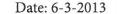


## NOTES:

- 1) Manholes, tunnel and piping to be designed by a Virginia rgistered professional engineer.
- 2) Construct tunnel and tops for H-20 loading.
- 3) Design tunnel and piping with as little abrupt elevational and lateral direction change as possible to avoid additional anchorage and expansion joints. Tunnel height can vary with site contour but height shall not exceed 8'. Tops at grade unless precluded by abrupt grade changes, road crossing or other obstruction.
- 4) Provie floor drains in tunnel if necessary, otherwise grade drain channel to manhole.
- 5) Lifting lugs for tunnel top removal shall be located on the sides of the tunnel top, see tunnel top detail.
- 6) For expansion joints, ball joints and anchorage provide hatch access with cover. Hatch to be 4' x 3' min. clearnace.

NTS





## HTHW TUNNEL DETAIL, FAIRFAX CAMPUS

Detail No: 4.1-1