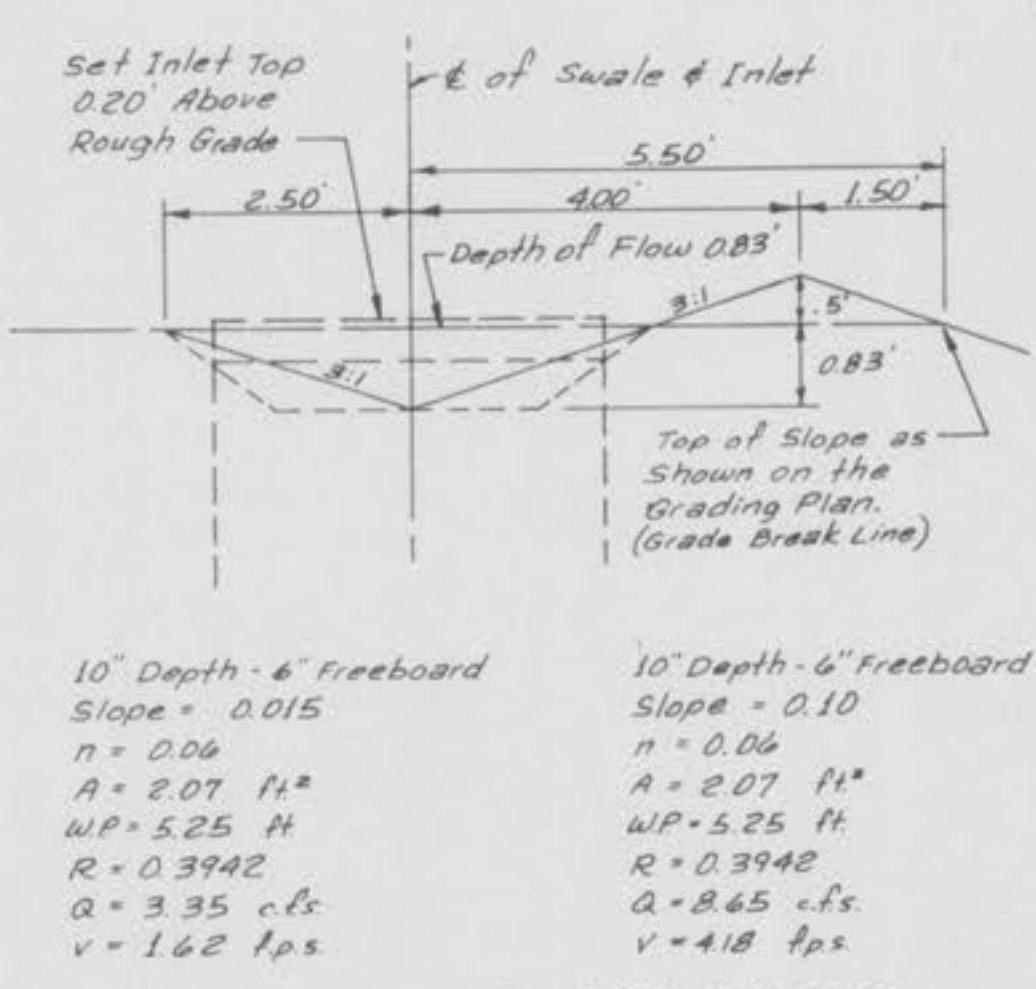
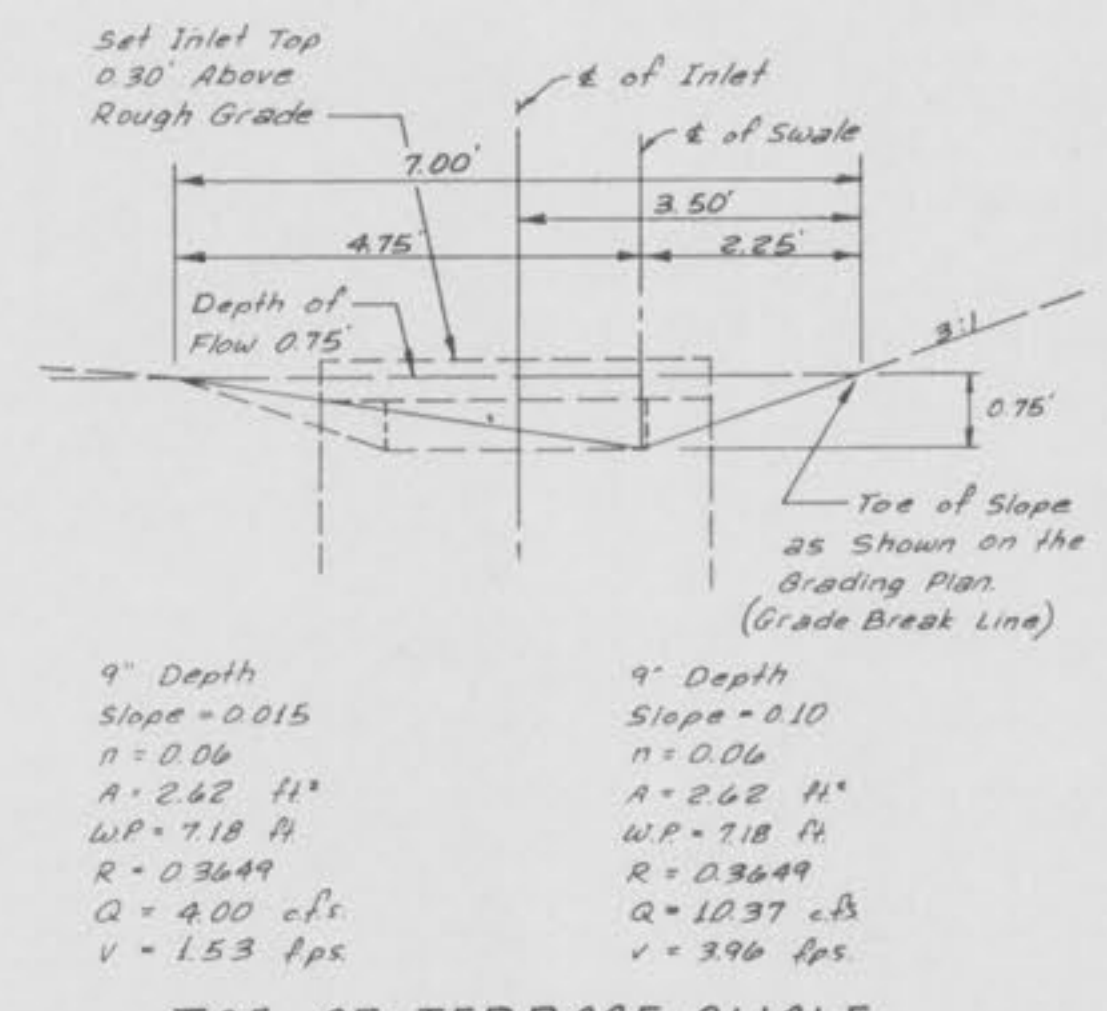


REAR YARD SWALE



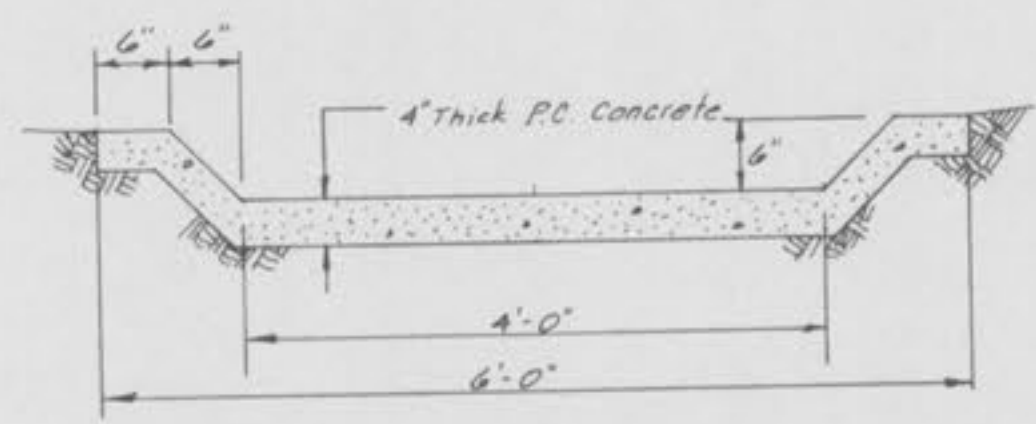
TOP OF TERRACE SWALE



TOE OF TERRACE SWALE

Swale Capacity:  
A = 2.25 ft² R<sup>M</sup> = 0.5564  
WP = 5.42 ft S = 0.005  
R = 0.4151 S<sup>N</sup> = 0.0707

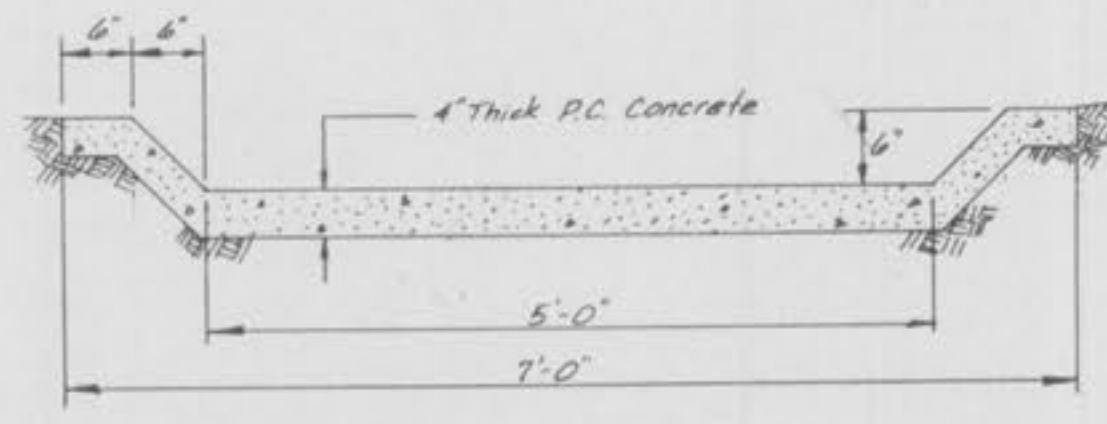
Mannings:  $\frac{1.486}{0.013} (2.25)(0.5564)(0.0707) = 10.12 \text{ cfs}$



PAVED SWALE DETAIL FOR  
Northeast & Southeast Basins

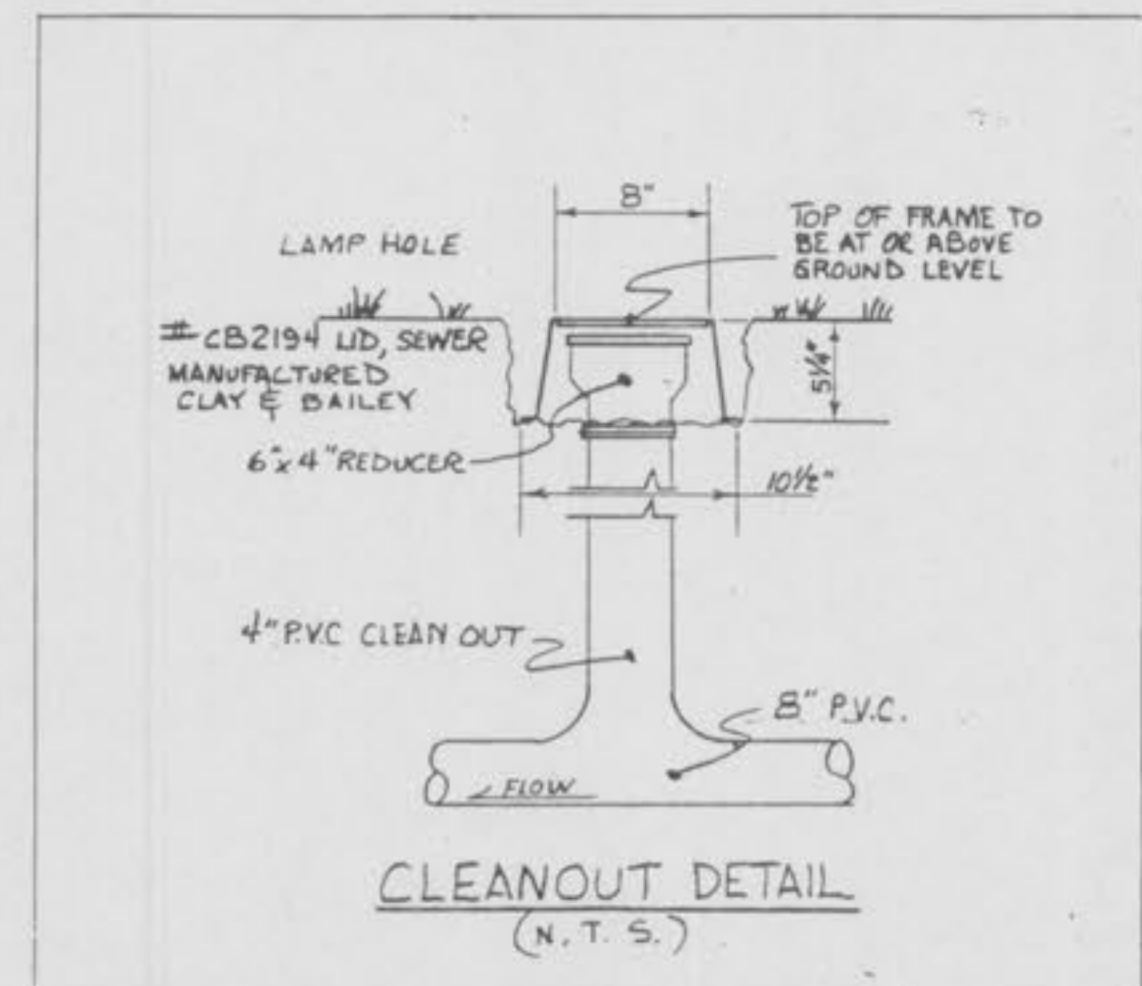
Swale Capacity for  
Northwest Basin & Southwest Basin North of OF 43  
A = 2.75 ft² R<sup>M</sup> = 0.5682  
WP = 5.42 ft S = 0.005  
R = 0.4283 S<sup>N</sup> = 0.0707

Mannings:  $\frac{1.486}{0.013} (2.75)(0.5682)(0.0707) = 12.63 \text{ cfs}$

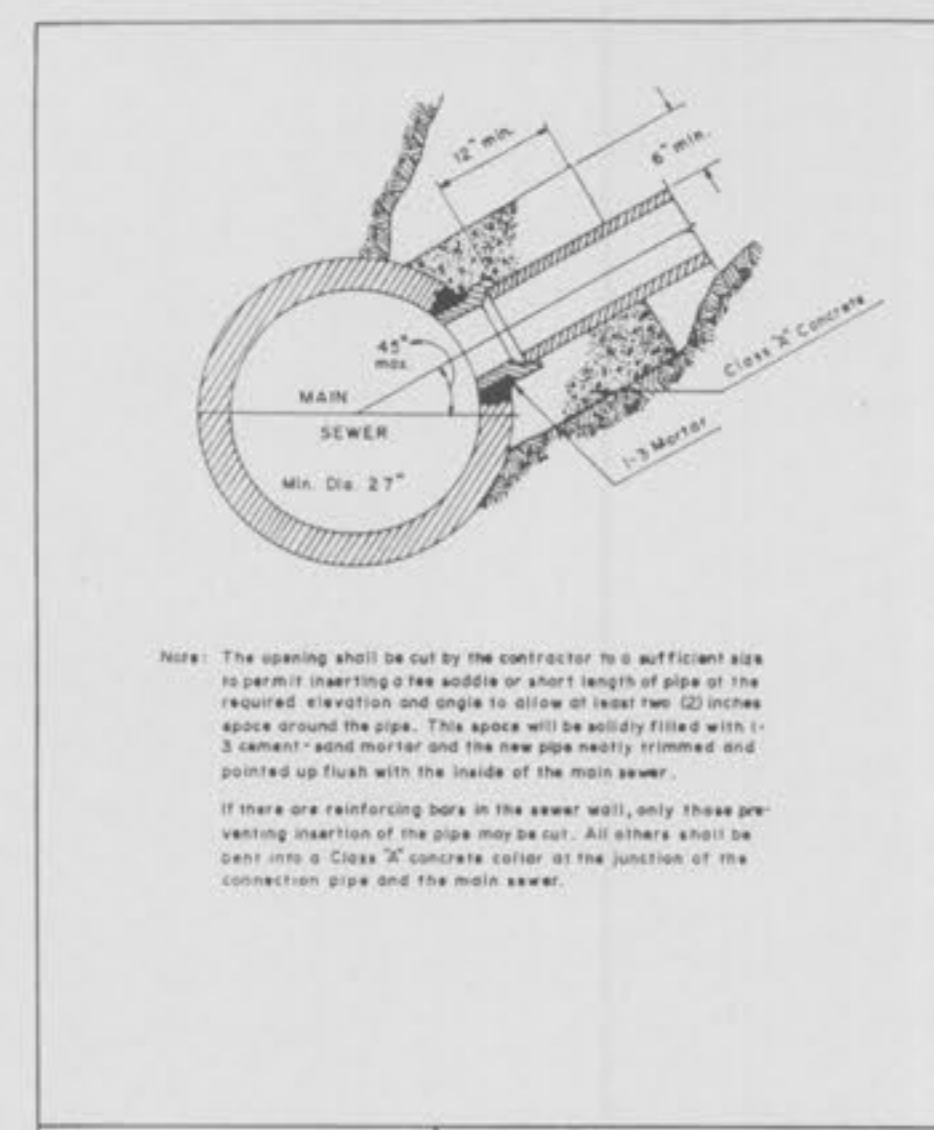


PAVED SWALE DETAIL FOR  
Northwest & Southwest Basins

Swale capacity for  
Southwest Basin between BR 44 & OF 43:  
A = 2.75 ft² R<sup>M</sup> = 0.5682 Mannings:  $\frac{1.486}{0.013} (2.75)(0.5682)(0.10) = 17.06 \text{ cfs}$   
WP = 6.42 ft S = 0.01  
R = 0.4283 S<sup>N</sup> = 0.10

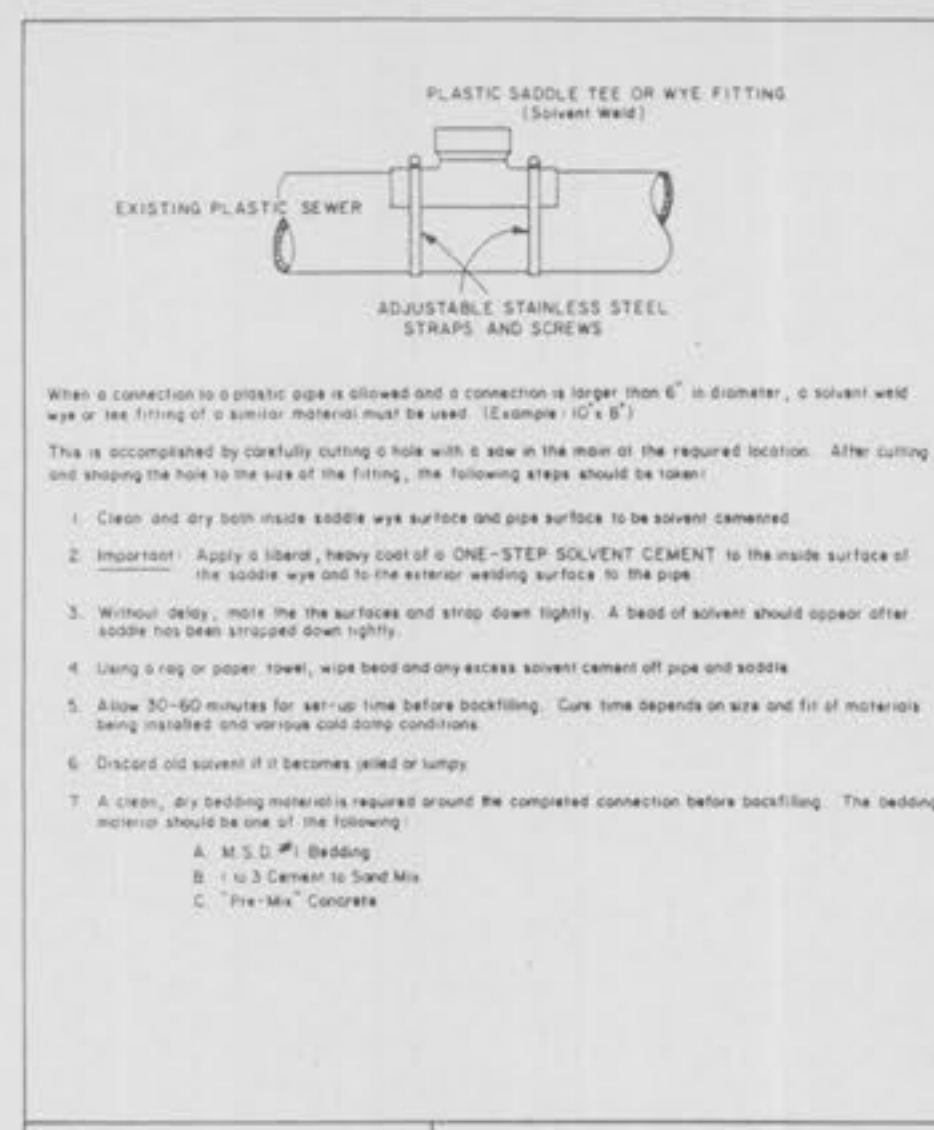


CLEANOUT DETAIL  
(N.T.S.)



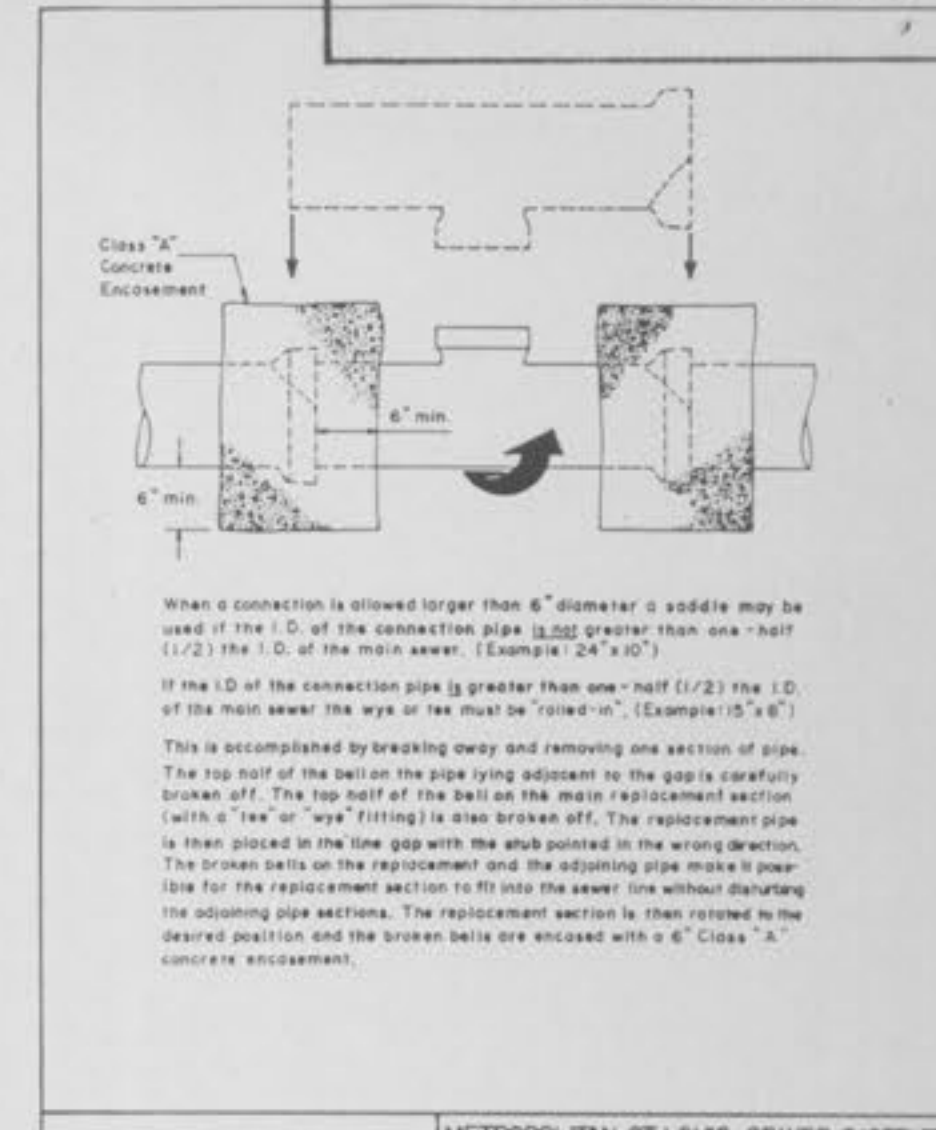
HOUSE CONNECTIONS  
ALLOWED BY  
TEE SADDLE

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. A.E.S. Ch. J.C.K. April 1978 Sheet 52



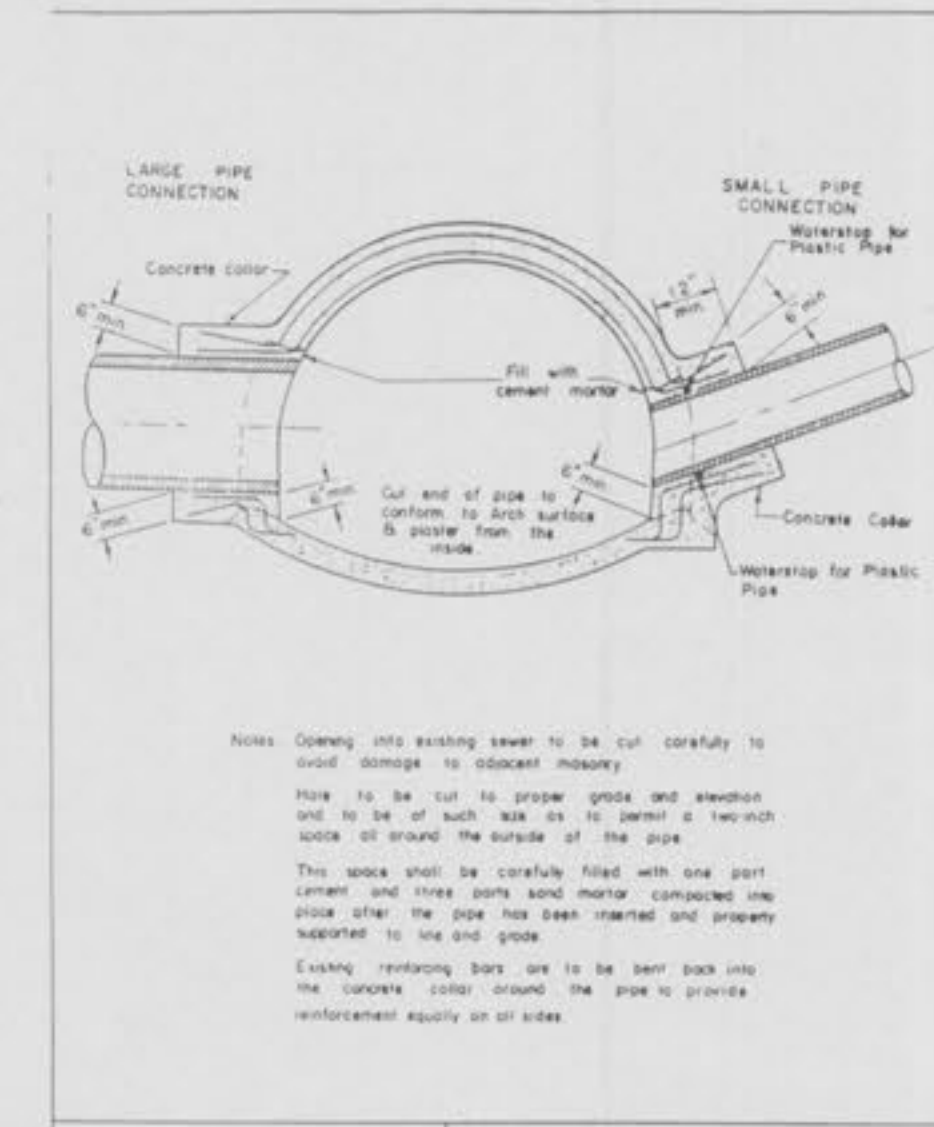
8" (8 LARGER) CONNECTION  
TO PLASTIC MAIN

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. A.E.S. Ch. J.C.K. JUNE, 1985 SHEET 53



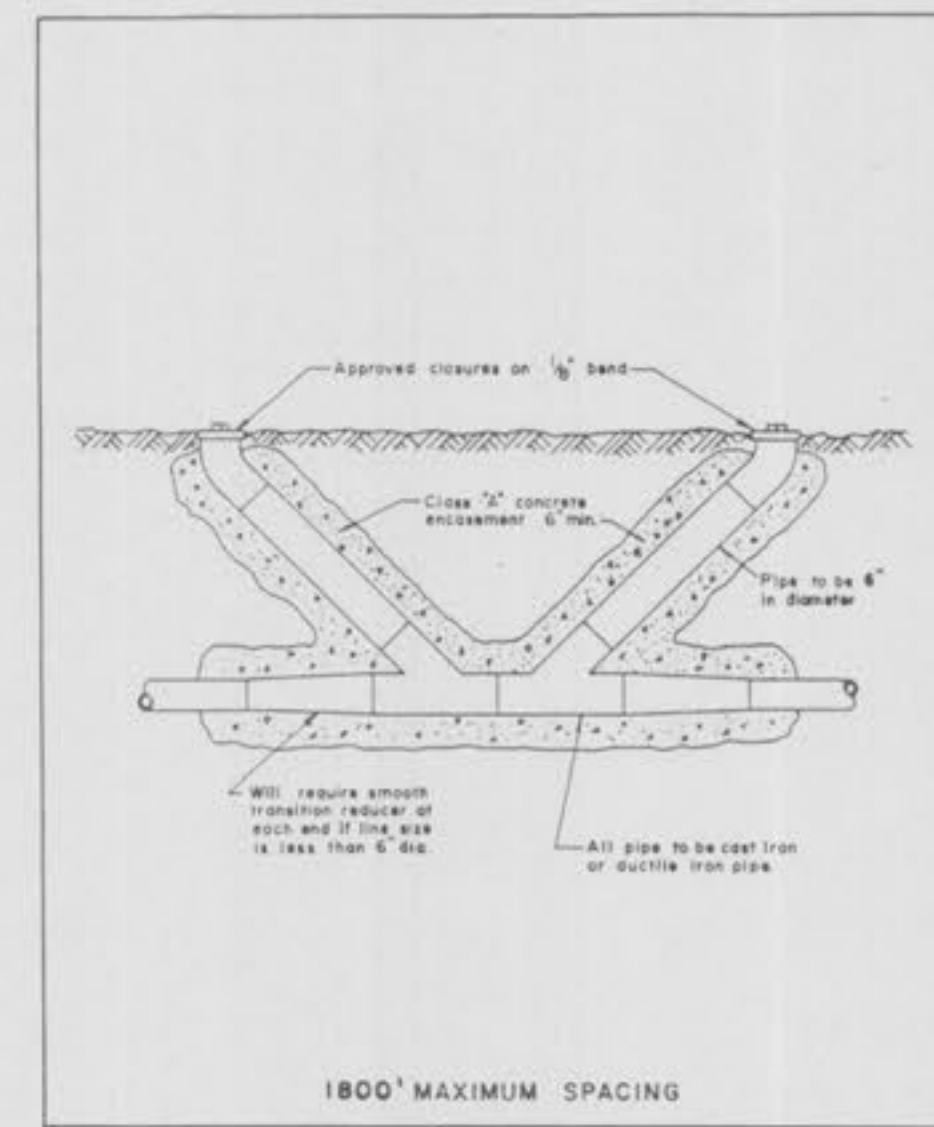
"ROLL-IN" (FOR EXISTING  
CLAY OR CONCRETE PIPE)

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. A.E.S. Ch. J.C.K. April 1985 Sheet 54



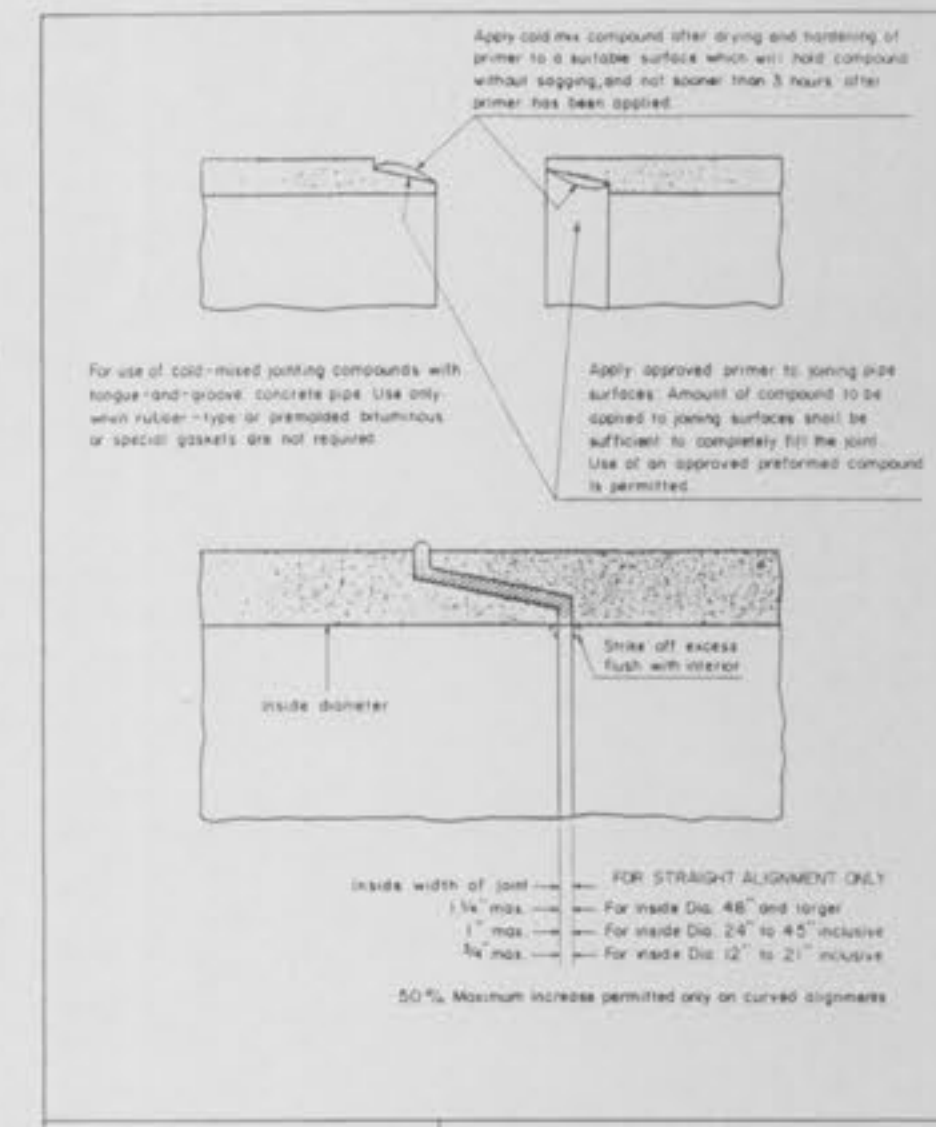
CONNECTIONS TO  
LARGE SEWERS

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. A.E.S. Ch. J.C.K. April 1985 Sheet 55



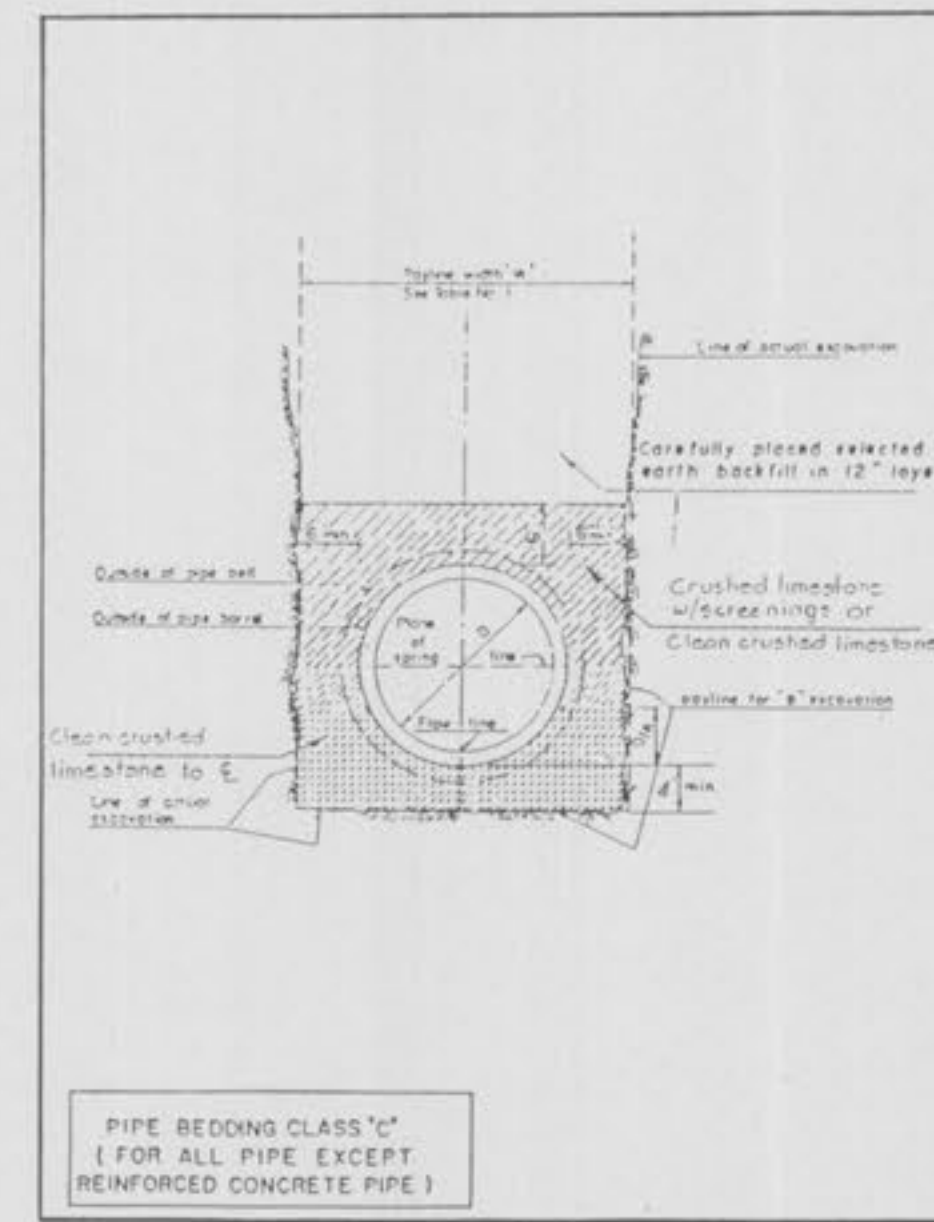
FORCE MAIN CLEANOUT  
(6" DIA. & SMALLER)

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. A.E.S. Ch. J.C.K. JAN. 1987 Sheet 56

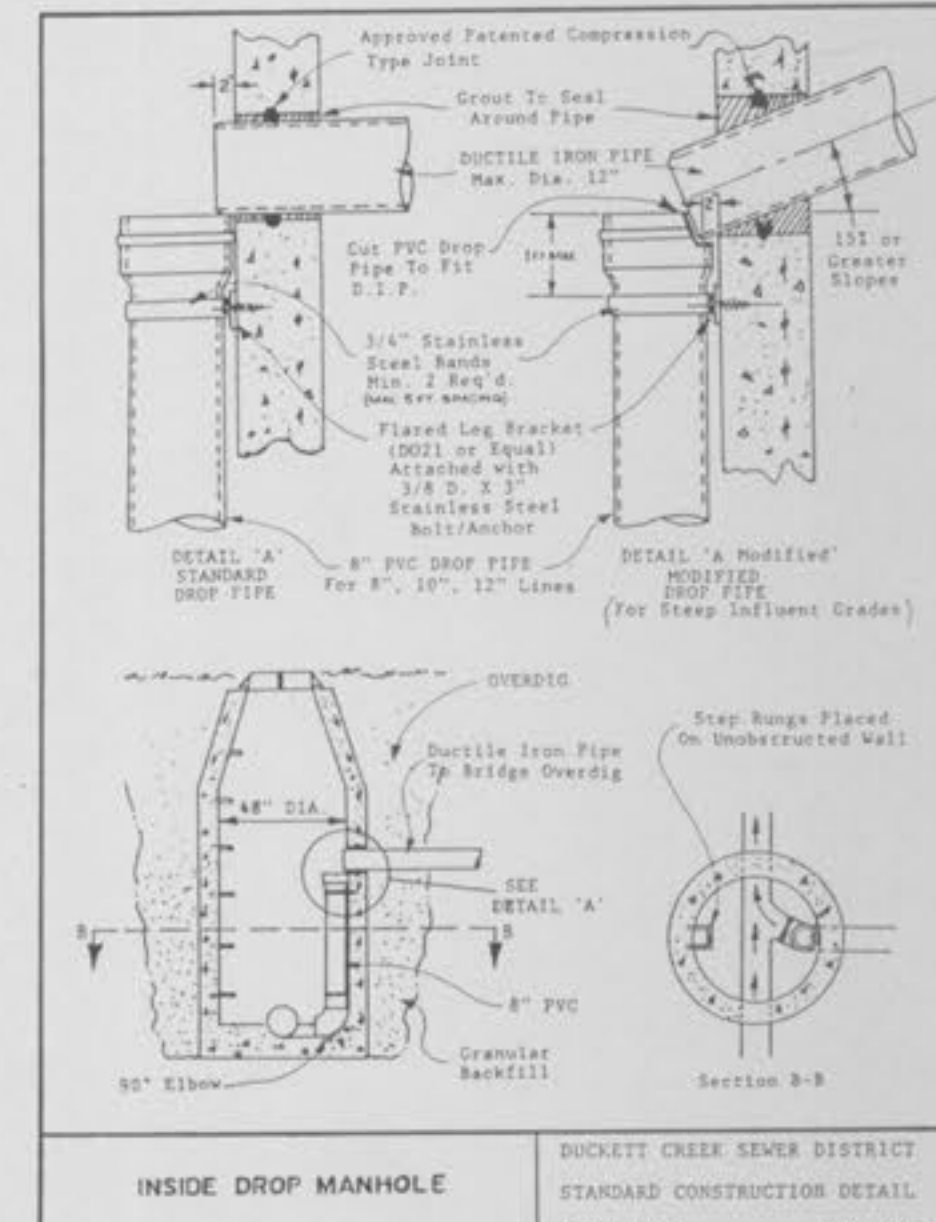


TONGUE AND GROOVE  
CONCRETE PIPE JOINTS

METROPOLITAN ST. LOUIS SEWER DISTRICT  
Standard Details of Sewer Construction  
Dr. A.E.S. Ch. J.C.K. November 1986 Sheet 57



PIPE BEDDING CLASS "C"  
(FOR ALL PIPE EXCEPT  
REINFORCED CONCRETE PIPE)



INSIDE DROP MANHOLE

DUCKETT CREEK SEWER DISTRICT  
STANDARD CONSTRUCTION DETAIL  
DETAIL NO. JAN. 1989