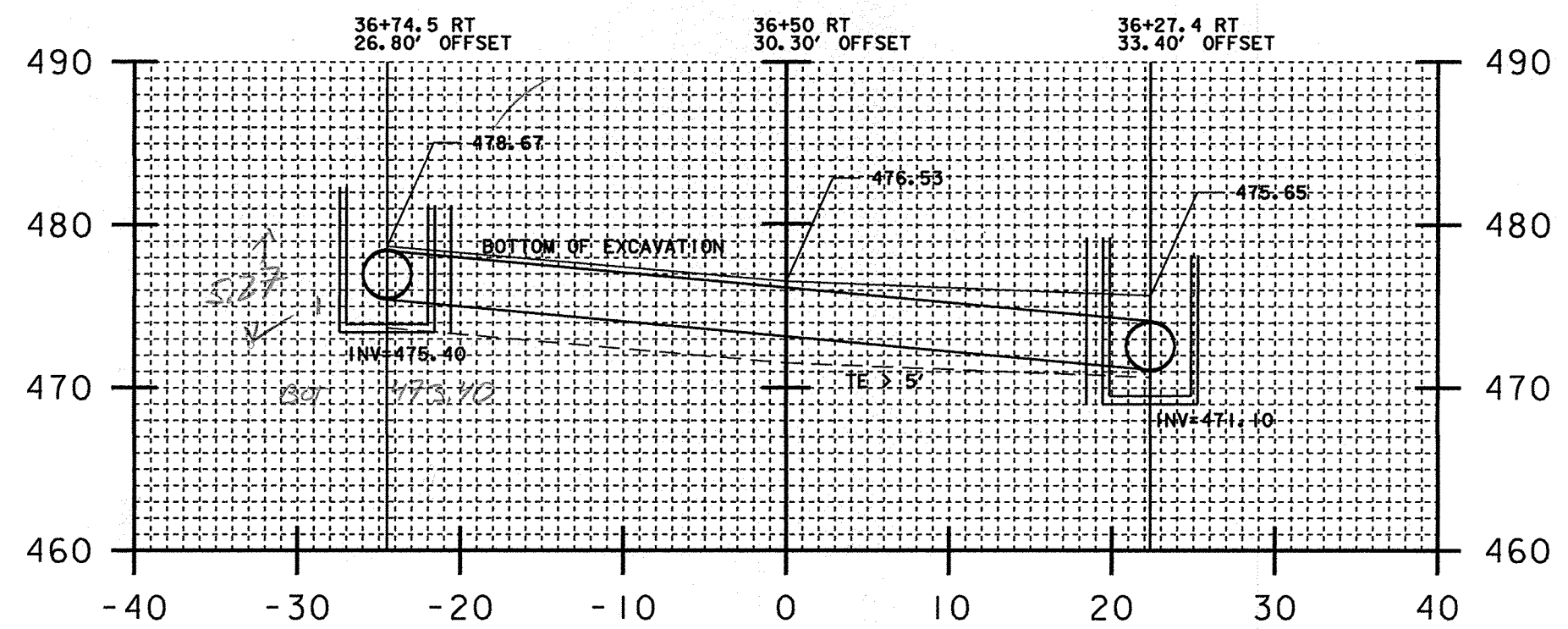


DR 31



CALCULATED AND DRAWN BY TBG 2/05/08
upf 02/23/08

DR 31

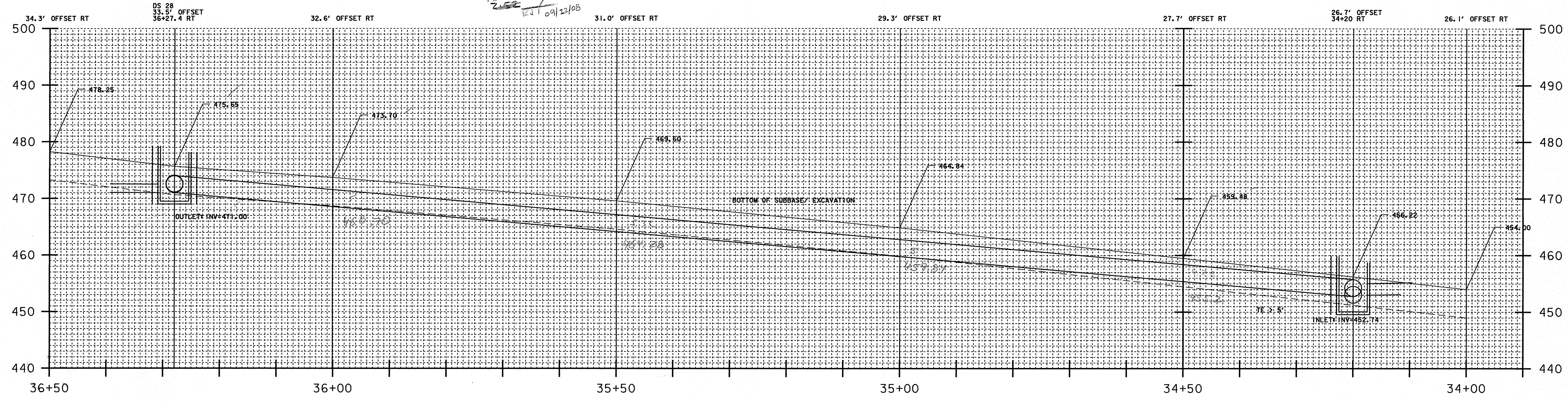
PIPE T.E. < 5'
 AREA (FROM CADD) = 139.72 SF * 5.1' = 712.57 CF/27 = 26.39 CY

DR 31 GRANULAR BACKFILL
 $(5.1' * 1.55' * 41.0') - [(PI (1.55')^2 / 2) * 41.0'] = 169.38 CF/27 = 6.27 CY$

T.E. STRUCTURE 5' (3.14) = ~~15.7~~ = 15.7 cy
 1.5 2.7 (3.14) = ~~12.7~~ = 12.7 cy
02/23/08 upf

DR 31 BEDDING 41' x 5.1' x .5' ÷ 27 = 3.87 CY
 PAY ITEM 601.0246 0095 41LF 9/18/08
 204.20 0035 28.91CY 9/18/08
 204.30 0050 3.87CY 9/18/08

DR 28



DR 28

PIPE T.E. < 5'
 AREA (FROM CADD) = 945.79 SF * 5.10' = 4823.53 CF/27 = 178.65 CY

PIPE T.E. > 5'
 AREA (FROM CADD) = 1.5 (25.88 SF * 5.10') = 197.98 CF/27 = 7.33 CY

TOT = 185.98 CY

DS 28

STRUCTURE T.E. < 5'
 $5' * PI (4.00')^2 = 251.33 CF/27 = 9.31 CY$

STRUCTURE T.E. > 5'
 $1.5 [(2.11' + 1.65' + 1.37') / 3] * PI (4.00')^2 = 128.93 CF/27 = 4.78 CY$

TOT = 14.09 CY

DR 28 GRANULAR BACKFILL
 $(5.10' * 1.55' * 202.2') - [(PI (1.55')^2 / 2) * 202.2'] = 835.32 CF/27 = 30.94 CY$
762.60

PAY ITEM	LIVE	AMOUNT	DATE
601.0246	0095	204LF	9/18/08
604.20	0205	75EFT	9/18/08
204.20	0035	200 CY	9/18/08
204.30	0050	31 CY	9/18/08

200.07 cy
RJT

upf 02/26/08

SHEET # 12

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