



Connecticut DOT

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ENGINEERING & CONSTRUCTION BULLETIN

Assistant Chief Engineer

Drainage Network Data Availability

This Bulletin notifies project development teams of the availability of drainage network data to be used during the scoping and design of a project. The data represents corrugated metal pipes and other drainage features within the Department's highway network. Design units shall utilize the data to determine if the drainage assets are within their project boundaries and identify if inspecting and correcting deficiencies can be accomplished with the project's purpose & need.

What data is available: The Drainage Network Map is currently in a GIS format and is available for viewing in ESRI's ARC GIS On-Line platform, by up to 15 users in Engineering. The plan is to incorporate the data into Atlas as it is transformed in the near future. The Map is intended to graphically represent all the Department's drainage assets (minus assets classified as bridges) in a GIS environment. The Drainage Network Map has also been designed to allow for input and review of inspection data for all physical drainage assets. Refer to the [Metadata](#) document for a full description of the Drainage Network Mapping/Database schema.

Drainage assets are being added to the map/database on a Town by Town basis. The schedule calls for mapping approximately 10% of the Department's drainage system every year with a required completion date of 6/30/2029. As of the fall of 2020, approximately 20% of the Department's system is mapped.

How data is being developed/updated: The development of the GIS Drainage Network Map/Database is a result of an on-going collaboration between the Department's GIS Unit, the Office of Environmental Planning (OEP) and the Environmental Compliance (EC) section within Engineering. The GIS Unit developed the mapping application per the instructions of OEP and EC. OEP and EC are using archived constructions plans supplemented with field investigations to add drainage assets to the map/database. Updates to the map/database are constantly being made not only by OEP and EC but also by other stakeholders that interact with drainage assets regularly such as Office of Construction's District Drainage Engineers.

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How data should be utilized: The data in the Drainage Network Map/Database should be used as a planning level tool during project scoping and design. In particular, any available condition assessment data from prior asset investigations should be used to assess the need to upgrade drainage structures at Project Scoping.

Who to contact to get access to data: Until the data is incorporated into Atlas, designers should contact the [Department's GIS Unit](#). Up to 15 ESRI account credentials will be assigned to provide viewing access to the database.

Inputting data for H&D reviews: The detailed asset inspection forms included in Chapter 4, Appendix B of the CTDOT Drainage Manual have been incorporated into the inspection forms developed for the Drainage Network Map/Database. These GIS forms should be used to complete condition assessment inspections that are often done when consultants are preparing a drainage report to prepare a drainage plan for a project. This will ensure that all available inspection data is in a single location.