1.0 Construction Dewatering

1.1 Description

These procedures and practices are designed to minimize or eliminate the discharge of concrete waste materials to storm drain systems or to waterbodies.

1.2 Applications

Concrete waste management procedures and practices are implemented on construction projects where:

- Concrete or mortar is used as a construction material or where concrete dust and debris result from demolition activities.
- Slurries containing portland cement concrete (PCC) or asphalt concrete (AC) are generated, such as from saw cutting, coring, grinding, grooving, and hydro-concrete demolition.
- Concrete trucks and other concrete-coated equipment are washed on-site. Where mortar-mixing stations exist.

1.3 Concrete Slurry Wastes

- PCC and AC waste are not allowed to enter storm drains or waterbodies.
- Collect and properly place PCC and AC waste in a temporary concrete washout facility.
- Disposal of hardened PCC and AC waste in conformance with the Project Standard Specifications.
- Place a sign within 30 feet of each temporary concrete washout facility to inform concrete equipment operators to utilize the proper facilities.
- The contractor will monitor on-site concrete working tasks, such as saw cutting, coring, grinding, and grooving to ensure proper methods are implemented.
- Saw-cut PCC slurry is not be allowed to enter storm drains or waterbodies. Residue from grinding operations will be picked up by means of a vacuum attachment to the grinding machine. Saw cutting residue is not allowed to flow across the pavement and shall not be left on the surface of the pavement.
- Slurry residue is vacuumed, disposed in a temporary facility, and allowed to dry. Dry slurry residue is removed and disposed of in conformance with the provisions in the Project Standard Specifications.
- Residue from grooving and grinding operations is collected and disposed in accordance with the Project Standard Specifications.

1.4 Concrete Transit Truck Washout Procedures

- Temporary concrete washout facilities are located a minimum of 50 feet from storm drain inlets, open drainage facilities, waterbodies, creek banks, or perimeter control unless determined infeasible by the Design Engineer. Each facility is located away from construction traffic or access areas to prevent disturbance or tracking.
- Install sign within 30 feet each washout facility to inform concrete equipment operators to utilize the proper facilities.
- Temporary concrete washout facilities are constructed above grade or below grade at the option of the Contractor. Temporary concrete washout facilities will be constructed and maintained in sufficient quantity and size to contain all liquid and concrete waste generated by washout operations.
- Temporary washout facilities have a temporary pit or bermed areas of sufficient volume to completely contain all liquid and waste concrete materials generated during washout procedures.
- Washout of concrete mixer trucks are performed in designated areas only.
- Concrete is washed only from mixer truck chutes into an approved concrete washout facility. Washout may be collected in an impermeable bag for disposal.
- Excess concrete is pumped in concrete pump bin back into concrete mixer truck.
- Concrete washout from concrete pumper bins can be washed into concrete pumper trucks and discharged into designated washout area or properly disposed offsite.
- Once concrete wastes are washed into the designated area and allowed to harden, the concrete will be broken up, removed and disposed.

1.5 **Above Grade Temporary Concrete Washout Facility**

- Above Grade Temporary concrete washout facilities are constructed, with a minimum length of 10 feet and minimum width of 10 feet, but with sufficient quantity and volume to contain all liquid and concrete waste generated by washout operations. The length and width of a facility may be increased, upon approval from the Design Engineer.
- Plastic lining material is a minimum of 10-millimeter polyethylene sheeting and is free of holes, tears, or other defects that compromise the impermeability of the material.
- Portable delineators are applied only to a clean, dry surface.

1.6 **Below Grade Temporary Concrete Washout Facility**

- Below Grade Temporary concrete washout facilities are constructed, with a recommended minimum length and minimum width of 10 feet. The quantity and volume is sufficient to contain all liquid and concrete waste generated by washout operations. The length and width of a facility may be increased, upon approval of the Design Engineer. Lath and flagging shall be commercial type.
- Plastic lining material is a minimum of 10-millimeter polyethylene sheeting and is free of holes, tears or other defects that compromise the impermeability of the material.
- The soil base is prepared free of rocks or other debris that may cause tears or holes in the plastic lining material.

1.7 **Maintenance**

Clean out all temporary concrete washout facilities when they are 50% full.

1.8 **Removal**

- When temporary concrete washout facilities are no longer required for the work, as determined by the Design Engineer, the hardened concrete shall be removed and disposed of in conformance with the provisions in the Project Standard Specifications.
- Materials used to construct temporary concrete washout facilities shall be removed from the site of the work.
- Holes, depressions, or other ground disturbance caused by the removal of the temporary concrete washout facilities shall be backfilled and stabilized.