VDOT PRECAST CONCRETE DRAINAGE STRUCTURE
SHOP DRAWING SUBMITTAL FORMAT

(IN CONJUNCTION WITH ROAD & BRIDGE SPECIFICATION REQUIREMENTS)

PROCESS

• Submit electronically (.pdf) or send hard copies. Hard copies can be sent to:

  VDOT Standards and Special Design Section
  1401 East Broad Street
  Richmond, VA 23219

• For project specific submittals, include VDOT project & structure number.
• For project specific submittals, review and return is within 30 business days from receipt.
• For blanket approval submittals, review and return is 60-90 business days from receipt.
• If submittals are not approved and are resubmitted to address review comments, an additional 30 business days will be required for review.

CALCULATIONS

• Shall be sealed by a Virginia licensed PE having at least 5 years of precast concrete design experience.
• Structure shall meet the requirements in Section 302 of the VDOT Road and Bridge Specifications.
• Label all variables.
• Show referenced specifications (AASHTO, ASTM, etc.).
• Show assumed and referenced (note source) values.
• Show calculated forces on structure such as live load, dead load, soil load, water load, flotation, and overturning/sliding if applicable. Calculations must account for truck loading (HS-20 or HL-93) when the structure is within or has the potential to be within VDOT right-of-way.
• Show formulas used in each step.
• Structural software output must also include above information.

SHOP DRAWINGS

• Shall be sealed by a Virginia licensed PE having at least 5 years of precast concrete design experience.
• Show all dimensions of the structure including dimensions for any openings.
• Show minimum and maximum heights if applicable.
• Show and label reinforcement size and type, spacing, lap lengths, and clear cover.
• Show and label any additional reinforcement around openings.
• Show pipe size, type, and invert for a project specific submittal.
• Provide information on any castings, coatings, flexible connectors, or other appurtenances not preapproved.
• When an SL-1 is called for in the plans, refer to the Standard SL-1 for current guidance on safety slabs.

(NEW 10/2019)