

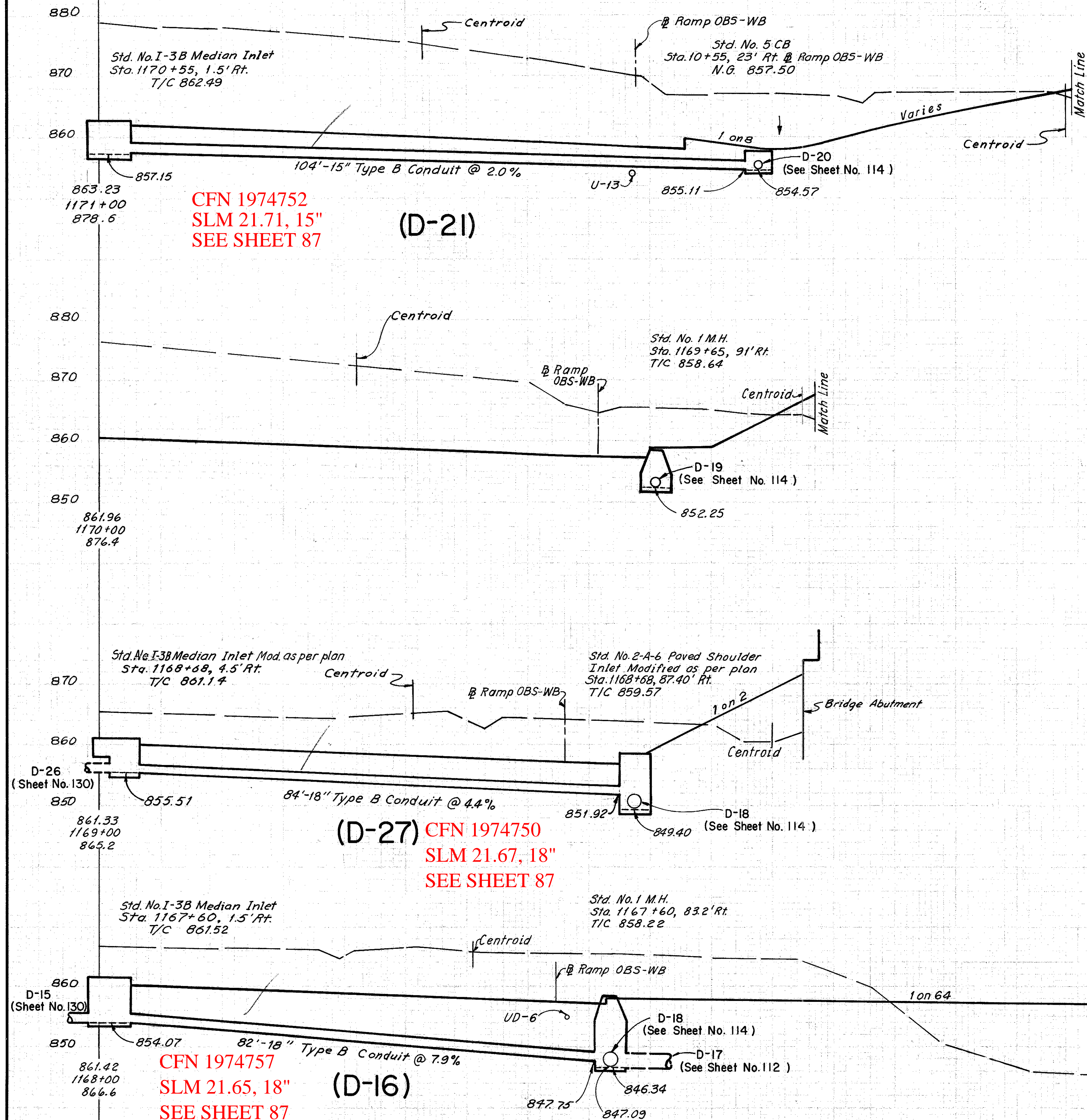
Quantity Calculations  
 Made By JEM Date 6-70  
 Checked By IM Date 6-72

FED. RD. DIVISION	STATE	PROJECT	
2	OHIO		



CUYAHOGA COUNTY  
 CUY 480-21.40

8-67  
 9-52  
 6-72  
 G.P.M.  
 W.L.M.  
 J.E.M.



**CFN 1974752**  
**SLM 21.71, 15"**  
**SEE SHEET 87**  
**(D-21)**

**(D-27) CFN 1974750**  
**SLM 21.67, 18"**  
**SEE SHEET 87**

**CFN 1974757**  
**SLM 21.65, 18"**  
**SEE SHEET 87**  
**(D-16)**

880				
870				
860				
Exc. L. = $\frac{(2864.8 - 47.7) \times 100}{2864.8} = 98.3$				
Emb. L. = $\frac{(2864.8 - 139.5) \times 100}{2864.8} = 95.2$				
880				
870				
860				
850				
Exc. L. = $\frac{(2864.8 - 46.8) \times 100}{2864.8} = 98.4$				
Emb. L. = $\frac{(2864.8 - 113) \times 100}{2864.8} = 96.1$				
870				
860				
850				
Emb. = $\frac{(2864.8 - 121) \times 100}{2864.8} = 95.8$				
Exc. = $\frac{(2864.8 - 56) \times 100}{2864.8} = 98.0$				
870				
860				
850				
Exc. = $\frac{(2864.8 - 66.5) \times 100}{2864.8} = 97.7$				

EARTHWORK			
END	AREA	VOLUME	
EXC.	EMB.	EXC.	EMB.
	1750	2	
			5436
	1236	10	
			3306
	578	104	
			2668
	892	872	
			4353
	1314	98	
			1755

All Earthwork Quantities  
 in Participation Limit III

HOWARD, NEEDLES, TAMMEN & BERGENDOFF  
 CONSULTING ENGINEERS  
 KANSAS CITY CLEVELAND NEW YORK