

Drainage Systems and Offsite Drainage Connections

UDOT 08A-06

Effective: February 7, 1969

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Purpose

To establish a policy and procedures for the Utah Department of Transportation (Department) to plan, design, construct and maintain its drainage systems and to regulate offsite drainage connections.

Policy

A. EXISTING DEPARTMENT DRAINAGE SYSTEMS

The Department enforces its prescriptive rights to drain stormwater runoff.

B. NEW DEPARTMENT DRAINAGE SYSTEMS

The Department should provide drainage systems to collect and convey stormwater runoff where runoff cannot dissipate into natural ground and where no other drainage system is available. The Department should coordinate with the local government entities so that proposed drainage systems are compatible with basin-wide drainage plans and local master plans.

The Department will convey flows through the Department Right of Way when a project intersects an existing watercourse. Drainage systems should be designed to convey the expected flows while maintaining natural drainage patterns to the greatest extent possible. The Department is not responsible for storm water or sediment from offsite areas conveyed through the Right of Way to adjacent properties.

A drainage report should be prepared for new drainage systems and include a hydrologic and hydraulic analysis with recommendations for the new system. The report is to describe features of the drainage system and conformance to local drainage master plans.

C. OFFSITE DRAINAGE CONNECTION TO DEPARTMENT'S SYSTEM

Entities proposing to connect into the Department's drainage system must file a permit application and enter into an Agreement with the Department.

The following conditions apply for proposed drainage connections:

1. The Department must have a drainage system that can accept additional stormwater runoff.

2. No connection will be allowed if the Department's drainage system depends entirely on subsurface infiltration such as infiltration trenches, infiltration basins, dry wells, sumps or similar features.
3. Flows from offsite areas must not exceed the capacity of the drainage system or interfere with the Department's ability to use its drainage system.
4. The quantity of stormwater discharged into the Department's drainage system for the 10 year storm event must not exceed 0.2 cubic feet per second per acre of developed area.
5. Size the storage facility and outlet structure to contain the 100-year storm event while providing 1 foot of freeboard from the water surface elevation to the top of the facility.
6. Pollutants and contaminants must be removed prior to entering the Department's drainage system using water quality controls.
7. Offsite drainage is not allowed to pond within the Department's Right of Way unless authorized by the Department in writing.
8. The requesting entity pays the cost of connecting to the Department's drainage system.

D. OFFSITE DRAINAGE NOT CONNECTING TO DEPARTMENT'S SYSTEM

Entities proposing to place a drainage system in the Department's Right of Way without a connection to the Department's drainage system must enter into a Statewide Utility License Agreement and file a Permit application with the Region Permits office.

E. DESIGN AND CONSTRUCTION STANDARDS

Drainage systems within the Department Right of Way are to be designed and constructed according to the current Department Drainage Manual of Instruction and Department Standard Specifications and Drawings for Road and Bridge Construction.

Definitions

Connection

A location where offsite drainage is discharged into the Department's drainage system.

Drainage System

A closed conduit or open waterway that collects and or conveys runoff. System features may include culverts, bridges, storm drains, catch basins, manholes, ditches, detention or retention basins, and other similar features.

Offsite Drainage

Stormwater runoff or groundwater originating from any areas outside the Department's Right of Way.

Pollutant

Any substance that degrades the beneficial use classification established by the Utah Division of Water Quality of the receiving waters or, if there is no classification, any substance which degrades the existing uses of the receiving waters.

Procedures

Offsite Drainage Connections to the Department's Drainage System

UDOT 08A-06.1

Responsibility: Permit applicant

Actions

1. Contact the appropriate Region Permits office to initiate the Permit process.
2. Prepare the drainage report, site plans and supporting documentation. These documents are included in the drainage submittal which must be stamped by a Professional Engineer (Civil, registered in the State of Utah) containing the following:
 - a. Drainage Report
 - 1) Hydrology and Hydraulic calculations
 - b. Site Plans
 - 1) Location map of site
 - 2) Location of connection to the Departments drainage system.
 - 3) One foot contour lines of pre and post development conditions
 - 4) Drainage System features
 - a) Pipes, catch basins and access locations
 - b) Pipe diameters and slope
 - c) Stormwater velocity and hydraulic grade lines for the design event
 - 5) Stormwater storage areas
 - a) Storage capacity
 - b) Stormwater control details
 - c) Water surface elevations
 - 6) Temporary and permanent water quality controls
 - c. Supporting documentation showing that the Department's drainage system has sufficient capacity to convey the offsite stormwater runoff.

3. Enter into an Agreement with the Department.
 - a. Single parcel development
 - 1) Fill out the Department's Drainage Agreement. Refer to Attachment 1.
 - a) Property owner must sign, date, and notarize.
 - b. Multiple parcel development
 - 1) Initiate a Cooperative Agreement between the applicable local government entity and the Department.
 - a) The local government entity must sign, date, and notarize.
4. Submit the drainage submittal and Agreement to the Region Permits Office for review and countersignature.

Responsibility: Region Permits Officer

5. Facilitate the review of the drainage submittal and Agreement in consultation with the Region Preconstruction Engineer or designee, resulting in one of the three outcomes below:
 - a. Approved – The submittal adheres to policy requirements
 - 1) Countersign the Agreement on behalf of the Department.
 - 2) Single parcel developments
 - a) Retain a copy of the countersigned Drainage Agreement and drainage submittal.
 - b) Notify the Permit applicant to record the countersigned Drainage Agreement and drainage submittals and return the recorded document to continue the Permit process. Proceed to step 6.
 - 3) Multiple parcel developments
 - a) Submit the executed Cooperative Agreement to the Comptroller's office
 - b) Retain the executed and recorded Cooperative Agreement in the Department's document management system. Proceed to step 10.
 - b. Incomplete - Additional information required
 - 1) Provide written notification to the Permit applicant describing the additional information required for the drainage submittal to be in conformity with this policy.
 - 2) Indicate the process will not move forward until the drainage submittal is in conformity with this policy.

- c. Denied – The submittal does not adhere to policy requirements
 - 1) Consult with the Statewide Permits Office before notifying the Permit Applicant of a denied submittal.
 - 2) Provide written notification to the Permit applicant describing the reasons for denial.
 - 3) Retain an electronic copy of the denial within the Departments document archiving system.

Responsibility: Permit applicant

- 6. Single parcel developments
 - a. Record the Drainage Agreement and drainage submittal with the appropriate County once countersigned by the Department.
 - b. Return the executed and recorded Drainage Agreement and drainage submittal to the Region Permits Officer to continue the Permit process.

Responsibility: Region Permits Officer

- 7. Verify the Drainage Agreement was properly recorded against the Permit applicant's property in the appropriate county recorder's office and that there are no changes to the recorded Drainage Agreement and drainage submittal.
- 8. Retain a copy of the executed and recorded Drainage Agreement.
- 9. Notify the Permit Applicant to file a Permit application using the Department's online permits system to complete the permitting process.

Responsibility: Permit applicant

- 10. File a Permit application using the Department's online permits system to complete the permitting process.

Responsibility: Region Permits Officer

- 11. Verify all other Permit requirements are met before issuing the Permit.