中華人民共和國
交通部公路勘察設計院

# 土方計算表

基本宽度：7.5米

第三册



一九五六年

中華人民共和國
交通部公路總局設計局

# 土方計算表

路基寬度：7.5公尺

第三册

北京　1956年

# 路基寬为 7.5 公尺的土方計算表說明書

本册刊載路基寬为7.5公尺的路堤和路塹土方計算表；路基横断面所採用的一切因素，都是符合中華人民共和國公路工程設計准則的規定(以下簡称設計准則)，修筑路基所需的土方工程數量按本册所載有的計算表計算，其公式为：

$$D = Fcp \cdot L$$

式中：

D——所求的該段路基土方工程數量，以立方公尺計；

Fcp——路基横断面的平均面積，以平方公尺計；

該断面是按平均工作标高計算，其公式为：

$$Hcp = \frac{H_1 + H_2}{2}$$

式中：

$H_1 + H_2$——兩相鄰断面的工作标高(路堤高或路塹深，以公尺計)之和；

L——需求出土方數量路段的路基長度(路堤或路塹，以公尺計)；

引用公式所求得的土方工程數量較实际數量小，当$H_1$和$H_2$高差小於1公尺时，其差數很小，在計算土方时，可以不計。当高差$(H_1 - H_2) > 1$公尺时，土方修正數应按修正數專册中所載修正數計算表計算。

当計算路堤和路塹土方工程數量时，採用梯形的路基横断面來計算。其梯形上部是以通过現有路基頂边所画的水平綫为限。不計算路槽的修正數，而路槽修正數按另外修正數專册所載的計算表求得。

本册包括下列三个土方計算表：

(1)路堤土方計算表；

(2)積雪地区开敞式淺挖路塹土方計算表；

(3)标准式路塹土方計算表。

路堤和开敞式路塹土方計算表中，列有平均工作标高現成的數值，这些數值的范圍見表的头一部份。

为了使用計算表方便起見，表中不採用公式中所用的平均工作标高(Hcp)，而採用工作标高的和$(H_1 + H_2)$。为了按計算公式演算表列的土方工程數量，而需要把表上所列的工作标高和$(H_1 + H_2)$用2除，其公式为：$Hcp = \frac{H_1 + H_2}{2}$

在路堤和开敞式路塹土方計算表(表1、2、3、4、5、6、7)中，工作标高和$(H_1 + H_2)$的

數值間隔為一公分，而在標準式路塹土方計算表（表8、9、10、11）中，其數值間隔為2公分。所有的計算表中，都包括了該地段路基長（L）1—9公尺（其間隔為一公尺）的土方工程數量。

為了求出几十几公尺長度L的土方工程量，可以分別从表上查出適应於几十公尺和几公尺的數值，然后相加即得。因为表上所列的數值，都是以整公尺为單位，所以当長度为几十公尺（或零点几公尺）时，表上數值的小數点应向右（或向左）移一位。

路基横断面的面積（Fcp）按下面的所列的一些公式求得，这些公式所採用的符号是：

B——已筑路基的寬度以公尺計；

H——平均工作标高；

即 $\frac{H_1+H_2}{2}$，以公尺計；

h——边溝深，以公尺計；

c——边溝底的寬度，以公尺計。

表1包括路堤高在1.0公尺以下，边坡定为1:3的路堤土方工程數量，这是符合設計准則§1405所規定的类型。

表2包括边坡定为1:1.5的路堤土方工程數量。在設計路基和依表計算路基土方工程量时。这种类型的横断面是最常見的情况。根据設計准則的規定，对於分布最廣的中等密实的土壤，路堤最大高度（平均工作标高）採用8.0公尺。

表1和表2中路堤横断面面積（Fcp）依下式求得：

$$Fcp=BH+mH^2$$

其横断面計算圖具有下列圖1的形式：

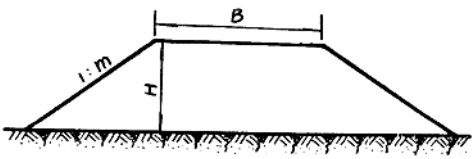


圖 1

表3、表4、表5包括平均工作标高在6.0公尺以上，边坡坡度为變坡，路堤边坡上部系數（m）採用m=1.5，而下部系數（n）採用n=1.75的路堤土方工程數量，这是符合設計准則§1405的規定。

在路堤最大高度部份，表3建議用粉砂土、粘土和粘土質炉堿修筑路堤，而表4建議用砂質炉堿和細粒砂土修筑。表5建議用中粒砂和粗粒砂土壤修筑路堤。

在編制表3、表4和表5时，路堤横断面的面積按下列公式求得：

$$Fcp=(Bh_1+mh_1^2)+[B+2mh_1+n(H-h_1)](H-h_1)$$

其横断面計算圖具有下列圖2的形式：

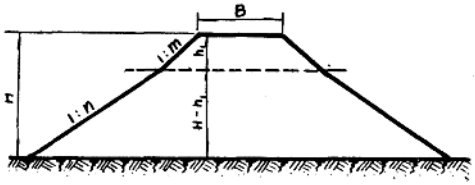


圖　　2

表 6 和表 7 包括積雪地段开敞式淺挖路塹的土方工程數量。根据設計准則的規定，路塹边坡頂点和路肩頂点联接綫的坡度应不大於1:10。根据这个原因，深为0~1公尺的路塹横断面面積（Fcp）依下式求得：

$$Fcp=(B+mh+C+10)H+(10+C)h$$

其路基横断面計算圖具有下列圖 3 的形式：

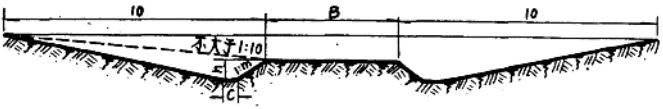


圖　　3

对於深为1.01—1.5公尺的开敞式路塹，其横断面面積(Fcp)依下式求得：

$$Fcp=10H^2+(B+mh+C+10h)\cdot H+ch$$

其路基横断面計算圖具有下列圖 4 的形式：

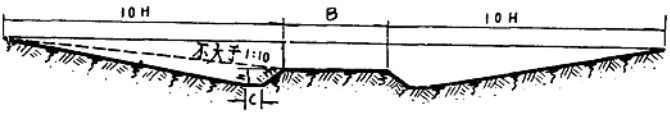


圖　　4

在表 6 和表 7 的計算公式中，边溝內坡系數以M字母表示。

在計算开敞式路塹土方时，边溝深採用0.4公尺，而对於疏松的土壤則採用0.8公尺，对於中等密实的土壤和密实的土壤，边溝深是根据設計准則的規定，並且考慮在積雪和積沙地段可能使用开敞式路塹的条件而决定。

表 8 、表 9 、表10和表11中包括深为 0 －12 公尺的标准式路塹土方工程數量。根据路塹深到12公尺的条件來採用最大深度，土方工程數量可以依表計算。

深度大於12公尺的路塹是極个別的況情，則按特別公式計算。

对於所有常遇到的土壤來講，标准式路塹边坡坡度採用1:1.5边溝內坡採用1:1.5，这是

根据設計准則的規定，亦即最普通的一种类型。

标准式路堑横断面面積 (Fcp) 按下列計算公式求得：

$$Fcp=[B+2c+2h(m+n)+mH]\cdot H+[2ch+h^2(m+n)]$$

其横断面計算圖具有下列圖 5 的形式：

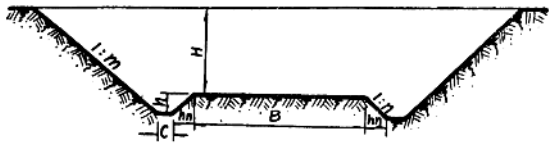


圖　　5

根据現有設計准則的規定，标准式路塹边溝的深度採用0.4~0.6~0.8和0.9公尺。

为了介紹使用計算表的程序，下面举一个例子。

例如：求路堤地段的土方數量，其長为54.27公尺。边坡坡度为1:1.5，横断面的工作标高以整个路堤地段兩端横断面的工作标高为限，即等於：$H_1=2.18$公尺，$H_2=3.02$公尺。

找出工作标高和：

$H_1+H_2=2.18+3.02=5.20$公尺

在表 2 中查出：

当距离 L＝50.00公尺时，体積D＝1482.00立方公尺

当距离 L＝ 4.00　　体積D＝ 118.56立方公尺

当距离 L＝ 0.20　　体積D＝ 5.93立方公尺

当距离 L＝ 0.07　　体積D＝ 2.07立方公尺

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当距离 L＝54.27公尺时，体積D＝1608.56立方公尺

中 1609 立方公尺

表 1

# 路 堤 土 方 表

B＝7.5M　　H：0～1M　　m＝3

| $H_1+H_2$ \ L | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 0.01 | 0.038 | 0.076 | 0.114 | 0.152 | 0.190 | 0.228 | 0.266 | 0.304 | 0.342 |
| 02 | 0.075 | 0.150 | 0.225 | 0.300 | 0.375 | 0.450 | 0.525 | 0.600 | 0.675 |
| 03 | 0.113 | 0.226 | 0.339 | 0.452 | 0.565 | 0.678 | 0.791 | 0.904 | 1.017 |
| 04 | 0.151 | 0.302 | 0.453 | 0.604 | 0.755 | 0.903 | 1.057 | 1.208 | 1.359 |
| 05 | 0.190 | 0.380 | 0.570 | 0.760 | 0.950 | 1.140 | 1.330 | 1.520 | 1.710 |
| 0.06 | 0.228 | 0.459 | 0.684 | 0.912 | 1.140 | 1.368 | 1.596 | 1.824 | 2.052 |
| 07 | 0.267 | 0.534 | 0.801 | 1.068 | 1.335 | 1.602 | 1.869 | 2.133 | 2.403 |
| 08 | 0.305 | 0.610 | 0.915 | 1.220 | 1.525 | 1.830 | 2.135 | 2.440 | 2.745 |
| 09 | 0.344 | 0.688 | 1.032 | 1.376 | 1.720 | 2.064 | 2.408 | 2.752 | 3.096 |
| 10 | 0.383 | 0.766 | 1.149 | 1.532 | 1.915 | 2.298 | 2.681 | 3.064 | 3.447 |
| 0.11 | 0.422 | 0.844 | 1.266 | 1.688 | 2.110 | 2.532 | 2.954 | 3.376 | 3.798 |
| 12 | 0.461 | 0.922 | 1.383 | 1.844 | 2.305 | 2.766 | 3.227 | 3.688 | 4.149 |
| 13 | 0.501 | 1.002 | 1.503 | 2.004 | 2.505 | 3.006 | 3.507 | 4.008 | 4.509 |
| 14 | 0.540 | 1.080 | 1.620 | 2.160 | 2.700 | 3.240 | 3.780 | 4.320 | 4.860 |
| 15 | 0.580 | 1.160 | 1.740 | 2.320 | 2.900 | 3.480 | 4.060 | 4.640 | 5.220 |
| 0.16 | 0.619 | 1.238 | 1.857 | 2.476 | 3.095 | 3.714 | 4.333 | 4.952 | 5.571 |
| 17 | 0.660 | 1.320 | 1.980 | 2.640 | 3.300 | 3.960 | 4.620 | 5.280 | 5.940 |
| 18 | 0.699 | 1.398 | 2.097 | 2.796 | 3.495 | 4.194 | 4.893 | 5.592 | 6.291 |
| 19 | 0.740 | 1.480 | 2.220 | 2.960 | 3.700 | 4.440 | 5.180 | 5.920 | 6.660 |
| 20 | 0.780 | 1.560 | 2.340 | 3.120 | 3.900 | 4.680 | 5.460 | 6.240 | 7.020 |
| 0.21 | 0.821 | 1.642 | 2.463 | 3.284 | 4.105 | 4.926 | 5.747 | 6.568 | 7.389 |
| 22 | 0.861 | 1.722 | 2.583 | 3.444 | 4.305 | 5.166 | 6.027 | 6.888 | 7.749 |
| 23 | 0.903 | 1.806 | 2.709 | 3.612 | 4.515 | 5.418 | 6.321 | 7.224 | 8.127 |
| 24 | 0.943 | 1.885 | 2.829 | 3.772 | 4.715 | 5.658 | 6.601 | 7.544 | 8.487 |
| 25 | 0.985 | 1.970 | 2.955 | 3.940 | 4.925 | 5.910 | 6.895 | 7.880 | 8.865 |
| 0.26 | 1.026 | 2.052 | 3.078 | 4.104 | 5.130 | 6.156 | 7.182 | 8.208 | 9.232 |
| 27 | 1.068 | 2.136 | 3.204 | 4.272 | 5.340 | 6.408 | 7.476 | 8.544 | 9.612 |
| 28 | 1.109 | 2.218 | 3.327 | 4.436 | 5.545 | 6.654 | 7.763 | 8.872 | 9.981 |
| 29 | 1.151 | 2.302 | 3.453 | 4.604 | 5.755 | 6.906 | 8.057 | 9.208 | 10.359 |
| 30 | 1.193 | 2.386 | 3.579 | 4.772 | 5.965 | 7.158 | 8.351 | 9.544 | 10.737 |
| 0.31 | 1.235 | 2.470 | 3.705 | 4.940 | 6.175 | 7.410 | 8.645 | 9.880 | 11.115 |
| 32 | 1.277 | 2.554 | 3.831 | 5.108 | 6.385 | 7.662 | 8.939 | 10.216 | 11.493 |
| 33 | 1.320 | 2.640 | 3.930 | 5.280 | 6.600 | 7.920 | 9.240 | 10.560 | 11.880 |
| 34 | 1.362 | 2.724 | 4.086 | 5.448 | 6.810 | 8.172 | 9.534 | 10.896 | 12.258 |
| 35 | 1.405 | 2.810 | 4.215 | 5.620 | 7.025 | 8.430 | 9.835 | 11.240 | 12.645 |

| $H_1+H_2$ \ L | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.447 | 2.894 | 4.341 | 5.788 | 7.235 | 8.682 | 10.129 | 11.576 | 13.023 |
| 37 | 1.491 | 2.982 | 4.473 | 5.964 | 7.455 | 8.946 | 10.437 | 11.928 | 13.419 |
| 38 | 1.533 | 3.066 | 4.599 | 6.132 | 7.665 | 9.198 | 10.731 | 12.264 | 13.797 |
| 39 | 1.577 | 3.154 | 4.731 | 6.308 | 7.885 | 9.462 | 11.039 | 12.616 | 14.194 |
| 40 | 1.620 | 3.240 | 4.860 | 6.480 | 8.100 | 9.720 | 11.340 | 12.960 | 14.580 |
| 0.41 | 1.664 | 3.328 | 4.992 | 6.656 | 8.320 | 9.984 | 11.648 | 13.312 | 14.976 |
| 42 | 1.707 | 3.414 | 5.121 | 6.828 | 8.535 | 10.242 | 11.949 | 13.656 | 15.363 |
| 43 | 1.752 | 3.504 | 5.256 | 7.008 | 8.760 | 10.512 | 12.264 | 14.016 | 15.768 |
| 44 | 1.795 | 3.590 | 5.385 | 7.180 | 8.975 | 10.770 | 12.565 | 14.360 | 16.155 |
| 45 | 1.840 | 3.680 | 5.520 | 7.360 | 9.200 | 11.040 | 12.880 | 14.720 | 16.560 |
| 0.46 | 1.884 | 3.768 | 5.652 | 7.536 | 9.420 | 11.304 | 13.188 | 15.072 | 16.956 |
| 47 | 1.929 | 3.858 | 5.787 | 7.716 | 9.645 | 11.574 | 13.503 | 15.432 | 17.361 |
| 48 | 1.973 | 3.946 | 5.919 | 7.892 | 9.865 | 11.838 | 13.811 | 15.784 | 17.757 |
| 49 | 2.018 | 4.036 | 6.054 | 8.072 | 10.090 | 12.108 | 14.126 | 16.144 | 18.162 |
| 50 | 2.063 | 4.126 | 6.189 | 8.252 | 10.315 | 12.378 | 14.441 | 16.504 | 18.567 |
| 0.51 | 2.108 | 4.216 | 6.324 | 8.432 | 10.540 | 12.648 | 14.756 | 16.864 | 18.972 |
| 52 | 2.153 | 4.306 | 6.459 | 8.612 | 10.765 | 12.918 | 15.071 | 17.224 | 19.377 |
| 53 | 2.199 | 4.398 | 6.597 | 8.796 | 10.995 | 13.194 | 15.393 | 17.592 | 19.791 |
| 54 | 2.244 | 4.488 | 6.732 | 8.976 | 11.220 | 13.464 | 15.708 | 17.952 | 20.193 |
| 55 | 2.290 | 4.580 | 6.870 | 9.160 | 11.450 | 13.740 | 16.030 | 18.320 | 20.610 |
| 0.56 | 2.335 | 4.670 | 7.005 | 9.340 | 11.675 | 14.010 | 16.345 | 18.680 | 21.015 |
| 57 | 2.382 | 4.764 | 7.146 | 9.528 | 11.910 | 14.292 | 16.674 | 19.056 | 21.438 |
| 58 | 2.427 | 4.854 | 7.281 | 9.708 | 12.135 | 14.562 | 16.989 | 19.416 | 21.843 |
| 59 | 2.474 | 4.948 | 7.422 | 9.896 | 12.370 | 14.844 | 17.318 | 19.792 | 22.266 |
| 60 | 2.520 | 5.040 | 7.560 | 10.080 | 12.600 | 15.120 | 17.640 | 20.160 | 22.680 |
| 0.61 | 2.567 | 5.134 | 7.701 | 10.268 | 12.835 | 15.402 | 17.969 | 20.536 | 23.103 |
| 62 | 2.613 | 5.226 | 7.839 | 10.452 | 13.065 | 15.678 | 18.291 | 20.904 | 23.517 |
| 63 | 2.661 | 5.322 | 7.983 | 10.644 | 13.305 | 15.966 | 18.627 | 21.288 | 23.949 |
| 64 | 2.707 | 5.414 | 8.121 | 10.828 | 13.535 | 16.242 | 18.949 | 21.656 | 24.363 |
| 65 | 2.755 | 5.510 | 8.265 | 11.020 | 13.775 | 16.530 | 19.285 | 22.040 | 24.795 |
| 0.66 | 2.802 | 5.604 | 8.406 | 11.208 | 14.010 | 16.812 | 19.614 | 22.416 | 25.218 |
| 67 | 2.850 | 5.700 | 8.550 | 11.400 | 14.250 | 17.100 | 19.950 | 22.800 | 25.650 |
| 68 | 2.897 | 5.794 | 8.691 | 11.588 | 14.485 | 17.382 | 20.279 | 23.176 | 26.073 |
| 69 | 2.945 | 5.890 | 8.835 | 11.780 | 14.725 | 17.670 | 20.615 | 23.560 | 26.505 |
| 70 | 2.992 | 5.984 | 8.976 | 11.968 | 14.960 | 17.952 | 20.944 | 23.636 | 26.628 |
| 0.71 | 3.041 | 6.082 | 9.123 | 12.164 | 15.205 | 18.246 | 21.287 | 24.328 | 27.369 |
| 72 | 3.089 | 6.178 | 9.267 | 12.356 | 15.445 | 18.534 | 21.623 | 24.712 | 27.801 |
| 73 | 3.138 | 6.276 | 9.414 | 12.552 | 15.690 | 18.828 | 21.983 | 25.104 | 28.242 |
| 74 | 3.186 | 6.372 | 9.558 | 12.744 | 15.930 | 19.116 | 22.302 | 25.488 | 28.674 |
| 75 | 3.235 | 6.470 | 9.705 | 12.940 | 16.175 | 19.410 | 22.645 | 25.880 | 29.115 |
| 0.76 | 3.283 | 6.566 | 9.849 | 13.132 | 16.415 | 19.698 | 22.981 | 26.264 | 29.547 |
| 77 | 3.333 | 6.666 | 9.999 | 13.332 | 16.665 | 19.998 | 23.331 | 26.664 | 29.997 |
| 78 | 3.381 | 6.762 | 10.143 | 13.524 | 16.905 | 20.286 | 23.667 | 27.048 | 30.429 |
| 79 | 3.431 | 6.862 | 10.293 | 13.724 | 17.155 | 20.583 | 24.017 | 27.448 | 30.879 |
| 80 | 3.480 | 6.960 | 10.440 | 13.920 | 17.400 | 20.880 | 24.360 | 27.840 | 31.320 |
| 0.81 | 3.530 | 7.060 | 10.590 | 14.120 | 17.650 | 21.180 | 24.710 | 28.240 | 31.770 |
| 82 | 3.579 | 7.158 | 10.737 | 14.316 | 17.895 | 21.474 | 25.053 | 28.632 | 32.211 |
| 83 | 3.630 | 7.260 | 10.890 | 14.520 | 18.150 | 21.780 | 25.410 | 29.040 | 32.670 |
| 84 | 3.679 | 7.358 | 11.037 | 14.716 | 18.395 | 22.074 | 25.753 | 29.432 | 33.111 |
| 85 | 3.730 | 7.460 | 11.190 | 14.920 | 18.650 | 22.380 | 26.110 | 29.840 | 33.570 |

表 1（續）

| $H_1+H_2$ \ L | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 0.86 | 3.780 | 7.560 | 11.340 | 15.120 | 18.900 | 22.680 | 26.460 | 30.240 | 34.020 |
| 87 | 3.831 | 7.662 | 11.493 | 15.324 | 19.155 | 22.986 | 26.817 | 30.648 | 34.479 |
| 88 | 3.881 | 7.762 | 11.643 | 15.524 | 19.405 | 23.283 | 27.167 | 31.048 | 34.929 |
| 89 | 3.932 | 7.864 | 11.793 | 15.728 | 19.660 | 23.592 | 27.524 | 31.456 | 35.388 |
| 90 | 3.983 | 7.966 | 11.949 | 15.932 | 19.915 | 23.898 | 27.881 | 31.864 | 35.847 |
| 0.91 | 4.034 | 8.068 | 12.102 | 16.136 | 20.170 | 24.204 | 28.238 | 32.272 | 36.306 |
| 92 | 4.085 | 8.170 | 12.255 | 16.340 | 20.425 | 24.510 | 28.595 | 32.680 | 36.765 |
| 93 | 4.137 | 8.274 | 12.411 | 16.548 | 20.685 | 24.822 | 28.959 | 33.096 | 37.233 |
| 94 | 4.188 | 8.376 | 12.564 | 16.752 | 20.940 | 25.128 | 29.316 | 33.504 | 37.692 |
| 95 | 4.240 | 8.480 | 12.720 | 16.960 | 21.200 | 25.440 | 29.680 | 33.920 | 38.160 |
| 0.96 | 4.291 | 8.582 | 12.873 | 17.164 | 21.455 | 25.746 | 30.037 | 34.328 | 38.619 |
| 97 | 4.344 | 8.688 | 13.032 | 17.376 | 21.720 | 26.064 | 30.408 | 34.752 | 39.093 |
| 98 | 4.395 | 8.790 | 13.185 | 17.580 | 21.975 | 26.370 | 30.765 | 35.160 | 39.555 |
| 99 | 4.448 | 8.896 | 13.344 | 17.792 | 22.240 | 26.688 | 31.136 | 35.584 | 40.032 |
| 1.00 | 4.500 | 9.000 | 13.500 | 18.000 | 22.500 | 27.000 | 31.500 | 36.000 | 40.500 |
| 1.01 | 4.553 | 9.106 | 13.659 | 18.212 | 22.765 | 27.318 | 31.871 | 36.424 | 40.977 |
| 02 | 4.605 | 9.210 | 13.815 | 18.420 | 23.025 | 27.630 | 32.235 | 36.840 | 41.445 |
| 03 | 4.659 | 9.318 | 13.977 | 18.636 | 23.295 | 27.954 | 32.613 | 37.272 | 41.931 |
| 04 | 4.711 | 9.422 | 14.133 | 18.844 | 23.555 | 28.266 | 32.977 | 37.688 | 42.399 |
| 05 | 4.765 | 9.530 | 14.295 | 19.060 | 23.825 | 28.590 | 33.355 | 38.120 | 42.885 |
| 1.06 | 4.818 | 9.636 | 14.454 | 19.272 | 24.090 | 28.908 | 33.726 | 38.544 | 43.362 |
| 07 | 4.872 | 9.744 | 14.616 | 19.488 | 24.360 | 29.232 | 34.104 | 38.976 | 43.848 |
| 08 | 4.925 | 9.850 | 14.775 | 19.700 | 24.625 | 29.550 | 34.475 | 39.400 | 44.325 |
| 09 | 4.979 | 9.958 | 14.937 | 19.916 | 24.895 | 29.874 | 34.853 | 39.832 | 44.811 |
| 10 | 5.033 | 10.066 | 15.099 | 20.132 | 25.165 | 30.198 | 35.231 | 40.264 | 45.297 |
| 1.11 | 5.087 | 10.174 | 15.261 | 20.348 | 25.435 | 30.522 | 35.609 | 40.696 | 45.783 |
| 12 | 5.141 | 10.282 | 15.423 | 20.564 | 25.705 | 30.846 | 35.987 | 41.128 | 46.269 |
| 13 | 5.196 | 10.392 | 15.588 | 20.784 | 25.980 | 31.176 | 36.372 | 41.568 | 46.764 |
| 14 | 5.250 | 10.500 | 15.750 | 21.000 | 26.250 | 31.500 | 36.750 | 42.000 | 47.250 |
| 15 | 5.305 | 10.610 | 15.915 | 21.220 | 26.525 | 31.830 | 37.135 | 42.440 | 47.745 |
| 1.16 | 5.359 | 10.718 | 16.077 | 21.436 | 26.795 | 32.154 | 37.513 | 42.872 | 48.231 |
| 17 | 5.415 | 10.830 | 16.245 | 21.660 | 27.075 | 32.490 | 37.905 | 43.320 | 48.735 |
| 18 | 5.469 | 10.938 | 16.407 | 21.876 | 27.345 | 32.814 | 38.283 | 43.752 | 49.221 |
| 19 | 5.525 | 11.050 | 16.575 | 22.100 | 27.625 | 33.150 | 38.675 | 44.200 | 49.725 |
| 20 | 5.580 | 11.160 | 16.740 | 22.320 | 27.900 | 33.480 | 39.060 | 44.640 | 50.220 |
| 1.21 | 5.636 | 11.272 | 16.908 | 22.544 | 28.180 | 33.816 | 39.452 | 45.088 | 50.724 |
| 22 | 5.691 | 11.382 | 17.073 | 22.764 | 28.455 | 34.146 | 39.837 | 45.528 | 51.219 |
| 23 | 5.748 | 11.496 | 17.244 | 22.992 | 28.740 | 34.488 | 40.236 | 45.984 | 51.732 |
| 24 | 5.803 | 11.606 | 17.409 | 23.212 | 29.015 | 34.818 | 40.621 | 46.424 | 52.227 |
| 25 | 5.860 | 11.720 | 17.580 | 23.440 | 29.300 | 35.160 | 41.020 | 46.880 | 52.740 |
| 1.26 | 5.916 | 11.832 | 17.748 | 23.664 | 29.580 | 35.496 | 41.412 | 47.328 | 53.244 |
| 27 | 5.973 | 11.946 | 17.919 | 23.892 | 29.865 | 35.838 | 41.811 | 47.784 | 53.757 |
| 28 | 6.029 | 12.058 | 18.087 | 24.116 | 30.145 | 36.174 | 42.203 | 48.232 | 54.261 |
| 29 | 6.086 | 12.172 | 18.258 | 24.344 | 30.430 | 36.516 | 42.602 | 48.688 | 54.774 |
| 30 | 6.143 | 12.286 | 18.429 | 24.572 | 30.715 | 36.858 | 43.001 | 49.144 | 55.287 |
| 1.31 | 6.200 | 12.400 | 18.600 | 24.800 | 31.000 | 37.200 | 43.400 | 49.600 | 55.800 |
| 32 | 6.257 | 12.514 | 18.771 | 25.028 | 31.285 | 37.542 | 43.799 | 50.056 | 56.313 |
| 33 | 6.315 | 12.630 | 18.945 | 25.260 | 31.575 | 37.890 | 44.205 | 50.520 | 56.835 |
| 34 | 6.372 | 12.744 | 19.116 | 25.488 | 31.860 | 38.232 | 44.604 | 50.976 | 57.348 |
| 35 | 6.430 | 12.860 | 19.290 | 25.720 | 32.150 | 38.580 | 45.010 | 51.440 | 57.870 |

| $H_1+H_2$ \ L | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 1.36 | 6.487 | 12.974 | 19.461 | 25.948 | 32.435 | 38.922 | 45.409 | 51.896 | 58.383 |
| 37 | 6.546 | 13.092 | 19.638 | 26.184 | 32.730 | 39.276 | 45.822 | 52.368 | 58.914 |
| 38 | 6.603 | 13.206 | 19.809 | 26.412 | 33.015 | 39.618 | 46.221 | 52.824 | 59.427 |
| 39 | 6.662 | 13.324 | 19.986 | 26.648 | 33.310 | 39.972 | 46.634 | 53.296 | 59.958 |
| 40 | 6.720 | 13.440 | 20.160 | 26.880 | 33.600 | 40.320 | 47.040 | 53.760 | 60.480 |
| 1.41 | 6.779 | 13.558 | 20.337 | 27.116 | 33.895 | 40.674 | 47.453 | 54.232 | 61.011 |
| 42 | 6.837 | 13.674 | 20.511 | 27.348 | 34.185 | 41.022 | 47.859 | 54.696 | 61.533 |
| 43 | 6.897 | 13.794 | 20.691 | 27.588 | 34.485 | 41.382 | 48.279 | 55.176 | 62.073 |
| 44 | 6.955 | 13.910 | 20.865 | 27.820 | 34.775 | 41.730 | 48.685 | 55.640 | 62.595 |
| 45 | 7.015 | 14.030 | 21.045 | 28.060 | 35.075 | 42.090 | 49.105 | 56.120 | 63.135 |
| 1.46 | 7.074 | 14.148 | 21.222 | 28.293 | 35.370 | 42.444 | 49.518 | 56.592 | 63.666 |
| 47 | 7.134 | 14.268 | 21.402 | 28.536 | 35.670 | 42.804 | 49.938 | 57.072 | 64.206 |
| 48 | 7.193 | 14.386 | 21.579 | 28.772 | 35.965 | 43.158 | 50.351 | 57.544 | 64.737 |
| 49 | 7.253 | 14.506 | 21.759 | 29.012 | 36.265 | 43.518 | 50.771 | 58.024 | 65.277 |
| 50 | 7.313 | 14.623 | 21.939 | 29.252 | 36.565 | 43.878 | 51.191 | 58.504 | 65.817 |
| 1.51 | 7.373 | 14.745 | 22.119 | 29.492 | 36.865 | 44.238 | 51.611 | 58.984 | 66.357 |
| 52 | 7.433 | 14.866 | 22.299 | 29.732 | 37.165 | 44 598 | 52.031 | 59.464 | 66.897 |
| 53 | 7.494 | 14.988 | 22.482 | 29.976 | 37.470 | 44.964 | 52.458 | 59.952 | 67.446 |
| 54 | 7.554 | 15.108 | 22.662 | 30.216 | 37.770 | 45.324 | 52.878 | 60.432 | 67.986 |
| 55 | 7.615 | 15.230 | 22.845 | 30.460 | 38.075 | 45.690 | 53.305 | 60.920 | 68.535 |
| 1.56 | 7.675 | 15.350 | 23.025 | 30.700 | 38.375 | 46.050 | 53.725 | 61.400 | 69.075 |
| 57 | 7.737 | 15.474 | 23.211 | 30.948 | 38.685 | 46.422 | 54.159 | 61.896 | 99.633 |
| 58 | 7.797 | 15.594 | 23.391 | 31.188 | 38.985 | 46.782 | 54.579 | 62.376 | 70.173 |
| 59 | 7.859 | 15.718 | 23.577 | 31.436 | 39.295 | 47.154 | 55.013 | 62.872 | 70.731 |
| 60 | 7.920 | 15.840 | 23.760 | 31.680 | 39.600 | 47.520 | 55.440 | 63.360 | 71.280 |
| 1.61 | 7.982 | 15.964 | 23.946 | 31.928 | 39.910 | 47.892 | 55.874 | 63.859 | 71.838 |
| 62 | 8.043 | 16.086 | 24.129 | 32.172 | 40.215 | 48.258 | 56.301 | 64.344 | 72.387 |
| 63 | 8.106 | 16.212 | 24.318 | 32.424 | 40.530 | 48.636 | 56.742 | 64.848 | 72.954 |
| 64 | 8.167 | 16.334 | 24.501 | 32.668 | 40.835 | 49.002 | 57.169 | 65.336 | 73.503 |
| 65 | 8.230 | 16.460 | 24.690 | 32.920 | 41.150 | 49.380 | 57.610 | 65.840 | 74.070 |
| 1.66 | 8.292 | 16.584 | 24.876 | 33.168 | 41.460 | 49.752 | 58.044 | 66.336 | 74.628 |
| 67 | 8.355 | 16.710 | 25.065 | 33.420 | 41.775 | 50.130 | 58.485 | 66.840 | 75.195 |
| 68 | 8.417 | 16.834 | 25.251 | 33.668 | 42.085 | 50.502 | 58.919 | 67.336 | 75.753 |
| 69 | 8.480 | 16.960 | 25.440 | 33.920 | 42.400 | 50.880 | 59.360 | 67.840 | 76.320 |
| 70 | 8.543 | 17.086 | 25.629 | 34.172 | 42.715 | 51.258 | 59.801 | 68.344 | 76.887 |
| 1.71 | 8.606 | 17.212 | 25.818 | 34.424 | 43.030 | 51.636 | 60.242 | 68.848 | 77.454 |
| 72 | 8.669 | 17.338 | 26.007 | 34.676 | 43.345 | 52.014 | 30.683 | 69.352 | 78.021 |
| 73 | 8.733 | 17.466 | 26.199 | 34.932 | 43.665 | 52.398 | 61.131 | 69.864 | 78.597 |
| 74 | 8.796 | 17.592 | 26.388 | 35.184 | 43.980 | 52.776 | 61.572 | 70.368 | 79.164 |
| 75 | 8.860 | 17.720 | 26.580 | 35.440 | 44.300 | 53.160 | 62.020 | 70.880 | 79.740 |
| 1.76 | 8.923 | 17.846 | 26.769 | 35.692 | 44.615 | 53.538 | 62.461 | 71.384 | 80.307 |
| 77 | 8.988 | 17.976 | 26.964 | 35.952 | 44.940 | 53.928 | 62.916 | 71.904 | 80.892 |
| 78 | 9.051 | 18.102 | 27.153 | 36.204 | 45.255 | 54.306 | 63.357 | 72.408 | 81.459 |
| 79 | 9.116 | 18.232 | 27.348 | 36.464 | 45.580 | 54.696 | 63.812 | 72.928 | 82.044 |
| 80 | 9.180 | 18.360 | 27.540 | 36.720 | 45.900 | 55.080 | 64.260 | 73.440 | 82.620 |
| 1.81 | 9.245 | 18.490 | 27.735 | 36.980 | 46.225 | 55.470 | 64.715 | 73.980 | 83.205 |
| 82 | 9.309 | 18.618 | 27.927 | 37.236 | 46.545 | 55.854 | 65.163 | 74.472 | 83.781 |
| 83 | 9.375 | 18.750 | 28.125 | 37.500 | 46.875 | 56.250 | 65.625 | 75.000 | 84.375 |
| 84 | 9.439 | 18.878 | 28.317 | 37.756 | 47.195 | 56.634 | 66.073 | 75.512 | 84.951 |
| 85 | 9.505 | 19.010 | 28.515 | 38.020 | 47.525 | 57.030 | 66.535 | 76.040 | 85.545 |

表 1（續）

| $H_1+H_2$ \ L | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 1.86 | 9.570 | 19.140 | 28.710 | 38.280 | 47.850 | 57.420 | 66.990 | 76.560 | 86.130 |
| 87 | 9.633 | 19.272 | 28.908 | 38.544 | 48.180 | 57.816 | 67.452 | 77.088 | 86.724 |
| 88 | 9.701 | 19.402 | 29.103 | 38.804 | 48.505 | 58.206 | 67.907 | 77.608 | 87.309 |
| 89 | 9.767 | 19.534 | 29.301 | 39.068 | 48.835 | 58.602 | 68.369 | 78.136 | 87.903 |
| 90 | 9.833 | 19.666 | 29.499 | 39.332 | 49.165 | 58.998 | 68.831 | 78.664 | 88.497 |
| 1.91 | 9.899 | 19.798 | 29.697 | 39.596 | 49.495 | 59.394 | 69.293 | 79.192 | 89.091 |
| 92 | 9.965 | 19.930 | 29.895 | 39.860 | 49.825 | 59.790 | 69.755 | 79.720 | 89.685 |
| 93 | 10.032 | 20.064 | 30.096 | 40.128 | 50.160 | 60.192 | 70.224 | 80.256 | 90.288 |
| 94 | 10.098 | 20.193 | 30.294 | 40.392 | 50.490 | 60.588 | 70.683 | 80.784 | 90.882 |
| 95 | 10.165 | 20.330 | 30.295 | 40.660 | 50.825 | 60.990 | 71.155 | 81.320 | 91.485 |
| 1.96 | 10.231 | 20.462 | 30.693 | 40.924 | 51.155 | 61.383 | 71.617 | 81.848 | 92.079 |
| 97 | 10.299 | 20.598 | 30.897 | 41.196 | 51.495 | 61.794 | 72.093 | 82.392 | 92.691 |
| 98 | 10.335 | 20.730 | 31.095 | 41.460 | 51.825 | 62.190 | 72.555 | 82.920 | 93.285 |
| 99 | 10.433 | 20.866 | 31.299 | 41.732 | 52.165 | 62.598 | 73.031 | 83.464 | 93.897 |
| 2.00 | 10.500 | 21.000 | 31.500 | 42.000 | 52.500 | 63.000 | 73.500 | 84.000 | 94.500 |

表 2

# 路 堤 土 方 表

B=7.5M　　H：0～8.0M　　m=1.5

| $H_1+H_2$ \ L | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 0.01 | 0.038 | 0.076 | 0.114 | 0.152 | 0.190 | 0.228 | 0.266 | 0.304 | 0.342 |
| 02 | 0.075 | 0.150 | 0.225 | 0.300 | 0.375 | 0.450 | 0.525 | 0.600 | 0.675 |
| 03 | 0.113 | 0.226 | 0.339 | 0.452 | 0.565 | 0.678 | 0.791 | 0.904 | 1.017 |
| 04 | 0.151 | 0.302 | 0.453 | 0.604 | 0.755 | 0.906 | 1.057 | 1.208 | 1.359 |
| 05 | 0.189 | 0.378 | 0.567 | 0.756 | 0.945 | 1.134 | 1.323 | 1.512 | 1.701 |
| 0.06 | 0.226 | 0.452 | 0.678 | 0.904 | 1.130 | 1.356 | 1.582 | 1.808 | 2.034 |
| 07 | 0.265 | 0.530 | 0.795 | 1.060 | 1.325 | 1.590 | 1.855 | 2.120 | 2.385 |
| 08 | 0.302 | 0.604 | 0.906 | 1.208 | 1.510 | 1.812 | 2.114 | 2.416 | 2.718 |
| 09 | 0.341 | 0.682 | 1.023 | 1.364 | 1.705 | 2.046 | 2.387 | 2.728 | 3.069 |
| 10 | 0.379 | 0.758 | 1.137 | 1.516 | 1.895 | 2.274 | 2.653 | 3.032 | 3.411 |
| 0.11 | 0.418 | 0.836 | 1.254 | 1.672 | 2.090 | 2.508 | 2.926 | 3.344 | 3.762 |
| 12 | 0.455 | 0.910 | 1.365 | 1.820 | 2.275 | 2.730 | 3.185 | 3.640 | 4.095 |
| 13 | 0.494 | 0.988 | 1.482 | 1.976 | 2.470 | 2.964 | 3.458 | 3.952 | 4.446 |
| 14 | 0.532 | 1.064 | 1.593 | 2.128 | 2.660 | 3.192 | 3.724 | 4.256 | 4.788 |
| 15 | 0.571 | 1.142 | 1.713 | 2.284 | 2.855 | 3.426 | 3.997 | 4.568 | 5.139 |
| 0.16 | 0.610 | 1.220 | 1.830 | 2.440 | 3.050 | 3.660 | 4.270 | 4.880 | 5.490 |
| 17 | 0.649 | 1.298 | 1.947 | 2.593 | 3.245 | 3.894 | 4.543 | 5.192 | 5.841 |
| 18 | 0.687 | 1.374 | 2.061 | 2.748 | 3.435 | 4.122 | 4.809 | 5.495 | 6.183 |
| 19 | 0.727 | 1.454 | 2.181 | 2.908 | 3.635 | 4.362 | 5.089 | 5.816 | 6.543 |
| 20 | 0.765 | 1.530 | 2.295 | 3.060 | 3.825 | 4.590 | 5.355 | 6.120 | 6.885 |
| 0.21 | 0.805 | 1.610 | 2.415 | 3.220 | 4.025 | 4.830 | 5.635 | 6.440 | 7.245 |
| 22 | 0.843 | 1.686 | 2.529 | 3.372 | 4.215 | 5.058 | 5.901 | 6.744 | 7.587 |
| 23 | 0.883 | 1.766 | 2.649 | 3.532 | 4.415 | 5.298 | 6.181 | 7.064 | 7.947 |
| 24 | 0.922 | 1.844 | 2.766 | 3.688 | 4.610 | 5.532 | 6.454 | 7.376 | 8.298 |
| 25 | 0.961 | 1.922 | 2.883 | 3.844 | 4.805 | 5.766 | 6.727 | 7.688 | 8.649 |
| 0.26 | 1.000 | 2.000 | 3.000 | 4.000 | 5.000 | 6.000 | 7.000 | 8.000 | 9.000 |
| 27 | 1.040 | 2.080 | 3.120 | 4.160 | 5.200 | 6.240 | 7.280 | 8.320 | 9.360 |
| 28 | 1.079 | 2.158 | 3.237 | 4.316 | 5.395 | 6.474 | 7.553 | 8.632 | 9.711 |
| 29 | 1.120 | 2.240 | 3.360 | 4.480 | 5.600 | 6.720 | 7.840 | 8.960 | 10.080 |
| 30 | 1.159 | 2.318 | 3.477 | 4.636 | 5.795 | 6.954 | 8.113 | 9.272 | 10.431 |
| 0.31 | 1.199 | 2.398 | 3.597 | 4.793 | 5.995 | 7.194 | 8.393 | 9.592 | 10.791 |
| 32 | 1.238 | 2.476 | 3.714 | 4.952 | 6.190 | 7.428 | 8.666 | 9.904 | 11.142 |
| 33 | 1.279 | 2.558 | 3.837 | 5.116 | 6.395 | 7.674 | 8.953 | 10.232 | 11.511 |
| 34 | 1.318 | 2.636 | 3.954 | 5.272 | 6.590 | 7.908 | 9.226 | 10.544 | 11.862 |
| 35 | 1.359 | 2.718 | 4.077 | 5.436 | 6.795 | 8.154 | 9.513 | 10.872 | 12.231 |

| $H_1+H_2$ \ L | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 0.36 | 1.399 | 2.798 | 4.197 | 5.596 | 6.695 | 8.394 | 9.793 | 11.192 | 12.591 |
| 37 | 1.439 | 2.878 | 4.317 | 5.756 | 7.195 | 8.634 | 10.073 | 11.512 | 12.951 |
| 38 | 1.479 | 2.958 | 4.437 | 5.916 | 7.395 | 8.874 | 10.353 | 11.832 | 13.311 |
| 39 | 1.520 | 3.040 | 4.560 | 6.080 | 7.600 | 9.120 | 10.640 | 12.160 | 13.680 |
| 40 | 1.560 | 3.120 | 4.680 | 6.240 | 7.800 | 9.360 | 10.920 | 12.480 | 14.040 |
| 0.41 | 1.601 | 3.202 | 4.803 | 6.404 | 8.005 | 9.603 | 11.207 | 12.808 | 14.409 |
| 42 | 1.642 | 3.284 | 4.926 | 6.568 | 8.210 | 9.852 | 11.494 | 13.136 | 14.774 |
| 43 | 1.682 | 3.364 | 5.046 | 6.728 | 8.410 | 10.092 | 11.774 | 13.456 | 15.138 |
| 44 | 1.723 | 3.446 | 5.169 | 6.892 | 8.615 | 10.338 | 12.061 | 13.784 | 15.507 |
| 45 | 1.764 | 3.528 | 5.292 | 7.056 | 8.820 | 10.584 | 12.348 | 14.112 | 15.876 |
| 0.46 | 1.804 | 3.608 | 5.412 | 7.216 | 9.029 | 10.824 | 12.628 | 14.432 | 16.236 |
| 47 | 1.846 | 3.692 | 5.538 | 7.384 | 9.230 | 11.076 | 12.922 | 14.768 | 16.614 |
| 48 | 1.886 | 3.772 | 5.658 | 7.544 | 9.430 | 11.316 | 13.202 | 15.088 | 16.974 |
| 49 | 1.928 | 3.856 | 5.784 | 7.712 | 9.640 | 11.568 | 13.496 | 15.424 | 17.352 |
| 50 | 1.969 | 3.938 | 5.907 | 7.876 | 9.845 | 11.814 | 13.783 | 15.752 | 17.721 |
| 0.51 | 2.011 | 4.022 | 6.033 | 8.044 | 10.055 | 12.066 | 14.077 | 16.088 | 18.099 |
| 52 | 2.051 | 4.102 | 6.153 | 8.204 | 10.255 | 12.306 | 14.357 | 16.408 | 18.459 |
| 53 | 2.093 | 4.186 | 6.279 | 8.372 | 10.465 | 12.558 | 14.651 | 16.744 | 18.837 |
| 54 | 2.134 | 4.268 | 6.402 | 8.536 | 10.670 | 12.804 | 14.938 | 17.072 | 19.206 |
| 55 | 2.176 | 4.352 | 6.528 | 8.704 | 10.880 | 13.056 | 15.232 | 17.408 | 19.584 |
| 0.56 | 2.218 | 4.436 | 6.654 | 8.872 | 11.090 | 13.308 | 15.526 | 17.744 | 19.962 |
| 57 | 2.260 | 4.520 | 6.780 | 9.040 | 11.300 | 13.560 | 15.820 | 18.080 | 20.340 |
| 58 | 2.301 | 4.602 | 6.903 | 9.204 | 11.505 | 13.806 | 16.107 | 18.408 | 20.709 |
| 59 | 2.344 | 4.688 | 7.032 | 9.376 | 11.720 | 14.064 | 16.408 | 18.752 | 21.096 |
| 60 | 2.385 | 4.770 | 7.155 | 9.540 | 11.925 | 14.310 | 16.695 | 19.080 | 21.465 |
| 0.61 | 2.428 | 4.856 | 7.284 | 9.712 | 12.140 | 14.568 | 16.996 | 19.424 | 21.852 |
| 62 | 2.469 | 4.938 | 7.407 | 9.876 | 12.345 | 14.814 | 17.283 | 19.752 | 22.221 |
| 63 | 2.512 | 5.024 | 7.536 | 10.048 | 12.560 | 15.072 | 17.584 | 20.093 | 22.608 |
| 64 | 2.554 | 5.108 | 7.662 | 10.216 | 12.770 | 15.324 | 17.878 | 20.432 | 22.985 |
| 65 | 2.596 | 5.192 | 7.788 | 10.384 | 12.980 | 15.576 | 18.172 | 20.768 | 23.364 |
| 0.66 | 2.638 | 5.276 | 7.914 | 10.552 | 13.190 | 15.828 | 18.466 | 21.104 | 23.742 |
| 67 | 2.681 | 5.362 | 8.043 | 10.724 | 13.405 | 16.086 | 18.767 | 21.448 | 24.129 |
| 68 | 2.723 | 5.446 | 8.169 | 10.892 | 13.615 | 16.338 | 19.061 | 21.784 | 24.507 |
| 69 | 2.767 | 5.534 | 8.301 | 11.068 | 13.835 | 16.602 | 19.369 | 22.136 | 24.903 |
| 70 | 2.809 | 5.618 | 8.427 | 11.236 | 14.045 | 16.854 | 19.663 | 22.472 | 25.281 |
| 0.71 | 2.852 | 5.704 | 8.556 | 11.408 | 14.260 | 17.112 | 19.964 | 22.816 | 25.668 |
| 72 | 2.894 | 5.788 | 8.682 | 11.576 | 14.470 | 17.364 | 20.248 | 23.152 | 26.046 |
| 73 | 2.938 | 5.876 | 8.814 | 11.752 | 14.690 | 17.628 | 20.565 | 23.504 | 26.442 |
| 74 | 2.980 | 5.960 | 8.940 | 11.920 | 14.900 | 17.880 | 20.860 | 23.840 | 26.820 |
| 75 | 3.024 | 6.048 | 9.072 | 12.096 | 15.120 | 18.144 | 21.168 | 24.192 | 27.215 |
| 0.76 | 3.067 | 6.134 | 9.201 | 12.268 | 15.335 | 18.402 | 21.469 | 24.536 | 27.603 |
| 77 | 3.110 | 6.220 | 9.330 | 12.440 | 15.550 | 18.660 | 21.770 | 24.880 | 27.990 |
| 78 | 3.153 | 6.706 | 9.459 | 12.612 | 15.765 | 18.918 | 22.071 | 25.224 | 28.377 |
| 79 | 3.197 | 6.394 | 9.591 | 12.788 | 15.985 | 19.182 | 22.379 | 25.576 | 28.773 |
| 80 | 3.240 | 6.480 | 9.720 | 12.960 | 16.200 | 19.440 | 22.680 | 25.920 | 29.160 |
| 0.81 | 3.284 | 6.568 | 9.852 | 13.136 | 16.420 | 19.704 | 22.988 | 26.272 | 29.556 |
| 82 | 3.327 | 6.654 | 9.981 | 13.308 | 16.645 | 19.962 | 23.289 | 26.616 | 29.943 |
| 83 | 3.371 | 6.742 | 10.113 | 13.484 | 16.855 | 20.226 | 23.597 | 26.968 | 30.339 |
| 84 | 3.415 | 6.830 | 10.245 | 13.660 | 17.075 | 20.490 | 23.905 | 27.320 | 30.735 |
| 85 | 3.459 | 6.918 | 10.377 | 13.836 | 17.295 | 20.754 | 24.213 | 27.672 | 31.131 |

表 2（續）

| $H_1+H_2$ \ L | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 0.86 | 3.502 | 7.004 | 10.506 | 14.008 | 17.510 | 21.012 | 24.514 | 28.016 | 31.518 |
| 87 | 3.547 | 7.094 | 10.641 | 14.188 | 17.735 | 21.282 | 24.829 | 28.376 | 31.923 |
| 88 | 3.590 | 7.180 | 10.770 | 14.360 | 17.950 | 21.540 | 25.130 | 28.720 | 32.310 |
| 89 | 3.635 | 7.270 | 10.905 | 14.540 | 18.175 | 21.810 | 25.445 | 29.080 | 32.715 |
| 90 | 3.679 | 7.358 | 11.037 | 14.716 | 18.395 | 22.074 | 25.753 | 29.432 | 33.111 |
| 0.91 | 3.724 | 7.448 | 11.172 | 14.893 | 18.620 | 22.344 | 26.068 | 29.792 | 33.516 |
| 92 | 3.767 | 7.534 | 11.301 | 15.068 | 18.835 | 22.602 | 26.369 | 30.136 | 33.903 |
| 93 | 3.812 | 7.624 | 11.436 | 15.248 | 19.060 | 22.872 | 26.684 | 30.496 | 34.308 |
| 94 | 3.856 | 7.712 | 11.568 | 15.427 | 19.280 | 23.136 | 26.992 | 30.848 | 34.704 |
| 95 | 3.901 | 7.802 | 11.703 | 15.604 | 19.505 | 23.403 | 27.307 | 31.208 | 35.109 |
| 0.96 | 3.946 | 7.892 | 11.838 | 15.784 | 19.730 | 23.676 | 27.622 | 31.568 | 35.514 |
| 97 | 3.991 | 7.982 | 11.973 | 15.964 | 19.955 | 23.946 | 27.937 | 31.928 | 35.919 |
| 98 | 4.035 | 8.070 | 12.105 | 16.140 | 20.175 | 24.210 | 28.245 | 32.280 | 36.315 |
| 99 | 4.081 | 8.162 | 12.243 | 16.324 | 20.405 | 24.483 | 28.567 | 32.648 | 36.729 |
| 1.00 | 4.125 | 8.250 | 12.375 | 16.500 | 20.625 | 24.750 | 28.875 | 33.000 | 37.125 |
| 1.01 | 4.171 | 8.342 | 12.513 | 16.684 | 20.855 | 25.056 | 29.197 | 33.368 | 37.539 |
| 02 | 4.215 | 8.430 | 12.645 | 16.860 | 21.075 | 25.290 | 29.505 | 33.720 | 37.935 |
| 03 | 4.261 | 8.522 | 12.783 | 17.044 | 21.305 | 25.566 | 29.827 | 34.088 | 38.349 |
| 04 | 4.306 | 8.612 | 12.918 | 17.224 | 21.530 | 25.836 | 30.142 | 34.448 | 38.754 |
| 05 | 4.351 | 8.702 | 13.053 | 17.404 | 21.755 | 26.106 | 30.457 | 34.808 | 39.159 |
| 1.06 | 4.393 | 8.792 | 13.188 | 17.584 | 21.980 | 26.376 | 30.775 | 35.168 | 39.564 |
| 07 | 4.442 | 8.884 | 13.326 | 17.768 | 22.210 | 26.652 | 31.094 | 35.536 | 39.978 |
| 08 | 4.487 | 8.974 | 13.461 | 17.948 | 22.435 | 26.922 | 31.409 | 35.896 | 40.383 |
| 09 | 4.534 | 9.038 | 13.602 | 18.136 | 22.670 | 27.204 | 31.738 | 36.272 | 40.806 |
| 10 | 4.579 | 9.158 | 13.737 | 18.316 | 22.895 | 27.474 | 32.053 | 36.632 | 41.211 |
| 1.11 | 4.625 | 9.250 | 13.875 | 18.500 | 23.125 | 27.750 | 32.375 | 37.000 | 41.625 |
| 12 | 4.670 | 9.340 | 14.010 | 18.680 | 23.350 | 28.020 | 32.690 | 37.360 | 42.030 |
| 13 | 4.717 | 9.434 | 14.151 | 18.868 | 23.585 | 28.302 | 33.019 | 37.736 | 42.453 |
| 14 | 4.762 | 9.524 | 14.286 | 19.048 | 23.810 | 28.572 | 33.334 | 38.096 | 42.858 |
| 15 | 4.809 | 9.618 | 14.427 | 19.236 | 24.045 | 28.854 | 34.663 | 38.472 | 43.381 |
| 1.16 | 4.855 | 9.710 | 14.565 | 19.420 | 24.275 | 29.130 | 33.985 | 38.840 | 43.695 |
| 17 | 4.901 | 9.802 | 14.703 | 19.604 | 24.505 | 29.406 | 34.307 | 39.208 | 44.109 |
| 18 | 4.947 | 9.894 | 14.841 | 19.788 | 24.735 | 29.682 | 34.629 | 39.576 | 44.523 |
| 19 | 4.994 | 9.988 | 14.982 | 19.976 | 24.970 | 29.964 | 34.958 | 39.952 | 44.946 |
| 20 | 5.040 | 10.080 | 15.120 | 20.160 | 25.200 | 30.240 | 35.280 | 40.320 | 45.360 |
| 1.21 | 5.087 | 10.174 | 15.261 | 20.348 | 25.435 | 30.522 | 35.609 | 40.696 | 45.783 |
| 22 | 5.133 | 10.266 | 15.399 | 20.532 | 25.665 | 30.798 | 35.931 | 41.064 | 46.197 |
| 23 | 5.180 | 10.360 | 15.540 | 20.720 | 25.900 | 31.080 | 36.260 | 41.440 | 46.620 |
| 24 | 5.227 | 10.454 | 15.681 | 20.908 | 26.135 | 31.362 | 36.589 | 41.816 | 47.043 |
| 25 | 5.274 | 10.548 | 15.822 | 21.096 | 26.370 | 31.644 | 36.918 | 42.192 | 47.466 |
| 1.26 | 5.320 | 10.640 | 15.960 | 21.280 | 26.600 | 31.920 | 37.240 | 42.560 | 47.880 |
| 27 | 5.368 | 10.736 | 16.104 | 21.472 | 26.840 | 32.208 | 37.576 | 42.944 | 48.312 |
| 28 | 5.414 | 10.828 | 16.242 | 21.656 | 27.070 | 32.484 | 37.898 | 43.312 | 48.726 |
| 29 | 5.462 | 10.924 | 16.386 | 21.848 | 27.310 | 32.772 | 38.234 | 43.693 | 49.158 |
| 30 | 5.509 | 11.018 | 16.527 | 22.036 | 27.545 | 33.054 | 38.563 | 44.072 | 49.581 |
| 1.31 | 5.557 | 11.114 | 16.671 | 22.228 | 27.785 | 33.342 | 38.899 | 44.456 | 50.013 |
| 32 | 5.603 | 11.206 | 16.809 | 22.412 | 28.015 | 33.618 | 39.221 | 44.824 | 50.427 |
| 33 | 5.951 | 11.302 | 16.953 | 22.604 | 28.255 | 33.906 | 39.557 | 45.208 | 50.859 |
| 34 | 5.698 | 11.396 | 17.094 | 22.792 | 28.490 | 34.188 | 39.886 | 45.584 | 51.282 |
| 35 | 5.746 | 11.492 | 17.238 | 22.984 | 28.730 | 34.476 | 40.222 | 45.968 | 51.714 |

表 2（續）

| $H_1+H_2$ \ L | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 1.36 | 5.794 | 11.588 | 17.382 | 23.176 | 28.970 | 34.764 | 40.558 | 46.352 | 52.146 |
| 37 | 5.842 | 11.684 | 17.526 | 23.368 | 29.210 | 35.052 | 40.894 | 46.736 | 52.578 |
| 38 | 5.889 | 11.778 | 17.667 | 23.556 | 29.445 | 35.334 | 41.223 | 47.112 | 53.001 |
| 39 | 5.938 | 11.876 | 17.814 | 23.752 | 29.690 | 35.628 | 41.566 | 47.504 | 53.442 |
| 40 | 5.985 | 11.970 | 17.955 | 23.940 | 29.925 | 35.910 | 41.895 | 47.880 | 53.835 |
| 1.41 | 6.034 | 12.068 | 18.102 | 24.136 | 30.170 | 36.204 | 42.238 | 48.272 | 54.306 |
| 42 | 6.081 | 12.162 | 18.243 | 24.324 | 30.405 | 36.486 | 42.567 | 48.648 | 54.729 |
| 43 | 6.130 | 12.260 | 18.390 | 24.520 | 30.650 | 36.780 | 42.910 | 49.040 | 55.170 |
| 44 | 6.178 | 12.356 | 18.534 | 24.712 | 30.890 | 37.068 | 43.246 | 49.424 | 55.602 |
| 45 | 6.226 | 12.452 | 18.678 | 24.904 | 31.130 | 37.356 | 43.582 | 49.808 | 56.034 |
| 1.46 | 6.274 | 12.548 | 18.822 | 25.096 | 31.370 | 37.644 | 43.918 | 50.192 | 56.466 |
| 47 | 6.323 | 12.646 | 18.969 | 25.292 | 31.615 | 37.938 | 44.261 | 50.584 | 56.907 |
| 48 | 6.371 | 12.742 | 19.113 | 25.484 | 31.855 | 38.226 | 44.597 | 50.968 | 57.339 |
| 49 | 6.421 | 12.842 | 19.263 | 25.684 | 32.105 | 38.526 | 44.947 | 51.368 | 57.789 |
| 50 | 6.469 | 12.938 | 19.407 | 25.876 | 32.345 | 38.814 | 45.283 | 51.752 | 58.221 |
| 1.51 | 6.518 | 13.036 | 19.554 | 26.072 | 32.590 | 39.108 | 45.626 | 52.144 | 58.662 |
| 52 | 6 566 | 13.132 | 19.698 | 26.264 | 32.830 | 39.396 | 45.962 | 52.528 | 59.094 |
| 53 | 6.616 | 13.232 | 19.848 | 26.464 | 33.080 | 39.696 | 46.312 | 52.928 | 59.544 |
| 54 | 6.664 | 13.328 | 19.992 | 26.656 | 33.320 | 39.984 | 46.648 | 53.312 | 59.976 |
| 55 | 6.714 | 13.428 | 20.142 | 26.856 | 33.570 | 40.284 | 46.998 | 53.712 | 60.426 |
| 1.56 | 6.763 | 13.526 | 20.289 | 27.052 | 33.815 | 40.578 | 47.341 | 54.104 | 60.837 |
| 57 | 6.812 | 13.624 | 20.436 | 27.248 | 34.060 | 40.872 | 47.684 | 54.496 | 61.308 |
| 58 | 6.861 | 13.722 | 20.582 | 27.444 | 34.305 | 41.166 | 48.027 | 54.888 | 61.749 |
| 59 | 6.911 | 13.822 | 20.733 | 27.644 | 34.555 | 41.466 | 48.377 | 55.288 | 62.199 |
| 60 | 6.960 | 13.920 | 20.880 | 27.840 | 34.800 | 41.760 | 48.720 | 55.680 | 62.640 |
| 1.61 | 7.010 | 14.020 | 21.030 | 28.040 | 35.050 | 42.060 | 49.070 | 56.080 | 63.090 |
| 62 | 7.059 | 14.118 | 21.177 | 28.236 | 35.295 | 42.354 | 49.413 | 56.472 | 63.531 |
| 63 | 7.109 | 14.218 | 21.327 | 28.436 | 35.545 | 42.654 | 49.763 | 56.872 | 63.981 |
| 64 | 7.159 | 14.318 | 21.477 | 28.636 | 35.795 | 42.654 | 50.113 | 57.272 | 64.431 |
| 65 | 7.209 | 14.418 | 21.627 | 28.836 | 36.045 | 43.254 | 50.463 | 57.672 | 64.881 |
| 1.66 | 7.258 | 14.516 | 21.774 | 29.032 | 36.290 | 43.548 | 50.806 | 58.064 | 65.322 |
| 67 | 7.309 | 14.613 | 21.927 | 29.236 | 36.545 | 43.854 | 51.162 | 58.472 | 65.781 |
| 68 | 7.358 | 14.716 | 22.074 | 29.432 | 36.790 | 44.148 | 51.506 | 58.864 | 66.222 |
| 69 | 7.409 | 14.818 | 22.227 | 29.636 | 37.045 | 44.454 | 51.863 | 59.272 | 66.681 |
| 70 | 7.459 | 14.918 | 22.377 | 29.836 | 37.295 | 44.754 | 52.213 | 59.672 | 67.131 |
| 1.71 | 7.510 | 15.020 | 22.530 | 30.040 | 37.550 | 45.060 | 52.570 | 60.080 | 67.590 |
| 72 | 7.559 | 15.118 | 22.677 | 30.236 | 37.795 | 45.354 | 52.913 | 60.472 | 68.031 |
| 73 | 7.610 | 15.220 | 22.830 | 30.440 | 38.050 | 45.660 | 53.270 | 60.880 | 68.490 |
| 74 | 7.660 | 15.320 | 22.980 | 30.640 | 38.300 | 45.930 | 53.620 | 61.280 | 68.940 |
| 75 | 7.711 | 15.422 | 23.133 | 30.844 | 38.555 | 46.266 | 53.977 | 61.688 | 69.399 |
| 1.76 | 7.762 | 15.524 | 23.286 | 31.048 | 38.810 | 46.572 | 54.334 | 62.096 | 69.858 |
| 77 | 7.813 | 15.626 | 23.439 | 31.252 | 39.065 | 46.878 | 54.691 | 62.504 | 70.317 |
| 78 | 7.863 | 15.726 | 23.589 | 31.452 | 39.315 | 47.178 | 55.041 | 62.904 | 70.767 |
| 79 | 7.914 | 15.828 | 23.742 | 31.656 | 39.570 | 47.484 | 55.398 | 63.312 | 71.226 |
| 80 | 7.965 | 15.930 | 23.895 | 31.860 | 39.825 | 47.790 | 55.755 | 63.720 | 71.685 |
| 1.81 | 8.017 | 16.034 | 24.051 | 32.068 | 40.085 | 48.102 | 56.119 | 64.136 | 72.153 |
| 82 | 8.067 | 16.134 | 24.201 | 32.268 | 40.335 | 48.402 | 56.469 | 64.536 | 72.603 |
| 83 | 8.119 | 16.238 | 24.357 | 32.476 | 40.595 | 48.714 | 56.833 | 64.952 | 73.071 |
| 84 | 8.170 | 16.340 | 24.510 | 32.680 | 40.850 | 49.020 | 57.190 | 65.360 | 73.530 |
| 85 | 8.221 | 16,442 | 24,663 | 32,884 | 41,105 | 49.326 | 57,547 | 65,768 | 73.989 |

| $H_1+H_2$ \ L | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|
| 1.83 | 8.272 | 16.544 | 24.816 | 33.088 | 41.360 | 49.632 | 57.904 | 66.176 | 74.448 |
| 87 | 8.224 | 16.648 | 24.972 | 33.295 | 41.620 | 49.944 | 58.268 | 66.592 | 74.916 |
| 88 | 8.375 | 16.750 | 25.125 | 33.500 | 41.875 | 50.250 | 58.625 | 67.000 | 75.375 |
| 89 | 8.428 | 16.856 | 25.284 | 33.712 | 42.140 | 50.568 | 58.996 | 67.424 | 75.852 |
| 90 | 8.479 | 16.958 | 25.437 | 33.916 | 42.395 | 50.874 | 59.353 | 67.832 | 76.311 |
| 1.91 | 8.531 | 17.062 | 25.593 | 34.124 | 42.655 | 51.186 | 59.717 | 68.248 | 76.779 |
| 92 | 8.582 | 17.164 | 25.746 | 34.328 | 42.910 | 51.492 | 60.074 | 68.656 | 77.238 |
| 93 | 8.635 | 17.270 | 25.905 | 34.540 | 43.175 | 51.810 | 60.445 | 69.080 | 77.715 |
| 94 | 8.686 | 17.372 | 26.058 | 34.744 | 43.430 | 52.116 | 60.802 | 69.488 | 78.174 |
| 95 | 8.739 | 17.478 | 26.217 | 34.956 | 43.695 | 52.434 | 61.173 | 69.912 | 78.651 |
| 1.96 | 8.791 | 17.582 | 26.373 | 35.164 | 43.955 | 52.746 | 61.537 | 70.328 | 79.119 |
| 97 | 8.843 | 17.683 | 26.529 | 35.372 | 44.215 | 53.058 | 61.901 | 70.744 | 79.587 |
| 98 | 8.895 | 17.790 | 26.685 | 35.580 | 44.475 | 53.370 | 62.235 | 71.160 | 80.055 |
| 99 | 8.948 | 17.896 | 26.844 | 35.792 | 44.740 | 53.688 | 62.636 | 71.584 | 80.532 |
| 2.00 | 9.000 | 18.000 | 27.000 | 36.000 | 45.000 | 54.000 | 63.000 | 72.000 | 81.000 |
| 2.01 | 9.053 | 18.103 | 27.159 | 36.212 | 45.265 | 54.318 | 63.371 | 72.424 | 81.477 |
| 02 | 9.105 | 18.210 | 27.315 | 36.420 | 45.525 | 54.630 | 63.735 | 72.840 | 81.945 |
| 03 | 9.158 | 18.316 | 27.474 | 36.632 | 45.790 | 54.948 | 64.106 | 73.264 | 82.422 |
| 04 | 9.211 | 18.422 | 27.633 | 36.844 | 46.055 | 55.266 | 64.477 | 73.688 | 82.899 |
| 05 | 9.264 | 18.528 | 27.792 | 37.056 | 46.320 | 55.584 | 64.848 | 74.112 | 83.376 |
| 2.06 | 9.316 | 18.632 | 27.948 | 37.264 | 46.580 | 55.896 | 65.212 | 74.528 | 83.844 |
| 07 | 9.370 | 18.740 | 28.110 | 37.480 | 46.850 | 56.220 | 65.590 | 74.960 | 84.330 |
| 08 | 9.422 | 18.844 | 28.266 | 37.688 | 47.110 | 56.532 | 65.954 | 75.376 | 84.798 |
| 09 | 9.476 | 18.952 | 28.428 | 37.904 | 47.380 | 53.856 | 63.332 | 75.808 | 85.284 |
| 10 | 9.529 | 19.058 | 28.587 | 38.116 | 47.645 | 57.174 | 66.703 | 76.232 | 85.761 |
| 2.11 | 9.583 | 19.166 | 28.749 | 38.332 | 47.915 | 57.498 | 67.081 | 76.664 | 83.247 |
| 12 | 9.635 | 19.270 | 28.905 | 38.540 | 48.175 | 57.810 | 67.445 | 77.080 | 86.715 |
| 13 | 9.689 | 19.378 | 29.067 | 38.756 | 48.445 | 58.134 | 67.823 | 77.512 | 87.201 |
| 14 | 9.742 | 19.484 | 29.226 | 38.968 | 48.710 | 58.452 | 68.194 | 77.936 | 87.678 |
| 15 | 9.793 | 19.592 | 29.388 | 39.184 | 48.980 | 58.773 | 68.572 | 78.368 | 88.164 |
| 2.16 | 9.850 | 19.700 | 29.550 | 39.400 | 49.250 | 59.100 | 68.950 | 78.800 | 88.650 |
| 17 | 9.904 | 19.808 | 29.712 | 39.616 | 49.520 | 59.424 | 69.328 | 79.232 | 89.136 |
| 18 | 9.957 | 19.914 | 29.871 | 39.828 | 49.785 | 59.742 | 69.699 | 79.656 | 89.613 |
| 19 | 10.012 | 20.024 | 30.036 | 40.048 | 50.060 | 60.072 | 70.084 | 80.093 | 90.108 |
| 20 | 10.065 | 20.130 | 30.195 | 40.260 | 50.325 | 60.390 | 70.455 | 80.520 | 90.585 |
| 2.21 | 10.120 | 20.240 | 30.360 | 40.480 | 50.600 | 60.720 | 70.840 | 80.960 | 91.080 |
| 22 | 10.173 | 20.346 | 30.519 | 40.692 | 50.865 | 61.038 | 71.211 | 81.384 | 91.557 |
| 23 | 10.228 | 20.456 | 30.684 | 40.912 | 51.140 | 61.368 | 71.596 | 81.824 | 92.052 |
| 24 | 10.282 | 20.564 | 30.846 | 41.128 | 51.410 | 61.692 | 71.974 | 82.256 | 92.538 |
| 25 | 10.336 | 20.672 | 31.008 | 41.344 | 51.680 | 62.016 | 72.352 | 82.688 | 93.024 |
| 2.26 | 10.390 | 20.780 | 31.170 | 41.560 | 51.950 | 62.340 | 72.730 | 83.120 | 93.510 |
| 27 | 10.445 | 20.890 | 31.335 | 41.780 | 52.225 | 62.670 | 73.115 | 83.560 | 94.005 |
| 28 | 10.499 | 20.998 | 31.497 | 41.996 | 52.495 | 62.994 | 73.493 | 83.992 | 94.491 |
| 29 | 10.555 | 21.110 | 31.665 | 42.220 | 52.775 | 63.330 | 73.885 | 84.440 | 94.995 |
| 30 | 10.609 | 21.218 | 31.827 | 42.436 | 53.045 | 63.654 | 74.263 | 84.872 | 95.481 |
| 2.31 | 10.664 | 21.328 | 31.992 | 42.656 | 53.320 | 63.984 | 74.648 | 85.312 | 95.976 |
| 32 | 10.718 | 21.436 | 32.154 | 42.872 | 53.590 | 64.308 | 75.023 | 85.744 | 96.462 |
| 33 | 10.774 | 21.548 | 32.322 | 43.096 | 53.870 | 64.644 | 75.418 | 83.192 | 96.938 |
| 34 | 10.828 | 21.656 | 32.484 | 43.312 | 54.140 | 64.968 | 75.793 | 83.624 | 97.452 |
| 35 | 10.884 | 21.768 | 32.652 | 43.536 | 54.420 | 65.304 | 76.188 | 87.072 | 97.956 |