



MEMORANDUM

Temporary sediment basin drawdown time

TO: North Central Texas Council of Governments
iSWM Implementation Subcommittee

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FROM: Ashley Lowrie, PE, CFM
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In Section 3.9 of the Construction Controls iSWM Technical Manual page CC-115, the requirement for minimum sediment basin dewatering time is stated as 36 hours. It is also stated on page CC-118 of the same section: "The primary outlet shall have a minimum design dewatering time of 36 hours for the temporary control design storm (2-year, 24-hour)." However, on page CC-135 of the Sediment Basin Design Procedures Step 14 (a) defines the variable Q as the "volumetric flow rate through the orifice needed to achieve approximate 6-hour drawdown".

After checking several different entities' requirements and other documentation, the majority of reviewed sources require a minimum draw down time of 24 hours or higher. These entities included NRCS which required 24-hours, City of Austin required 72 hours, and TxDOT required 40 hours. It is recommended that iSWM technical manual require a minimum dewatering time of 36 hours.

To correct this in the Construction Controls technical manual, this will require a revision to the wording on page CC-135 Step 14 (a). The wording will be needed to change from a 6-hour drawdown time to 36 hours. Also, the 21,600 seconds representing 6 hours will need to be increased to 129,600 seconds representing 36 hours.