



DR 54

PIPE T.E. < 5'  $\frac{123}{27} =$   
 AREA (FROM CADD) = 37.56 SF \* 3.75' = 140.85 CF/27 = 5.21 CY 4.56 CY

DS 54

STRUCTURE T.E. < 5'  
 $5' * \text{PI} (3.42')^2 = 183.73 \text{ CF/27} = 6.80 \text{ CY}$

STRUCTURE T.E. > 5'  $\frac{83.74}{3.10 \text{ CY}}$   
 $1.5 [ (2.05' + 2.03' + 1.28' + 1.21' + 1.96' + 1.88') / 6 ] * \text{PI} (3.42')^2 = 95.63 \text{ CF/27} = 3.54 \text{ CY}$

REM. EXIST (F.M. CPH 10/26/07) =  $[ 3.67' * 3.67' * 5' + 1.5 (3.67' * 3.67' * 6') ] / 27 = 2.94 \text{ CY}$

TOT = 10.34 CY - 2.94 CY = 7.40 CY 6.76 CY

DR 54 GRANULAR BACKFILL  
 $(3.75' * .88' * 13.0') - [ (\text{PI} (.88')^2 / 2) * 13.0' ] = 27.09 \text{ CF/27} = 1.00 \text{ CY}$

489.50  
 482.98  
 6.52  
 @ 1.5 1.52

SHEET #23

PROJECT NAME: HARTFORD	
PROJECT NUMBER: RS 0113(40)	
FILE NAME: ****FILENAME****	PLOT DATE: 05-FEB-2008
PROJECT LEADER: KEN UPMAL	DRAWN BY: E. ATKINS
DESIGNED BY: K. ISHIKURA	CHECKED BY: K. ISHIKURA
E. ATKINS	SHEET 220 OF 239