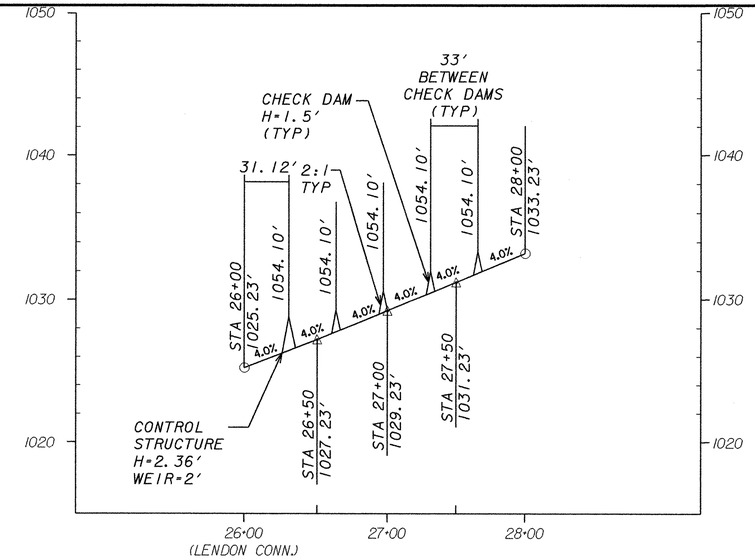


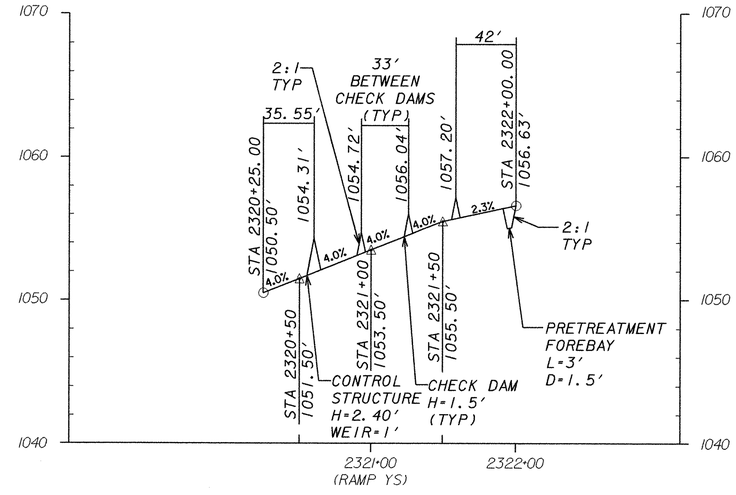

```
*********************************
PRELIMINARY HYDROLOGIC CALCULATIONS
*********************************
Compute WQv volume requirements
Compute Runoff Coefficient, Rv          -Rv          =0.050
Compute Water Quality Volume            -WQv         =275  cf

Compute Channel Protection Volume       -Cpv         =1516 cf
Compute Overbank Flood Protection Volume -Qp25       =2351 cf
Compute Extreme Flood Protection Volume -Qf100       =NA

********************
ENHANCED SWALE DESIGN
********************
Pretreatment volume                     -Vp          =NA
Swale dimensions                        -Length      =197  ft
                                         Width       =6    ft
                                         Side Slope L =2:1
                                         Side Slope R =2:1
                                         Area        =13.5 sf
Compute number of check dams            -Slope       =0.040ft/ft
                                         Depth       =1.5  ft
                                         Distance    =33   ft
                                         Number      =5    each
Calculate draw down time                -t           =24   hr
Required k=1.5 ft per day
Calculate channel velocity              -V           =3.33 fps
Overflow wier length                    -Length      =2.0  ft
Outlet structure height                 -Height      =2.36 ft
Calculate forebay length                -Length      =NA
```

ENHANCED DRY SWALE PROFILE #17

APPLY TO STA. 26+00 TO 28+00 (LENDON CONNECTOR) RIGHT




```
*********************************
PRELIMINARY HYDROLOGIC CALCULATIONS
*********************************
Compute WQv volume requirements
Compute Runoff Coefficient, Rv          -Rv          =0.245
Compute Water Quality Volume            -WQv         =419  cf

Compute Channel Protection Volume       -Cpv         =804  cf
Compute Overbank Flood Protection Volume -Qp25       =794  cf
Compute Extreme Flood Protection Volume -Qf100       =1099 cf

********************
ENHANCED SWALE DESIGN
********************
Pretreatment volume                     -Vp          =31   cf
Swale dimensions                        -Length      =176  ft
                                         Width       =4    ft
                                         Side Slope L =VAR-3:1 AVG
                                         Side Slope R =2:1
                                         Area        =11.63 sf (AVG)
Compute number of check dams            -Slope       =0.034ft/ft
                                         Depth       =1.5  ft
                                         Distance    =33   ft
                                         Number      =4    each
Calculate draw down time                -t           =24   hr
Required k=1.5 ft per day
Calculate channel velocity              -V           =0.82 fps
Overflow wier length                    -Length      =1.0  ft
Outlet structure height                 -Height      =2.40 ft
Calculate forebay length                -Length      =2    ft
```

ENHANCED DRY SWALE PROFILE #16

APPLY TO STA. 2320+25 TO 2322+00 (RAMP 'YS') RIGHT

PBS&J

H. 0 50 100 150
V. 0 5 10 15
(SCALE IN FEET)

REVISION DATES		

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION

OFFICE: PROGRAM DELIVERY

SPECIAL CONSTRUCTION DETAIL

ENHANCED DRY SWALES PROFILES

DRAWING No. 38-08K

1/5/2009 GPLM