Pennsylvania coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks,
zone 18, shown in blue
To place on the predicted North American Datum 1983,
move the projection lines 4 meters south and
26 meters west as shown by dashed corner ticks
There may be private subdivisions within the boundaries of
the National or State reservations shown on this map

1:24,000
SCALE 1:24,000
CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

ROAD CLASSIFICATION
Primary highway, hard surface
Secondary highway, hard surface
Unimproved road
Interstate Route
U.S. Route
State Route

NAUVOO, PA.
41077-E2-TT-024
1969
PHOTOREVISED 1986



UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
TOPOGRAPHIC AND GEOLOGIC SURVEY

PICTURE ROCKS QUADRANGLE
PENNSYLVANIA
7.5 MINUTE SERIES (TOPOGRAPHIC)
SWITCHES HERE IS QUADRANGLE

Maped, edited, and published by the Geological Survey
Control by USGS and USCGS
Topography by photogrammetric methods from aerial
photographs taken 1959. Field checked 1970
Polyconic projection, 1927 North American datum
10 000-foot grid based on Pennsylvania coordinate system, north zone
1000 meter Universal Transverse Mercator grid ticks,
zone 18, shown in blue

SCALE 1:24000
CONTOUR INTERVAL 20 FEET
NATIONAL GEODESIC VERTICAL DATUM OF 1929

ROAD CLASSIFICATION
Primary highway, hard surface
Secondary highway, hard surface
Unimproved road
Interstate Route
U.S. Route
State Route

"THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
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PICTURE ROCKS, PA.
SWITCHES HERE IS QUADRANGLE
14115-87637.5/7.5
1970



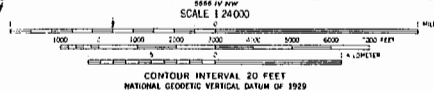
Maped, edited, and published by the Geological Survey
Control by USGS and USGS/OS

Topography by photogrammetric methods from aerial photographs
taken 1959. Field checked 1959.

Projection: 1927 North American datum
10,000-foot grid based on Pennsylvania coordinate system, north zone,
1000-meter Universal Transverse Mercator grid ticks, zone 18
shown in blue.

Red dashed lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is uncorrected
to place on the projected North American Datum 1983,
move the projection lines 5 meters south and
26 meters west as shown by dashed corner ticks.

UTM GRID AND TRUE MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET



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FOR SALE BY U.S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

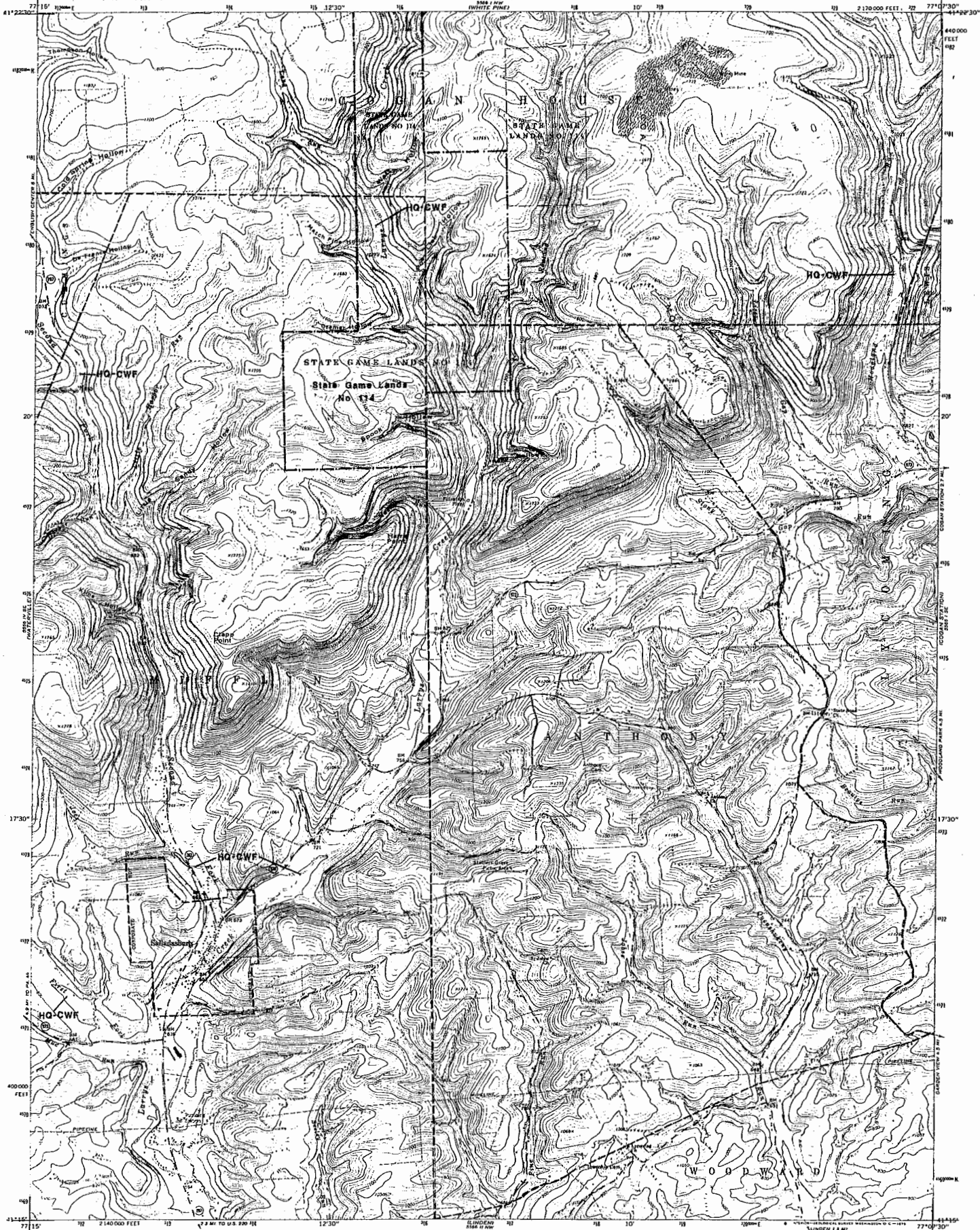
Revisions shown in purple compiled in cooperation with
Commonwealth of Pennsylvania agencies from aerial photographs
taken 1953 and other sources. This information not
included. New edition 1986.

ROAD CLASSIFICATION
Primary highway
hard surface
Secondary highway
hard surface
Unimproved road
Light duty road, hard or
unimproved surface
Unimproved road
State Route
U.S. Route
State Route

RALSTON, PA.

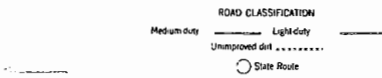
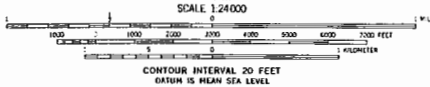
41076-EB-TF-024

1959



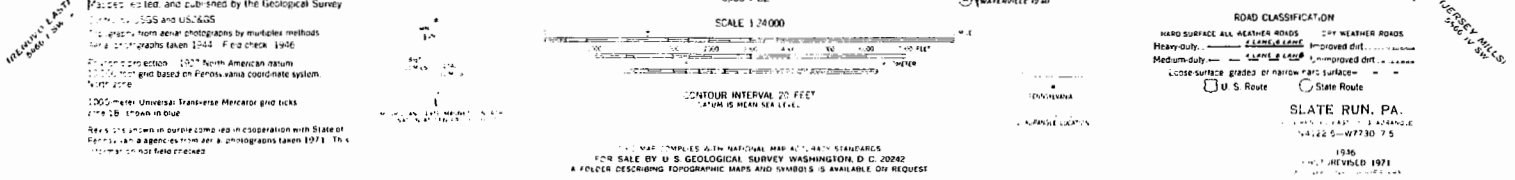
Maped, edited, and published by the Geological Survey
Control by USGS and USCAOS
Topography by photogrammetric methods from aerial
photographs taken 1963. Field checked 1965
Polyconic projection, 1927 North American datum
10,000-foot grid based on Pennsylvania coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks,
zone 18, shown in blue
Fine red dashed lines indicate selected fence and field lines where
generally visible on aerial photographs. This information is unchecked
Brownish shows in purple compiled in cooperation with
State of Pennsylvania agencies from aerial photographs
taken 1973. This information not field checked

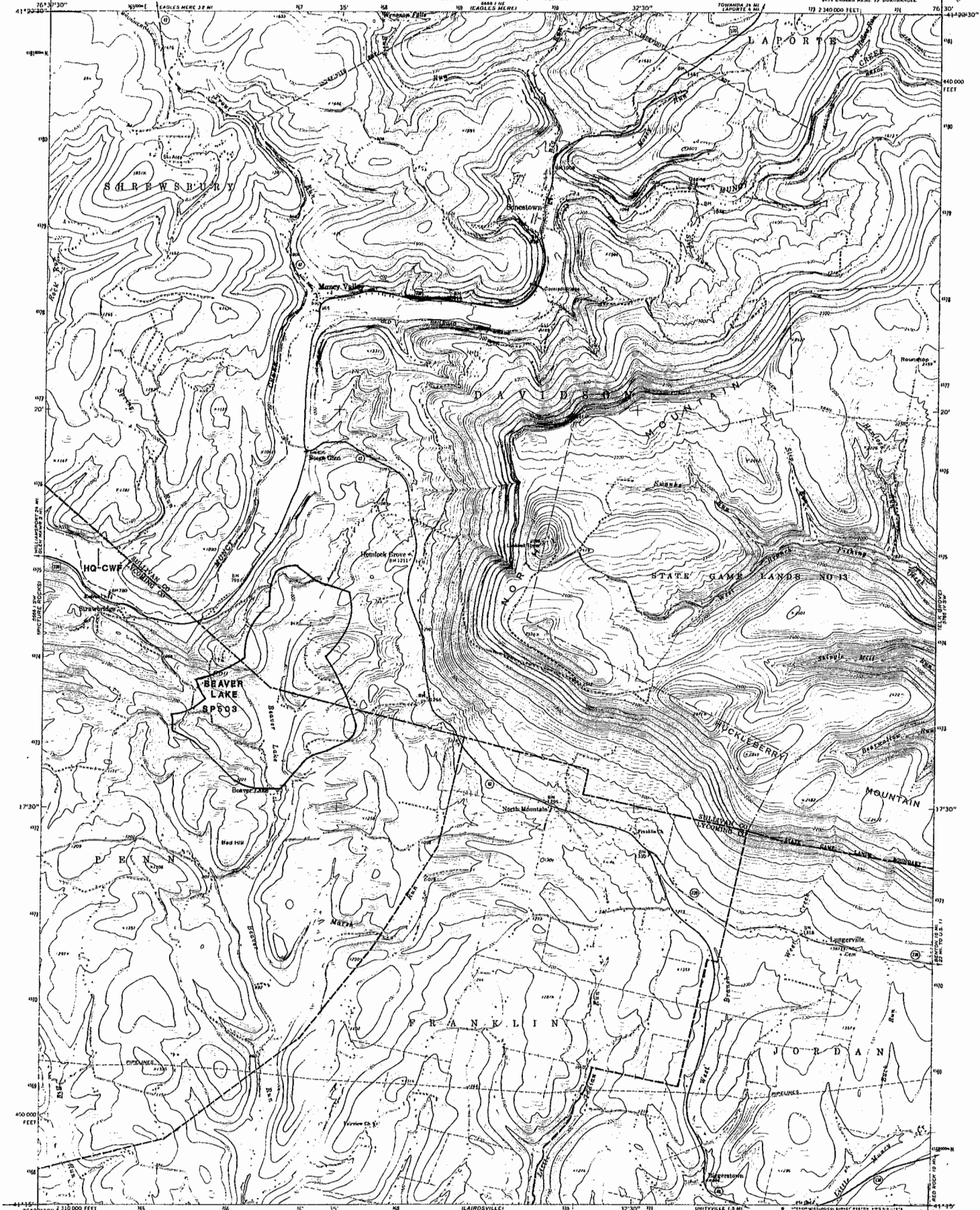
UTM GRID AND 1973 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET



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SALLADASBURG, PA.
14115-W7707 5/7.5
1965
PHOTOREVISED 1973
ASAC, ASAC, 1 CM, -CEBIE, VERT





Maped, edited, and published by the Geological Survey
Control by USGS and USC&GS

Topography by photogrammetric methods from aerial photographs
taken 1969. Field checked 1970

Polychrome projection. 1927 North American datum
10,000-foot grid based on Pennsylvania coordinate system, north zone
1000-meter Universal Transverse Mercator grid ticks, zone 18,
shown in blue

To place on the predicted North American Datum 1983
move the projection lines 5 meters south and
27 meters west as shown by printed corner ticks

For use in staked lines and case sections fence and flow lines were
Zimera, p. 1 for an actual photograph. This information is uncorrected

SCALE 1:24,000

CONTOUR INTERVAL 22 FEET

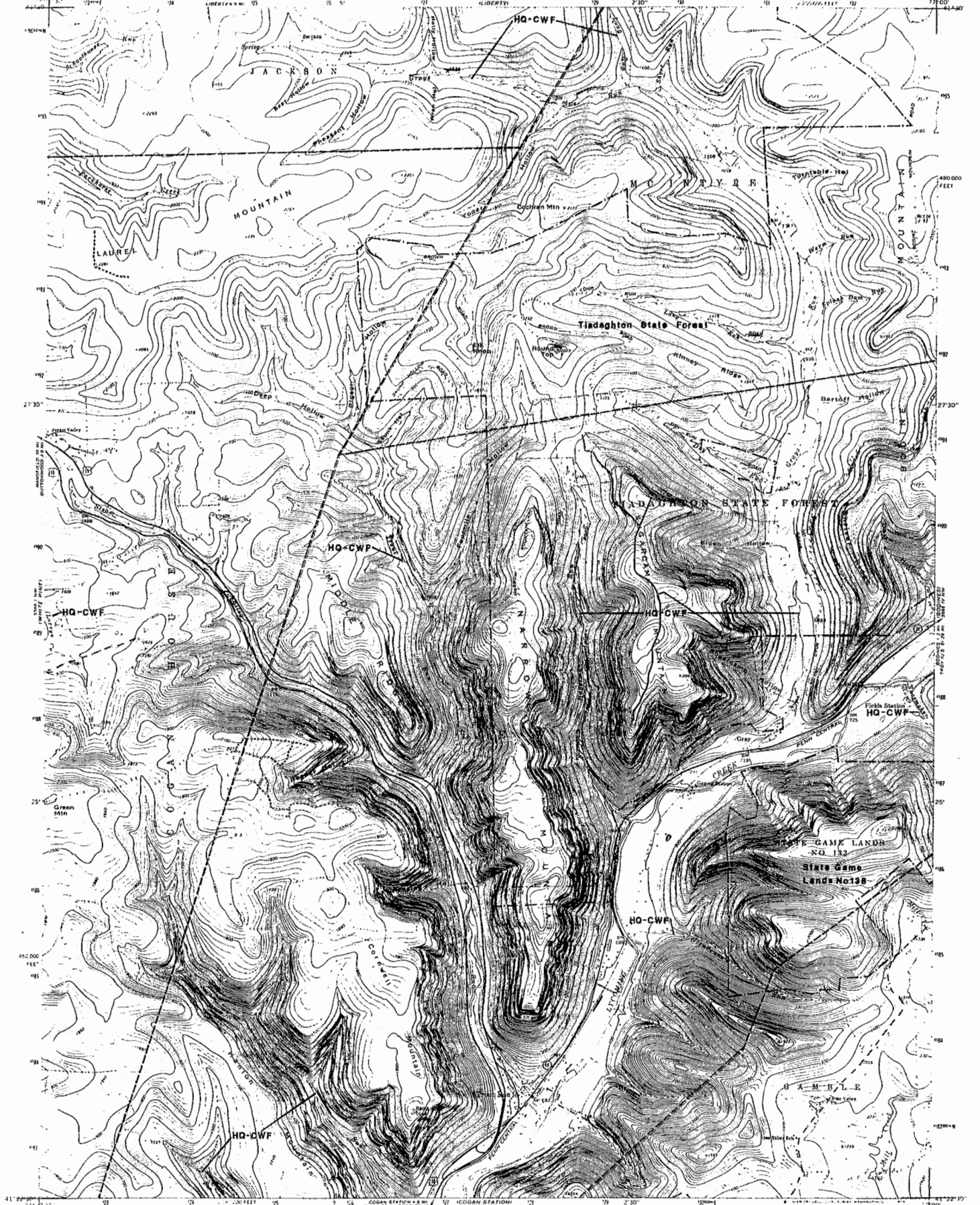
NATIONAL GEOGRAPHIC VERTICAL DATUM OF 1929

ROAD CLASSIFICATION
Primary highway
hard surface
Secondary highway
hard surface
Unimproved road
Interstate Route
U.S. Route
State Route
Light duty road hard or
improved surface
Unimproved road

SONESTOWN, PA.
SEA EAGLES HERE IS QUADRANGLE
N4115-N7630/75

1970

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY RESTON VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



Passed, edited and published by the Geological Survey

U.S. and U.S.G.S.

U.S. and U.S.G.S.

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U.S. and U.S.G.S.

U.S. and U.S.G.S.

U.S. and U.S.G.S.

U.S. and U.S.G.S.

Scale 1:50,000

Scale 1:50,000

Scale 1:50,000

Scale 1:50,000

Scale 1:50,000

Scale 1:50,000

Scale 1:50,000

Scale 1:50,000

Scale 1:50,000

Scale 1:50,000

Scale 1:50,000

Scale 1:50,000

Scale 1:50,000

ROAD CLASSIFICATION

Major road

Minor road

Unimproved dirt

State Route

TROUT RUN, PA.

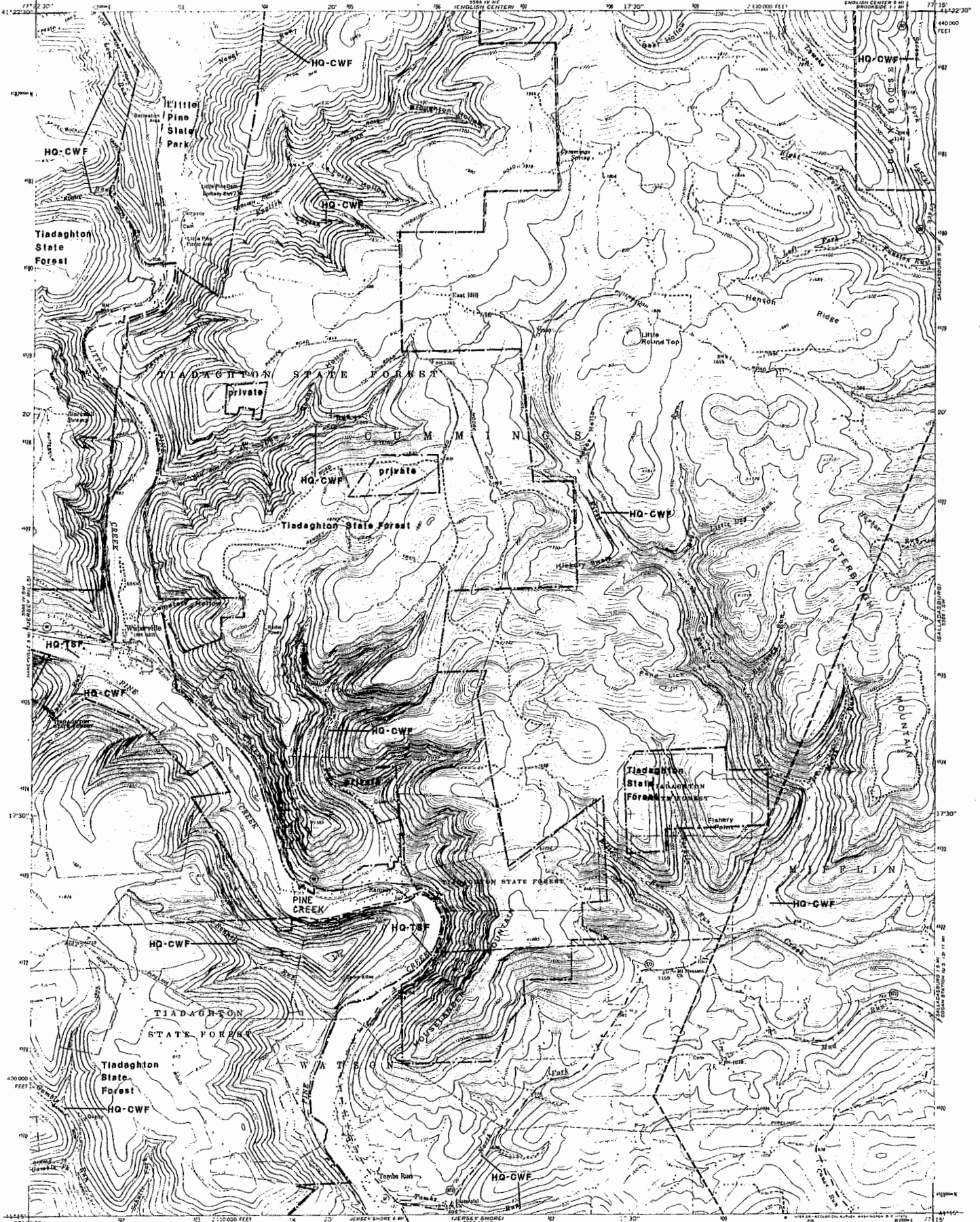
1:50,000

1965

1:50,000

1:50,000

1:50,000



Map was edited and published by the Geological Survey

Maps by USGS and USGAS

Topography by photogrammetric methods from aerial

photographs taken 1963. Field checked 1965

Horizontal projection. 1927 North American datum

1927 foot grid based on Pennsylvania coordinate system, north zone

1927-meter Universal Transverse Mercator grid and ticks

1927 U.S. datum = datum

Red dashed lines indicate selected fence and top lines where

generally visible on aerial photographs. This information is uncharted

and is shown by dashed light blue lines

USGS and USGAS

Horizontal projection

1927 North American datum

1927 foot grid based on Pennsylvania coordinate system, north zone

1927-meter Universal Transverse Mercator grid and ticks

Scale 1:24,000

CONTOUR INTERVAL 20 FEET

ELEVATION IN FEET

Scale 1:24,000

CONTOUR INTERVAL 20 FEET

ELEVATION IN FEET

Scale 1:24,000

CONTOUR INTERVAL 20 FEET

ELEVATION IN FEET

Scale 1:24,000

CONTOUR INTERVAL 20 FEET

ROAD CLASSIFICATION

Medium duty

Light duty

Unimproved dirt

State Route

Scale 1:24,000

CONTOUR INTERVAL 20 FEET

ELEVATION IN FEET

Scale 1:24,000

CONTOUR INTERVAL 20 FEET

ELEVATION IN FEET

WATERVILLE, PA.

1:24,000

CONTOUR INTERVAL 20 FEET

ELEVATION IN FEET

Scale 1:24,000

CONTOUR INTERVAL 20 FEET

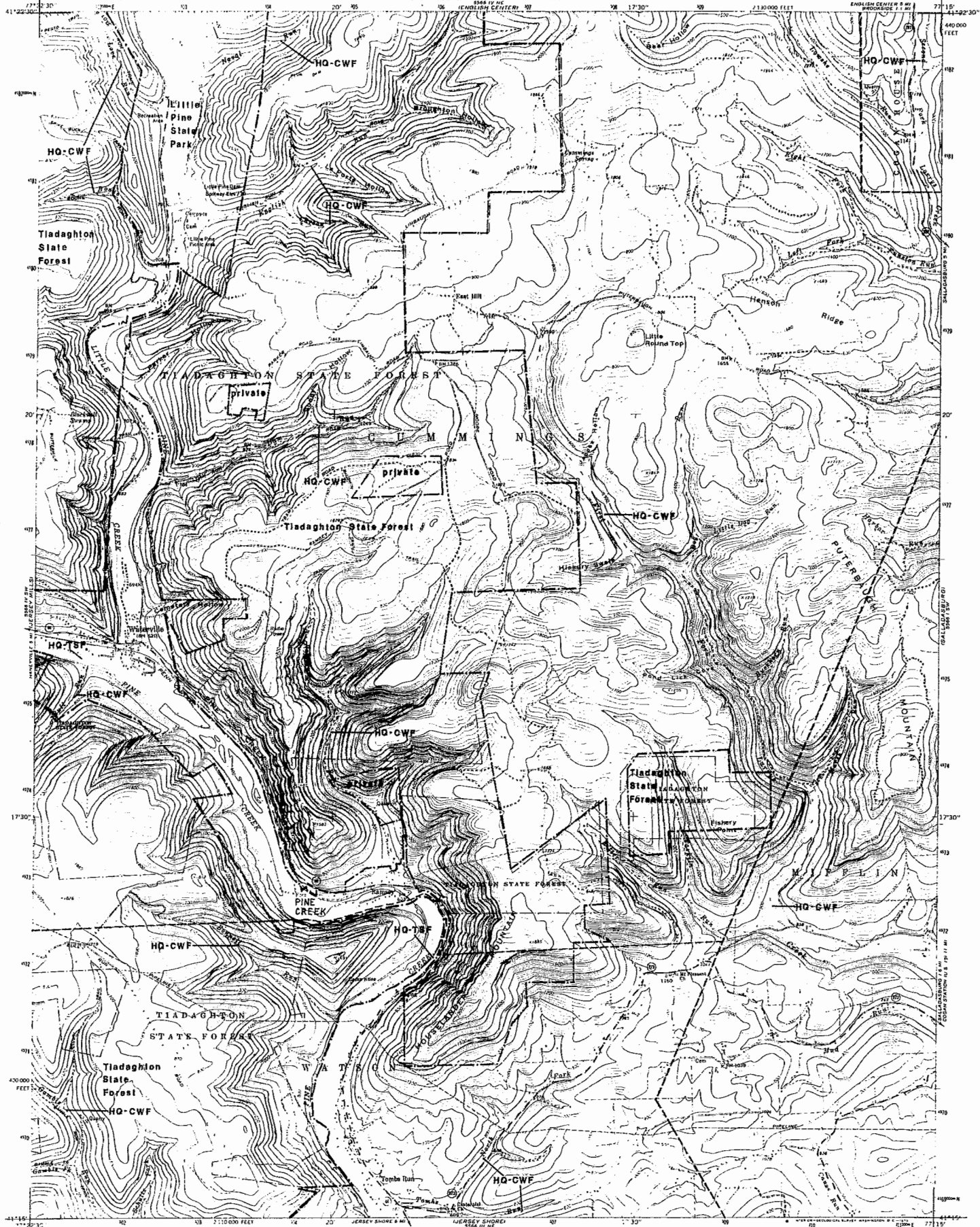
ELEVATION IN FEET

Scale 1:24,000

CONTOUR INTERVAL 20 FEET

ELEVATION IN FEET

Scale 1:24,000



Map edited and published by the Geological Survey
by USGS and USGAS

Topography by photogrammetric methods from aerial
photographs taken 1963. Field checked 1965.

Projection: 1983 North American datum
1:250,000 foot grid based on Pennsylvania road map system, north zone
1:250,000 meter Universal Transverse Mercator grid 1845

Scale: 1:250,000
1 inch = 2.5 miles

Contours: Surveyed and selected fence and road lines where
shown as on the aerial photographs. This information is uncorrected
and is subject to improvement.

Area covered by dashed light blue pattern
is subject to improvement.

Map was prepared in cooperation with

SCALE 1:24,000

CONTOUR INTERVAL 25 FEET
DATUM IS MEAN SEA LEVEL

UTM GRID AND NAD 83 COORDINATES
DECLARATION AT CENTER 18 45E

THIS MAP COMPLIES WITH NATIONAL MAP ACTUARY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D.C. 20542

A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

ROAD CLASSIFICATION

Medium duty Light duty

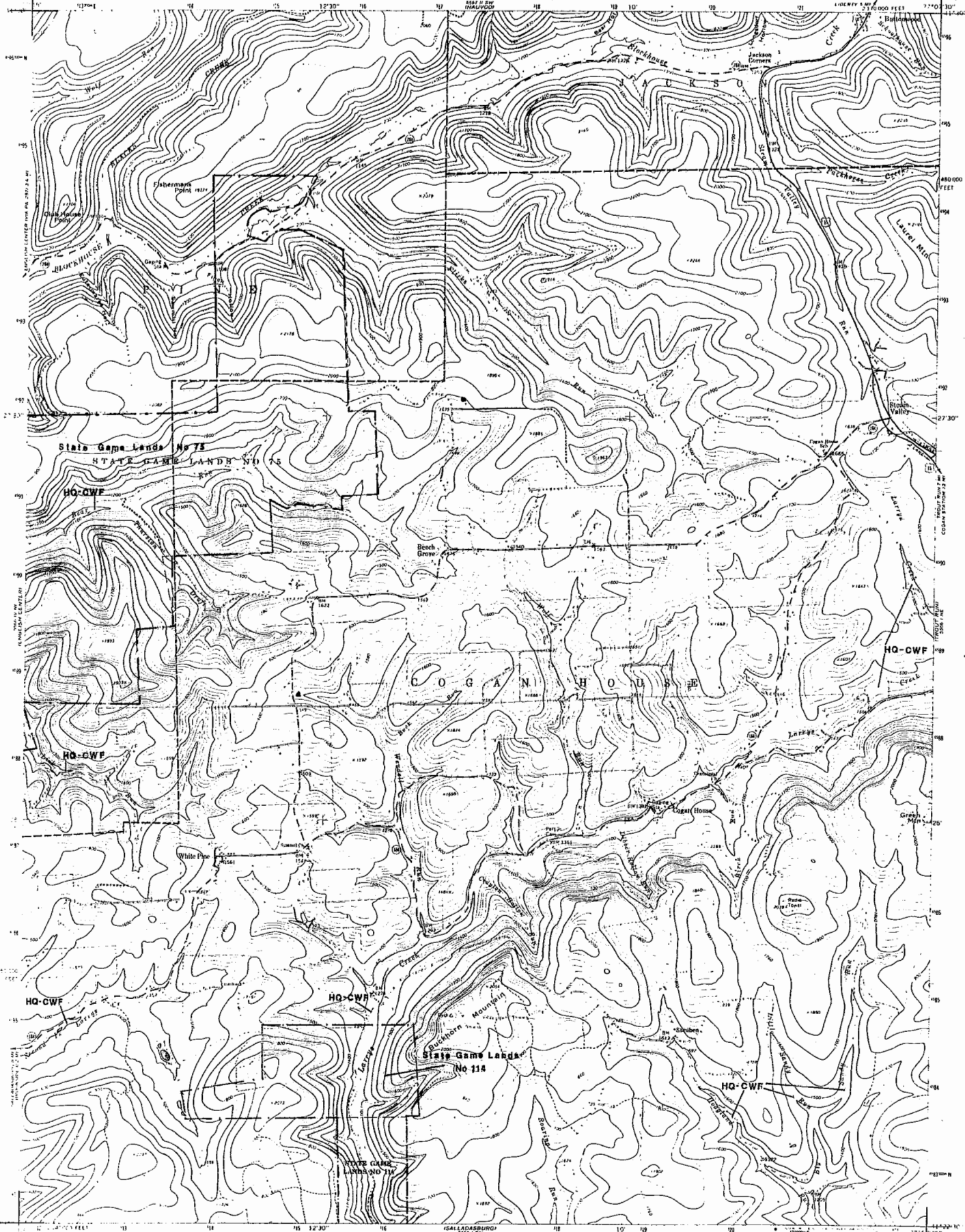
Unimproved dirt

State Route

WATERVILLE, PA.

14115-7715 7.5

1965
PHOTOREVISED 1973



Printed on paper and published by the Geological Survey

Scale 1:24,000

Contour interval 20 feet

Datum is mean sea level

Photorevised 1973

For sale by U.S. Geological Survey, Washington, D.C. 20542

A folder describing topographic maps and symbols is available on request

Photorevised 1973

Photorevised 1973

Photorevised 1973

Photorevised 1973

Photorevised 1973

Photorevised 1973

Photorevised 1973

WHITE PINE, PA.

Photorevised 1973

Photorevised 1973

Photorevised 1973

Photorevised 1973

Photorevised 1973

Photorevised 1973



Map prepared, edited, and published by the Geological Survey
Compiled by USGS and USCAOS

Topography by photogrammetric methods from aerial
photographs taken 1962 and 1963. Field checked 1965

Hydrographic data, 1927 North American datum
1:250-foot grid based on Pennsylvania coordinate system, north zone
100-meter Universal Transverse Mercator grid ticks,
zone 18, shown in blue

To place on the projected North American Datum 1983,
move the projection lines 5 meters south and
27 meters west as shown by dashed corner ticks

There may be possible misalignments within the boundaries of
the National or State organizations shown on this map

Large scale information shown on this map is not shown on this map

UTM GRID AND PSEUDO-MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

SCALE 1:24,000

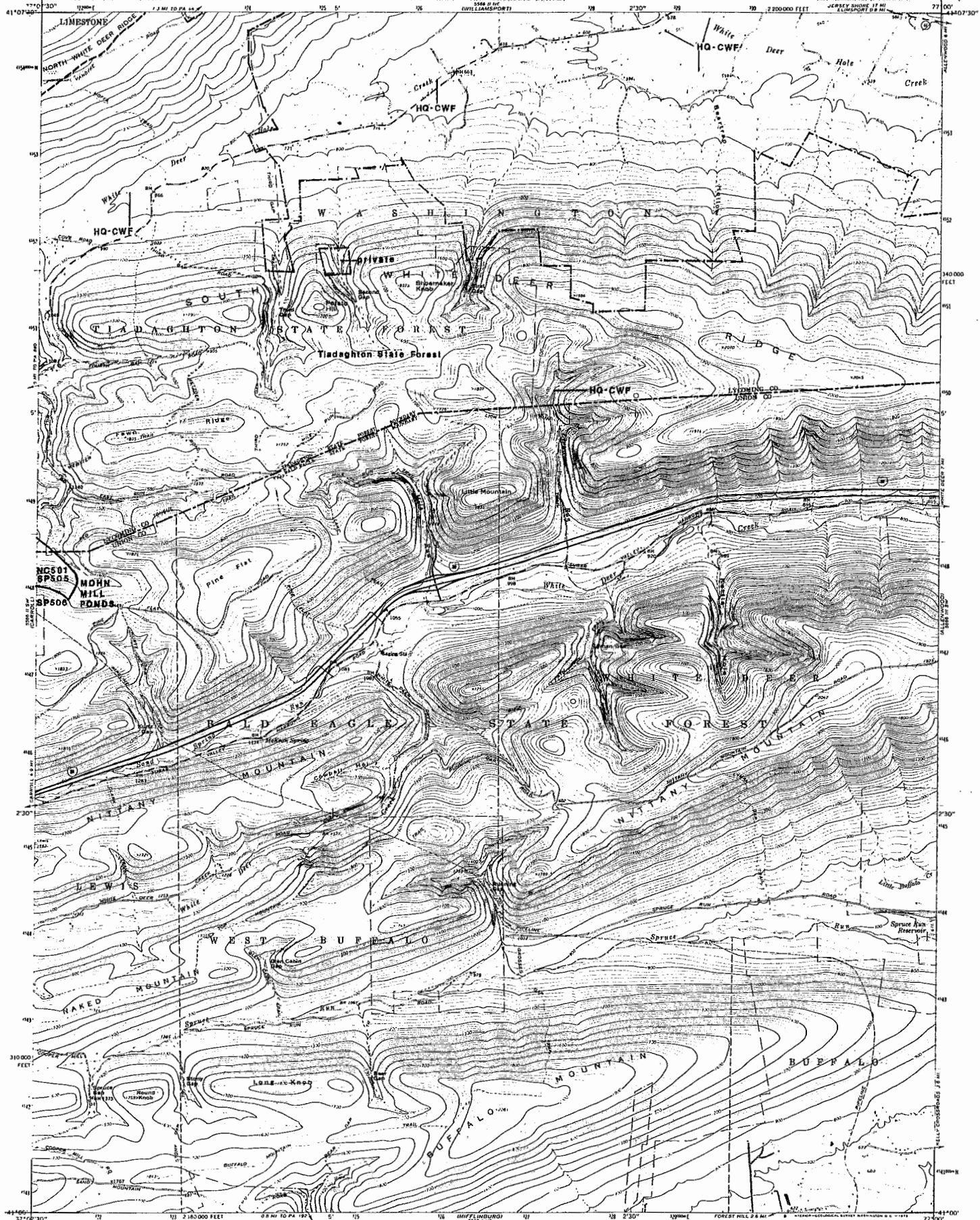
CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 10-FOOT CONTOURS
NATIONAL GEOLOGIC VERTICAL DATUM OF 1929

FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

Revisions shown in purple compiled in cooperation with
Commonwealth of Pennsylvania agencies from recent photographs
taken 1953 and other sources. This information not

PHOTOREPRODUCED 1985

WILLIAMSPORT, PA.
NEAR WILLIAMSPORT 15' DIAMETER
41077 81-31-024



Maped, edited, and published by the Geological Survey
Control by USGS and USCAGS
Topography by photogrammetric methods from aerial
photographs taken 1962. Field checked 1965.
Polyconic projection. 1927 North American datum.
10,000-foot grid based on Pennsylvania coordinate system, north zone.
1,000-meter Universal Transverse Mercator grid ticks,
zone 18, shown in blue.
1" red dashed lines indicate selected fence and fuel lines where
generally visible on aerial photographs. This information is unchecked.

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generally visible on aerial photographs. This information is unchecked.

SCALE 1:24,000
CONTOUR INTERVAL 20 FEET
DATUM IS MEAN SEA LEVEL

ROAD CLASSIFICATION
Medium duty Light duty
Unimproved dirt
Interstate Route State Route

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D.C. 20242

Revisions shown in purple computed in cooperation with
Pennsylvania Department of Environmental Resources

WILLIAMSPORT SE, PA.
SER WILLIAMSPORT SE QUADRANGLE
N4100-W7700/7.5
1966