

Bridge Abutment / Approach Backfill

Woodrow Wilson Bridge I-95/I-495/I-295, Rt. 1 Tie In, Washington DC
Maryland & Virginia Department of Transportation
2003-2004

Density: 30 pcf & 40 pcf

Volume: 67,000 cy

As part of the reconstruction of the entire Woodrow Wilson Bridge and connecting roadways, the Maryland side bridge approach contained soft and compressible soils, and with the widening of the new approaches a lightweight fill was needed at the abutments to reduce future settlement of the road. The abutments and retaining walls were constructed on piling for vertical support and the sloped embankment inside of the abutment and walls was backfilled with PROVOTON foam concrete up to 20' deep. On the Virginia abutment the entire approach to the bridge structure was backfilled with 60,000 cy of foam concrete. Being of a ridged body when hardened, the PROVOTON foam concrete does not apply any lateral pressures on the abutments or the adjacent retaining walls, and greatly reduced the loading on the soft soils.



Finished backfill of one of the Maryland side connector bridge abutments.



Filling up the north side of the Woodrow Wilson bridge abutment.



The Virginia abutment backfill utilized 60,000 cy of PROVOTON foam concrete.