

3046/24

# TRANSMITTAL

**DATE:** 6/5/2024  
**ATTENTION:** Kevin Bronson  
**COMPANY:** Delaware DNREC, Division of Water, Commercial and Government Services Section  
**ADDRESS:** 89 Kings Highway  
Dover, Delaware 19901

**FROM:** Liz Ennis  
**E-MAIL ADDRESS:** [lennis@blcompanies.com](mailto:lennis@blcompanies.com)  
**PROJECT:** Walker Farms Industrial Development  
**PROJECT NO:** 2100863

**SUBJECT:** Application for the Construction of Wastewater Collection and Conveyance Systems



**WE ARE SENDING YOU:**

- Attached
- Via:      FedEx
- Under Separate Cover
- Plans
- Specifications
- Copy of Letter
- Prints
- Shop Drawings
- Samples
- Application for Payment
- Change Order
- Other

COPIES	DATE	NO.	DESCRIPTION
1			DNREC Application
1			\$1,125 DNREC Review Fee (check 2022)
1			DNREC Narrative
1		13	Sanitary Sewer Plan
1			Pump Specifications Package
1			Pump Data Sheet
1			Pump Station Design Detailed Summary
1		2	Pump Station Drawings
1			New Castle County Planning Board Approval Letter

**THESE ARE TRANSMITTED as checked below:**

- For Approval
- For Your Use
- As Requested
- For Review & Comment
- For Bids Due:
- No Exceptions
- Furnish as Corrected
- Revise & Resubmit
- Rejected
- Resubmit for Record
- Resubmit
- Submit
- Return
- Prints Returned After Loan to Us
- For Distribution
- Corrected Prints

**REMARKS:**

Please feel free to reach out to me at [lennis@blcompanies.com](mailto:lennis@blcompanies.com) or 781-619-9521 if you have any questions or require any additional information.

Signed:           Liz Ennis



Department of Natural Resources  
and Environmental Control  
89 Kings Hwy  
Dover, DE 19901  
dnrec.delaware.gov

Walker Farms Industrial  
Development

Division of Water  
Commercial and Government Services Section

Phone: (302) 739-9946  
Fax: (302) 739-2296

### INSTRUCTIONS FOR COMPLETING THE PERMIT APPLICATION FOR THE CONSTRUCTION OF WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS

The following items must accompany the application. **Please note that incomplete application packages will be returned in their entirety and not reviewed until such time as all required information is received.**

- 1. A narrative summary of the intended purpose and design of the proposed facilities.
- 2. One (1) set of final construction plans and specifications (paper copy), if applicable, signed and sealed by a Delaware-registered Professional Engineer, or a Delaware-registered Professional Land Surveyor for gravity systems only.
- 3. One (1) electronic copy of final Plans.
- 4. The final plans must be drawn to scale showing slopes, inverts, pipe types and sizes, existing and proposed ground surfaces, tops of manholes, water lines, stormwater and stream crossings, encasements shown in plan and profile, and other information if pertinent or requested.
- 5. For pump/lift stations and force mains, include all calculations and pump/performance curves.
- 6. A check made payable to the State of Delaware for eight hundred twenty-five dollars (\$825.00), the non-refundable permit review fee. This fee covers the initial review and one follow-up review of any corrections or changes made to address the Division's comments. An additional eight hundred twenty-five dollars (\$825.00) non-refundable review fee must be submitted for resubmission of the plans if changes are made to the project which trigger a complete review of the permit application.
- 7. Your permit will have a public notice requirement if your system includes force mains or pump/lift stations. Include a check made payable to the State of Delaware for three hundred dollars (\$300.00) for the reimbursement of legal notices if the system has a force main connection or a pump/lift station.
- Please submit the completed application package, as outlined above, to DE DNREC, Division of Water, Commercial and Government Services Section, 89 Kings Highway, Dover, DE 19901. Please note, a new application, including the review fee, must be submitted if the Division's comments are not addressed or if requested supplemental information is not provided within one (1) year of the comment or request date.
- The following items must be submitted prior to permit issuance:
- 8. Verification from the appropriate county or municipal planning authority that the project has the proper zoning approval.
- 9. A letter from the owner/operator of the wastewater facilities to which the proposed collection and conveyance facilities connect. The letter must include confirmation that the owner/operator has approved the project, that the owner/operator will take responsibility for treating and disposing of the wastewater to be conveyed and that the downstream facilities have the capacity to manage the additional flows without causing or contributing to violations of Delaware's Environmental Protection Act (7 Del. C., Chapter 60) and the regulations promulgated thereafter. This includes, but is not limited to, unauthorized discharges such as overflows at manholes and violations of the treatment system's operating permit (for example, the National Pollutant Discharge Elimination System (NPDES) permit).

- Visit us on the web at: <https://dnrec.delaware.gov/water/commercial-government/>

The project is in the process of being reviewed by New Castle County Department of Public Works. When New Castle County Department of Public Works has been approved the project a copy of the approval letter will be sent to DNREC

**APPLICATION FOR THE CONSTRUCTION OF  
WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS**  
Application must be complete, typewritten or clearly printed

Date Application Submitted \_\_\_\_\_

PROJECT INFORMATION			
Project Name and Location/ Address <b>Walker Farms Industrial Development 0 Christiana Road Delaware City, Delaware</b>			
Tax Parcel Number(s) <b>10-024.00-219</b>			
County <input type="checkbox"/> Kent <input checked="" type="checkbox"/> New Castle <input type="checkbox"/> Sussex		Watershed ( <a href="http://www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessment.aspx">www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessment.aspx</a> ) <input type="checkbox"/> Chesapeake Bay <input checked="" type="checkbox"/> DE Bay/Estuary <input type="checkbox"/> Inland Bays/Atl Ocean <input type="checkbox"/> Piedmont	
Sewer District or Interceptor <b>New Castle County</b>		Wastewater Treatment/Disposal Facility Name <b>NA</b>	
Anticipated Construction Start Date <b>TBD</b>		Treatment/Disposal Facility Owner and Operating Permit Number <b>NA</b>	
Please note, construction permits expire three (3) years from the date of permit issuance.			
Are you requesting plan review and comment of <u>WPCC Construction Permit issuance?</u> (circle one)			
Design Flow (gallons/day) Average <b>5,363</b>		Peak <b>21,450</b>	Peak Factor  Basis of Design
Description <b>Flows based on New Castle County Department of Public Works design flow rates guidelines (NCC Eng SOP 1.13)</b>			
OWNER/DEVELOPER			
Company Name <b>First Industrial Realty Trust, Inc</b>			
Mailing Address <b>17 E Gay Street, Suite 302</b>			
City <b>West Chester</b>		State <b>PA</b>	Zip <b>19380</b>
Contact Name <b>James Knopka</b>			
E-Mail Address <b>Jknopka@firstindustrial.com</b>			
Telephone <b>813-347-5224</b>		Cell	Fax

ENGINEER					
Company Name BL Companies					
Mailing Address 1100 First Avenue, Suite 104					
City King of Prussia		State PA		Zip 19406	
Contact Name Liz Ennis					
E-Mail Address lennis@blcompanies.com					
Telephone 781-619-9521		Cell		Fax	
GRAVITY SEWER INFORMATION					
Ownership <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	Type of Sewer System <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other?			If Other, list below	
Type of Pipe PVC SDR 35	Length (ft) 4,216	Diameter (in) 8"	Joint Specification	Min. Slope (ft/ft) 0.5%	Min. Velocity (ft/sec)
Minimum Pipe Cover (ft) 3'	Number of Manholes 21	Drop manholes provided? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Maximum Distance Between Manholes (ft) 306 ft	
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			If not, explain provisions to prevent cross-contamination:		
Explain any special challenges (for example, stream, highway and/or railroad crossings, directional drilling, elevated sewers, etc.)  A portion of this project will be constructed within the a Delaware state road. The project includes a submersible sanitary sewer pump station and force main.					
Comments					

PUMP/LIFT STATION INFORMATION				
Ownership <input type="checkbox"/> Public <input checked="" type="checkbox"/> Private	Type of Wastewater <input type="checkbox"/> Residential <input checked="" type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other?		If Other, list below	
Pump Station Flows (gallons/day) Design	Average 58 gpm	Peak 145 gpm	Peak Factor 2.5	
Basis of Design		Pump Type Barnes 4XSCDF		
Will peak flows be accommodated if largest unit fails? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Pump calc's and pump curves attached? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Cycle Time (minutes) 10.76	Wet Well Detention Time (minutes) 2.58	
Check valves provided on discharge line? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Gate valves provided on discharge line? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
If not, explain alternate procedure:				
Ventilation provided in wet well? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Dry Well? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Is an alarm system included? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Alternate source of power? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
What other provisions for emergency operations? 2 hr of emergency storage is provided in wet well and emergency generator hook up.				
Height of Influent Above Pump (suction head) (ft) 51.52	Height of Effluent Above Pump (discharge head) (ft) 70.71		Friction Loss (ft) 19.23	
Pump Design Point 147 gpm @ 46.4 ft	Pump Operating Point 145 gpm @ 45.94 ft	Static Head (ft) 26.71	Total Head (ft) 45.94	Required Motor Horsepower (hp) 7.5
FORCE MAIN INFORMATION				
Type of Pipe HDPE	Length (ft) 935'		Diameter (in) 4"	
Hazen-Williams "C" Design Factor 150	Type of Joints	Velocity Under Design Conditions (ft/sec) 11.62	Minimum Pipe Cover (ft) 3.5'	
Air relief valves specified? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Clean-outs provided? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Maximum distance between clean-outs (ft) 400'		
Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	If not, explain provisions to prevent cross-contamination:			
Comments				

## **Narrative**

### *Purpose:*

This narrative and accompanying Site Development Plans were prepared for the Walker Farms Industrial Development DNREC construction of Wastewater collection and conveyance systems permit submission. The plan drawings provide detailed information about the physical features on-site and the proposed facilities to be constructed as well as construction requirements for the proposed improvements. Any deviation from the placement of improvements as specified on the plans and/or drawings, or changes in the design, shall be approved by the Engineer and all applicable reviewing agencies prior to installation.

### *Site and Project Description:*

The proposed development is located in the Delaware City, New Castle County, Delaware. The property is located on Tax Parcel No. 10-024.00-219. The proposed development includes subdividing the existing parcel into five separate parcels through a title subdivision process. The existing site is 61.37 acres in size. The site is currently a farmland that is generally bounded by Churchman's Road and industrial developments to the north, farmland to the west, Christiana Road to the south and commercial development to the east. The existing site cover was almost entirely pervious.

The site is currently zoned as Suburban (S) but will be rezoned to Industrial (I) as part of the permit process. The rezoning has been approved through New Castle County (a copy of the Planning Board recommendation is included with this submission). The effective date of the rezoning shall occur when this plan is recorded. It is bordered on the northeast side by three parcels that are zoned as Industrial (I). The site is bordered on the southeast side by two parcels that are zoned as Suburban (S), one parcel that is zoned as Commercial Regional (CR) and one parcel that is zoned as Office Neighborhood (ON). It is bordered on the west side by three parcels that are zoned as Suburban (S). The parcel to the south is zoned as Institutional/Office. To the north, the site is bordered by New Churchmans Road. To the south, the site is bordered by Christiana Road (Route 273).

There are existing wetland systems and resource protection areas onsite; however, the proposed limit of disturbance is outside of the wetland systems and resource protection areas. According to the FEMA Flood Insurance Rate Map Number 10003C0161L for New Castle County, Delaware revised January 22, 2020, the parcel resides in Flood Hazard Zone X. Zone X is defined as "area of minimal flood hazard". The site is contained within the Army Creek Watershed. According to the NRCS Soil report, the onsite soils include Reybold Silt Loam 2 to 5 percent slopes HSG B, Reybold-Queponco complex 0 to 2 percent slopes HSG B, Mattapex Silt Loam HSG C, and Urban Land HSG D.

The proposed development includes the construction of two warehouse facilities totaling ±837,000SF with associated site parking, utilities, lighting, stormwater management and landscape improvements. The total limit of disturbance will be ±63.76 acres including offsite improvements. Access to the property will be through two driveways, one on New Churchmans Road and one on Christiana Road.

The project includes the construction of a 8" PVC gravity sanitary sewer main to the proposed development (4,216 linear feet), three 8" PVC gravity sanitary sewer service connections that will connect into the proposed 8" PVC gravity sanitary sewer main (375 linear feet), one submersible sanitary sewer pump station (30 feet deep), 4" HDPE sanitary sewer force main (935 linear feet) and four sanitary sewer cleanouts. The proposed sanitary sewer line and laterals will have a slopes ranging from 0.5% to 3.49%. A portion of the proposed 8" PVC gravity sanitary sewer main

will be constructed with New Churchmans Road, which is a state roadway. The sanitary sewer will connect into the existing sanitary sewer main at the intersection of Airport Road and New Churchmans Road. DeIDOT and New Castle County are in the process of reviewing the proposed design.

# RECEIPT

	June 7, 2024				<b>63</b>
RCVD FROM	Kestra M Kelly				\$1,125.00
	One Thousand One Hundred Twenty Five Dollars and 00/100 <i>DOLLARS</i>				
FOR	WPCC 3046/24 Legal notice and permit application fee - Walker Farms				
ACCT	\$	1,125.00		x	CHECK # 2022
PAYMENT	\$	1,125.00			CASH
	\$	-			OTHER BY <i>Kevin Bronson</i>

DNREC, Commercial & Government Services Section, 89 Kings Hwy, Dover, DE 19901