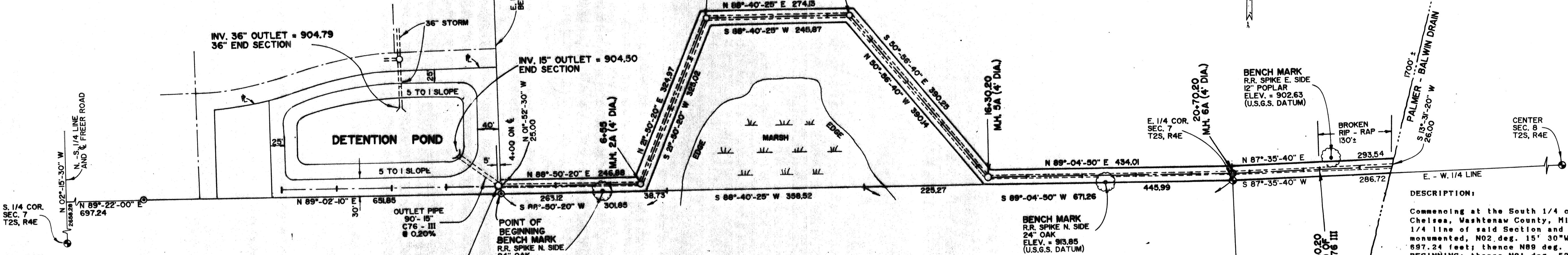


SECTION THRU DETENTION POND
 CAPACITY REQUIRED (100 YRD. STORM) 19,838 CU. FT.
 CAPACITY PROVIDED - 330(30x4.5)DEEP) = 19,050 CU. FT.
 FREEBOARD WILL STORE ADDITIONAL 50,025 CU. FT. (345 x 145 x 1)

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RETENTION DESIGN
 Glen Yrjanainen & Alan W. Warren method
 $Q_0 = (8.52)/(0.40 \times 42.61 \text{ ac.}) = 0.50 \text{ c.f.s./acre imperviousness}$
 $T = -25 + \sqrt{10.31270.50} = 118.61 \text{ MN}$
 $V_s = (16,500 \times 118.61)/(118.61 + 25) - (40 \times 0.50 \times 118.61) = 11,255.44 \text{ cu. ft./acre imp.}$
 $V_t = 11,255.44 \times 0.40 \times 42.61 = 191,838 \text{ cu. ft.}$
 $\text{AREA} = 8.52/(0.62 \times \sqrt{64.4 \times 2}) = 1.21 \text{ sq. ft.}$
 (USE 15" C76-IV RESTRICTOR-OUTLET PIPE)

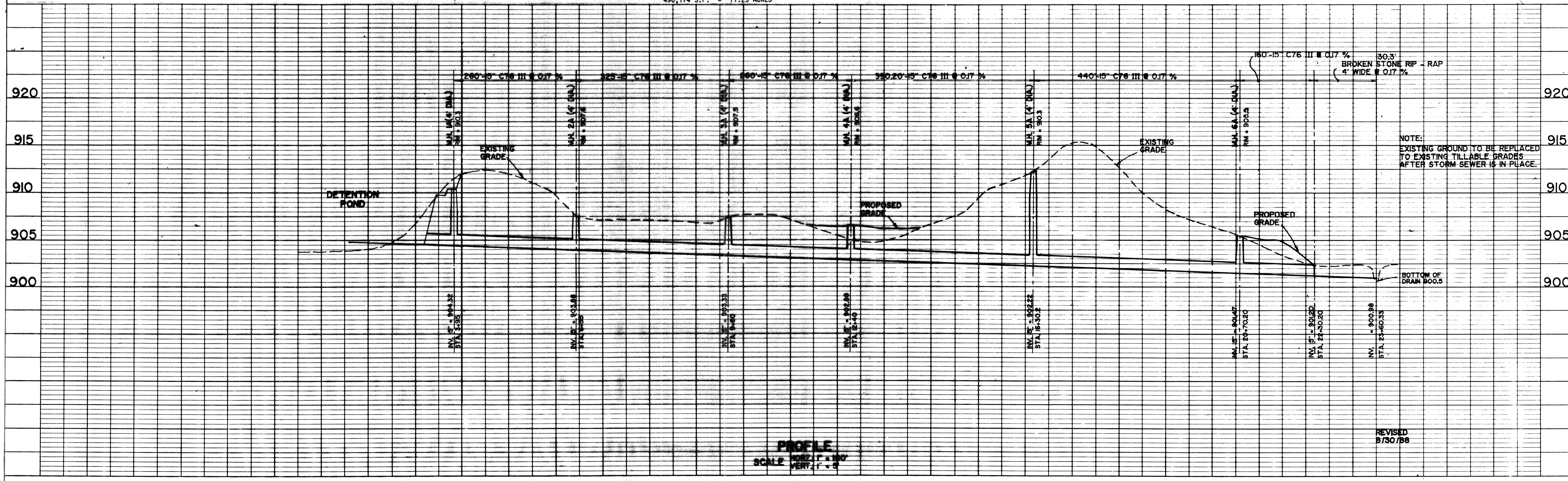
CALCULATIONS FOR RUNOFF COEFFICIENT

HOUSE	= 1600 S.F. x 75 LOTS	= 120,000 S.F.
GARAGE	= 400 S.F. x 75	= 30,000 S.F.
DRIVEWAY	= 18' x 30' x 75	= 40,500 S.F.
HOUSE WALK	= 30' x 5' x 75	= 11,250 S.F.
PORCH	= 4' x 30' x 75	= 9,000 S.F.
ROADS	= 5770' x 34' + 3,927 (COURT)	
	+ 1021 x 17 (FREER RD)	= 222,024 S.F.
	+ 45605 .F. (FILLET)	= 57,400 S.F.
ROAD WALKS	= 11,480' x 5'	
		490,174 S.F. = 11.25 ACRES

PAV'T = $\frac{11.25}{42.61} = .2640 \times 1.0 = .2640$
 GRASS = $\frac{31.36}{42.61} = .7360 \times 0.15 = .1104$
 USED 0.40

DESCRIPTION:
 Commencing at the South 1/4 corner of Section 7, T25, R4E, Village of Chelsea, Washtenaw County, Michigan; thence along the North and South 1/4 line of said Section and along the centerline of Freer Road, as monumented, N02 deg. 15' 30"W 2858.28 feet; thence N89 deg. 22' 00"E 697.24 feet; thence N89 deg. 02' 10"E 651.85 feet for a POINT OF BEGINNING; thence N01 deg. 52' 30"W 25.00 feet; thence N88 deg. 50' 20"E 248.88 feet; thence N21 deg. 50' 20"E 324.97 feet; thence N88 deg. 40' 25"E 274.13 feet; thence S40 deg. 56' 40"E 390.25 feet; thence N89 deg. 04' 50"E 434.01 feet; thence N87 deg. 35' 40"E 293.54 feet to a point in the center of the Palmer-Baldwin Drain; thence along the center of said Drain, S13 deg. 31' 20"W 28.00 feet to a point on the East and West 1/4 line of Section 8, T25, R4E, Lina Township, Washtenaw County, Michigan; thence along the East and West 1/4 line of said Section 8, S87 deg. 35' 40"W 286.72 feet to the East 1/4 corner of said Section 7; thence S89 deg. 04' 50"W 445.99 feet; thence N40 deg. 58' 40"W 390.14 feet; thence S88 deg. 40' 25"W 245.87 feet; thence S21 deg. 50' 20"W 325.02 feet; thence S88 deg. 50' 20"W 283.12 feet to the Point of Beginning, being part of the East 1/2 of said Section 7 and part of the Northwest 1/4 of said Section 8 and containing 1.12 acres of land more or less.

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REVISED 8/30/88

DETENTION POND DRAIN AND DRAINAGE EASEMENT TO PALMER - BALDWIN DRAIN