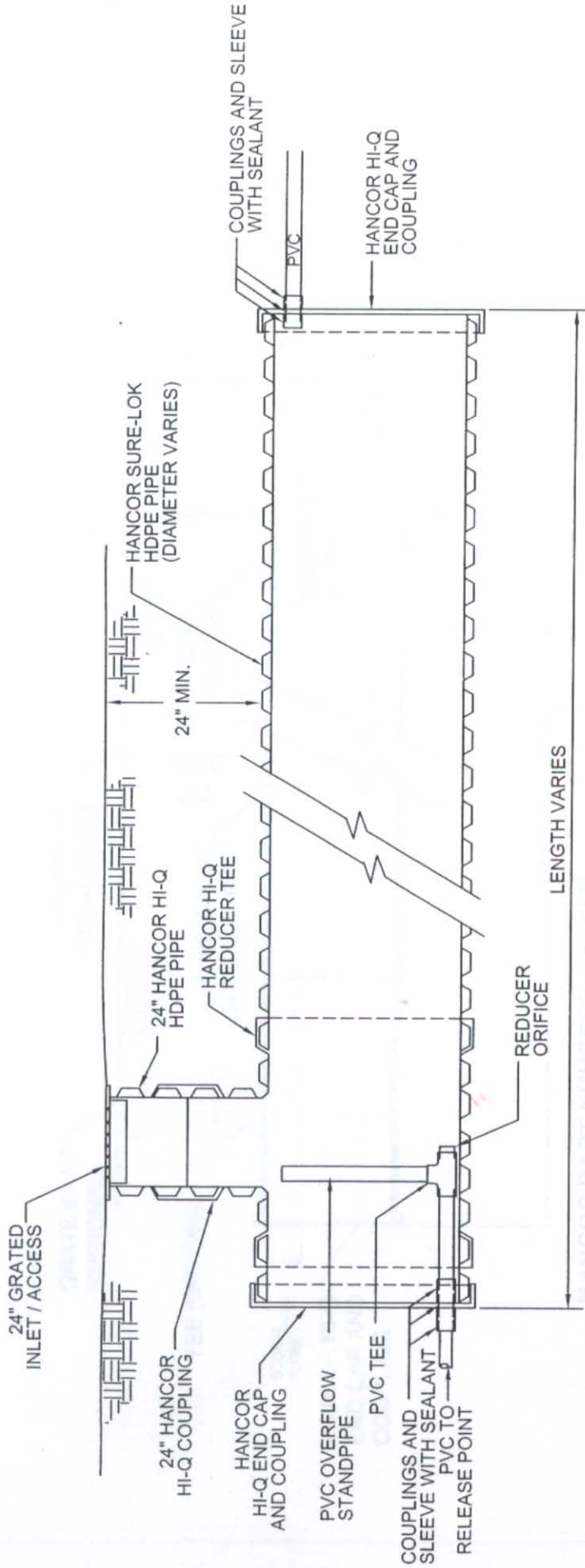


TYPICAL DETENTION SYSTEM DESIGN PIPE STORAGE (30" to 48" DIA.)



HANCOR PART NUMBERS (48" DIA)

Item	Part No.
Sure-Lok 48" Pipe (20.5')	DW S47 48 0020
Hi-Q 48"x24" Reducing Tee	FC AHQ 48 0000
Hi-Q 48" End Cap	FC EOQ 48 0000
Hi-Q 48" Split-Band Coupling	FC CPB 48 0000
Hi-Q 24" Split-Band Coupling	FC CPB 24 0000
Nyloplast 24" Drop-In Grate	2401DI

PIPE STORAGE VOLUME FACTORS

Diameter (ft)	Pipe Full Area (ft ²)	95% Full Area (ft ²)
2.5	4.91	4.82
3.0	7.07	6.94
3.5	9.62	9.44
4.0	12.57	12.33

SCALE

1:40

CLIENT NO.

116-01

DRAWN BY

TJS 07/24/2006

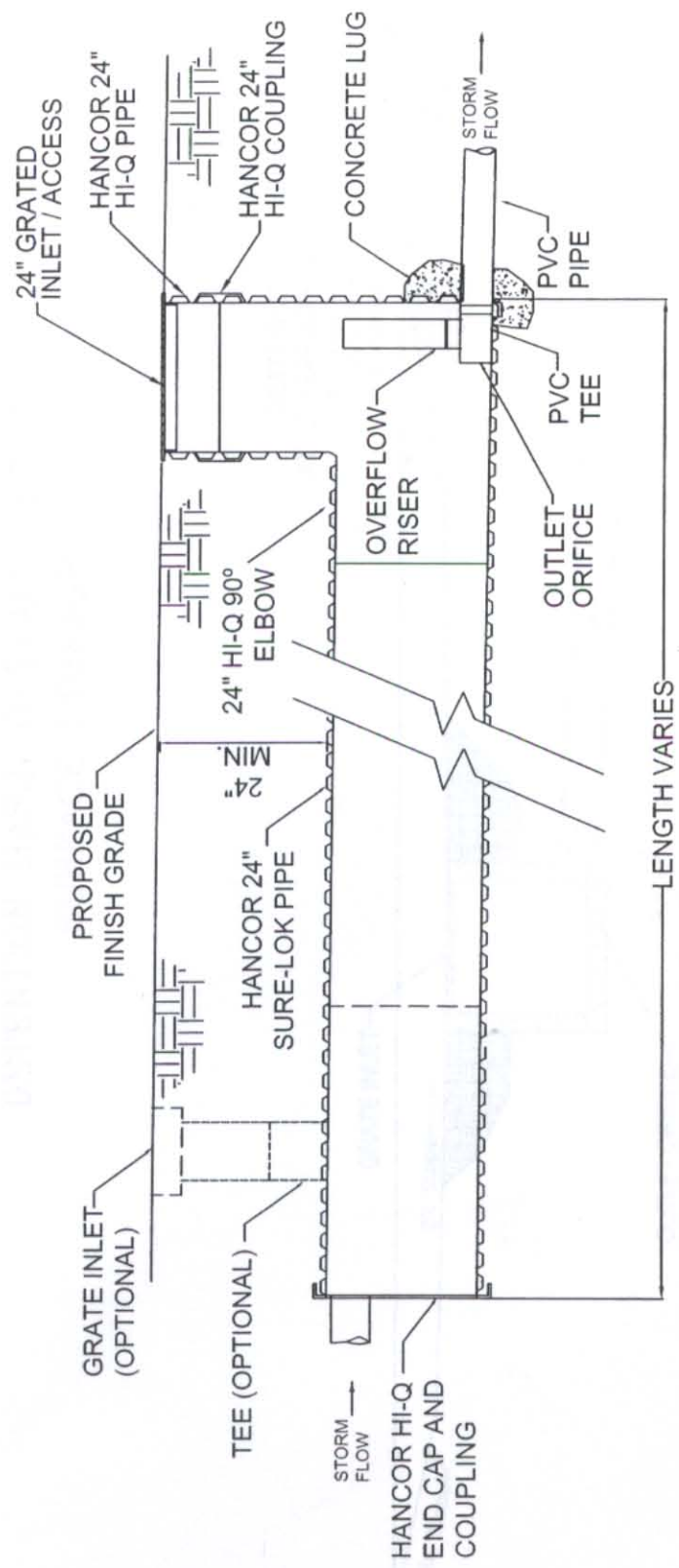
APPROVED BY

TRW 07/24/2006



TORY R. WALKER ENGINEERING, INC.
WATER RESOURCES PLANNING & ENGINEERING

TYPICAL DETENTION SYSTEM DESIGN 24" DIA. PIPE STORAGE



HANCOR PART NUMBERS (24" DIA)

Item	Part No.
Sure-Lok 24" Pipe (20.5')	DR S47 24 0021
Hi-Q 24" 90° Elbow	FC LNQ 24 0000
Hi-Q 24" End Cap	FC EOQ 24 0000
Hi-Q 24" Split-Band Coupling	FC CPB 24 0000
Nyloplast 24" Drop-In Grate	2401DI

PIPE STORAGE VOLUME FACTORS

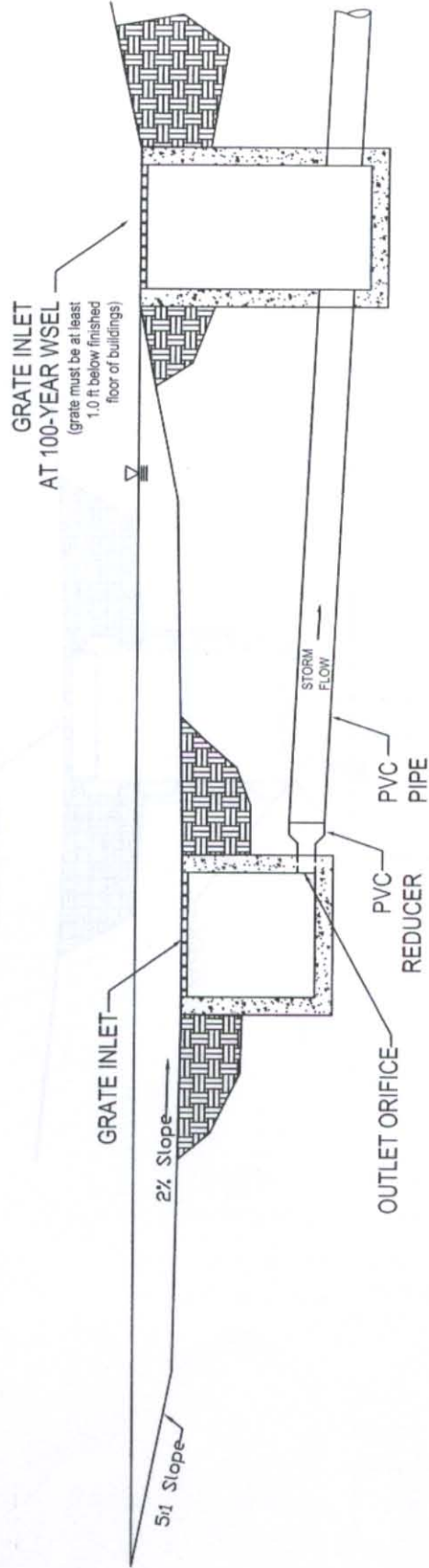
Diameter (ft)	Pipe Full Area (ft ²)	95% Full Area (ft ²)
2.0	3.14	3.08

SCALE	CLIENT NO.
1:30	116-01
DRAWN BY	APPROVED BY
TJS 07/24/2006	TRW 07/24/2006



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DETENTION BASIN OUTFALL DESIGN SURFACE STORAGE

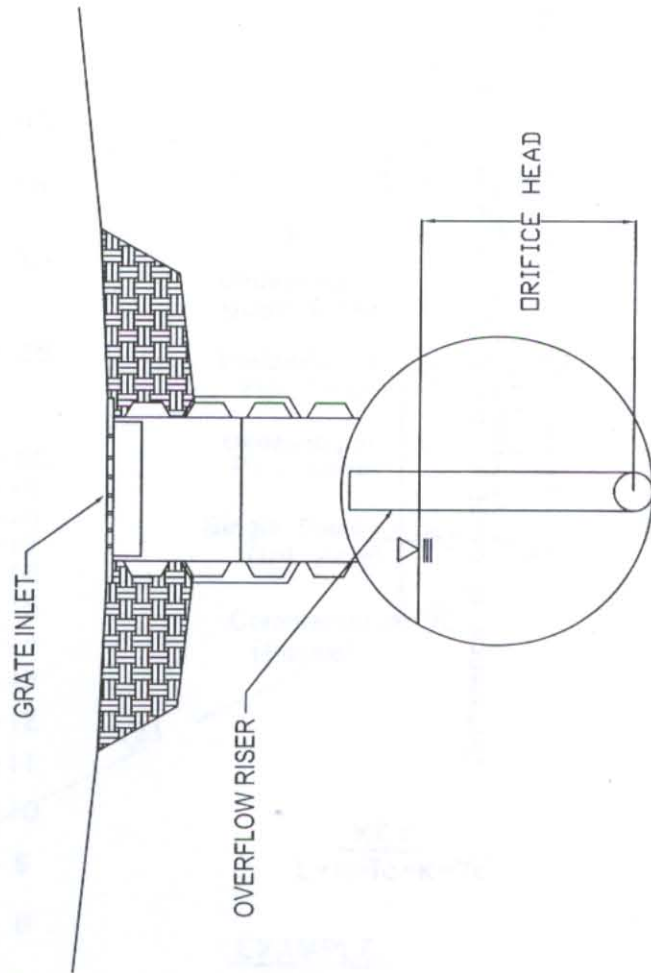


SCALE	1:30	CLIENT NO.	116-01
DRAWN BY	TJS 07/24/2006	APPROVED BY	TRW 07/24/2006



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UNDERGROUND DETENTION SYSTEM OUTFALL DESIGN
ORIFICE SCHEMATIC

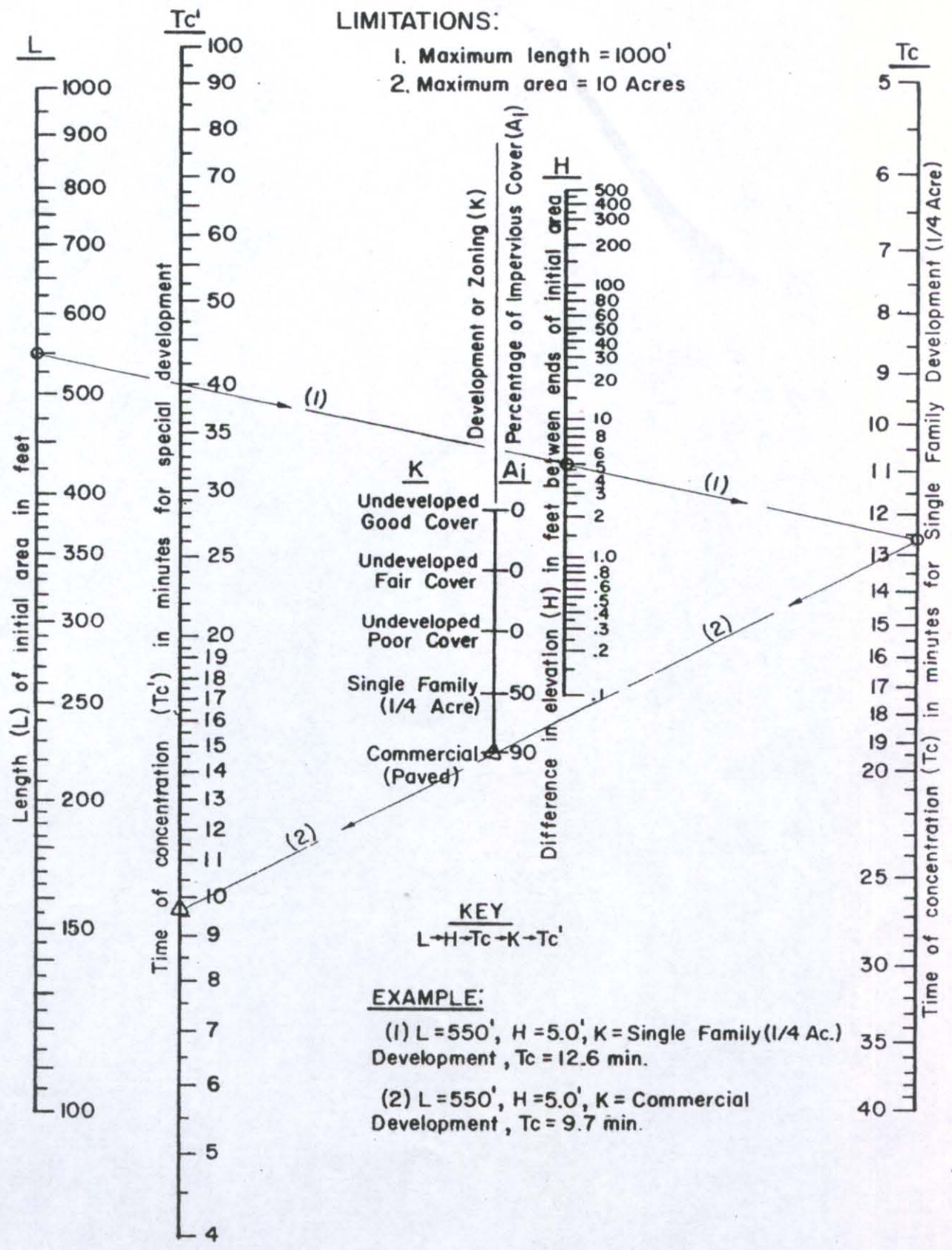


SCALE	1:30	CLIENT NO.	116-01
DRAWN BY	TJS 07/24/2006	APPROVED BY	TRW 07/24/2006



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TIME OF CONCENTRATION
FOR INITIAL SUBMITTAL



LIMITATIONS:

- 1. Maximum length = 1000'
- 2. Maximum area = 10 Acres

- KEY**
 $L \rightarrow H \rightarrow T_c \rightarrow K \rightarrow T_c'$
- Development or Zoning (K)**
- Undeveloped Good Cover
 - Undeveloped Fair Cover
 - Undeveloped Poor Cover
 - Single Family (1/4 Acre)
 - Commercial (Paved)

EXAMPLE:

- (1) $L = 550'$, $H = 5.0'$, $K = \text{Single Family (1/4 Ac.) Development}$, $T_c = 12.6 \text{ min.}$
- (2) $L = 550'$, $H = 5.0'$, $K = \text{Commercial Development}$, $T_c = 9.7 \text{ min.}$

**TIME OF CONCENTRATION
FOR INITIAL SUBAREA**