1. **GRAVITY SEWER DESIGN CRITERIA -** [**15A NCAC 02T .0305**](http://portal.ncdenr.org/c/document_library/get_file?p_l_id=1169848&folderId=10351930&name=DLFE-120266.pdf)**:**
2. Summarize Gravity Sewer to be permitted:

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| --- | --- | --- |
| **Size (inches)** | **Length (feet)** | **Material** |
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1. **PUMP STATION DESIGN CRITERIA –** [**02T .0305**](http://portal.ncdenr.org/c/document_library/get_file?p_l_id=1169848&folderId=10351930&name=DLFE-120266.pdf) **&** [**MDC (Pump Stations/Force Mains)**](http://deq.nc.gov/about/divisions/water-resources/water-resources-permits/wastewater-branch/collection-systems/sewer-extension-permitting)**:**

**COMPLETE FOR EACH PUMP STATION INCLUDED IN THIS PROJECT**

1. Pump station number or name:
2. Approximate Coordinates (Decimal Degrees): Latitude:   .     ○ Longitude: -  .     ○
3. What is the nearest 100-year flood elevation to the facility?       feet mean sea level. Source:

Is any of the proposed project located within the 100-year flood plain?  Yes  No

1. If Yes, are the following items provided per [15A NCAC 02T .0305(e)](http://portal.ncdenr.org/c/document_library/get_file?p_l_id=1169848&folderId=10351930&name=DLFE-120266.pdf) :

Water-tight seals on all station hatches and manholes; **and**

Control panels vents extend two feet above the100-year flood plain elevation?

Yes  No  N/A

If No, what measures are being taken to protect them against flooding?

1. Finish grade elevation of the pump station:
2. Design flow of the pump station:       millions gallons per day (firm capacity)
3. Operational point(s) of the pump(s):       gallons per minute at       feet total dynamic head (TDH)
4. Number of pumps provided:
5. Number of pump cycles at average daily flow:       cycles per hour
6. Power reliability in accordance with [15A NCAC 02T .0305(h)(1)](http://portal.ncdenr.org/c/document_library/get_file?p_l_id=1169848&folderId=10351930&name=DLFE-120266.pdf):

Standby power source or pump with automatic activation and telemetry - 15A NCAC 02T .0305(h)(1)(B):

* Required for all pump stations with an average daily flow greater than or equal to 15,000 gallons per day
* Must be permanent to facility

Or if the pump station has an average daily flow less than 15,000 gallons per day:

Portable power source with manual activation, quick-connection receptacle and telemetry - 15A NCAC 02T .0305(h)(1)(C)

or

Portable pumping unit with plugged emergency pump connection and telemetry - 15A NCAC 02T .0305(h)(1)(C):

* It shall be demonstrated to the Division that the portable source is owned or contracted by the applicant (draft agreement) and is compatible with the station.
* If the portable power source or pump is dedicated to multiple pump stations, an evaluation of all the pump stations' storage capacities and the rotation schedule of the portable power source or pump, including travel timeframes, shall be provided in the case of a multiple station power outage.

**XI. PUMP STATION DESIGN CRITERIA (continued)**

1. Summarize the pump station design elements:

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| --- | --- | --- |
| **Design Element** | **Plan Sheet Reference** | **Specification Reference** |
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| Power Reliability Source and Associated Elements |  |  |
| Screened Wet Well Vent |  |  |
| Check Valves, Gate Valves, etc. |  |  |
| Control Panel |  |  |
| Restricted Access Elements (Fence, Wet Well Lock, etc) |  |  |
| Audible and Visual Alarms |  |  |
| Telemetry/SCADA |  |  |
| Level Controls |  |  |
| Weatherproof Sign with Required Information |  |  |
| Air Relief Valves |  |  |

1. Summarize the force main to be permitted:

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| --- | --- | --- | --- | --- | --- |
| **Size (inches)** | **Length (feet)** | **Material** | **High**  **Elevation (feet)** | **Discharge**  **Elevation (feet)** | **Pump-Off Elevation (feet)** |
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1. Air release valve station locations per [15A NCAC 02T .0305(i):](http://portal.ncdenr.org/c/document_library/get_file?p_l_id=1169848&folderId=10351930&name=DLFE-120266.pdf)

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| --- | --- | --- |
| **Air Release Valve #** | **Station** | **Plan Sheet Reference** |
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