

VIRGINIA RAILWAY EXPRESS
Fredericksburg Station Infrastructure Repairs
January 14, 2010

- D. Precast structures will conform to Section **302** of Virginia Department of Transportation Road and Bridge Specifications, 2007. The manufacturer will have the option of selecting the combination of precast units to complete a structure unless otherwise noted on the plans. All precast structures shall be constructed with 4000 psi minimum concrete.
- E. **Junction boxes, frames and lids shall be designed to carry full highway loadings (AASHTO HS20-44 loading).**

PART 3 - EXECUTION

3.01 DESCRIPTION OF WORK

- A. The Contractor shall remove existing drain pipes. Drain pipes shall be detached from deck drain assemblies overhead. Existing drain pipes shall be cut off a minimum of 6" above the ground line, and the remaining pipe shall be capped off. Connections to the structure shall be removed to a depth of 1" below the surface of the concrete; fill any remaining voids with high strength, non-shrink grout.
- B. The Contractor shall replace existing deck drain assemblies as designated in the plans. Existing ballast shall be removed in the area around the deck drain assembly to be replaced. A temporary ballast retaining frame shall be used to minimize the area of ballast removal. The frame should be advanced downward as the ballast is removed; in no case shall ballast be removed from underneath the ties. Existing deck drain assembly shall be removed. A new deck drain assembly, complete with the heavy duty perforated grate, shall be installed. Ballast shall be replaced as the temporary ballast retaining frame is extracted.
- C. The Contractor shall install new deck drain assemblies as designated in the plans. Existing ballast shall be removed in the area around the deck drain assembly to be replaced. A temporary ballast retaining frame shall be used to minimize the area of ballast removal. The frame should be advanced downward as the ballast is removed; in no case shall ballast be removed from underneath the ties. A hole shall be cored in the deck, at the location of the new drain assembly, which meets the size requirements of the drain assembly to be installed. Oversized holes shall not be permitted. A new deck drain assembly, complete with the heavy duty perforated grate, shall be installed. Ballast shall be replaced as the temporary ballast retaining frame is extracted.
- D. The Contractor shall install new drain pipes to convey deck drainage away from the structure. The Contractor shall install 6" ductile iron pipes and 8" ductile iron pipes as shown in the plans to carry storm drainage from the deck drain assemblies, in a watertight system, to a point which exits the station.
- E. 2'x2' junction boxes shall be constructed in such a manner to tie the 8" ductile iron pipe into the existing storm sewer systems. For junction box details, refer to Project Plans.
- F. The Contractor shall trench through existing concrete and asphalt pavement in order to install new underground drain pipes. The pipes shall be placed on compacted bedding followed by compacted granular backfill. Concrete and asphalt pavement shall be repaired to match existing conditions. For typical pipe trench details, refer to Project Plans. All pavement removed shall be sawcut to minimize damage to adjacent pavement to remain. All areas of pavement removal shall be patched to match existing.
- G. The Contractor shall be responsible for the details of all connections of drain pipes to the existing structure.