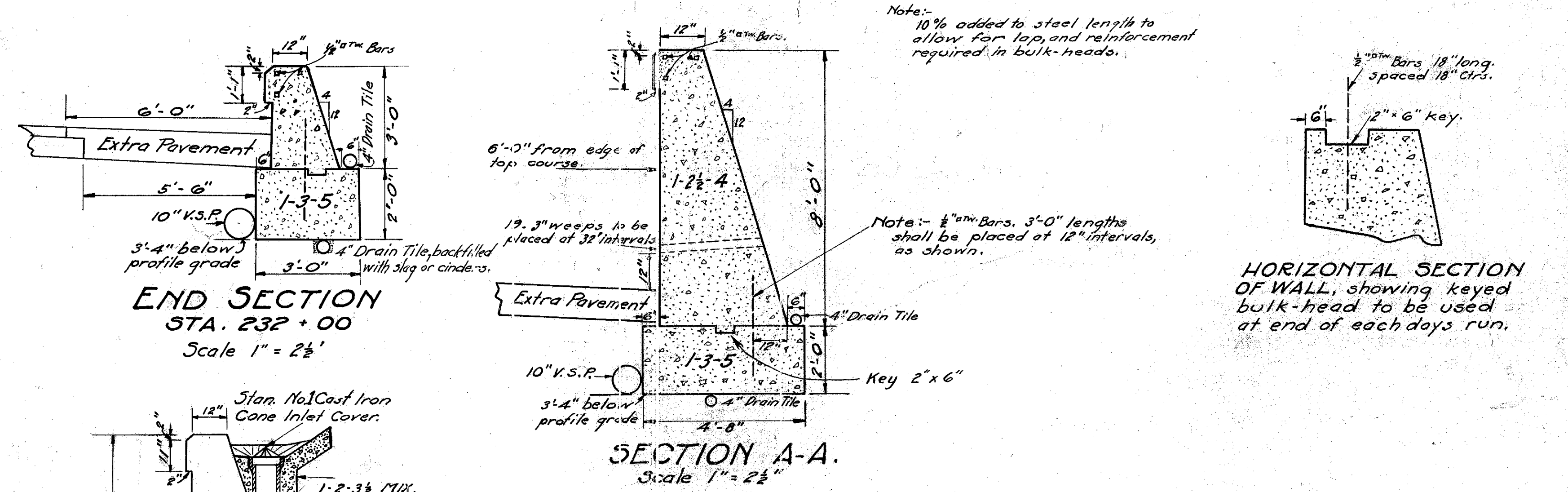
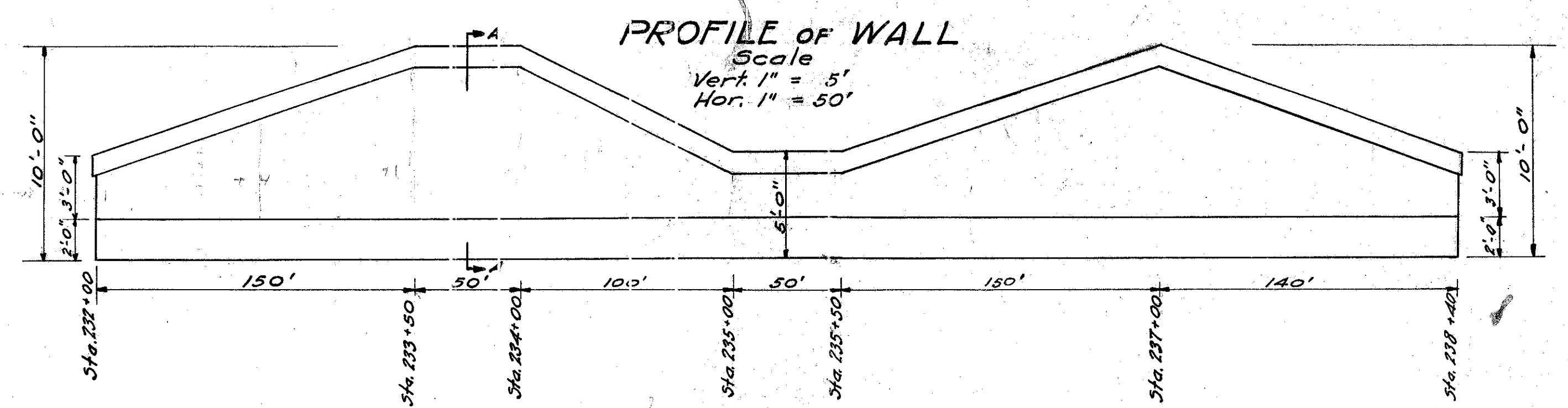
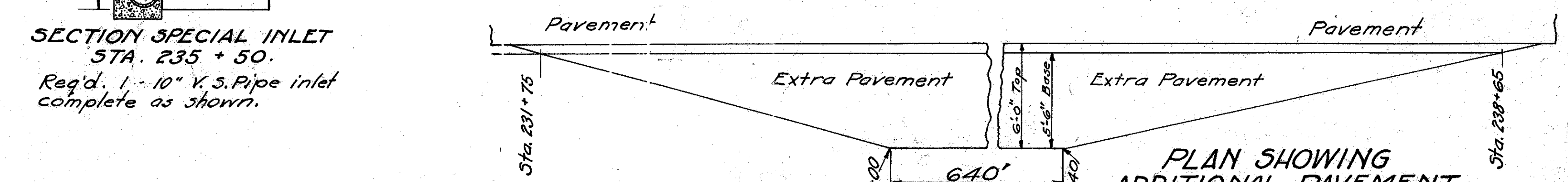


## SPECIAL CONCRETE RETAINING WALL STA. 232+00 TO STA. 238+40

I.C.H. 324 SEC. F.  
GEAUGA COUNTY



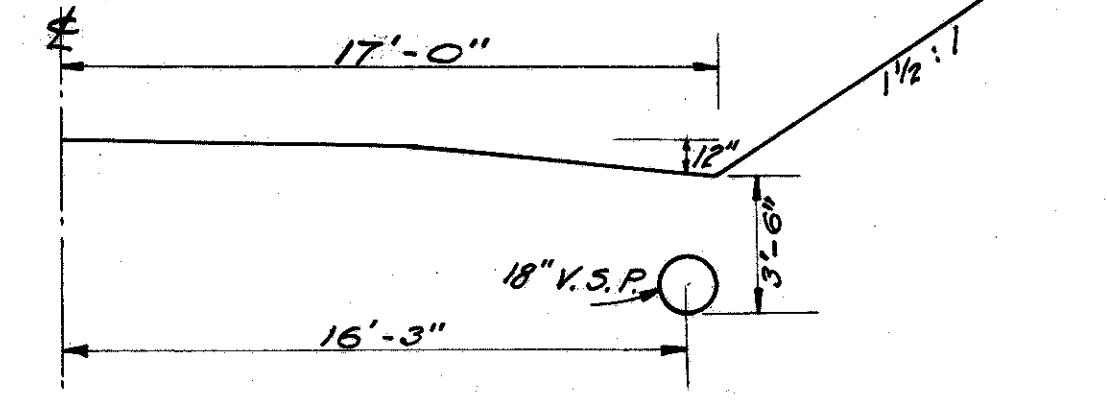
HORIZONTAL SECTION OF WALL, showing keyed bulk-head to be used at end of each days run.



**SUMMARY OF SPECIAL CONSTRUCTION AT RETAINING WALL.**

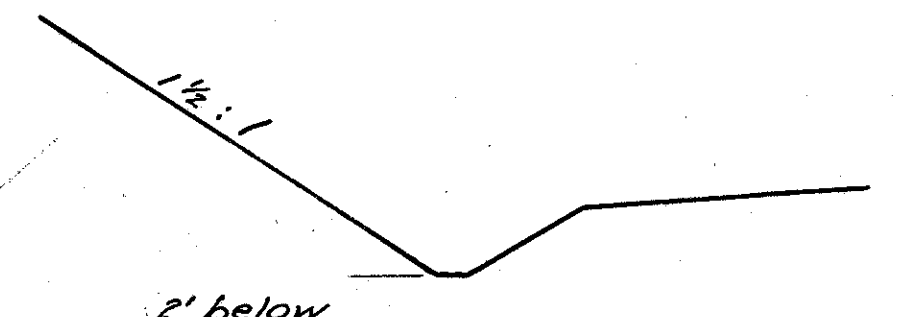
Excav. & Backfill	600 Cu. Yds.
1-2 1/2-4 Conc. in wall	264.3 Cu. Yds.
1-3-5 Conc. in footer	181.8 Cu. Yds.
1-2 1/2-4 Conc. in headwall	0.9 Cu. Yds.
Reinf. steel	3588 Lbs.
10" V. S. Pipe in place	600 Lin. ft.
4" Drain tile	1320 Lin. ft.
Stan. No. 1 side ditch inlets.	6 only.
Extra width top course	443.3 Sq. Yds.
Extra width base course	406.4 Sq. Yds.

**DETAIL OF PIPE DRAIN**  
Sta. 144+30 to Sta. 146+50.



**QUANTITIES**  
18" V.S.P. in place complete. 220 Lin. Ft.

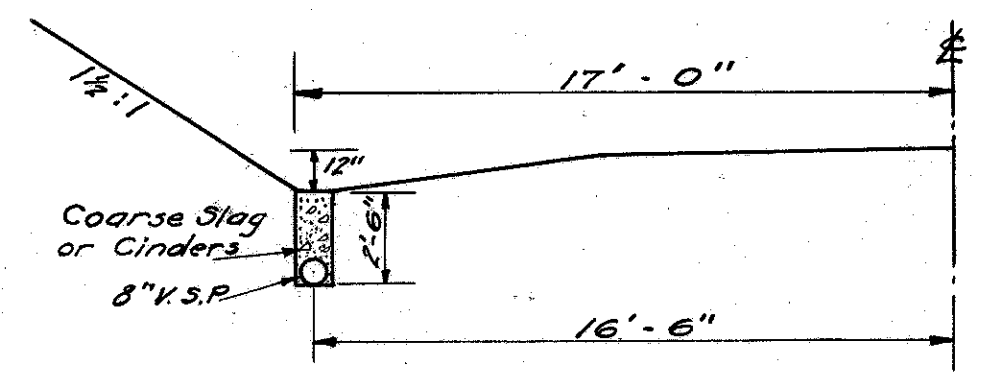
**DETAIL OF PIPE DRAIN**  
Sta. 193+50 to Sta. 195+80



**QUANTITIES**  
8" Tile in place complete including Excav. & backfill. = 230 Lin. Ft.  
1-2-3/4 Conc. = 06 Cu. Yds.

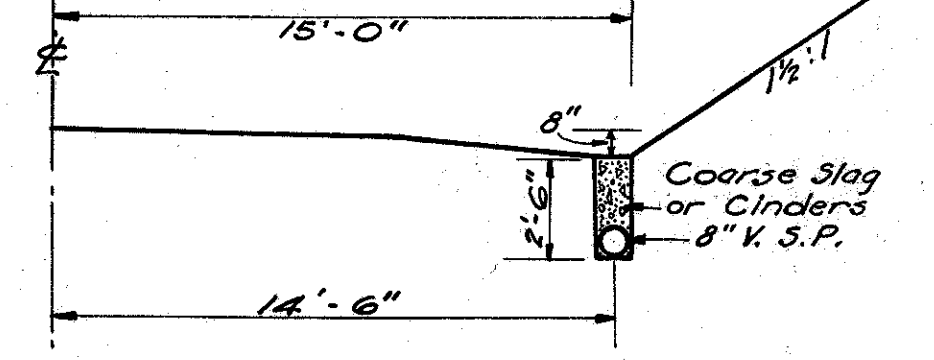
Note:-  
On all V.S.P. drains exposed ends of pipe shall be protected with hand-laid cobble or field stone.

**DETAIL OF PIPE DRAIN**  
Sta. 155+05 to Sta. 156+81.



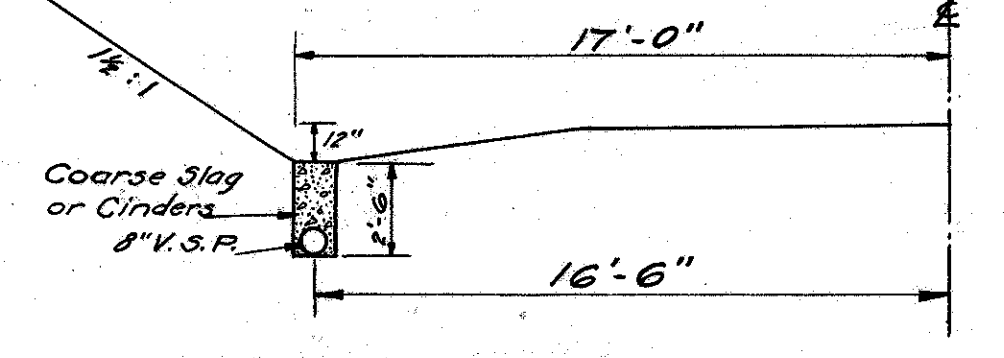
**QUANTITIES.**  
8" V.S.P. in place complete including Slag or Cinder backfill. 176 Lin. Ft.

**DETAIL OF PIPE DRAIN**  
Sta. 212+50 to Sta. 214+60.



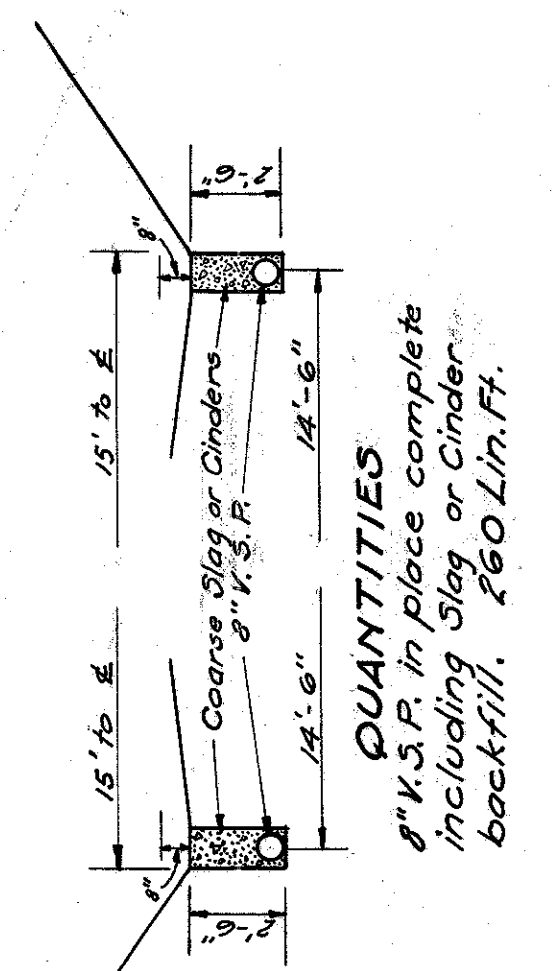
**QUANTITIES**  
8" V.S.P. in place complete including Slag or Cinder backfill. 210 Lin. Ft.

**DETAIL OF PIPE DRAIN**  
Sta. 168+30 to Sta. 169+80.



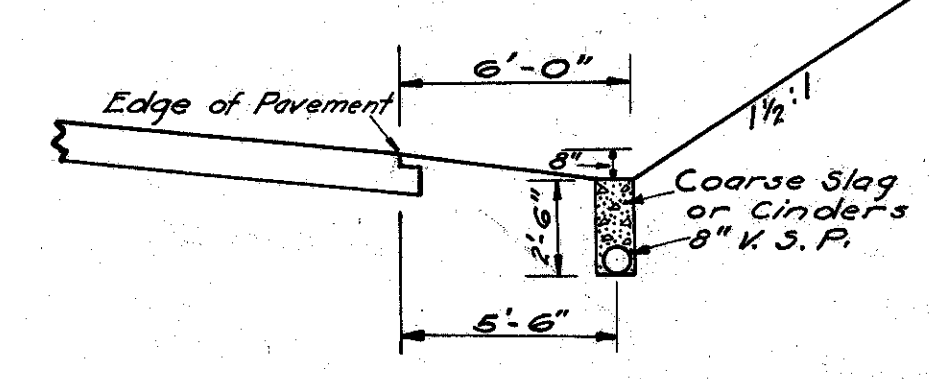
**QUANTITIES**  
8" V.S.P. in place complete including Slag or Cinder backfill. 150 Lin. Ft.

**DETAIL OF PIPE DRAIN**  
Sta. 313+40 to Sta. 314+40 Ft.  
Sta. 313+20 to Sta. 314+80 Lt.



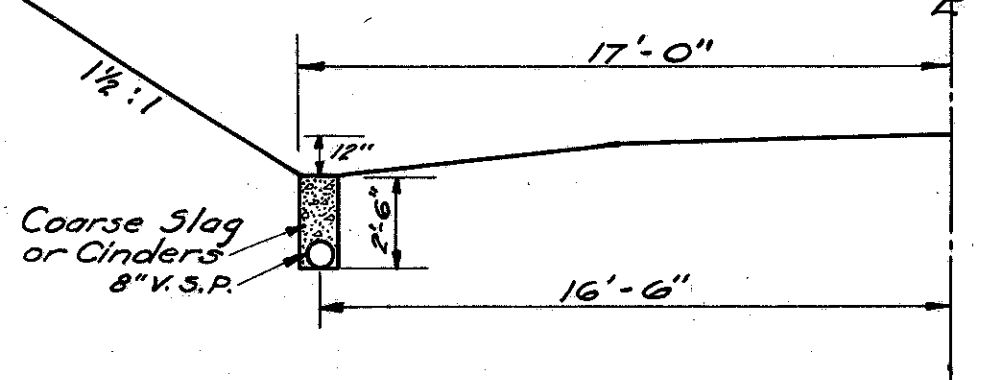
**QUANTITIES**  
8" V.S.P. in place complete including Slag or Cinder backfill. 260 Lin. Ft.

**DETAIL OF PIPE DRAIN**  
Sta. 220+20 to Sta. 224+20.



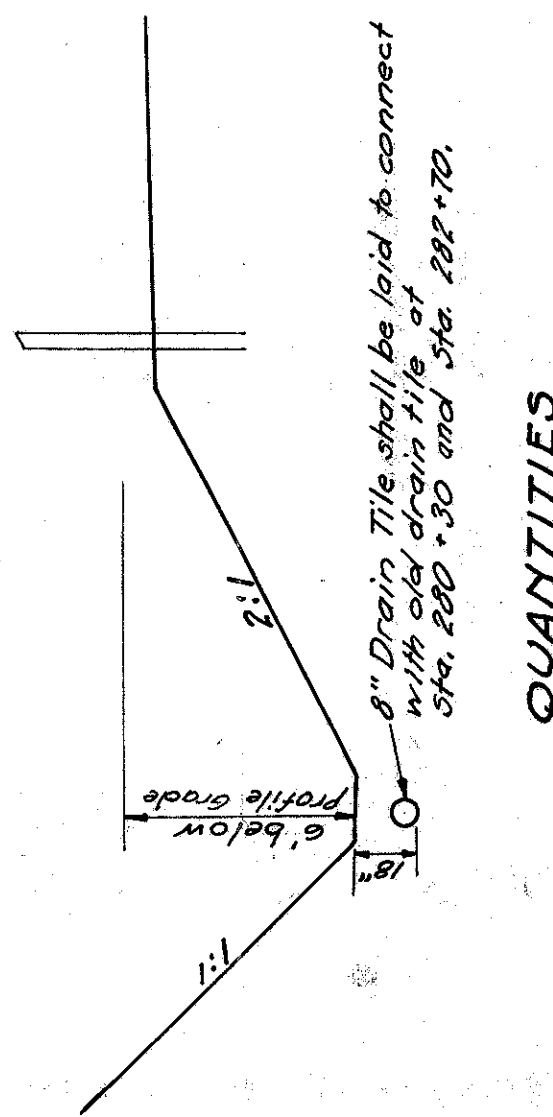
**QUANTITIES**  
8" V.S.P. in place complete including Slag or Cinder backfill. 400 Lin. Ft.

**DETAIL OF PIPE DRAIN**  
Sta. 177+27 to Sta. 178+27

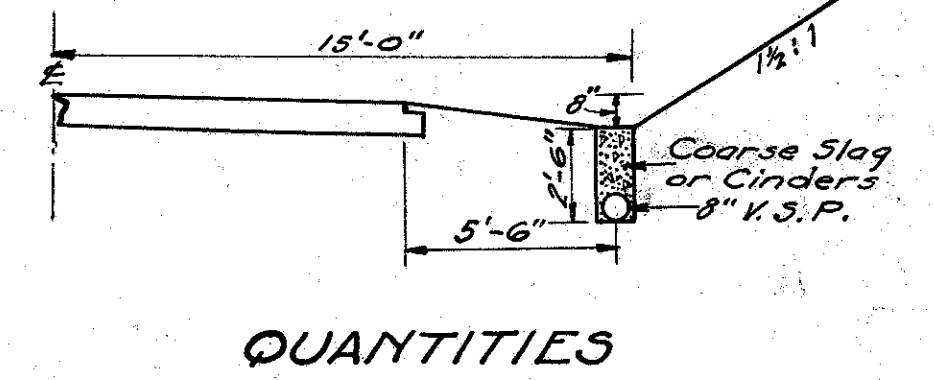


**QUANTITIES**  
8" V.S.P. in place complete including Slag or Cinder backfill. 100 Lin. Ft.

**SPECIAL DRAIN TILE.**  
Sta. 280+30 to Sta. 282+70.

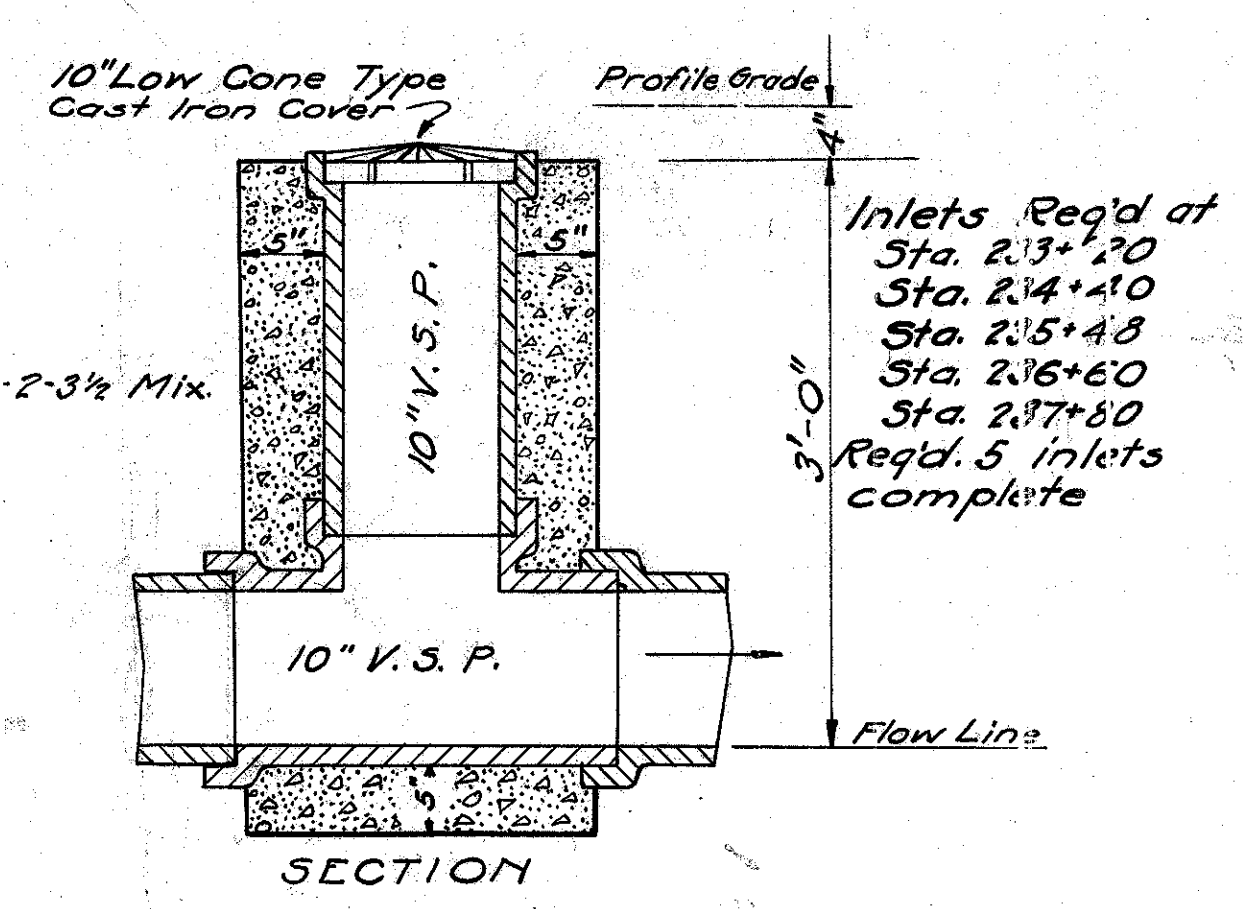


**DETAIL OF PIPE DRAIN**  
Sta. 242+40 to Sta. 244+80



**QUANTITIES**  
8" V.S.P. in place complete including Slag or Cinder backfill. 240 Lin. Ft.

**STAN. No. 1 INLET**



**SPECIAL STORM WATER SEWER**  
Sta. 231+80 to 237+80  
600 Lin. ft. 10" V.S.P. in place complete.  
Note: Backfill shall be thoroughly flushed and tamped.

**HEADWALL AT END OF SEWER PIPE.**  
1-2-3/4 Conc. = 0.9 Cu. Yds.