



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) 739-8369

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, if applicable, signed and sealed by a Delaware-registered Professional Engineer, or a Delaware-registered Professional Land Surveyor for gravity systems only. One (1) electronic copy of final Plans.
- 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.alpha.delaware.gov/water/surface-water/>

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

Application must be complete, typewritten or clearly printed

Date Application Submitted 11/16/2023

| PROJECT INFORMATION | | | |
|--|--|---|--|
| Project Name and Location/ Address Harmons Hill Road Force Main Extension Independence to Townsend Road Millsboro, DE 19966 | | | |
| Tax Parcel Number(s) 234-16.00-8.03 | | | |
| County <input type="checkbox"/> Kent <input type="checkbox"/> New Castle <input checked="" type="checkbox"/> Sussex | | Watershed (www.dnrec.delaware.gov/swc/wa/Pages/WatershedAssessment.aspx) <input type="checkbox"/> Chesapeake Bay <input type="checkbox"/> DE Bay/Estuary <input checked="" type="checkbox"/> Inland Bays/Atl Ocean <input type="checkbox"/> Piedmont | |
| Sewer District or Interceptor N/A | | Wastewater Treatment/Disposal Facility Name Sussex County Inland Bays WWTP | |
| Anticipated Construction Start Date Fall 2024 | | Treatment/Disposal Facility Owner and Operating Permit Number Sussex County Inland Bays WWTP | |
| Please note, construction permits expire three (3) years from the date of permit issuance. | | | |
| Are you requesting plan review and comment or WPCC Construction Permit issuance? (circle one) | | | |
| Design Flow (gallons/day) Average 1M | | Peak 2M | Peak Factor 2 Basis of Design Development Estimates |
| Description Tie into existing AWTMI 6" PVC force main and install 4,580 LF of 12" PVC force main from Independence along Harmons Hill Road to Townsend Road and connect to Sussex County's existing 24" PVC force main. Install 167 LF of 6" PVC force main in Independence on Franklin Roosevelt Lane to connect existing force mains and leave stub for future development. | | | |
| OWNER/DEVELOPER | | | |
| Company Name Artesian Wastewater Management, Inc. | | | |
| Mailing Address 664 Churchmans Road | | | |
| City Newark | | State DE | Zip 19702 |
| Contact Name David Spacht | | | |
| E-Mail Address dspacht@artesianwater.com | | | |
| Telephone (302) 453-6900 | | Cell | Fax |

ENGINEER

Company Name
 Artesian Wastewater Management, Inc.

Mailing Address
 664 Churchmans Road

| | | |
|----------------|-------------|--------------|
| City Newark | State DE | Zip 19702 |
|----------------|-------------|--------------|

Contact Name
 Daniel W. Konstanski, PE

E-Mail Address
 dkonstanski@artesianwater.com

| | | |
|-----------------------------|------|-----|
| Telephone (302) 453-6900 | Cell | Fax |
|-----------------------------|------|-----|

GRAVITY SEWER INFORMATION

| | | |
|---|--|----------------------|
| Ownership <input type="checkbox"/> Public <input type="checkbox"/> Private | Type of Sewer System <input 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) |
|--------------|-------------|---------------|---------------------|--------------------|------------------------|
| | | | | | |

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|--|--|--|--|--|
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|--|--|--|--|--|

| | | | |
|-------------------------|--------------------|---|--|
| Minimum Pipe Cover (ft) | Number of Manholes | Drop manholes provided? <input type="checkbox"/> Yes <input type="checkbox"/> No | Maximum Distance Between Manholes (ft) |
|-------------------------|--------------------|---|--|

| | |
|--|--|
| Minimum ten foot (10') horizontal & eighteen inch (18") vertical separation from water lines maintained? <input 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 type="checkbox"/> Public <input type="checkbox"/> Private | | Type of Wastewater <input 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 | | Average | Peak | Peak Factor |
| Basis of Design | | | Pump Type | |
| Will peak flows be accommodated if largest unit fails? <input type="checkbox"/> Yes <input type="checkbox"/> No | | Pump calc's and pump curves attached? <input type="checkbox"/> Yes <input type="checkbox"/> No | Cycle Time (minutes) | Wet Well Detention Time (minutes) |
| Check valves provided on discharge line? <input type="checkbox"/> Yes <input type="checkbox"/> No | | | Gate valves provided on discharge line? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| If not, explain alternate procedure: | | | | |
| Ventilation provided in wet well? <input type="checkbox"/> Yes <input type="checkbox"/> No | | Dry Well? <input type="checkbox"/> Yes <input type="checkbox"/> No | Is an alarm system included? <input type="checkbox"/> Yes <input type="checkbox"/> No | Alternate source of power? <input type="checkbox"/> Yes <input type="checkbox"/> No |
| What other provisions for emergency operations? | | | | |
| Height of Influent Above Pump (suction head) (ft) | | Height of Effluent Above Pump (discharge head) (ft) | | Friction Loss (ft) |
| Pump Design Point | Pump Operating Point | Static Head (ft) | Total Head (ft) | Required Motor Horsepower (hp) |
| FORCE MAIN INFORMATION | | | | |
| Type of Pipe PVC C900 | | Length (ft) 4,760' | Diameter (in) 12" (4,520') 6" (240') | |
| Hazen-Williams "C" Design Factor 140 | Type of Joints Push-on Gasket | Velocity Under Design Conditions (ft/sec) 2.5 | Minimum Pipe Cover (ft) 4 | |
| Air relief valves specified? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Clean-outs provided? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | Maximum distance between clean-outs (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: | | |
| Comments | | | | |