



Department of Natural Resources
and Environmental Control

89 Kings Hwy
Dover, DE 19901

dnrec.delaware.gov

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/>

**APPLICATION FOR THE CONSTRUCTION OF
WASTEWATER COLLECTION AND CONVEYANCE SYSTEMS**

Application must be complete, typewritten or clearly printed

Date Application Submitted May 14, 2025

PROJECT INFORMATION			
Project Name and Location/ Address Abbey Creek - 380 Green Giant Road, Townsend, DE 19734			
Tax Parcel Number(s) p/o 23-055.00-001			
County <input type="checkbox"/> Kent <input checked="" type="checkbox"/> New Castle <input type="checkbox"/> Sussex		Watershed (www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessment.aspx) <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		Wastewater Treatment/Disposal Facility Name	
Anticipated Construction Start Date		Treatment/Disposal Facility Owner and Operating Permit Number	
Please note, construction permits expire three (3) years from the date of permit issuance.			
Are you requesting plan review and comment on <u>WPCC Construction Permit issuance</u> ? (circle one)			
Design Flow (gallons/day) Average 57,260		Peak 277,285	Peak Factor 4
Basis of Design			
Description			
OWNER/DEVELOPER			
Company Name Mckee Builders, LLC.			
Mailing Address 940 West Sproul Road, Suite 301			
City Springfield		State PA	Zip 19064
Contact Name Brian Luse			
E-Mail Address bluse@mckeegroup.net			
Telephone 610-604-9800		Cell	Fax

ENGINEER					
Company Name Morris & Ritchie Associates, Inc.					
Mailing Address 111 Ruthar Drive					
City Newark			State DE		Zip 19711
Contact Name Frank Peno					
E-Mail Address FPerno@mragta.com					
Telephone 302-326-2200		Cell		Fax	
GRAVITY SEWER INFORMATION					
Ownership <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private		Type of Sewer System <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other?		If Other, list below	
Type of Pipe	Length (ft)	Diameter (in)	Joint Specification	Min. Slope (ft/ft)	Min. Velocity (ft/sec)
PVC (SDR-26)	17,652	8	Push On	0.005	2.0
PVC (SDR-26)	956	10			
DIP	392	8			
DIP	20	10			
Minimum Pipe Cover (ft) 4	Number of Manholes 127	Drop manholes provided? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Maximum Distance Between Manholes (ft) 300	
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.)					
Comments					

PUMP/LIFT STATION INFORMATION				
Ownership <input checked="" type="checkbox"/> Public <input type="checkbox"/> Private		Type of Wastewater <input checked="" type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input type="checkbox"/> Other?		If Other, list below
Pump Station Flows (gallons/day) Design 1,152,000 gpd		Average 277,285 gpd	Peak 1,109,140 gpd	Peak Factor 4
Basis of Design Hazen-Williams			Pump Type FLYGT Model N3301 HT 3~468, 85hp	
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
				Wet Well Detention Time (minutes) 11.6
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 checked="" type="checkbox"/> Yes <input type="checkbox"/> No
What other provisions for emergency operations? Emergency bypass pump connection				
Height of Influent Above Pump (suction head) (ft) 1.5		Height of Effluent Above Pump (discharge head) (ft) 33.6		Friction Loss (ft) 90.7
Pump Design Point 800gmp @ 124ft	Pump Operating Point 800gmp @ 124ft	Static Head (ft) 33.6	Total Head (ft) 124	Required Motor Horsepower (hp) 85hp
FORCE MAIN INFORMATION				
Type of Pipe HDPE DIPS DR 11		Length (ft) 13,229		Diameter (in) 10
Hazen-Williams "C" Design Factor 140	Type of Joints Butt Welded		Velocity Under Design Conditions (ft/sec) 4.78	Minimum Pipe Cover (ft) 3.5
Air relief valves specified? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Clean-outs provided? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Maximum distance between clean-outs (ft) 400ft	
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				