

Environmental Review Record

TO: ENVIRONMENTAL FILE, CENTRAL DELAWARE HABITAT FOR HUMANITY
FROM: WILLIAM C. BALDWIN, R.E.P. – REGISTERED ENVIRONMENTAL PROFESSIONAL
SUBJECT: ENVIRONMENTAL REVIEW RECORD, CATEGORICAL EXCLUSION
DOVER DELAWARE
CENTRAL DELAWARE HABITAT FOR HUMANITY
DATE: March 20th, 2023

PROJECT TITLE:

145 North Ann Avenue Dover, Delaware 19904
Tax Parcel(s) # 2-05-06715-02-3500-000

PROJECT DESCRIPTION:

Central Delaware Habitat for Humanity is proposing new construction at 145 North Ann Avenue Dover, Delaware 19904. William C. Baldwin & Edward J. Baldwin visited subject site on March 8th, 2023 for the purpose of conducting a Tier 2 Site Specific Environmental Review Record. The following environmental issues were identified absent or present on site at the time of inspection:

1. 145 North Ann Avenue is a vacant lot. Previous construction on the lot was determined present.
2. Minor unnatural topography (mounds/sinkholes) are present indicating potential buried demolition wastes.
3. A DNREC Contaminated Materials Management Plan (CMMP) (copy attached) shall be followed during foundation excavation.
4. Stressed or dead vegetation is absent.
5. Underground storage tanks (UST's) are not known present. Follow CMMP guidance.
6. Wetlands are not present and the property is not in the floodplain.
7. A noise assessment was deemed necessary. Noise levels were deemed acceptable.
8. Action Environmental Service Corp. observed utilities to include city water, sanitary sewer, electric, gas, concrete sidewalk and paved street infrastructure available.
9. Select graphics (i.e., SG-1, SG-2, SG-3, SG-4, SG-5 & SG-6) supporting this Environmental Review Record are included.
10. Action Environmental Service Corp. may be contacted at (302) 798-3100 or (302) 540-8245 for assistance in the disposal of subgrade materials.

ENVIRONMENTAL REVIEW:

In accordance with the Environmental Review Procedures of 24 CFR Part 58 Programs, the following referenced project is a 58.35 categorical exclusion, which states that the following activity is categorically excluded under NEPA, but may be subject to review under authorities listed in Sec. 58.5:

- (a)(1) Acquisition, repair, improvement, reconstruction, or rehabilitation of public facilities and improvements (other than buildings) when the facilities and improvements are in place and will be retained in the same use without change in size or capacity of more than 20 percent (e.g., replacement of water or sewer lines, reconstruction of curbs and sidewalks, repaving of streets).
- (a)(4)(i) An individual action on up to four dwelling units where there is a maximum of four units on any one site. The units can be four one-unit buildings or one four-unit building or any combination in between.
- (a)(5) Acquisition (including leasing) or disposition of, or equity loans of an existing structure, or acquisition (including leasing) of vacant land provided that the structure or land acquired, financed, or disposed of will be retained for the same use.
- (a)(6) Combinations of the above activities

SOURCES:

Figure No. 1 – Site Location Map	SG-1 Coastal Zone Management
Figure No. 2 – 2023 Aerial Photograph	SG-2 Sole Source Aquifer
Figure No. 3 – Flood Insurance Rate Map (Firmette)	SG-3 Endangered Species
Subject Site Photographs	SG-4 Wild & Scenic Rivers
Contaminated Materials Management Plan	SG-5 Farmland Protection
Proposed Activity – Housing Elevations	SG-6 Airport Clear Zone
Noise Assessment Guidance	

STATUTORY CHECKLIST

- A. Are all activities of this project 58.34(a)(1)-(11) Exempt and/or 58.35(b) Categorically Excluded (CE) from NEPA procedures? Yes X No. If "Yes" attach supporting documentation including citations to applicable subsection of 58.34(a)(1)-(11) and/or 58.35(b) and complete Other Requirements Checklist (58.6). Sign and date below and keep this form in the project ERR. Remaining portions of the Checklist need not be filled out. Do not initiate RROF procedures. Funds may be obligated for this Exempt project. If "No" proceed to question B.
- B. 1. Is this a 58.35(a) CE Project? X Yes No. If "Yes", then document by specific reference(s) to Section 58.35(a) why this project qualifies as a 58.35(a) CE project and respond to question B2. If "No" then go to question C.
2. Does the project trigger a 58.5 Compliance Threshold? X Yes No. If "Yes" perform all actions as per relevant compliance requirements, complete columns B & C, sign and date form; complete, sign and date Other Requirements Checklist; then initiate RROF procedures, beginning with publication/posting of RROF Notice. If "No"; complete columns A & C; project is exempt under 58.34(a)(12), do not initiate RROF procedures and funds may be obligated after signing and dating this form and completing Other Requirements Checklist.
- C. Does this project require an Environmental Assessment (EA)? Yes X No. If "Yes" fill out the Checklist, documenting all determinations and compliance with any 58.5 laws and authorities as necessary, then sign a date it; complete, sign and date Other Requirements Checklist; make both checklists part of the project ERR; and complete Part II of the ERR format. Even if an EA has already been completed, 24 CFR Part 58, Subpart H procedures, beginning with publication/posting of FONSI/RROF Notice, cannot be initiated until all 58.5 and 58.6 determinations and compliance processes have been completed. Some theoretically CE projects may be deemed by the grantee, because of their environmental effect, to warrant either an EA or Environmental Impact Statement.

PROJECT NAME AND IDENTIFICATION NO. 145 North Ann Avenue Dover, Delaware 19904

AREA OF STATUTORY OR REGULATORY COMPLIANCE	A NO CIRCUMSTANCE REQUIRING COMPLIANCE	B DATE COMPLIANCE ACHIEVED	C REFERENCES TO NOTES PROVIDING DOCUMENTATION, SOURCES, AND EXPLANATION OF CHECKED BOXES
Air Quality	X		DE-SIP Approved by EPA in 2007 with 2008, 2009 & 2010 revisions for PM and 03. Proposed activity will not impact SIP.
Historic Properties	X		Subject site is not historic. Reference City of Dover Historic Districts
Floodplain Management	X		Subject Site is not in floodplain. Reference Map 10001C0166H effective 5/5/2003.
Wetlands Protection	X		Subject Site is not in wetlands. Field determined by AESC wetland scientist. Proposed activity does not impact wetlands.
Coastal Zone/	X		Subject Site is not in the Coastal Strip of the Coastal Zone. REF. SG. -1 (attached) Proposed activity is consistent with the Coastal Zone Management Act.
Sole Source Aquifers	X		Subject Site is not located over a Sole Source Aquifer (New Jersey Coastal Plain Aquifer) REF. SG. -2 (attached) Proposed activity does not impact Sole Source Aquifer.
Endangered Species	X		Proposed activity does not impact endangered, threatened, or rare species. REF. SG. -3 (attached) (Reference DNREC Div. of F&W 3/3/11.)
Wild & Scenic Rivers	X		Proposed activity will not affect a wild or scenic river (White Clay Creek). REF. map SG. -4 (attached)
Farmland Protection	X		Proposed activity does not involve the conversion of farmland to non agricultural use. Reference map SG. -5 (attached)
Noise (24 CFR Part 51B)		March 20, 2023	Subject Site is Residential Neighborhood and is within a noise assessment guideline (Railroad, Airport or Highway). Subject site is outside airport 75 dba DNL contour. Subject site is within 3,000 feet of railway. Subject site is not within 1,000 feet of a 4-lane highway. (Compliance achieved)
Hazardous Facilities (24 CFR Part 51C)	X		There are no NPL or State HSCA sites or RCRA COR sites in vicinity of subject site. Proposed activity is not impacted by hazardous facilities.
Airport [except for Clear Zone Notification of [24 CFR Part 51D 303 (a)(3)]]	X		The Proposed Activity is not conducted on a site within the Dover Air Force Base Airport Clear Zone. REF. map SG-6 (attached)
Site Contamination	X		Proposed activity is free from industrial site contamination.
Environmental Justice (Executive Order 12898)	X		Limited to rehabilitation of existing single-family residential structure. No disproportionate adverse impacts on minority or low-income population.

Prepared By: William C. Baldwin

Title: Registered Environmental Professional

Date: March 20, 2023

Reviewed By: Juaney Surry

Title: Community Dev. Mgr

Date: July 26, 2023

Other Requirements (Section 58.6) Checklist

PROJECT NAME: 145 NORTH ANN AVENUE DOVER, DELAWARE 19904

GRANT NUMBER: CENTRAL DELAWARE HABITAT FOR HUMANITY

In addition to the duties under the laws and authorities specified in 58.5 for assumption by Responsible Entities (RE) under the laws cited in 58.1(b), RE must comply with the following requirements. Applicability of the following requirements does not trigger the certification and release of funds procedure under this Part or preclude exemption of an activity under 58.34 (a) (12) and/or the applicability of 58.35(b). However, the RE remains responsible for addressing the following requirements in its ERR and meeting these requirements, where applicable, regardless of whether the activity is exempt under 58.34 or Categorically Excluded under 58.35 (a) or (b).

(a) Federal Flood Insurance Purchase Requirements (do not apply to funds from Federal formula grants made to a State).

- (1) Does the project involve acquisition or construction (including rehabilitation) of structures, buildings or mobile homes in a community identified by the Federal Emergency Management Agency (FEMA) as having special flood hazard areas (100 year and 500-year floodplains)? Yes X No If "Yes," go to (a)(2). If "No," go to Question (b).
- (2) Is the project located in 100-year flood plain (500-year floodplain for "critical" actions*)? Yes No X If "Yes," go to (a) (3). If "No," go to Question (b).
- (3) Is the community in which the project is located participating in the National Flood Insurance Program or, has less than a year passed since FEMA notified the community concerning such hazards. Please check one of the above depending on the situation) Yes No X If "Yes," attach a statement concerning how you will assure that flood insurance will be maintained in accordance with the "Flood Insurance Protection" guidance sheet attached to this Checklist and go to Question (b). The implementation of this project consistent with your statement must be made a condition on the environmental findings and recommendations for the project. If "No," project cannot be funded.

*As defined in the U.S. Water Resources Council's Floodplain Management Guidelines for Implementing Executive Order 11988.

(b) Coastal Barriers Resources

Is the project to be undertaken located in the coastal Barrier Resources System, as amended by the Coastal Barrier Improvement Act of 1990 (16 U.S.C. 3501)?

Yes No X. If "Yes," Federal financial assistance may not be provided. If "No," then go to Question (c).

(c) Projects located in Close Proximity to Airports Contained on the HUD list of 24 CFR Part 51D Covered Airports.

Does the project involve assistance, subsidy, or insurance for the purchase or sale of an existing property in a Runway Clear Zone or Clear Zone as defined in 24 CFR Part 51D? Yes No X If "Yes," the buyer must be advised that the property is in a runway Clear Zone or Clear Zone, what the implications of such a location are, and then there is a possibility that the property may, at a later date, be acquired by the airport operator. The buyer must sign a statement acknowledging receipt of this information. The implementation of this requirement must be made a condition in the environmental review findings and recommendations for this project.

Prepared by: William C. Baldwin

Title: Registered Environmental Professional

Date: March 20, 2023

Reviewed by: Jessie Hursey

Title: Community Dev. Mgr

Date: July 26, 2023

39°10.375' N, 75°32.797' W WGS84

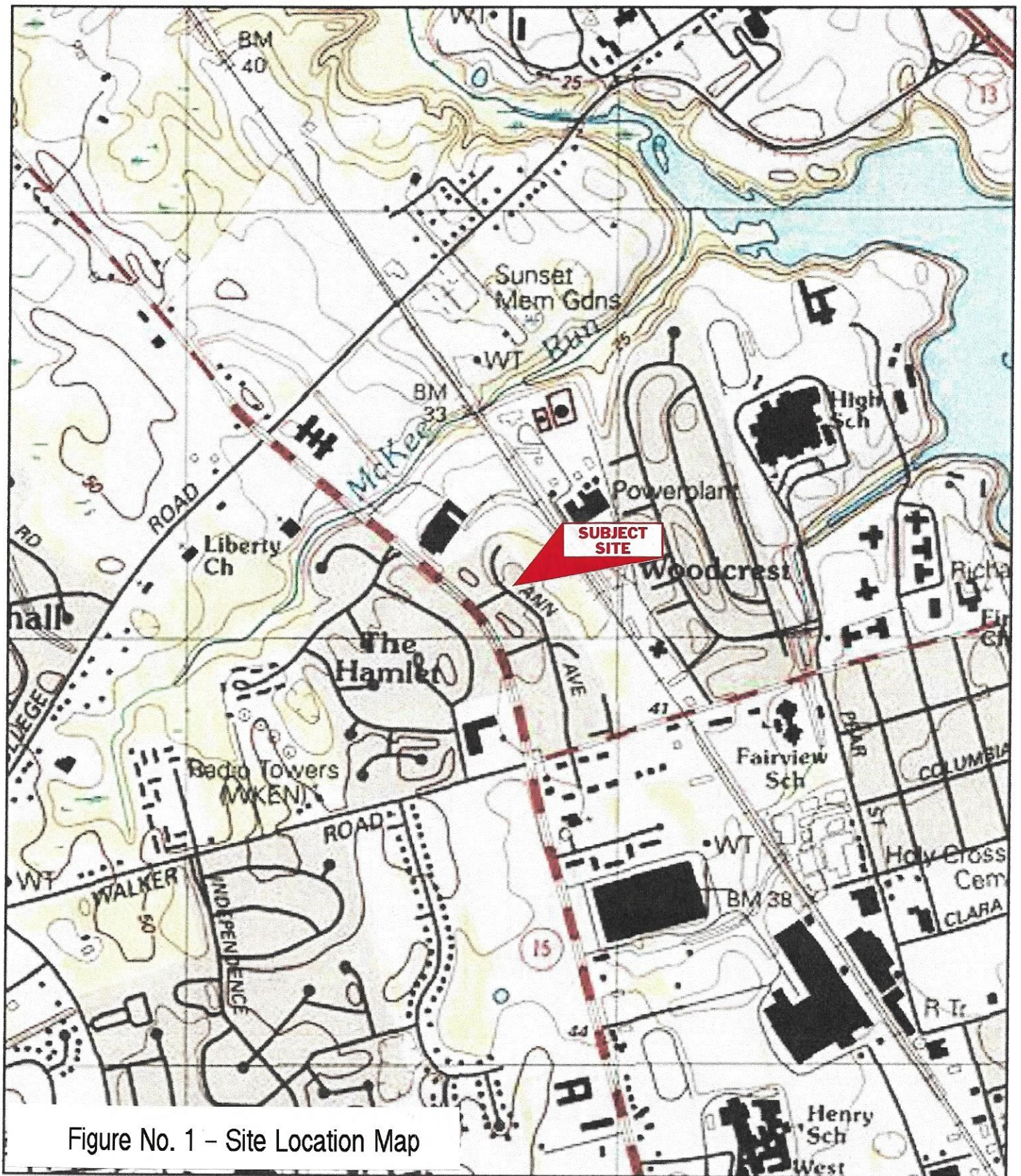


Figure No. 1 – Site Location Map

MN TN
12½°

0 5 1 MILE
0 1000 FEET 0 500 1000 METERS

Printed from TOPO! ©2000 National Geographic Holdings (www.topo.com)

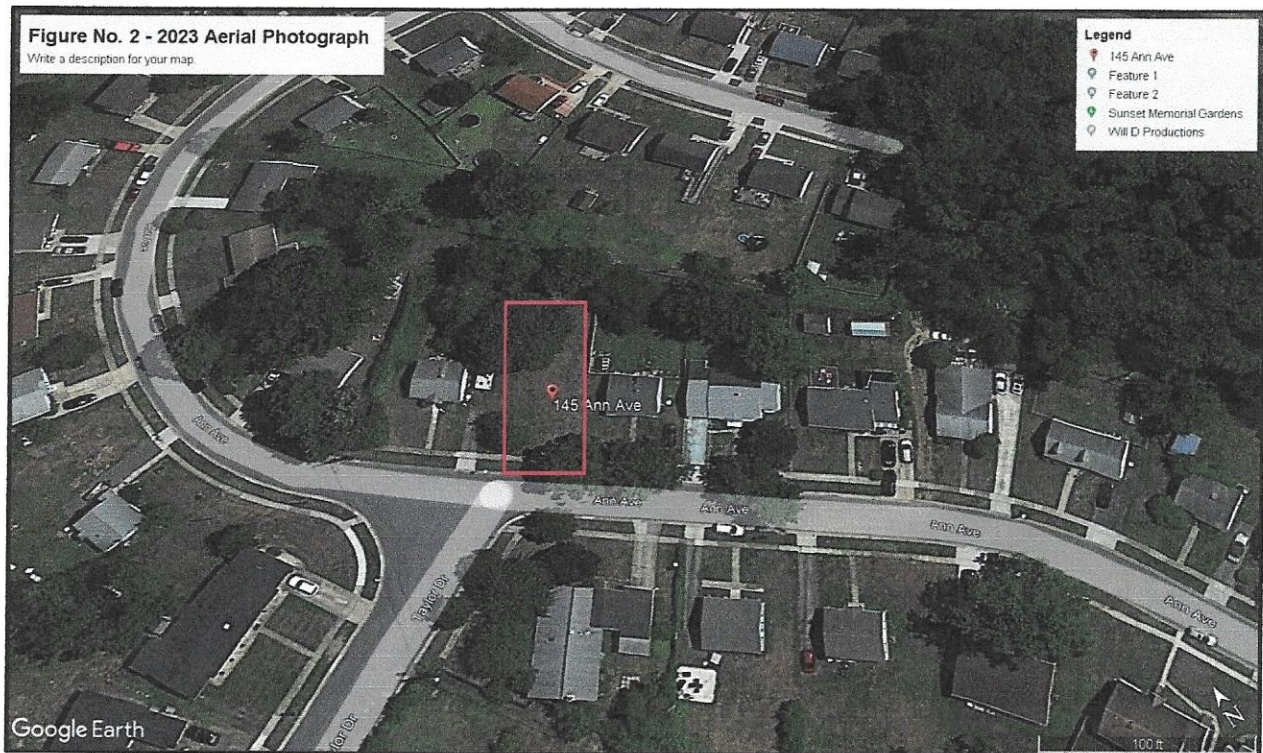


Figure No. 2 – 2023 Aerial Photograph
145 North Ann Avenue
Dover, Delaware 19904
Tax Parcel No(s). # 2-05-06715-02-3500-000



Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

Without Base Flood Elevation (BFE)
Zone A, V, A99

With BFE or Depth
Zone AE, AH, AO, AH, VE, AR

Regulatory Floodway

0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile
Zone X

Future Conditions 1% Annual Chance Flood Hazard
Zone X

Area with Reduced Flood Risk due to Levee. See Notes.
Zone X

Area with Flood Risk due to Levee
Zone D

NO SCREEN

Area of Minimal Flood Hazard
Zone X

Effective LOMRs

Area of Undetermined Flood Hazard
Zone I

Channel, Culvert, or Storm Sewer

Levee, Dike, or Floodwall

Cross Sections with 1% Annual Chance Water Surface Elevation

Coastal Transect

Base Flood Elevation Line (BFE)

Limit of Study

Jurisdiction Boundary

Coastal Transect Baseline

Profile Baseline

Hydrographic Feature

Digital Data Available

No Digital Data Available

Unmapped

The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **3/10/2023 at 2:14 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Figure No. 3 – Flood Insurance Rate Map

0 250 500 1,000 1,500 2,000 Feet 1:6,000

75°32'30"W 39°10'37"N

Basemap: USGS National Map. Orthorectified. Data refreshed October 2020



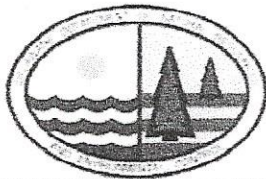
Photograph No. 1
145 North Ann Avenue Dover, Delaware 19904 (Front View)



Photograph No. 2
145 North Ann Avenue Dover, Delaware 19904 (Rear View)



Photograph No. 3
Typical new construction (Central Delaware Habitat for Humanity)



Contaminated Material Management Plan (CMMP) For Utility Installation and Repair at DNREC Sites

Delaware Department of Natural Resources and Environmental Control (DNREC)

The purpose of this CMMP is to provide general guidance to utility companies for safe handling of contaminated materials (soil and groundwater) at DNREC sites contaminated or potentially contaminated with hazardous substance and/or petroleum. The CMMP addresses the management of material related to soil excavation activities to be performed for installation or replacement of underground utilities by workers under their own utility company contract.

Background

There are hundreds of sites contaminated or potentially contaminated with hazardous substances that are being addressed by DNREC Site Investigation and Restoration Section (SIRS) and thousands of sites contaminated or potentially contaminated with petroleum releases from underground and aboveground storage tanks that are being addressed by DNREC-Tank Management Section (TMS). These sites are at different stages of investigation and cleanup process and the amount of information regarding contamination at these sites varies. Some sites are at the beginning of the investigation and have only limited information whereas at other sites the remedy is in place such as a cap. Sites with remedy in place such as engineered cap might have special instructions on the advisory ticket to contact DNREC prior to excavation.

Intrusive Activities

Intrusive activities are defined as activities penetrating the existing ground surface which include, but are not limited to:

- Excavation and proper material management (soil and groundwater) associated with trenches for utility excavation due to utility installations or utility system repairs.
- Backfilling excavated areas.
- Management of underground storage tanks (USTs) and associated piping, components and foundations, if encountered.
- Excavation of landscaped areas or site grading.

Excavation, Handling and Management of Contaminated Materials

The contaminant of concern for the site where excavation is taking place will be listed in the advisory. However, some of these sites are in the initial stages of investigations and may not have a detailed list. It is not possible to sample every location on a site, so there is potential for encountering contamination other than the ones listed. So the following measures should be taken as standard procedures.

Soil

The advisory for the ticket should give a general idea of what types of contaminants are likely to be encountered during the excavation. The advisory may also provide any special information about the site such as there is a 1 to 2 feet thick soil cap present at the site. The advisory should be consulted to determine how to handle the excavated soil.

Soil that is excavated or disturbed at a location with known Volatile Organic Compounds (VOCs), semi volatile Organic Compounds (SVOCs), gasoline, or diesel contamination will require special treatment in the following cases. These contaminants are generally iden-

tifiable by characteristic petroleum odors or staining.

- If these signs are identified during excavation, and the soil is not immediately scheduled to be reused in the excavation, soil should be stockpiled on top of double 6 mil thick polyethylene sheeting and be covered with a similar material at the end of each work day and secured by weights to minimize removal of the cover by wind. If the soil is stored in the staging area for more than 14 days after stockpiling, the excavator will install silt fencing around the stockpile and temporarily stabilize using DNREC approved best management practices.
- If the purpose of the excavation is to install or replace a water supply line, organic impacted soils (i.e. petroleum, chlorinated solvents, etc.) cannot be reused in the excavation without DNREC approval. Clean imported soil and the use of non-permeable materials including water mains and organic-resistant gaskets are standard practices in these cases.
- Any non-reusable soils generated that are not going to be used to fill the excavation should not be considered as "clean fill". These soils need to be characterized prior to off-site disposal. Contact DNREC person listed on your ticket for coordination on testing and soil disposal requirements.
- In the event that soil is heavily contaminated with petroleum compounds to a point that there is free product mixed with the soil or grossly contaminated with other contaminants indicated by heavy staining or strong odor, backfilling activities cannot proceed without DNREC approval.

If the advisory indicates inorganic contamination in soil such as metals only and the excavated soil does not show indication of contamination determined using visual, olfactory or instrumental evidence then the soil can be put back into the excavation.

If the advisory indicate that a 1 or 2 foot thick cap is present at the site then the soil encountered in the upper 1 or 2 feet of the excavation should be separated from the rest of the soil generated from the excavation. This clean soil is required to be put back on the excavation as an upper fill, as encountered prior to excavation. In this way, we can minimize exposure to deeper potentially contaminated soils.

Fill/Debris Materials

If visually contaminated, the debris materials (timber, treated wood, railroad ties and/or concrete) encountered during excavation activities will be segregated and stockpiled on 6 mil polyethylene sheeting. If debris material is determined to be hazardous, it will be managed following RCRA generator, transportation and disposal requirements.

USTs, ASTs and Piping

If USTs, ASTs or associated piping are encountered during any of the intrusive activities at the site, they will be properly drained of liquids, removed, decontaminated and disposed off site in accordance with the Delaware Regulations Governing Underground Storage Tank Systems or the Delaware Regulations Governing Aboveground Storage Tank Systems. If a regulated UST or piping associated with a regulated AST or UST is discovered, you must contact the DNREC Tank Management Section. In general, if any component of an AST or UST system is encountered, the DNREC Tank

(Continued on next page)



Contaminated Material Management Plan (CMMP) For Utility Installation and Repair at DNREC Sites *(continued)*

Management Section can be contacted at 302-395-2500 to answer any questions.

Groundwater

If groundwater is encountered during excavation activities, the utility company is responsible for obtaining a wastewater discharge permit prior to dewatering activities from the appropriate local and state agency. All dewatering operations require DNREC approval. Please contact DNREC Water Supply Section for permits at 302-739-9945. For the City of Wilmington, all dewatering fluids are required to be routed into one of the designated sanitary sewer manholes approved by the City in accordance with the Wastewater Discharge Permit. Initial pretreatment of the groundwater may include a sedimentation tank, a filtration unit, an oil/water separator, or a carbon filtration unit if necessary, before discharging into the sewer system. Water pumped from the excavation shall be treated, as necessary, to meet the discharge concentrations specified by the wastewater permit issued by the City or a state agency.

Health and Safety

The intrusive activities shall be conducted under the guidance of the Health and Safety (H&S) plan of each utility company. The H&S plan should indicate what level of training the worker would need such as OSHA 24-hour HAZWOPER training or 40-hour HAZWOPER training. In general a modified level D OSHA personal protective equipment (PPE) within the project area is required. However, a higher level of protection may be required based on the contaminants as indicated in the H & S plan. The excavator shall provide adequate protective measures to limit potential public exposure to environmentally impacted materials.

Transportation of Contaminated Materials

a) Soil Disposal

1. Contaminated soil shall either be loaded or temporarily stockpiled in preparation for loading into dump trucks or trailers by the excavator. The excavator is responsible for monitoring the loading and stockpiling the soil. The soil will be transported to a DNREC approved disposal location and copies of completed waste manifests shall be forwarded to DNREC contact listed in the ticket.
2. The trucks shall be loaded so that the solids are at least six (6) inches below the top of the trailer bed.
3. The trucks shall be covered during transport.
4. The excavator should remove accumulated material from the truck tires prior to the trucks leaving the site. Soil removed from the truck tires shall be collected and managed as per the specifications of this plan.
5. The excavator shall keep all roadways entering and leaving the site free from soil. If necessary a tracking pad or street sweeper will be used to prevent any soil tracked on roadways from trucks leaving the site.
6. A manifest record should be kept by the excavator.

b) Fill/Debris Materials

1. Excavator should be responsible for transportation and disposal of all concrete, asphalt, metal and untreated wood resulting from the excavation. If debris material is determined to be hazardous, it will be managed following RCRA generator, transportation and disposal requirements. Copies of Com-

pleted waste manifests shall be forwarded to DNREC contact listed in the ticket.

c) Petroleum Contaminated Water and Oil (if encountered)

1. Petroleum contaminated water will be pre-treated, as necessary, and then pumped to a treatment water plant or sewer system if applicable and permitted.
2. The transporter of any recovered oil will be a fully licensed, insured and permitted company to transport petroleum contaminated liquids in the State of Delaware.
3. The excavator is responsible for keeping all disposal records as appropriated.

Site Restoration

Restoring the site conditions to conditions prior to excavation activities is a requirement to protect the integrity of any remedy in place. Therefore, after excavation is complete, the utility company is required to restore the site to a condition that prevents potential contact with contaminated materials.

- Procedure for backfilling: The upper 1 to 2 foot of clean soil indicated in ticket as a cap needs to be put back on the excavation as an upper fill.
- Impervious surfaces (asphalt, concrete, etc): Asphalt and concrete from utility trenches must be restored to a previous excavation condition of the cap. This would prevent exposure to the soil underneath the cap.
- Landscaped areas: materials from the landscape areas at sites with cap must be restored to a condition previous to excavation. This would prevent exposure to the soil underneath the cap.

Emergency Utility Repair

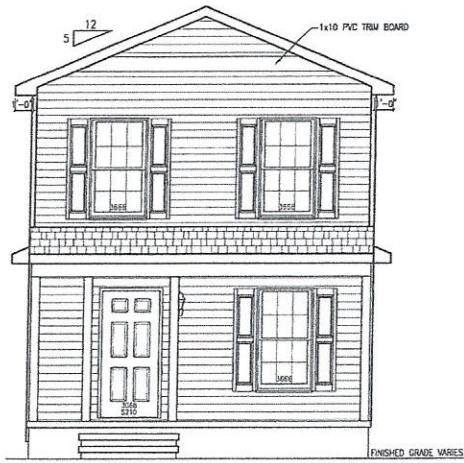
For emergency utility repairs, except for water lines replacement or installation, reusing the onsite excavating materials from the utility trench back into the trench is an acceptable procedure for DNREC. However, if evidence of contamination was detected and if possible, the soil should be stockpiled. If that is not possible, soil can be temporarily put back in the excavation but DNREC should be informed by the next working day. However, if free product is encountered during the excavation, the excavator should contain the material and notify DNREC emergency response team immediately.

Further Support

For further support regarding safe handling of contaminated materials please contact DNREC. For best response select the Tank Management Section for petroleum related contamination, or the Site Investigation and Restoration Section for non-petroleum related contamination:

- **DNREC Tank Management Section**
Patrick Boettcher
302-395-2500
- **DNREC Site Investigation and Restoration Section**
Qazi Salahuddin or Wilmer Reyes
302-395-2600
- **DNREC Emergency Response Team**
800-662-8802

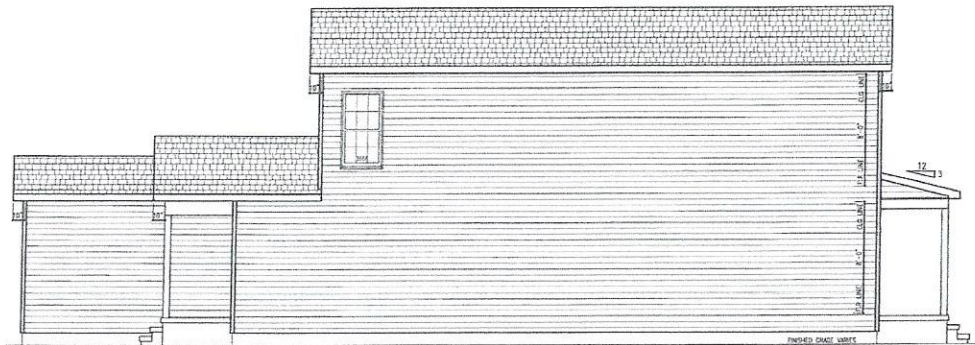
Proposed Activity



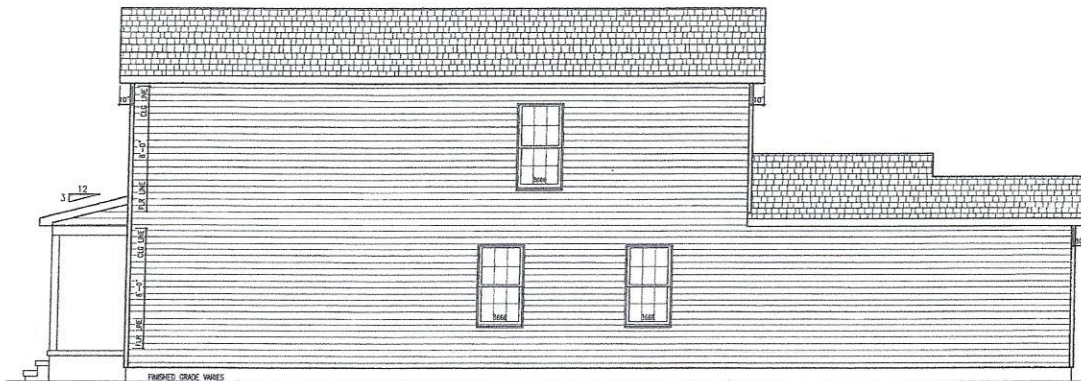
Front Elevation
SCALE: 3/16" = 1'-0"



Rear Elevation
SCALE: 3/16" = 1'-0"



Left Elevation
SCALE: 3/16" = 1'-0"



Right Elevation
SCALE: 3/16" = 1'-0"

Worksheet A
Site Evaluation

Noise Assessment Guidelines

Site Location

11 ANN AVE, S NEW STREET, S GOVERNORS DELAWARE (DOVER)

Program

CENTRAL DELAWARE HABITAT FOR HUMANITY

Project Name

CENTRAL DELAWARE HABITAT FOR HUMANITY (NEW CONSTRUCTION)

Locality

SEE SITE LOCATIONS ABOVE

File Number

9101

Sponsor's Name WWW.CENTRALDELAWAREHABITAT.ORG

Phone

JOYCELYN TICE, CENTRAL DELAWARE HABITAT FOR HUMANITY (MOBILE 302-535-3595)

Street Address

2311 S. DUPONT HWY. DOVER DE 19901
(302) 526-2366 EXT 116

City, State

	Acceptability Category	DNL	Predicted for Operations in Year
1. Roadway Noise			
2. Aircraft Noise			
3. Railway Noise	< 65	< 55	2022-2023

Value of DNL for all noise sources: (see page 3 for
combination procedure)

Final Site Evaluation (circle one)

Acceptable

Normally Unacceptable

Unacceptable

Signature

Wm. C. Baldwin

Date

20 March 2023

Clip this worksheet to the top of a package
containing Worksheets B-E and Workcharts 1-7
that are used in the site evaluations

List All Railways within 3000 feet of the site:

1. DELMARVA CENTRAL RAILROAD (3 LOCATIONS FROM) (<500', <1200', <1600')
2. _____
3. _____

Necessary Information:

Railway No. 1 Railway No. 2 Railway No. 3

1. Distance in feet from the NAL to the railway track: 4500' 145 N. ANN, <1200' 39 S NEW, <1600' 23 S GOV
(3 LOCATIONS)
2. Number of trains in 24 hours:
 - a. diesel 1 (ADJUSTMENT FACTOR 1.00) REF. TABLE 9
2
 - b. electrified _____
3. Fraction of operations occurring at night
(10 p.m. - 7 a.m.): 0.15 (ADJUSTMENT FACTOR 1.00) REF. TABLE 5
4. Number of diesel locomotives per train: 1
5. Number of rail cars per train:
 - a. diesel trains 5 MIN - 50 MAX
 - b. electrified trains _____
6. Average train speed: 30 MPH (ADJUSTMENT FACTOR 1.00)
7. Is track welded or bolted? BOTH WELDED AND BOLTED
8. Are whistles or horns required for grade crossings? YES

Adjustments for Diesel Locomotives

	9 No. of Locomotives 2	10 Average Speed Table 9	11 Horns (enter 10)	12 Night- time Table 5	13 No. of Trains (line 2a)	14 Adj. No. of Opns.	15 DNL Workchart 3	16 Barrier Attn.	17 Partial DNL
Railway No. 1	<u>1/2</u>	X <u>1.00</u>	X <u>10</u>	X <u>1.00</u>	X <u>1</u>	= <u>5</u>	<u>54-65</u>	- <u>Ø</u>	= <u><65</u>
Railway No. 2		X	X	X	X	= <u>5</u>	<u><1200</u>	- <u>Ø</u>	= <u><55</u>
Railway No. 3		X	X	X	X	=		-	=

Adjustments for Railway Cars or Rapid Transit Trains

	18 Number of cars 50	19 Average Speed Table 10	20 Bolted Rails (enter 4)	21 Night- time Table 5	22 No. of Trains (Line 2a or 2b)	23 Adj. No. of Opns.	24 DNL Work- chart 4	25 Barrier Attn.	26 Partial DNL
Railway No. 1		X	X	X	X	=		-	=
Railway No. 2		X	X	X	X	=		-	=
Railway No. 3		X	X	X	X	=		-	=

Combined Locomotive and Railway Car DNL

Railway No. 1 <55 Railway No. 2 Railway No. 3 Total DNL for all Railways <55

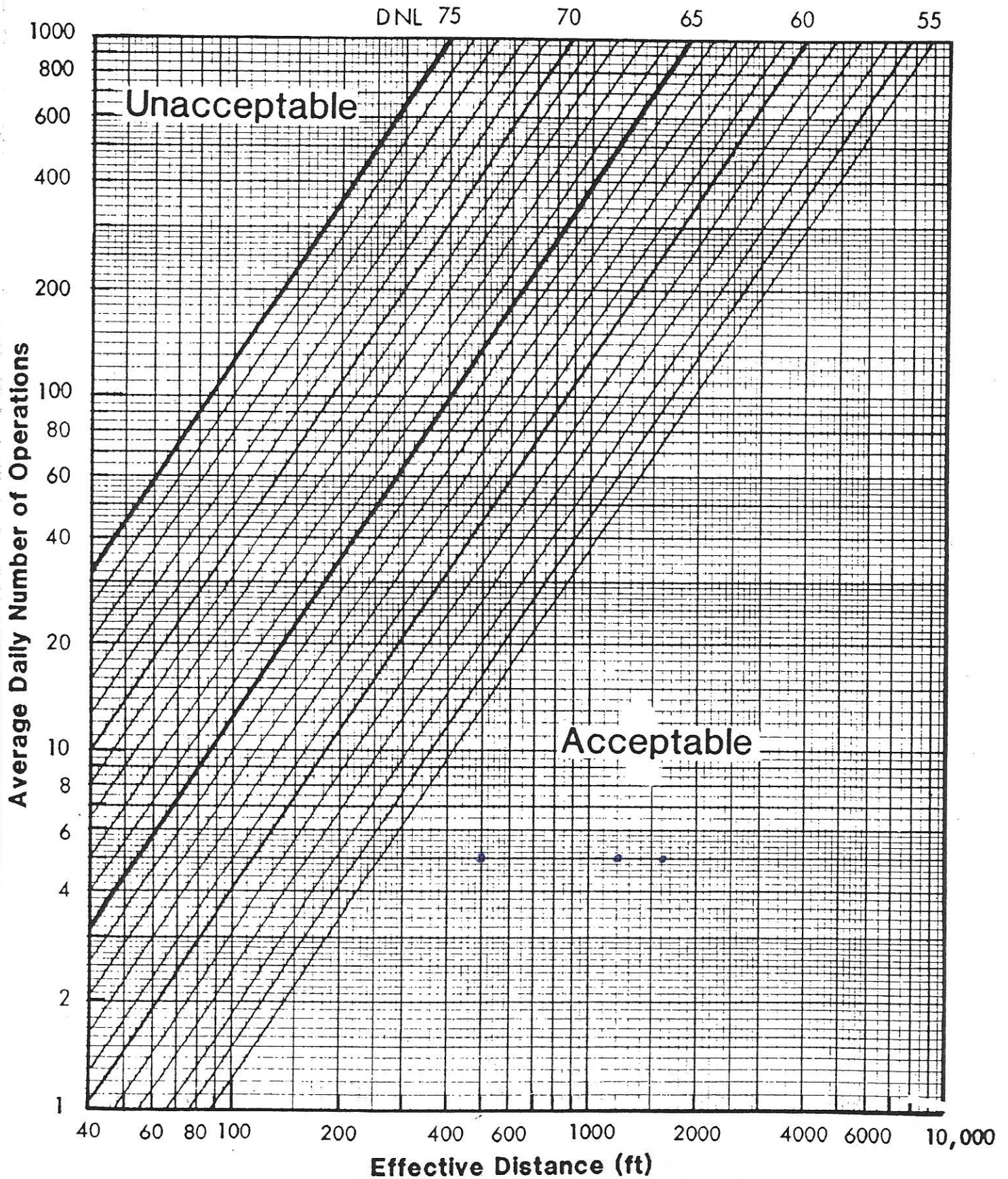
Signature

Wm. J. Saldaña

Date

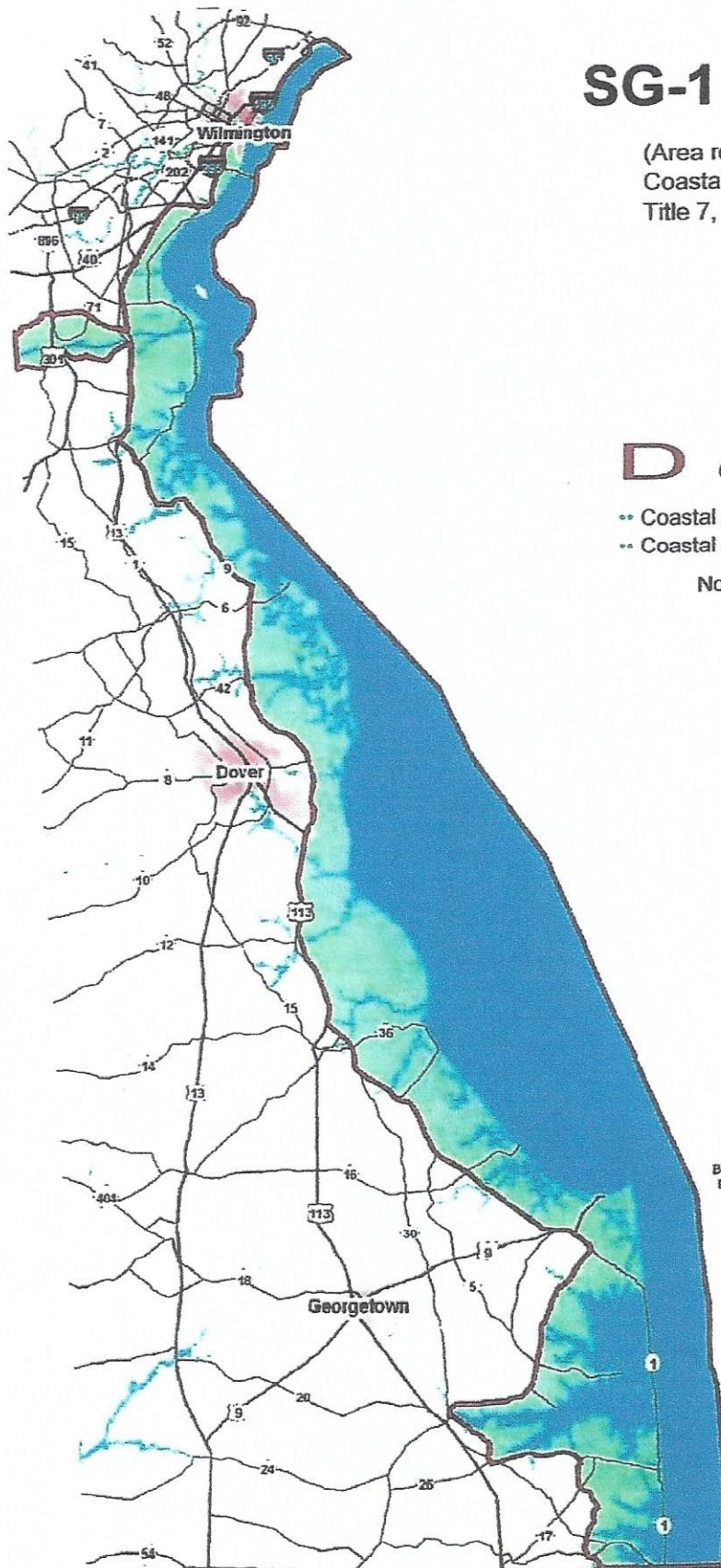
20 MARCH 2023

Workchart 3
Railroads - Diesel Locomotives



SG-1 The Coastal Strip

(Area regulated by the Delaware
Coastal Zone Act Chapter 70,
Title 7, Delaware Code)



Legend

D Coastal Zone

.. Coastal Zone - WatBr

.. Coastal Zone - Land

Not regulated by Coast Zone Act



Boundary at the mouth of the
Delaware Bay is in dispute.

This map is prepared primarily for internal DNREC purposes. The information contained herein is preliminary and is subject to change or revision at any time. Use of this information by others is at their own risk and the OIRIC in no way warrants the accuracy of the information.

This is a map of the Eastern United States, oriented horizontally on the page. The map shows the Atlantic Ocean in blue on the right side. Major cities and regions are labeled in black text. In the upper left, 'Long Branch' and 'River' are visible. Below them, 'Philadelphia' is prominently displayed. To the right of Philadelphia, 'Dover' is labeled. Further right, 'Salisbury' and 'Columbia' are shown. In the center, 'Washington' is labeled, with 'Baltimore' and 'Annapolis' nearby. To the left of Washington, 'Harrisburg' and 'Lancaster' are marked. Below Washington, 'Frederick' and 'Georgetown' are visible. Further south, 'Richmond' is labeled. The map also shows various rivers and smaller towns like 'Chambersburg', 'Hagerstown', 'Martinsburg', 'Winchester', 'Dicks City', and 'Fredericksburg'. The map is bordered by a thin black line.

1:2,311,162

U.S. Environmental Protection Agency

SG-3 Delaware's Endangered Species

Birds

Birds

- Northern Harrier^{BR} (*Circus cyaneus*)
- Broad-winged Hawk^{BR} (*Buteo platypterus*)
- Black-Crowned Night-Heron (*Nycticorax nycticorax*)
- Yellow-Crowned Night-Heron (*Nyctanassa violacea*)
- American Kestrel (*Falco sparverius*)
- Red Knot (*Calidris canutus*)
- Piping Plover (*Charadrius melodus*)
- Short-eared Owl ^{BR} (*Asio flammeus*)
- American Oystercatcher (*Haematopus palliatus*)
- Black Rail (*Laterallus jamaicensis*)
- Upland Sandpiper (*Bartramia longicauda*)
- Black Skimmer (*Rynchops niger*)
- Henslow's Sparrow (*Ammodramus henslowii*)
- Common Tern^{BR} (*Sterna hirundo*)
- Forster's Tern^{BR} (*Sterna forsteri*)
- Least Tern (*Sterna antillarum*)
- Cerulean Warbler (*Setophaga cerulea*)
- Hooded Warbler ^{BR} (*Setophaga citrina*)
- Swainson's Warbler (*Limnothlypis swainsonii*)
- Sedge Wren (*Cistothorus platensis*)

BR Breeding population only

Reptiles

- Leatherback Turtle (*Dermochelys coriacea*)
- Kemp's Ridley Turtle (*Lepidochelys kempi*)
- Green Turtle (*Chelonia mydas*)
- Loggerhead Turtle (*Caretta caretta*)
- Bog Turtle (*Clemmys muhlenbergii*)
- Corn Snake (*Elaphe guttata guttata*)
- Eastern Scarlet Snake (*Cemophora coccinea*)
- Redbelly Watersnake (*Nerodia erythrogaster*)

Amphibians

- Eastern Mud Salamander (*Pseudotriton montanus montanus*)
- Eastern Tiger Salamander (*Ambystoma tigrinum tigrinum*)
- Barking Treefrog (*Hyla gratiosa*)

Mammals

- Little Brown Bat (*Myotis lucifugus*)
- Northern Long-eared Bat (*Myotis septentrionalis*)
- Delmarva Fox Squirrel (*Sciurus niger cinereus*)
- Blue Whale (*Balaenoptera musculus*)
- Fin Whale (*Balaenoptera physalus*)
- Humpback Whale (*Megaptera novaengliae*)
- North Atlantic Right Whale (*Eubalaena glacialis*)
- Sei Whale (*Balaenoptera borealis*)
- Sperm Whale (*Physeter macrocephalus*)

Fish

- Glassy Darter (*Etheostoma vitreum*)



Birds

- Pied-billed Grebe^{BR} (*Podilymbus podiceps*)
- Northern Harrier^{BR} (*Circus cyaneus*)
- Broad-winged Hawk^{BR} (*Buteo platypterus*)
- Black-Crowned Night-Heron (*Nycticorax nycticorax*)
- Yellow-Crowned Night-Heron (*Nyctanassa violacea*)
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- Sedge Wren (*Cistothorus platensis*)

^{BR} Breeding population only

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- Sei Whale (*Balaenoptera borealis*)
- Sperm Whale (*Physeter macrocephalus*)

Fish

- Glassy Darter (*Etheostoma vitreum*)

- Blueridge Sculpin (*Cottus caeruleomentum*)
- Bridled Shiner (*Notropis bifrenatus*)
- Ironcolor Shiner (*Notropis chalybaeus*)
- Atlantic Sturgeon (*Acipenser oxyrinchus*)
- Shortnose Sturgeon (*Acipenser brevirostrum*)
- Blackbanded Sunfish (*Enneacanthus chaetodon*)

Mollusks

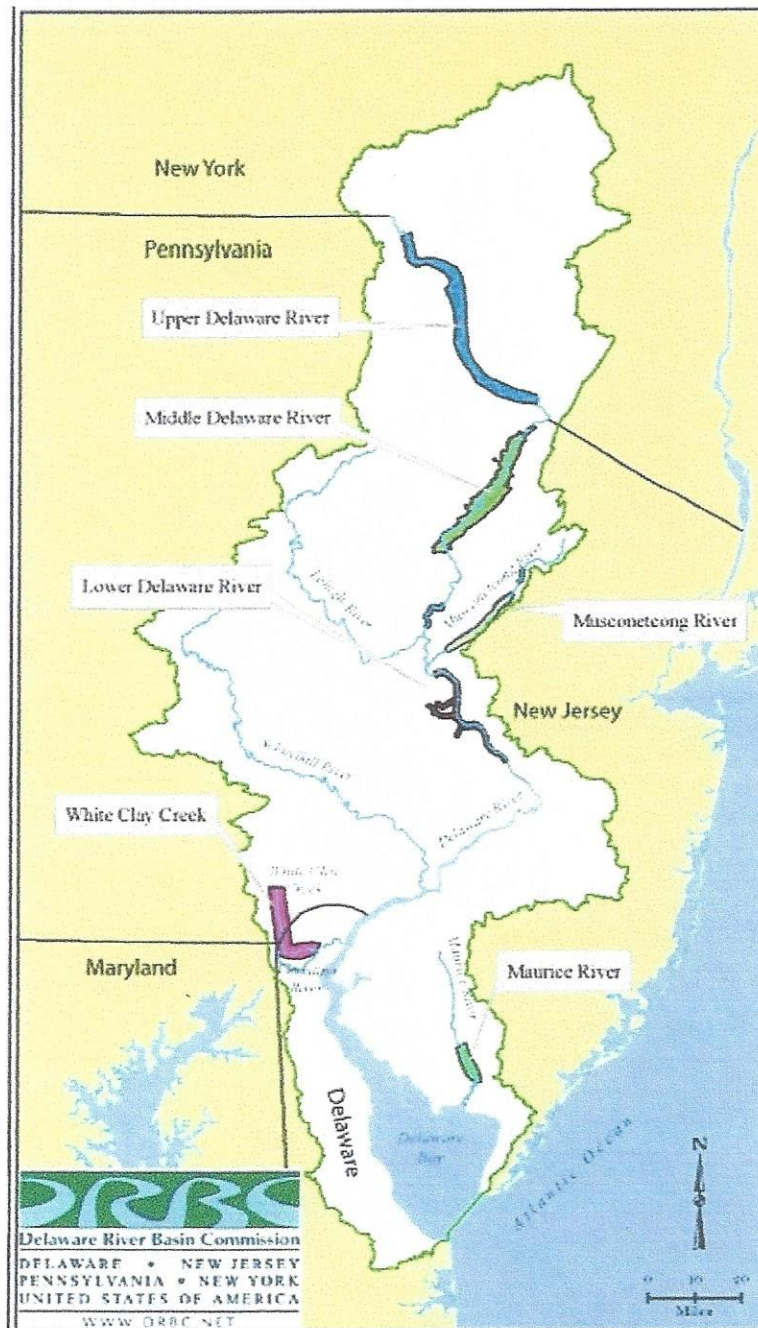
- Yellow Lampmussel (*Lampsilis cariosa*)
- Eastern Lampmussel (*Lampsilis radiata*)
- Dwarf Wedgemussel (*Alasmidonta heterodon*)
- Eastern Pondmussel (*Ligumia nasuta*)
- Brook Floater (*Alasmidonta varicosa*)
- Triangle Floater (*Alasmidonta undulata*)
- Tidewater Mucket (*Leptodea ochracea*)

Insects

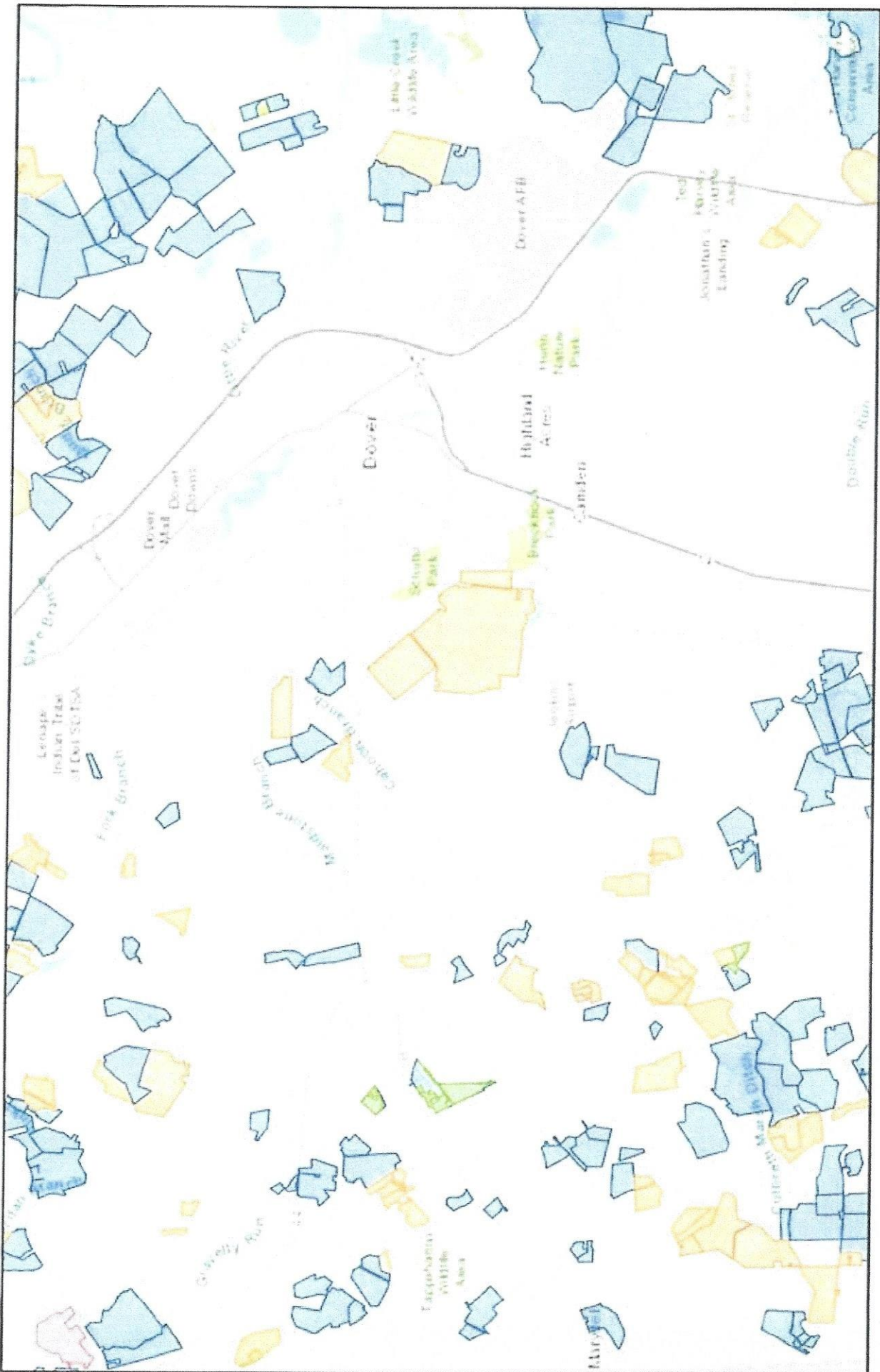
- Little White Tiger Beetle (*Cicindela lepida*)
- White Tiger Beetle (*Cicindela dorsalis*)
- Seth Forest Scavenger Beetle (*Hydrochus sp.spangleri*)
- Burgundy Bluet (*Enallagma dubium*)
- Pale Bluet (*Enallagma pallidum*)
- Baltimore Checkerspot (*Euphydryas phaeton*)
- Banner Clubtail (*Gomphus apomyius*)
- Laura's Clubtail (*Stylurus laurae*)
- Midland Clubtail (*Gomphus fraternus*)
- Sable Clubtail (*Gomphus rogersi*)
- Black-tipped Darner (*Aeshna tuberculifera*)
- Taper-tailed Darner (*Gomphaeschna antelope*)
- Black Dash (*Euphyes conspicua*)
- Frosted Elfin (*Incisalia irus*)
- Treetop Emerald (*Somatochlora provocans*)
- Bethany Beach Firefly (*Photuris bethaniensis*)
- Hessel's Hairstreak (*Mitoura hesseli*)
- King's Hairstreak (*Satyrium kingi*)
- Aralia Shoot Borer Moth (*Papaipema araliae*)
- Dark Stoneroot Borer Moth (*Papaipema duplicatus*)
- Maritime Sunflower Borer Moth (*Papaipema maritima*)
- Pitcher Plant Borer Moth (*Papaipema appassionata*)
- Yellow Stoneroot Borer Moth (*Papaipema astuta*)
- Elfin Skimmer (*Nannothemis bella*)
- Rare Skipper (*Problema bulenta*)
- Brown Spiketail (*Cordulegaster bilineata*)
- Sely's Sundragon (*Helocordulia selysii*)
- Marbled Underwing (*Catocala marmorata*)
- Ulalume Underwing (*Catocala ulalume*)
- Mulberry Wing (*Poanes massasoit massasoit*)
- Chermock's Mulberry Wing (*Poanes massasoit chermocki*)

Effective July 31, 2013

SG-4 Wild & Scenic Rivers



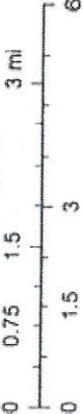
SG-5 Farmland Protection - Delaware Agricultural Land Preservation



9/24/2022, 12:11:46 PM

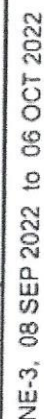
1:144,448

- Aglands Preservation Districts
- Ag Easement
- Expansion
- Forestland Area
- Forestland Easement
- Young Farmer



City of Dover, Delaware FirstMap, VITA, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS

Department of Agriculture
City of Dover, Delaware FirstMap, VITA, Esri, HERE, Garmin, USGS, NGA, EPA, USDA, NPS | The dataset was developed by Aerial Information Systems (AIS) and funded by the Delaware Department of Transportation (DelDOT) and New Castle County, | Delaware



AirNav.COM

Air Wisconsin
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Airports

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Aviation Fuel

Hotels

iPhone App

My AirNav

1383 users online

KDOV Dover Air Force Base
Dover, Delaware, USA

GOING TO DOVER?

[Reserve a Hotel Room](#)**FAA INFORMATION EFFECTIVE 08 SEPTEMBER 2022****Location**

FAA Identifier: DOV

Lat/Long: 39-07-46.3400N 075-27-57.4600W

39-07.772333N 075-27.957667W

39.1295389,-75.4659611

(estimated)

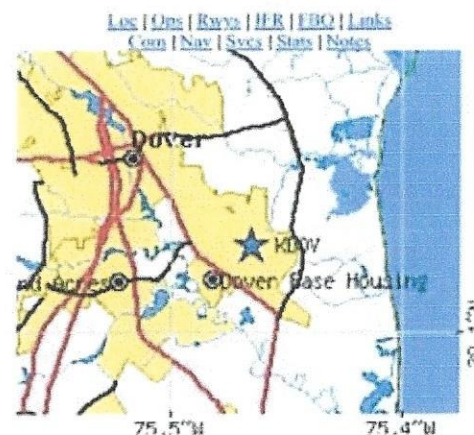
Elevation: 28.9 ft. / 9 m (estimated)

Variation: 12W (2020)

From city: 3 miles E of DOVER, DE

Time zone: UTC -4 (UTC -5 during Standard Time)

Zip code: 19902

Road maps at: [MapQuest](#) [Bing](#) [Google](#)**Airport Operations**

Airport use: Open to the public

Control tower: yes

ARTCC: WASHINGTON CENTER

FSS: MILLVILLE FLIGHT SERVICE STATION

NOTAMs facility: DOV (NOTAM-D service available)

Attendance: CONTINUOUS

Pattern altitude: RECTANGULAR 1500 FT, OVERHEAD 2500 FT.

AERO CLUB/LGT ACFT 1000 FT.

Segmented circle: no

Beacon: white-green (lighted land airport)

Operates sunset to sunrise.

Fire and rescue: ARFF index A

Airline operations: ARFF INDEX APPLIES ONLY TO THE DOVER CIVIL AIR TERMINAL. 72 HRS PPR IS RQRD FOR ALL CIVILIAN ACFT OPNS THAT NEED TO USE THE DOVER CIVIL AIR TERMINAL; CALL 302-736-6614.

International operations: international airport of entry
US CUSTOMS USER FEE ARPT.

Aerial photo

WARNING: Photo may not be current or correct



Photo by Casey Moorman
Photo taken 30-Dec-2018
looking southeast.

Do you have a better or more recent aerial photo of Dover Air Force Base that you would like to share? If so, please [send us your photo](#).

Sectional chart

Airport Communications

DOVER GROUND: 118.875 225.4
 DOVER TOWER: 126.35 279.625
 DOVER APPROACH: 132.425 257.875 135.15X
 DOVER DEPARTURE: 132.425 257.875 323.0
 CLEARANCE DELIVERY: 125.55 289.4
 COMD POST: 349.4
 D-ATIS: 127.825 273.5
 EMERG: 121.5 243.0
 GCA: 142.2X 294.7X 318.1X 373.0X 388.9X
 PMSV METRO: 342.0
 PTD: 372.2 ;THRU COMD POST
 VFR SEQUENCING: 125.9 ;SVC 25 NM OUT 282.325
 WX AWOS-3 at 33N (8 nm NW): 120.125 (302-735-9754)

- (ATIS DESCRIPTION) DIGITAL-ATIS, DATA LINK ENABLED.
- VFR SEQUENCING SVC 25 NM OUT.
- NO-NOTAM MP: 05001100Z++MON - FRI (3000/5+1).

Nearby radio navigation aids

VOR radial/distance	VOR name	Freq	Var
ENQ r168/6.6	SMYRNA VORTAC	111.40	09W
ATR r337/22.6	WATERLOO VOR/DME	112.60	09W
SIE r283/31.1	SEA ISLE VORTAC	114.80	09W
OOD r204/31.3	WOODSTOWN VORTAC	112.80	10W
DQO r179/33.6	DUPONT VORTAC	114.00	10W
VCN r233/33.7	CEDAR LAKE VOR/DME	115.20	10W

NDB name	Hdg/Dist	Freq	Var	ID
RAINBOW	233/23.2	363	11W	RNB .-. .-. -...

Airport Services

Fuel available: A+ J8
 Parking: hangars
 Airframe service: MAJOR
 Powerplant service: MAJOR
 Bottled oxygen: LOW
 Bulk oxygen: LOW

Runway Information

Runway 14/32

Dimensions: 12903 x 150 ft. / 3933 x 46 m
 Surface: asphalt/concrete/grooved
 Weight bearing capacity: PCN 105/R/B/W/T
 Runway edge lights: high intensity
RUNWAY 14
 Latitude: 39-08.358000N
 Longitude: 075-29.167000W
 Elevation: 28.8 ft.

RUNWAY 32
 39-07.114000N
 075-26.954167W
 26.2 ft.



Traffic pattern: left	left
Runway heading: 138 magnetic, 126 true	318 magnetic, 306 true
Displaced threshold: 4251 ft.	no
Visual slope indicator: 4-light PAPI on left (3.00 degrees glide path)	4-light PAPI on left (2.93 degrees glide path)
Runway end identifier lights:	yes
Touchdown point: yes, no lights	yes, no lights

Local (UTC-4)

METAR

KDOV 161955Z AUTO 24005KT 10SM CLR
25/09 A3013 RMK AO2 SLP207
T02500089 \$

K33N 162015Z AUTO VRB03KT 10SM CLR
8nm NW 25/13 A3014 RMK A01

TAF

KDOV 161600Z 1616/1722 34006KT 9999
SKC QNH3015INS WND 31006KT AFT
1700 BECMG 1705/1706 01006KT
9999 SKC QNH3020INS TEMPO
1710/1716 VRB06KT BECMG
1715/1716 15006KT 9999 SCT040
QNH3021INS TX27/1620Z TN16/1710Z

Runway 1/19

Dimensions: 9602 x 150 ft. / 2927 x 46 m
Surface: concrete/grooved
Weight bearing capacity: PCN 150/R/A/W/T
Runway edge lights: high intensity

RUNWAY 1

Latitude: 39-07.031667N
Longitude: 075-27.876333W
Elevation: 25.0 ft.
Traffic pattern: left
Runway heading: 015 magnetic, 003 true

Markings: precision, in good condition

Visual slope indicator: 4-light PAPI on left
(3.00 degrees glide path)

RVR equipment: touchdown

Approach lights: ALSF2: standard 2,400
foot high intensity
approach lighting
system with centerline
sequenced flashers
(category II or III)

Runway end identifier lights:

Centerline lights: yes

Touchdown point: yes, lighted

Instrument approach: ILS

RUNWAY 19

39-08.611000N
075-27.762167W
22.2 ft.

left
195 magnetic, 183
true

precision, in good
condition

4-light PAPI on left
(3.00 degrees glide
path)

touchdown

ALSF1: standard
2,400 foot high
intensity approach
lighting system with
centerline sequenced
flashers (category I)

yes

yes

yes, no lights

ILS

NOTAMs

▼ [Click for the latest NOTAMs](#)

NOTAMs are issued by the DoD/FAA and
will open in a separate window not controlled
by AirNav.

Airport Ownership and Management from official FAA records

Ownership: U.S. Air Force

Owner: USAF

DOVER AFB

DOVER, DE 19901

Manager: CHIEF AFLD MANAGEMENT/ MR HETTEROTH

DOVER AFB

DOVER, DE 19901

Phone 302-677-4183

Airport Operational Statistics

Aircraft operations: avg 339/day