



APPLICATION FOR A COASTAL ZONE ACT PERMIT

**State of Delaware
Department of Natural Resources & Environmental Control
Office of the Secretary**

February 2016

**Nalco - An Ecolab Company
800 Centerpoint Boulevard Facility
New Castle, Delaware**

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Permit Application Instructions

1. Complete all parts of the application. For sections which are not applicable to your project, do not leave blank; present a statement that clearly states why the section is not applicable to your project.
2. Because all applicants' projects are different, this word document template will provide you flexibility for needed space to answer the questions. Please insert additional lines for text where needed for your application. If appropriate, attach extra pages referencing each answer by the corresponding section and question number.
3. Submit eight complete hard copies of the permit application to:

Office of the Secretary
Department of Natural Resources & Environmental Control
State of Delaware
89 Kings Highway
Dover, DE 19901

In addition to the eight hard copies, submit a complete electronic "pdf" copy of the permit application and a copy of the Offset Matrix in Microsoft Word format on cd-rom.

4. Comply, if required, or as requested by the DNREC Secretary, with [7 Delaware Code, Chapter 79, Section 7902](#). If requested, but not completed, your application will not be considered administratively complete until this form is reviewed.
5. Be sure to include your permit application fee of \$3,000; otherwise the application will not be considered administratively complete. Make checks payable to the "State of Delaware."
6. Be advised that the application for a Delaware Coastal Zone Act Permit is a public document, which may be displayed at DNREC offices, public libraries, and the web, among others. If this application requires you to place confidential information or data in the application to make it administratively complete, note the Delaware Freedom of Information Act ([29 Delaware Code, Chapter 100](#)) and [DNREC's Freedom of Information Act Regulation](#), Section 6 (Requests for Confidentiality), for the proper procedure in requesting confidentiality.

Note: This application template was last revised by DNREC on January 30, 2008. Please discard any previous versions.

PART 1

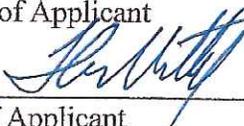
CERTIFICATION BY APPLICANT

Under the penalty of perjury pursuant to 11 Delaware Code §1221-1235, I hereby certify that all the information contained in this Delaware Coastal Zone Act Permit Application and in any attachments is true and complete to the best of my belief.

I hereby acknowledge that any falsification or withholding of information will be grounds for denial of a Coastal Zone Permit.

I also hereby acknowledge that all information in this application will be public information subject to the Delaware Freedom of Information Act, except for clearly identified proprietary information agreed to by the Secretary of the Department of Natural Resources & Environmental Control.

Thomas S. Beatty
Print Name of Applicant


Signature of Applicant

Business Director
Title

3/14/2016
Date

PART 2

APPLICANT INFORMATION AND SITE IDENTIFICATION

2.1 Identification of the applicant:

Company Name: **Nalco – An Ecolab Company**
Address: **2 New Road**
Aston, Pennsylvania 19014
Telephone: **610-358-0717**
Fax: **610-358-4642 (email: tbeatty@nalco.com)**

2.2 Primary contact: Please list the name, phone number and email of a preferred contact within your company in case the DNREC needs to contact you regarding this permit application.

Tom Beatty, Business Director, 856-889-2390, tbeatty@nalco.com

2.3 Authorized agent (if any):

Name: **Craig Smith, Landmark Science & Engineering, Inc.**
Address: **100 W. Commons Blvd., Suite 301**
New Castle, Delaware 19720
Telephone: **302-323-9377, Ext 146**
Fax: **302-323-9461 (email: craigs@landmark-se.com)**

If you have an authorized agent for this permit application process, provide written authorization from client for being the authorized agent.

2.4 Project property location (street address):

800 Centerpoint Boulevard
New Castle, Delaware 19720

2.5 In a separate attachment, provide a general map of appropriate scale to clearly show the project site.

Attachment A

2.6 Is the applicant claiming confidentiality in any section of their application?

YES

If yes, see instructions on page 3.

PART 3

PROJECT SUMMARY

Provide a one-page summary describing the proposed project. Include a brief quantitative description of the anticipated environmental impacts, and how the Environmental Offset Proposal will "clearly and demonstrably" more than offset any negative impacts.

Nalco – An Ecolab Company (Nalco), a water treatment company, intends to lease the vacant northern portion ($\pm 54,800$ ft²) of an existing 177,844 ft² steel and masonry commercial structure located at 800 Centerpoint Boulevard, Centerpoint Business Complex, New Castle, Delaware. The subject property, identified as Tax Parcel No. 21-013.00-099, is zoned "21I Industrial". New construction will be limited to a 400 ft² concrete pad for a 12,000-gallon exterior HCl tank and a 20' x 100' truck containment. This project will consist mainly of retrofitting the space to accommodate the ion-exchange regeneration system that Nalco uses to treat water and regenerate reusable resin filter media on-site. Nalco currently operates a similar facility in Aston, Pa., but has outgrown the space available for their processes and services.

Potable water provided to the facility by the local utility is purified by means of carbon filtration, softening with salt brine, then reverse osmosis. Softened water is used to backwash dirt, metals, and fine particulates from the filter media. The regeneration process strips exchanged ions (elution) by applying a heated solution of water and hydrochloric acid (HCl) to the cation filter media to exchange positively charged ions such as calcium, magnesium, and sodium, and applying a heated solution of water and sodium hydroxide (NaOH) to the anion filter media to exchange negatively charged ions such as sulfide, chloride, and silica. The filter media is rinsed and is ready to be reused. The softened water, acid rinsate and base rinsate are combined, cooled, and neutralized to a level that is within specified discharge limits, and discharged into the municipal sewer system at a maximum rate of up to 50,000 gal/day.

Proposed pollution prevention strategies include the installation of a 99% effective scrubber system on the HCl tank vent line to capture vented gases during tank fills; installation of containment structures under all storage tanks designed to hold 110% of their contents in the event of a leak or spill; and the installation of bollards will prevent accidental contact with the tank and fill ports from vehicles.

Atmospheric discharges will be limited to vented HCl vapors during tank fills and NO_x emissions from combustion in the natural gas-powered water heater. Nalco expects to use $\pm 5,000$ gal/mo of HCl which equates to 8,000ft³/yr. of displaced HCl vapor. The scrubbers are 99% effective so the annual emissions discharged is expected to 80 ft³/yr. Based on a (maximum) 16-hr production day, the water heater is expected to release a maximum of 0.0773 tons of NO_x annually.

Solid waste materials generated from the water purification processes are limited to the filtering media (activated carbon) and typical solid waste materials such as packaging material waste, cardboard, paper and discarded office-related materials. Activated carbon filtering media is disposed of through a licensed contractor. Solid waste materials will be placed in the proper containers and removed by a local contractor.

PART 4

**PROJECT PROPERTY RECORD AND
EVIDENCE OF LOCAL ZONING AND PLANNING APPROVAL**

PROJECT PROPERTY RECORD

- 4.1 Name and address of project premises owner(s) of record:

**Centerpoint 800, LLC
1201 N. Market Street, Suite 400
Wilmington, Delaware 19801**

- 4.2 Name and address of project premises equitable owner(s):

**Centerpoint 800, LLC
1201 N. Market Street, Suite 400
Wilmington, Delaware 19801**

- 4.3 Name and address of lessee(s):

**Nalco - An Ecolab Company
2 New Road
Aston, Pennsylvania 19014**

- 4.4 Is the project premises under option by permit applicant?

Yes

- 4.5 What is the present zoning of the land for this entire project site?

I Industrial

EVIDENCE OF LOCAL ZONING AND PLANNING APPROVAL

I, Jeffrey A. Bergstrom, for the City of New Castle, Delaware
(Name of County, City of Town)

do hereby affirm that the project proposed by

Nalco – An Ecolab Company; New Castle Facility
(Name of Applicant)

located at

800 Centerpoint Blvd., Centerpoint Business Complex, New Castle, Delaware
(Address)

the I- Industrial zoning district
is in full compliance with the zoning code as it applies to this project.

The above named applicant's project is in compliance with the adopted comprehensive development plan for the geographic area within which the project will be located.


(Signature)

Building Official
(Title)

February 19, 2016
(Date)

This part is essential for a complete Coastal Zone Act Permit Application. No application will be considered administratively complete without it. While the applicant is strongly advised to use this form, the local zoning jurisdiction may utilize a different form or document to demonstrate "evidence of local zoning approval," provided such documents are signed and dated by the proper official.

PART 5

PROJECT OPERATIONS

- 5.1 Describe the characteristics of the manufactured product and all the process and/or assembly operations utilized by the proposed project. Include in the description (use attachments if necessary):

The final product is filter media that has been cleaned and neutralized by using the ion-exchange and regeneration processes, and ready for reuse. Potable water provided to the facility by the local utility is purified by means of carbon filtering, UV light, and reverse osmosis. Softened water is used to backwash dirt, metals, and fine particulates from the filter media. The regeneration process strips exchanged ions (elution) by applying a heated solution of water and hydrochloric acid (HCl) to the cation filter media to exchange positively charged ions such as calcium, magnesium, and sodium, and applying a heated solution of water and sodium hydroxide (NaOH) to the anion filter media to exchange negatively charged ions such as sulfide, chloride, and silica. The filter media is rinsed and is ready to be used. Up to 50,000 gal/day of softened water, acid rinsate and base rinsate are combined, cooled, and neutralized to a level that is within specified discharged limits, and discharged into the municipal sewer system.

- a. The raw materials, intermediate products, by-products and final products and characteristics of each. Review any materials' risk of carcinogenicity, toxicity, mutagenicity and/or the potential to contribute to the formation of smog. Provide material safety data sheets (MSDS) if available;

Raw Materials: potable water, salt, 32% HCl (hydrochloric acid), and 50% NaOH (sodium hydroxide).

By-products: NO_x from the water heater, acid rinsate, base rinsate, and softened water.

Final products: clean and reusable filtering media.

None of these raw materials, by-products, or final products are known to be carcinogens, toxic to humans, or mutagens.

The gas-powered water heater is expected to discharge ± 0.0773 tons/year of NO_x, a component of smog.

- b. The step-by-step procedures or processes for manufacturing and/or assembling the product(s). Provide a flow diagram to illustrate procedures;

See Attachment B:

- c. The nature of the materials mentioned above in 4.1(a) as to whether or not the materials require special means of storage or handling;

HCl; Store in a non-metallic, airtight tank, away from bases. Keep cool and dry.

NaOH; Store in a non-metallic, airtight tank, away from acids. Keep cool and dry.

- d. List the machinery (new and/or existing) to be utilized by this project;

Reverse osmosis system, UV system, pumps and tanks; water softener and salt brine tanks, pumps and regenerators; air dryers and compressors; surge tanks and pumps; cation/anion separators, remixer and tanks; NaOH tank and pumps; neutralization tanks and pumps; HCl tank, pumps and scrubbers; natural gas-fired water heater.

- e. List any new buildings or other facilities to be utilized;

A 20' x 20' concrete slab will be constructed outside the northeast corner of the existing building as a tank pad for the proposed HCl tank; a 20' x 100' truck containment will be installed between the tank pad and existing paved access road to allow for routing filling of the HCl tank by means of a tank truck.

- f. List the size and contents of any anticipated aboveground or underground storage tank systems that may be constructed or utilized in support of facility operations;

One 12,000-gallon non-metallic tank to hold a 32% HCl solution will be installed just outside the northeast corner of the existing building.

One 12,000-gallon non-metallic tank to hold a 50% NaOH solution will be installed inside the existing building. In addition, two 13,000-gallon neutralization tanks, an 83,500-gallon soft water tank, an 83,500-gallon reverse osmosis product tank, and two 1,500-gallon tanks associated with the larger HCl and NaOH tanks will also be installed inside the existing building.

Future expansion may necessitate the installation of a second 83,500-gallon soft water tank and 83,500-gallon reverse osmosis product tank, plus two 6,500-gallon surge tanks inside the existing building.

- g. If this project represents an increase or decrease in production at an already existing facility, what will be the new rate of maximum production?

The existing facility is currently vacant.

- h. If this project represents a totally new facility at a new or existing site, what will be the maximum production rate?

Nalco anticipates producing between 8,000 ft³ and 15,000 ft³ of resin filter media per month.

- 5.2 Describe daily hours of plant operations and the number of operating shifts.

Nalco intends to begin the process with one shift per day, 8 to 10 hours per shift, and add a second shift only if required.

- 5.3 Provide a site plan of this project with:

- a. A north arrow;
- b. A scale of not less than one inch to 200 feet;
- c. Identity of the person responsible for the plan, including any licenses and their numbers;
- d. The acreage of the applicant's entire property and acreage of the proposed project;
- e. Property lines of entire property;
- f. Lines designating the proposed project area for which application is being made, clearly distinguished from present facilities and operating areas (if any);
- g. Existing and proposed roads, railroads, parking and loading areas, piers, wharfs, and other transportation facilities;
- h. Existing water bodies and wetlands and proposed dredge and fill areas, and;
- i. Existing and proposed drainage ways, gas, electric, sewer, water, roads, and other rights-of-way.

Please refer to Attachment C: Site Plan

- 5.4 How many acres of land in total are required for this proposed project?

Existing/ currently utilized/ developed land: 10.511 acres.

New land: 0 acres.

- 5.5 Has the property been involved with a state or federal site cleanup program such as Superfund, Brownfields, HSCA Voluntary Cleanup Program, RCRA Corrective Action, Aboveground or Underground Storage Tank Cleanup Programs? If so please specify which program.

NO. An ASTM E1527-05 Phase I Environmental Site Assessment (ESA) was conducted for the subject property in June 2011 by LandmarkJCM (now Landmark Science & Engineering). This ESA concluded that there were no ASTM Recognized Environmental Conditions (RECs) within the subject property at that time. A database search was ordered from EnviroSite Corporation (EnviroSite) in December 2015 and reviewed to verify the subject property was not listed on any State or Federal cleanup programs since the issuance of the June 2011 ESA.

The EDR Database Search included in the ESA listed the business name for the subject property as “Johnson Controls Interiors LLC” and listed as a RCRA generator, and on the Facility Index System/Facility Registration System (FINDS). According to the DNREC Delaware Environmental Navigator (DEN) website, the operator had an air permit for a 350 kW emergency generator, and no violations were identified with their permits. According to the ESA, no unauthorized releases of hazardous substances or petroleum products (e.g. Leaking Underground Storage Tanks, Emergency Response Notification System, Superfund Sites, and databases reporting hazardous materials users and/or hazardous waste generators) are recorded as being present within the subject property.

The December 2015 EnviroSite report identified Johnson Controls Interiors LLC of Michigan as the occupant of the subject property and was listed on four databases: RCRA Non-Gen; classified as a non-generator with no violations on record, AIRS-DE; a State list of facilities with air permits, FRS; a facility registration system sourced by the USEPA, and HWG-DE; a State list of hazardous waste generators.

A copy of the complete June 2011 Phase I ESA as well as the December 2015 EnviroSite database report are both available upon request.

According to the property owner, Johnson Controls Interiors, LLC was a former tenant that occupied the existing building and supplied interior components (dashboards and headliners) for Saturn automobiles being assembled at the nearby General Motors Boxwood plant in Newport.

- 5.6 With regard to environmental cleanup actions, has a Uniform Environmental Covenant, Final Plan of Remedial Action, or no further action letter been issued by the Department? If so are the planned construction activities consistent with the requirements or conditions stated in these documents?

No such covenant, Remedial Action, or “no further action” letters have been required, produced, or issued for the subject property. A copy of the complete June 2011 Phase I ESA as well as the December 2015 Envirosite database report are both available upon request.

PART 6A

ENVIRONMENTAL IMPACTS

Air Quality

- 6.1 Describe project emissions (new, as well as any increase or decrease over current emissions) by type and amount under maximum operating conditions:

NOx is a by-product of natural gas combustion in the water heater. The daily and annual amounts of NOx from the water heater was calculated as follows based on data provided by the manufacturer (AERCO) representative. See Attachment K for AERCO spreadsheet and details.

Acid (HCl) vapors are displaced and vented during the tank filling process. The daily and annual amounts of HCl vapors was calculated as follows based on data provided by the applicant:

**5,000 gal/mo x 0.133681 ft³/gal x 12mos/yr = 8020 ft³/yr displaced HCl vapor
The scrubbers are 99% effective so...**

8020 ft³/yr x 0.01 = 80.2 ft³/yr uncaptured HCl vapors

Assume 1 ft³ HCl vapors = 0.9 lbs/ft³

∴ 80.2 ft³/yr x 0.9 lbs/ft³ x 1yr/365 days = 0.198 lbs/day

∴ 80.2 ft³/yr x 0.9 lbs/ft³ x 1t/2000 lbs = 0.036 t/yr

Pollutant	Existing Emissions		Net Increase/Decrease		New Total Emissions		Percent Change (compare tons/year)
	Lbs/day	Tons/year	Lbs/day	Tons/year	Lbs/day	Tons/year	
NOx	0	0	0.4236	0.0773	0.4236	0.0773	100%
HCl vapor	0	0	0.198	0.036	0.198	0.036	100%

The proposed exterior HCl storage tank must be registered with the State; however, pre-scrubber HCl vapor emissions will be less than 10 lbs/day so the scrubbers do not have to be registered or permitted.

- 6.2 Describe how the above emissions change in the event of a mechanical malfunction or human error.

The acids and bases used in the process are moved by education which removes human error and minimizes the potential for spills or fume leaks. Gas-fired boiler emissions (NOx) could increase due to disrepair or lack of proper maintenance.

In the event of a fire, the proposed space already contains a fully operational sprinkler system, and the proposed process utilizes water throughout.

- 6.3 Describe any pollution control measures to be utilized to control emissions to the levels cited above in 5.1.

No explosive, thermal, toxic, corrosive, bacteriological, radiological, or hazardous materials will be used at the facility and/or are involved in the water treatment and filtering media treatment processes. The end products are clean water and regenerated filter media.

Proposed pollution prevention strategies include the installation of a 99% effective scrubber system on the HCl tank vent line to capture vented gases during tank fills; installation of containment structures under all storage tanks designed to hold 110% of their contents in the event of a leak or spill; and bollards will be installed at the exterior HCl tank to prevent accidental contact from vehicles.

Atmospheric discharges will be limited to vented HCl vapors during tank fills and NOx emissions from combustion in the natural gas-powered water heater. Nalco expects to use $\pm 5,000$ gal/mo of HCl which equates to 8,000ft³/yr. of displaced HCl vapor. The scrubbers are 99% effective so the annual emissions discharged is expected to 80 ft³/yr. Based on a (maximum) 16-hr production day, the water heater is expected to release a maximum of 0.0773 tons of NOx annually.

Solid waste materials generated from the water purification processes are limited to the filtering media (activated carbon) and typical solid waste materials such as packaging material waste, cardboard, paper and discarded office-related materials. Activated carbon filtering media is disposed of through a licensed contractor and transported out of state. Solid waste materials will be placed in the proper containers and removed by a local contractor.

- 6.4 Show evidence that applicant has, or will have, the ability to maintain and utilize this equipment listed in 5.3 in a consistently proper and efficient manner. (For example, provide college transcripts and/or records of training courses and summary of experience with this pollution control equipment of person(s) responsible for pollution control equipment, and/or provide copies of contracts with pollution control firms to be responsible for maintaining and utilizing this equipment.)

There has not been a need for specific-trained operators as the only process requirement is neutralizing the rinsate flow levels that is within specified discharge limits. The operators are trained on the process itself but there is no licensure. All Nalco employees have extensive safety training in excess of OSHA requirements with regard to the on-site activities and operations.

Water Quality

- 6.5 Describe wastewater discharge (new, as well as any increase or decrease over current discharge levels) due to project operations:

Pollutant	Current Discharge Concentration (ppm)	New or Changed Discharge Concentration (ppm)	Current Discharge		Net Increase/Decrease		New Total Emissions	
			Lbs/day	Tons/year	Lbs/day	Tons/year	Lbs/day	Tons/year
TDS	0	22,500	0	0	9382	1219	9382	1219
TSS	0	36	0	0	15	1.9	15	1.9
Phenolics	0	0.009	0	0	0.003	0.0004	0.003	0.0004
Ammonia	0	4.4	0	0	1.83	0.24	1.83	0.24
As	0	0.017	0	0	0.007	0.001	0.007	0.001
Cr	0	0.012	0	0	0.005	0.0007	0.005	0.0007
Cu	0	0.015	0	0	0.006	0.0008	0.006	0.0008
Mg	0	6.95	0	0	2.9	0.38	2.9	0.38
Hg	0	0.004	0	0	0.0017	0.0002	0.0017	0.0002
Ni	0	0.006	0	0	0.0025	0.0003	0.0025	0.0003
Se	0	0.014	0	0	0.0058	0.0007	0.0058	0.0007
Zn	0	0.115	0	0	0.048	0.0062	0.048	0.0062
Toluene	0	0.0014	0	0	0.0006	0.00008	0.0006	0.00008
Chloroform	0	0.006	0	0	0.0026	0.0003	0.0026	0.0003

Potable water provided to the facility by the local utility is purified and softened. Softened water is used to remove dirt, metals, and fine particulates from the filter media. The regeneration process strips exchanged ions (elution) by means of adding a warm solution of water and hydrochloric acid (HCl) to the cation filter media to exchange positively charged ions such as calcium, magnesium and sodium, and a warm solution of water and sodium hydroxide (NaOH) to the anion filter media to exchange negatively charged ions such as sulfide, chloride, and silica. The filter media is rinsed for re-use. Up to 50,000 gal/day of softened water, acid rinsate and base rinsate are combined, cooled, and neutralized to level that is within specified discharge limits, and discharged into the municipal sewer system.

The pollutants and estimated concentrations (parts per million) listed in the table above were based on recent data provided by the client from four sampling events collected and analyzed in 2015 at their current facility in Aston, Pennsylvania. The estimations were based on a forecasted maximum water usage of 50,000 gals/day and a five-day work week as follows: For example, the Total Dissolved Solids average was calculated using the three detected values divided by 3 tests $(3,460+20,100+44,000) \div 3 = 22,500$

$$22,500:1,000,000 = 1,125 \text{ gal for every } 50,000 \text{ gal used daily}$$

$$1,125 \text{ gal/day} \times 8.34 \text{ lbs/gal} = 9,382 \text{ lbs/day}$$

$$9,382 \text{ lbs/day} \times 260 \text{ work days/year} \times 1 \text{ ton}/2,000 \text{ lbs} = 1,219 \text{ tons/year}$$

According to the New Castle town manager, the potable water they provide is filtered twice through activated carbon filters due to a past government mandate that resulted from past foam leakage at the airport that contaminated the groundwater. Thus, their potable water is extraordinarily clean due to this process which must remove all traces of the foam. The discharges at the end of Nalco's processes at their proposed facility may be lower than those detected at their Aston facility as incoming water is not sampled and analyzed.

All the data is summarized in Attachment D.

- 6.6 Describe the current method of employee sanitary wastewater disposal and any proposed changes to that system due to this proposed project.

The subject property is already connected to the local municipal sewer system (Sewer District Northern-ASMT). No changes to the sewer service are being proposed in association with this project.

- 6.7 Identify the number, location, and name of receiving water outfall(s) of any and all process wastewater discharge (new or current) affected by this proposed project. Provide NPDES Permit Numbers for each discharge affected.

There are no water outfalls that will receive process wastewater discharges.

NPDES Permit Number DE 0051071 authorizes the town of New Castle to discharge stormwater to waters of the State located in New Castle County in accordance with the comprehensive storm water pollution prevention and management program (expires May 6, 2018).

- 6.8 If any effluent is discharged into a public sewer system, is there any pretreatment program? If so, describe the program.

The softened water, acid rinsate and base rinsate are combined, cooled, and neutralized to a level that is within specified discharge limits, and discharged into the municipal sewer system at a rate of up to 50,000 gal/day.

- 6.9 Stormwater:

- a. Identify the number, location, and name of receiving waters of stormwater discharges. Provide permit number for each discharge.

All stormwater discharges are managed by on-site systems specifically designed for and constructed in the Centerpoint Business Park.

NPDES Permit Number DE 0051071

- b. Describe the sources of stormwater run-off (roofs, storage piles, parking lots, etc).

The principal sources of stormwater discharges from the subject property are the building rooftop and the surrounding paved parking areas and access roads.

- c. Describe the amount of stormwater run-off increase over current levels that will result from the proposed project.

Existing impervious covers include ±106,400 ft² of paved surfaces and ±177,800 ft² of flat rooftop. No changes will be made to the building exterior and roof. A 400 ft² tank pad and a 2,000 ft² truck containment will be constructed just beyond the northeastern corner of the building adjacent to the paved loading area will increase existing impervious surfaces by only 0.85%. Thus, the increase in stormwater runoff from the current conditions will be *de minimus*.

- d. Describe any pollutants likely to be in the stormwater.

No pollutants will be discharged into stormwater as a result of this project.

- e. Describe any pollution control device(s) or management technique(s) to be used to reduce the amount of stormwater generated, and devices to improve the quality of the stormwater run-off prior to discharge.

No changes will be made to the building exterior and roof, and only a minor increase in paved areas is planned; a 20' x 20' tank pad and a 20' x 100' truck containment. Thus, there will be a *de minimus* increase in existing stormwater runoff quantity which will be diverted into the existing stormwater management area for on-site treatment.

- f. Describe any new or improved stormwater drainage system required to safely carry off stormwater without flooding project site or neighboring areas down gradient.

The existing stormwater management systems situated within the subject property and the surrounding commercial properties in the Centerpoint Business Complex were designed using the best management practices of that time for stormwater management and flood control. There is no history of either on-site or downstream flooding issues. The subject property is mapped as "Zone X" on the FEMA map, which indicates it to be in an area of minimal flood hazard, and located outside of any Flood Hazard Zones. (See Attachment H; maps and figures for additional information)

6.10 Will this project use a new water intake device, or increase the use (flow) from an existing intake device?

NO Any increase in water use required as a result of the proposed project will be provided by the City of New Castle, the municipal water supplier.

If yes, state:

- a. The volume of water to be withdrawn, and;
- b. Describe what will be done to prevent entrainment and/or entrapment of aquatic life by the intake device.

6.11 Will this proposed project result in a thermal discharge of water, or an increase in the flow or temperature of a current thermal discharge?

NO Up to 50,000 gal/day of softened water, acid rinsate and base rinsate will be combined, cooled, and neutralized to a level that is within specified discharge limits before being discharged into the municipal sewer system.

If yes, state:

- a. The volume of the new flow or increase from the existing thermal discharge, both in flow and amount of heat;
- b. How warm will the water be when it is discharged into a receiving waterway, discharge canal, or ditch, and what will be the difference in discharge temperature and ambient temperature (delta T) at various seasons of the year after all cooling water mechanisms have been applied to the hot water?
- c. The equipment and/or management techniques that will be used to reduce the thermal load of the discharge water.

6.12 Will any proposed new discharge or change in existing discharge cause, or have potential to cause, or contribute to, the exceedance of applicable criteria appearing in the [“State of Delaware Surface Water Quality Standards”](#)?

NO Up to 50,000 gal/day of softened water, acid rinsate and base rinsate will be combined, cooled, and neutralized to a level that is within specified discharge limits before being discharged into the municipal sewer system.

If yes, explain:

- 6.13 Describe any oils discharged to surface waters due to this proposed project.

No oils will be discharged into any surface waters as a result of this project.

- 6.14 Describe any settleable or floating solid wastes discharged to surface waters due to this project.

No settleable or floating solid wastes will be discharged into any surface waters as a result of the project.

- 6.15 Show evidence that the applicant has, or will have, the ability to maintain and utilize any water pollution control equipment listed in questions 5.5 through 5.14 in a consistently proper and efficient manner. (For example, provide operator license numbers, college transcripts and/or training courses and summary of prior experience with this pollution control equipment of person(s) responsible for pollution control equipment, and/or provide copies of contracts with pollution control firms.)

There has not been a need for specific-trained operators as the only process requirement is neutralizing the pH of the rinsate flow. The operators are trained on the process itself but there is no licensure. All Nalco employees have extensive safety training in excess of OSHA requirements with regard to the on-site activities and operations.

- 6.15 Estimate the amount of water to be used for each specified purpose including cooling water. State daily and maximum water use in the unit of gallons per day for each purpose and source of water. State if water use will vary with the seasons, time of day, or other factors.

The facility will use 35,000 to 50,000 gal/day to purify and neutralize filter media by using the ion-exchange and regeneration processes. Water usage will vary in accordance with operating shifts and workload. Potable water provided to the facility by the local utility is purified by means of carbon filtering, ultra violet light, and reverse osmosis, and softened with salt brine. Softened water is used to backwash dirt, metals, and fine particulates from the filter media. The regeneration process strips exchanged ions (elution) by applying a heated solution of water and hydrochloric acid (HCl) and a heated solution of water and sodium hydroxide (NaOH) to exchange positively-charged and negatively-charged ions. The filter media is rinsed and is ready to be reused. Up to 50,000 gal/day of softened water, acid rinsate and base rinsate are combined, cooled, and neutralized to a level that is within specified discharge limits, and discharged into the municipal sewer system.

6.16 Identify the source of water needed for the proposed project, including potable water supplies.

The proposed project will have no need for non-potable water. All potable water will be provided by the City of New Castle, the municipal water supplier.

6.17 Are wells going to be used?

NO The City of New Castle, the municipal water supplier, currently provides potable water to the subject property and will provide any additional water on an as-needed basis.

If yes:

- a. Identify the aquifer to be pumped and the depth, size and pumping capacity of the wells.
- b. Has a permit been applied for to do this?
- c. How close is the proposed well(s) to any well(s) on adjacent lands?

Solid Waste

6.18 Will this project result in the generation of any solid waste?

YES

If yes, describe each type and volume of any solid waste (including biowastes) generated by this project, and the means used to transport, store, and dispose of the waste(s).

Solid waste materials to be generated:

Activated carbon filter media will be on site long enough to arrange for shipment by a licensed contractor to an out-of-state facility.

Packing material, cardboard, paper, pallets, and other inert solids will be generated at an estimated rate of approximately 100-120 tons/year. This solid waste will be stored in containers for regular transport to a single-stream recycling facility.

6.19 Will there be any on-site recycling, re-use, or reclamation of solid wastes generated by this project?

YES

If yes, describe:

Used activated carbon filter media is removed from leased filters and temporarily stored on site until shipping arrangements can be made to transport to an out-of-state facility by a licensed contractor for repurposing. Nalco intends to participate in the available single-stream recycling program for the conventional solid waste that is generated.

6.20 Will any waste material generated by this project be destroyed on-site?

NO

If yes, how will that be done?

Hazardous Waste

- 6.21 Will this proposed project result in the generation of any hazardous waste as defined by the [“Delaware Regulations Governing Hazardous Waste”](#)?

NO

If yes, identify each hazardous waste, its amount, and how it is generated:

- 6.22 Describe the transport of any hazardous waste and list the permitted hazardous waste haulers that will be utilized.

No hazardous waste will be produced.

- 6.23 Will the proposed project cause the applicant to store, treat, and/or dispose of hazardous waste?

NO

If yes, describe:

- 6.24 Does the applicant currently generate any hazardous waste at this site?

NO

If yes, describe:

Habitat Protection

6.25 What is the current use of the land that is to be used for the proposed project?

The subject property is located within the Centerpoint Business Complex in New Castle, Delaware which is appropriately zoned as "Industrial". Environmental scientists from Landmark Science & Engineering, Inc. investigated the subject property in December 2015 for the presence of wetlands and to assess its potential ability to support populations of state or federal rare, threatened, or endangered species.

Currently the subject property consists of an existing 177,844 ft² steel and masonry commercial structure surrounded by paved parking and access roads, and maintained lawn areas with planted ornamental vegetation. A narrow hedgerow along the southern property line buffered the subject property from the adjacent active Norfolk & Southern rail line. A scrub shrub area with scattered scrub-shrub vegetation surrounding a large man-made stormwater management pond was situated in the panhandle in the southwestern portion of the subject property. The subject property was bordered by Centerpoint Boulevard to the north, Norfolk & Southern Railroad to the south, and other commercially-developed properties to the east and west.

No rare plant or animal species or their habitats were observed within the subject property.

No wetlands or Waters of the United States were encountered within the subject property. The combined state and federal wetland map identifies the man-made stormwater management pond at the westernmost end of the southwestern panhandle, along with the second stormwater management pond just west of the adjacent structure to the west as excavated palustrine ponds with unconsolidated-bottoms (PUBHx). These two basins were excavated during site development for the purpose of detaining surface water runoff during storm events from these two properties. The 1992 historical aerial photo depicts a single large stormwater basin that was later reconfigured into the two present-day basins. The 1977 historical aerial photo depicts no historical pond or basin that predates the development of the present-day business park. Stormwater management ponds excavated in upland areas for treatment and retention purposes are not considered regulated wetlands.

According to the USDA Web Soil Survey the subject lot is underlain completely with the Urban Land (Up) soil type which consists of well drained soils on uplands that have been highly disturbed during urbanization and is not considered hydric by the USDA Natural Resource Conservation Service. A representative soil boring in the northeastern portion of the subject property revealed 10YR 4/3 silt loam in the upper six inches, followed by

10YR 5/4 silt clay to a depth of twelve inches, and 10YR 6/3 silt clay to eighteen inches. No hydric soil conditions were encountered within the subject property at the time of the site investigation.

Most of the subject property is relatively flat and lies between the 30 and 34 foot contour lines. Site elevations range from 40 feet at the top of a man-made earthen berm along the western property line, down to 14 feet around the man-made stormwater management pond in the western end of the southwestern panhandle, according to the LiDAR Contour Map.

Landscaping and planted vegetation around the existing structure included turf grasses plus Sedum, Ornamental Panic Grasses, Winterberry, Winged Euonymus, Inkberry, Purple-leaf Plum, White Pine, Japanese Black Pine, Crapemyrtle, Red Maple, Bradford Pear and Pin Oak. Common vegetation observed in the narrow hedgerow along the southern boundary included Bigtooth Aspen, Bradford Pear, Crabapple, Black Locust, Black Cherry, Sassafras, Eastern Redcedar, Autumn-Olive, Bush Honeysuckle, Oriental Bittersweet, Japanese Honeysuckle, and Goldenrods. Common vegetation observed in the old field and scrub-shrub area surrounding the man-made stormwater management pond included Yellow-Poplar, Persimmon, Black Willow, Apple, Groundseltree, Shining Sumac, Old Field Blackberry, Dogbane, Meadow Fescue, Orchard Grass, Broomsedge, Evening Primrose, Yellow Bristlegrass, White Heath Aster, Daisy, Chinese Bushclover, Narrowleaf Plantain, Blue Vervain, Queen Anne's Lace, Crown Vetch, Japanese Honeysuckle, and Goldenrods. Common Reed, Cattail, and Soft Rush were observed in and around the perimeter of the man-made stormwater pond. No dominant hydrophytic plant communities were observed within the subject property beyond the edge of the man-made stormwater management pond.

For details, maps and figures, see Attachment E: Rare, Threatened, and Endangered Species and Habitat Assessment Letter, and Attachment F: Wetlands Investigation Letter.

6.26 Will the proposed project result in the loss of any wetland habitat?

NO There are no planned grading changes or additions to the existing building exterior. A small concrete tank pad and a paved access driveway will be constructed in a maintained lawn area off the northeastern corner of the existing structure.

If yes, describe:

6.27 Will any wastewater and/or stormwater be discharged into a wetland?

NO The existing stormwater management pond in the easternmost portion of the property will intercept surface water runoff during storm events.

If yes, will the discharge water be of the same salinity as the receiving wetlands?

6.28 Will the proposed project result in the loss of any undisturbed natural habitat or public use of tidal waters?

NO The only planned exterior modification is the installation of a small concrete tank pad and a paved access driveway to be constructed in a maintained lawn area off the northeastern corner of the existing structure adjacent to the existing paved loading dock facility.

If yes, how many acres?

6.29 Do threatened or endangered species (as defined by the DNREC and/or the Federal Endangered Species Act) exist at the site of the proposed project, or immediately adjacent to it?

NO The subject property and adjacent lands are developed and in active commercial use. An active railroad borders the subject property to the south.

If yes, list each species:

6.30 Will this proposed project have any effect on these threatened or endangered species (as defined by the DNREC and/or the Federal Endangered Species Act).

NO The proposed project will be contained within the existing structure on an existing commercial parcel in an existing business park.

If yes, explain:

6.31 What assurances can be made that no threatened or endangered species exist on the proposed project site?

A Wetland Investigation and a Rare, Threatened, and Endangered Species Investigation was conducted on the subject property by environmental scientists from Landmark Science & Engineering, Inc. in December of 2015. The investigation was conducted by a Landmark Wetland Scientist and their Delaware-Recognized Qualified Bog Turtle Surveyor. The investigations concluded that the subject property consisted of a large commercial structure surrounded by paved parking and access areas, with maintained lawn areas and scattered native and non-native ornamental vegetation

beyond. A narrow isolated hedgerow dominated by native and non-native invasive species was observed along the southern property boundary providing a buffer from the adjacent active rail line. An early successional old field area with a narrow hedgerow and a man-made stormwater detention pond were observed in the southeastern panhandle of the property. No state or rare species, or their habitats, were observed within the subject property. Due to its narrow width, size, vegetation composition, and fragmentation, the on-site hedgerow provides negligible habitat value for rare or endangered species.

For details, maps and figures, see Attachment E: Rare, Threatened, and Endangered Species and Habitat Assessment Letter, and Attachment F: Wetlands Investigation Letter.

- 6.32 Describe any filling, dredging, or draining that may affect nearby wetlands or waterways.

The only planned exterior modification is the installation of a small concrete tank pad and a paved access driveway to be constructed in a maintained lawn area off the northeastern corner of the existing structure adjacent to the existing paved loading dock facility. No filling, dredging, or draining is needed nor planned for this project.

- 6.33 If dredging is proposed, how much will occur and where will the dredged materials go for disposal?

No dredging of any kind is proposed or necessary in association with this project.

Other Environmental Effects

- 6.34 Describe any noticeable effects of the proposed project site including: heat, glare, noise, vibration, radiation, electromagnetic interference, odors, and other effects.

Nalco intends to lease ±54,800 ft² of vacant warehouse space within a larger existing commercial structure, and retrofit the space to accommodate tanks, pumps, pipelines, mixers, separators, filters, reverse osmosis systems, water heater, storage areas, office areas, and other features that support their proposed process. Any generated heat or noise will be contained and controlled within the structure. The process produces no glare, radiation or electromagnetic interference.

- 6.35 Describe what will be done to minimize and monitor such effects.

Interior heat will be controlled by means of air-conditioning. Interior noise will be attenuated by the existing structure and insulation. The installation of an active and passive scrubber system on the HCl tank vent line will capture 99% of the vented gases during tank fills.

- 6.36 Describe any effect this proposed project will have on public access to tidal waters.

The project will have no effect on public access to tidal waters as no tidal waters are present within or adjacent to the subject property.

- 6.37 Provide a thorough scenario of the proposed project's potential to pollute should a major equipment malfunction or human error occur, including a description of backup controls, backup power, and safety provisions planned for this project to minimize any such accidents.

The acids and bases used in the process are moved by education which removes human error and minimizes the potential for spills or fume leaks.

Tanks and pipes are non-metallic and double-lined. In the event of a tank leak, there will be containment structures that hold 110% of the tank contents. Curbs will be placed throughout the processing areas to capture or divert any spills or leaks in the other areas. Bollards will be installed to prevent vehicles from accidentally contacting the HCl tank and fill ports.

In the event that the scrubber system fails during the tank filling process, additional HCl vapor as a result of displacement would be vented into the atmosphere.

Gas-fired boiler emissions (NO_x) may increase due to disrepair or lack of proper maintenance.

In the event of a fire, the proposed space already contains a fully operational sprinkler system, and the proposed process utilizes water throughout.

No explosive materials will be used so there is no risk of an explosion.

The existing space already contains a fully operational sprinkler system, and water is used throughout most of the processes.

In the event of major equipment malfunction or human error, the resulting worst case scenario would be minor flooding. In the event that the scrubber system failed at the exact time that the HCl tank was being refilled, the displaced HCl vapor in the top of the tank would be vented into the atmosphere as it was being displaced.

- 6.38 Describe how the air, water, solid and hazardous waste streams, emissions, or discharge change in the event of a major mechanical malfunction or human error.

A major mechanical malfunction would have no effect on the air, water, solid waste stream, or hot water system as the affected processes would simply be shut down. In the event that the scrubber system failed at the exact time that the HCl tank was being refilled, the displaced HCl vapor in the top of the tank would be vented into the atmosphere as it was being displaced. In the event of major equipment malfunction or human error, the resulting worst case scenario would be a water or rinsate spilling inside their respective containment areas. In the event of a fire, the facility already contains a fully operational sprinkler system, and water is a major component in the processes.

PART 6B

ENVIRONMENTAL OFFSET PROPOSAL REDUCTION CLAIM

Is applicant claiming the right to have a reduced offset proposal due to past voluntary improvements as defined in the “Regulations Governing Delaware’s Coastal Zone”?

NO

If yes, provide an attachment to the application presenting sufficient tangible documentation to support your claim.

PART 6C

ENVIRONMENTAL OFFSET PROPOSAL

If the applicant or the Department finds that an Environmental Offset Proposal is required, the proposed offset project shall include all the information needed to clearly establish:

- A. A qualitative and quantitative description of how the offset project will “*clearly and demonstrably*” more than offset the negative impacts from the proposed project.
- B. How and in what period of time the offset project will be carried out.
- C. What the environmental benefits will be and when they will be achieved.
- D. What scientific evidence there is concerning the efficacy of the offset project in producing its intended results?
- E. How the success or failure of the offset project will be measured in both the short and long term.
- F. What, if any, negative impacts are associated with the offset project.
- G. How the offset will impact the attainment of the Department’s environmental goals for the Coastal Zone and the environmental indicators used to assess long-term environmental quality within the Coastal Zone.

The applicant has agreed to purchase one (1) Emission Reduction Credit (ERC) necessary as required for the issuance of a Delaware Coastal Zone permit. The credit will be for one (1) NOx non-ozone season credit currently held in the Delaware Economic Development Office (DEDO) bank which will be released when all the agreed-upon conditions are met. Please refer to Attachment M for details.

Additional Offset Proposal Information for the Applicant

1. The offset proposals must “*clearly and demonstrably*”¹ more than offset any new pollution from the applicant’s proposed project. The applicant can claim (with documentation) evidence of past voluntary environmental investments (as defined in the Regulations) implemented prior to the time of application. Where the Department concurs with the applicant that such has occurred, the positive environmental improvement of the offset proposal against the new negative impact can be somewhat reduced.
2. The applicant must complete the Coastal Zone Environmental Impact Offset Matrix. This matrix can be found on the CZA web page (<http://www.dnrec.delaware.gov/Admin/CZA/CZAHome.htm>), or by clicking on [this link](#). On page one, the applicant must list all environmental impacts in the column labeled “Describe Environmental Impacts.” In the column to the immediate right, the applicant should reference the page number of the application or attachment which documents each impact listed. In the “Describe Environmental Offset Proposal” column, applicant must state what action is offsetting the impact. The offset action shall be referenced by page number in the column to the right to show how the offset will work. The applicant shall not utilize the far right column. *Please ensure the matrix is complete, detailed, and as specific as possible, given the allotted space. Also, thoroughly proof-read to ensure there are no spelling or grammatical errors.* The applicant must submit a completed matrix both in hardcopy and electronic form.
3. Please note: the entire offset proposal, including the matrix, shall be available to the public, as well as the evidence of past voluntary environmental enhancements.

See Attachment J for Environmental Impact Offset Matrix

¹ For purposes of this requirement, the DNREC will interpret the phrase “clearly and demonstrably” to mean an offset proposal that is obviously so beneficial without detailed technical argument or debate. The positive environmental benefits must be obviously more beneficial to the environment than the new pollution that minimal technical review is required by the Department and the public to confirm such. The total project must have a positive environmental impact. The burden of proof is on the applicant.

PART 7

ECONOMIC EFFECTS

Construction

- 7.1 Estimate the total number of workers for project construction and the number to be hired in Delaware.

It was estimated that ±30 contractor, subcontractor and specialty employees will be temporarily hired in order to retrofit the interior of the existing building and construct the tank pad and access driveway. Nalco also estimated that ±34 full-time employees will be hired to work on-site once the facility is fully operational.

- 7.2 Estimate the weekly construction payroll.

\$24,000/week (estimate)

- 7.3 Estimate the value of construction supplies and services to be purchased in Delaware.

\$1,700,000 (estimate)

- 7.4 State the expected dates of construction initiation and completion.

Expected start date: April 15, 2016

Expected completion date: September 15, 2016

- 7.5 Estimate the economic impact from the loss of natural habitat, or any adverse economic effects from degraded water or air quality from the project on individuals who are directly or indirectly dependent on that habitat or air or water quality (e.g. commercial fishermen, waterfowl guides, trappers, fishing guides, charter or head boat operators, and bait and tackle dealers).

Nalco intends to lease a large portion of an existing structure located within an existing business complex. No new construction or building additions are required; therefore, no adverse economic impacts are expected as there will be no loss of natural habitat or habitat quality as a result of this project.

Operations

- 7.6 State the number of new employees to be hired as a direct result of this proposed project and how many of them will be existing Delaware residents and how many will be transferred in from other states.

Nalco stated that 18% of the ±34 new, full-time employees already live in Delaware, and that the remainder will commute or relocate once the facility is fully operational.

- 7.7 If employment attributable to the proposed project will vary on a seasonal or periodic basis, explain the variation and estimate the number of employees involved.

The proposed positions are intended to be full-time professional, permanent positions; not seasonal or periodic.

- 7.8 Estimate the percent distribution of annual wages and salaries (based on regular working hours) for employees attributable to this project:

<u>Wage/salary</u>	<u>Percent of employees</u>
<\$10,000	-0-
\$10,000-14,999	-0-
\$15,000-24,999	-0-
\$25,000-34,999	14.2
\$35,000-49,999	34.3
\$50,000-64,999	5.8
\$65,000-74,999	14.7
\$75,000-99,999	23.5
>\$100,000	8.8

- 7.8 Estimate the annual taxes to be paid in Delaware attributable to this proposed project:

State personal income taxes:	\$ 100,000.
State corporate income taxes	\$ 61,000.
Local and school district taxes:	\$ 37,500.

PART 8

SUPPORTING FACILITIES REQUIREMENTS

Describe the number and type of new supporting facilities and services that will be required as a result of the proposed project, including, but not limited to:

a. Roads = **0**

b. Bridges = **0**

c. Piers and/or docks = **0**

d. Railroads = **0**

e. Microwave towers = **0**

f. Special fire protection services not now available = **0**

g. Traffic signals = **0**

h. Sewer expansion = **0**

i. Energy related facilities expansion = **0**

j. Pipelines = **0**

PART 9

AESTHETIC EFFECTS

- 9.1 Describe whether the proposed project will be located on a site readily visible from a public road, residential area, public park, or other public meeting place (such as schools or cultural centers).

The proposed project is will be located almost entirely inside a vacant space within an existing commercial structure situated within an existing business park. Except for the addition of a 12,000 exterior storage tank, the proposed project will be completely contained within the existing structure and will not be visible from any public road, residential area, public park, or any other public meeting place.

- 9.2 Is the project site location within a half mile of a place of historic or scenic value?

YES. Both the National Registry of Historic Places and the Delaware Historical and Cultural Affairs (DHCA) Historic Properties List identify the Penn Farm of the Trustees of the New Castle Common 0.5 miles to the north and the Hangar at Bellanca Airfield 0.4 miles to the northeast; The DHCA Historic Properties List identifies Bridge 303 0.5 miles to the southeast.

The DHCA also identified several historic properties (Walnut Hill, Walnut Cottage, Spring Garden, Bellanca Aircraft Main Plant, and Dobbinsville Site) that have been demolished and redeveloped. See Attachment G for details.

- 9.3 Describe any planned attempt to make the proposed facility aesthetically compatible with its neighboring land uses. Include schematic plans and/or drawings of the proposed project after it is complete, including any landscaping and screening.

The proposed project will be contained within the existing commercial structure, and surrounded by similar facilities within Centerpoint Buisness Complex. The subject property and surrounding lands are appropriately zoned for "Industrial" so the project is compatible with the existing land uses of the neighboring properties. The only exterior alteration is the addition of an exterior storage tank and a small paved driveway for tank access. No other changes are proposed to the existing building exterior which is already landscaped and regularly maintained.

PART 10

EFFECTS ON NEIGHBORING LAND USES

- 10.1 How close is the nearest year-round residence to the site of this proposed project?

A residential subdivision is situated approximately 0.5 miles east of 800 Centerpoint Boulevard, the proposed project location. A new residential subdivision is currently being constructed to the south beyond the active railroad line and wooded hedgerow. The subject property is located within an already established business park.

- 10.2 Will this proposed project interfere with the public's use of existing public or private recreational facilities or resources?

The proposed project will not interfere at all with any existing public or private recreational facilities or resources. The subject property is located within an existing structure in an existing business complex.

- 10.3 Will the proposed project utilize or interfere with agricultural areas?

No. The subject property is located within an existing business complex.

- 10.4 Is there any possibility that the proposed project could interfere with a nearby existing business, commercial or manufacturing use?

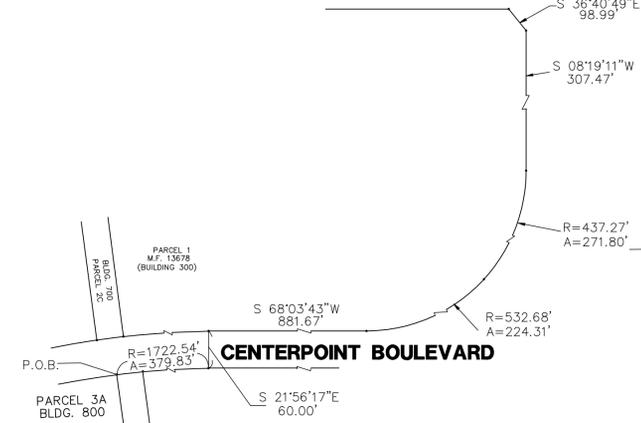
No. The subject property is zoned as "Industrial" and is located within Centerpoint Business Complex. A second business park (Airport Industrial Park) is located just to the west.

Please refer to Attachment H (maps and figures) for additional information related to Part 10.

END OF APPLICATION

**PART 11:
ATTACHEMENTS TO FOLLOW**

DEL RTE. 273



INSET MAP NO SCALE

Survey Certification
 To Centerpoint 800, LLC, U.S. PPM Financing, Inc. its successors and/or assigns, Fidelity National Title Insurance Company, Drinker Biddle & Reath LLP and Morris, Nichols, Arns & Tunnell LLP.

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2011 Minimum Standard Detail Requirements for ALTA/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 2, 3, 4, 7a, 7c, 8, 9, 11a, 13, 14, 16, and 18 of Table A thereof. The field work was completed on April 1, 2014.

Surveyor's signature: _____ License Number: 579

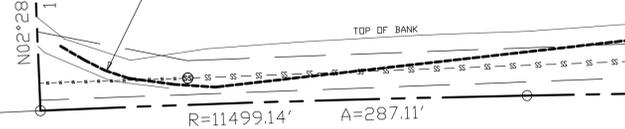
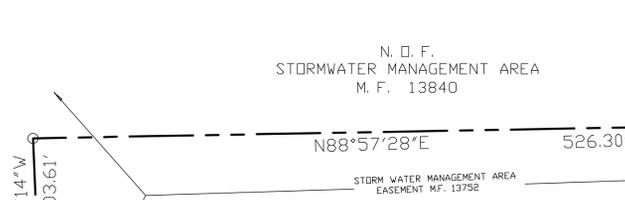
LEGAL DESCRIPTION FOR 800 CENTERPOINT BLVD., NEW CASTLE, DELAWARE Tax Parcel no. 21-013.00-099

ALL that certain piece, parcel or tract of land, with the improvements thereon, situate in the City of New Castle, New Castle County, State of Delaware, being known as Parcel 3A on the Record Minor Subdivision Plan of Parcels 3A, 4A, 2C and Storm Water Management Area, Centerpoint Business Park, dated March 31, 1999 and recorded April 28, 1999 in the Office of the Recorder of Deeds in and for New Castle County and State of Delaware of Microfilm No. 13840, and being more particularly bounded and described in accordance with said plan as follows, to-wit: BEGINNING at a point on the southeasterly side of Centerpoint Boulevard (60 feet wide), said point being a common corner for Parcel 3B and lands herein being ascribed and located the following six courses and distances from the southeasterly end of a fillet joining the southerly side of Delaware Route 273 (80 feet wide) with the westerly side of Centerpoint Boulevard (60 feet wide):

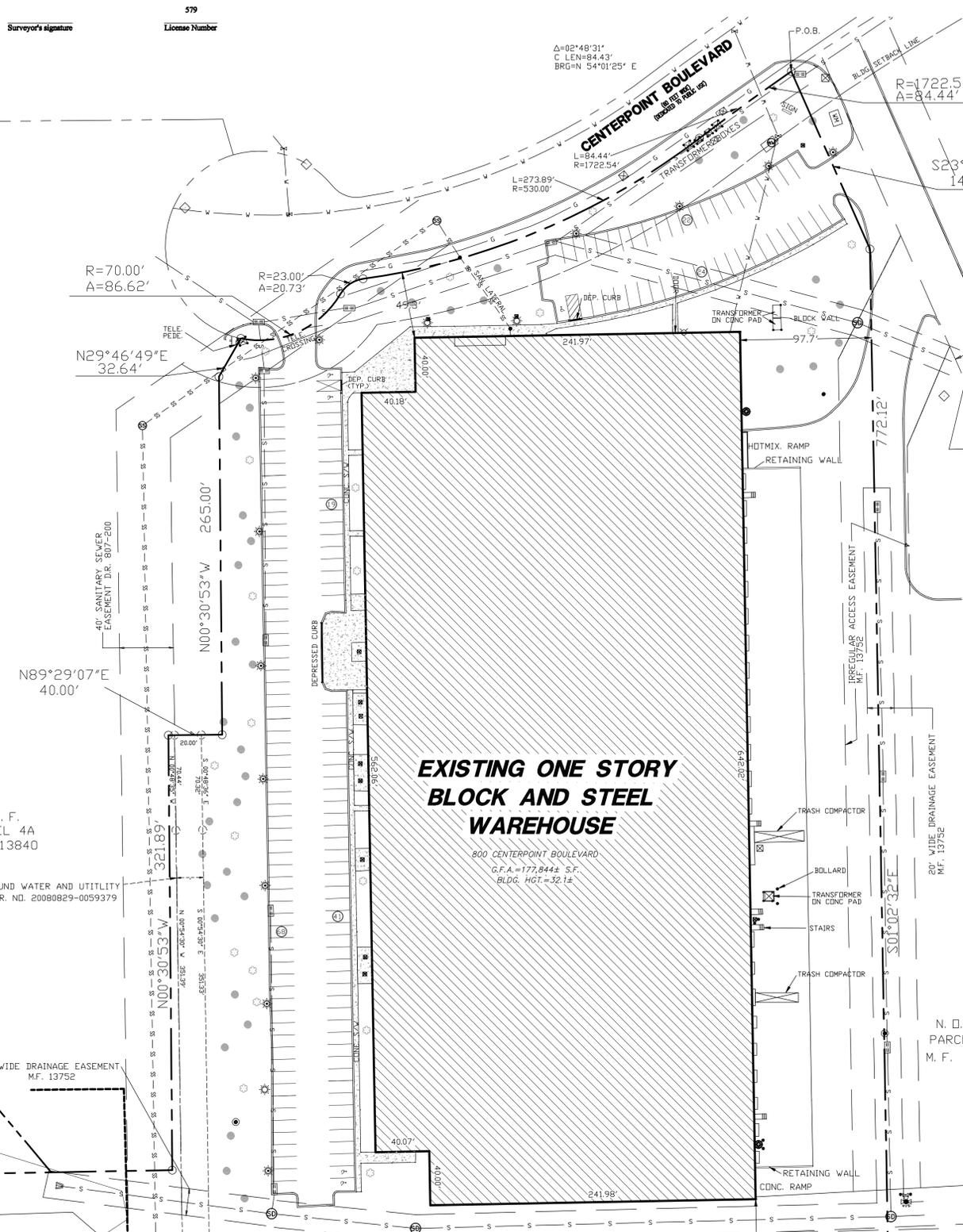
- (1) South 08 degrees 19 minutes 11 seconds West, 307.47 feet to a point of curvature; thence
 - (2) By an arc curving to the right having a radius of 437.27 feet an arc distance of 271.80 feet to a point of compound curvature; thence,
 - (3) By an arc curving to the right having a radius of 532.68 feet, an arc distance of 224.31 feet to a point of tangency; thence,
 - (4) South 68 degrees 03 minutes 43 seconds West, 881.67 feet to a point of curvature; thence,
 - (5) Crossing Centerpoint Boulevard, South 21 degrees 56 minutes 17 seconds East, 60.00 feet to a point on the southerly side of Centerpoint Boulevard; thence, with same,
 - (6) By an arc curving to the left having a radius of 1722.54 feet, an arc distance of 379.83 feet, to the Point of Beginning.
- Thence, from said Point of Beginning the following fourteen courses and distances:
- (1) South 23 degrees 56 minutes 17 seconds East, 143.94 feet to a point; thence,
 - (2) South 01 degrees 02 minutes 32 seconds East, 772.12 feet to a point in line of lands now or formerly of the Delaware Division of P.B. & W.R.R.; thence, with same the next two courses and distances,
 - (3) South 88 degrees 57 minutes 28 seconds West, 767.58 feet to a point of curvature; thence,
 - (4) By an arc curving to the left having a radius of 11499.14 feet, an arc distance of 287.11 feet to a corner for the Storm Water Management Area; thence, with same the next course and distance,
 - (5) North 02 degrees 28 minutes 14 seconds West, 103.61 feet to a corner for Storm Water Management Area; thence, in part with same and in part with Parcel 4A,
 - (6) North 88 degrees 57 minutes 28 seconds East, 526.30 feet to a corner for the aforesaid Parcel 4A; thence, with same the next four courses and distances,
 - (7) North 00 degrees 30 minutes 53 seconds West, 321.89 feet to a point; thence,
 - (8) North 89 degrees 29 minutes 07 seconds East, 40.00 feet to a point; thence,
 - (9) North 00 degrees 30 minutes 53 seconds West, 265.00 feet to a point; thence,
 - (10) North 29 degrees 46 minutes 49 seconds East, 32.64 feet to a point on the cul-de-sac at the end of Centerpoint Boulevard; thence, with same the next four courses and distances,
 - (11) By an arc curving to the left having a radius of 70.00 feet, an arc distance of 86.62 feet to a point of reverse curvature; thence,
 - (12) By an arc curving to the right having a radius of 23.00 feet, an arc distance of 20.73 feet to a point of reverse curvature; thence,
 - (13) By an arc curving to the left having a radius of 530.00 feet, an arc distance of 273.89 feet to a point of reverse curvature; thence,
 - (14) By an arc curving to the right having a radius of 1722.54 feet, an arc distance of 84.44 feet to the Point of Beginning.

Containing within said metes and bounds 10.51 acres of land, be they the same, more or less. TOGETHER WITH the use of an irregular cross access easement with Parcel 50 crossing course (2) above. SUBJECT to half of a 20 foot wide drainage easement partially along course (2) above, a 20 foot wide drainage easement crossing course (2) above and terminating in the storm water management area easement, a 20 foot wide drainage easement crossing courses (2) and (3) above, a storm water management area easement crossing courses (5) and (6) above, an irregular sanitary sewer easement crossing courses (2) and (5) above, and a 40 foot wide sanitary sewer easement crossing courses (7), (8) and (11) above.

N. O. F. PARCEL 4A M. F. 13840
 UNDERGROUND WATER AND UTILITY AGREEMENT INSTR. NO. 20080829-0059379



N. O. F. DELAWARE DIVISION OF P. B. & W. R. R. (70' WIDE)



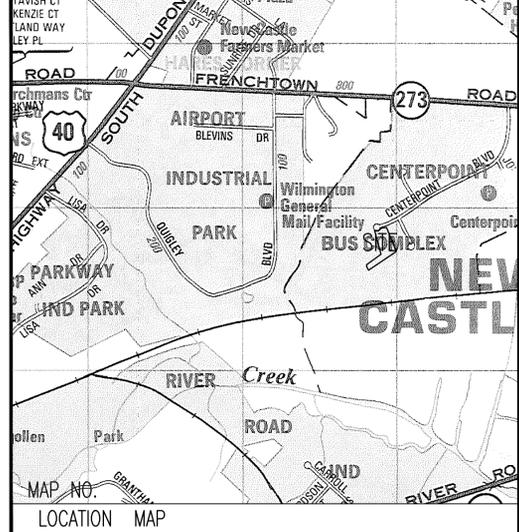
EXISTING ONE STORY BLOCK AND STEEL WAREHOUSE

800 CENTERPOINT BOULEVARD
 G.F.A. = 177,844± S.F.
 BLDG. HGT. = 32.1±

N. O. F. PARCEL 5D M. F. 13752

SCHEDULE B - PART II
 Fidelity National Title Insurance Company
 Title No. 38748
 Effective Date: March 19, 2014

- 800 Parcel:
8. Utility Easement Agreement with the Delmarva Power & Light Company, dated December 7, 1988 and recorded February 21, 1989 in the Office of the Recorder of Deeds aforesaid at Deed Record Book 833, Page 314. (APPLICABLE BLANKET)
 9. Agreement with New Castle County regarding sanitary sewer service, dated April 5, 1989 and recorded May 5, 1989 in the Office aforesaid at Deed Record Book 866, Page 247. (APPLICABLE NOT PLOTTABLE)
 10. Development Grant in favor of The Diamond State Telephone Company, executed August 30, 1988 and recorded October 21, 1988 in the Office aforesaid at Deed Record Book 778, Page 142. (APPLICABLE BLANKET)
 11. The legal operation and effect of Certificate of Annexation of the Mayor and Council of New Castle (Pursuant to 65 Del. Laws, Chapter 459), recorded August 3, 1988 in the Office aforesaid at Deed Record Book 741, Page 96 (with accompanying Plan of Lands About to Be Annexed into the City of New Castle, recorded May 19, 1993 in the Office aforesaid at Microfilm No. 11667). (APPLICABLE NOT PLOTTABLE)
 12. Declaration of Restrictions dated August 2, 1988 and recorded August 5, 1988 in the Office aforesaid at Deed Record Book 742, Page 285. (APPLICABLE NOT PLOTTABLE)
 17. The legal operation and effect of the Certificate of Annexation of the Mayor and Council of New Castle Pursuant to 65 Del. Laws, Chapter 459 recorded in the Office aforesaid on June 12, 1996 at Deed Record Book 2117, Page 0056. (NOT APPLICABLE)
 18. Rights of others in and to the use of that portion of the property lying within the boundaries of the cross access easement and the drainage easement as the same are shown and noted on the Record Plan and on the 800 Survey. (APPLICABLE SHOWN ON PLAN)
 19. Agreements with New Castle County regarding sanitary sewer service and rights-of-way, dated and recorded in the Office aforesaid as follows: (a) recorded November 10, 1980 at Deed Record R, Volume 112, Page 67 (with Plot Plan appended thereto at Microfilm No. 5772); and (b) dated November 6, 1980 and recorded December 8, 1980 at Deed Record Y, Volume 112, Page 229 (with Plot Plan appended thereto at Microfilm No. 5801). (APPLICABLE SHOWN ON PLAN)
 20. Notes, conditions, setback lines, and easements as shown and set forth on the Record Minor Subdivision Plan of Parcels 2A, 2C, 3, 4, 5A, Private Open Space and Airport Holdings Parcel, Centerpoint Business Park, dated December 29, 1998 and recorded January 22, 1999 in the Office of the Recorder of Deeds aforesaid at Microfilm No. 13752;
 - a. Record Minor Subdivision Plan of Parcels 2A, 2C, 3, 4, 5A, Private Open Space and Airport Holdings Parcel, Centerpoint Business Park, dated December 29, 1998 and recorded January 22, 1999 in the Office of the Recorder of Deeds aforesaid at Microfilm No. 13752;
 - b. Record Minor Subdivision Plan of Parcels 1, 2A, 2B and 2C Centerpoint Business Complex, dated August 4, 1998, revised October 13, 1998 and recorded October 16, 1998 at Microfilm No. 13678;
 - c. Record Minor Subdivision Plan for Parcel 2, Centerpoint Business Complex, dated March 5, 1996, revised March 11, 1996, and recorded March 21, 1996 at Microfilm No. 12789;
 - d. Record Minor Subdivision Plan for Centerpoint Business Complex, dated September 11, 1995 and recorded October 17, 1995 at Microfilm No. 12604; and
 - e. Land Development Plan of Centerpoint Business Park, dated July 1, 1988, last revised July 22, 1988, and recorded September 7, 1988 at Microfilm No. 9377.
 21. Underground Water and Utility Agreement granted to the Municipal Services Commission of the City of New Castle, Delaware, dated August 15, 2008 and recorded at Instrument No. 20080829-0059379. (APPLICABLE SHOWN ON PLAN)
 22. Underground Grant given to Verizon Delaware LLC recorded May 8, 2009 at Instrument No. 20090508028616. (APPLICABLE BLANKET)



PLAN DATA

1. TAX PARCEL:	21-013.00-099
2. SOURCE OF TITLE:	D.R. 2675-27
3. GROSS AREA:	10,511± Acres
4. EXISTING ZONING:	21-1 (Industrial)
5. WATER RESOURCE PROTECTION: This property is not located within a Water Resource Protection Area (WRPA). See WRPA map for Wilmington-Newark Area, sheet 2 of 3, dated 1993, Revised February 2006.	
6. NO 100-YEAR FLOOD PLAIN exists on this parcel, in accordance with Flood Insurance Rate Map Panel 165 of 475, dated January 17, 2007.	
7. POSTAL ADDRESS: 800 Centerpoint Boulevard New Castle, DE 19801	
8. BUILDING RESTRICTIONS:	
SETBACKS:	Front=35' Side=0' Rear=20'

ATTACHMENT A
ALTA/ACSM LAND TITLE PLAN
 OF
800 CENTERPOINT BOULEVARD
 PREPARED FOR
CENTERPOINT 800, LLC
 CITY OF NEW CASTLE, NEW CASTLE COUNTY, DELAWARE

M & Z
McBRIDE & ZIEGLER, INC.
 LAND SURVEYORS • PLANNERS • ENGINEERS
 2807 EASTBURN CENTER, NEWARK, DELAWARE 19711
 PHONE (302) 737-9138 • FAX (302) 737-2610

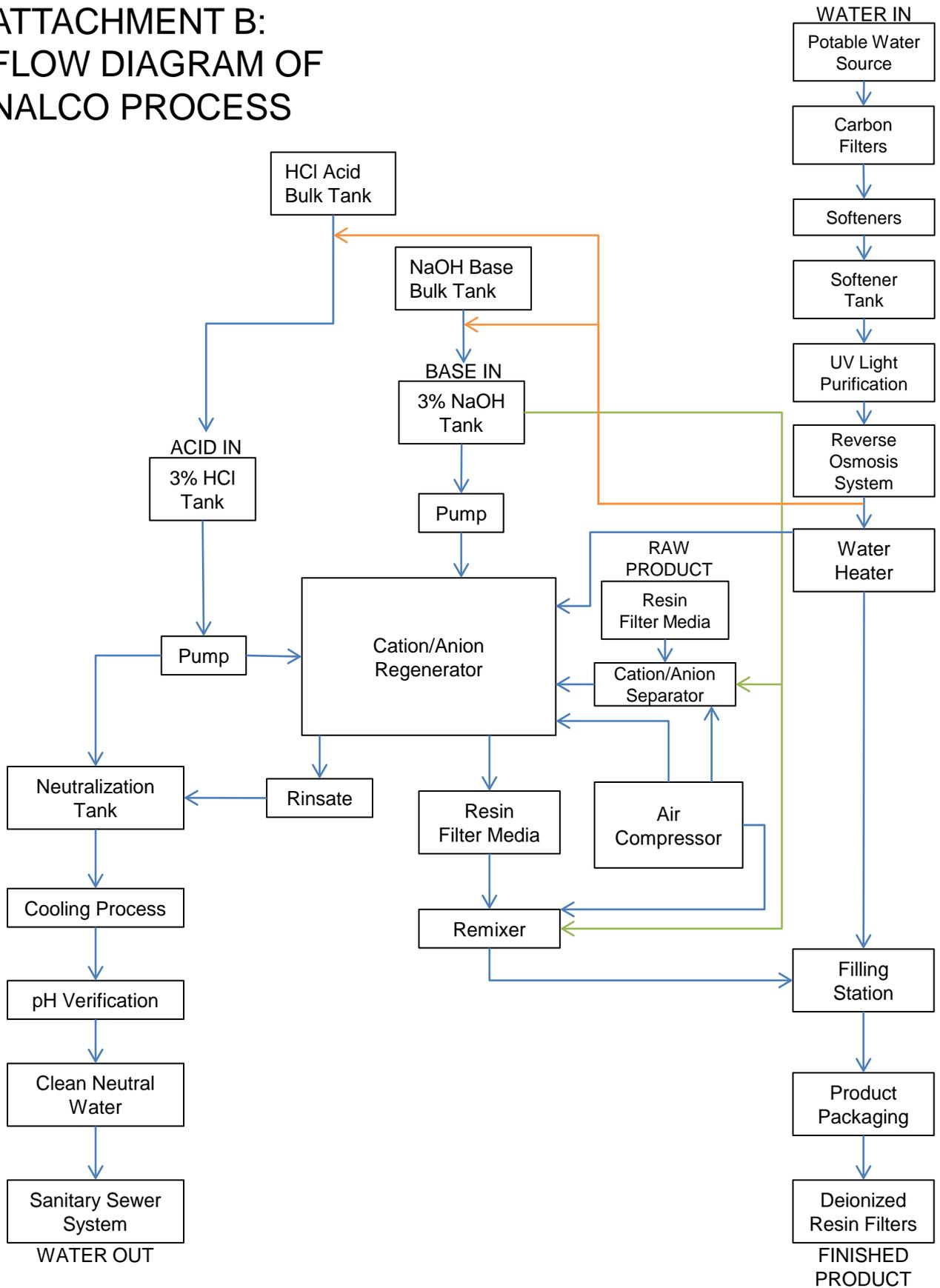
APPROVED BY: _____ PROFESSIONAL ENGINEER / LAND SURVEYOR

SURVEY BY: K.Z.	CHECKED BY: K.Z.
DESIGN BY: .	SCALE: 1" = 50'
DRAWN BY: T.J.W.	DATE: MARCH 31, 2014
DWG. NO.: 9803389-	SHEET 1 of 1

F:\SURVEY-PROJECTS\1980-2000\9803389\1389414_2014.dwg

REV. NO.	DATE	REVISION

ATTACHMENT B: FLOW DIAGRAM OF NALCO PROCESS



Attachment D: Wastewater and Outfall Analytical Results Summary

	DATE AND LOCATION OF SAMPLING				ESTIMATIONS				
	DETECTED ANALYTES	OUTFALL 001 09/15/15	QTRLY OUTFALL 001 COMP 08/13/15	WASTEWATER 06/18/15	QUARTERLY WASTEWATER + EFFLUENT 01/13/15	AVERAGE	GAL/DAY (Based on 50,000 gal/day)	LBS/DAY (1 gal = 8.34 lbs)	TONS/YEAR (260 work days/yr)
GEN CHEMISTRY	Chemical Oxygen Demand (COD)	NA	NA	NA	45				
	Biochemical Oxygen Demand (BOD)	ND	6.84	10.7	ND				
	Total Dissolved Solids (TDS)	3,460	20,100	NA	44,000	22,500	1,125	9382	1219
	Total Suspended Solids	24	28	46	46	36	1.8	15	1.9
	Total Recoverable Phenolics	NA	NA	0.018	ND	0.009	0.00045	0.0038	0.0004
	pH	NA	NA	NA	7.52				
	Ammonia	NA	NA	2.62	6.17	4.4	0.22	1.83	0.24
METALS	Arsenic	ND	0.0272	NA	0.008	0.017	0.00085	0.007	0.001
	Calcium	27.1	32	34.5	23.2				
	Chromium	NA	NA	0.0134	0.0107	0.012	0.0006	0.005	0.0007
	Copper	0.0188	0.0077	0.0071	0.0272	0.015	0.00075	0.006	0.0008
	Magnesium	7.73	6.39	8.85	4.81	6.95	0.35	2.9	0.38
	Mercury	0.00042	0.0031	0.000699	0.0115	0.004	0.0002	0.0017	0.0002
	Nickel	0.0056	0.0096	0.0098	ND	0.006	0.0003	0.0025	0.0003
	Selenium	ND	0.043	NA	ND	0.014	0.0007	0.0058	0.0007
VOCs	Zinc	0.0777	0.138	0.167	0.0788	0.115	0.00575	0.048	0.0062
	Toluene	NA	NA	NA	0.0014	0.0014	0.00007	0.0006	0.00008
	Chloroform	NA	NA	NA	0.00612	0.00612	0.0003	0.0026	0.0003

Units: mg/liter (PPM), NA: Not analyzed, ND: Not detected, Analyses by Eurofins Lancaster Laboratories Environmental, and provided by Nalco



January 4, 2016

C 2729

Nalco – An Ecolab Company
2 New Road
Aston, Pennsylvania 19014

Attention: Mr. Thomas S. Beatty

**SUBJECT: RARE, THREATENED, AND ENDANGERED SPECIES/HABITAT
ASSESSMENT INVESTIGATION FOR 800 CENTERPOINT BOULEVARD
CENTERPOINT BUSINESS COMPLEX
NEW CASTLE, DELAWARE**

Dear Mr. Beatty:

This letter is to inform you that Environmental Scientists from Landmark Science & Engineering investigated the aforementioned subject property to assess its potential ability to support populations of state or federal rare, threatened, or endangered species. The investigation was conducted on December 29, 2015.

No rare plant or animal species, or their habitats, were observed within the subject property. Additionally, no wetlands or waters of the United States were encountered within the subject property.

The 10.51±- acre subject property is located within the Centerpoint Business Complex located in New Castle, Delaware (see attached location map and aerial). The subject property is further identified as New Castle County Tax Parcel No. 21-013.00-099 located at approximately 39° 39' 33.08" N and 75° 35' 35.49" W. The subject property is zoned as 21I (Industrial) and consists of an existing 177,844 square foot warehouse surrounded by paved parking and landscaped maintained lawn. Early successional old field, a narrow hedgerow, and a man-made stormwater detention pond were also present along the southern property boundary. The subject property is bordered by Centerpoint Boulevard to the north, adjacent warehouse buildings to the east and west, and the Norfolk Southern railroad line to the south.

According to the USDA Web Soil Survey the subject lot is underlain completely with the Urban Land (Up) soil type. The Urban Land series consists of well drained soils on uplands that have been highly disturbed during urbanization and is not considered hydric by the USDA Natural Resource Conservation Service.

C 2729

Mr. Thomas S. Beatty

January 4, 2016

Page Two

Ornamental plantings in the lawn areas surrounding the building included Red Maple, Pin Oak, Eastern White Pine, Japanese Black Pine, Boxwood, Winged Euonymus, and Inkberry and Winterberry Holly. Common vegetation within the hedgerow along the southern property boundary included Persimmon, Tulip Poplar, Black Willow, Black Locust, Red Maple, Black Cherry, Multi-flora Rose, Blackberry, and Japanese Honeysuckle. The early successional old field along the southwest property boundary was dominated by Meadow Fescue, Broomsedge, Claspingleaf Dogbane, Chinese Bush Clover, and Goldenrod.

A man-made stormwater detention pond was present within the southwestern corner of the subject property. This pond was excavated for stormwater storage when the adjacent property to the west was developed as a commercial facility. Although runoff from the surrounding lawn areas still drain into the pond as designed through rip-rap lined culverts, the hydrology of the pond has been manipulated by beaver activity.

Evidence of recent beaver activity included trails, cut-marks, and a soft-rush lined dam located within the western portion of the pond. The pond's vegetative community was dominated by Black Willow, Red Maple, Common Reed, Cattail, Broomsedge, and soft rush. The pond ranged in water depths from 2 inches to several feet in its deepest portion and its substrate was firm throughout. A comprehensive vegetation list may be found below in Table 1.

The hedgerow along the southern property boundary contains exotic/ invasive species typically associated with disturbed soils conditions. Additionally the hedgerow has been fragmented as a result of the surrounding industrial development and the railroad tracks. Because of its isolation and small size (with a maximum of about 200 feet from any given edge habitat), the subject property would not offer quality breeding habitat for any forest interior dwelling species (or FIDS).

Likewise, the old field was also small in size (approximately 300' x 180'), isolated from other such habitat type, and dominated by a non-native plant species that establishes in previously-disturbed areas (Chinese Bush-Clover). Thus, the on-site old field is also unlikely to be supporting any populations of rare species.

No wetlands were present within the subject property and the man-made detention pond lacked all 3 habitat criterion associated with potential Bog Turtle habitat; (a tussock-dominated vegetative community, mucky substrates, and groundwater-fed hydrology). The on-site pond was firm throughout, fed by stormwater runoff from the surrounding areas, and tussock-forming vegetation was not present aside from scattered Soft Rush. Thus, no potential Bog Turtle habitat was present within the subject property.

C 2729

Mr. Thomas S. Beatty

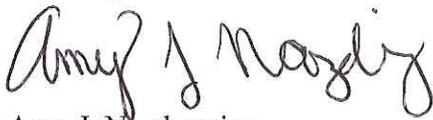
January 4, 2016

Page Three

Additionally, no large nests (such as those of the Bald Eagle or Osprey) were observed within the subject property.

Due to the narrow width, size and fragmentation of the natural habitats within the property (hedgerow and old field), the subject property provides limited habitat value for rare or endangered species. A letter concurring with the results of this investigation was received by the Delaware Division of Fish and Wildlife on December 31, 2015 and is enclosed for your convenience. If you have any questions please feel free to give us a call at (302) 323-9377, ext. 145.

Sincerely



Amy J. Nazdrowicz

Environmental Scientist, DE Recognized Qualified Bog Turtle Surveyor

Extension 145, amyn@landmark-se.com

Enclosures: Representative Site Photographs
2013 Aerial Photograph
Combined State and Federal Wetlands Map
Historical Aerial Photographs
Soil Map
DNREC Division of Fish & Wildlife Letter



Maintained lawn and ornamental plantings along the parking lot within the western portion of the property in December 2015



Maintained lawn and ornamental plantings along the parking lot within the northern portion of the property in December 2015



A stand of dogbane within the old field present within the western portion of the property in December 2015



A stand of Goldenrod and Broomsedge within the old field present within the western portion of the property in December 2015



Representative photograph of the hedgerow along the southern property boundary in December 2015



Representative photograph of the hedgerow along the southern property boundary in December 2015



Fresh beaver chew marks on saplings near the eastern edge of the pond located within the southwestern portion of the property



A rip-rap-lined culvert within the eastern portion of the on-site stormwater detention pond in the southwestern portion of the property



Surface inundation as a result of recent beaver activity within the eastern portion of the on-site stormwater detention pond



Phragmites and Cattail stands dominated the on-site pond in December 2015



The soft rush-lined beaver dam observed in the western portion of the pond in December 2015



The central basin in the western portion of the on-site pond in December 2015



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF FISH & WILDLIFE
89 Kings Highway
Dover, Delaware 19901

**OFFICE OF THE
DIRECTOR**

**Phone: (302) 739-9910
Fax: (302) 739-6157**

December 31, 2015

Amy Nazdrowicz
Landmark Science & Engineering
100 W. Commons Blvd
Suite 301
New Castle, Delaware 19720

Dear Ms. Nazdrowicz,

Re: LSE 2015 NALCO Ion Exchange Water Treatment Facility, TP 2101300099

Thank you for contacting the Wildlife Species Conservation and Research Program about information on rare, threatened and endangered species, unique natural communities, and other significant natural resources as they relate to the above referenced project.

A review of our database indicates that there are currently no records of state-rare or federally listed plants, animals or natural communities at this project site.

We are continually updating our records on Delaware's rare, threatened and endangered species, unique natural communities and other significant natural resources. If the start of the project is delayed more than a year past the date of this letter, please contact us again for the latest information.

Please feel free to contact me with any questions or if you require additional information.

Sincerely,

Kate Fleming
Wildlife Biologist/Environmental Review Coordinator
(302) 735-8658; fax: (302) 653-3431; Kate.Fleming@state.de.us

(See invoice on next page)

***We Bring You Delaware's Great Outdoors
through Science and Service***

Find us on Facebook <http://www.facebook.com/DelawareFishWildlife>



Legend
Parcel Boundary

Figure 2
800 Centerpoint Boulevard
Aerial Imagery - 2013

0 100 200 400 Feet

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100 W. Commons Blvd.
New Castle, DE 19720
302-323-9377

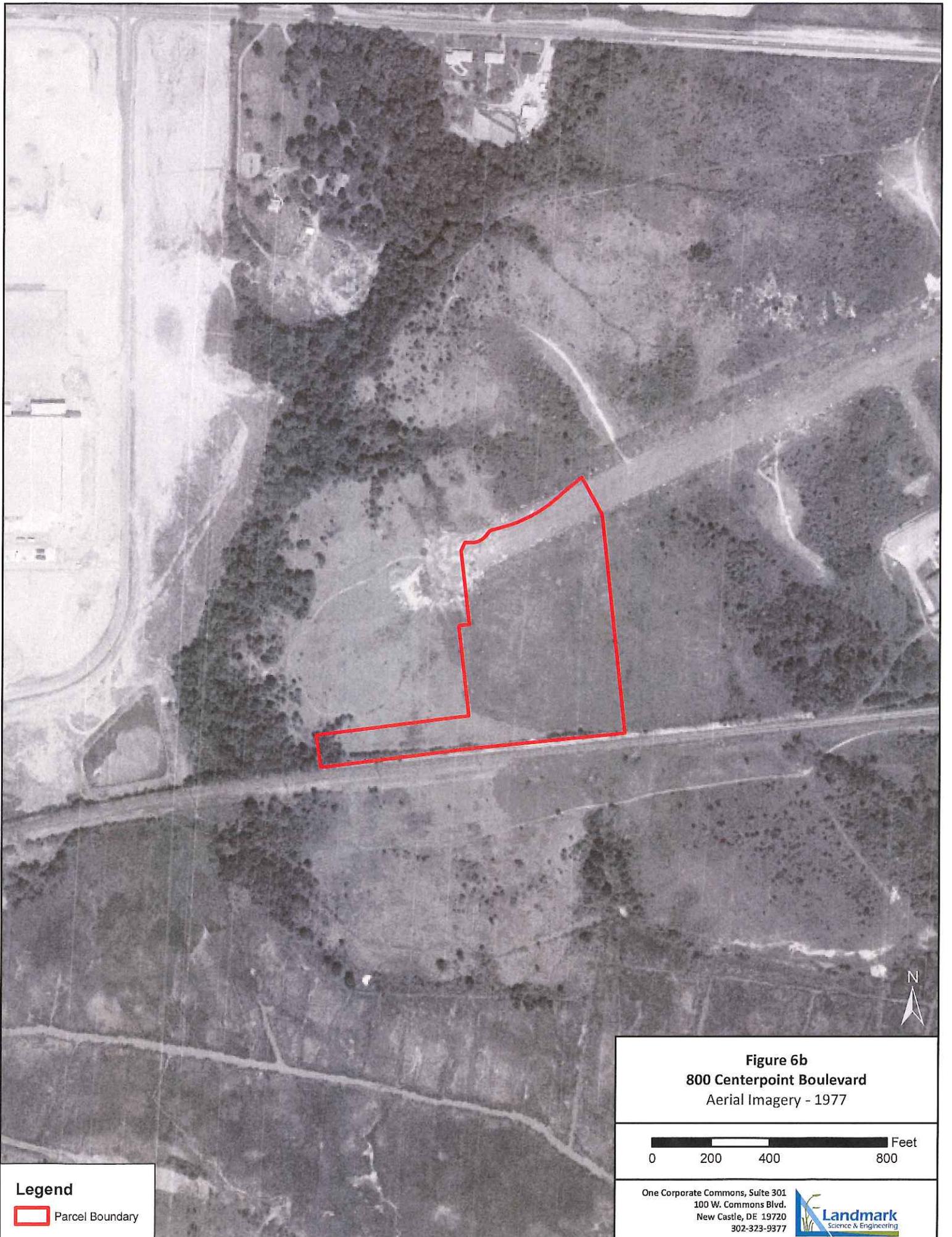
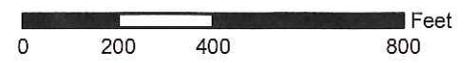


Figure 6b
800 Centerpoint Boulevard
Aerial Imagery - 1977



Legend
 Parcel Boundary

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100 W. Commons Blvd.
New Castle, DE 19720
302-323-9377





Figure 6a
800 Centerpoint Boulevard
Aerial Imagery - 1992

0 100 200 400 Feet

Legend

 Parcel Boundary

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100 W. Commons Blvd.
New Castle, DE 19720
302-323-9377





Legend

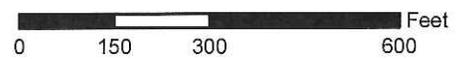
 SWMP

Delaware Wetlands

 Delaware Wetlands

 Parcel Boundary

800 Centerpoint Boulevard
 Wetlands - USFWS NWI, SWMP, and
 Delaware Division of Watershed Steward



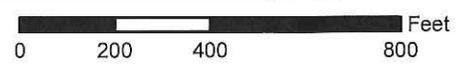
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 100 W. Commons Blvd.
 New Castle, DE 19720
 302-323-9377



Map data: Esri, DeLorme, Garmin, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, Aero, and the GIS User Community



Figure 3
800 Centerpoint Boulevard
Soils



Legend

- Parcel Boundary
- Soils - New Castle

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 New Castle, DE 19720
 302-323-9377





December 22, 2015

C 2729

Nalco - An Ecolab Company
2 New Road
Aston, PA 19014

Attention: Mr. Thomas S. Beatty

**SUBJECT: WETLAND INVESTIGATION FOR 800 CENTERPOINT BOULEVARD
CENTERPOINT BUSINESS COMPLEX, NEW CASTLE, DELAWARE**

Dear Mr. Beatty:

As part of the application process for a Coastal Zone Permit for the property identified above, Landmark Science & Engineering has investigated the subject property for the presence of wetlands. The investigation was performed on December 21, 2015 in accordance with the U.S. Army Corps of Engineers (USACE) Wetland Delineation Manual (Technical Report Y-87-1) and the Regional Supplement to the USACE Wetland Delineation Manual: Atlantic and Gulf Coastal Region.

No wetlands or Waters of the United States were encountered within the subject property.

The subject property is located at 800 Centerpoint Boulevard in the Centerpoint Business Complex and is further identified as New Castle County Tax Parcel No. 21-013.00-099. The subject property consisted of an existing 177,844 square-foot commercial structure surrounded by paved parking and access areas, maintained lawn areas with scattered ornamental trees and vegetation. A scrub shrub area with scattered scrub-shrub vegetation surrounding a large man-made stormwater management pond was situated in the panhandle in the southwestern portion of the subject property. A narrow hedgerow was observed along the southern boundary. The subject property was bordered by Centerpoint Boulevard to the north, Norfolk & Southern Railroad to the south, and other commercially-developed properties to the east and west. See Figures 1 and 2 for details.

Landscaping and planted vegetation around the existing structure included turf grasses plus Sedum, Ornamental Panic Grasses, Winterberry, Winged Euonymus, Inkberry, Purple-leaf Plum, White Pine, Japanese Black Pine, Crapemyrtle, Red Maple, Bradford Pear and Pin Oak. Common vegetation observed in the narrow hedgerow along the southern boundary included Bigtooth Aspen, Bradford Pear, Crabapple, Black Locust, Black Cherry, Sassafras, Eastern Redcedar, Autumn-Olive, Bush Honeysuckle, Oriental Bittersweet, Japanese Honeysuckle, and Goldenrods. Common vegetation observed in the old field and scrub-shrub area surrounding the man-made stormwater management

C 2729

Nalco - An Ecolab Company

December 22, 2014

Page Two

pond included Yellow-Poplar, Persimmon, Black Willow, Apple, Groundseltree, Shining Sumac, Old Field Blackberry, Dogbane, Meadow Fescue, Orchard Grass, Broomsedge, Evening Primrose, Yellow Bristlegrass, White Heath Aster, Daisy, Chinese Bushclover, Narrowleaf Plantain, Blue Vervain, Queen Anne's Lace, Crown Vetch, Japanese Honeysuckle, and Goldenrods. Common Reed, Cattail, and Soft Rush were observed in and around the perimeter of the man-made stormwater pond. No dominant hydrophytic plant communities were observed within the subject property beyond the edge of the man-made stormwater management pond.

According to the USDA Web Soil Survey the subject lot is underlain completely with the Urban Land (Up) soil type. The Urban Land series consists of well drained soils on uplands that have been highly disturbed during urbanization and is not considered hydric by the USDA Natural Resource Conservation Service. A representative soil boring in the northeastern portion of the subject property revealed 10YR 4/3 silt loam in the upper six inches, followed by 10YR 5/4 silt clay to a depth of twelve inches, and 10YR 6/3 silt clay to eighteen inches. No hydric soil conditions were encountered within the subject property at the time of the site investigation. See Figure 3 for details.

Most of the subject property is relatively flat and lies between the 30 and 34 foot contour lines. Site elevations range from 40 feet at the top of a man-made earthen berm along the western property line, down to 14 feet around the man-made stormwater management pond in the western end of the southwestern panhandle, according to the LiDAR Contour Map (Figure 4).

According to the Wilmington South 7.5 Minute USGS Quadrangle, a small pond was mapped in the westernmost end of the southwestern panhandle of the subject property. This pond was excavated for stormwater storage when the adjacent property to the west was developed as a commercial facility. This pond was later reconfigured into two separate larger stormwater ponds that are present today. These two ponds store surface water runoff from the subject property and the adjacent property to the west during storm events. Historically, runoff from the subject property flowed overland westward and drained into a small unnamed stream off-site. According to historical aerial photos, the subject property was developed between 1997 and 2002, and post-development stormwater was thereafter conveyed to the current stormwater basins. No evidence of wetland hydrology indicators were observed during the site investigation.

The combined state and federal wetland map (Figure 5) identifies the man-made stormwater management pond at the westernmost end of the southwestern panhandle, along with the second stormwater management pond just west of the adjacent structure to the west as excavated palustrine ponds with unconsolidated-bottoms (PUBHx). These two basins were excavated during site development for the purpose of detaining surface water runoff during storm events from these two

C 2729

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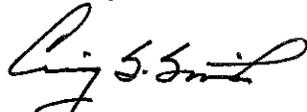
December 22, 2014

Page Three

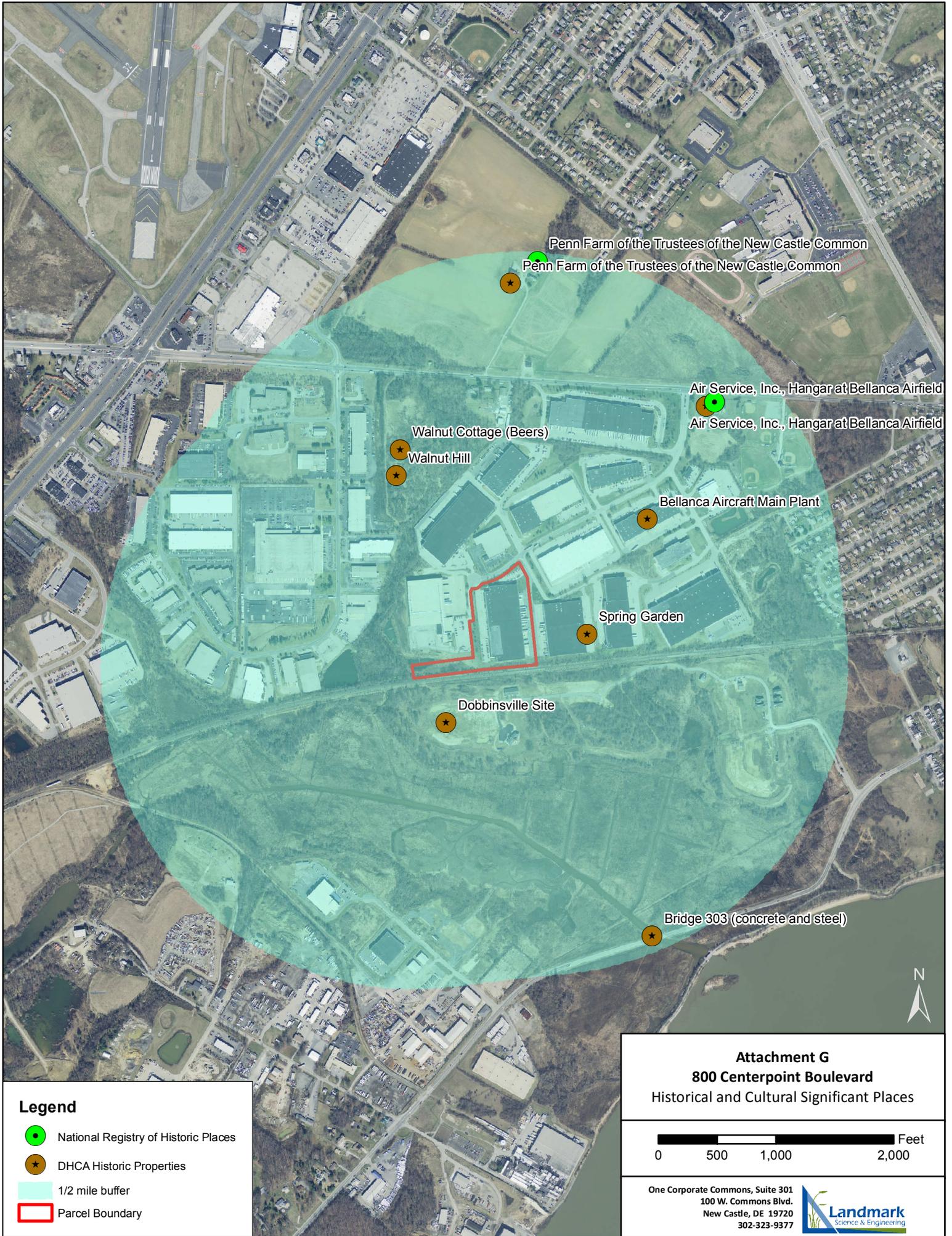
properties. The 1992 historical aerial photo (Figure 6a) depicts a single large stormwater basin that was later reconfigured into the two present-day basins. The 1977 historical aerial photo (Figure 6b) depicts no historical pond or or basin that predates the development of the present-day business park. Stormwater management ponds excavated in upland areas for treatment and retention purposes are not considered regulated wetlands.

Based on the above information it is the professional opinion of Landmark Science & Engineering that no state or federally regulated wetlands, or Waters of the U.S. are located within the subject property. If you have any questions please feel free to contact us at (302) 323-9377.

Sincerely,

A handwritten signature in black ink, appearing to read "Craig S. Smith". The signature is written in a cursive style with a large initial "C".

Craig S. Smith
Environmental Scientist



Penn Farm of the Trustees of the New Castle Common
 Penn Farm of the Trustees of the New Castle Common

Air Service, Inc., Hangar at Bellanca Airfield
 Air Service, Inc., Hangar at Bellanca Airfield

Walnut Cottage (Beers)
 Walnut Hill

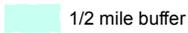
Bellanca Aircraft Main Plant

Spring Garden

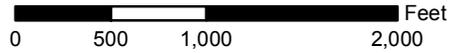
Dobbinsville Site

Bridge 303 (concrete and steel)

Legend

-  National Registry of Historic Places
-  DHCA Historic Properties
-  1/2 mile buffer
-  Parcel Boundary

Attachment G
800 Centerpoint Boulevard
 Historical and Cultural Significant Places



One Corporate Commons, Suite 301
 100 W. Commons Blvd.
 New Castle, DE 19720
 302-323-9377



ATTACHMENT H
MAPS & FIGURES



Figure 1
800 Centerpoint Boulevard
 Location



Legend

 Parcel Boundary

Source: HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

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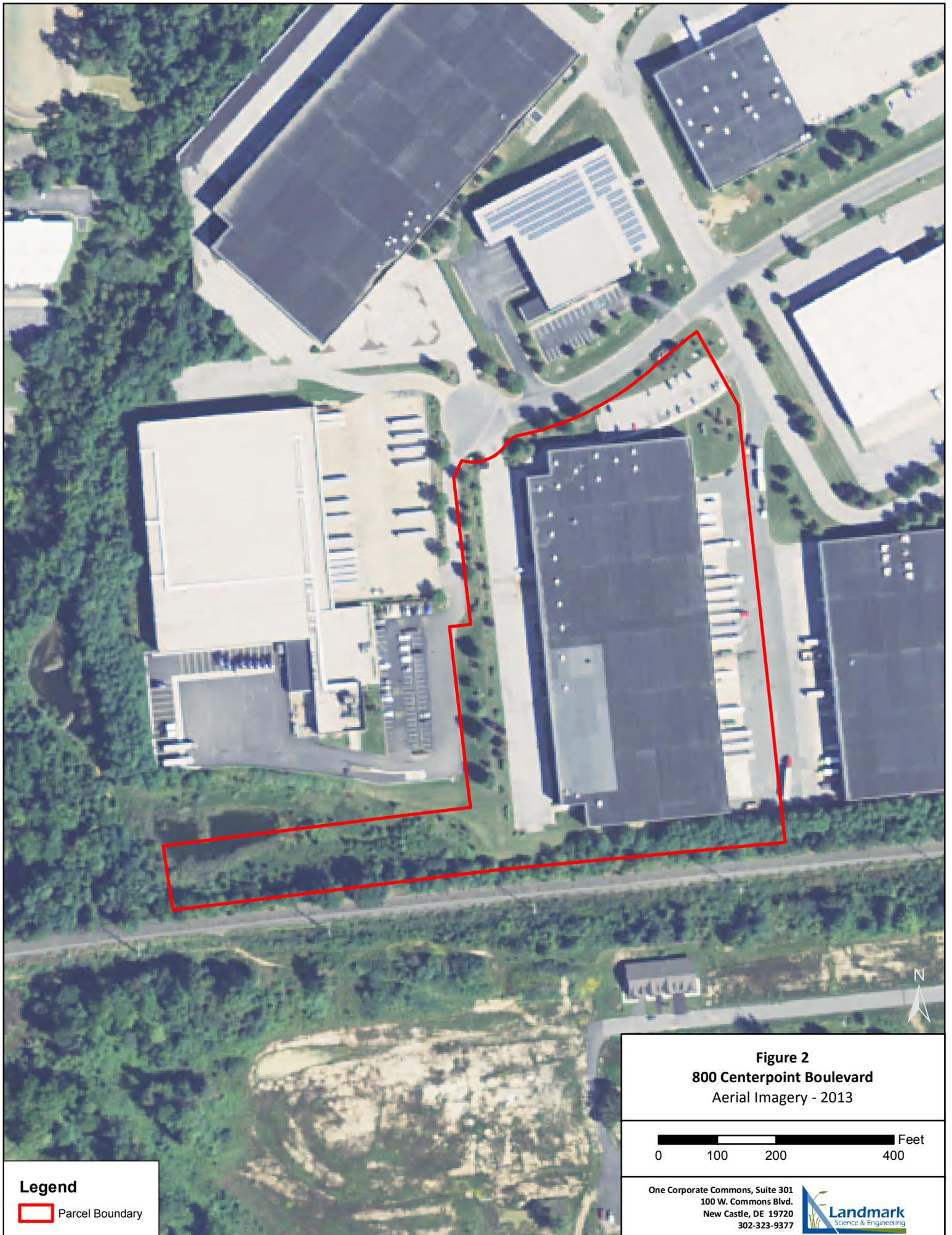


Figure 2
800 Centerpoint Boulevard
Aerial Imagery - 2013

0 100 200 400 Feet

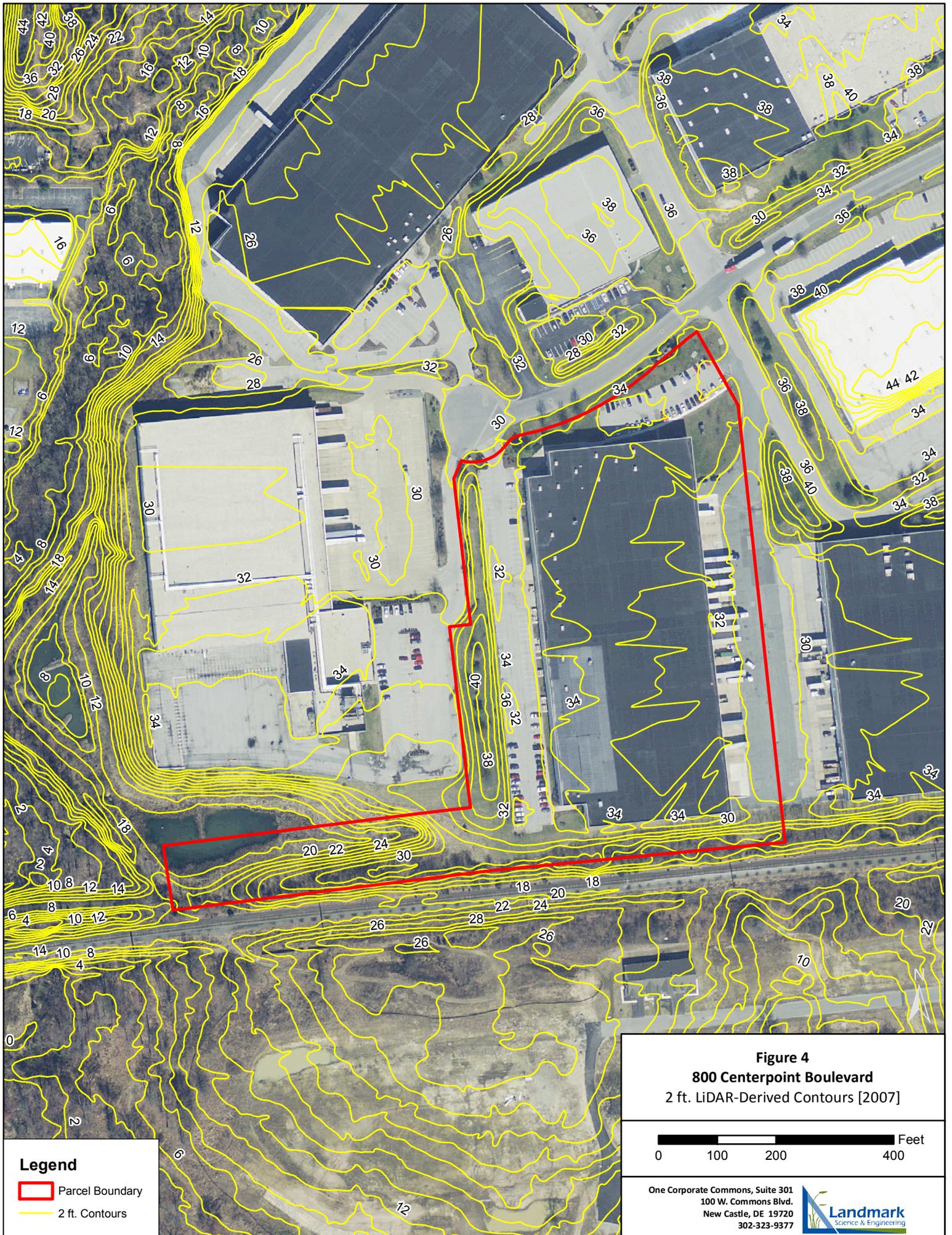
Legend

 Parcel Boundary

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Legend

-  Parcel Boundary
-  2 ft. Contours

Figure 4
800 Centerpoint Boulevard
2 ft. LiDAR-Derived Contours [2007]

0 100 200 400 Feet

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Figure 5
800 Centerpoint Boulevard
Combined Wetlands

Legend

 Parcel Boundary

 SWMP

Wetlands Delaware Division of Watershed Stewardship

 Wetlands Delaware Division of Watershed Stewardship

 Feet
 0 150 300 600

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Figure 6a
800 Centerpoint Boulevard
Aerial Imagery - 1992

0 100 200 400 Feet

Legend

 Parcel Boundary

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Figure 6b
800 Centerpoint Boulevard
Aerial Imagery - 1977

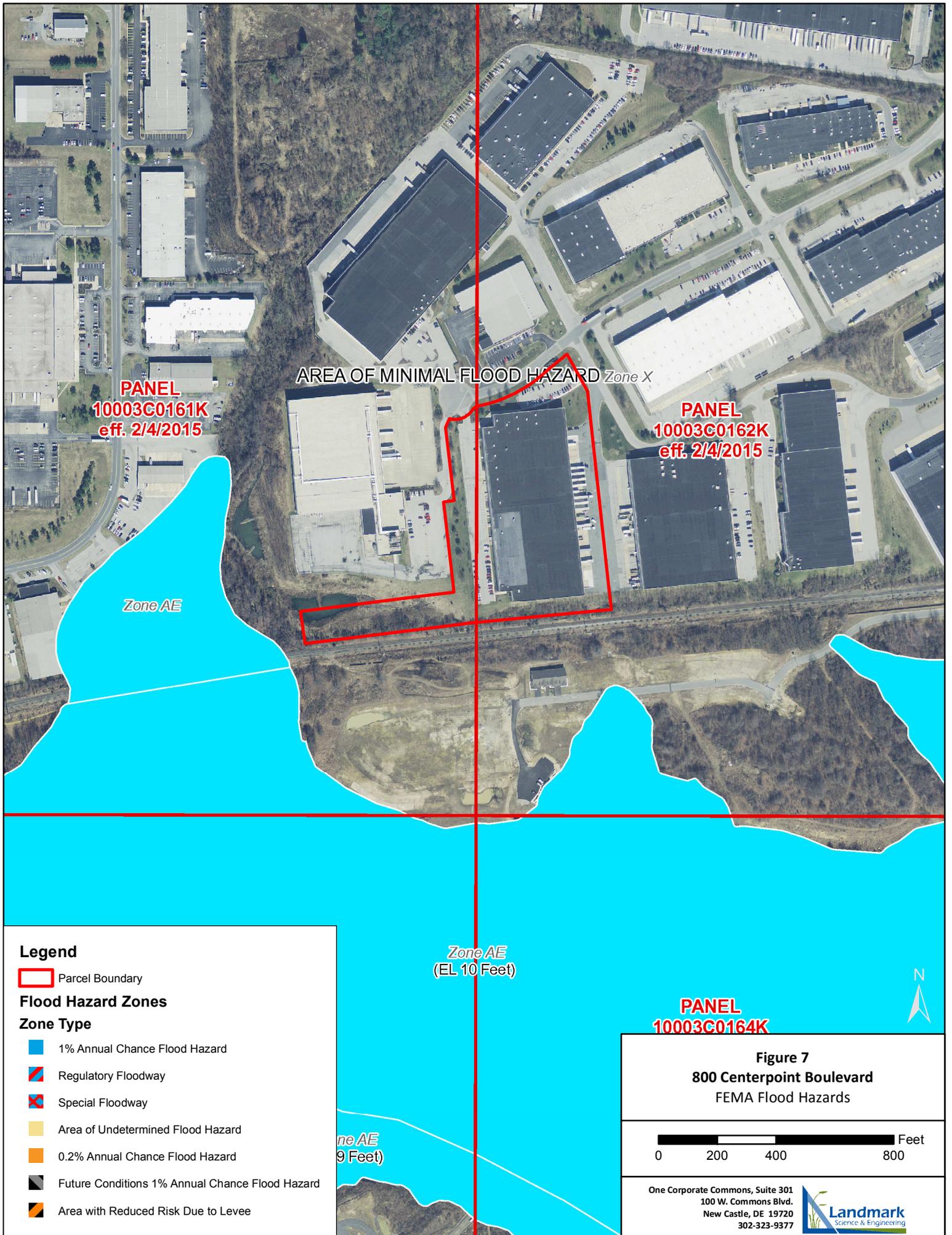
0 200 400 800 Feet

Legend

 Parcel Boundary

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PANEL
10003C0161K
 eff. 2/4/2015

AREA OF MINIMAL FLOOD HAZARD Zone X

PANEL
10003C0162K
 eff. 2/4/2015

Zone AE

Zone AE
 (EL 10 Feet)

Zone AE
 (EL 9 Feet)

PANEL
10003C0164K

Figure 7
800 Centerpoint Boulevard
 FEMA Flood Hazards

0 200 400 800 Feet

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 302-323-9377



Legend

- Parcel Boundary
- Flood Hazard Zones**
- Zone Type**
- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee

ATTACHMENT I
AGENCY CORRESPONDENCE



December 16, 2015

C 2729

Delaware SHPO
21 The Green – Suite A
Dover DE 19901-3611

**SUBJECT: NALCO PROPOSED ION EXCHANGE WATER TREATMENT FACILITY
CENTERPOINT BUIS. COMPLEX
800 CENTERPOINT BOULEVARD, NEW CASTLE, DELAWARE
NEW CASTLE COUNTY TAX PARCEL NO. 21-013.00-099**

To Whom It May Concern:

By way of this letter and attachments we are requesting information from your database on the presence of rare, threatened and endangered species, unique natural communities, and/or any other significant natural resources in relation to the above referenced tax parcel located at 800 Centerpoint Boulevard within the Centerpoint Business Complex in New Castle, New Castle County, Delaware (see enclosed ALTA/Land Title Plan).

A letter from your office regarding the subject property is required as part of the Delaware Coastal Zone Act Permit application.

Nalco, a water treatment company, is proposing to lease the existing warehouse building on the ±10.5-acre subject property. No new construction, new impervious cover, or vegetation removal are proposed within the subject property but the existing warehouse will be retrofitted to accommodate the ion exchange regeneration system Nalco utilizes to treat water on-site. Within the building, wastewater will be stored, neutralized, filtered, softened, and regenerated in tanks stored in reinforced concrete containments (see preliminary sketch of the proposed warehouse layout). The treated water will then be discharged into public sewer system. No explosive or hazardous materials are involved in the ion exchange regeneration process.

The property is currently comprised of the 177,844 square-foot warehouse, maintained lawn with landscaping, and a scrub-shrub hedgerow along its southern property boundary between the property and the Norfolk Southern railroad line. The subject lot is zoned as "21I Industrial".

C 2729
Delaware SHPO
December 16, 2015
Page Two

Please reference this project as "Nalco New Castle" in all future correspondence. Should you have any questions or require additional information in this regard, please do not hesitate to contact me (302) 323-9377, ext. 145.

Sincerely,

Amy J. Nazdrowicz
Environmental Scientist, amyn@landmark-se.com

Enclosures: Location Map
 2012 Aerial Photograph
 ALTA/Land Title Plan
 Proposed Facility Sketch



December 16, 2015

C 2729

Kate Fleming
Environmental Review Coordinator
Delaware Division of Fish and Wildlife
4876 Hay Point Landing Road
Smyrna, Delaware 19977

**SUBJECT: NALCO PROPOSED ION EXCHANGE WATER TREATMENT FACILITY
CENTERPOINT BUSINESS COMPLEX
800 CENTERPOINT BOULEVARD, NEW CASTLE, DELAWARE
NEW CASTLE COUNTY TAX PARCEL NO. 21-013.00-099**

Dear Ms. Fleming:

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C 2729
Kate Fleming
December 16, 2015
Page Two

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Sincerely,



Amy J. Nazdrowicz

Environmental Scientist, amyn@landmark-se.com

Enclosures: Location Map
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 Proposed Facility Sketch



STATE OF DELAWARE
DEPARTMENT OF NATURAL RESOURCES
& ENVIRONMENTAL CONTROL
DIVISION OF FISH & WILDLIFE
89 Kings Highway
Dover, Delaware 19901

OFFICE OF THE
DIRECTOR

Phone: (302) 739-9910
Fax: (302) 739-6157

December 31, 2015

Amy Nazdrowicz
Landmark Science & Engineering
100 W. Commons Blvd
Suite 301
New Castle, Delaware 19720

Dear Ms. Nazdrowicz,

Re: LSE 2015 NALCO Ion Exchange Water Treatment Facility, TP 2101300099

Thank you for contacting the Wildlife Species Conservation and Research Program about information on rare, threatened and endangered species, unique natural communities, and other significant natural resources as they relate to the above referenced project.

A review of our database indicates that there are currently no records of state-rare or federally listed plants, animals or natural communities at this project site.

We are continually updating our records on Delaware's rare, threatened and endangered species, unique natural communities and other significant natural resources. If the start of the project is delayed more than a year past the date of this letter, please contact us again for the latest information.

Please feel free to contact me with any questions or if you require additional information.

Sincerely,

Kate Fleming
Wildlife Biologist/Environmental Review Coordinator
(302) 735-8658; fax: (302) 653-3431; Kate.Fleming@state.de.us

(See invoice on next page)

*We Bring You Delaware's Great Outdoors
through Science and Service*

Find us on Facebook <http://www.facebook.com/DelawareFishWildlife>

January 4, 2016

C2729

Nalco – An Ecolab Company
2 New Road
Aston, Pennsylvania 19014

Attention: Mr. Thomas S. Beatty

**SUBJECT: RARE, THREATENED, AND ENDANGERED SPECIES/HABITAT ASSESSMENT
INVESTIGATION FOR 800 CENTERPOINT BOULEVARD, CENTERPOINT BUSINESS
COMPLEX, NEW CASTLE, DELAWARE**

Dear Mr. Beatty,

This letter is to inform you that Environmental Scientists from Landmark Science and Engineering, Inc. investigated the aforementioned subject property to assess its potential ability to support populations of state or federal rare, threatened, or endangered species. The investigation was conducted on December 29, 2015.

No rare plant or animal species, or their habitats, were observed within the subject property. Additionally, no wetlands or waters of the United States were encountered within the subject property.

The 10.51±-acre subject property is located within the Centerpoint Business Complex located in New Castle, Delaware (see attached location map and aerial). The subject property is further identified as New Castle County Tax Parcel No. 21-013.00-099 located at approximately 39°39'33.08"N and 75°35'35.49"W. The subject property is zoned as 2II (Industrial) and consists of an existing 177,844 square foot warehouse surrounded by paved parking and landscaped maintained lawn. Early successional old field, a narrow hedgerow, and a man-made stormwater detention pond were also present along the southern property boundary. The subject property is bordered by Centerpoint Blvd to the north, adjacent warehouse buildings to the east and west, and the Norfolk Southern railroad line to the south.

According to the USDA Web Soil Survey the subject lot is underlain completely with the Urban Land (Up) soil type. The Urban Land series consists of well drained soils on uplands that have been highly disturbed during urbanization and is not considered hydric by the USDA Natural Resource Conservation Service.

Ornamental plantings in the lawn areas surrounding the building included Red Maple, Pin Oak, Eastern White Pine, Japanese Black Pine, Boxwood, Winged Euonymus, and Inkberry and Winterberry Holly. Common vegetation within the hedgerow along the southern property boundary included Persimmon, Tulip Poplar, Black Willow, Black Locust, Red Maple, Black Cherry, Multi-flora Rose, Blackberry, and Japanese Honeysuckle. The early successional old field along the southwest property boundary was dominated by Meadow Fescue, Broomsedge, Claspingleaf Dogbane, Chinese Bush Clover, and Goldenrod.

A man-made stormwater detention pond was present within the southwestern corner of the subject property. This pond was excavated for stormwater storage when the adjacent property to the west was developed as a commercial facility. Although runoff from the surrounding lawn areas still drain into the pond as designed through rip-rap lined culverts, the hydrology of the pond has been manipulated by beaver activity.

C2729

Nalco Proposed New Castle Facility

December 30, 2015

Page Two

Evidence of recent beaver activity included trails, cut-marks, and a soft-rush lined dam located within the western portion of the pond. The pond's vegetative community was dominated by Black Willow, Red Maple, Common Reed, Cattail, Broomsedge, and soft rush. The pond ranged in water depths from 2 inches to several feet in its deepest portion and its substrate was firm throughout. A comprehensive vegetation list may be found below in Table 1.

The hedgerow along the southern property boundary contains exotic/ invasive species typically associated with disturbed soils conditions. Additionally the hedgerow has been fragmented as a result of the surrounding industrial development and the railroad tracks. Because of its isolation and small size (with a maximum of about 200 feet from any given edge habitat), the subject property would not offer quality breeding habitat for any forest interior dwelling species (or FIDS).

Likewise, the old field was also small in size (approximately 300'x180'), isolated from other such habitat type, and dominated by a non-native plant species that establishes in previously-disturbed areas (Chinese Bush-Clover). Thus, the on-site old field is also unlikely to be supporting any populations of rare species.

No wetlands were present within the subject property and the man-made detention pond lacked all 3 habitat criterion associated with potential Bog Turtle habitat; (a tussock-dominated vegetative community, mucky substrates, and groundwater-fed hydrology). The on-site pond was firm throughout, fed by stormwater runoff from the surrounding areas, and tussock-forming vegetation was not present aside from scattered Soft Rush. Thus, no potential Bog Turtle habitat was present within the subject property.

Additionally, no large nests (such as those of the Bald Eagle or Osprey) were observed within the subject property.

Due to the narrow width, size and fragmentation of the natural habitats within the property (hedgerow and old field), the subject property provides limited habitat value for rare or endangered species. A letter concurring with the results of this investigation was received by the Delaware Division of Fish and Wildlife on December 31, 2015 and is enclosed for your convenience. If you have any questions please feel free to give us a call at (302) 323-9377.

Sincerely

Amy J. Nazdrowicz

Environmental Scientist, DE Recognized Qualified Bog Turtle Surveyor

Extension 145, amyn@landmark-se

Enclosures:

Representative Site Photographs

2013 Aerial Photograph

Combined State and Federal Wetlands Map

Historical Aerial Photographs

Soil Map

DNREC Division of Fish & Wildlife Letter

COASTAL ZONE ENVIRONMENTAL IMPACT OFFSET MATRIX

Applicant: NALCO, AN ECOLAB COMPANY
Project: 800 CENTERPOINT BOULEVARD
CZA Offset Review Reference: (DNREC Only)

Page 1 of 1
Application Date: FEB 29, 2016
Amendments:
Offset Review Date: (DNREC Use Only)
Matrix Amended:

ATTACHMENT "J"

ENVIRONMENTAL IMPACTS	(Applicant's Use) DESCRIBE ENVIRONMENTAL IMPACTS	PAGE NO.	(Applicant's Use) DESCRIBE ENVIRONMENTAL OFFSET PROPOSAL ¹	PAGE NO.	(DNREC Use Only) OFFSET SUFFICIENCY Yes, No or N/A
Air Quality (Applicant to List Below by Parameter)	Hydrochloric (HCl) Acid fumes displaced during tank fillings; approx. 8,000 cubic feet/year.	14	A scrubber system installed on the HCl vent line is 99% efficient and will reduce escaping fumes to 80 cubic ft/yr.	15	
	NOx emissions from commercial-grade water heater; approx. 0.0773 tons/year.	14	The applicant has agreed to purchase one (1) ECR from DEDO for NOx non-ozone to offset water heater emissions	32	
Water Quality					
Surface	No expected impacts to surface water quality.	16			
Groundwater	No expected impacts to groundwater quality.	16, 21			
Water Quantity					
Surface	No expected impacts to surface water quantity.	19			
Groundwater	No expected impacts to groundwater quantity.	19, 21			
Water Use For:					
Processing	Up to 50,000 gals/day of potable water will be used for the process and returned to the municipal sewer system.	16	The water will be cooled and neutralized to a pH of 7 before being returned to the municipal sewer system.	16	
Cooling					
Effluent Removal					
Solid Waste	Solid waste materials will consist of typical commercial waste include packaging, plastic, and paper materials.	22	Solid waste materials will be placed in a dumpster for local disposal.	22	
	Activated carbon filter media from leased filter canisters.	22	Activated carbon will be collected by a licensed contractor and transported to an out-of-state facility.	22	
Hazardous Waste					
Habitat					
Wetlands	No impact; the proposed project will reuse a portion of an existing structure in an existing business park.	24 - 26			
Flora Fauna	No impact; the proposed project will reuse a portion of an existing structure in an existing business park.	24 - 26			
Drainage/Flood Control	A 20' x 20' concrete tank pad plus a 20' x 100' paved access lane will be constructed for the outdoor HCl tank.	11	Tank pad and paved lane will increase existing impervious surface area by less than 1% (0.85%).	18	
	The proposed project will rely on the existing drainage systems and SWM facilities of the existing business park.				
Erosion ²					
	No impact; the proposed project will reuse a portion of an existing structure in an existing business park.	18			
Land Use Effects					
Glare	No impact; the proposed project will be inside an existing structure in an existing business park.	28, 29			
Heat	The proposed project will generate a minor amount of heat.	28, 29	The existing building is air-conditioned		
Noise	The proposed project will generate a minor amount of noise.	28, 29	The existing building and insulation will attenuate most noises generated by the project		
Odors	The proposed project will generate a minor amount of emissions associated with the water heater.	28, 29			
Vibration	No impact; the proposed project will be inside an existing structure in an existing business park.	28, 29			
Radiation	The proposed project will produce no radiation.	28, 29			
Electro-Magnetic Interference	The proposed project will generate no electro-magnetic interferences.	28, 29			
Other Effects	No other effects are anticipated from the proposed project.	28, 29			
Threatened & Endangered Species	No impact; the proposed project will reuse a portion of an existing structure in an existing business park.	24 - 26			
Impacts From:					
Raw Material	No impacts; potable water, salt, hydrochloric acid (HCl), and sodium hydroxide (NaOH)	10			
Intermediate Products	No impacts; softened water, diluted acid and base solutions	10			
By-Products	NOx emissions from water heater, No impacts from softened water, diluted acid and base solutions	10	The applicant has agreed to purchase one (1) ECR from DEDO for NOx non-ozone to offset water heater emissions	32	
Final Products	No impacts; neutralized and cooled clean water, clean and reusable filtering media.	10			

¹ See paragraph I.1.b in "Secretary Assessment"

² Construction and normal operation

Conversion Factors		
1 Ng	0.000000001	grams
1 gram	1.10231E-06	US ton
1 gram	0.000001	Metric ton
1 Joule	0.0009478	BTU

Legend

Given
Inputs
Outputs

Worst Case		
INN NOx Emissions	6.4	ng/J
Hot Water Usage	50000	Gallons/day
Winter Temp Rise	75	°F
Summer Temp Rise	65	°F
% of Winter Time	33%	
Winter BTUs	3762556875.00	BTU
Summer BTUs	6620579875	BTU
Annual Energy Consumption	10383136750	BTU
Annual Energy Consumption	1.0955E+13	Joules
Annual NOx	0.077285068	US tons
Annual NOx	0.070111917	Metric tons

<-- Substitute the emission if necessary

ATTACHMENT K

ATTACHMENT L
HYDROCHLORIC ACID SCRUBBER DATA



ADVANCED AIR TECHNOLOGIES, INC.

300 Earl Sleseman Drive
Corunna, MI 48817
(Michigan - USA)

Phone: 989-743-5544
Fax: 989-743-5624
Toll Free: 800-295-6583

www.advairtech.com

Duns #:603669805

Cage #017M8

ISO9001:2008 Certified

01-December-2015

Mr. Bob Dortwegt - Mechanical Engineer
NALCO | An Ecolab Company
320 West 194th Street
Glenwood, IL 60425

PH: 708-754-2550
CP: 708-514-1602
EM: robert.dortwegt@nalco.com

PROPOSAL: Apollo 500P-Air Scrubber for 32% Hydrochloric Acid HCl Storage Tank Vent Application
AAT DocID: #151584-nalco-Q1

Thank you for your interest in Advanced Air Technologies, Inc. Air Scrubber systems.
Enclosed on this page is a technical summary while the following pages list scope of commercial supply.
Please keep us informed on the project.

TECHNICAL SUMMARY

#151584-Q1

Application

Tanker truck load of < 4,800 gallons of 32% Hydrochloric Acid (HCl) is transferred to a bulk storage tank through a 2 inch diameter pipe using < 30psig compressed air. The vent gas will be ambient temperature. Displaced air will be vented through an Apollo 500P eductor/venturi air scrubber unit at a normal rate of 25 scfm with a maximum end-of-fill surge rate of <500 scfm.

Scrubbing Process Description

The vent gas is drawn into the Apollo Series air scrubber using an ejector venturi (plus liquid displacement from fill event). This device also provides the first stage of contacting the gas with recycled water. The water from the scrubber sump tank is also pumped to an integral packed tower / mist eliminator assembly for final contact scrubbing of the HCl.

Operation of scrubber equipment to be in a batch mode using water only. Water only solution to be purged from scrubber using scrubber's recirculation pump. Unit will be refilled after < 14% HCl concentration is reached in sump tank to avoid reduced removal efficiency.

Equipment Design

The Apollo 500P Scrubber is designed for ± 6 in. w.g., indoor installation and 110 F maximum operating temperature. Unit dimensions are roughly 4½ ft. x 4½ ft. x < 12 ft. tall. The scrubbing efficiency on HCl gas is 99% when operated per AAT instructions. System is not rated for electrically classified areas.

Submitted By:

Sales Department
32 HCl Scenario

PROPOSAL

#151584-Q1

Advanced Air Technologies will provide the following equipment for the described process, subject to enclosed terms. All items are fabricated of new material to commonly accepted standards. All products are **WARRANTED** against corrosion and manufacturing defects for a period of one year from date of shipment (subject to attached terms & conditions). Purchased items are warranted by separate manufacturers' warranties and generally are good for a period of one year. We service all of our equipment, and we offer technical support to all of our customers.

PROCESS DESCRIPTION:

(See page 1 for additional process summary)

*Our performance warranty is based on the above information. If the process description is **NOT** correct, please let us know. We may alter our design to ensure that you will achieve the needed performance.*

COMMERCIAL SUMMARY

(1) Apollo 500P Model Air Scrubber Assembly (Polyvinylchloride Construction) 32% HCl

- (1) PVC ejector-venturi inlet assembly with all internals
- (1) PVC extended packed column assembly with all internals
- (1) PP mist eliminator section- high efficiency / single stage
- (1) PVC integral sump tank -150 gallon working volume
- (1) CPVC recycle pump -vertical seal-less with 7-1/2 Hp CHEM DUTY motor
(Creates 480scfm @ -3/4 inch WC vacuum draw- adjustable in field)
- (lot) PVC piping and valves Schedule 80
- (lot) Instrumentation and indicators consisting of :
 - (2) Recycle liquid pressure gauges
 - (1) Packed column differential pressure gauge
 - (1) Lexan™ Sump level access window
- (1) Motor starter for pump - NEMA 4X (Factory wired)
- (1) Factory Acceptance Testing (FAT- Corunna, MI) for mechanical functions
- (1) Open crate(s) for LTL shipment – ISPM-15 Compliant

CUSTOM APOLLO 500P -PVC- SCRUBBER COST: _____ \$ 23,700.00 USD*

*** These prices are only for those items stated above and are subject to the attached terms and conditions. Examples of items not included, unless specified are:**

- | | | | |
|------------------------------|-----------------------------|---|---------------------|
| - field wiring | - freight (unless noted) | - installation | - start up |
| - heat tracing | - additional duct necessary | - insulation | - permitting |
| - reassembly at site | - emissions testing | - chemicals | - UL certifications |
| - PLC / HMI display | - guy wires / bracing | - ladders / platform | - PE stamp |
| - paper submittal / drawings | - non-English text | - any item not specifically stated herein | |

TIMING / SHIPMENT:

Drawings: 2 weeks from PO (1) Single Equipment GA and (1) Single system P&ID
Shipment: 9 weeks after Purchase Order and approved of drawings listed above.
Actual shipping date will be based on shop workload at time of release for manufacturing and receipt of required progress payments

LTL FREIGHT:

EXW- ExWorks: Corunna, MI- USA , collect

PROGRESSIVE PAYMENT TERMS:

30% net 10 days with purchase order
40% net 30 days after drawing approval (before shipment)
30% net 30 days after shipment

Quote valid for 30 days

All terms subject to credit approval.

A finance charge of 2% per month, or any part thereof, shall be assessed on all past due amounts.

Please feel free to call contact us if we may be of further assistance.

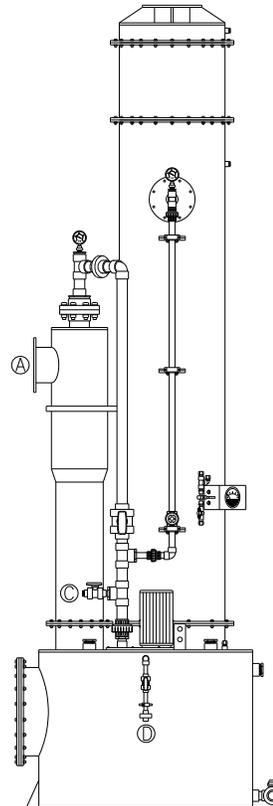
Sincerely,

ADVANCED AIR TECHNOLOGIES, INC.

Marvin Biondi

Marvin Biondi
Sales Manager

EM: mbiondi@advairtech.com





**STATE OF DELAWARE
EXECUTIVE DEPARTMENT
DELAWARE ECONOMIC DEVELOPMENT OFFICE**

Bernice Whaley
Director

March 23, 2016

Mr. Thomas S Beatty
Business Manager
NALCO
2 New Road
Aston, PA 19014

Dear Mr. Beatty:

By this letter, the Delaware Economic Development Office (DEDO) agrees to sell to NALCO 1 Emission Reduction Credit (ERC) necessary as required offsets for the issuance of a Delaware Coastal Zone permit allowing the operation of NALCO's facility under the terms and conditions listed below.

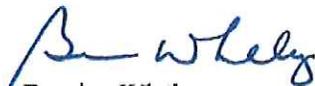
- 1) The credit being approved is for one (1) NOx non ozone season credit currently held in the DEDO credit bank; and,
- 2) The credit is released from DEDO's credit bank when the following conditions are met.
 - DEDO receives a copy of this letter signed by an authorized officer of NALCO acknowledging and accepting these terms and conditions.
 - NALCO submits a \$500 application fee to DEDO as well as the \$1,000 discounted purchase price to DEDO for a total of \$1,500.
 - NALCO commences full operation of its facility located at 800 Centerpoint Drive, New Castle, Delaware on or before March 21, 2017. Should operations not commence by that date, DEDO reserves the right to rescind this offer and return the credit to the credit bank.
 - NALCO agrees that the credits are to permit operation of their facility located at 800 Centerpoint Drive, New Castle, DE and may not be sold or transferred in any manner to any other organization or utilized at any other location without the expressed written consent of DEDO. If DEDO does not approve a transfer, the credits will be returned to the credit bank.

Mr. Thomas S Beatty
March 23, 2016
Page 2

If you need more information, please contact Patty Cannon at (302) 577-8485 or patricia.cannon@state.de.us.

I appreciate your continuing investment in the State of Delaware and your efforts to preserve and enhance our environment and wish you continued growth and success in your operations.

Sincerely,



Bernice Whaley
Director

cc: David Small, Department of Natural Resources and Environmental Control
Ali Mirzakhali, Department of Natural Resources and Environmental Control
Phil Cherry, Department of Natural Resources and Environmental Control
Kevin Coyle, Department of Natural Resources and Environmental Control
Patty Cannon, Delaware Economic Development Office

On behalf of NALCO, I hereby acknowledge and accept the terms and conditions as detailed above.

By: _____
Name & Title

_____ Date