ENG 2021-02: Repairing 3 Box Culverts

Detail Sheet

Bemiss Knights Academy Road Box Culvert over Cherry Creek Tributary

- Traffic control
- The road may be closed
- Saw cut 15' each direction from far north end of culvert
- Dig down to bottom of culvert (North End), backfill 6" above weep holes with # 57 stone
- Make repair if barrel of culvert is leaking
- Replace any unsuitable material with compactable material
- Upper 12" compacted to 95% standard proctor
- Backfill upper 8" with GAB
- Tack both edges of asphalt
- Top with 220# of 12.5 superpave
- Temporary centerline and edge line 4" wide after topping
- Permanent centerline and edge line 5" wide 15 days after topping (Highbuild)
- Protect inlet end of apron with type III rip rap, width of apron and 10' long from apron edge
- On inlet seal apron joints at culvert with flexible joint sealant (Pourthane SL) or equivalent
- Remove and replace apron and toe wall on outlet end, new apron must be epoxied into culvert floor and wing wall footings with #4 rebar @24" O.C.
- See GDOT Std. 2406 for apron and toe wall reinforcing. (Omit baffle)
- Bed area under apron and toe wall with 12" # 57 Stone