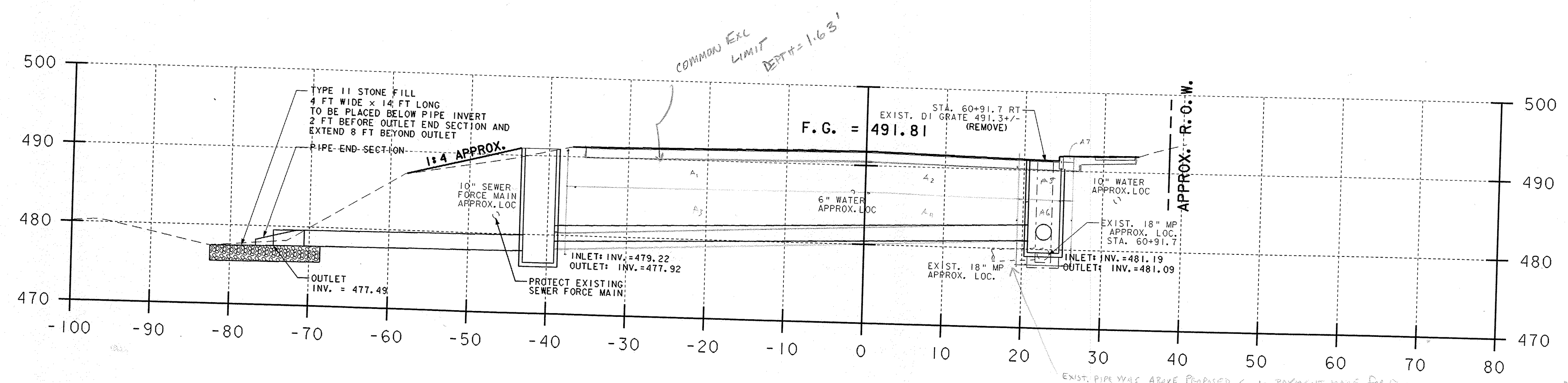


DS #93



60+94.24
 ASKEW 6° 17' 58.2" RT

- TRENCH Exc. of earth
 For pipe, exc. 4.5' depth
 $A_1 = 5' \times 32.3' \times 4.1' = 764.65 \text{ ft}^3$
 $A_2 = 5' \times 12.1' \times 4.1' = 391.35 \text{ ft}^3$
 For pipe exc. 5' depth
 $A_3 = \left[\frac{(6' + 8')}{2} \times (12.3' + 32.1') + 41' \right] \times 1.5 = 1635.78 \text{ ft}^3$
 $A_4 = \left[\frac{(6' + 5' + 5')}{2} \times 19' \times 41' \right] \times 1.5 = 671.89 \text{ ft}^3$
 - COMMON EXC = $(19 + 55) \times (1.63) \times 1.5 = 20.05 \text{ cy}$
 - TRENCH Exc. catch basin < 5'
 $A_5 = 5' \times 7.2 \times 2.5 = 134.38 \text{ ft}^3$
 $A_6 = 10.7' \times 1.9' \times 1.85 = 6.73 \text{ ft}^3$
 - TRENCH Exc. C.B. > 5'
 $A_7 = 8.1' \times 7.2 \times 2.5 = 326.57 \text{ ft}^3$
 - COMMON EXC $(1.63 \times \pi + 2925) \times 1.15 = 243 \text{ cy}$
 TOTAL = 467.67 ft^3
 Grand total = $3931.54 \text{ ft}^3 / 27 = 145.61 \text{ cy}$
 Call by TBG 8:87

TYPE I STONE FOR GRAVEL DRAIN (FIELD MEASURES)
 $6' \times 9' \times 6' \times 6' = 324 \text{ ft}^3 / 27 = 12 \text{ cy}$
 GRANULAR BACKFILL (1' UNDER STRUCTURE)
 $1' \times 10.2 \times 25 = 16.55 \text{ ft}^3 / 27 = 0.61 \text{ cy}$
 S-BASE DENSE CRUSHED STONE (TRAFFIC)
 $4' \times 10.2 \times 25 = 102.8 \text{ ft}^3$
 $4' \times 1' \times 0.5 \times 25 = 114.8 \text{ ft}^3$
 TOTAL = 123.88 $\text{ft}^3 / 27 = 4.56 \text{ cy}$

24" CORR. PLASTIC PIPE = 59.4 ft^3
 12" 4" CONC. C.B. SAN = 60.0 ft^3

Said Rock = $1.63 \times 4 \times 4 / 27 = 0.96 \text{ cy}$
 TRENCH ROCK = $5 \times 4 \times 4 / 27 = 2.96 \text{ cy}$
 $> 5' = (12 - 5 - 1.63) \times 4 \times 4 = 31.84 \text{ cy}$
 } 6.14 cy
 CBS 02/09/10
 PCS 1/20/11

- COMMON EXC = 20.05 + 2.93 = 22.98 cy
 - TRENCH ROCK = 6.14 cy
 TOTAL = 29.12 cy

TOTAL = 117.84 cy
 CBS 02/09/10
 PCS 1/20/11

U.S. ROUTE 5 HARTFORD AVENUE

PROJECT NAME:	HARTFORD	PLOT DATE:	12-JUN-2007
PROJECT NUMBER:	RS 0113(40)	DRAWN BY:	E. ATKINS
FILE NAME:	\$\$\$FILENAME\$\$\$	CHECKED BY:	K. ISHIKURA
PROJECT LEADER:	KEN UPMAL	SHEET	224 OF 239
DESIGNED BY:	E. ATKINS		