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THE REVISED UNIVERSAL SOIL LOSS EQUATION RUSLE)

RUSLE is an updated version of the Universal Soil Loss Equation (USLE) and Agricultural Handbook 537. The original USLE has been retained in RUSLE, however it has been put into a computer program to facilitate calculations, and the technology for factor evaluation has been altered and new data has been introduced to evaluate each factor under more specific conditions.

RUSLE uses the same USLE formula A = R *K * LS * C * P. Where:

A = Predicted Average Annual Soil Loss(Tons/Acre/Year)
R = Rainfall-Runoff Erosivity Factor
K = Soil Erodibility Factor
LS = Length-Slope Factor
C = Cover-Management Factor
P = Support Practice Factor

Although not a factor in the RUSLE formula "Soil Loss Tolerance" (T), expressed in tons/acre/year, is an important criteria when we begin our management to control soil loss. "T" - Soil Loss Tolerance - is the maximum amount of soil loss, in tons/acre/year, that a given soil type can tolerate and still permit a high level of crop production to be sustained economically and indefinitely. "T" is often substituted for "A" in the RUSLE equation to establish a "Maximum C*P Value" for a given site.

RUSLE Is a tool to predict long term average annual soil loss in ton/acre/year from specific field conditions using specific management systems. RUSLE cannot be used to estimate or predict soil loss from individual storms nor from a particular year of weather and related factors. The factors used in the RUSLE are based on long-term averages.

RUSLE is only to be used to predict sheet and rill erosion on cropland, pastureland, and construction sites. RUSLE is not applicable to woodland and is not to be used to predict soil loss on woodland sites.

The following is a brief description of each of the factors used in RUSLE and how the RUSLE factors differ from the USLE factor.

(R) THE RAINFALL-RUNOFF INTENSITY EROSIVITY INDEX FACTOR

To understand the "**R**" value used In RUSLE one must first understand how the erosive potential of rainfall effects the soil erosion process. Raindrop erosion increases with the intensity of the rain. A long slow rain may have the same total energy as a short rain that is more intense. Total energy of the rainfall alone is not a good indicator of erosive potential. However, when energy is combined with rainfall intensity the result (EI-Energy/Intensity) is a good predictor of erosive potential. EI is the value of the product of total storm energy times the maximum 30 minute intensity. Technically, the term indicates how particle detachment is combined with transport capacity (the soil erosion process).

The relation of soil loss to the EI parameter is considered linear, and the parameter's individual storm values are directly additive. The sum of an average years EI's for a particular locality is the

"Rainfall Erosion Index - **R**" for that location. In the development of RUSLE these values where updated and as a result new "**R**" factors are available for each county.

The "**R**" values for Illinois vary from 140 in northeastern Illinois to 245 in southern Illinois. The higher the "**R**" value the higher the erosion potential.

(K) THE SOIL ERODIBILITY FACTOR

Soil erodibility is a complex property and is thought of as the ease with which soil is detached by splash during rainfall and/or by surface flow. Soil erodibility is related to the integrated effect of rainfall, runoff, and infiltration.

The soil erodibility factor (**K**) is the soil loss rate per erosion index unit for a specified soil as measured on a unit plot. A unit plot is defined as 72.6 feet long with a uniform slope of 9% in continuously clean-tilled fallow. The "**K**" represents both the susceptibility of the soil to erode and the rate of runoff.

Soils generally become less erosive with a decrease in the silt fraction regardless of whether the corresponding increase is from the clay or sand fraction. Organic matter also strongly influences the erodibility of a soil. Soils with higher amounts of organic matter and tilth have a stronger resistance to detachment due to aggregation and larger particle size. Soil erodibility is a function of complex interactions of both chemical and physical properties often within the same textural class.

The "**K**" factor represents the effect of soil properties and the soil profile characteristics on soil loss. The "**K**" values are expressed as average annual values. "**K**" values are assigned using a "Soil Erodibility Nomograph" that combines the effects of soil particle size, percent organic matter, soil structure code, and the profile permeability class.

RUSLE has taken the process one step further and adjusted the "**K**" factor based on seasonal variability related to freeze/thaw and soil moisture during the year. RUSLE recomputes the "**K**" value bimonthly (24 times during the year).

The RUSLE "**K**" values, found in the tables and charts, reflect the average annual adjusted "**K**" value for your location.

(LS) THE LENGTH AND SLOPE FACTOR

The length and slope factors used in RUSLE account for the effect of topography on erosion. Erosion increases as the slope length increases, and is considered the slope-length factor (**L**). Slope length is defined as the horizontal distance from the origin of flow to the point where either (1) the slope gradient decreases enough that deposition begins or (2) runoff becomes concentrated in a defined channel. Slope lengths will rarely exceed 400 feet in length unless grading has been done. Deposition usually begins to occur along a slope gradient at the point where the slope decreases by about 5%. Slope length is best determined by pacing or measuring in the field.

The slope steepness factor (S) reflects the influence of slope gradient on erosion. Erosion potential increases with the steepness of the slope. Slope is measured in the field by use of a clinometer, Abney level, or similar device. Contour maps, unless down to a two-foot contour interval, should not be used to measure slope nor length of slope. Slope and length of slope are measured perpendicular to the contour lines. When measuring in the field it is important to visualize the contour lines and measure perpendicular to those lines.

The combined **LS** factor in RUSLE represents the ratio of soil loss on a given slope length and steepness to the soil loss from a unit slope that has a length of 72.6 feet and a steepness of 9%, where all other conditions are the same. **LS** values are not absolute values but are referenced to a value of 1.0 at a 72.6 foot slope length and a 9% steepness. **LS** values less than 1.0 represent site conditions that erode less than the referenced condition of 72.6 ft. and 9% slope; and **LS** values more than 1.0 represent conditions more erosive than the reference condition.

It is important to consider the shape and makeup of a slope when determining its **LS** value. Uniform slopes are slopes where the slope is generally uniform over the entire length. Irregular or complex slopes have slope changes along the measured slope length. Irregular or complex slopes should have the **LS** value calculated to obtain a more accurate soil loss prediction. Slopes that are convex (slopes tend to increase downslope) are more erosive than concave slopes (slopes tend to decrease downslope). This situation will be reflected in the **LS** value calculated for an irregular slope.

Until users obtain FOCS-RUSLE to calculate **LS** values, charts are available to obtain **LS** values for uniform slopes. Occasionally situations arise where an **LS** value is needed for a complex slope (slopes change one or more times in length). When FOCS-RUSLE becomes available, users will be able to calculate **LS** values for complex slopes.

RUSLE **LS** values vary from the USLE values. RUSLE calculated LS values differently depending on the site susceptibility to rill or interill erosion. RUSLE will adjust **LS** values for the four (4) different situations.

1. Situation where the ratio of rill to interill erosion is low. **This would be used for pasture or rangeland situation**. Due to soil consolidation most erosion will be sheet (interill) vs. rill erosion.

2. Situations where the ratio of rill to interill erosion is moderate. **This situation would be used for cropland.**

3. Situations where the ratio of rill to interill is high and the soil has a strong tendency to rill. **This situation would be used for construction sites with relatively loose disturbed soil.**

4. Situations for thawing soil where most of the erosion is caused by surface flow. **This is only applicable for the Pacific Northwest.**

(C) THE COVER MANAGEMENT FACTOR

This is one of the two RUSLE factors (other that the Practice Factor "**P**" to be discussed later) that we can influence or manage to reduce soil loss. This is the factor that will most often be used for soil conservation planning activities with landusers.

The "**C**" Factor is used within both the USLE and RUSLE to reflect the effect of cropping and management practices on erosion rates. The "**C**" Factor measures how soil loss potential will be distributed in time during construction activities, crop rotations, or other management schemes.

As with most of the other factors within RUSLE, the "**C**" Factor is based on the concept of deviation from the standard. In this case the standard is an area under clean-tilled continuous fallow conditions. A Soil Loss Ratio (**SLR**) is then used to estimate soil loss under actual site conditions compared to losses experienced under the standard conditions (continuous fallow). The "**C**" value for the standard condition is 1.

USLE developed values for "**C**" by looking at conditions during specific crop stages (fallow, seedbed preparation. crop establishment, crop development, crop maturing, and harvest residue). USLE used average values for surface roughness, canopy cover, surface cover, and EI during each crop stage. RUSLE takes a much more thorough approach to calculating "**C**"Factors.

RUSLE looks at the impact of cropping and management on several subfactors. It looks at the impacts from previous cropping and management (prior land use, **PLU**), the protection offered the soil surface by vegetative canopy (canopy cover, **CC**), the reduction in erosion due to surface cover and surface roughness (surface cover, **SC**; surface roughness, **SR**), and in some cases the impact of low soil moisture (**SM**)on reduction of runoff from low-intensity rainfall. RUSLE assigns a subfactor value to each of these parameters during each semi-monthly time period, and calculates a Soil Loss Ratio (**SLR**) for each time period. The **SLR** for each period is weighted by the fraction of rainfall and runoff erosivity (EI) for the corresponding period. The weighted values are then combined into an overall "**C**" Factor.

The following is a brief description of the subfactors impacting the RUSLE "**C**" Factors.

Prior Land Use (PLU) Subfactor - expresses (1) the influence on the soil erosion of subsurface residual effects from previous crops and (2) the effect of previous tillage practices on soil consolidation. RUSLE evaluates the effects of subsurface biomass (roots and residue buried in the top 4 inches) to resist erosion. RUSLE continuously tracks the decomposition of the biomass on both the surface and subsurface as SLR's are calculated for each semi-monthly period.

Canopy Cover (CC) Subfactor - expresses the effectiveness of vegetative canopy in reducing the energy of rainfall striking the soil surface. Although most of the rainfall eventually reaches the soil surface, the rainfall intercepted by the canopy reaches the soil surface with less energy. RUSLE using crop databases constantly tracks the growth of a crop to calculate percent of canopy cover and average fall height of the raindrop from the crop leaf surface. The taller canopy cover, the less effective is canopy cover because the raindrop gains more velocity before reaching the soil surface.

Surface Cover (SC) Subfactor - affects erosion by reducing the transport capacity of runoff water, by causing deposition in ponded areas, and by decreasing the surface area susceptible to raindrop impact. This is measured by the amount of crop residue cover on the soil surface. RUSLE continuously tracks residue from harvest until it is decomposed. RUSLE assigns specific decomposition rates to residue based in the carbon:nitrogen ratio for the residue. RUSLE also tracks how much residue is buried by each type of tillage operation and then adjusts the decomposition rate for above and below ground residue. RUSLE recalculates these figures semi-monthly along with all the other subfactors. **This is perhaps the single most important factor determining SLR's.** The RUSLE **SC** subfactor does allow the measurement of rocks on the surface as apart of surface cover, whereas USLE did not.

Surface Roughness (SR) Subfactor - surface roughness directly effects soil erosion. A rough surface has many depressions and barriers. During a rainfall event, these trap water and sediment causing rough surfaces to erode at lower rates than do smooth surfaces under similar conditions. Roughness also effects the degree and the rate of soil sealing by raindrop impact. Rougher soils generally have higher infiltration rates. The **SR** is defined by a baseline condition for a unit plot that is in clean cultivation, smooth, and exposed to rainfall of moderate intensity. RUSLE tracks **SR** throughout the year based on the time and type of field operation performed and the corresponding rainfall, temperature, and biomass decay rate.

Soil Moisture (SM) Subfactor - antecedent soil moisture has a substantial influence on infiltration and runoff and hence on soil erosion. Soil moisture is usually high during susceptible crop stages in spring and early summer when much of the erosion occurs. This situation closely parallels the unit plot continuous fallow plots. This is true for most of the continental United States. Where this situation is true, no adjustments are needed for soil moisture. Only the Pacific Northwest and Range Region adjust for soil moisture.

"**C**" Values have been calculated for most cropping and pasture situations and are available in tables in the FOTG. The "**C**" Values will also be available in FOCS-RUSLE as "look-up" tables. Individuals needing special "**C**" Values may contact the state conservation agronomist for assistance.

(P) THE SUPPORT PRACTICE FACTOR

The support practice factor "**P**" in RUSLE is the ratio of soil loss with a specific support practice to the corresponding loss with up and down slope tillage, which has a value of 1. The support practices principally affect erosion by modifying the flow pattern, grade, or direction of surface runoff. For cultivated land the support practice generally includes contouring, stripcropping, terracing, and subsurface drainage. RUSLE studies indicate a wide variation among "**P**" Factors for subsurface drainage and still require more research before reliable values can be calculated. At this time there is no "**P**" Factor adjustment for subsurface drainage.

The "**P**" does not consider improved tillage such as notill and other conservation tillage systems, sod-based crop rotations, fertility treatment, and crop residue management. These erosion control measures are included in the "**C**" Factor.

An overall "**P**" Factor value is computed as a product of **"P"** subfactors for individual support practices, which are typically used in combination. For example contouring is almost always used in stripcropping or terraces.

RUSLE calculates the **"P"** Factor based on percent slopes, length of slope, roughness and ridge height, EI distribution, hydrologic soil group, and the effect of off grade contouring.

Contouring is most effective on slopes of 2-12%. As slopes get steeper than 12% the effectiveness of contouring begins to taper off. Contouring has almost no effect on slopes exceeding 25%.

Adding ridge height to contouring adds to the effectiveness of contouring. Ridge height refers to the amount of roughness left with tillage and planting operations.

Data from field studies indicate that contouring is less effective for large storms than for small storms. The reduced effectiveness depends on both the amount of runoff and the peak rate of runoff. These runoff variables are directly related to rainfall amount and intensity which are the principal variables that determine EI. RUSLE uses a 10 year EI to calculate the effectiveness of contouring. Each county is assigned an EI number that corresponds to the 10 Year EI calculated from a local weather station.

Until the RUSLE "**P**" Factor routine is available in FOCS-RUSLE the **"P"** Factors can be determined by using the **"P"** Factor Charts included in the attached material.

RUSLE SUMMARY

RUSLE is a much more technically advanced method to predicted sheet and rill erosion than USLE. RUSLE has more data available and refinement of the data to more accurately predict soil loss.

With the addition of a computer program for RUSLE we can now more accurately reflect actual site conditions throughout the entire year or crop rotation.

RUSLE uses three primary databases to evaluate RUSLE factor values: CROPLIST, CITYLIST, and OPLIST databases.

The CROPLIST database identifies the crop being grown; how that crop develops and or decays on a semimonthly basis based on its expected yield; weight of residue at 30%, 60%. and 90% cover; the amount of root biomass in the upper 4 inches of soil; percent of canopy cover; and canopy fall height. Each one of the items is recalculated semi-monthly against all other RUSLE parameters.

The CITYLIST database identifies the mean semi-monthly precipitation and temperature for each specific weather station used; the average annual R-Factor; EI; and the number of frost free days each year. Again each one of the factors is recalculated semi-monthly against all the other RUSLE parameters.

The OPLIST database tracks the soil disturbing and other field operations. The database identified specific effects created by each field operation. It identifies such effects as the amount of surface disturbed; depth of disturbance; whether a crop is killed or begins growth; whether residue is added or taken away; and the amount of residue retained or buried by each operation.

RUSLE is the present state of the art in sheet and rill soil loss prediction. RUSLE is enhanced through the use of the computer program to accurately describe and evaluate your specific site conditions.

References:

Predicting Rainfall Erosion Losses, Agricultural Handbook No. 537

Predicting Soil Erosion by Water: A Guide to Conservation Planning with RUSLE; Agricultural Handbook No. 703, Agricultural Research Service.

UNITED STATES DEPARTMENT OF AGRICULTURE

NATURAL RESOURCES CONSERVATION SERVICE

ILLINOIS "R" FACTOR MAP

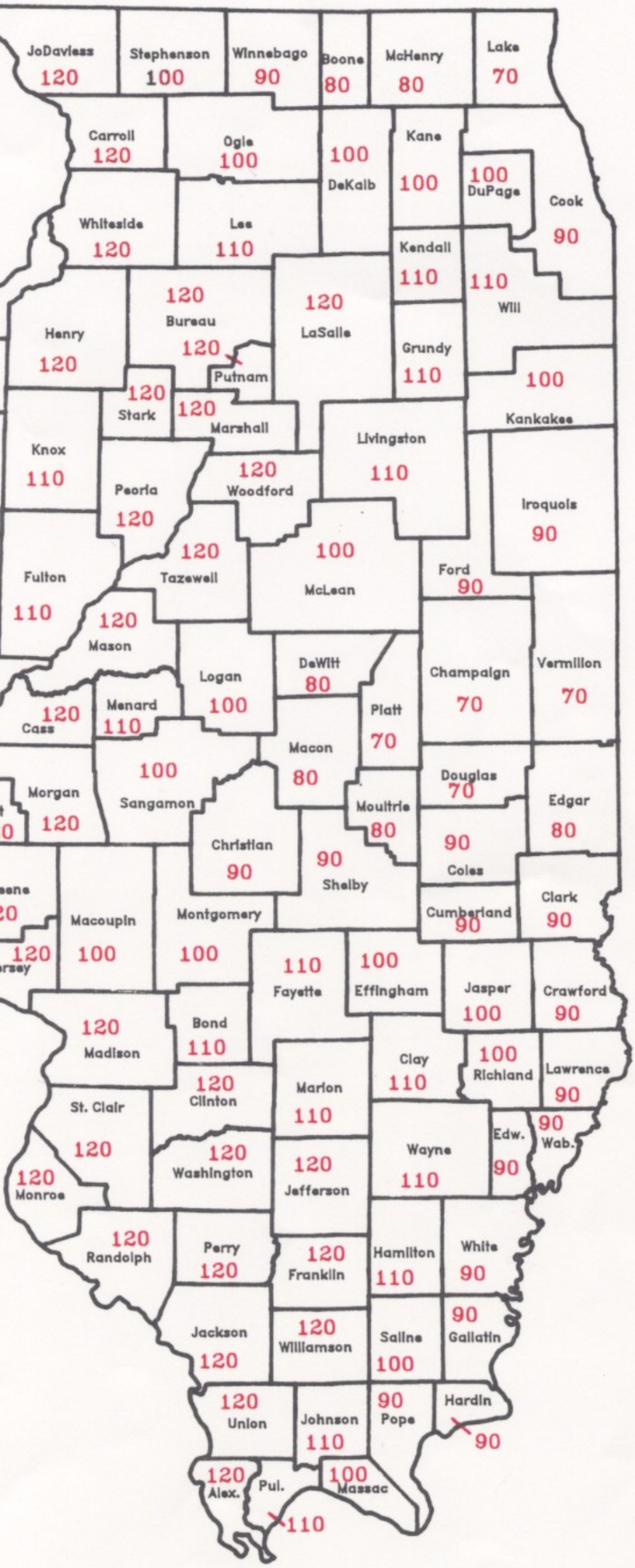
GRASS-MAPGEN INTERFACE

REVISED NOVEMBER 1994

UNITED STATES DEPARTMENT OF AGRICULTURE

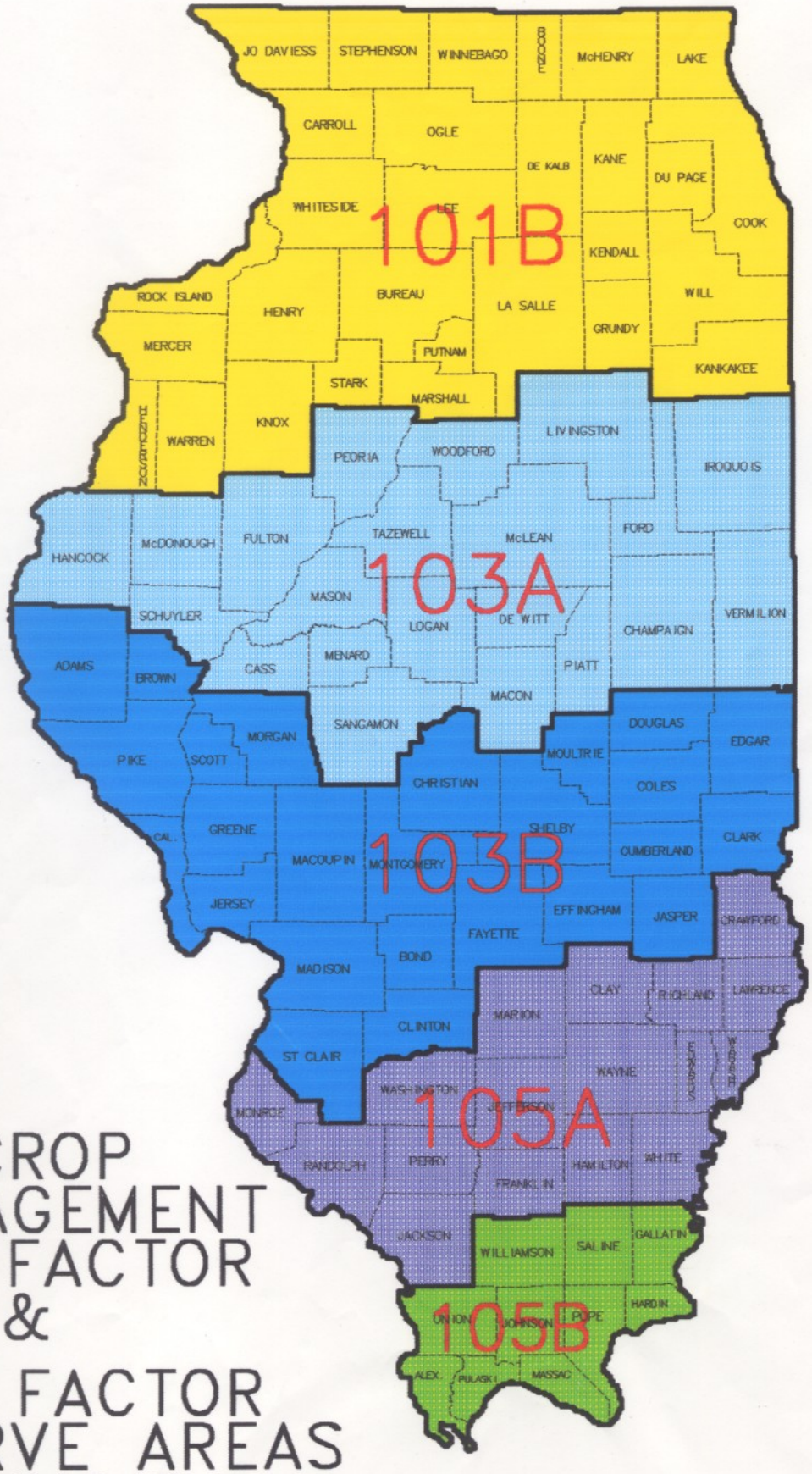
NATURAL RESOURCES CONSERVATION SERVICE

10 – YEAR STORM EI ILLINOIS MAP



GRASS-MAPGEN INTERFACE

REVISED NOVEMBER 1994



CROP MANAGEMENT "C" FACTOR & "K" FACTOR EI CURVE AREAS ILLINOIS

Instructions For Determining Soil loss by Water
RUSLE VERSION

Note: The "RUSLE Sheet and Rill Erosion Prediction Worksheet" can be reproduced and used to train yourself or others on the procedure to calculate soil loss with RUSLE. There is an "Example RUSLE Sheet and Rill Erosion Prediction Worksheet" completed to use as a reference.

1. Determine the "**R**" value for the county. See the RUSLE "**R**" Factor Map.

2. Determine the soil type (map unit) for the site where soils loss will be calculated. Use the Soil Survey Map.

3. Determine the soil erodibility factor "**K**" the "Soil Interpretations For RUSLE" table.

4. Determine the "**C**" and "**K**" Factor ZONE" for your county. See the Illinois **C & K** Factor Zone Map.

5. Determine the "RUSLE Adjusted **K** Value" from the Average annual **K** Factors for your respective **C & K** Zone, pages 3.2 - 3.6.

6. Determine Slope Percent and Slope Length for **LS**. Refer to Table 1, 2, or 3 to determine the **LS** value, pages 4.2 - 4.4.

7. Determine the "**C**" Factor. Refer to the appropriate "**C**" Factor Table for Cropland for the appropriate "**C & K** Factor Zone" or "**C**" Factors For Permanent Grasses on page 5.2. For construction sites call the State Agronomist for assistance to determine "**C**". There are no "**C**" Values for woodland developed.

8. Determine the "**P**" Factor. See the "RUSLE Supporting Practice Instructions, Tables, and Figures", pages 6.1 - 6.60

9. Multiply **R** x Adjusted **K** x **LS** x **C** x **P** = **A** "Average Annual Soil Loss in Tons/Acre/Year".

RUSLE Sheet and Rill Erosion Prediction Worksheet

1. County _____ "R" Factor _____ "C" and "K" Factor Zone_____
("R" Factor Maps) ("C" & "K" Factor Map)

2. Soil Type _____ Map Unit_____ "K" Factor _____ Adjusted "K" _____ "T" Value_____
(See Average Annual K Adjusted Charts for "C"/"K" Zone)

3. Length of Slope _____ Percent Slope _____ LS Factor_____
Pasture, Cropland, or Construction Site Table (1, 2, or 3)

4. "C" Factors: See tables for your "C" factor area for Cropland, or page 5.2 for Permanent Grass.

Crop (1) _____Tillage/Residue% _____ "C" Factor_____
Crop (2) _____Tillage/Residue% _____ "C" Factor_____
Crop (3) _____Tillage/Residue% _____ "C" Factor_____
Crop (4) _____Tillage/Residue% _____ "C" Factor_____
Crop (5) _____Tillage/Residue% _____ "C" Factor_____

Total "C" - All Yrs_____
Average "C" Total "C'. for Rotation / Total Yrs_____

5. Average Annual Soil Loss Where "P" is Equal to "1".

R _____ x K _____ x LS _____ x C_____ x P (1) = **Average Annual Soil Loss (A)**_____
(P = 1 when contouring or stripcropping are not a consideration)

"P" Subfactor Procedure for Contouring

Step 1. Soil Type/Map Unit _____ Soil Hydrologic Group (A,B,C,D) (Circle one)
10-Year EI = _____Slope Length _____ Slope Percent _____ Furrow Grade Percent_____
(EI 10 Map) (from 3 above) (from 3 above)

	Table 1 page 6.13 - 6.14 Cover Management Condition	Table 2 page 6.15 Ridge Height	Table 3 page 6.16 - 6.27 Contouring
Year (1)	_____	_____	_____
Year (2)	_____	_____	_____
Year (3)	_____	_____	_____
Year (4)	_____	_____	_____
Year (5)	_____	_____	_____

Total Years "P" _____
Average "P" (Total Years "P" / Years) = _____

Step 2. Adjust Contouring "P" Subfactor for Furrow Grade (Table 4 page 6.28 - 6.29).

a. Determine if contour furrow grade meets Contour Farming standard row grade. If it does, go to STEP 3. If it doesn't, go to b. below to determine adjustment to "P" subfactor.
b. Determine the Ratio of "Furrow Grade" to the "Profile (slope) grade".
Formula: Ratio = Furrow Grade % = _____
(Round to Nearest 0.1) Slope/Profile % = = _____

From Table 4 page 6.28 - 6.29: Find the Contouring "P" Subfactor Value Adjusted for Furrow Grade.
Adjusted "P" Subfactor for Furrow Grade = _____

Step 3. Determine Critical Slope Length (Figures 1 - 23 pages 6.35 - 6.57).
(Each Year Evaluated Against Its "Cover Management Conditions").

Crop Year	Contouring Critical Length		Stripcropping Critical Length	
1	_____	X 1.5 =	_____	
2	_____	X 1.5 =	_____	USE SMALLEST
3	_____	X 1.5 =	_____	*See subscript below
4	_____	X 1.5 =	_____	
5	_____	X 1.5 =	_____	

*Critical Slope Length Equals the Smallest Critical Length for "Contouring" if contouring; and for "Stripcropping" if contour stripcropping is used

Note 1: If the "Critical Slope Length" is more than the "Actual Slope Length" use the "**P**" Subfactor determined in Step 2.

Note 2: If the "Critical Slope Length" is less than the "Actual Slope Length" go to Step 4.

Step 4. Adjusting the Contouring "**P**" Subfactor where Slope Length exceeds the "Critical Slope Length" (Figures 1 - 23).

A. Determine "Actual Slope Length" / "Critical Slope Length" Ratio.
Ratio = Critical Slope Length _____ / Slope Length (for the Slope %)_____ = _____

B. Go to Figures 1-23 to determine "**P**" Subfactor Adjustment for "Critical Slope Length".

Note: 1. Use the "**Medium**" Range for Rill/Interill Ratio - Use:
Figure 29 for Slopes 0.2 - 4.0%
Figure 30 for Slopes 4.1 - 12%
Figure 31 for Slope. 13 - 80%
"**P**" Subfactor Adjustment for Critical Slope = _____

R _____ x **K** _____ x **L** _____ x **C** _____ x **P** _____ = **A** _____ Tons/Acre/Year

"P" Subfactor Procedure for Contour/Field Stripcropping & Buffer Strips

Step 1. Determine "**P**" Subfactor for "Contouring " (see previous steps).

Step 2. Number of strips that cross the Slope Length _____ .**Note**: Two (2) is the minimum strips to cross a slope length. If less that 2. use the "P" Subfector Procedure for "Contouring".
Step 3. Determine "**P**" Subfactor for Cover and Ridge Height Conditions for Contour/ Field Stripcropping and Buffer strips.
a. From Table 1 pages 6.13 - 6.14 select proper Cover Management Condition._____
b. From Table 2 page 6.15 select proper Ridge Height rating._____

Next, choose either Table 5A (Contour Stripcropping), 5B (Field Stripcropping), or 5C (Buffer Strips) and select the number of strips on the left side and the Ridge Height/Cover Management Condition pairings from the bottom to determine "**P**" Sub factor for Stripcropping (contour or field) or Buffer Strips (circle one).

Enter "**P**" Subfactor (From table 5A,.5B, or 5C)_____ "**P**" Subfactor. Remember to select from sod based table or small grain based table.

Step 4. Determine the "Composite" "P" Sub factor

(Contour Cropping "**P**" Subfactor) X (Buffer/Stripcropping Field "**P**" Sub factor) = "**P**" Factor

_____ x _____ = _____ "**P**" for Contour/Field Stripcropping and/or Buffer Strips.

Step 5. Determine Predicted Soil Loss.

R_____ x **K**_____ x **LS**_____ x **C**_____ x **P** _____ = **A** _____ Tons/Acre/Year

RUSLE Sheet and Rill Erosion Prediction Worksheet - EXAMPLE

1. County _____ "R" Factor _____ "C" and "K" Factor Zone _____
("R" Factor Maps) ("C" & "K" Factor Map)

2. Soil Type _____ Map Unit _____ "K" Factor _____ Adjusted "K" _____ "T" Value _____
(See Average Annual K Adjusted Charts for "C"/"K" Zone)

3. Length of Slope _____ Percent Slope _____ LS Factor _____
Pasture, Cropland, or Construction Site Table (1, 2, or 3)

4. "C" Factors: See tables for your "C" factor area for Cropland, or page 5.2 for Permanent Grass.

Crop (1) _____ Tillage/Residue% _____ "C" Factor _____
Crop (2) _____ Tillage/Residue% _____ "C" Factor _____
Crop (3) _____ Tillage/Residue% _____ "C" Factor _____
Crop (4) _____ Tillage/Residue% _____ "C" Factor _____
Crop (5) _____ Tillage/Residue% _____ "C" Factor _____

Total "C" - All Yrs _____

Average "C' Total "C'. for Rotation / Total Yrs _____

5. Average Annual Soil Loss Where "P" is Equal to "1".

R _____ x K _____ x LS _____ x C _____ x P (1) = **Average Annual Soil Loss (A)** _____
(P = 1 when contouring or stripcropping are not a consideration)

"P" Subfactor Procedure for Contouring

Step 1. Soil Type/Map Unit _____ Soil Hydrologic Group (A,B,C,D) (Circle one)
10-Year EI = _____ Slope Length _____ Slope Percent _____ Furrow Grade Percent _____
(EI 10 Map) (from 3 above) (from 3 above)

	Table 1 page 6.13 - 6.14 Cover Management Condition	Table 2 page 6.15 Ridge Height	Table 3 page 6.16 - 6.27 Contouring
Year (1)	_____	_____	_____
Year (2)	_____	_____	_____
Year (3)	_____	_____	_____
Year (4)	_____	_____	_____
Year (5)	_____	_____	_____
		Total Years "P"	_____

Average "P" (Total Years "P" / Years) = _____

Step 2. Adjust Contouring "P" Subfactor for Furrow Grade (ONLY IF NEEDED)(Table 4 page 6.28 - 6.29).

a. Determine if contour furrow grade meets Contour Farming standard row grade. If it does, go to STEP 3. If it doesn't, go to b. below to determine adjustment to "P" subfactor.
b. Determine the Ratio of "Furrow Grade" to the "Profile (slope) grade".
Formula: Ratio = Furrow Grade % = _____
(Round to Nearest 0.1) Slope/Profile % = = _____

From Table 4 page 6.28 - 6.29: Find the Contouring "P" Subfactor Value Adjusted for Furrow Grade.
Adjusted "P" Subfactor for Furrow Grade = _____

Step 3. Determine Critical Slope Length (Figures 1 - 23 pages 6.35 - 6.57).
(Each Year Evaluated Against Its "Cover Management Conditions").

Crop Year	Contouring Critical Length		Stripcropping Critical Length	
1	_____	X 1.5 =	_____	
2	_____	X 1.5 =	_____	USE SMALLEST
3	_____	X 1.5 =	_____	*See subscript below
4	_____	X 1.5 =	_____	
5	_____	X 1.5 =	_____	

*Critical Slope Length Equals the Smallest Critical Length for 'Contouring" if contouring; and for "Stripcropping" if contour stripcropping is used

RUSLE Sheet and Rill Erosion Prediction Worksheet - EXAMPLE (contd)

Note 1: If the "Critical Slope Length" is more than the "Actual Slope Length" use the **"P"** Subfactor determined in Step 2.

Note 2: If the "Critical Slope Length" is less than the "Actual Slope Length" go to Step 4.

Step 4. Adjusting the Contouring **"P"** Subfactor where Slope Length exceeds the "Critical Slope Length" (Figures 1 - 23).

A. Determine "Actual Slope Length" / "Critical Slope Length" Ratio.
Ratio = Critical Slope Length _____ / Slope Length (for the Slope %)_____ = _____

B. Go to Figures 1-23 to determine **"P"** Subfactor Adjustment for "Critical Slope Length".

Note: 1. Use the **"Medium"** Range for Rill/Interill Ratio - Use:
Figure 29 for Slopes 0.2 - 4.0%
Figure 30 for Slopes 4.1 - 12%
Figure 31 for Slope. 13 - 80%
"P" Subfactor Adjustment for Critical Slope = _____

R _____ x **K** _____ x **L** _____ x **C** _____ x **P** _____ = **A** _____ Tons/Acre/Year

"P" Subfactor Procedure for Contour/Field Stripcropping & Buffer Strips

Step 1. Determine **"P"** Subfactor for "Contouring " (see previous steps).

Step 2. Number of strips that cross the Slope Length _____ .**Note**: Two (2) is the minimum strips to cross a slope length. If less that 2. use the "P" Subfector Procedure for "Contouring".
Step 3. Determine "**P**" Subfactor for Cover and Ridge Height Conditions for Contour/ Field Stripcropping and Buffer strips.
a. From Table 1 pages 6.13 - 6.14 select proper Cover Management Condition._____
b. From Table 2 page 6.15 select proper Ridge Height rating._____

Next, choose either Table 5A (Contour Stripcropping), 5B (Field Stripcropping), or 5C (Buffer Strips) and select the number of strips on the left side and the Ridge Height/Cover Management Condition pairings from the bottom to determine **"P"** Sub factor for Stripcropping (contour or field) or Buffer Strips (circle one).

Enter **"P"** Subfactor (From table 5A,.5B, or 5C)_____ "**P**" Subfactor. Remember to select from sod based table or small grain based table.

Step 4. Determine the "Composite" "P" Sub factor

(Contour Cropping **"P"** Subfactor) X (Buffer/Stripcropping Field **"P"** Sub factor) = "**P**" Factor

_____ x _____ = _____ **"P"** for Contour/Field Stripcropping and/or Buffer Strips.

Step 5. Determine Predicted Soil Loss.

R_____ x **K**_____ x **LS**_____ x **C**_____ x **P** _____ = **A** _____ Tons/Acre/Year

AVERAGE ANNUAL k FACTORS

RUSLE Version 1.04

Climatic Zone: 101B (Moline, IL)

Current k_f	RUSLE Adjusted k
.02	.02
.05	.05
.10	.08
.15	.12
.17	.15
.20	.17
.24	.20
.28	.24
.32	.26
.37	.30
.43	.35
.49	.40
.55	.46
.64	.52

The RUSLE Adjusted k factors from this table are to be used only for hand calculations prior to the use of the computerized version of RUSLE.

Procedure:

1. Obtain k for each soil from the **Kf** column in "Soil Interpretations For RUSLE" table.

2. From the table above, read the **RUSLE Adjusted k** that corresponds to the k factor obtained in step 1 above. This is the k value to use in RUSLE.

AVERAGE ANNUAL k FACTORS

RUSLE Version 1.04

Climatic Zone: 103A (Ft. Wayne, IN)

Current k_f	RUSLE Adjusted k_f
.02	.02
.05	.05
.10	.10
.15	.15
.17	.17
.20	.20
.24	.24
.28	.26
.32	.30
.37	.35
.43	.40
.49	.46
.55	.52
.64	.60

The RUSLE Adjusted k factors from this table are to be used only for hand calculations prior to the use of the computerized version of RUSLE.

Procedure:

1. Obtain k for each soil from the **Kf** column in "Soil Interpretations For RUSLE" table.

2. From the table above, read the **RUSLE Adjusted k** that corresponds to the k factor obtained in step 1 above. This is the k value to use in RUSLE.

AVERAGE ANNUAL k FACTORS

RUSLE Version 1.04

Climatic Zone: 103B (Columbia, MO)

Current k_f	RUSLE Adjusted k_f
.02	.02
.05	.05
.10	.08
.15	.12
.17	.15
.20	.17
.24	.20
.28	.24
.32	.26
.37	.30
.43	.35
.49	.40
.55	.46
.64	.52

The RUSLE Adjusted k factors from this table are to be used only for hand calculations prior to the use of the computerized version of RUSLE.

Procedure:

1. Obtain k for each soil from the **Kf** column in "Soil Interpretations For RUSLE" table.

2. From the table above, read the **RUSLE Adjusted k** that corresponds to the k factor obtained in step 1 above. This is the k value to use in RUSLE.

AVERAGE ANNUAL k FACTORS

RUSLE Version 1.04

Climatic Zone: 105A (Evansville, IN)

Current k_f	RUSLE Adjusted k_f
.02	.02
.05	.05
.10	.10
.15	.15
.17	.17
.20	.20
.24	.24
.28	.28
.32	.32
.37	.37
.43	.43
.49	.49
.55	.55
.64	.64

The RUSLE Adjusted k factors from this table are to be used only for hand calculations prior to the use of the computerized version of RUSLE.

Procedure:

1. Obtain k for each soil from the **Kf** column in "Soil Interpretations For RUSLE" table.

2. From the table above, read the **RUSLE Adjusted k** that corresponds to the k factor obtained in step 1 above. This is the k value to use in RUSLE.

AVERAGE ANNUAL k FACTORS

RUSLE Version 1.04

Climatic Zone: 105B (Caruthersville, MO)

Current k	RUSLE Adjusted k_f
.02	.02
.05	.05
.10	.08
.15	.12
.17	.15
.20	.17
.24	.22
.28	.24
.32	.28
.37	.32
.43	.37
.49	.43
.55	.49
.64	.55

The RUSLE Adjusted k factors from this table are to be used only for hand calculations prior to the use of the computerized version of RUSLE.

Procedure:

1. Obtain k for each soil from the **Kf** column in "Soil Interpretations For RUSLE" table.

2. From the table above, read the **RUSLE Adjusted k** that corresponds to the k factor obtained in step 1 above. This is the k value to use in RUSLE.

Topographic (LS) Factor

The slope length and steepness factor in RUSLE is based on three tables include in this section. The selection of the proper table is an important step in determining the LS-factor.

Select the proper table using the following guidelines:

Table 1: Use this table if the erosion calculations are for RANGELAND, FORESTLAND, CONTINUOUS LONG TERM NO-TILL CROPLAND, and other consolidated soil conditions with surface cover. These situations have low rill to sheet (interrill) erosion ratio.

Table 2: Use this table if the erosion calculations are for CROPLAND excluding long term no-till and other moderately consolidated soil conditions with little to moderate cover. These situations have a moderate rill to sheet (interrill) erosion ratio.

Table 3: Use this table if the erosion calculations are for freshly prepared CONSTRUCTION SITES AND MINE SPOIL areas and other highly disturbed soil conditions with little to no cover. These situations have a high rill to sheet (interrill) erosion ratio.

Table 1: Values for topographic factor, LS, for RANGELAND, PASTURELAND, FORESTLAND, LONG TERM NO-TILL CROPLAND 1/ and other consolidated soil conditions with cover (low rill to interrill erosion ratio)

Percent Slope	Slope Length (feet)																
	<3	6	9	12	15	25	50	75	100	150	200	250	300	400	600	800	1000
0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05
0.5	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09	0.09
1.0	0.12	0.12	0.12	0.12	0.12	0.13	0.13	0.14	0.14	0.15	0.15	0.15	0.15	0.16	0.16	0.17	0.17
2.0	0.20	0.20	0.20	0.20	0.20	0.21	0.23	0.25	0.26	0.27	0.28	0.29	0.30	0.31	0.33	0.34	0.35
3.0	0.26	0.26	0.26	0.26	0.26	0.29	0.33	0.36	0.38	0.40	0.43	0.44	0.46	0.48	0.52	0.55	0.57
4.0	0.33	0.33	0.33	0.33	0.33	0.36	0.43	0.46	0.50	0.54	0.58	0.61	0.63	0.67	0.74	0.78	0.82
5.0	0.38	0.38	0.38	0.38	0.38	0.44	0.52	0.57	0.62	0.68	0.73	0.78	0.81	0.87	0.97	1.04	1.10
6.0	0.44	0.44	0.44	0.44	0.44	0.50	0.61	0.68	0.74	0.83	0.90	0.95	1.00	1.08	1.21	1.31	1.40
8.0	0.54	0.54	0.54	0.54	0.54	0.64	0.79	0.90	0.99	1.12	1.23	1.32	1.40	1.53	1.74	1.91	2.05
10.0	0.60	0.63	0.65	0.66	0.68	0.81	1.03	1.19	1.31	1.51	1.67	1.80	1.92	2.13	2.45	2.71	2.93
12.0	0.61	0.70	0.75	0.80	0.83	1.01	1.31	1.52	1.69	1.97	2.20	2.39	2.56	2.85	3.32	3.70	4.02
14.0	0.63	0.76	0.85	0.92	0.98	1.20	1.58	1.85	2.08	2.44	2.73	2.99	3.21	3.60	4.23	4.74	5.18
16.0	0.65	0.82	0.94	1.04	1.12	1.38	1.85	2.18	2.46	2.91	3.28	3.60	3.88	4.37	5.17	5.82	6.39
20.0	0.68	0.93	1.11	1.26	1.39	1.74	2.37	2.84	3.22	3.85	4.38	4.83	5.24	5.95	7.13	8.10	8.94
25.0	0.73	1.05	1.30	1.51	1.70	2.17	3.00	3.63	4.16	5.03	5.76	6.39	6.96	7.97	9.65	11.04	12.26
30.0	0.77	1.16	1.48	1.75	2.00	2.57	3.60	4.40	5.06	6.18	7.11	7.94	8.68	9.99	12.19	14.04	15.66
40.0	0.85	1.36	1.79	2.17	2.53	3.30	4.73	5.84	6.78	8.37	9.71	10.91	11.99	13.92	17.19	19.96	22.41
50.0	0.91	1.52	2.06	2.54	3.00	3.95	5.74	7.14	8.33	10.37	12.11	13.65	15.06	17.59	21.88	25.55	28.82
60.0	0.97	1.67	2.29	2.86	3.41	4.52	6.63	8.29	9.72	12.16	14.26	16.13	17.84	20.92	26.17	30.68	34.71

1/ Long Term No-Till Cropland = cropland where continuous no-till has been used five (5) or more years.

Table 2: Values for topographic factor, LS, for ROW-CROPPED agricultural and other moderately consolidated soil conditions with little to moderate cover (moderate rill to interril erosion ratio)

Percent Slope	Slope Length (feet)																
	<3	6	9	12	15	25	50	75	100	150	200	250	300	400	600	800	1000
0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06
0.5	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.08	0.09	0.09	0.09	0.09	0.09	0.10	0.10	0.10	0.10
1.0	0.11	0.11	0.11	0.11	0.11	0.12	0.13	0.14	0.14	0.15	0.16	0.17	0.17	0.18	0.19	0.20	0.20
2.0	0.17	0.17	0.17	0.17	0.17	0.19	0.22	0.25	0.27	0.29	0.31	0.33	0.35	0.37	0.41	0.44	0.47
3.0	0.22	0.22	0.22	0.22	0.22	0.25	0.32	0.36	0.39	0.44	0.48	0.52	0.55	0.60	0.68	0.75	0.80
4.0	0.26	0.26	0.26	0.26	0.26	0.31	0.40	0.47	0.52	0.60	0.67	0.72	0.77	0.86	0.99	1.10	1.19
5.0	0.30	0.30	0.30	0.30	0.30	0.37	0.49	0.58	0.65	0.76	0.85	0.93	1.01	1.13	1.33	1.49	1.63
6.0	0.34	0.34	0.34	0.34	0.34	0.43	0.58	0.69	0.78	0.93	1.05	1.16	1.25	1.42	1.69	1.91	2.11
8.0	0.42	0.42	0.42	0.42	0.42	0.53	0.74	0.91	1.04	1.26	1.45	1.62	1.77	2.03	2.47	2.83	3.15
10.0	0.46	0.48	0.50	0.51	0.52	0.67	0.97	1.19	1.38	1.71	1.98	2.22	2.44	2.84	3.50	4.06	4.56
12.0	0.47	0.53	0.58	0.61	0.64	0.84	1.23	1.53	1.79	2.23	2.61	2.95	3.26	3.81	4.75	5.56	6.28
14.0	0.48	0.58	0.65	0.70	0.75	1.00	1.48	1.86	2.19	2.76	3.25	3.69	4.09	4.82	6.07	7.15	8.11
16.0	0.49	0.63	0.72	0.79	0.85	1.15	1.73	2.20	2.60	3.30	3.90	4.45	4.95	5.86	7.43	8.79	10.02
20.0	0.52	0.71	0.85	0.96	1.06	1.45	2.22	2.85	3.40	4.36	5.21	5.97	6.68	7.97	10.23	12.20	13.99
25.0	0.56	0.80	1.00	1.16	1.30	1.81	2.82	3.65	4.39	5.69	6.83	7.88	8.86	10.65	13.80	16.58	19.13
30.0	0.59	0.89	1.13	1.34	1.53	2.15	3.39	4.42	5.34	6.98	8.43	9.76	11.01	13.30	17.37	20.99	24.31
40.0	0.65	1.05	1.38	1.68	1.95	2.77	4.45	5.87	7.14	9.43	11.47	13.37	15.14	18.43	24.32	29.60	34.48
50.0	0.71	1.18	1.59	1.97	2.32	3.32	5.40	7.17	8.78	11.66	14.26	16.67	18.94	23.17	30.78	37.65	44.02
60.0	0.76	1.30	1.78	2.23	2.65	3.81	6.24	8.33	10.23	13.65	16.76	19.64	22.36	27.45	36.63	44.96	52.70

Table 3: Values for topographic factor, LS, for freshly prepared CONSTRUCTION SITES and MINE SPOIL areas, and other highly disturbed soil conditions with little or no cover (high rill to interrill erosion ratio)

Percent Slope	Slope Length (feet)																
	<3	6	9	12	15	25	50	75	100	150	200	250	300	400	600	800	1000
0.2	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06
0.5	0.07	0.07	0.07	0.07	0.07	0.07	0.08	0.08	0.09	0.09	0.10	0.10	0.10	0.11	0.12	0.12	0.13
1.0	0.09	0.09	0.09	0.09	0.09	0.10	0.13	0.14	0.15	0.17	0.18	0.19	0.20	0.22	0.24	0.26	0.27
2.0	0.13	0.13	0.13	0.13	0.13	0.16	0.21	0.25	0.28	0.33	0.37	0.40	0.43	0.48	0.56	0.63	0.69
3.0	0.17	0.17	0.17	0.17	0.17	0.21	0.30	0.36	0.41	0.50	0.57	0.64	0.69	0.80	0.96	1.10	1.23
4.0	0.20	0.20	0.20	0.20	0.20	0.26	0.38	0.47	0.55	0.68	0.79	0.89	0.98	1.14	1.42	1.65	1.86
5.0	0.23	0.23	0.23	0.23	0.23	0.31	0.46	0.58	0.68	0.86	1.02	1.16	1.28	1.51	1.91	2.25	2.55
6.0	0.26	0.26	0.26	0.26	0.26	0.36	0.54	0.69	0.82	1.05	1.25	1.43	1.60	1.90	2.43	2.89	3.30
8.0	0.32	0.32	0.32	0.32	0.32	0.45	0.70	0.91	1.10	1.43	1.72	1.99	2.24	2.70	3.52	4.24	4.91
10.0	0.35	0.37	0.38	0.39	0.40	0.57	0.91	1.20	1.46	1.92	2.34	2.72	3.09	3.75	4.95	6.03	7.02
12.0	0.36	0.41	0.45	0.47	0.49	0.71	1.15	1.54	1.88	2.51	3.07	3.60	4.09	5.01	6.67	8.17	9.57
14.0	0.38	0.45	0.51	0.55	0.58	0.85	1.40	1.87	2.31	3.09	3.81	4.48	5.11	6.30	8.45	10.40	12.23
16.0	0.39	0.49	0.56	0.62	0.67	0.98	1.64	2.21	2.73	3.68	4.56	5.37	6.15	7.60	10.26	12.69	14.96
20.0	0.41	0.56	0.67	0.76	0.84	1.24	2.10	2.86	3.57	4.85	6.04	7.16	8.23	10.24	13.94	17.35	20.57
25.0	0.45	0.64	0.80	0.93	1.04	1.56	2.67	3.67	4.59	6.30	7.88	9.38	10.81	13.53	18.57	23.24	27.66
30.0	0.48	0.72	0.91	1.08	1.24	1.86	3.22	4.44	5.58	7.70	9.67	11.55	13.35	16.77	23.14	29.07	34.71
40.0	0.53	0.85	1.13	1.37	1.59	2.41	4.24	5.89	7.44	10.35	13.07	15.67	18.17	22.95	31.89	40.29	48.29
50.0	0.58	0.97	1.31	1.62	1.91	2.91	5.16	7.20	9.13	12.75	16.16	19.42	22.57	28.60	39.95	50.63	60.84
60.0	0.63	1.07	1.47	1.84	2.19	3.36	5.97	8.37	10.63	14.89	18.92	22.78	26.51	33.67	47.18	59.93	72.15

Mulch-till C Factors -Medium production C Factor Zone 101B

Corn after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn, grain	.19	.15	.13	.11	.09	.07	.06		.21	.16	.13	.10	.09	.08		
corn, seed	.22	.17	.15	.12	.09	.08	.07		.25	.18	.14	.12	.10			
corn silage	.33	.23							.33	.25						
corn silage, w/cover	.24	.19	.16	.13	.07	.05	.04	.03								
grain sorghum	.24	.19	.16	.13	.11				.26	.19	.16	.14				
soybeans, wide row	.28	.21	.18	.16					.31	.25	.21	.16				
soybeans, narrow	.28	.21	.18	.16					.33	.22	.19	.16				
oats	.22	.17	.14	.11	.08	.07			.25	.17	.14	.11	.08	.07		
winter wheat	.21	.16	.13	.11	.08				.23	.16	.13	.11				
legume	.13	.12	.11						.17	.15	.13					
grass	.09	.07	.06						.11	.09	.07					

Corn, seed after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn, grain	.23	.18	.15	.13	.11	.08	.07		.24	.18	.15	.13	.11	.09		
corn, seed																
corn silage	.32	.25							.31	.25						
corn silage, w/cover	.25	.20	.20	.11	.10											
grain sorghum	.27	.22	.17	.15	.13				.29	.22	.19	.16				
soybeans, wide row	.32	.26	.22	.19					.34	.27	.23					
soybeans, narrow	.31	.26	.22	.19					.33	.26	.22					
oats	.25	.19	.15	.13	.10	.08	.06		.28	.20	.16	.13	.10	.08		
winter wheat	.24	.18	.15	.12	.09	.07	.06		.26	.19	.15	12	.09			
legume																
grass																

Mulch-till C Factors -Medium production C Factor Zone 101B

Corn silage after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn, grain	.18	.14	.12	.11	.08	.06	.05		.20	.15	.12	.10	.08			
corn, seed	.22	.17	.15	.12	.10	.08			.23	.18	.14	.12	.10			
corn silage	.33	.30							.32	.30						
corn silage, w/cover		.11	.09	.08												
grain sorghum	.26	.19							.31	.23						
soybeans, wide row	.28	.21	.19	.16					.31	.23	.20	.17				
soybeans, narrow	.28	.24	.18	.16					.30	.25	.19	.16				
oats	.23	.18	.14						.25	.18	.14	.11				
winter wheat	.21	.16	.13	.10	.08	.06	.05		.23	.17	.13	.10				
legume	.12	.09							.16	.14						
grass	.08	.06							.11	.09						

Corn Silage After w/cover	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn, grain	.18	.14	.12	.11	.10	.09										
corn, seed	.20	.16	.13	.11	.09											
corn silage		.21														
corn silage, w/cover		.18	.13	.11	.09	.07										
grain sorghum	.19	.15	.13							.17						
soybeans, wide row	.30															
soybeans, narrow	.28									.19						
oats			.12	.10	.08											
winter wheat																
legume																
grass																

Mulch-till C Factors -Medium production C Factor Zone 101B

Grain Sorghum after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn, grain	.21	.17	.15	.12	.10	.08	.06		.26	.18	.15	.12	.10	.08		
corn, seed	.28	.21	.18	.14	.11	.09			.31	.23	.18	.15	.12			
corn silage	.34															
corn silage, w/cover	.18	.18	.16													
grain sorghum	.28	.22							.31	.23						
soybeans, wide row	.31	.24	.21	.17	.15				.38							
soybeans, narrow	.33								.37							
oats	.26	.19	.15	.12					.31	.20	.16					
winter wheat	.24	.19	.15	.11	.09	.07	.06		.28	.20	.16	.11	.09	.08		
legume																
grass																

Soybeans, After wide row	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn, grain	.19	.15	.12	.10	.08	.07	.05		.22	.16	.13	.11	.09	.07	.06	
corn, seed	.22	.17	.15	.12	.09				.24	.18	.14	.12	.10			
corn silage	.34	.31							.35	.33						
corn silage, w/cover	.27	.15								.16	.13	.11				
grain sorghum	.24								.27	.15						
soybeans, wide row	.29	.22	.19						.34	.27						
oats	.23								.26	.19	.15	.12	.10			
winter wheat	.21								.25	.18	.14	.11	.09			
legume	.12								.18							
grass																

Mulch-till C Factors -Medium production C Factor Zone 101B

Soybeans Narrow Row	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn, grain	.14	.11	.09	.07	.06	.05	.04	.03	.17	.12	.09	.08	.06	.05		
corn, seed	.17	.13	.11	.09	.07				.18	.13	.11	.09	.07			
corn silage	.28	.24							.28	.27						
corn silage, w/cover	.16															
grain sorghum	.18	.18	.13						.22	.19	.16					
soybeans, narrow	.21	.16	.14						.26	.20						
oats	.17	.13	.11	.09	.07	.06	.04		.21	.14	.11	.09	.07	.06		
winter wheat	.16	.12	.10	.08	.06	.05	.04		.20	.14	.11	.09				
legume									.14							
grass																

Oats after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn, grain	.05	.04	.03	.03	.02	.02	.01	.01	.07	.04	.04	.03	.02	.02	.01	
corn, seed	.06	.05	.04	.03	.03	.02	.02	.01	.08	.06	.04	.04	.03	.02	.02	
corn silage	.10	.06	.05						.09	.07						
corn silage, w/cover			.06	.05	.04											
grain sorghum	.07	.06	.05						.09	.06	.05					
soybeans, wide row	.09	.06	.05	.04	.03				.11	.07	.06	.04				
soybeans, narrow	.08	.06	.05	.04	.03				.11	.07	.06	.04				
legume																
grass																
oats	.08	.06	.05	.04					.09	.06	.05	.04				

Oats w/Meadow after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn, grain	.04	.02	.02	.02	.01				.04	.03	.02	.02	.02	.01		
corn, seed																
corn silage																
corn silage, w/cover																
grain sorghum																
soybeans, wide row																
soybeans, narrow																
legume																
grass																

Mulch-till C Factors -Medium production C Factor Zone 101B

Wheat after	Fall primary tillage							
	Plow	10	20	30	40	50	60	70
corn, grain	.05	.04	.03	.03	.02			
corn, seed		.05	.04	.03	.02	.02		
corn silage	.10	.07	.05	.04				
corn silage, w/cover								
grain sorghum	.07	.05	.04	.03	.02	.02	.01	
soybeans, wide row	.08	.06	.05	.04				
soybeans, narrow	.08	.06	.05	.04	.03			
legume								
grass								

Alfalfa, 1st year after	Spring primary tillage								Fall primary tillage							
	Plow	10	20	30	40	50	60	70	Plow	10	20	30	40	50	60	70
corn, grain	.09	.07	.06	.05	.04				.11	.08	.06	.05	.04	.04		
corn, seed																
corn silage	.18	.01							.20							
corn silage, w/cover																
grain sorghum																
soybeans, wide row	.14									.13	.10					
soybeans, narrow	.13	.11	.09	.08					.16	.13						
oats																
winter wheat																
legume																

No-till C Factors - Medium production C Factor Zone 101B

Corn after	10	20	30	40	50	60	70
corn, grain					.04	.02	.02
corn, seed			.07	.06			
corn silage	.13						
corn silage, w/cover				.09	.07	.04	.03
grain sorghum				.05	.04		
soybeans, wide row			.08	.07	.06	.05	
soybeans, narrow			.12	.10	.08		
oats						.03	.03
winter wheat					.03	.03	.02
legume					.03	.02	.02
grass							.01
oats w/meadow				.04	.04	.03	

Corn, seed after	Not cultivated						
	10	20	30	40	50	60	70
corn, grain		.09	.07				
corn, seed							
corn silage	.19						
corn silage, w/cover						.04	.03
grain sorghum				.06	.05		
soybeans, wide row		.11	.01	.09	.08		
soybeans, narrow	.16	.14	.09	.08	.07		
oats						.03	.02
winter wheat						.03	.03
legume							
grass							

* - Residue levels will normally be below 10% cover.

No-till C Factors - Medium production C Factor Zone 101B

Corn, Silage after	Not cultivated						
	10	20	30	40	50	60	70
corn, grain						.03	.02
corn, seed			.08	.06	.05		
corn silage	.16						
corn silage, w/cover		.04					
grain sorghum		.11	.09				
soybeans, wide row		1.0	.09	.07			
soybeans, narrow			.11	.09			
oats						.05	.04
winter wheat						.03	.03
legume						.02	.01
grass							
oats w/meadow					.04	.03	

Corn Silage w/cover	Not cultivated						
	10	20	30	40	50	60	70
corn, grain						.04	.03
corn, seed					.03	.03	.20
corn silage		.10	.07				
corn silage, w/cover						.03	.020
grain sorghum				.07	.06		
soybeans, wide row			.11	.09			
soybeans, narrow				.06	.05		
oats							
winter wheat							
legume							
grass							

* - Residue levels will normally be below 10% cover.

Grain Sorghum after	Not cultivated						
	10	20	30	40	50	60	70
corn, grain					.04	.03	.02
corn, seed					.050	.04	
corn silage	.26						
corn silage, w/cover			.12	.10			
grain sorghum				.06			
soybeans, wide row			.10	.08			
soybeans, narrow			.13	.11			
oats					.05	.04	.03
winter wheat						.03	.03
legume						.03	.02
grass							

Soybeans, wide row	Not cultivated						
	10	20	30	40	50	60	70
corn, grain					.04	.03	.02
corn, seed				.05	.04	.03	
corn silage	.17						
corn silage, w/cover				.07	.06		
grain sorghum			.09	.08			
soybeans, wide row			.09				
soybeans, narrow							
oats						.04	.04
winter wheat						.04	.03
legume							
grass							

* - Residue levels will normally be below 10% cover.

No-till C Factors - Medium production C Factor Zone 101B

Soybeans Narrow Row	Not cultivated						
	10	20	30	40	50	60	70
corn, grain				.04	.04	.03	.02
corn, seed					.03	.03	
corn silage	.18						
corn silage, w/cover						.04	.04
grain sorghum			.09	.08			
soybeans, narrow			.07	.06			
oats					.04	.04	
winter wheat						.03	.03
legume						.02	.02
grass							

Oats after	Not cultivated						
	10	20	30	40	50	60	70
corn, grain							.01
corn, seed							.01
corn silage		.06	.05				
corn silage, w/cover							
grain sorghum				.02	.02		
soybeans, wide row				.03	.00		
soybeans, narrow				.03	.02		
legume							
grass							
oats						.02	.01

Oats w/Meadow after	Not cultivated						
	10	20	30	40	50	60	70
corn, grain							
corn, seed							
corn silage		.02	.02				
corn silage, w/cover							
grain sorghum							
soybeans, wide row							
soybeans, narrow							
legume							
grass							

* - Residue levels will normally be below 10% cover.

No-till C Factors - Medium production C Factor Zone 101B

Wheat after	Fall primary tillage						
	10	20	30	40	50	60	70
corn, grain					.01	.01	
corn, seed						.01	.01
corn silage			.03	.02			
corn silage, w/cover							
grain sorghum						.01	.01
soybeans, wide row				.02	.02		
soybeans, narrow				.02	.02	.01	.01
legume							
grass							

Alfalfa, 1st year after	Not cultivated						
	10	20	30	40	50	60	70
corn, grain				.02	.02	.02	.02
corn, seed							
corn silage	.07	.66					
corn silage, w/cover							
grain sorghum			.04	.00			
soybeans, wide row							
soybeans, narrow			.05	.05			
oats							
winter wheat							
legume							

* - Residue levels will normally be below 10% cover.

ZONE 103A

CROP SEQENCE	CLEAN TILL		FALL MULCH TILL						SPRING MULCH TILL							NO TILL									RIDGE
	FALL	SPRING	% COVER AFTER PLANTIN						% COVER AFTER PLANTING							% COVER AFTER PLANTING									Till
			<10	10	20	30	40	50	<10	10	20	30	40	50	60	<10	10	20	30	40	50	60	70	80	
Corn Grain After:																									
corn grain	.24	.21	.20	.16	.14	.12	.09	.08	.18	.15	.13	.11	.08	.07	.06	.18	.14	.11	.09	.06	.05	.04	.03	.02	.10
corn silage	.35	.37	.34	.31	.25				.35	.31	.24					.35	.22	.18	.13						.27
corn silage w/cc		.21							.19	.15	.13	.11	.08	.07	.06	.18	.14	.11	.09	.07	.05	.04	.03	.02	.10
soybeans	.36	.30	.34	.28	.23				.28	.24	.21					.26	.20	.13	.09	.07	.06	.05	.04	.03	.20
soybeans w/cc		.23							.21	.18	.14	.11	.09	.08	.07	.19	.15	.12	.09	.07	.06	.05	.04	.03	.11
1 year meadow	.18	.14	.16	.14	.12	.09	.07	.05	.14	.12	.10	.08	.06	.05	.04	.14	.11	.10	.07	.06	.05	.04	.03	.02	
estab. meadow	.17	.11	.17	.15	.13				.10	.09	.08	.06	.05	.04		.10	.08	.07	.06	.05	.04	.03	.02	.01	
wheat	.24	.20	.21	.17	.13	.11	.08	.06	.18	.15	.12	.10	.08	.06	.05	.15	.12	.10	.07	.05	.04	.03	.02	.02	
oats	.30	.24	.27	.23	.18	.14	.09	.08	.21	.19	.16	.13	.11	.08	.06	.21	.18	.15	.11	.08	.07	.06	.05	.04	
sugarbeets	.32	.33	.32	.29					.31	.29						.30	.27								
wheat/dbl. cro	.22	.18	.19	.15	.13	.11	.09	.07	.17	.14	.11	.10	.08	.07	.06	.17	.13	.10	.08	.06	.05	.04	.03	.02	
Corn Silage After:			<10	10	20	30	40	50	<10	10	20	30	40	50	60	<10	10	20	30	40	50	60	70	80	
corn grain	.27	.20	.24	.17	.14	.12	.09	.08	.19	.16	.13	.11	.09	.07	.06	.19	.15	.12	.08	.06	.05	.04	.03	.02	.10
corn silage	.37	.36	.35	.28	.24				.35	.31	.22					.30	.22	.18	.14						.30
corn silage w/cc		.23							.22	.19	.17	.14	.11	.09	.07	.20	.15	.13	.11	.09	.07	.06	.05	.04	.17
soybeans	.36	.29	.30	.24	.22	.20			.27	.25	.20	.18				.26	.22	.16	.13	.11	.09				.20
soybeans w/cc		.22							.21	.19	.15	.13	.09	.08	.07	.21	.18	.13	.11	.09	.07	.06	.05	.04	.11
1 year meadow	.19	.14	.18	.15	.13	.11			.14	.12	.10					.14	.11	.09	.07	.06	.05	.04	.03	.02	
estab. meadow	.17	.12	.17	.15	.13	.11			.11	.10	.08	.06	.05	.04	.03	.10	.08	.07	.06	.05	.04	.03	.02	.01	
wheat	.25	.21	.23	.18	.14	.11	.09		.19	.16	.12	.10	.08	.06	.05	.17	.12	.08	.06	.05	.04	.03	.02	.01	
oats	.31	.25	.28	.22	.18	.14	.12	.09	.23	.19	.16	.13	.10	.08	.06	.21	.18	.14	.11	.09	.06	.05	.04	.03	
sugarbeets	.32	.32	.31	.29					.32	.29						.30	.28								
wheat/dbl. cro	.22	.18	.19	.15	.13	.11	.09	.07	.17	.14	.11	.09	.07	.06	.05	.17	.13	.10	.08	.06	.05	.04	.03	.02	

Note: Crops following crops with a cover crops assumes the cover crop is killed or tilled at the 12" - 15" height (Late April - Early May).

CROP SEQENCE	CLEAN TILL		FALL MULCH TILL						SPRING MULCH TILL							NO TILL									RIDGE
	FALL	SPRING	% COVER AFTER PLANTIN						% COVER AFTER PLANTING							% COVER AFTER PLANTING									Till
Soybeans >20" After:			<10	10	20	30	40	50	<10	10	20	30	40	50	60	<10	10	20	30	40	50	60	70	80	
corn grain	.25	.21	.22	.18	.13	.09	.09	.08	.20	.16	.14	.08	.07	.06	.05	.20	.15	.13	.08	.07	.06	.05	.04	.03	.10
corn silage	.40	.39	.38	.33					.37	.31						.35	.29	.19							.29
corn silage w/cc		.25							.24	.21	.18	.16	.14			.23	.20	.17	.15	.13	.11	.10	.09		.13
soybeans	.38	.31	.36	.30	.22	.19			.30	.26	.21	.18				.27	.21	.15	.12	.09	.07	.05	.03		.16
soybeans w/cc		.25							.24	.20	.14	.11				.23	.19	.14	.10	.08	.06	.05	.04		.11
1 year meadow	.19	.16	.17	.15	.13	.11			.15	.13	.11	.09				.15	.13	.10	.08	.06					
estab. meadow	.18	.11	.17	.14	.12	.10			.11	.09	.07	.05				.11	.09	.07	.05	.04	.03	.02			
wheat	.26	.20	.24	.19	.16	.13	.09		.19	.16	.13	.09	.07			.18	.15	.12	.08	.06	.05	.04	.03		
oats	.33	.25	.31	.25	.20	.14	.11		.24	.19	.16	.13	.11			.23	.18	.15	.12	.09	.06	.05	.04		
sugarbeets	.35	.34	.33	.31					.32	.29						.31	.28								
sugarbeets w/cc		.24							.23	.20	.16	.14				.21	.18	.15	.13	.10	.08	.06	.05		
wheat/dbl. cro	.22	.18	.20	.17	.14	.11	.09		.17	.15	.12	.10	.08			.16	.13	.10	.08	.06	.05	.04	.03		
Soybeans <20" After:			<10	10	20	30	40	50	<10	10	20	30	40	50	60	<10	10	20	30	40	50	60	70	80	
corn grain	.20	.15	.18	.14	.09	.08	.07	.06	.14	.12	.08	.06	.05	.04	.03	.14	.11	.08	.06	.05	.04	.03	.02	.01	
corn silage	.33	.32	.31	.29	.27				.29	.27	.25					.27	.23	.18	.14						
corn silage w/cc		.18							.18	.16	.15	.13	.11			.17	.15	.14	.12	.10	.08	.07	.06		
soybeans	.29	.22	.27	.22	.16	.14	.12		.21	.17	.15	.13	.11			.20	.17	.14	.11	.09	.07	.05	.04		
soybeans w/cc		.17							.16	.14	.12	.10	.08			.15	.13	.11	.09	.07	.06	.05	.04		
1 year meadow	.17	.15	.16	.13	.11	.09			.15	.12	.10	.08	.06			.14	.11	.09	.07	.06	.05	.04	.03		
estab. meadow	.15	.13	.14	.11	.10	.08			.13	.11	.09	.07	.05			.12	.10	.08	.06	.04	.03	.03	.02		
wheat	.21	.15	.20	.16	.12	.08	.06		.14	.11	.09	.06	.05	.04	.03	.13	.11	.09	.07	.05	.04	.03	.02	.01	
oats	.26	.20	.25	.21	.16	.12	.09	.07	.19	.16	.12	.10	.08	.06	.05	.18	.15	.12	.10	.08	.06	.05	.04		
sugarbeets	.27	.26	.26	.24					.26	.24						.25	.23								
sugarbeets w/cc		.20							.19	.17	.14	.12	.10			.18	.16	.13	.11	.09	.07	.06	.05		
wheat/dbl. cro	.17	.13	.15	.13	.10	.08	.06	.04	.12	.10	.08	.06	.04			.11	.09	.07	.05	.04	.03	.03	.02		

Note: Crops following crops with a cover crops assumes the cover crop is killed or tilled at the 12" - 15" height (Late April - Early May).

CROP SEQENCE	CLEAN TILL		FALL MULCH TILL						SPRING MULCH TILL							NO TILL									Till
	FALL	SPRING	% COVER AFTER PLANTIN						% COVER AFTER PLANTING							% COVER AFTER PLANTING									
1st Year Meadow After:			<10	10	20	30	40	50	<10	10	20	30	40	50	60	<10	10	20	30	40	50	60	70	80	
corn grain	.14	.10	.12	.10	.08	.06	.05	.04	.10	.08	.06	.05	.04	.03	.02	.10	.07	.05	.04	.03	.02	.01			
corn silage	.23	.21	.22	.18	.16	.14			.20	.16	.14					.18	.15	.13	.10						
corn silage w/cc		.17							.17	.15	.13	.11				.17	.15	.13	.11	.09	.07	.06	.05	.03	
soybeans	.20	.16	.18	.13	.11	.09			.15	.12	.09	.08				.13	.11	.09	.07	.05					
soybeans w/cc		.13							.13	.11	.09	.07				.13	.11	.08	.06	.05	.04	.03			
1 year meadow	.08	.11	.08	.06	.04	.03			.11	.09	.07	.05	.04			.08	.06	.05	.04	.03	.02	.01			
estab. meadow	.07	.09	.07	.06	.05	.04			.08	.07	.06	.05	.04			.07	.06	.05	.03	.02					
wheat	.08	.11	.08	.06	.05	.04	.03		.11	.09	.08	.06	.05			.08	.07	.06	.05	.04	.03	.02	.01		
oats	.10	.12	.10	.08	.06	.05	.04		.12	.10	.09	.08	.07			.10	.09	.08	.07	.06	.05	.04	.03		
sugarbeets	.19	.18	.17	.15					.17	.15						.16	.11								
wheat/dbl. cro	.12	.08	.10	.08	.06	.04	.03	.02	.08	.06	.04	.03	.02	.01		.08	.06	.04	.03	.02	.01				
Wheat After:			<10	10	20	30	40	50	<10	10	20	30	40	50	60	<10	10	20	30	40	50	60	70	80	
corn grain	.07		.06	.05	.04	.03	.02													.02	.01	.01	.00	.002	
corn silage	.13		.11	.08	.06											.09	.06	.05	.04						
corn silage w/cc																									
soybeans	.11		.10	.08	.06	.04	.03									.09	.08	.07	.06	.05	.03	.02	.01		
soybeans w/cc																									
1 year meadow	.11		.11	.08	.06	.04										.10	.07	.05	.04	.03	.02	.01			
estab. meadow	.08		.08	.05	.04	.03										.08	.05	.04	.03	.02	.01				
wheat																									
oats	.13		.12	.09	.07	.05	.04									.11	.08	.06	.05	.04	.03	.02	.01		
sugarbeets	.09		.09	.07												.09	.07	.05							
wheat/dbl. crop Sb																									

Note: First year meadow established at the first optimum planting date after the crop it follows.
For Example, Meadow after corn is spring seeded, meadow after wheats, oats, and meadow are established in the summer for summer tillage and in the spring for spring tillage.

CROP SEQENCE	CLEAN TILL		FALL MULCH TILL						SPRING MULCH TILL							NO TILL									Ridge Till
	FALL	SPRING	% COVER AFTER PLANTIN						% COVER AFTER PLANTING							% COVER AFTER PLANTING									
			<10	10	20	30	40	50	<10	10	20	30	40	50	60	<10	10	20	30	40	50	60	70	80	
Oats After:																									
corn grain	.11	.08	.10	.08	.06	.05	.04	.03	.07	.06	.05	.04	.04	.03		.07	.06	.05	.04	.03	.02	.01	.00	.005	
corn silage	.21	.21	.18	.14	.09				.18	.14	.09					.18	.13	.09							
corn silage w/cc																									
soybeans	.17	.13	.16	.13	.09	.07	.05		.13	.10	.08	.06	.05			.12	.10	.08	.06	.04	.02				
soybeans w/cc																									
1 year meadow	.11	.08	.10	.09	.08	.07			.08	.07	.06	.05	.04			.07	.06	.05	.04	.03	.03	.02			
estab. meadow	.10	.07	.09	.08	.07	.06			.07	.06	.05	.04	.03			.07	.06	.05	.04	.03	.02	.01			
wheat	.12	.10	.11	.09	.07	.06	.05		.09	.07	.05	.04	.03			.09	.07	.05	.04	.03	.02	.01			
oats																									
sugarbeets	.16	.15	.15	.13					.15	.13						.14	.12								
wheat/dbl. cro	.10	.08	.10	.09	.08	.07	.06		.08	.07	.06	.05	.04	.03		.08	.07	.06	.05	.04	.03	.02	.01		
Sugarbeets After:			<10	10	20	30	40	50	<10	10	20	30	40	50	60	<10	10	20	30	40	50	60	70	80	
corn grain	.25	.21	.23	.19	.16	.14	.12	.10	.20	.18	.15	.13				.20	.18	.15	.12	.10	.08	.06	.05	.04	
corn silage	.40	.39	.39	.37					.38	.36						.37	.34								
corn silage w/cc		.23							.22	.20	.17	.15	.13	.11		.21	.19	.17	.15	.13	.11	.09	.07		
soybeans	.38	.30	.36	.27	.25	.23			.28	.26	.24	.22				.27	.24	.21	.19	.17					
soybeans w/cc		.22							.22	.19	.16	.14				.21	.18	.15	.12	.10	.08	.07	.06		
1 year meadow	.21	.19	.19	.16	.14	.12			.18	.16	.13	.11				.17	.15	.12	.09	.07	.05				
estab. meadow	.18	.12	.19	.17	.14	.12	.10		.12	.10	.09	.07	.06			.11	.10	.09	.08	.07	.06	.05			
wheat	.29	.23	.28	.25	.18	.13	.11		.22	.18	.16	.12	.10	.08		.22	.18	.16	.12	.10	.08	.06			
oats	.32	.26	.30	.26	.19	.14	.12		.24	.19	.17	.13	.11	.09		.24	.19	.17	.13	.11	.09	.08	.07		
sugarbeets																									
wheat/dbl. cro	.20	.17	.19	.16	.14	.12	.10		.16	.14	.12	.10	.08	.06		.15	.13	.11	.09	.07	.05	.03	.01		

Note: Crops following crops with a cover crops assumes the cover crop is killed or tilled at the 12" - 15" height (Late April - Early May).

CROP SEQENCE	CLEAN TILL		FALL MULCH TILL						SPRING MULCH TILL							NO TILL									Till
	FALL	SPRING	% COVER AFTER PLANTIN						% COVER AFTER PLANTING							% COVER AFTER PLANTING									
			<10	10	20	30	40	50	<10	10	20	30	40	50	60	<10	10	20	30	40	50	60	70	80	
Wheat w/Double Crop Soybeans >20" After: ("C" Factor for Wheat Establishment - Assumes No Till Double Crop Sb)																									
Soybeans >20"	.12		.11	.09	.07	.06	.05									.08	.07	.06	.05	.04	.04	.03	.02		
Wheat w/Double Crop Soybeans <20" After: ("C" Factor for Wheat Establishment - Assumes No Till Double Crop Sb)																									
Soybeans <20"	.12		.11	.09	.07	.06	.05									.08	.07	.06	.05	.04	.04	.03	.02		
Established Meadow	Use 0.01 for average stands and 0.007 for good to excellent stands.																								
Note: Crops following crops with a cover crops assumes the cover crop is killed or tilled at the 12" - 15" height (Late April - Early May).																									

Continuous No Till "C" Factors

(No Till 4 or More Years)

No Till Corn Grain	No Till % Cover After Planting									
	<10	10	20	30	40	50	60	70	80	90
Corn Grain					.02	.02	.01	.01	.005	
Corn Silage	.21	.16	.12							
Corn Silage w/cc					.06	.04	.03	.02		
Soybeans			.09	.07	.06	.05	.035			
Soybeans w/cc				.05	.04	.03	.02	.009		
Wheat				.05	.03	.02	.01	.008		

No Till Corn Silag	No Till % Cover After Planting									
	<10	10	20	30	40	50	60	70	80	90
Corn Grain				.03	.02	.02	.01	.01		
Corn Silage	.21	.17	.13							
Corn Silage w/cc				.08	.07	.06	.05	.04		
Soybeans		.18	.14	.11	.07	.06				
Soybeans w/cc				.06	.04	.03	.02	.02	.013	
Wheat					.03	.03	.02	.01		

No Till Soybeans A	No Till % Cover After Planting									
	<10	10	20	30	40	50	60	70	80	90
Corn Grain					.03	.01	.00	.006		
Corn Silage	.20	.15	.12							
Corn Silage w/cc				.07	.06	.05	.041			
Soybeans			.07	.05	.04	.033				
Soybeans w/cc				.05	.03	.02	.01			
Wheat						.03	.03	.028		

No Till Wheat Afte	No Till % Cover After Planting									
	<10	10	20	30	40	50	60	70	80	90
Corn Grain					.01	.00	.00	.003		
Corn Silage	.08	.05	.04	.023						
Corn Silage w/cc										
Soybeans					.02	.01	.01	.01	.01	
Soybeans w/cc										
Wheat										

No Till Alfalfa Af	No Till % Cover After Planting									
	<10	10	20	30	40	50	60	70	80	90
Corn Grain				.02	.01	.01	.00	.006		
Corn Silage	.14	.12	.10							
Corn Silage w/cc										
Soybeans				.06	.03	.02	.01	.01		
Soybeans w/cc										
Wheat				.03	.01	.01	.00	.006		

Note: Crops following crops with a cover crops assumes the cover crop is killed or tilled at the 12" - 15" height (Late April - Early May).

C-Factor Table for
Missouri Climatic Zone 103B

CROP SEQUENCE	CLEAN TILL		RIDGE TILL (%COVER)					FALL MULCH TILL (%COVER)						SPRING MULCH TILL (%COVER)							NO TILL (%COVER)								
	FP	SP	10	20	30	40	50	10	20	30	40	50	60	10	20	30	40	50	60	70	10	20	30	40	50	60	70	80	90
CORN, GRAIN 112BU. AFTER:																													
Corn, Grain	0.27	0.23	0.14	0.13	0.12	0.11	0.10	0.18	0.16	0.12	0.10	0.08	0.05	0.17	0.15	0.12	0.10	0.08	0.06					0.05	0.04	0.03	0.02		
row cult.																								0.09	0.08	0.07	0.06		
Corn, Silage	0.40	0.39						0.31						0.30							0.18								
row cult.																					0.29								
w/cov aft har	0.38	0.30		0.19	0.18	0.16		0.28	0.21	0.15	0.12	0.09		0.24	0.20	0.17	0.14	0.11	0.09					0.09	0.07	0.06	0.04	0.03	
row cult.																								0.14	0.11	0.10	0.08		
w/cov pr to har	0.28	0.20	0.13	0.12	0.11	0.10	0.09	0.20	0.16	0.13	0.09	0.05		0.15	0.13	0.11	0.08	0.07	0.06						0.04	0.03	0.02	0.01	
row cult.																									0.07	0.06	0.05	0.04	
Grain Sorghum	0.30	0.26	0.18	0.16	0.15			0.21	0.18	0.15				0.20	0.17	0.14	0.12					0.10	0.09	0.07	0.05				
row cult.																								0.12	0.10				
Grain Sorg. Sil.	0.41	0.39						0.30						0.30							0.18								
row cult.																					0.30								
Soybeans, wr	0.38	0.31	0.23					0.27	0.23					0.26									0.09	0.08					
row cult.																							0.19	0.16					
w/cov aft har	0.37	0.23		0.16	0.15	0.13	0.11	0.27	0.21					0.20	0.16	0.14	0.11	0.09	0.07					0.06	0.05	0.04	0.03	0.03	
row cult.																								0.11	0.09	0.08	0.06	0.05	
w/cov pr to har	0.32	0.20	0.12	0.10	0.09			0.22	0.18	0.14				0.15	0.12	0.10	0.08	0.06					0.04	0.04	0.03	0.03	0.02	0.01	
row cult.																							0.09	0.08	0.06	0.06	0.05	0.04	
Soybeans, dr	0.37	0.31						0.26	0.21					0.25	0.20								0.12	0.08					
row cult.																					0.22	0.19	0.17	0.15				
w/cov aft har	0.36	0.26						0.25	0.21					0.19	0.16	0.13	0.10	0.09	0.07						0.05	0.04	0.03	0.03	
row cult.																									0.08	0.07	0.06	0.04	
Dbl Cropped SB	0.25	0.22						0.17	0.14	0.11	0.08	0.07		0.17	0.14	0.11	0.08	0.07						0.06	0.04	0.03	0.02	0.01	0.01
dr aft W.Wheat																													
Winter Wheat	0.31							0.18	0.14	0.12	0.09	0.07													0.04	0.03	0.02	0.01	
Alfalfa																													
1st year	0.23	0.15						0.18	0.15					0.12	0.11	0.09	0.07						0.05	0.04	0.03	0.02			
row cult.																							0.08	0.07	0.05	0.04			
Tall Fescue																													
1st year	0.13	0.07						0.11	0.08	0.07	0.06	0.05		0.06	0.05	0.04	0.04	0.03	0.02					0.02	0.01	0.01	0.01	0.01	
row cult.																								0.03	0.02	0.02	0.02	0.01	
2nd year	0.25	0.20						0.17	0.14	0.12	0.10	0.08		0.16	0.14	0.11	0.08	0.07	0.06					0.05	0.04	0.03	0.02		
row cult.																								0.08	0.07	0.06	0.05		
CORN, SILAGE 23 TON AFTER:																													
Corn, Grain	0.26	0.22		0.12	0.11	0.10		0.17	0.14	0.11	0.10	0.08		0.16	0.13	0.11	0.09	0.07						0.05	0.04	0.03	0.02		
row cult.																									0.07	0.06	0.05		
Corn, Silage	0.40	0.38																											
w/cov aft har	0.38	0.29		0.20	0.19	0.17		0.28						0.25	0.21	0.17	0.15	0.12						0.13	0.11	0.10	0.08		
row cult.																								0.15	0.13	0.12	0.10		
w/cov pr to har	0.28	0.19		0.12	0.11	0.10	0.09	0.19	0.16	0.12				0.15	0.12	0.10	0.08	0.07	0.06					0.05	0.04	0.03	0.03	0.02	
row cult.																								0.08	0.07	0.06	0.05	0.05	
Grain Sorghum	0.29	0.24	0.17	0.15	0.14			0.20	0.17	0.14				0.19	0.15	0.13						0.10	0.07	0.07					
row cult.																						0.15	0.13	0.11					
Grain Sorg. Sil.	0.40	0.39																											
Soybeans, wr	0.38	0.31	0.24					0.28						0.25	0.21							0.12	0.10						
w/cov aft har		0.25		0.15	0.14	0.12	0.10							0.19	0.16	0.13	0.11	0.09	0.07				0.07	0.05	0.05	0.04	0.03		
row cult.																								0.11	0.09	0.08	0.06	0.05	
w/cov pr to har	0.31	0.19	0.11	0.10	0.09	0.08		0.21						0.14	0.12	0.10	0.07	0.06					0.05	0.04	0.03	0.02	0.02	0.01	0.01
row cult.																							0.08	0.07	0.06	0.05	0.05	0.04	
Soybeans, dr	0.39	0.31						0.27	0.22					0.24	0.20						0.16	0.13	0.10						
row cult.																					0.22	0.19	0.17						
w/cov aft har	0.35	0.25						0.25	0.20					0.18	0.15	0.13	0.10	0.08	0.06						0.05	0.05	0.05	0.03	
row cult.																									0.07	0.07	0.05	0.04	
Dbl Cropped SB	0.25	0.21						0.17	0.14	0.11	0.08	0.06		0.16	0.13	0.10	0.08	0.06					0.07	0.05	0.04	0.03			
dr aft W.Wheat																							0.08	0.07	0.05	0.0			
Winter Wheat	0.30	0.22						0.18	0.14	0.11	0.09	0.07		0.16	0.13	0.10	0.08	0.06	0.05					0.04	0.03	0.03	0.02		
row cult.																								0.07	0.06	0.05	0.04		
Alfalfa																													
1st year	0.22	0.14						0.16	0.13					0.11	0.10	0.08	0.06						0.04	0.03	0.03	0.02	0.01	0.01	0.01
row cult.																							0.07	0.06	0.06	0.04			

C-Factor Table for
Missouri Climatic Zone 103B

CROP SEQUENCE	CLEAN TILL		RIDGE TILL (%COVER)					FALL MULCH TILL (%COVER)						SPRING MULCH TILL (%COVER)							NO TILL (%COVER)								
	FP	SP	10	20	30	40	50	10	20	30	40	50	60	10	20	30	40	50	60	70	10	20	30	40	50	60	70	80	90
Tall Fescue																													
1st year	0.12	0.06						0.09	0.07	0.06	0.05			0.04	0.04	0.03	0.03	0.02	0.02					0.01	0.01	0.01	0.01	0.01	0.01
row cult.																									0.02	0.01	0.01	0.01	0.01
2nd year	0.35	0.32												0.23							0.15								
row cult.																					0.22								
CORN, SILAGE 23 TON W/COVER CROP SEEDED AFTER HARVEST AFTER:																													
Corn, Grain	0.26	0.20		0.10	0.09	0.08		0.18	0.14	0.11	0.09	0.07	0.06	0.15	0.12	0.10	0.08	0.07	0.05					0.05	0.04	0.03	0.02	0.02	
row cult.																								0.07	0.06	0.05	0.04	0.03	
Corn, Silage	0.39	0.36						0.31						0.24	0.20	0.17					0.20	0.15	0.11						
row cult.																					0.24	0.19	0.14						
w/cov aft har	0.37	0.27		0.16	0.15	0.13		0.27						0.21	0.17	0.14	0.11	0.09	0.07					0.07	0.06	0.05	0.04	0.02	
row cult.																								0.11	0.09	0.08	0.05	0.04	
w/cov pr to har	0.27	0.18		0.10	0.09	0.08	0.07	0.19	0.15	0.12				0.13	0.11	0.09	0.07	0.06	0.04	0.03					0.03	0.02	0.02	0.02	0.01
row cult.																									0.05	0.04	0.04	0.03	
Grain Sorghum	0.29	0.23	0.15	0.13	0.11			0.20	0.16	0.14				0.18	0.14	0.12	0.09						0.07	0.06	0.05	0.03			
row cult.																							0.11	0.09	0.07	0.05			
Grain Sorg. Sil.	0.40	0.36						0.30						0.25	0.19						0.17	0.12	0.10	0.06					
row cult.																					0.24	0.19	0.14						
Soybeans, wr	0.39	0.29	0.19					0.28						0.22	0.18							0.10	0.08			0.07	0.06		
row cult.																										0.13	0.10		
w/cov aft har	0.37	0.23		0.12	0.11	0.10	0.08	0.26	0.21					0.18	0.14	0.12	0.09	0.08	0.06	0.05					0.04	0.03	0.03	0.02	0.01
row cult.																									0.07	0.05	0.05	0.03	
w/cov pr to har	0.31	0.18	0.09	0.08	0.08	0.07		0.20	0.17	0.13				0.13	0.11	0.09	0.06	0.05						0.04	0.03	0.03	0.02	0.02	0.01
row cult.																								0.06	0.05	0.04	0.04	0.03	0.02
Soybeans, dr	0.38	0.28						0.26	0.21					0.22	0.17	0.14						0.13	0.11	0.07	0.04	0.02			
row cult.																						0.15	0.13	0.11	0.09				
w/cov aft har	0.37	0.23						0.26	0.20					0.17	0.14	0.11	0.09	0.07	0.05						0.04	0.03	0.03	0.02	0.01
row cult.																									0.06	0.05	0.04	0.03	0.02
Alfalfa																													
1st year	0.22	0.14						0.17	0.13					0.11	0.09	0.08	0.07							0.03	0.03	0.02			
row cult.																							0.07	0.05	0.05	0.04			
Tall Fescue																													
1st year	0.12	0.06						0.09	0.07	0.06	0.05			0.05	0.04	0.03	0.03	0.02	0.02					0.01	0.01	0.01	0.01	0.01	0.01
row cult.																									0.02	0.02	0.01	0.01	0.01
2nd year	0.34	0.25						0.25						0.20	0.16	0.14	0.12	0.10	0.08					0.10	0.08	0.07	0.05		
row cult.																								0.12	0.10	0.08	0.07		
CORN, SILAGE 23 TON W/COVER SEEDED PRIOR TO HARVEST AFTER:																													
Corn, Grain	0.24	0.18		0.09	0.08	0.07		0.15	0.12	0.10	0.08	0.07		0.13	0.11	0.09	0.07	0.06	0.04					0.03	0.02	0.01	0.01	0.01	0.01
row cult.																								0.07	0.05	0.03	0.03		
Corn, Silage	0.36	0.32	0.22					0.26						0.22	0.16						0.14	0.09	0.07	0.05					
row cult.																					0.21	0.16	0.12						
w/cov aft har	0.34	0.24		0.14	0.13	0.11		0.24	0.19	0.12				0.18	0.15	0.11	0.10	0.08						0.06	0.05	0.04	0.03	0.02	
row cult.																								0.09	0.08	0.07	0.05	0.03	
Grain Sorghum	0.26	0.20	0.12	0.11	0.09			0.18	0.14	0.11	0.09			0.15	0.12	0.10	0.08	0.06					0.06	0.05	0.04	0.02			
row cult.																							0.09	0.08	0.06	0.05			
Soybeans, wr	0.34	0.25	0.17	0.15				0.24	0.19	0.15				0.20	0.17	0.13	0.10						0.07	0.06	0.04				
row cult.																						0.15	0.12	0.10	0.09				
Soybeans, dr	0.33	0.25						0.23	0.19	0.15				0.19	0.16	0.13	0.10						0.09	0.07	0.05				
row cult.																						0.14	0.12	0.10	0.08				
GRAIN SORGHUM, 65BU. AFTER:																													
Corn, Grain	0.28	0.23		0.11	0.10	0.09		0.18	0.14	0.12	0.09	0.08		0.16	0.14	0.11	0.09	0.07						0.05	0.04	0.04	0.02		
row cult.																								0.09	0.07	0.06	0.05		
Corn, Silage	0.41	0.40																			0.19								
w/cov aft har	0.39	0.30		0.18	0.17	0.15		0.28						0.24	0.20	0.16	0.14	0.11						0.09	0.08	0.07	0.05		
row cult.																								0.14	0.12	0.11	0.09		
w/cov pr to har	0.29	0.20		0.11	0.10	0.09	0.08	0.20	0.16	0.13				0.15	0.12	0.10	0.08	0.07	0.06					0.05	0.04	0.03	0.03	0.02	
row cult.																								0.08	0.07	0.07	0.05	0.04	
Grain Sorghum	0.31	0.26	0.17	0.15				0.21	0.17	0.14				0.20	0.16	0.13						0.11	0.08	0.07					
row cult.																						0.16	0.13	0.11					
Soybeans, wr	0.40	0.33	0.24					0.28						0.26							0.17	0.13							
row cult.																					0.26	0.23							

C-Factor Table for
Missouri Climatic Zone 103B

CROP SEQUENCE	CLEAN TILL		RIDGE TILL (%COVER)					FALL MULCH TILL (%COVER)						SPRING MULCH TILL (%COVER)							NO TILL (%COVER)								
	FP	SP	10	20	30	40	50	10	20	30	40	50	60	10	20	30	40	50	60	70	10	20	30	40	50	60	70	80	90
w/cov aft har row cult.	0.38	0.26		0.14	0.13	0.11	0.09	0.26	0.20					0.19	0.16	0.13	0.10	0.09	0.07					0.07	0.05	0.05	0.03	0.02		
w/cov pr to har row cult.	0.33	0.20	0.11	0.09	0.09	0.08		0.21	0.17	0.14				0.15	0.12	0.09	0.07	0.06						0.11	0.08	0.08	0.06	0.05		
Soybeans, dr row cult.	0.39	0.32						0.28	0.22					0.26	0.21								0.05	0.04	0.03	0.02	0.02	0.01	0.01
w/cov aft har row cult.	0.37	0.26						0.25	0.21					0.19	0.15	0.13	0.10	0.08	0.06				0.09	0.07	0.06	0.05	0.05	0.03		
Winter Wheat row cult.	0.32	0.23						0.18	0.14	0.12	0.09	0.07		0.16	0.13	0.10	0.08	0.07	0.05		0.17	0.12	0.12						
Alfalfa 1st year row cult.	0.24	0.14						0.18	0.15					0.11	0.09	0.08	0.06				0.23	0.20	0.17						
Tall Fescue 1st year row cult.	0.13	0.06						0.09	0.08	0.06				0.05	0.04	0.03	0.03	0.02	0.02					0.07	0.05	0.05	0.04	0.02	
2nd year row cult.	0.29	0.23						0.20	0.16	0.13				0.17	0.14	0.12								0.09	0.07	0.06	0.05	0.04	
GRAIN SORGHUM, SILAGE AFTER:																								0.04	0.04	0.03	0.02		
Corn, Grain row cult.	0.26	0.21		0.11	0.10	0.08		0.17	0.13	0.11	0.09	0.07		0.16	0.13	0.10	0.09	0.07						0.07	0.06	0.05	0.04	0.01	0.01	0.01
Corn, Silage	0.41	0.39																						0.06	0.05	0.04	0.03	0.01		
w/cov aft har row cult.	0.38	0.29		0.18	0.17	0.15		0.28						0.23	0.20	0.16	0.15	0.12						0.09	0.07	0.06				
Soybeans, wr row cult.	0.39	0.31	0.23					0.27						0.25										0.08	0.06	0.04				
w/cov aft har row cult.	0.37	0.25		0.14	0.12	0.11	0.09	0.26	0.20					0.19	0.15	0.13	0.10	0.08	0.06		0.12			0.07	0.05	0.04	0.03	0.03		
w/cov pr to har row cult.	0.32	0.19	0.12	0.11	0.10	0.09		0.20	0.17	0.13				0.14	0.12	0.09	0.07	0.05			0.22			0.10	0.08	0.08	0.06	0.04		
Soybeans, dr row cult.	0.38	0.30	0.22					0.27						0.24									0.05	0.04	0.03	0.02	0.02	0.01	0.01
SOYBEANS, WIDE ROW, 35BU. AFTER:																							0.08	0.07	0.05	0.04	0.04	0.03	
Corn, Grain row cult.	0.32	0.27			0.15	0.14		0.22	0.19	0.14	0.10	0.08		0.21	0.18	0.15	0.13					0.15	0.13						
Corn, Silage	0.42	0.41																				0.21	0.18						
w/cov aft har row cult.	0.40	0.30			0.18	0.17		0.30						0.25	0.22	0.18	0.15	0.13						0.04	0.03				
w/cov pr to har row cult.	0.29	0.20			0.12	0.11	0.09	0.20	0.16	0.13				0.15	0.13	0.11	0.09	0.08	0.06					0.09	0.07				
Grain Sorghum row cult.	0.34	0.26		0.17				0.23	0.19	0.16				0.20	0.17	0.14													
Grain Sorg. Sil.	0.43	0.41																					0.08	0.06					
Soybeans, wr row cult.	0.44	0.37	0.29					0.29						0.30	0.23								0.15	0.12					
w/cov aft har row cult.	0.39	0.27			0.14	0.12	0.10	0.27	0.22					0.20	0.17	0.14	0.11	0.09	0.07										
w/cov pr to har row cult.	0.33	0.20		0.11	0.10	0.09		0.22	0.18	0.15				0.16	0.12	0.09	0.08	0.06						0.04	0.03	0.02				
Soybeans, dr row cult.	0.39	0.32						0.28	0.23					0.25	0.21									0.08	0.06	0.05				
w/cov aft har row cult.	0.38	0.26						0.26	0.21					0.19	0.16	0.13	0.11	0.09	0.07		0.13	0.11							
Dbl Cropped SB dr aft W.Wheat	0.27	0.23						0.18	0.14	0.11	0.09	0.07		0.17	0.14	0.11	0.08	0.06			0.20	0.17							
Winter Wheat row cult.	0.32	0.23						0.18	0.15	0.12	0.10	0.08		0.16	0.13	0.09	0.07							0.07	0.05	0.03				
Alfalfa 1st year row cult.	0.24	0.14						0.18	0.15					0.11	0.10	0.08	0.06							0.07	0.06	0.04				
Tall Fescue																								0.06	0.04				
																								0.07	0.06	0.03	0.02		
																								0.05	0.04				
																								0.07	0.06	0.03	0.02		
																								0.04	0.03				

C-Factor Table for
Missouri Climatic Zone 103B

CROP SEQUENCE	CLEAN TILL		RIDGE TILL (%COVER)					FALL MULCH TILL (%COVER)						SPRING MULCH TILL (%COVER)							NO TILL (%COVER)								
	FP	SP	10	20	30	40	50	10	20	30	40	50	60	10	20	30	40	50	60	70	10	20	30	40	50	60	70	80	90
1st year row cult.	0.12	0.06						0.09	0.08	0.06	0.05			0.05	0.04	0.03	0.03	0.02	0.02								0.01	0.01	0.01
2nd year row cult.	0.36	0.28						0.26						0.23	0.19							0.10	0.09				0.01	0.01	0.01
																						0.17	0.15						
SOYBEANS, WIDE ROW, 35BU. W/COVER CROP SEEDED AFTER HARVEST AFTER:																													
Corn, Grain row cult.	0.27	0.22			0.10	0.09		0.18	0.15	0.12	0.10	0.08		0.16	0.13	0.11	0.09	0.07	0.06							0.03	0.03	0.02	
Corn, Silage row cult.		0.38												0.27	0.20						0.18	0.13	0.10				0.06	0.05	0.04
w/cov aft har row cult.	0.40	0.29			0.16	0.14		0.29						0.22	0.18	0.15	0.12	0.09	0.07		0.26	0.21	0.15				0.06	0.04	0.03
Grain Sorghum row cult.	0.31	0.25		0.15	0.13			0.21	0.18	0.14				0.19	0.15	0.13	0.10										0.09	0.07	0.05
Grain Sorg. Sil. row cult.	0.42	0.38												0.27	0.21						0.18	0.13	0.10	0.07			0.06	0.05	0.03
Soybeans, wr row cult.	0.39	0.31	0.22					0.28						0.24	0.19						0.26	0.20	0.15	0.10	0.08	0.06			
w/cov aft har row cult.	0.39	0.25			0.12	0.10	0.09	0.27	0.22					0.19	0.15	0.13	0.10	0.08	0.06	0.05			0.09	0.07	0.05				
Soybeans, dr row cult.	0.38	0.31						0.28	0.22					0.25									0.16	0.13			0.30	0.02	
w/cov aft har row cult.	0.38	0.24						0.27	0.21					0.18	0.15	0.12	0.09	0.08	0.06	0.05						0.07	0.05	0.04	
SOYBEANS, WIDE ROW, 35BU. W/COVER CROP SEEDED PRIOR TO HARVEST AFTER:																													
Corn, Grain row cult.	0.27	0.21			0.10	0.09	0.08	0.18	0.14	0.12	0.10	0.08		0.15	0.13	0.11	0.08	0.07	0.05						0.07	0.06			
Corn, Silage row cult.	0.41	0.36												0.25							0.15	0.11	0.07	0.06			0.04	0.03	0.02	0.02
w/cov aft har row cult.	0.39	0.27			0.14	0.13		0.28	0.21					0.22	0.18	0.15	0.13	0.10	0.08		0.24	0.18					0.06	0.05	0.04	0.03
Grain Sorghum row cult.	0.30	0.23		0.14				0.21	0.17	0.14				0.18	0.15	0.12	0.09										0.07	0.05	0.04	
Grain Sorg. Sil. row cult.	0.41	0.36						0.30						0.27	0.19						0.15	0.11	0.07	0.06			0.09	0.07	0.05	
Soybeans, wr row cult.	0.39	0.29	0.20					0.28	0.24					0.23	0.18						0.24	0.19	0.14				0.05	0.04	0.03	
Soybeans, dr row cult.	0.38	0.28						0.27	0.22					0.22	0.18								0.07	0.06	0.05		0.15	0.12	0.10	
Winter Wheat row cult.					0.11	0.10																	0.10	0.08			0.07	0.06	
Alfalfa 1st year row cult.	0.24	0.14						0.17	0.14					0.11	0.10	0.08	0.06						0.15	0.12			0.03	0.02	
SOYBEANS, DRILLED, 40BU. AFTER																											0.04	0.04	
Corn, Grain	0.22	0.17						0.13	0.11	0.10	0.08	0.07		0.11	0.10	0.09	0.08	0.06											
Corn, Silage	0.28	0.27																									0.04	0.04	0.02	0.02
w/cov aft har	0.33	0.25						0.24						0.21	0.18	0.16	0.14	0.12											
w/cov pr to har	0.23	0.16						0.16	0.13	0.11				0.12	0.10	0.09	0.07	0.07	0.05								0.03	0.08	0.08
Grain Sorghum	0.24	0.19						0.16	0.14	0.11				0.15	0.12	0.10											0.05	0.04	0.04
Grain Sorg. Sil.	0.35	0.33																				0.08	0.07	0.07					
Soybeans, wr	0.32	0.25						0.22						0.20															
w/cov aft har	0.31	0.23						0.21						0.18								0.11							
w/cov pr to har	0.26	0.15						0.17	0.13					0.11	0.09	0.07	0.06										0.03	0.03	0.02
Soybeans, dr	0.31	0.24						0.22						0.19															
w/cov aft har	0.30	0.20						0.20	0.15					0.14	0.11	0.10	0.08					0.09	0.08						
Winter Wheat	0.26							0.15	0.12	0.10	0.08	0.06												0.06	0.05	0.04	0.03		
Alfalfa 1st year	0.18	0.10						0.13	0.11					0.08	0.07	0.06	0.05							0.05	0.04	0.01	0.01	0.01	
Tall Fescue 1st year	0.09	0.04						0.06	0.05	0.05				0.03	0.03	0.02	0.02	0.02	0.01				0.03	0.02	0.02				
2nd year	0.28	0.20						0.19						0.16	0.13												0.01	0.01	
																					0.09								

C-Factor Table for
Missouri Climatic Zone 103B

CROP SEQUENCE	CLEAN TILL		RIDGE TILL (%COVER)					FALL MULCH TILL (%COVER)						SPRING MULCH TILL (%COVER)							NO TILL (%COVER)								
	FP	SP	10	20	30	40	50	10	20	30	40	50	60	10	20	30	40	50	60	70	10	20	30	40	50	60	70	80	90
SOYBEANS, DRILLED, 40BU. W/COVER CROP SEEDED AFTER HARVEST AFTER:																													
Corn, Grain	0.21	0.16						0.14	0.11	0.09	0.07	0.06		0.12	0.10	0.08	0.07	0.05	0.04							0.03	0.03	0.02	0.01
Corn, Silage	0.34	0.31												0.21	0.16						0.17	0.12	0.09						
w/cov aft har	0.32	0.23						0.24						0.18	0.15	0.12	0.10	0.08	0.06					0.05	0.05	0.04	0.03		
Grain Sorghum	0.24	0.18						0.16	0.13	0.11				0.14	0.12	0.09	0.07						0.06	0.05	0.04	0.04			
Soybeans, wr	0.32	0.24						0.22						0.17	0.14								0.09	0.07					
w/cov aft har	0.31	0.19						0.20	0.16					0.14	0.12	0.10	0.08	0.06	0.05	0.04					0.04	0.03	0.03	0.03	
Soybeans, dr	0.31	0.22						0.22						0.18	0.15	0.12						0.10	0.09	0.05	0.04				
w/cov aft har	0.30	0.19						0.20	0.16					0.13	0.11	0.09	0.07	0.06	0.05	0.04				0.07	0.05	0.04	0.02	0.02	
SOYBEANS, DRILLED, 20BU. DOUBLE CROPPED AFTER W.WHEAT AFTER:																													
Corn, Grain	0.09	0.09						0.06	0.05	0.03	0.03	0.02	0.01	0.06	0.04	0.03	0.03	0.02	0.01	0.01						0.01	0.01	0.01	0.01
Corn, Silage	0.10	0.10						0.06	0.05	0.04	0.03	0.02	0.02	0.06	0.05	0.04	0.03	0.02	0.02	0.01					0.01	0.01	0.01	0.01	0.01
Soybeans, wr	0.10	0.10							0.05	0.04	0.03	0.02	0.02	0.04	0.05	0.04	0.03	0.02	0.02	0.01					0.01	0.01	0.01	0.01	0.01
WINTER WHEAT, 50BU. AFTER:																													
Corn, Grain	0.08							0.06	0.05	0.04	0.03	0.02	0.02													0.01	0.01	0.01	0.01
Corn, Silage	0.13							0.09	0.07	0.05												0.04	0.03	0.02	0.01				
row cult.																						0.06	0.05	0.04					
Grain Sorghum	0.08	0.08						0.06	0.05	0.04	0.03	0.02	0.02	0.06	0.05	0.04	0.03	0.02	0.02	0.01						0.02	0.01	0.01	0.01
Soybeans, wr	0.12							0.09	0.07	0.06	0.05														0.03	0.02	0.02		
w/cov pr to har	0.10					0.04	0.04	0.03	0.07	0.06	0.04	0.03	0.03												0.03	0.02	0.01	0.01	0.01
Soybeans, dr	0.11							0.09	0.07	0.06	0.05														0.03	0.03	0.02	0.02	
Winter Wheat	0.10							0.07	0.05	0.04	0.03	0.03	0.02													0.02	0.01	0.01	0.01
Alfalfa																													
1st year	0.08							0.06	0.05	0.04	0.03															0.01	0.01	0.01	0.01
Tall Fescue																													
1st year	0.02							0.02	0.01	0.01	0.01	0.01	0.01																
2nd year	0.09							0.07	0.05	0.04	0.03	0.03	0.02													0.01	0.01	0.01	0.01
ALFALFA, 1ST YEAR AFTER:																											0.01	0.01	0.01
Corn, Grain	0.14	0.11						0.09	0.07	0.06	0.05	0.04	0.03	0.08	0.07	0.06	0.05	0.04	0.03										
Corn, Silage	0.24	0.23												0.18											0.03	0.02	0.02		
w/cov aft har	0.22	0.18						0.17	0.14					0.15	0.13	0.12	0.10	0.09	0.08		0.11								
Grain Sorghum	0.16	0.12						0.11	0.09	0.08	0.06			0.10	0.08	0.07	0.06							0.09	0.08				
Soybeans, wr	0.21	0.16						0.15	0.13	0.11				0.13	0.12	0.10							0.05	0.04					
w/cov pr to har	0.17	0.10						0.11	0.09	0.08	0.06	0.05		0.08	0.06	0.05	0.04	0.04	0.03	0.03		0.08	0.07						
Soybeans, dr	0.21	0.15						0.14	0.12	0.10	0.09			0.12	0.11	0.10	0.08										0.02	0.01	0.01
Winter Wheat	0.16							0.10	0.08	0.07	0.06	0.05	0.04										0.08	0.07					
ALFALFA, 2ND YEAR AFTER:																									0.03	0.03	0.02		
Corn, Grain	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Corn, Silage	0.02	0.02						0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
w/cov aft har	0.02	0.02						0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Grain Sorghum	0.02	0.02						0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Soybeans, wr	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
w/cov pr to har	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Soybeans, dr	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Winter Wheat	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02

ZONE 105A

CROP SEQENCE	CLEAN TILL		FALL MULCH TILL						SPRING MULCH TILL							NO TILL									RIDGE
	FALL	SPRING	% COVER AFTER PLANTING						% COVER AFTER PLANTING							% COVER AFTER PLANTING									Till
Corn Grain After:			10	20	30	40	50		10	20	30	40	50	60		10	20	30	40	50	60	70	80	30	
corn grain	.27	.18	.18	.14	.11	.09	.07		.14	.12	.10	.08	.06	.05					.05	.03	.02	.02		.09	
corn silage	.42	.41	.39	.31					.35	.32	.30					.26								.36	
corn silage w/cc		.23							.14	.12	.11	.10	.07	.06						.10	.09	.06	.05		
soybeans	.43	.29	.27	.25					.21	.17						.21	.16	.12						.22	
soybeans w/cc		.23							.18	.15	.12	.10									.11	.09	.07		
1 year meadow	.25	.18		.21	.19	.17	.15		.10	.09									.07	.05	.03	.02			
estab. meadow	.22	.13		.19	.17	.16	.14		.09	.07	.06	.05							.05	.03	.02	.01			
wheat	.32	.19	.15	.13	.11	.10	.09		.14	.12	.10	.09	.08	.07					.06	.05	.04				
oats	.30	.19	.21	.17	.12				.17	.14	.11	.09	.07	.06					.06	.05	.04				
wheat/dbl. crop Sb																									
Corn Silage After:			10	20	30	40	50		10	20	30	40	50	60		10	20	30	40	50	60	70	80	30	
corn grain	.32	.27	.21	.18	.16	.14	.12		.17	.16	.15	.13	.11	.10		.18	.16	.14	.12	.08	.05	.03	.02	.11	
corn silage	.49	.46							.35							.30	.26	.20						.32	
corn silage w/cc		.22							.18	.16	.14	.12	.10	.08		.18	.15	.13	.11	.10	.06	.05	.03	.15	
soybeans	.47	.31	.30	.29					.27	.25	.23	.21	.19			.22	.21	.20	.18	.16				.25	
soybeans w/cc		.26								.15	.13	.11	.09	.07				.14	.12	.10	.08	.06	.04		
1 year meadow	.27	.20	.23	.21	.19	.18	.16		.17	.15	.13	.10	.08	.06				.10	.09	.08	.07	.06	.05		
estab. meadow	.26	.20	.21	.18	.14	.12	.10		.13	.11	.09	.07	.06	.05				.08	.07	.06	.05	.04	.03		
wheat	.34	.20	.19	.15	.13	.11	.10		.18	.11	.09	.08	.07	.06				.10	.08	.07	.06	.05	.04		
oats	.39	.24	.22	.17	.15				.19	.15	.13							.09	.06	.05	.04	.03	.02		
wheat/dbl. crop Sb																									

Note: Crops following crops with a cover crop assume the cover crop is killed or tilled at the 12" - 15" height. (Late April - Early May)

5.1

105A

CROP SEQENCE	CLEAN TILL		FALL MULCH TILL					SPRING MULCH TILL						NO TILL								RIDGE
	FALL	SPRING	% COVER AFTER PLANTING					% COVER AFTER PLANTING						% COVER AFTER PLANTING								Till
Soybeans >20" After:			10	20	30	40	50	10	20	30	40	50	60	10	20	30	40	50	60	70	80	
corn grain	.26	.15	.16	.12	.08	.07	.06	.15	.12	.10	.06	.05	.05	.16	.13	.10	.07	.05	.03	.02	.01	.12
corn silage	.44	.41	.38					.35						.30	.21	.18						.31
corn silage w/cc		.29						.24	.21	.19	.17	.15	.14	.23	.20	.18	.16	.14	.12	.10	.08	.16
soybeans	.42	.25	.35	.29	.26			.24	.17	.14	.13	.12	.10	.20	.15	.13	.11	.10	.08			.19
soybeans w/cc		.20						.15	.14	.12	.10	.08	.06			.12	.10	.09	.07	.06		.13
1 year meadow	.23	.20	.14	.12	.10	.08	.06	.13	.10	.09	.07					.10	.08	.06	.04	.02		
estab. meadow	.22	.15	.13	.11	.09	.07	.05	.12	.10	.08	.06					.09	.07	.06	.04	.03		
wheat	.31	.18	.17	.16	.14	.12	.10	.14	.12	.10	.08	.06				.10	.08	.06	.04	.02		
oats	.36	.28	.22	.17	.13	.11	.10	.16	.13	.10	.09	.07				.11	.09	.07	.04			
wheat/dbl. crop Sb																						
Soybeans <20" After:			10	20	30	40	50	10	20	30	40	50	60	10	20	30	40	50	60	70	80	
corn grain	.25	.14	.13	.11	.08	.07	.06	.10	.08	.07	.06	.05	.04			.05	.04	.03	.03	.02	.02	.10
corn silage	.40	.37	.35					.32						.24								
corn silage w/cc		.24						.22	.19	.17	.15	.13	.12	.19	.16	.14	.12	.10	.06	.04	.02	.15
soybeans	.39	.23	.27	.21	.19	.17	.15	.21	.18	.16	.14	.12	.11	.20	.17	.16	.14	.12	.10			.17
soybeans w/cc		.19						.14	.12	.10	.08	.06	.04			.09	.07	.05	.03	.01		.12
1 year meadow	.21	.18	.13	.11	.09	.07	.05	.12	.10	.08	.06					.08	.07	.06	.05	.04		
estab. meadow	.20	.13	.12	.10	.08	.06	.04	.11	.09	.07	.05					.07	.06	.05	.04	.03		
wheat	.30	.15	.15	.12	.09	.08	.06	.10	.08	.07	.05	.04	.03			.07	.05	.04	.03	.03		
oats	.34	.27	.18	.17	.16	.14	.12	.13	.11	.09	.07	.06	.05			.06	.05	.04	.03			
wheat/dbl. crop Sb																						

CROP SEQENCE	CLEAN TILL		FALL MULCH TILL						SPRING MULCH TILL							NO TILL									RIDGE
	FALL	SPRING	% COVER AFTER PLANTING						% COVER AFTER PLANTING							% COVER AFTER PLANTING									Till
Wheat After:			10	20	30	40	50		10	20	30	40	50	60		10	20	30	40	50	60	70	80		
corn grain	.11		.08	.06	.05	.04	.03									.13	.06	.05	.04	.03	.01	.01	.01		
corn silag	.16		.13	.11	.08											.13	.06	.05	.04						
corn silage w/cc																									
soybeans	.17		.13	.10	.09	.08	.06									.11	.09	.06	.05	.04	.03				
soybeans w/cc																									
1 year meadow	.15		.15	.12	.10	.08	.06									.13	.11	.09	.08	.07	.06	.05	.04		
estab. meadow	.14		.10	.08	.07	.06	.05									.10	.08	.07	.06	.05	.04	.03	.02		
wheat																									
oats	.17		.16	.12	.09	.08	.07									.15	.12	.09	.08	.07	.06	.05	.04		
wheat/dbl. crop Sb																									

CROP SEQENCE	CLEAN TILL		FALL MULCH TILL						SPRING MULCH TILL							NO TILL									RIDGE
	FALL	SPRING	% COVER AFTER PLANTING						% COVER AFTER PLANTING							% COVER AFTER PLANTING									Till
Oats After:			10	20	30	40	50		10	20	30	40	50	60		10	20	30	40	50	60	70	80		
corn grain	.15	.10		.08	.07	.06	.05			.08	.07	.06	.05								.04	.01	.01		
corn silage	.25	.24	.20						.15							.19	.15	.11							
corn silage w/cc																									
soybeans	.24	.16	.17	.13	.11					.12	.10							.08	.05	.03					
soybeans w/cc																									
1 year meadow	.15	.12	.14	.13	.11				.11	.10	.09	.08						.07	.06	.05	.04				
estab. meadow	.13	.10	.12	.11	.09				.09	.08	.07	.06						.06	.05	.03	.03				
wheat	.16	.13	.12	.11	.09				.10	.09	.08	.07						.07	.06	.05	.04				
oats	.23	.11		.12	.07	.05				.08	.05														
wheat/dbl. crop Sb																									

Acceptable Conservation Systems for Tobacco Rotations grown in Illinois

Acceptable Conservation Systems	RUSLE "C" Value Zone 105A	RUSLE "C" Value Zone 105B
2 yr. Spring plow tobacco-fall cover crop -2 yr. grass meadow	.123	.132
3 yr. Spring plow tobacco-fall cover crop -3 yr. grass meadow	.126	.135
3 yr. Spring plow tobacco-fall cover crop -2 yr. grass meadow	.151	.162

Fall cover crops are required for all tobacco rotations. The cover crop must be sown immediately after tobacco harvest. Tobacco rotations may **not** be used on soils where erosion rates will exceed three times the sustainable limit (3T) for the predominant HEL soils within the Conservation Management Unit. Site specific RUSLE "R", "K", and "LS" will be used to determine the acceptability of the systems listed above or locally derived systems on HEL fields. Tobacco rotations that exceed 3T will not meet the Highly Erodible Land Conservation Provision requirements set forth under provisions of the 1985 Food Security Act, as amended.

"C" Values for Tobacco Rotations
Illinois "C" Factor Zones 105A and 105B

The "C" factors provided are for crop rotations that include tobacco. The Revised Universal Soil Loss Equation calculates the effects of changes in crop residue decomposition, soil roughness, and ground surface cover until they no longer impact soil loss rates. For this reason, "C" values derived for tobacco will differ depending on the other crops and tillage practices being rotated with it. The "C" values below do not represent every possible crop-tobacco combination. They do however, provide a representation of tobacco "C" values when following no-till row crop, no-till drilled grain crop, grass meadow, and continuous tobacco monoculture conditions.

RUSLE "C" values for spring plow tobacco with a fall cover crop in rotation with grass meadow.

Crop Sequence	RUSLE "C" Value Zone 105A	RUSLE "C" Value Zone 105B
1st year tobacco w/cover crop after est. meadow	.148	.162
2nd year tobacco w/cover crop 1st year tobacco w/cover crop	.341	.365
3rd year tobacco w/cover crop 2nd year tobacco w/cover crop	.265	.280
1st year meadow after tobacco w/cover crop	.0006	.0006
2nd year meadow after tobacco w/cover crop	.0005	.0005
3rd year meadow after tobacco w/cover crop	.0003	.0003

RUSLE "C" values for spring plow tobacco with a fall cover crop in rotation with no-till corn.

Crop Sequence	RUSLE "C" Value Zone 105A	RUSLE "C" Value Zone 105B
1st year tobacco w/cover crop	.212	.234
2nd year tobacco w/cover crop	.354	.378
3rd year tobacco w/cover crop	.352	.372
No-till corn (125 Bu) after tobacco w/ cover crop	.14	.15

RUSLE "C" values for spring plow tobacco with a fall cover crop in rotation with no-till soybeans.

Crop Sequence	RUSLE "C" Value Zone 105A	RUSLE "C" Value Zone 105B
1st year tobacco w/cover crop	.282	.304
2nd year tobacco w/cover crop	.372	.392
3rd year tobacco w/cover crop	.353	.373
No-till soybeans (45 Bu) after tobacco w/ cover crop	.13	.13

Continuous spring plow tobacco with a fall cover crop

Crop Sequence	RUSLE "C" Value Zone 105A	RUSLE "C" Value Zone 105B
Cont. tobacco w/cover crop	.322	.368

Split tillage "C" values for Zone 101B

	Percent % residue after planting			
CROP	**10**	**20**	**30**	**40**
112 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.2158	.1918	.1678	.1438
125 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.1998	.1778	.1558	.1338
150 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.1825	.1625	.1425	.1225

RUSLE "C" Values for split tillage systems				
	Percent % residue after planting			
CROP	**50**	**60**	**70**	**80**
No-till drill soybeans 45 Bu/ac after mulch tilled corn(112 Bu/ac)	.0477	.0407	.0337	.0267
No-till drill soybeans 45 Bu/ac after mulch tilled corn(125 Bu/ac)	.0449	.0389	.0329	.0269
No-till drill soybeans 45 Bu/ac after mulch tilled corn(150 Bu/ac)	.0417	.0367	.0317	.0267

Notes: Corn was planted after a single pass with a field cultivator. Soybeans were no-till drilled with a single disc opener.

Split tillage "C" values for Zone 101B w/ NH3

	Percent % residue after planting			
CROP	**10**	**20**	**30**	**40**
112 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.2274	.2004	.1734	.1464
125 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.2111	.1861	.1611	.1361
150 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.1919	.1689	.1459	.1229

RUSLE "C" Values for split tillage systems				
	Percent % residue after planting			
CROP	**50**	**60**	**70**	**80**
No-till drill soybeans 45 Bu/ac after mulch tilled corn(112 Bu/ac)	.0492	.0422	.0352	.0282
No-till drill soybeans 45 Bu/ac after mulch tilled corn(125 Bu/ac)	.0471	.0411	.0351	.0291
No-till drill soybeans 45 Bu/ac after mulch tilled corn(150 Bu/ac)	.0406	.0356	.0306	.0256

Notes: Corn was planted after a single pass with a field cultivator. Soybeans were no-till drilled with a single disc opener. Anhydrous ammonia injected after soybean harvest.

Split tillage "C" values for Zone 103A

	Percent % residue after planting			
CROP	**10**	**20**	**30**	**40**
112 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.1872	.1662	.1452	.1242
125 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.1731	.1531	.1331	.1131
150 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.1561	.1381	.1201	.1021

RUSLE "C" Values for split tillage systems				
	Percent % residue after planting			
CROP	**50**	**60**	**70**	**80**
No-till drill soybeans 45 Bu/ac after mulch tilled corn(112 Bu/ac)	.0445	.0385	.0325	.0265
No-till drill soybeans 45 Bu/ac after mulch tilled corn(125 Bu/ac)	.0403	.0353	.0303	.0253
No-till drill soybeans 45 Bu/ac after mulch tilled corn(150 Bu/ac)	.0336	.0286	.0236	.0186

Notes: Corn was planted after a single pass with a field cultivator. Soybeans were no-till drilled with a single disc opener.

Split tillage "C" factors for Zone 103A w/NH3

	Percent % residue after planting			
CROP	**10**	**20**	**30**	**40**
112 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.1991	.1741	.1491	.1241
125 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.1847	.1617	.1387	.1157
150 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.1669	.1459	.1249	.1039

RUSLE "C" Values for split tillage systems				
	Percent % residue after planting			
CROP	**50**	**60**	**70**	**80**
No-till drill soybeans 45 Bu/ac after mulch tilled corn(112 Bu/ac)	.0459	.0399	.0339	.0279
No-till drill soybeans 45 Bu/ac after mulch tilled corn(125 Bu/ac)	.0397	.0347	.0297	.0247
No-till drill soybeans 45 Bu/ac after mulch tilled corn(150 Bu/ac)	.033	.028	.023	.018

Notes: Corn was planted after a single pass with a field cultivator. Soybeans were no-till drilled with a single disc opener.

Split tillage "C" values for Zone 103B

	Percent % residue after planting			
CROP	**10**	**20**	**30**	**40**
112 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.2197	.1937	.1677	.1417
125 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.2061	.1811	.1561	.1311
150 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.1893	.1663	.1433	.1203

RUSLE "C" Values for split tillage systems				
	Percent % residue after planting			
CROP	**50**	**60**	**70**	**80**
No-till drill soybeans 45 Bu/ac after mulch tilled corn(112 Bu/ac)	.0503	.0423	.0343	.0263
No-till drill soybeans 45 Bu/ac after mulch tilled corn(125 Bu/ac)	.0465	.0395	.0325	.0255
No-till drill soybeans 45 Bu/ac after mulch tilled corn(150 Bu/ac)	.041	.035	.029	.023

Notes: Corn was planted after a single pass with a field cultivator. Soybeans were no-till drilled with a single disc opener.

Split tillage "C" values for Zone 103B w/ NH3

	Percent % residue after planting			
CROP	**10**	**20**	**30**	**40**
112 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.2334	.2024	.1714	.1404
125 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.2201	.1901	.1601	.1301
150 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.2014	.1734	.1454	.1174

RUSLE "C" Values for split tillage systems				
	Percent % residue after planting			
CROP	**50**	**60**	**70**	**80**
No-till drill soybeans 45 Bu/ac after mulch tilled corn(112 Bu/ac)	.049	.041	.033	.025
No-till drill soybeans 45 Bu/ac after mulch tilled corn(125 Bu/ac)	.045	.038	.031	.024
No-till drill soybeans 45 Bu/ac after mulch tilled corn(150 Bu/ac)	.041	.035	.029	.023

Notes: Corn was planted after a single pass with a field cultivator. Soybeans were no-till drilled with a single disc opener. Anhydrous ammonia injected after soybean harvest.

Split tillage "C" values for Zone 105A

	Percent % residue after planting			
CROP	**10**	**20**	**30**	**40**
112 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.193	.172	.151	.13
125 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.1817	.1617	.1417	.1217
150 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.1675	.1485	.1295	.1105

RUSLE "C" Values for split tillage systems				
	Percent % residue after planting			
CROP	**50**	**60**	**70**	**80**
No-till drill soybeans 45 Bu/ac after mulch tilled corn(112 Bu/ac)	.0508	.0448	.0388	.0328
No-till drill soybeans 45 Bu/ac after mulch tilled corn(125 Bu/ac)	.0439	.0379	.0319	.0259
No-till drill soybeans 45 Bu/ac after mulch tilled corn(150 Bu/ac)	.037	.032	.027	.022

Notes: Corn was planted after a single pass with a field cultivator. Soybeans were no-till drilled with a single disc opener.

Split tillage "C" values for Zone 105B

	Percent % residue after planting			
CROP	**10**	**20**	**30**	**40**
112 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.2115	.1895	.1675	.1455
125 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.2001	.1781	.1561	.1341
150 Bu/ac corn mulch tilled after No-till drill soybeans 45 Bu/ac	.1844	.1644	.1444	.1244

RUSLE "C" Values for split tillage systems				
	Percent % residue after planting			
CROP	**50**	**60**	**70**	**80**
No-till drill soybeans 45 Bu/ac after mulch tilled corn(112 Bu/ac)	.0519	.0449	.0379	.0309
No-till drill soybeans 45 Bu/ac after mulch tilled corn(125 Bu/ac)	.052	.046	.04	.034
No-till drill soybeans 45 Bu/ac after mulch tilled corn(150 Bu/ac)	.0441	.0391	.0341	.0291

Notes: Corn was planted after a single pass with a field cultivator. Soybeans were no-till drilled with a single disc opener.

C FACTOR FOR PERMANENT GRASSES
ALL CLIMATIC ZONES IN ILLINOIS

PERCENT COVER			C FACTOR * VIGOR / FERTILITY / PRODUCTIVITY		
TOTAL =	GROUND +	CANOPY	HIGH	MEDIUM	LOW
100	80-90	10-20	.001		
100	10-70	30-90	.002		
90	50-80	10-40	.002	.01	
90	10-40	50-80	.003	.01	
80	60-70	10-20	.002	.01	.02
80	30-50	30-50	.003	.01	.03
80	10-20	60-70	.005	.01	.04
70	40-60	10-30	.003	.01	.03
70	10-30	40-60	.006	.02	.05
60	40-50	10-20		.01	.04
60	30	30		.02	.05
60	10-20	40-50		.02	.07
50	40	10			.05
50	30	20			.06
50	20	30			.07
50	10	40			.09
40	30	10			.06
40	20	20			.08
40	10	30			.10
30	20	10			.09
30	10	20			.12
20	20	0			.10
20	10	10			.13
20	0	20			.16

* C-factor values based on vigor, fertility, and/or productivity ratings of high, medium, and low.

Explanation of C-factor for permanent grasses

RUSLE VERSION:
The Time Invariant option in the C factor routine of RUSLE version 1.05pre_d was used to develop the C factors for established grasses. The input needed in RUSLE are identified below.

PERMANENT GRASSES - ASSUMPTIONS:
These factors are for long-term or permanent grasses. For grasses established in recent years, the time Variant option in RUSLE should be used.

Relatively smooth sod surface. These values may not apply to rough surfaces, such as may occur from grazing on wet soils.

Root masses in upper 4 inches of soil surface are 4000 pounds per acre for High, 2500 pounds per acre for Medium and 1000 pounds per acre for Low. Since these stands are more permanent than grasses in rotation, they may be less productive and contain more weeds. The root mass, therefore, will likely be lower than with grasses in long-term rotation with cultivated crops principally used for hay production.

COVER (%):
Total Cover is the sum of ground cover and canopy cover. Note: In this table, total cover will not exceed 100%. It is assumed that ground cover occurring directly below canopy will be counted as ground cover.

Ground Cover is any material in contact with the soil surface during rainstorms that intercepts raindrops and affects runoff. It includes live plant material, plant residue, and any other material such as gravel, stone, etc.

Canopy Cover is plant material, dead or alive, above the soil surface during rainstorms. Canopy intercepts raindrops but does not affect surface runoff.

ESTIMATING COVER:
The line transect method may be used. Following standard procedures established for measuring crop residue cover, the line is stretched above the canopy. A "hit" occurs when canopy or ground cover occurs directly beneath the "point." When both canopy and ground cover occur below a "point," only ground cover is recorded, since it has the greater impact on erosion reduction. After making line transect measurements in various kinds of cover types, one should be capable of making visual estimates. Periodic recalibration with the line transect will likely be needed.

VIGOR/FERTILITY/PRODUCTIVITY:
Plant vigor, soil fertility and crop productivity of the permanent grasses are grouped into classes of high, medium, and low.

High would be associated with a dense stand of sod-forming grasses with good plant vigor, productivity, management practices, soil fertility and soil quality. 4000 pounds per acre average annual root mass in the upper four inches of the soil was used in RUSLE.

Low would be associated with a stand of grass with poor vigor, management and soil quality, as well as low productivity and soil fertility. 1000 pounds per acre average annual root mass in the upper four inches of the soil was used in RUSLE. The stand would be more open and contain more weeds than stands classed as Medium and High.

Medium would be associated with a stand that falls between High and Low. 2500 pounds per acre average annual root mass in the upper four inches of the soil was used in RUSLE.

ROUGHNESS:
The soil surface associated with permanent grasses is assumed to be relatively smooth. A random roughness value of 0.24 inches was used in RUSLE.

SURFACE COVER FUNCTION, b VALUE:
The b value of 0.35 was used in RUSLE. This value is associated with permanent grasses on medium and coarse textured soils.

CANOPY FALL HEIGHT:
Average canopy fall height used in RUSLE was 0.3 ft. Fall height is the average distance a raindrop falls to the soil surface after being intercepted by canopy. Live plant material at or near the soil surface is generally assumed to be ground cover in the Time Variant option of RUSLE. Therefore the fall height for grasses was increased from 0.1 for the Time Variant option to 0.3 for these calculations using the Time Invariant option.

RUSLE SUPPORTING PRACTICE INSTRUCTIONS, TABLES, AND FIGURES

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RUSLE P SUBFACTOR VALUES FOR CONTOURING

Step 1. Gather appropriate information.

a) Identify the hydrologic soil group for the selected profile soil.

b) Determine the length and slope gradient of the landscape profile, and grade along the furrows.

c) Identify the 10-year storm erosivity (10-yr EI) value for the site.

d) Select the Cover-Management Condition using **Table 1**, "Cover Management Conditions".

e) Select the appropriate ridge height using **Table 2**, "Guidelines for Selecting Ridge Heights for Contouring with RUSLE".

Step 2. Determine the P subfactor for contouring.

a) With 10-yr EI value, ridge height, hydrologic soil group, and cover- management condition, select the appropriate part of **Table 3**, "RUSLE Contour P_C Subfactor Tables. This is the value to be selected when the contour lines are in conformance with the Illinois NRCS Contouring standard, Practice Code 330. For rotations that consist of 50% meadow, select the next higher hydrologic soil group. For example: A field comprised of silt loam soils (Group B soils) and is farmed with alternating strips of grain crops and hay. The hay is on half of the acreage. Select
the contour P_C from the hydrologic group A table.

b) Enter the selected table proceeding across the row for the appropriate Cover Management Code and read the value in the column for the ridge height. Procede down to the point where the column intersects the row that represents the field slope The resulting value is the P subfactor value for contouring. Skip to Step 4 if the field is contoured in conformance with the Contouring Standard.

Step 3. Adjust contouring P subfactor when furrow grades exceed the Contouring Standard.

a) Calculate the ratio of the field's average furrow grade to its landscape profile slope used to describe the field's topographic factor and round to the nearest 0.1. Given that the furrow grade and landscape profile slope generally are inexact estimates with only one significant figure, do not attempt for more precision by rounding to the nearest hundredth. Go to **Table 4** , "Contouring P Subfactor Value Adjusted for Furrow Grades Exceeding Specifications in the Contour Standard."

b) In the left-most column of **Table 4**, locate the P-factor value for contouring obtained from step 2 above. If the P factor value is an odd number, round up or down to the nearest even number listed in Table 4. Round in the opposite direction than you did when rounding the furrow grade to landscape profile slope ratio to the nearest 0.1. On the located row, move right to the column for the appropriate ratio of furrow grade to slope steepness of the landscape profile. This value is the RUSLE P subfactor value for "off grade" contouring where the slope length is less than the critical slope length and furrow the grade is greater than limits specified for contouring in Section IV. FOTG.

Beyond the critical slope length, the practice effectiveness decreases quickly with greater slope length.

Step 4. Determine the critical slope length.

a) Refer to **Figures 1-23** and select the applicable figure for the hydrologic soil group, and Cover-Management Condition 1-7.

b) Enter the selected figure at the landscape profile slope on the horizontal axis and project a vertical line up to intersect the 10-yr EI value (EI_{10}) for the site. From that intersection project a horizontal line to the left and read the critical length. This is the critical length, which is the maximum slope for which the previously determined P subfactor value applies. Use the previously determined P subfactor value for slopes less than critical. If the measured slope length is less than the critical slope length, skip step 5 and go to step 6.

c) Stripcropping increases the effectiveness of contouring. When used in conjunction with contouring, increase the critical slope length by multiplying the value from b (above) by 1.5.

Step 5. Adjust the contouring P subfactor where the landscape profile exceeds the critical slope length.

a) Where landscape profile slope exceeds the critical, divide the landscape profile slope length by the critical slope length. Be sure to increase the critical slope length if stripcropping applies. (The P subfactor value increases as a function of the ratio of landscape profile slope length to critical length where the ratio exceeds a value of one.)

b) Use the same rill/interrill ratio if used previously in determining the topographic (LS) factor at the site. Otherwise select the ratio from the following: **Medium**, when the interrill erosion and rill erosion are "balanced" which is the case for most cultivated cropland in row crops and small grains; **Low**, when most of the soil loss is caused by interrill erosion, which is the case for rangelands, pasture lands, and situations where consolidated soil is resistant to erosion; **High** where most of the erosion is rill erosion, which is often the case for construction sites immediately after disturbance.

c) Go to **Figures 29-31**. Select the appropriate figure with the rill/interrill ratio and the percent slope.

d) From the slope length/critical length ratio on the horizontal axis of the selected figure, project a vertical line to intersect the P subfactor value determined in step 2 or 3 above. From that intersection project a horizontal line to the left and read the effective P subfactor value. This subfactor value is the corrected P subfactor value for contouring for the entire landscape profile slope length.

Step 6. Compute rotational contouring P subfactor where cover-management conditions and/or ridge heights change from year to year during the life of a crop rotation.

a) Where the crop rotation planned for the field will cause cover-management conditions and/or ridge heights to change from year to year during the critical erosion period, calculate the average annual P subfactor. It is the weighted average of the P

subfactors calculated for each cover management condition and ridge height presented during the critical erosion period for each year in the life of the rotation.

b) For each cover management condition and ridge height presented by each year in the crop rotation during the critical erosion period, calculate the contour P subfactor following the appropriate steps 1-5 above.

c) Multiply the contour P subfactor value for crops with the same cover-management condition and ridge height by the number of the years they occur in the rotation.

d) Sum these different sets of multiplied values and divide by the total years in the rotation to yield an average annual contour P subfactor value.

Example A:

Step 1. Gather information.

a) Hydrologic soils group B.

b) Landscape profile slope = 6%, slope length = 150 feet. Furrow grade = 1%.

c) For the site near Evansville, Indiana, the 10-yr EI = 60, and the R value applies to the site.

d) When row cropped, clean tilled corn is grown. This is Cover-Management Condition 6.

e) Ridges and furrows made during corn planting range 3-4 inches in depth so they are Moderate Ridges.

Step 2. Determine the P subfactor for contouring.

a) Select the Table 3 for EI=60, and hyrologic group B.

b) Find the column for Cover Management Code 6 with moderate ridge height.

c) Follow down the coulmn until it intersects with the row for a 6% slope. Read the P subfactor value of 0.39.

Step 3. Adjust contouring P subfactor for furrow grade.

Note: This step would not be needed in the above example because the field being evaluated is farmed according to the Contour Standard. The following example will illustrate the use of Table 4 for a field with a 6% slope, 150 feet slope length, a furrow grade of 4%, and a Pc value =0.39.

a) The furrow grade/slope grade ratio is calculated as 4%/6% = 0.667 rounded to 0.7.

b) Since Table 4 does not have a line for 0.39, round the value up or down between 0.38 and 0.40. Since the furrow grade/slope grade ratio was rounded up, round down this time to 0.38. Enter Table 4 with the contouring P_c subfactor value of 0.38 and read across to the furrow grade/slope grade ratio of 0.7. The value is 0.90. It is the P

subfactor value for "off grade" contouring where the slope length is less than the critical slope length and the furrow grade is greater than limits specified for contouring in Section IV. FOTG.

Step 4. Determine the critical slope length.

a) With Figure 10 for hydrologic soils group B, and Cover-Management Condition 6, and the 6% slope, read a critical length of 510 feet. The critical slope exceeds the 150-foot slope length at the site so the P subfactor value of 0.39 applies to the entire landscape profile slope length.

Example B:

Step 1. Gather information.

a) Hydrologic soils group C.

b) Landscape profile slope = 6%, slope length = 450 feet. Furrow grade = 1.0%.

c) For the cropland site near Evansville, Indiana, the 10-yr EI = 60.

d) When row cropped, clean tilled corn is grown. This is Cover-Management Condition 6.

e) Only a ridge height of 2-3 inches is formed by tillage and planting equipment on this soil, a Low Ridge.

Step 2. Determine the P subfactor for contouring.

a) In Table 3, EI=60, Hydrologic Goup C. Column Condition 6/ Low Ridge Height (2-3" Ridges).

b) Find the row for 6% slope and the value intersected by the column identified above. P_C subfactor value of 0.53.

Step 3. Determine the critical slope length.

a) Select Figure 16 for hydrologic soils group C, and Cover-Management Condition 6.

b) Enter with the 6% slope, read up to intersection of $(EI)_{10}$ = 60 and across to find a critical length of 380 feet. The profile slope length of 450 feet **does** exceed the critical slope length so adjust the P subfactor value of 0.53.

Step 4. Adjust the contouring P subfactor for critical slope length.

a) The slope length/critical length ratio is 450/380 = 1.2.

b) Select figure 30 that applies to the slope range (4.1%-12%) and the medium Rill/Interrill Ratio used to describe row cropped cropland.

c) From the slope length/critical length ratio of 1.2 on the horizontal axis, project a vertical line to intersect the previously determined P subfactor value of 0.53 for the site. From that intersection project a horizontal line to the left and read the P effective subfactor

value of 0.61. The value of 0.61 is the contouring P subfactor value that applies to the entire landscape profile slope length.

EXAMPLE C:

Step 1. Gather information about crop rotation. Include the length in years, crops grown, ridge height, if any, created during the production year, and the cover management condition produced by the crop production practices used to grow the crop.

a) Crop rotation is 8 years long.

b) Crops are clean tilled corn after hay; no-till corn after corn; mulch till, 40% cover , soybeans after corn; mulch till spring oats, 10 % cover, after soybeans; summer seeded alfalfa-timothy into oat stubble, 30% cover; followed by four years of alfalfa-timothy hay production years.

c) Landscape profile is 10 percent, slope length = 300 feet. Average furrow grade = 1%. 10-yr EI = 70. Soil hydrologic group is B.

d) Ridge height = 3-4" for corn after hay, 2-3" for no-till corn after corn, 3-4" for soybeans after corn, 0.5-2" for oats after soybeans, 0.5-2" for hay seeding into oat stubble, and 4 years of alfalfa-timothy hay = no ridges.

e) Cover management condition of corn after hay = 6, corn after corn = 3, soybean after corn =4, oats after soybeans = 5, alfalfa-timothy into oat stubble = 5, and alfalfa-timothy hay/haylage = 2.

Step 2. Calculate the contour P subfactor for each year where cover management condition or ridge height change.

a) Corn after hay, on-grade P = 0.44. Critical slope length = 240 feet. Correct for exceeding critical slope, contour P subfactor = 0.60, where 300/240 = 1.25.

b) Corn after corn, on-grade P = 0.46. Critical slope length = 1000 feet.

c) Soybeans after corn, on-grade P=0.39. Critical slope length = 1000 feet.

d) Oats after soybeans and alfalfa-timothy into oat stubble, on-grade P = 0.44. Critical slope length = 560 feet.

e) Alfalfa-timothy hay. No ridges present. Contour P subfactor = 1.0.

Step 3. Multiply each different yearly contour P subfactor times the number of years it occurs in the crop rotation.

0.60 X 1 = 0.60, 0.46 X 1 = 0.46, 0.39 X 1 = 0.39, 0.64 X 1 = 0.64, and 1.0 X 4 = 4.0.

Step 4. Sum the values calculated in step 3 and divide by the total number of years in the crop rotation to get the average annual contour P subfactor for the rotation.

a) Sum of the values in step 3. 0.60 + 0.46 + 0.39 + 0.64 + 4.0 = 6.09.

b) Divide 6.09 by the number of years in the crop rotation (8). Average annual contour P subfactor for the crop rotation = 6.09/8 = 0.76.

RUSLE P SUBFACTOR VALUES FOR STRIPCROPPING

Step 1. Gather information. Note that much of the information is also used for evaluating contouring.

a) Identify the hydrologic soil group for the selected profile soil.

b) Determine the length and slope steepness of the landscape profile, and grade along the strip boundaries.

c) Identify the 10 year storm erosivity (10-yr EI) value for the site.

d) Determine the number of strips that can be laid across the landscape profile. A minimum of two full strip widths must fit on the slope.

e) For a strip pair, select the Cover-Management Conditions that will be opposite each other during the life of the crop rotation using **Table 1**, "Cover-Management Conditions." For sod based rotations, it also important whether or not hay is established by clear seeding or with a nurse crop. The seeding year with a nurse crop introduces a third cover-management condition.

f) Determine whether this is to be a contour stripcrop layout (as close to level strip boundaries as possible), a field stripcropping layout (strips markedly off-contour occasionally), or a buffer stripcrop layout (lower position stationary narrow sod cross slope strips alternate with wider tilled strips down the landscape profile). Sediment retarding strips and erosion prone strips on contour and field stripcrop layouts switch positions on the landscape profile during the life of the crop rotation employed on them.

g) If a buffer stripcrop layout, consult with farmer on percentage of landscape profile to be occupied by buffer strips, not less than 15 feet wide. Table 5 is set up for 10 and 20 percent, but presented as crop strip to buffer strip ratios of 9:1 and 4:1. Note from Table 5 that there is little to be gained by going to 20 percent from a sheet and rill erosion standpoint. The minimum landscape profile length that can benefit from buffer strips is 150 feet.

Step 2. Determine the P subfactor for stripcropping.

a) Determine the type of planned stripcrop layout, number of strips, cover-management condition pairings, and, in the case of buffer strips, the percent of landscape slope occupied by buffer strips. Select the appropriate part of **Table 5A,B,orC**, "RUSLE Stripcropping P Subfactor Tables" as developed within the state.

(If Table 5A,B,or,C cannot approximate the conditions, your state office will assist in the development of an appropriate subfactor for stripcropping.)

b) Locate the stripcropping subfactor value at the intersection of number of strips and the Cover-Management Conditions of the strips. (For buffer strips, enter the correct column for ratio of cultivated crop strip to buffer strip.) The value is the stripcropping P subfactor for slopes where the landscape profile slope length is less than, or equal to, the critical slope length.

Step 3. Determine critical slope length.

a) Refer to **Figures 1-23** and select the applicable figure for the hydrologic soil group, and Cover-Management Condition.

Use the most erosive cover-management condition of the opposing strip pairs proposed for, or existing on, the slope to determine the critical slope length for stripcropping.

b) Enter the selected figure at the profile slope on the horizontal axis and project a vertical line up to intersect the 10-yr EI value (EI_{10}) for the site. From that intersection project a horizontal line to the left and read the critical length. Stripcropping increases the effectiveness of the contouring. Therefore, adjust the critical slope length from the figure by multiplying the value by 1.5.

c) The adjusted critical length is the maximum slope length for which the previously determined stripcropping P subfactor value applies. Use the previously determined stripcropping P subfactor value where the landscape slope is equal to or less than the adjusted critical slope length.

Step 4. Adjust the stripcropping P subfactor where the landscape profile exceeds the critical slope length.

a) Divide the landscape profile total slope length by the critical slope length. (The P subfactor value increases as a function of the ratio of total slope length to critical length where the ratio exceeds a value of one.)

b) Use the same rill/interrill ratio if used previously in determining the topographic (LS) factor at the site. Otherwise select the ratio from the following: **Medium**, when the interrill erosion and rill erosion are "balanced" which is the case for most cultivated cropland in row crops and small grains; **Low**, when most of the soil loss is caused by interrill erosion, which is the case for rangelands, pasture lands, and situations where consolidated soil is resistant to erosion; **High** where most of the erosion is rill erosion, which is often the case for construction sites immediately after disturbance.

c) Go to **Figures 29-31**. Select the appropriate figure with the rill/interrill ratio and the percent slope.

d) From the slope length/critical length ratio on the horizontal axis of the selected figure, project a vertical line to intersect the stripcropping P subfactor value determined in step 2. From that intersection project a horizontal line to the left and read the effective P subfactor value. The effective P subfactor value is the adjusted P subfactor value for contouring for the entire landscape profile slope length.

Step 5. Multiply the contour P subfactor times the stripcropping P subfactor to get the composite P factor for the sheet and rill erosion conservation management subsystem.

a) When the critical slope is not exceeded for stripcropping, use the unadjusted for slope length contour P subfactor value determined earlier using the contour P subfactor instructions. Take the P subfactor for stripcropping times the contour P subfactor to get the composite P factor for the conservation management subsystem.

b) When the critical slope is exceeded for stripcropping, adjust the contour P subfactor value using the ratio determined by dividing the total slope length by the critical slope length for stripcropping. Go to figures 29-31, enter appropriate figure with this ratio and determine adjusted contour P subfactor. Take this adjusted contour P subfactor times the adjusted P subfactor for stripcropping to get the composite P factor for the conservation management subsystem.

Example D:

Step 1. Gather information for use in RUSLE.

a) Hydrologic soils group C.

b) Landscape profile slope = 6%, slope length = 450 feet. Strip boundary grade = 1%.

c) For the site near Freeport, Illinois the 10-yr EI = 100, and the R value applies to the site.

d) Four contour strips are planned with alternating Cover-Management Conditions 2 and 6. 2 is for hay. Hay is clear seeded. 6 is for clean tilled corn with moderate (3-4 inches) ridges. Near equal acreage of corn and hay in every year of the crop rotation. We can therefore compute the P factor based on a Hydrologic Group B soil.

Step 2. Determine stripcropping P subfactor.

a) In Table 5, select the contour stripcropping practice P subfactor table for sod based rotations, clear, spring seeded hay. This table has a furrow grade of 0.5% (close to the 1 % actual row grade).

b) Locate the intersection of 4 strips and Cover-Management 2, 6. The value of 0.69 rounded to 0.70 is the stripcropping P subfactor that applies for slopes less than or equal to critical.

Step 3. Determine critical slope length.

a) With Figure 10 for hydrologic soils group B, and Cover-Management Condition 6, (EI_{10}) =100, and the 6 % slope, read the critical length is 300 feet.

b) Multiply 1.5 X 300 to calculate the stripcropping critical length of 450 feet. The 450-foot slope length at the site is equal to the critical length.

Step 4. Adjust the stripcropping P subfactor for critical slope length.

None required in this example.

Step 5. Multiply contour P subfactor times stripcropping P subfactor to get composite P factor.

a) The contouring Pc subfactor was determined to be 0.51.

Note that this is the contour P subfactor for the corn cover-management condition, not a weighted average P subfactor for corn and hay cover-management conditions. Corn or

cover management condition 6 is always present in the field somewhere. So cover-management condition 6 is continually in the field, it just alternates positionally back and forth between strip pairs.

b) From this example, the contour stripcropping P subfactor was 0.70.

c) Multiply the two subfactors together, 0.51 X 0.70 = 0.36. The P factor for this field's contour stripcropping system is 0.36.

RUSLE P SUBFACTOR VALUES FOR TERRACING

Step 1. Gather information for use in RUSLE.

a) Determine the slope gradient of the landscape profile. Will it change with construction of terrace? If yes, determine new slope gradient.

b) Identify the R value for site being evaluated.

c) Determine what supporting conservation practice will accompany the terraces, contouring or contour stripcropping.

d) Determine terrace horizontal spacing interval using **Table 2** from **page IL-600-5, IL FOTG, Terrace** conservation practice standard, as a guide. Check maximum and minimum spacing requirements for the proper slope and R value ranges. Minimum spacing interval given at bottom of **Table 2**. If terrace(s) will be used in conjunction with contour stripcropping, read across to spacing interval in feet under **With Contour Stripcropping** column.

e) Decide whether terrace will have an open or closed outlet.

f) If an open outlet, determine terrace channel grade in the last 300 feet or last one-third of the outlet end whichever is less. If channel grade is 0.8 or greater, skip step 2. because the terrace practice subfactor equals 1.0. Do proceed with step 3, however.

Step 2. Determine terrace P subfactor.

a) Enter **Table 1** from **page IL-600-5, IL-FOTG, Terrace** conservation practice standard. Select proper horizontal spacing interval range row. Read across to the selected outlet type. If an open outlet is the design choice, then select the terrace channel grade range column that describes the design terrace channel grade. Read the P subfactor value at the row-column intersection.

Step 3. If terrace horizontal spacing interval is less than landscape profile slope length, recalculate LS value to reflect shorter sheet and rill erosion flow length.

a) Check original landscape profile length. If terrace horizontal spacing interval is less than it, LS value must be recalculated.

b) If significant earthmoving will cause a change in landscape profile slope, recompute landscape profile slope, record new slope and use in step c.

c) Enter appropriate **LS table** with terrace spacing interval length by going across table column heading until slope length in feet approximates terrace interval. Read down column until you intersect correct percent slope. This is the new adjusted LS factor value. Enter this value in place of the original value estimated before terraces were used to split the original landscape profile. If terrace spacing falls between two slope length column headings, interpolate for more precision, if desired.

Step 4. Determine composite P factor for terracing when used in combination with contouring alone, or with contouring and stripcropping.

a) When terraces are used in conjunction with contouring, multiply terrace P subfactor times the contouring P subfactor to get the composite P factor.

b) When terraces are used in conjunction with both contouring and stripcropping, multiply all three P subfactors together to get the composite P factor.

Example E:

Step 1. Gather information.

a) Landscape profile = 6%. Will not change with construction of terrace.

b) For the site near Evansville, Indiana, the R factor = 195, 10 yr EI=60.

c) Contouring will be used. Row grades will parallel terrace channel.

d) Horizontal spacing interval selected is 150 feet. Will split landscape profile slope length into thirds (originally 450'). This is the minimum spacing allowed by **Table 2, page IL-600-5 Terrace**.

e) Open outlet selected. Terraces will outlet into stone center waterway.

f) Terrace channel grade will be 0.5%.

g). Corn is grown with conventional tillage with moderate ridges.

Step 2. Determine P subfactor for Terracing.

a) In **Table 1, page IL-600-5 Terrace**, find horizontal interval range 140-180 and read across to Open Outlets, with percent grade of 0.4-0.7. Read the P subfactor value of 0.9.

Step 3. Adjust LS value.

a) Horizontal terrace spacing interval = 150'. This one third of the original landscape profile lope length. Adjust LS factor value and re-enter new value into the general RUSLE equation. Original LS = 1.49.

b) No appreciable change in the landscape profile slope is expected. Continue to use 6%.

c) Enter **LS table** for moderate ratio of rill to interrill erosion. Find the column for 150 feet of slope length and the value in the intersected row for 6% slope. Read the new LS value of 0.93. Enter this new value into the general **RUSLE** equation.

Step 4. Determine composite P factor.

a) Contour P_c subfactor is based on a moderate ridges, Cover mangement code 6, 10 yr EI = 60, C soil hydrologic group. Contour P_c subfactor = 0.44.

b) Multiply terrace P subfactor 0.9 times Contour P_c subfactor 0.44. Composite P factor = 0.40.

TABLE 1 - COVER MANAGEMENT CONDITIONS

Select the cover management condition that best describes the condition during the 1/4 of the year when rainfall and runoff are most erosive and the soil is most susceptible to erosion. Since the P factor effects are approximate, no provision is made for varying the cover-management condition class during the year.

Description of cropland cover-management conditions used in RUSLE for estimating P-factor values.

Cover-Management Condition	Description
Code 1. Established meadow.	In this condition, the grass is dense and runoff is very slow, about the slowest under any vegetative condition. When mowed and baled, this condition is condition 2.
Code 2. 1st year meadow, hay.	In this condition, the hay is a mixture of grass and legume just before cutting. The meadow is a good stand of grass that is nearing the end of the first year. When mowed and baled, this condition becomes a condition 4 for a short time.
Code 3. Heavy cover and/or very rough.	Ground cover for this condition is about 75 to 95%. Roughness would be like that left by a high clearance moldboard plow on a heavy textured soil. Roughness depressions would have the appearance of being 7 inches deep and deeper. Vegetative hydraulic roughness would be like that from a good legume crop, such as lespedeza, that has not been mowed.
Code 4. Moderate cover and/or rough.	The ground cover for this condition is about 40 to 65%. This roughness would be like that left by a moldboard plow in a medium textured soil. Depressions would have the appearance of being about 4 to 6 inches deep. Vegetative hydraulic roughness would be much like that produced by winter small grain at full maturity.
Code 5. Light cover and/or moderate roughness.	Ground surface cover is between 10 to 35% and the surface roughness is like that left by the first pass of a tandem disk over a medium texture soil that has been moldboard plowed. This roughness could also be much like that left after a chisel plow through a medium textured soil at optimum moisture conditions for tillage. Roughness depressions would have the appearance of being on the order of 2 to 3 inches deep. In terms of hydraulic roughness produced by vegetation, this condition is much like that produced by spring small grain at about three fourths maturity.

TABLE 1, cont. - COVER MANAGEMENT CONDITIONS

Cover-Management Condition	Description
Code 6. No cover and/or minimal roughness.	This condition is very much like the condition typically found in row cropped fields after the field has been planted and exposed to a moderately intense rainfall. Ground cover is less than about 5% and the roughness is that characteristic of a good seedbed for corn or soybeans. The surface is rougher than that of a finely pulverized seedbed for seeding vegetables or grass.
Code 7. Clean-tilled, smooth, fallow.	This condition is is essentially bare, with a cover of 5% or less. The soil has not had a crop grown on it in the last 6 months or more. Much of the residual effects of previous cropping has disappeared. The surface is smooth, much like the surface that develops on a very finely pulverized seedbed exposed to several intense rainfalls. This condition is found in fallowed and vegetable fields, or in newly sown lawns and hay fields.

Table 2 - GUIDELINES FOR SELECTING RIDGE HEIGHTS FOR CONTOURING WITH RUSLE

Select the ridge height that best describes the condition during the 1/4 of the year when rainfall and runoff are most erosive and the soil is most susceptible to erosion. For dry-farmed cropland of the Northwest Wheat and Range Region, and additional areas where R_{eq} is identified as applicable to the winter erosive period, use the ridge height after fall seeding.

1. VERY LOW (0.5 - 2 in.) RIDGES

   - Plants not closely spaced, but with a perceptible ridge height
   - No-till planted row crops
   - Fields that have been rolled, pressed or dragged after planting
   - Conventionally drilled crops when erosive rains occur during or soon after planting
   - Clear seeded hay that leaves a very low ridge

2. LOW (2 - 3 in.) RIDGES

   - No-till drilled crops
   - Mulch tilled row crops
   - Conventionally planted row crops with no row cultivation
   - Conventionally drilled small grain when erosive rains are uniformly distributed throughout the year
   - Winter small grain when runoff from snowmelt occurs during winter and early spring
   - Transplanted crops, widely spaced

3. MODERATE (3 - 4 in.) RIDGES)

   - Conventionally (clean) tilled row crops with row cultivation
   - High yielding winter small grain crops when erosive rains are concentrated in the late spring after plants have developed a stiff, upright stem
   - Transplanted crops that are closely spaced and/or in narrow rows

4. HIGH (4 - 6 in.) RIDGES

   - Ridge tilled crops with high (4-6") ridges during periods of erosive rain

5. VERY HIGH (Greater than 6 in.) RIDGES

   - Ridge tilled crops with very high (6+") ridges during periods of erosive rains
   - Hipping, bedding or ridging with very high ridges during periods of erosive rains

TABLE 3

HYDROLOGIC GROUP A

EI = 60

Technical Guide, Section I Erosion Control

Pc SUBFACTOR - CONTOUR

Cover Mgt. Code	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	Cover Mgt. Code
Ridge Height	V Low	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	Ridge Height
Slope																		Slope
2	0.61	0.61	0.46	0.46	0.49	0.61	0.46	0.46	0.49	0.61	0.46	0.47	0.50	0.61	0.47	0.49	0.50	2
4	0.61	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.31	0.61	0.46	0.34	0.32	4
6	0.61	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	6
8	0.61	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	8
10	0.61	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	10
12	0.60	0.60	0.44	0.32	0.27	0.60	0.44	0.32	0.27	0.60	0.44	0.32	0.27	0.60	0.44	0.32	0.27	12
14	0.59	0.59	0.43	0.31	0.25	0.59	0.43	0.31	0.25	0.59	0.43	0.31	0.25	0.59	0.43	0.31	0.26	14
16	0.59	0.59	0.42	0.30	0.24	0.59	0.42	0.30	0.24	0.59	0.42	0.30	0.25	0.59	0.42	0.32	0.27	16
18	0.58	0.58	0.42	0.29	0.24	0.58	0.42	0.29	0.24	0.58	0.42	0.31	0.26	0.58	0.42	0.33	0.28	18
20	0.58	0.58	0.41	0.29	0.25	0.58	0.41	0.29	0.25	0.58	0.41	0.32	0.27	0.58	0.43	0.34	0.29	20
24	0.57	0.57	0.40	0.29	0.27	0.57	0.40	0.30	0.27	0.57	0.43	0.34	0.29	0.64	0.49	0.39	0.31	24

HYDROLOGIC GROUP B

EI = 60

Pc SUBFACTOR - CONTOUR

Cover Mgt. Code	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	Cover Mgt. Code
Ridge Height	V Low	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	Ridge Height
Slope																		Slope
2	0.61	0.61	0.47	0.49	0.50	0.61	0.53	0.52	0.52	0.61	0.54	0.53	0.53	0.61	0.57	0.55	0.53	2
4	0.61	0.61	0.46	0.34	0.32	0.61	0.46	0.37	0.34	0.61	0.46	0.39	0.36	0.61	0.47	0.41	0.36	4
6	0.61	0.61	0.46	0.34	0.29	0.61	0.46	0.35	0.30	0.61	0.46	0.37	0.32	0.61	0.46	0.39	0.32	6
8	0.61	0.61	0.46	0.34	0.29	0.61	0.46	0.36	0.30	0.61	0.46	0.37	0.31	0.61	0.48	0.39	0.32	8
10	0.61	0.61	0.46	0.34	0.29	0.61	0.46	0.36	0.31	0.61	0.47	0.39	0.32	0.62	0.50	0.41	0.33	10
12	0.60	0.60	0.44	0.32	0.27	0.60	0.45	0.37	0.30	0.61	0.49	0.40	0.32	0.67	0.53	0.42	0.33	12
14	0.59	0.59	0.43	0.31	0.26	0.60	0.47	0.38	0.30	0.66	0.51	0.41	0.32	0.72	0.56	0.44	0.34	14
16	0.59	0.59	0.42	0.32	0.27	0.65	0.51	0.39	0.31	0.72	0.56	0.42	0.33	0.79	0.61	0.47	0.35	16
18	0.58	0.58	0.42	0.33	0.28	0.71	0.54	0.42	0.33	0.79	0.59	0.45	0.35	0.88	0.66	0.49	0.38	18
20	0.61	0.58	0.43	0.34	0.29	0.77	0.58	0.45	0.34	0.87	0.65	0.49	0.37	0.96	0.71	0.53	0.40	20
24	0.70	0.64	0.49	0.39	0.31	0.91	0.67	0.50	0.39	1.00	0.75	0.56	0.42	1.00	0.84	0.62	0.46	24

Pc SUBFACTOR - CONTOUR

Cover Mgt. Code	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	Cover Mgt. Code
Ridge Height	V Low	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	Ridge Height
Slope																		Slope
2	0.61	0.61	0.57	0.55	0.54	0.63	0.60	0.57	0.54	0.66	0.61	0.57	0.55	0.68	0.63	0.59	0.56	2
4	0.61	0.61	0.48	0.42	0.37	0.61	0.50	0.43	0.38	0.61	0.52	0.44	0.39	0.64	0.54	0.46	0.39	4
6	0.61	0.61	0.47	0.39	0.33	0.61	0.50	0.41	0.34	0.61	0.51	0.43	0.35	0.64	0.53	0.44	0.36	6
8	0.61	0.61	0.49	0.40	0.32	0.62	0.51	0.42	0.33	0.65	0.53	0.43	0.35	0.68	0.56	0.45	0.36	8
10	0.62	0.64	0.52	0.42	0.33	0.67	0.54	0.43	0.35	0.71	0.57	0.45	0.36	0.74	0.60	0.47	0.36	10
12	0.67	0.68	0.55	0.43	0.34	0.72	0.57	0.44	0.35	0.76	0.60	0.47	0.36	0.80	0.63	0.49	0.37	12
14	0.72	0.75	0.58	0.45	0.34	0.79	0.61	0.47	0.36	0.84	0.65	0.50	0.38	0.89	0.68	0.52	0.39	14
16	0.79	0.82	0.62	0.47	0.36	0.87	0.66	0.51	0.38	0.93	0.70	0.53	0.40	0.98	0.75	0.56	0.42	16
18	0.88	0.90	0.68	0.51	0.38	0.96	0.73	0.54	0.40	1.00	0.77	0.58	0.43	1.00	0.82	0.61	0.44	18
20	0.96	0.99	0.74	0.55	0.41	1.00	0.79	0.59	0.44	1.00	0.84	0.62	0.45	1.00	0.89	0.66	0.49	20
24	1.00	1.00	0.87	0.64	0.47	1.00	0.93	0.68	0.50	1.00	1.00	0.74	0.54	1.00	1.00	0.79	0.57	24

HYDROLOGIC GROUP D EI = 60

Pc SUBFACTOR - CONTOUR

Cover Mgt. Code	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	Cover Mgt. Code
Ridge Height	V Low	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	Ridge Height
Slope																		Slope
2	0.68	0.67	0.62	0.58	0.56	0.68	0.63	0.59	0.56	0.70	0.65	0.60	0.57	0.72	0.66	0.60	0.57	2
4	0.64	0.62	0.53	0.45	0.39	0.64	0.54	0.46	0.39	0.67	0.57	0.47	0.40	0.68	0.58	0.48	0.41	4
6	0.64	0.63	0.53	0.43	0.35	0.64	0.53	0.44	0.36	0.67	0.56	0.46	0.36	0.69	0.57	0.46	0.37	6
8	0.68	0.67	0.54	0.44	0.35	0.68	0.56	0.45	0.36	0.71	0.58	0.46	0.36	0.74	0.60	0.47	0.37	8
10	0.74	0.72	0.58	0.46	0.36	0.74	0.60	0.47	0.36	0.78	0.62	0.49	0.38	0.79	0.64	0.50	0.38	10
12	0.80	0.79	0.62	0.48	0.36	0.80	0.63	0.49	0.37	0.84	0.67	0.51	0.39	0.86	0.68	0.52	0.40	12
14	0.89	0.86	0.67	0.51	0.38	0.89	0.68	0.52	0.39	0.93	0.72	0.55	0.41	0.95	0.74	0.56	0.42	14
16	0.98	0.95	0.72	0.55	0.41	0.98	0.75	0.56	0.42	1.00	0.79	0.59	0.43	1.00	0.81	0.61	0.44	16
18	1.00	1.00	0.79	0.59	0.43	1.00	0.82	0.61	0.44	1.00	0.87	0.64	0.47	1.00	0.89	0.66	0.48	18
20	1.00	1.00	0.87	0.64	0.47	1.00	0.89	0.66	0.49	1.00	0.95	0.71	0.51	1.00	0.97	0.72	0.53	20
24	1.00	1.00	1.00	0.76	0.56	1.00	1.00	0.79	0.57	1.00	1.00	0.84	0.61	1.00	1.00	0.86	0.63	24

TABLE 3

HYDROLOGIC GROUP A

EI = 70

Technical Guide, Section I Erosion Control

Pc SUBFACTOR - CONTOUR

Cover Mgt. Code	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	Cover Mgt. Code
Ridge Height	V Low	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	Ridge Height
Slope																		Slope
2	0.61	0.61	0.46	0.46	0.49	0.61	0.46	0.47	0.50	0.61	0.48	0.49	0.50	0.61	0.50	0.50	0.51	2
4	0.61	0.61	0.46	0.34	0.30	0.61	0.46	0.34	0.30	0.61	0.46	0.34	0.32	0.61	0.46	0.35	0.33	4
6	0.61	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	6
8	0.61	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	8
10	0.61	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	0.61	0.46	0.34	0.29	10
12	0.60	0.60	0.44	0.32	0.27	0.60	0.44	0.32	0.27	0.60	0.44	0.32	0.28	0.60	0.44	0.34	0.28	12
14	0.59	0.59	0.43	0.31	0.25	0.59	0.43	0.31	0.25	0.59	0.43	0.32	0.27	0.59	0.43	0.34	0.29	14
16	0.59	0.59	0.42	0.30	0.24	0.59	0.42	0.30	0.25	0.59	0.42	0.33	0.28	0.59	0.45	0.36	0.29	16
18	0.58	0.58	0.42	0.29	0.25	0.58	0.42	0.29	0.25	0.58	0.43	0.34	0.28	0.61	0.48	0.38	0.30	18
20	0.58	0.58	0.41	0.29	0.26	0.58	0.41	0.29	0.26	0.58	0.45	0.36	0.29	0.66	0.50	0.39	0.31	20
24	0.57	0.57	0.40	0.31	0.28	0.57	0.40	0.33	0.28	0.68	0.50	0.39	0.32	0.78	0.57	0.45	0.34	24

HYDROLOGIC GROUP B

EI = 70

Pc SUBFACTOR - CONTOUR

Cover Mgt. Code	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	Cover Mgt. Code
Ridge Height	V Low	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	Ridge Height
Slope																		Slope
2	0.61	0.61	0.50	0.50	0.51	0.61	0.56	0.54	0.53	0.61	0.58	0.56	0.54	0.64	0.60	0.57	0.55	2
4	0.61	0.61	0.46	0.35	0.33	0.61	0.46	0.39	0.36	0.61	0.48	0.42	0.37	0.61	0.51	0.44	0.38	4
6	0.61	0.61	0.46	0.34	0.29	0.61	0.46	0.38	0.32	0.61	0.47	0.39	0.33	0.61	0.50	0.42	0.34	6
8	0.61	0.61	0.46	0.34	0.29	0.61	0.46	0.38	0.32	0.61	0.49	0.40	0.32	0.64	0.53	0.43	0.34	8
10	0.61	0.61	0.46	0.34	0.29	0.61	0.49	0.39	0.33	0.64	0.52	0.42	0.34	0.69	0.56	0.44	0.35	10
12	0.60	0.60	0.44	0.34	0.28	0.63	0.51	0.40	0.32	0.69	0.55	0.43	0.34	0.75	0.59	0.46	0.36	12
14	0.59	0.59	0.43	0.34	0.29	0.69	0.54	0.42	0.33	0.76	0.59	0.45	0.35	0.82	0.64	0.49	0.37	14
16	0.61	0.59	0.45	0.36	0.29	0.75	0.57	0.44	0.34	0.83	0.63	0.48	0.37	0.90	0.69	0.52	0.39	16
18	0.66	0.61	0.48	0.38	0.30	0.83	0.63	0.48	0.36	0.91	0.68	0.52	0.38	1.00	0.75	0.56	0.42	18
20	0.72	0.66	0.50	0.39	0.31	0.91	0.67	0.50	0.38	1.00	0.75	0.55	0.41	1.00	0.82	0.61	0.45	20
24	0.85	0.78	0.57	0.45	0.34	1.00	0.79	0.58	0.44	1.00	0.88	0.65	0.48	1.00	0.97	0.72	0.52	24

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

MODERATE RIDGES (3-4")

	Slope %																				
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.70	0.52	0.42	0.38	0.36	0.36	0.37	0.40	0.46	0.52	0.60	0.68	0.77	0.96	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.75	0.60	0.52	0.48	0.47	0.46	0.47	0.53	0.60	0.69	0.79	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.78	0.65	0.58	0.54	0.53	0.53	0.54	0.60	0.69	0.79	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.80	0.68	0.61	0.58	0.57	0.57	0.58	0.65	0.74	0.85	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6")

	Slope %																				
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.67	0.46	0.33	0.26	0.23	0.22	0.21	0.23	0.27	0.32	0.37	0.43	0.50	0.65	0.81	0.99	1.00	1.00	1.00	1.00
B	1.00	0.70	0.51	0.39	0.32	0.29	0.28	0.28	0.31	0.36	0.43	0.51	0.60	0.70	0.92	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.72	0.53	0.42	0.36	0.33	0.32	0.32	0.35	0.42	0.50	0.60	0.71	0.83	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.73	0.55	0.44	0.38	0.35	0.34	0.34	0.38	0.45	0.55	0.66	0.78	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6")

	Slope %																				
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.62	0.37	0.22	0.14	0.10	0.08	0.08	0.09	0.12	0.15	0.18	0.22	0.27	0.37	0.47	0.59	0.71	0.83	0.99	1.00
B	1.00	0.63	0.39	0.24	0.16	0.12	0.11	0.10	0.12	0.16	0.20	0.26	0.32	0.39	0.53	0.69	0.86	1.00	1.00	1.00	1.00
C	1.00	0.63	0.40	0.25	0.17	0.13	0.12	0.12	0.14	0.19	0.24	0.31	0.38	0.47	0.65	0.84	1.00	1.00	1.00	1.00	1.00
D	1.00	0.64	0.40	0.26	0.18	0.14	0.13	0.13	0.15	0.20	0.27	0.34	0.43	0.52	0.72	0.94	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

10-YEAR STORM EI=110.00
COVER-MANAGEMENT CONDITION--1

VERY LOW RIDGES (0.5-2")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
B	1.00	0.62	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.52	0.59	0.67	0.75	0.84	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.77	0.66	0.62	0.61	0.61	0.63	0.68	0.76	0.85	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.86	0.79	0.77	0.76	0.76	0.78	0.83	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.49	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.34	0.40	0.47
B	1.00	0.63	0.42	0.32	0.30	0.30	0.30	0.30	0.32	0.36	0.41	0.46	0.51	0.57	0.70	0.84	0.99	1.00	1.00	1.00	1.00
C	1.00	0.72	0.57	0.50	0.48	0.47	0.47	0.50	0.55	0.62	0.70	0.79	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.78	0.67	0.61	0.59	0.58	0.58	0.62	0.68	0.77	0.86	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.54	0.26	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.18	0.23	0.28	0.33	0.39	0.46
B	1.00	0.63	0.40	0.28	0.22	0.20	0.19	0.20	0.21	0.24	0.27	0.30	0.34	0.38	0.47	0.56	0.66	0.77	0.88	1.00	1.00
C	1.00	0.69	0.50	0.40	0.35	0.33	0.32	0.33	0.37	0.41	0.47	0.54	0.61	0.69	0.87	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.73	0.56	0.47	0.42	0.41	0.40	0.41	0.46	0.52	0.60	0.69	0.78	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.32	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.12	0.17	0.22	0.27	0.32	0.38	0.45
B	1.00	0.63	0.39	0.25	0.17	0.13	0.12	0.12	0.12	0.14	0.16	0.18	0.21	0.24	0.30	0.36	0.44	0.51	0.59	0.69	0.79
C	1.00	0.67	0.45	0.32	0.24	0.21	0.20	0.19	0.21	0.24	0.28	0.33	0.39	0.45	0.57	0.72	0.87	1.00	1.00	1.00	1.00
D	1.00	0.69	0.48	0.36	0.29	0.26	0.25	0.24	0.27	0.31	0.37	0.43	0.51	0.59	0.77	0.96	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.32	0.15	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.08	0.12	0.17	0.22	0.27	0.32	0.38	0.45
B	1.00	0.60	0.34	0.19	0.10	0.06	0.05	0.05	0.05	0.06	0.07	0.09	0.10	0.12	0.16	0.20	0.25	0.30	0.35	0.41	0.48
C	1.00	0.62	0.36	0.21	0.13	0.09	0.08	0.07	0.08	0.10	0.13	0.16	0.20	0.24	0.32	0.42	0.51	0.62	0.73	0.86	1.00
D	1.00	0.62	0.38	0.23	0.15	0.11	0.09	0.09	0.11	0.14	0.17	0.22	0.27	0.32	0.44	0.57	0.71	0.85	1.00	1.00	1.00

10-YEAR STORM EI=110.00
COVER-MANAGEMENT CONDITION--2

VERY LOW RIDGES (0.5-2")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.51	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.54	0.63	0.72	0.82	0.94	1.00
B	1.00	0.71	0.58	0.52	0.51	0.51	0.52	0.57	0.64	0.73	0.83	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.86	0.79	0.77	0.76	0.76	0.78	0.83	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.93	0.89	0.88	0.88	0.88	0.89	0.92	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.55	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.35	0.41	0.47	0.53	0.61	0.69
B	1.00	0.68	0.51	0.43	0.40	0.39	0.39	0.42	0.46	0.52	0.59	0.66	0.74	0.83	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.78	0.67	0.61	0.59	0.58	0.58	0.62	0.68	0.77	0.86	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.83	0.74	0.69	0.68	0.67	0.67	0.71	0.78	0.86	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.58	0.33	0.19	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.17	0.21	0.25	0.29	0.34	0.39	0.45	0.51
B	1.00	0.66	0.46	0.35	0.30	0.28	0.27	0.28	0.30	0.34	0.39	0.44	0.50	0.56	0.70	0.85	1.00	1.00	1.00	1.00	1.00
C	1.00	0.73	0.56	0.47	0.42	0.41	0.40	0.41	0.46	0.52	0.60	0.69	0.78	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.75	0.60	0.52	0.48	0.47	0.46	0.48	0.53	0.60	0.69	0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

HIGH RIDGES (4-6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.35	0.20	0.11	0.08	0.08	0.08	0.08	0.08	0.08	0.10	0.11	0.13	0.17	0.21	0.26	0.31	0.35	0.42	0.48
B	1.00	0.65	0.43	0.29	0.21	0.18	0.17	0.16	0.18	0.20	0.23	0.27	0.31	0.36	0.46	0.57	0.68	0.81	0.93	1.00	1.00
C	1.00	0.69	0.48	0.36	0.29	0.26	0.25	0.24	0.27	0.31	0.37	0.43	0.51	0.59	0.77	0.96	1.00	1.00	1.00	1.00	1.00
D	1.00	0.70	0.51	0.39	0.32	0.29	0.28	0.28	0.31	0.36	0.43	0.51	0.61	0.71	0.93	1.00	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.33	0.17	0.08	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.08	0.10	0.14	0.18	0.23	0.28	0.33	0.40	0.46
B	1.00	0.61	0.36	0.20	0.12	0.08	0.06	0.06	0.07	0.09	0.11	0.13	0.16	0.19	0.25	0.32	0.40	0.48	0.56	0.67	0.77
C	1.00	0.62	0.38	0.23	0.15	0.11	0.09	0.09	0.11	0.14	0.17	0.22	0.27	0.32	0.44	0.57	0.71	0.85	1.00	1.00	1.00
D	1.00	0.63	0.39	0.24	0.16	0.12	0.11	0.10	0.12	0.16	0.21	0.26	0.32	0.39	0.54	0.70	0.87	1.00	1.00	1.00	1.00

10-YEAR STORM EI=110.00

COVER-MANAGEMENT CONDITION--3

VERY LOW RIDGES (0.5-2")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.58	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.54	0.60	0.68	0.83	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.75	0.63	0.58	0.57	0.57	0.58	0.64	0.71	0.81	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.87	0.81	0.79	0.79	0.79	0.80	0.85	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.94	0.91	0.90	0.90	0.90	0.91	0.94	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.38	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.33	0.37	0.41	0.45	0.55	0.66	0.78	0.90	1.00	1.00	1.00
B	1.00	0.71	0.55	0.47	0.44	0.44	0.44	0.46	0.51	0.58	0.65	0.74	0.83	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.79	0.68	0.63	0.61	0.60	0.60	0.64	0.70	0.79	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.84	0.75	0.71	0.69	0.69	0.69	0.73	0.80	0.88	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.38	0.25	0.18	0.16	0.16	0.16	0.17	0.19	0.21	0.24	0.27	0.30	0.36	0.44	0.51	0.60	0.68	0.78	0.89
B	1.00	0.68	0.48	0.38	0.33	0.31	0.30	0.31	0.34	0.38	0.44	0.50	0.57	0.64	0.80	0.97	1.00	1.00	1.00	1.00	1.00
C	1.00	0.73	0.57	0.48	0.44	0.42	0.42	0.43	0.47	0.54	0.62	0.71	0.81	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.76	0.61	0.53	0.49	0.48	0.48	0.49	0.54	0.62	0.71	0.82	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.62	0.38	0.23	0.15	0.11	0.10	0.09	0.10	0.11	0.13	0.14	0.16	0.18	0.23	0.28	0.34	0.39	0.45	0.52	0.60
B	1.00	0.66	0.44	0.31	0.23	0.20	0.18	0.18	0.20	0.23	0.26	0.31	0.36	0.41	0.53	0.65	0.79	0.93	1.00	1.00	1.00
C	1.00	0.69	0.49	0.36	0.30	0.26	0.25	0.25	0.27	0.32	0.38	0.45	0.53	0.61	0.80	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.70	0.51	0.39	0.33	0.30	0.29	0.29	0.32	0.37	0.45	0.53	0.63	0.73	0.96	1.00	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.34	0.18	0.09	0.05	0.05	0.05	0.05	0.05	0.06	0.08	0.09	0.11	0.15	0.20	0.24	0.29	0.34	0.40	0.47
B	1.00	0.61	0.36	0.21	0.13	0.09	0.07	0.07	0.08	0.10	0.12	0.15	0.18	0.22	0.29	0.38	0.47	0.56	0.66	0.78	0.90
C	1.00	0.62	0.38	0.23	0.15	0.11	0.10	0.09	0.11	0.14	0.18	0.22	0.28	0.33	0.46	0.59	0.74	0.89	1.00	1.00	1.00
D	1.00	0.63	0.39	0.24	0.16	0.12	0.11	0.11	0.13	0.16	0.21	0.27	0.33	0.40	0.56	0.73	0.91	1.00	1.00	1.00	1.00

10-YEAR STORM EI=110.00

COVER-MANAGEMENT CONDITION--4

VERY LOW RIDGES (0.5-2")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.57	0.64	0.72	0.88	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.78	0.68	0.64	0.63	0.63	0.65	0.70	0.78	0.88	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.90	0.85	0.84	0.83	0.83	0.84	0.89	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.96	0.93	0.93	0.93	0.92	0.93	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.39	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.35	0.39	0.43	0.48	0.59	0.71	0.83	0.96	1.00	1.00	1.00
B	1.00	0.73	0.59	0.52	0.49	0.49	0.48	0.52	0.57	0.64	0.73	0.82	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.81	0.71	0.66	0.64	0.64	0.64	0.67	0.74	0.83	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.85	0.76	0.73	0.71	0.71	0.71	0.74	0.81	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.62	0.38	0.25	0.19	0.17	0.17	0.17	0.18	0.20	0.23	0.25	0.28	0.32	0.39	0.47	0.55	0.64	0.73	0.84	0.95
B	1.00	0.69	0.51	0.41	0.36	0.34	0.34	0.34	0.38	0.43	0.49	0.56	0.64	0.72	0.90	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.74	0.59	0.50	0.46	0.44	0.44	0.45	0.50	0.57	0.66	0.75	0.86	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.76	0.62	0.54	0.51	0.49	0.49	0.50	0.56	0.64	0.73	0.84	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.63	0.38	0.24	0.15	0.12	0.10	0.10	0.11	0.12	0.13	0.15	0.17	0.20	0.25	0.30	0.36	0.42	0.48	0.56	0.64
B	1.00	0.67	0.45	0.32	0.25	0.22	0.20	0.20	0.22	0.25	0.30	0.35	0.40	0.46	0.60	0.75	0.91	1.00	1.00	1.00	1.00
C	1.00	0.69	0.50	0.38	0.31	0.28	0.27	0.26	0.29	0.34	0.41	0.48	0.57	0.66	0.86	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.71	0.52	0.40	0.34	0.31	0.30	0.29	0.33	0.38	0.46	0.55	0.65	0.76	1.00	1.00	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.34	0.18	0.10	0.06	0.05	0.05	0.05	0.05	0.06	0.08	0.10	0.11	0.15	0.20	0.24	0.29	0.34	0.41	0.47
B	1.00	0.62	0.37	0.21	0.13	0.09	0.08	0.07	0.09	0.11	0.14	0.17	0.21	0.25	0.34	0.44	0.54	0.65	0.76	0.90	1.00
C	1.00	0.63	0.38	0.23	0.15	0.12	0.10	0.10	0.12	0.15	0.19	0.24	0.30	0.36	0.49	0.64	0.80	0.97	1.00	1.00	1.00
D	1.00	0.63	0.39	0.24	0.16	0.13	0.11	0.11	0.13	0.17	0.22	0.28	0.35	0.42	0.58	0.75	0.94	1.00	1.00	1.00	1.00

10-YEAR STORM EI=110.00
COVER-MANAGEMENT CONDITION--5

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.66	0.50	0.50	0.50	0.50	0.50	0.50	0.53	0.60	0.68	0.77	0.87	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.82	0.74	0.71	0.70	0.70	0.71	0.77	0.85	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.93	0.89	0.88	0.88	0.88	0.89	0.92	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.98	0.98	0.97	0.97	0.97	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.65	0.45	0.36	0.33	0.32	0.32	0.34	0.37	0.42	0.47	0.53	0.60	0.67	0.82	0.98	1.00	1.00	1.00	1.00	1.00
B	1.00	0.76	0.63	0.56	0.54	0.53	0.53	0.57	0.63	0.70	0.80	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.83	0.74	0.69	0.68	0.67	0.67	0.71	0.78	0.86	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.87	0.79	0.76	0.75	0.74	0.74	0.78	0.85	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.64	0.42	0.30	0.25	0.23	0.22	0.23	0.25	0.28	0.31	0.35	0.40	0.44	0.55	0.66	0.79	0.91	1.00	1.00	1.00
B	1.00	0.71	0.53	0.44	0.39	0.37	0.37	0.38	0.42	0.47	0.54	0.62	0.71	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.75	0.60	0.52	0.48	0.47	0.46	0.48	0.53	0.60	0.69	0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.78	0.64	0.57	0.53	0.52	0.52	0.53	0.59	0.67	0.77	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.64	0.41	0.26	0.19	0.15	0.14	0.13	0.14	0.16	0.18	0.21	0.24	0.28	0.35	0.44	0.52	0.61	0.71	0.83	0.95
B	1.00	0.68	0.47	0.34	0.27	0.24	0.22	0.22	0.24	0.28	0.33	0.39	0.45	0.52	0.68	0.85	1.00	1.00	1.00	1.00	1.00
C	1.00	0.70	0.51	0.39	0.32	0.29	0.28	0.28	0.31	0.36	0.43	0.51	0.61	0.71	0.93	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.71	0.53	0.41	0.35	0.32	0.31	0.31	0.34	0.41	0.49	0.58	0.69	0.81	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

VERY HIGH RIDGES (>6")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50	
A	1.00	0.61	0.35	0.19	0.11	0.07	0.05	0.05	0.06	0.07	0.08	0.10	0.12	0.14	0.19	0.25	0.30	0.36	0.42	0.50	0.58	
B	1.00	0.62	0.37	0.22	0.14	0.10	0.09	0.08	0.10	0.12	0.15	0.19	0.24	0.28	0.39	0.50	0.62	0.75	0.88	1.00	1.00	
C	1.00	0.63	0.39	0.24	0.16	0.12	0.11	0.10	0.12	0.16	0.21	0.26	0.32	0.39	0.54	0.70	0.87	1.00	1.00	1.00	1.00	
D	1.00	0.63	0.39	0.25	0.17	0.13	0.12	0.11	0.14	0.18	0.24	0.30	0.37	0.45	0.62	0.82	1.00	1.00	1.00	1.00	1.00	

10-YEAR STORM EI=110.00

COVER-MANAGEMENT CONDITION--6

VERY LOW RIDGES (0.5-2")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50	
A	1.00	0.69	0.54	0.50	0.50	0.50	0.50	0.53	0.60	0.68	0.77	0.87	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
B	1.00	0.86	0.79	0.77	0.76	0.76	0.78	0.83	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
C	1.00	0.96	0.93	0.93	0.93	0.92	0.93	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
D	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

LOW RIDGES (2-3")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50	
A	1.00	0.67	0.49	0.40	0.37	0.36	0.36	0.38	0.43	0.48	0.54	0.61	0.68	0.77	0.94	1.00	1.00	1.00	1.00	1.00	1.00	
B	1.00	0.78	0.67	0.61	0.59	0.58	0.58	0.62	0.68	0.77	0.86	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
C	1.00	0.85	0.76	0.73	0.71	0.71	0.71	0.74	0.81	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
D	1.00	0.88	0.81	0.78	0.77	0.76	0.76	0.80	0.87	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

MODERATE RIDGES (3-4")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50	
A	1.00	0.65	0.45	0.33	0.28	0.26	0.25	0.26	0.28	0.31	0.36	0.40	0.46	0.51	0.64	0.77	0.92	1.00	1.00	1.00	1.00	
B	1.00	0.73	0.56	0.47	0.42	0.41	0.40	0.41	0.46	0.52	0.60	0.69	0.78	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
C	1.00	0.76	0.62	0.54	0.51	0.49	0.49	0.50	0.56	0.64	0.73	0.84	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
D	1.00	0.78	0.65	0.58	0.54	0.53	0.53	0.54	0.60	0.69	0.79	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

HIGH RIDGES (4-6")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50	
A	1.00	0.65	0.42	0.28	0.20	0.17	0.15	0.15	0.16	0.18	0.21	0.25	0.28	0.32	0.41	0.51	0.62	0.73	0.84	0.98	1.00	
B	1.00	0.69	0.48	0.36	0.29	0.26	0.25	0.24	0.27	0.31	0.37	0.43	0.51	0.59	0.77	0.96	1.00	1.00	1.00	1.00	1.00	
C	1.00	0.71	0.52	0.40	0.34	0.31	0.30	0.29	0.33	0.38	0.46	0.55	0.65	0.76	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
D	1.00	0.72	0.53	0.42	0.36	0.33	0.32	0.32	0.35	0.42	0.50	0.60	0.71	0.84	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

VERY HIGH RIDGES (>6")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50	
A	1.00	0.61	0.35	0.20	0.11	0.07	0.06	0.06	0.06	0.08	0.10	0.12	0.14	0.17	0.23	0.29	0.36	0.43	0.50	0.60	0.69	
B	1.00	0.62	0.38	0.23	0.15	0.11	0.09	0.09	0.11	0.14	0.17	0.22	0.27	0.32	0.44	0.57	0.71	0.85	1.00	1.00	1.00	
C	1.00	0.63	0.39	0.24	0.16	0.13	0.11	0.11	0.13	0.17	0.22	0.28	0.35	0.42	0.58	0.75	0.94	1.00	1.00	1.00	1.00	
D	1.00	0.63	0.40	0.25	0.17	0.13	0.12	0.12	0.14	0.19	0.24	0.31	0.39	0.47	0.65	0.85	1.00	1.00	1.00	1.00	1.00	

10-YEAR STORM EI=110.00

COVER-MANAGEMENT CONDITION--7

VERY LOW RIDGES (0.5-2")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50	
A	1.00	0.85	0.77	0.75	0.74	0.74	0.75	0.81	0.89	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
B	1.00	0.97	0.96	0.95	0.95	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
C	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
D	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

LOW RIDGES (2-3")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50	
A	1.00	0.78	0.65	0.59	0.57	0.57	0.57	0.60	0.66	0.75	0.84	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
B	1.00	0.86	0.78	0.74	0.73	0.73	0.73	0.76	0.83	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
C	1.00	0.91	0.86	0.83	0.82	0.82	0.82	0.85	0.91	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
D	1.00	0.94	0.90	0.89	0.88	0.88	0.88	0.91	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

MODERATE RIDGES (3-4")

	Slope %																				
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.72	0.55	0.46	0.41	0.40	0.39	0.40	0.45	0.51	0.58	0.66	0.76	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.77	0.63	0.56	0.52	0.51	0.50	0.52	0.57	0.65	0.75	0.87	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.80	0.68	0.61	0.58	0.57	0.57	0.58	0.65	0.74	0.85	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.82	0.71	0.65	0.62	0.61	0.61	0.62	0.69	0.79	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6")

	Slope %																				
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.68	0.48	0.35	0.28	0.25	0.24	0.24	0.26	0.30	0.35	0.42	0.49	0.57	0.74	0.93	1.00	1.00	1.00	1.00	1.00
B	1.00	0.71	0.52	0.41	0.34	0.32	0.30	0.30	0.34	0.40	0.47	0.57	0.67	0.78	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.73	0.55	0.44	0.38	0.35	0.34	0.34	0.38	0.46	0.55	0.66	0.79	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.74	0.57	0.46	0.40	0.38	0.37	0.36	0.41	0.49	0.60	0.72	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6")

	Slope %																				
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.62	0.37	0.23	0.14	0.11	0.09	0.09	0.10	0.13	0.17	0.21	0.26	0.31	0.42	0.54	0.68	0.82	0.96	1.00	1.00
B	1.00	0.63	0.39	0.25	0.17	0.13	0.12	0.11	0.13	0.18	0.23	0.29	0.36	0.43	0.60	0.78	0.98	1.00	1.00	1.00	1.00
C	1.00	0.64	0.40	0.26	0.18	0.14	0.13	0.13	0.15	0.20	0.27	0.34	0.43	0.52	0.72	0.95	1.00	1.00	1.00	1.00	1.00
D	1.00	0.64	0.41	0.27	0.19	0.15	0.14	0.14	0.17	0.22	0.29	0.38	0.47	0.58	0.81	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

10-YEAR STORM EI=120.00
COVER-MANAGEMENT CONDITION--1

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
B	1.00	0.65	0.50	0.50	0.50	0.50	0.50	0.50	0.52	0.59	0.67	0.76	0.85	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.81	0.72	0.68	0.68	0.68	0.69	0.74	0.82	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1 00
D	1.00	0.90	0.85	0.84	0.83	0.83	0.84	0.89	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.49	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.34	0.41	0.47
B	1.00	0.64	0.45	0.36	0.32	0.32	0.31	0.33	0.37	0.41	0.47	0.52	0.5[illegible]	0.66	0.81	0.97	1.00	1.00	1.00	1.00	1.00
C	1.00	0.75	0.61	0.55	0.52	0.52	0.52	0.55	0.61	0.68	0.77	0.87	0.9[illegible]	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.81	0.71	0.66	0.64	0.64	0.64	0.67	0.74	0.83	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.54	0.27	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.18	0.23	0.28	0.33	0.40	0.46
B	1.00	0.64	0.42	0.30	0.24	0.22	0.22	0.22	0.24	0.27	0.31	0.35	0.39	0.44	0.54	0.65	0.77	0.90	1.00	1.00	1.00
C	1.00	0.70	0.52	0.43	0.38	0.36	0.36	0.37	0.40	0.46	0.52	0.60	0.68	0.77	0.97	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.74	0.59	0.50	0.46	0.44	0.44	0.45	0.50	0.57	0.66	0.75	0.86	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.32	0.16	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.13	0.17	0.22	0.27	0.32	0.39	0.45
B	1.00	0.64	0.40	0.26	0.18	0.15	0.13	0.13	0.14	0.16	0.18	0.21	0.24	0.27	0.35	0.43	0.51	0.60	0.69	0.81	0.93
C	1.00	0.67	0.46	0.33	0.26	0.23	0.22	0.21	0.23	0.27	0.32	0.37	0.44	0.50	0.65	0.82	0.99	1.00	1.00	1.00	1.00
D	1.00	0.69	0.50	0.38	0.31	0.28	0.27	0.26	0.29	0.34	0.41	0.48	0.57	0.66	0.86	1.00	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.32	0.15	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.08	0.12	0.17	0.22	0.27	0.32	0.38	0.45
B	1.00	0.61	0.35	0.19	0.11	0.07	0.05	0.05	0.05	0.07	0.08	0.10	0.12	0.14	0.19	0.24	0.30	0.35	0.41	0.49	0.57
C	1.00	0.62	0.37	0.22	0.14	0.10	0.08	0.08	0.09	0.12	0.15	0.18	0.23	0.27	0.37	0.48	0.59	0.71	0.83	0.99	1.00
D	1.00	0.63	0.38	0.23	0.15	0.12	0.10	0.10	0.12	0.15	0.19	0.24	0.30	0.36	0.50	0.64	0.80	0.97	1.00	1.00	1.00

10-YEAR STORM EI=120.00
COVER-MANAGEMENT CONDITION--2

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.53	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.55	0.66	0.77	0.88	1.00	1.00	1.00
B	1.00	0.75	0.62	0.58	0.57	0.57	0.58	0.64	0.71	0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.90	0.85	0.84	0.83	0.83	0.84	0.89	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.97	0.96	0.95	0.95	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.56	0.32	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.36	0.43	0.50	0.58	0.65	0.75	0.85
B	1.00	0.71	0.55	0.47	0.44	0.44	0.44	0.46	0.51	0.58	0.65	0.74	0.83	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.81	0.71	0.66	0.64	0.64	0.64	0.67	0.74	0.83	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.86	0.78	0.74	0.73	0.73	0.73	0.76	0.83	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.34	0.20	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.18	0.20	0.24	0.28	0.33	0.38	0.43	0.49	0.56
B	1.00	0.68	0.48	0.38	0.32	0.31	0.30	0.31	0.34	0.38	0.44	0.50	0.56	0.64	0.79	0.97	1.00	1.00	1.00	1.00	1.00
C	1.00	0.74	0.59	0.50	0.46	0.44	0.44	0.45	0.50	0.57	0.66	0.75	0.86	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.77	0.63	0.56	0.52	0.51	0.50	0.52	0.57	0.66	0.75	0.87	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.36	0.21	0.12	0.08	0.08	0.08	0.08	0.08	0.09	0.11	0.12	0.14	0.18	0.22	0.27	0.31	0.36	0.42	0.48
B	1.00	0.66	0.44	0.31	0.23	0.20	0.18	0.18	0.20	0.23	0.26	0.31	0.35	0.41	0.52	0.65	0.79	0.93	1.00	1.00	1.00
C	1.00	0.69	0.50	0.38	0.31	0.28	0.27	0.26	0.29	0.34	0.41	0.48	0.57	0.66	0.86	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.71	0.52	0.41	0.34	0.32	0.30	0.30	0.34	0.40	0.47	0.57	0.67	0.78	1.00	1.00	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.33	0.17	0.08	0.05	0.05	0.05	0.05	0.05	0.05	0.07	0.08	0.10	0.14	0.19	0.23	0.28	0.33	0.40	0.46
B	1.00	0.61	0.36	0.21	0.12	0.09	0.07	0.07	0.08	0.10	0.12	0.15	0.18	0.21	0.29	0.37	0.46	0.56	0.65	0.77	0.90
C	1.00	0.63	0.38	0.23	0.15	0.12	0.10	0.10	0.12	0.15	0.19	0.24	0.30	0.36	0.50	0.64	0.80	0.97	1.00	1.00	1.00
D	1.00	0.63	0.39	0.25	0.17	0.13	0.12	0.11	0.13	0.18	0.23	0.29	0.36	0.44	0.60	0.79	0.98	1.00	1.00	1.00	1.00

10-YEAR STORM EI=120.00
COVER-MANAGEMENT CONDITION--3

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.55	0.62	0.70	0.78	0.96	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.78	0.68	0.64	0.63	0.63	0.65	0.70	0.78	0.88	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.91	0.87	0.86	0.86	0.85	0.87	0.91	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.98	0.98	0.97	0.97	0.97	0.98	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.62	0.40	0.30	0.30	0.30	0.30	0.30	0.30	0.34	0.38	0.42	0.47	0.53	0.65	0.77	0.91	1.00	1.00	1.00	1.00
B	1.00	0.73	0.59	0.52	0.49	0.48	0.48	0.51	0.57	0.64	0.72	0.82	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.82	0.72	0.68	0.66	0.65	0.65	0.69	0.76	0.85	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.87	0.79	0.76	0.75	0.74	0.74	0.78	0.85	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.62	0.39	0.27	0.21	0.18	0.18	0.18	0.20	0.22	0.25	0.28	0.31	0.35	0.43	0.52	0.61	0.70	0.80	0.93	1.00
B	1.00	0.69	0.51	0.41	0.36	0.34	0.33	0.34	0.38	0.43	0.49	0.56	0.63	0.72	0.90	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.75	0.59	0.51	0.47	0.46	0.45	0.46	0.52	0.59	0.68	0.78	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.78	0.64	0.57	0.53	0.52	0.52	0.53	0.59	0.67	0.77	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.63	0.39	0.24	0.16	0.12	0.11	0.11	0.11	0.13	0.15	0.17	0.19	0.22	0.27	0.33	0.40	0.47	0.54	0.63	0.71
B	1.00	0.67	0.45	0.32	0.25	0.22	0.20	0.20	0.22	0.25	0.30	0.35	0.40	0.46	0.60	0.75	0.91	1.00	1.00	1.00	1.00
C	1.00	0.70	0.50	0.38	0.32	0.29	0.27	0.27	0.30	0.35	0.42	0.50	0.59	0.68	0.89	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.71	0.53	0.41	0.35	0.32	0.31	0.31	0.34	0.41	0.49	0.59	0.69	0.81	1.00	1.00	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.34	0.19	0.10	0.06	0.05	0.05	0.05	0.05	0.07	0.08	0.10	0.12	0.16	0.20	0.25	0.29	0.34	0.41	0.47
B	1.00	0.62	0.37	0.21	0.13	0.09	0.08	0.07	0.09	0.11	0.14	0.17	0.21	0.25	0.34	0.43	0.54	0.65	0.76	0.90	1.00
C	1.00	0.63	0.38	0.24	0.16	0.12	0.10	0.10	0.12	0.15	0.20	0.25	0.31	0.37	0.52	0.67	0.84	1.00	1.00	1.00	1.00
D	1.00	0.63	0.39	0.25	0.17	0.13	0.12	0.11	0.14	0.18	0.24	0.30	0.37	0.45	0.63	0.82	1.00	1.00	1.00	1.00	1.00

10-YEAR STORM EI=120.00
COVER-MANAGEMENT CONDITION--4

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.62	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.51	0.58	0.65	0.74	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.82	0.74	0.70	0.70	0.70	0.71	0.77	0.85	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.94	0.91	0.90	0.90	0.90	0.91	0.94	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

LOW RIDGES (2-3")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.62	0.42	0.32	0.30	0.30	0.30	0.30	0.32	0.35	0.40	0.45	0.50	0.56	0.69	0.82	0.97	1.00	1.00	1.00	1.00
B	1.00	0.76	0.62	0.56	0.54	0.53	0.53	0.57	0.63	0.70	0.79	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.84	0.75	0.71	0.69	0.69	0.69	0.73	0.80	0.88	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.88	0.81	0.78	0.77	0.76	0.76	0.80	0.87	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.63	0.40	0.27	0.22	0.19	0.19	0.19	0.21	0.23	0.26	0.29	0.33	0.37	0.45	0.55	0.65	0.75	0.86	0.99	1.00
B	1.00	0.71	0.53	0.44	0.39	0.37	0.37	0.38	0.42	0.47	0.54	0.62	0.71	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.76	0.61	0.53	0.49	0.48	0.48	0.49	0.54	0.62	0.71	0.82	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.78	0.65	0.58	0.54	0.53	0.53	0.54	0.60	0.69	0.79	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.63	0.39	0.25	0.17	0.13	0.12	0.11	0.12	0.14	0.15	0.18	0.20	0.23	0.29	0.36	0.43	0.50	0.57	0.67	0.77
B	1.00	0.68	0.47	0.34	0.27	0.24	0.22	0.22	0.24	0.28	0.33	0.39	0.45	0.52	0.68	0.85	1.00	1.00	1.00	1.00	1.00
C	1.00	0.70	0.51	0.39	0.33	0.30	0.29	0.29	0.32	0.37	0.45	0.53	0.63	0.73	0.96	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.72	0.53	0.42	0.36	0.33	0.32	0.32	0.35	0.42	0.50	0.60	0.72	0.84	1.00	1.00	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.34	0.19	0.10	0.06	0.05	0.05	0.05	0.06	0.07	0.08	0.10	0.12	0.16	0.20	0.25	0.30	0.35	0.41	0.47
B	1.00	0.62	0.37	0.22	0.14	0.10	0.09	0.08	0.10	0.12	0.15	0.19	0.23	0.28	0.38	0.50	0.62	0.74	0.87	1.00	1.00
C	1.00	0.63	0.39	0.24	0.16	0.12	0.11	0.11	0.13	0.16	0.21	0.27	0.33	0.40	0.56	0.73	0.91	1.00	1.00	1.00	1.00
D	1.00	0.63	0.40	0.25	0.17	0.13	0.12	0.12	0.14	0.19	0.24	0.31	0.39	0.47	0.65	0.85	1.00	1.00	1.00	1.00	1.00

10-YEAR STORM EI=120.00

COVER-MANAGEMENT CONDITION--5

VERY LOW RIDGES (0.5-2")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.69	0.54	0.50	0.50	0.50	0.50	0.53	0.59	0.67	0.76	0.86	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.86	0.79	0.77	0.76	0.76	0.78	0.83	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.97	0.96	0.95	0.95	0.95	0.95	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.67	0.48	0.40	0.37	0.36	0.36	0.38	0.42	0.47	0.53	0.60	0.68	0.76	0.93	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.78	0.67	0.61	0.59	0.58	0.58	0.62	0.68	0.77	0.86	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.86	0.78	0.74	0.73	0.73	0.73	0.76	0.83	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.90	0.84	0.81	0.80	0.80	0.80	0.84	0.90	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.65	0.44	0.33	0.27	0.25	0.25	0.25	0.28	0.31	0.35	0.40	0.45	0.51	0.63	0.76	0.91	1.00	1.00	1.00	1.00
B	1.00	0.73	0.56	0.47	0.42	0.41	0.40	0.41	0.46	0.52	0.60	0.69	0.78	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.77	0.63	0.56	0.52	0.51	0.50	0.52	0.57	0.66	0.75	0.87	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.79	0.67	0.60	0.57	0.56	0.55	0.57	0.63	0.72	0.83	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.65	0.42	0.28	0.20	0.17	0.15	0.15	0.16	0.18	0.21	0.24	0.28	0.32	0.41	0.51	0.61	0.72	0.83	0.97	1.00
B	1.00	0.69	0.48	0.36	0.29	0.26	0.25	0.24	0.27	0.31	0.37	0.43	0.51	0.59	0.77	0.96	1.00	1.00	1.00	1.00	1.00
C	1.00	0.71	0.52	0.41	0.34	0.32	0.30	0.30	0.34	0.40	0.47	0.57	0.67	0.78	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.72	0.54	0.43	0.37	0.35	0.34	0.33	0.37	0.44	0.53	0.64	0.76	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.35	0.20	0.11	0.07	0.06	0.06	0.06	0.08	0.10	0.12	0.14	0.17	0.22	0.29	0.35	0.42	0.50	0.59	0.68
B	1.00	0.62	0.38	0.23	0.15	0.11	0.09	0.09	0.11	0.14	0.17	0.22	0.27	0.32	0.44	0.57	0.71	0.85	1.00	1.00	1.00
C	1.00	0.63	0.39	0.25	0.17	0.13	0.12	0.11	0.13	0.18	0.23	0.29	0.36	0.44	0.60	0.79	0.98	1.00	1.00	1.00	1.00
D	1.00	0.64	0.40	0.26	0.18	0.14	0.13	0.12	0.15	0.20	0.26	0.33	0.41	0.50	0.70	0.91	1.00	1.00	1.00	1.00	1.00

10-YEAR STORM EI=120.00

COVER-MANAGEMENT CONDITION--6

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.72	0.59	0.54	0.53	0.53	0.54	0.59	0.66	0.75	0.85	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.90	0.85	0.84	0.83	0.83	0.84	0.89	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.69	0.52	0.44	0.41	0.40	0.40	0.43	0.48	0.53	0.60	0.68	0.77	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.81	0.71	0.66	0.64	0.64	0.64	0.67	0.74	0.83	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.88	0.81	0.78	0.77	0.76	0.76	0.80	0.87	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.91	0.86	0.83	0.82	0.82	0.82	0.85	0.91	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.67	0.47	0.36	0.30	0.28	0.28	0.29	0.31	0.35	0.40	0.46	0.52	0.58	0.73	0.88	1.00	1.00	1.00	1.00	1.00
B	1.00	0.74	0.59	0.50	0.46	0.44	0.44	0.45	0.50	0.57	0.66	0.75	0.86	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.78	0.65	0.58	0.54	0.53	0.53	0.54	0.60	0.69	0.79	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.80	0.68	0.61	0.58	0.57	0.57	0.58	0.65	0.74	0.85	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.65	0.43	0.29	0.22	0.18	0.17	0.17	0.18	0.21	0.24	0.28	0.32	0.37	0.48	0.59	0.71	0.84	0.97	1.00	1.00
B	1.00	0.69	0.50	0.38	0.31	0.28	0.27	0.26	0.29	0.34	0.41	0.48	0.57	0.66	0.86	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.72	0.53	0.42	0.36	0.33	0.32	0.32	0.35	0.42	0.50	0.60	0.72	0.84	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.73	0.55	0.44	0.38	0.35	0.34	0.34	0.38	0.46	0.55	0.66	0.79	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.36	0.20	0.12	0.08	0.07	0.06	0.07	0.09	0.11	0.14	0.16	0.19	0.26	0.34	0.42	0.50	0.59	0.70	0.81
B	1.00	0.63	0.38	0.23	0.15	0.12	0.10	0.10	0.12	0.15	0.19	0.24	0.30	0.36	0.50	0.64	0.80	0.97	1.00	1.00	1.00
C	1.00	0.63	0.40	0.25	0.17	0.13	0.12	0.12	0.14	0.19	0.24	0.31	0.39	0.47	0.65	0.85	1.00	1.00	1.00	1.00	1.00
D	1.00	0.64	0.40	0.26	0.18	0.14	0.13	0.13	0.15	0.20	0.27	0.34	0.43	0.52	0.72	0.95	1.00	1.00	1.00	1.00	1.00

10-YEAR STORM EI=120.00

COVER-MANAGEMENT CONDITION--7

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.89	0.83	0.81	0.81	0.81	0.82	0.87	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.80	0.69	0.64	0.62	0.62	0.62	0.65	0.72	0.81	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.89	0.82	0.80	0.78	0.78	0.78	0.82	0.88	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.94	0.90	0.89	0.88	0.88	0.88	0.90	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.97	0.95	0.94	0.94	0.94	0.94	0.95	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

MODERATE RIDGES (3-4")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.74	0.58	0.49	0.45	0.43	0.43	0.44	0.49	0.55	0.64	0.73	0.83	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.79	0.66	0.59	0.56	0.54	0.54	0.56	0.62	0.71	0.81	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.82	0.71	0.65	0.62	0.61	0.61	0.62	0.69	0.79	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.84	0.74	0.69	0.66	0.65	0.65	0.67	0.74	0.84	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.69	0.49	0.37	0.30	0.27	0.26	0.26	0.28	0.33	0.39	0.46	0.55	0.63	0.83	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.72	0.54	0.43	0.37	0.34	0.33	0.32	0.36	0.43	0.52	0.62	0.74	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.74	0.56	0.46	0.40	0.38	0.37	0.36	0.41	0.49	0.60	0.72	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.75	0.58	0.48	0.43	0.40	0.39	0.39	0.44	0.53	0.65	0.79	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.62	0.38	0.23	0.15	0.11	0.10	0.10	0.11	0.14	0.19	0.23	0.29	0.35	0.48	0.62	0.77	0.93	1.00	1.00	1.00
B	1.00	0.64	0.40	0.25	0.17	0.14	0.12	0.12	0.15	0.19	0.25	0.32	0.40	0.48	0.67	0.88	1.00	1.00	1.00	1.00	1.00
C	1.00	0.64	0.41	0.27	0.19	0.15	0.14	0.14	0.17	0.22	0.29	0.38	0.47	0.58	0.81	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.64	0.41	0.27	0.20	0.16	0.15	0.14	0.18	0.24	0.32	0.42	0.52	0.64	0.89	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

10-YEAR STORM EI=70.00
COVER-MANAGEMENT CONDITION--1

VERY LOW RIDGES (0.5-2")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
B	1.00	0.51	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.56	0.65	0.75	0.85	0.98	1.00
C	1.00	0.62	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.51	0.58	0.66	0.74	0.83	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.69	0.54	0.50	0.50	0.50	0.50	0.53	0.60	0.68	0.77	0.88	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.48	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.33	0.40	0.46
B	1.00	0.55	0.31	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.37	0.43	0.49	0.55	0.63	0.72
C	1.00	0.62	0.42	0.32	0.30	0.30	0.30	0.30	0.32	0.36	0.40	0.45	0.51	0.56	0.69	0.83	0.97	1.00	1.00	1.00	1.00
D	1.00	0.67	0.49	0.40	0.37	0.37	0.36	0.39	0.43	0.48	0.54	0.61	0.69	0.77	0.95	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.54	0.26	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.18	0.22	0.27	0.33	0.39	0.46
B	1.00	0.58	0.33	0.19	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.17	0.21	0.25	0.30	0.34	0.39	0.45	0.51
C	1.00	0.63	0.40	0.28	0.22	0.19	0.19	0.19	0.21	0.23	0.26	0.30	0.33	0.37	0.46	0.55	0.65	0.76	0.86	1.00	1.00
D	1.00	0.66	0.45	0.33	0.28	0.26	0.25	0.26	0.28	0.32	0.36	0.41	0.46	0.52	0.64	0.78	0.93	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.32	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.12	0.17	0.21	0.27	0.32	0.38	0.45
B	1.00	0.61	0.35	0.20	0.12	0.08	0.08	0.08	0.08	0.08	0.08	0.10	0.11	0.13	0.17	0.21	0.26	0.31	0.36	0.42	0.48
C	1.00	0.63	0.39	0.25	0.17	0.13	0.12	0.11	0.12	0.14	0.16	0.18	0.20	0.23	0.29	0.36	0.43	0.50	0.58	0.67	0.77
D	1.00	0.65	0.42	0.28	0.20	0.17	0.15	0.15	0.16	0.19	0.21	0.25	0.29	0.33	0.42	0.52	0.62	0.73	0.85	0.99	1.00

VERY HIGH RIDGES (>6")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.32	0.15	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.08	0.12	0.17	0.21	0.27	0.32	0.38	0.45
B	1.00	0.59	0.33	0.17	0.08	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.08	0.10	0.14	0.18	0.23	0.28	0.33	0.40	0.46
C	1.00	0.60	0.34	0.19	0.10	0.06	0.05	0.05	0.05	0.06	0.07	0.08	0.10	0.12	0.16	0.20	0.25	0.30	0.35	0.41	0.47
D	1.00	0.61	0.35	0.20	0.11	0.07	0.06	0.06	0.06	0.08	0.10	0.12	0.14	0.17	0.23	0.29	0.36	0.43	0.51	0.60	0.70

10-YEAR STORM EI=70.00
COVER-MANAGEMENT CONDITION--2

VERY LOW RIDGES (0.5-2")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
B	1.00	0.58	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.51	0.58	0.64	0.79	0.95	1.00	1.00	1.00	1.00	1.00
C	1.00	0.69	0.54	0.50	0.50	0.50	0.50	0.53	0.60	0.68	0.77	0.88	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.75	0.63	0.58	0.57	0.57	0.58	0.64	0.71	0.81	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.51	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.32	0.36	0.43	0.49
B	1.00	0.59	0.37	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.35	0.39	0.43	0.53	0.63	0.74	0.85	0.96	1.00	1.00
C	1.00	0.67	0.49	0.40	0.37	0.37	0.36	0.39	0.43	0.48	0.54	0.61	0.69	0.77	0.95	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.71	0.55	0.47	0.44	0.44	0.44	0.46	0.51	0.58	0.65	0.74	0.83	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4")

	Slope %																					
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.55	0.28	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.20	0.25	0.30	0.35	0.41	0.47
B	1.00	0.61	0.37	0.24	0.18	0.16	0.15	0.15	0.16	0.18	0.20	0.23	0.25	0.28	0.35	0.42	0.49	0.56	0.64	0.74	0.84
C	1.00	0.66	0.45	0.33	0.28	0.26	0.25	0.26	0.28	0.32	0.36	0.41	0.46	0.52	0.64	0.78	0.93	1.00	1.00	1.00	1.00
D	1.00	0.68	0.48	0.38	0.33	0.31	0.30	0.31	0.34	0.38	0.44	0.50	0.57	0.64	0.80	0.97	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.33	0.17	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.10	0.14	0.18	0.23	0.28	0.33	0.39	0.46
B	1.00	0.62	0.38	0.23	0.15	0.11	0.09	0.09	0.10	0.11	0.12	0.14	0.15	0.17	0.22	0.27	0.32	0.37	0.43	0.50	0.56
C	1.00	0.65	0.42	0.28	0.20	0.17	0.15	0.15	0.16	0.19	0.21	0.25	0.29	0.33	0.42	0.52	0.62	0.73	0.85	0.99	1.00
D	1.00	0.66	0.44	0.31	0.23	0.20	0.18	0.18	0.20	0.23	0.26	0.31	0.36	0.41	0.53	0.65	0.79	0.93	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.32	0.16	0.07	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.07	0.09	0.13	0.17	0.22	0.27	0.32	0.39	0.45
B	1.00	0.60	0.34	0.18	0.09	0.05	0.05	0.05	0.05	0.05	0.06	0.08	0.09	0.11	0.15	0.19	0.24	0.29	0.34	0.40	0.47
C	1.00	0.61	0.35	0.20	0.11	0.07	0.06	0.06	0.06	0.08	0.10	0.12	0.14	0.17	0.23	0.29	0.36	0.43	0.51	0.60	0.70
D	1.00	0.61	0.36	0.21	0.13	0.09	0.07	0.07	0.08	0.10	0.12	0.15	0.18	0.22	0.29	0.38	0.47	0.56	0.66	0.78	0.90

10-YEAR STORM EI=70.00
COVER-MANAGEMENT CONDITION--3

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.53	0.60	0.69	0.78
B	1.00	0.60	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.53	0.60	0.67	0.75	0.93	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.70	0.56	0.51	0.50	0.50	0.51	0.55	0.62	0.71	0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.76	0.64	0.60	0.59	0.59	0.60	0.66	0.74	0.83	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.53	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.36	0.40	0.46	0.52
B	1.00	0.61	0.40	0.30	0.30	0.30	0.30	0.30	0.30	0.32	0.36	0.41	0.46	0.51	0.62	0.75	0.87	1.00	1.00	1.00	1.00
C	1.00	0.68	0.50	0.42	0.39	0.38	0.38	0.40	0.45	0.50	0.56	0.64	0.72	0.80	0.99	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.72	0.56	0.49	0.46	0.45	0.45	0.48	0.53	0.60	0.68	0.77	0.86	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.57	0.31	0.17	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.19	0.23	0.28	0.33	0.37	0.43	0.49
B	1.00	0.62	0.39	0.26	0.20	0.18	0.17	0.18	0.19	0.21	0.24	0.27	0.30	0.33	0.41	0.49	0.58	0.68	0.77	0.89	1.00
C	1.00	0.66	0.45	0.34	0.29	0.27	0.26	0.27	0.29	0.33	0.37	0.42	0.48	0.54	0.67	0.82	0.97	1.00	1.00	1.00	1.00
D	1.00	0.68	0.49	0.39	0.34	0.32	0.31	0.32	0.35	0.40	0.45	0.52	0.59	0.66	0.83	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.34	0.19	0.10	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.10	0.12	0.16	0.20	0.25	0.30	0.35	0.41	0.47
B	1.00	0.63	0.39	0.24	0.16	0.12	0.11	0.10	0.11	0.12	0.14	0.16	0.18	0.21	0.26	0.32	0.38	0.45	0.51	0.60	0.68
C	1.00	0.65	0.42	0.28	0.21	0.17	0.16	0.16	0.17	0.19	0.22	0.26	0.30	0.34	0.44	0.54	0.65	0.77	0.89	1.00	1.00
D	1.00	0.66	0.44	0.31	0.24	0.20	0.19	0.19	0.20	0.24	0.27	0.32	0.37	0.43	0.55	0.68	0.83	0.98	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.33	0.16	0.08	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.08	0.09	0.14	0.18	0.23	0.28	0.33	0.39	0.46
B	1.00	0.60	0.34	0.18	0.10	0.06	0.05	0.05	0.05	0.05	0.07	0.08	0.10	0.12	0.15	0.20	0.25	0.29	0.34	0.41	0.47
C	1.00	0.61	0.36	0.20	0.12	0.08	0.06	0.06	0.07	0.08	0.10	0.12	0.15	0.18	0.24	0.31	0.38	0.46	0.54	0.63	0.73
D	1.00	0.61	0.36	0.21	0.13	0.09	0.07	0.07	0.08	0.10	0.13	0.16	0.19	0.23	0.31	0.40	0.49	0.59	0.69	0.82	0.95

10-YEAR STORM EI=70.00
COVER-MANAGEMENT CONDITION--4

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.51	0.58	0.66	0.76	0.85
B	1.00	0.63	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.53	0.61	0.69	0.78	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.72	0.59	0.54	0.53	0.53	0.54	0.60	0.67	0.76	0.86	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.77	0.66	0.62	0.61	0.61	0.63	0.68	0.76	0.85	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.54	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.33	0.38	0.43	0.49	0.55
B	1.00	0.63	0.43	0.33	0.30	0.30	0.30	0.30	0.33	0.37	0.42	0.47	0.53	0.59	0.72	0.87	1.00	1.00	1.00	1.00	1.00
C	1.00	0.69	0.52	0.44	0.41	0.41	0.41	0.43	0.48	0.54	0.61	0.69	0.77	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.72	0.57	0.50	0.47	0.47	0.47	0.50	0.55	0.62	0.70	0.79	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.57	0.32	0.17	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.20	0.24	0.28	0.33	0.38	0.44	0.50
B	1.00	0.63	0.41	0.28	0.22	0.20	0.20	0.20	0.22	0.25	0.28	0.31	0.35	0.39	0.48	0.58	0.69	0.80	0.91	1.00	1.00
C	1.00	0.67	0.47	0.36	0.31	0.29	0.28	0.29	0.32	0.36	0.41	0.46	0.52	0.59	0.73	0.89	1.00	1.00	1.00	1.00	1.00
D	1.00	0.69	0.50	0.40	0.35	0.33	0.32	0.33	0.37	0.41	0.47	0.54	0.61	0.69	0.86	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.35	0.19	0.10	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.10	0.12	0.16	0.20	0.25	0.30	0.35	0.41	0.47
B	1.00	0.63	0.40	0.25	0.17	0.14	0.12	0.12	0.13	0.14	0.16	0.19	0.21	0.24	0.31	0.38	0.45	0.53	0.61	0.71	0.82
C	1.00	0.66	0.43	0.30	0.22	0.19	0.17	0.17	0.18	0.21	0.24	0.28	0.33	0.37	0.48	0.60	0.72	0.85	0.98	1.00	1.00
D	1.00	0.67	0.45	0.32	0.24	0.21	0.20	0.19	0.21	0.24	0.28	0.33	0.39	0.44	0.57	0.72	0.87	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.33	0.17	0.08	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.08	0.10	0.14	0.18	0.23	0.28	0.33	0.39	0.46
B	1.00	0.60	0.35	0.19	0.10	0.06	0.05	0.05	0.05	0.06	0.07	0.09	0.11	0.12	0.17	0.21	0.26	0.31	0.36	0.43	0.50
C	1.00	0.61	0.36	0.20	0.12	0.08	0.07	0.06	0.07	0.09	0.11	0.14	0.17	0.20	0.27	0.34	0.42	0.51	0.59	0.70	0.81
D	1.00	0.62	0.36	0.21	0.13	0.09	0.08	0.07	0.08	0.10	0.13	0.16	0.20	0.24	0.32	0.41	0.51	0.62	0.72	0.86	1.00

10-YEAR STORM EI=70.00
COVER-MANAGEMENT CONDITION--5

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.54	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.58	0.69	0.81	0.94	1.00	1.00	1.00
B	1.00	0.66	0.50	0.50	0.50	0.50	0.50	0.50	0.53	0.61	0.69	0.78	0.88	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.75	0.63	0.58	0.57	0.57	0.58	0.64	0.71	0.81	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.80	0.70	0.66	0.66	0.65	0.67	0.72	0.80	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.57	0.33	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.32	0.39	0.46	0.53	0.61	0.70	0.80	0.90
B	1.00	0.65	0.46	0.37	0.33	0.32	0.32	0.34	0.38	0.43	0.48	0.54	0.61	0.68	0.83	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.71	0.55	0.47	0.44	0.44	0.44	0.46	0.51	0.58	0.65	0.74	0.83	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.74	0.60	0.53	0.51	0.50	0.50	0.53	0.59	0.66	0.75	0.85	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.34	0.21	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.17	0.19	0.21	0.25	0.30	0.35	0.40	0.46	0.53	0.60
B	1.00	0.64	0.43	0.31	0.25	0.23	0.22	0.23	0.25	0.28	0.32	0.36	0.40	0.45	0.56	0.68	0.80	0.93	1.00	1.00	1.00
C	1.00	0.68	0.48	0.38	0.33	0.31	0.30	0.31	0.34	0.38	0.44	0.50	0.57	0.64	0.80	0.97	1.00	1.00	1.00	1.00	1.00
D	1.00	0.70	0.52	0.42	0.37	0.35	0.35	0.36	0.39	0.44	0.51	0.58	0.66	0.75	0.93	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.36	0.21	0.13	0.09	0.08	0.08	0.08	0.08	0.10	0.11	0.13	0.14	0.18	0.22	0.27	0.32	0.36	0.42	0.49
B	1.00	0.64	0.41	0.27	0.19	0.15	0.14	0.13	0.14	0.16	0.19	0.22	0.25	0.28	0.36	0.44	0.53	0.63	0.72	0.84	0.97
C	1.00	0.66	0.44	0.31	0.23	0.20	0.18	0.18	0.20	0.23	0.26	0.31	0.36	0.41	0.53	0.65	0.79	0.93	1.00	1.00	1.00
D	1.00	0.67	0.46	0.33	0.26	0.22	0.21	0.21	0.23	0.26	0.31	0.36	0.42	0.48	0.63	0.78	0.95	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

VERY HIGH RIDGES (>6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.33	0.17	0.09	0.05	0.05	0.05	0.05	0.05	0.05	0.07	0.08	0.10	0.14	0.19	0.23	0.28	0.33	0.40	0.46
B	1.00	0.61	0.35	0.19	0.11	0.07	0.05	0.05	0.06	0.07	0.08	0.10	0.12	0.15	0.20	0.25	0.31	0.37	0.43	0.51	0.59
C	1.00	0.61	0.36	0.21	0.13	0.09	0.07	0.07	0.08	0.10	0.12	0.15	0.18	0.22	0.29	0.38	0.47	0.56	0.66	0.78	0.90
D	1.00	0.62	0.37	0.22	0.13	0.10	0.08	0.08	0.09	0.11	0.14	0.18	0.22	0.26	0.35	0.46	0.57	0.68	0.80	0.95	1.00

10-YEAR STORM EI=70.00

COVER-MANAGEMENT CONDITION--6

VERY LOW RIDGES (0.5-2")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.56	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.51	0.57	0.70	0.84	0.99	1.00	1.00	1.00	1.00
B	1.00	0.69	0.54	0.50	0.50	0.50	0.50	0.53	0.60	0.68	0.77	0.88	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.77	0.66	0.62	0.61	0.61	0.63	0.68	0.76	0.85	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.81	0.72	0.68	0.68	0.68	0.69	0.75	0.83	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.58	0.35	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.35	0.38	0.47	0.56	0.65	0.75	0.85	0.98	1.00
B	1.00	0.67	0.49	0.40	0.37	0.37	0.36	0.39	0.43	0.48	0.54	0.61	0.69	0.77	0.95	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.72	0.57	0.50	0.47	0.47	0.47	0.50	0.55	0.62	0.70	0.79	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.75	0.61	0.55	0.52	0.52	0.52	0.55	0.61	0.68	0.77	0.87	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.36	0.23	0.16	0.15	0.15	0.15	0.15	0.16	0.18	0.20	0.23	0.25	0.31	0.37	0.43	0.50	0.56	0.65	0.74
B	1.00	0.66	0.45	0.33	0.28	0.26	0.25	0.26	0.28	0.32	0.36	0.41	0.46	0.52	0.64	0.78	0.93	1.00	1.00	1.00	1.00
C	1.00	0.69	0.50	0.40	0.35	0.33	0.32	0.33	0.37	0.41	0.47	0.54	0.61	0.69	0.86	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.70	0.52	0.43	0.38	0.36	0.36	0.37	0.41	0.46	0.53	0.60	0.68	0.77	0.97	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.62	0.37	0.22	0.14	0.10	0.08	0.08	0.09	0.10	0.11	0.12	0.14	0.15	0.19	0.23	0.28	0.32	0.37	0.43	0.49
B	1.00	0.65	0.42	0.28	0.20	0.17	0.15	0.15	0.16	0.19	0.21	0.25	0.29	0.33	0.42	0.52	0.62	0.73	0.85	0.99	1.00
C	1.00	0.67	0.45	0.32	0.24	0.21	0.20	0.19	0.21	0.24	0.28	0.33	0.39	0.44	0.57	0.72	0.87	1.00	1.00	1.00	1.00
D	1.00	0.67	0.46	0.33	0.26	0.23	0.22	0.21	0.24	0.27	0.32	0.37	0.44	0.50	0.65	0.82	0.99	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.34	0.18	0.09	0.05	0.05	0.05	0.05	0.05	0.06	0.07	0.09	0.11	0.15	0.19	0.24	0.29	0.34	0.40	0.46
B	1.00	0.61	0.35	0.20	0.11	0.07	0.06	0.06	0.06	0.08	0.10	0.12	0.14	0.17	0.23	0.29	0.36	0.43	0.51	0.60	0.70
C	1.00	0.62	0.36	0.21	0.13	0.09	0.08	0.07	0.08	0.10	0.13	0.16	0.20	0.24	0.32	0.41	0.51	0.62	0.72	0.86	1.00
D	1.00	0.62	0.37	0.22	0.14	0.10	0.08	0.08	0.09	0.12	0.15	0.18	0.23	0.27	0.37	0.48	0.59	0.71	0.84	0.99	1.00

10-YEAR STORM EI=70.00

COVER-MANAGEMENT CONDITION--7

VERY LOW RIDGES (0.5-2")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.68	0.53	0.50	0.50	0.50	0.50	0.51	0.58	0.66	0.75	0.84	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.78	0.68	0.64	0.63	0.63	0.65	0.70	0.78	0.88	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.85	0.78	0.75	0.74	0.74	0.76	0.81	0.89	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.89	0.84	0.82	0.82	0.82	0.83	0.87	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.66	0.48	0.39	0.36	0.35	0.35	0.37	0.41	0.46	0.52	0.59	0.66	0.74	0.91	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.73	0.59	0.52	0.49	0.48	0.48	0.51	0.57	0.64	0.72	0.82	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.78	0.65	0.60	0.57	0.57	0.57	0.60	0.67	0.75	0.84	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.80	0.70	0.65	0.63	0.62	0.62	0.66	0.73	0.81	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

MODERATE RIDGES (3-4")

	Slope %																				
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.65	0.44	0.32	0.27	0.25	0.24	0.25	0.27	0.30	0.34	0.39	0.44	0.50	0.61	0.74	0.88	1.00	1.00	1.00	1.00
B	1.00	0.69	0.51	0.41	0.36	0.34	0.34	0.34	0.38	0.43	0.49	0.56	0.64	0.72	0.90	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.72	0.55	0.46	0.41	0.40	0.39	0.40	0.45	0.51	0.58	0.67	0.76	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.74	0.58	0.49	0.45	0.44	0.43	0.44	0.49	0.56	0.64	0.74	0.84	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6")

	Slope %																				
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.65	0.41	0.28	0.20	0.16	0.15	0.15	0.16	0.18	0.21	0.24	0.27	0.31	0.40	0.49	0.59	0.70	0.80	0.94	1.00
B	1.00	0.67	0.45	0.32	0.25	0.22	0.20	0.20	0.22	0.25	0.30	0.35	0.40	0.46	0.60	0.75	0.91	1.00	1.00	1.00	1.00
C	1.00	0.68	0.48	0.35	0.28	0.25	0.24	0.24	0.26	0.30	0.36	0.42	0.49	0.57	0.74	0.93	1.00	1.00	1.00	1.00	1.00
D	1.00	0.69	0.49	0.37	0.30	0.27	0.26	0.26	0.29	0.33	0.40	0.47	0.55	0.64	0.84	1.00	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6")

	Slope %																				
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.35	0.20	0.11	0.07	0.06	0.05	0.06	0.08	0.09	0.11	0.14	0.16	0.22	0.28	0.34	0.41	0.48	0.57	0.66
B	1.00	0.62	0.37	0.21	0.13	0.09	0.08	0.07	0.09	0.11	0.14	0.17	0.21	0.25	0.34	0.43	0.54	0.65	0.76	0.90	1.00
C	1.00	0.62	0.38	0.23	0.14	0.11	0.09	0.09	0.10	0.13	0.17	0.21	0.26	0.31	0.42	0.55	0.68	0.82	0.96	1.00	1.00
D	1.00	0.62	0.38	0.23	0.15	0.11	0.10	0.10	0.11	0.15	0.19	0.24	0.29	0.35	0.48	0.63	0.78	0.94	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

10-YEAR STORM EI=80.00
COVER-MANAGEMENT CONDITION--1

VERY LOW RIDGES (0.5-2")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
B	1.00	0.54	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.61	0.72	0.85	0.98	1.00	1.00	1.00
C	1.00	0.66	0.50	0.50	0.50	0.50	0.50	0.50	0.53	0.60	0.69	0.78	0.88	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.73	0.61	0.56	0.55	0.55	0.56	0.62	0.69	0.78	0.88	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.48	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.33	0.40	0.46
B	1.00	0.57	0.33	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.33	0.40	0.48	0.56	0.64	0.73	0.83	0.94
C	1.00	0.65	0.46	0.37	0.33	0.32	0.32	0.34	0.38	0.42	0.48	0.54	0.61	0.68	0.83	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.70	0.53	0.46	0.43	0.42	0.42	0.45	0.50	0.56	0.63	0.71	0.80	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.54	0.26	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.18	0.22	0.27	0.33	0.39	0.46
B	1.00	0.59	0.35	0.21	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.18	0.19	0.22	0.26	0.31	0.37	0.42	0.48	0.55	0.62
C	1.00	0.64	0.43	0.31	0.25	0.23	0.22	0.23	0.25	0.28	0.31	0.36	0.40	0.45	0.56	0.67	0.80	0.93	1.00	1.00	1.00
D	1.00	0.67	0.48	0.37	0.32	0.30	0.29	0.30	0.33	0.37	0.42	0.48	0.54	0.61	0.76	0.93	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.32	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.12	0.17	0.21	0.27	0.32	0.38	0.45
B	1.00	0.61	0.36	0.21	0.13	0.09	0.08	0.08	0.08	0.09	0.10	0.11	0.13	0.15	0.18	0.23	0.27	0.32	0.37	0.43	0.49
C	1.00	0.64	0.41	0.27	0.19	0.15	0.14	0.13	0.14	0.16	0.19	0.22	0.25	0.28	0.36	0.44	0.53	0.62	0.72	0.84	0.96
D	1.00	0.66	0.43	0.30	0.23	0.19	0.18	0.17	0.19	0.22	0.25	0.29	0.34	0.39	0.50	0.62	0.75	0.89	1.00	1.00	1.00

VERY HIGH RIDGES (>6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.32	0.15	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.08	0.12	0.17	0.21	0.27	0.32	0.38	0.45
B	1.00	0.60	0.33	0.17	0.09	0.05	0.05	0.05	0.05	0.05	0.05	0.07	0.09	0.10	0.14	0.19	0.24	0.28	0.33	0.40	0.46
C	1.00	0.61	0.35	0.19	0.11	0.07	0.05	0.05	0.06	0.07	0.08	0.10	0.12	0.15	0.20	0.25	0.31	0.37	0.43	0.51	0.59
D	1.00	0.61	0.36	0.21	0.12	0.08	0.07	0.06	0.07	0.09	0.12	0.14	0.17	0.21	0.28	0.36	0.44	0.53	0.62	0.74	0.85

10-YEAR STORM EI=80.00
COVER-MANAGEMENT CONDITION--2

VERY LOW RIDGES (0.5-2")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.52
B	1.00	0.61	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.55	0.62	0.70	0.79	0.97	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.73	0.61	0.56	0.55	0.55	0.56	0.62	0.69	0.78	0.88	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.79	0.70	0.66	0.65	0.65	0.66	0.72	0.80	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.52	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.33	0.38	0.44	0.50
B	1.00	0.62	0.41	0.31	0.30	0.30	0.30	0.30	0.30	0.34	0.38	0.43	0.48	0.53	0.65	0.78	0.92	1.00	1.00	1.00	1.00
C	1.00	0.70	0.53	0.46	0.43	0.42	0.42	0.45	0.50	0.56	0.63	0.71	0.80	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.74	0.60	0.53	0.50	0.50	0.50	0.53	0.59	0.66	0.74	0.84	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.56	0.29	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.17	0.21	0.26	0.31	0.36	0.42	0.48
B	1.00	0.62	0.39	0.27	0.21	0.19	0.18	0.18	0.20	0.22	0.25	0.28	0.31	0.35	0.43	0.52	0.61	0.71	0.81	0.93	1.00
C	1.00	0.67	0.48	0.37	0.32	0.30	0.29	0.30	0.33	0.37	0.42	0.48	0.54	0.61	0.76	0.93	1.00	1.00	1.00	1.00	1.00
D	1.00	0.70	0.51	0.41	0.37	0.35	0.35	0.35	0.39	0.44	0.50	0.58	0.66	0.74	0.93	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.33	0.17	0.09	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.10	0.15	0.19	0.24	0.29	0.34	0.40	0.46
B	1.00	0.63	0.39	0.24	0.16	0.13	0.11	0.11	0.12	0.13	0.15	0.17	0.19	0.22	0.27	0.34	0.40	0.47	0.54	0.63	0.72
C	1.00	0.66	0.43	0.30	0.23	0.19	0.18	0.17	0.19	0.22	0.25	0.29	0.34	0.39	0.50	0.62	0.75	0.89	1.00	1.00	1.00
D	1.00	0.67	0.46	0.33	0.26	0.22	0.21	0.21	0.23	0.26	0.31	0.36	0.42	0.48	0.62	0.78	0.94	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.32	0.16	0.07	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.07	0.09	0.13	0.17	0.22	0.27	0.32	0.39	0.45
B	1.00	0.60	0.34	0.19	0.10	0.06	0.05	0.05	0.05	0.06	0.07	0.08	0.10	0.12	0.16	0.20	0.25	0.29	0.34	0.41	0.47
C	1.00	0.61	0.36	0.21	0.12	0.08	0.07	0.06	0.07	0.09	0.12	0.14	0.17	0.21	0.28	0.36	0.44	0.53	0.62	0.74	0.85
D	1.00	0.62	0.37	0.22	0.13	0.09	0.08	0.08	0.09	0.11	0.14	0.18	0.21	0.26	0.35	0.45	0.56	0.68	0.79	0.94	1.00

10-YEAR STORM EI=80.00
COVER-MANAGEMENT CONDITION--3

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.51	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.54	0.63	0.72	0.82	0.94	1.00
B	1.00	0.64	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.56	0.63	0.72	0.81	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.75	0.63	0.58	0.57	0.57	0.58	0.64	0.71	0.80	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.81	0.71	0.68	0.67	0.67	0.69	0.74	0.82	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.55	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.35	0.41	0.47	0.53	0.61	0.68
B	1.00	0.64	0.44	0.34	0.31	0.30	0.30	0.31	0.35	0.39	0.44	0.49	0.55	0.62	0.76	0.91	1.00	1.00	1.00	1.00	1.00
C	1.00	0.71	0.55	0.47	0.44	0.44	0.44	0.46	0.51	0.58	0.65	0.74	0.83	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.75	0.61	0.54	0.52	0.51	0.51	0.55	0.60	0.68	0.77	0.87	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.58	0.33	0.19	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.17	0.21	0.25	0.29	0.34	0.39	0.45	0.51
B	1.00	0.63	0.41	0.29	0.23	0.21	0.21	0.21	0.23	0.26	0.29	0.32	0.36	0.41	0.50	0.61	0.72	0.84	0.95	1.00	1.00
C	1.00	0.68	0.48	0.38	0.33	0.31	0.30	0.31	0.34	0.38	0.44	0.50	0.56	0.64	0.79	0.97	1.00	1.00	1.00	1.00	1.00
D	1.00	0.70	0.52	0.42	0.38	0.36	0.36	0.37	0.40	0.46	0.52	0.60	0.68	0.77	0.96	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.35	0.20	0.11	0.08	0.08	0.08	0.08	0.08	0.08	0.10	0.11	0.13	0.17	0.21	0.26	0.31	0.35	0.42	0.48
B	1.00	0.64	0.40	0.26	0.18	0.14	0.13	0.12	0.13	0.15	0.17	0.20	0.22	0.25	0.32	0.40	0.48	0.56	0.64	0.75	0.86
C	1.00	0.66	0.44	0.31	0.23	0.20	0.18	0.18	0.20	0.23	0.26	0.31	0.35	0.41	0.52	0.65	0.79	0.93	1.00	1.00	1.00
D	1.00	0.67	0.46	0.33	0.26	0.23	0.22	0.21	0.23	0.27	0.32	0.37	0.43	0.50	0.65	0.81	0.99	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.33	0.17	0.08	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.08	0.10	0.14	0.18	0.23	0.28	0.33	0.40	0.46
B	1.00	0.60	0.35	0.19	0.10	0.06	0.05	0.05	0.05	0.06	0.08	0.09	0.11	0.13	0.17	0.22	0.27	0.33	0.38	0.45	0.52
C	1.00	0.61	0.36	0.21	0.12	0.09	0.07	0.07	0.08	0.10	0.12	0.15	0.18	0.21	0.29	0.38	0.46	0.56	0.65	0.78	0.90
D	1.00	0.62	0.37	0.22	0.14	0.10	0.08	0.08	0.09	0.12	0.15	0.18	0.22	0.27	0.37	0.47	0.59	0.71	0.83	0.99	1.00

10-YEAR STORM EI=80.00
COVER-MANAGEMENT CONDITION--4

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.52	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.58	0.68	0.78	0.89	1.00	1.00
B	1.00	0.67	0.51	0.50	0.50	0.50	0.50	0.50	0.55	0.63	0.72	0.81	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.77	0.66	0.62	0.61	0.61	0.62	0.68	0.76	0.85	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.82	0.73	0.70	0.69	0.69	0.71	0.76	0.84	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

LOW RIDGES (2-3")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.55	0.31	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.32	0.38	0.44	0.51	0.58	0.66	0.75
B	1.00	0.66	0.47	0.38	0.34	0.34	0.34	0.36	0.39	0.44	0.50	0.56	0.63	0.71	0.87	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.72	0.57	0.50	0.47	0.47	0.47	0.50	0.55	0.62	0.70	0.79	0.89	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.76	0.62	0.56	0.54	0.53	0.53	0.56	0.62	0.70	0.79	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.58	0.33	0.19	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.18	0.21	0.26	0.30	0.35	0.39	0.45	0.51
B	1.00	0.65	0.43	0.31	0.26	0.24	0.23	0.24	0.26	0.29	0.33	0.37	0.42	0.47	0.58	0.71	0.84	0.97	1.00	1.00	1.00
C	1.00	0.69	0.50	0.39	0.35	0.33	0.32	0.33	0.36	0.41	0.47	0.54	0.61	0.69	0.86	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.71	0.53	0.43	0.39	0.37	0.37	0.38	0.42	0.47	0.54	0.62	0.70	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.36	0.20	0.12	0.08	0.08	0.08	0.08	0.08	0.09	0.10	0.12	0.13	0.17	0.22	0.26	0.31	0.36	0.42	0.48
B	1.00	0.64	0.41	0.27	0.19	0.16	0.14	0.14	0.15	0.17	0.20	0.23	0.26	0.30	0.38	0.47	0.56	0.66	0.76	0.89	1.00
C	1.00	0.67	0.45	0.32	0.24	0.21	0.20	0.19	0.21	0.24	0.28	0.33	0.38	0.44	0.57	0.71	0.86	1.00	1.00	1.00	1.00
D	1.00	0.68	0.47	0.34	0.27	0.24	0.22	0.22	0.24	0.28	0.33	0.39	0.45	0.52	0.68	0.85	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.33	0.17	0.08	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.08	0.10	0.14	0.18	0.23	0.28	0.33	0.40	0.46
B	1.00	0.61	0.35	0.20	0.11	0.07	0.06	0.05	0.06	0.07	0.09	0.11	0.13	0.15	0.21	0.26	0.32	0.39	0.45	0.54	0.62
C	1.00	0.61	0.36	0.21	0.13	0.09	0.08	0.07	0.08	0.10	0.13	0.16	0.20	0.24	0.32	0.41	0.51	0.61	0.72	0.85	0.99
D	1.00	0.62	0.37	0.22	0.14	0.10	0.09	0.08	0.10	0.12	0.15	0.19	0.23	0.28	0.38	0.50	0.62	0.74	0.87	1.00	1.00

10-YEAR STORM EI=80.00

COVER-MANAGEMENT CONDITION--5

VERY LOW RIDGES (0.5-2")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.57	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.54	0.60	0.73	0.88	1.00	1.00	1.00	1.00	1.00
B	1.00	0.70	0.56	0.51	0.50	0.50	0.51	0.55	0.62	0.70	0.80	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.79	0.70	0.66	0.65	0.65	0.66	0.72	0.80	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.85	0.77	0.74	0.74	0.74	0.75	0.81	0.88	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.36	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.32	0.36	0.40	0.49	0.58	0.68	0.79	0.89	1.00	1.00
B	1.00	0.68	0.50	0.42	0.39	0.38	0.38	0.40	0.44	0.50	0.56	0.64	0.72	0.80	0.98	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.74	0.60	0.53	0.50	0.50	0.50	0.53	0.59	0.66	0.74	0.84	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.77	0.65	0.59	0.57	0.56	0.56	0.60	0.66	0.74	0.84	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.36	0.23	0.17	0.15	0.15	0.15	0.15	0.17	0.19	0.21	0.24	0.26	0.32	0.38	0.45	0.52	0.59	0.68	0.77
B	1.00	0.66	0.45	0.34	0.29	0.27	0.26	0.27	0.29	0.33	0.37	0.42	0.48	0.54	0.67	0.81	0.97	1.00	1.00	1.00	1.00
C	1.00	0.70	0.51	0.41	0.37	0.35	0.35	0.35	0.39	0.44	0.50	0.58	0.66	0.74	0.93	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.72	0.55	0.46	0.41	0.39	0.39	0.40	0.44	0.50	0.58	0.66	0.75	0.85	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.62	0.37	0.22	0.14	0.10	0.09	0.08	0.09	0.10	0.11	0.13	0.14	0.16	0.20	0.25	0.29	0.34	0.39	0.45	0.52
B	1.00	0.65	0.42	0.28	0.21	0.17	0.16	0.16	0.17	0.19	0.22	0.26	0.30	0.34	0.44	0.54	0.65	0.77	0.89	1.00	1.00
C	1.00	0.67	0.46	0.33	0.26	0.22	0.21	0.21	0.23	0.26	0.31	0.36	0.42	0.48	0.62	0.78	0.94	1.00	1.00	1.00	1.00
D	1.00	0.68	0.48	0.35	0.28	0.25	0.24	0.23	0.26	0.30	0.35	0.42	0.49	0.56	0.73	0.92	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.34	0.18	0.09	0.05	0.05	0.05	0.05	0.05	0.06	0.07	0.09	0.11	0.15	0.19	0.24	0.29	0.34	0.40	0.47
B	1.00	0.61	0.35	0.20	0.12	0.08	0.06	0.06	0.07	0.08	0.10	0.12	0.15	0.18	0.24	0.31	0.38	0.46	0.53	0.63	0.73
C	1.00	0.62	0.37	0.22	0.13	0.09	0.08	0.08	0.09	0.11	0.14	0.18	0.21	0.26	0.35	0.45	0.56	0.68	0.79	0.94	1.00
D	1.00	0.62	0.37	0.23	0.14	0.10	0.09	0.09	0.10	0.13	0.17	0.21	0.25	0.30	0.42	0.54	0.67	0.81	0.95	1.00	1.00

10-YEAR STORM EI=80.00

COVER-MANAGEMENT CONDITION--6

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.56	0.63	0.71	0.87	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.73	0.61	0.56	0.55	0.55	0.56	0.62	0.69	0.78	0.88	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.82	0.73	0.70	0.69	0.69	0.71	0.76	0.84	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.86	0.79	0.77	0.76	0.76	0.77	0.83	0.90	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.39	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.34	0.38	0.43	0.48	0.58	0.70	0.82	0.94	1.00	1.00	1.00
B	1.00	0.70	0.53	0.46	0.43	0.42	0.42	0.45	0.50	0.56	0.63	0.71	0.80	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.76	0.62	0.56	0.54	0.53	0.53	0.56	0.62	0.70	0.79	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.78	0.66	0.61	0.59	0.58	0.58	0.62	0.68	0.76	0.86	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.38	0.25	0.19	0.17	0.16	0.17	0.18	0.20	0.22	0.25	0.28	0.31	0.38	0.46	0.54	0.63	0.72	0.83	0.94
B	1.00	0.67	0.48	0.37	0.32	0.30	0.29	0.30	0.33	0.37	0.42	0.48	0.54	0.61	0.76	0.93	1.00	1.00	1.00	1.00	1.00
C	1.00	0.71	0.53	0.43	0.39	0.37	0.37	0.38	0.42	0.47	0.54	0.62	0.70	0.80	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.72	0.56	0.47	0.42	0.41	0.40	0.41	0.46	0.52	0.60	0.68	0.78	0.88	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.63	0.38	0.23	0.15	0.12	0.10	0.10	0.10	0.12	0.13	0.15	0.17	0.19	0.24	0.30	0.36	0.42	0.48	0.56	0.63
B	1.00	0.66	0.43	0.30	0.23	0.19	0.18	0.17	0.19	0.22	0.25	0.29	0.34	0.39	0.50	0.62	0.75	0.89	1.00	1.00	1.00
C	1.00	0.68	0.47	0.34	0.27	0.24	0.22	0.22	0.24	0.28	0.33	0.39	0.45	0.52	0.68	0.85	1.00	1.00	1.00	1.00	1.00
D	1.00	0.69	0.48	0.36	0.29	0.26	0.24	0.24	0.27	0.31	0.37	0.43	0.51	0.59	0.76	0.96	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.34	0.18	0.10	0.06	0.05	0.05	0.05	0.05	0.06	0.08	0.10	0.11	0.15	0.20	0.24	0.29	0.34	0.41	0.47
B	1.00	0.61	0.36	0.21	0.12	0.08	0.07	0.06	0.07	0.09	0.12	0.14	0.17	0.21	0.28	0.36	0.44	0.53	0.62	0.74	0.85
C	1.00	0.62	0.37	0.22	0.14	0.10	0.09	0.08	0.10	0.12	0.15	0.19	0.23	0.28	0.38	0.50	0.62	0.74	0.87	1.00	1.00
D	1.00	0.62	0.38	0.23	0.15	0.11	0.09	0.09	0.11	0.13	0.17	0.22	0.26	0.32	0.44	0.56	0.70	0.85	0.99	1.00	1.00

10-YEAR STORM EI=80.00

COVER-MANAGEMENT CONDITION--7

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.72	0.59	0.54	0.53	0.53	0.54	0.59	0.67	0.75	0.85	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.83	0.75	0.72	0.72	0.72	0.73	0.78	0.86	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.90	0.85	0.83	0.83	0.83	0.84	0.89	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.94	0.92	0.91	0.90	0.90	0.91	0.94	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.69	0.52	0.44	0.41	0.41	0.41	0.43	0.48	0.54	0.61	0.69	0.77	0.86	1.00	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.77	0.64	0.58	0.55	0.55	0.55	0.58	0.64	0.72	0.81	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.81	0.71	0.66	0.64	0.64	0.63	0.67	0.74	0.83	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.84	0.75	0.71	0.69	0.69	0.69	0.73	0.80	0.88	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

MODERATE RIDGES (3-4")

	Slope %																				
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.67	0.47	0.36	0.31	0.29	0.28	0.29	0.32	0.36	0.40	0.46	0.52	0.59	0.73	0.89	1.00	1.00	1.00	1.00	1.00
B	1.00	0.71	0.54	0.44	0.40	0.38	0.38	0.39	0.43	0.49	0.56	0.64	0.73	0.83	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.74	0.58	0.50	0.46	0.44	0.44	0.45	0.50	0.57	0.65	0.75	0.86	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.76	0.61	0.53	0.50	0.48	0.48	0.49	0.55	0.62	0.72	0.82	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6")

	Slope %																				
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.66	0.43	0.29	0.22	0.18	0.17	0.17	0.18	0.21	0.24	0.28	0.33	0.37	0.48	0.59	0.72	0.85	0.98	1.00	1.00
B	1.00	0.68	0.47	0.34	0.28	0.24	0.23	0.23	0.25	0.29	0.34	0.40	0.47	0.54	0.70	0.88	1.00	1.00	1.00	1.00	1.00
C	1.00	0.69	0.50	0.38	0.31	0.28	0.27	0.26	0.29	0.34	0.41	0.48	0.56	0.66	0.86	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.70	0.51	0.40	0.33	0.30	0.29	0.29	0.32	0.37	0.45	0.53	0.63	0.73	0.96	1.00	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6")

	Slope %																				
Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.36	0.20	0.12	0.08	0.07	0.06	0.07	0.09	0.11	0.14	0.16	0.20	0.26	0.34	0.42	0.51	0.59	0.70	0.81
B	1.00	0.62	0.37	0.22	0.14	0.10	0.09	0.08	0.10	0.13	0.16	0.20	0.24	0.29	0.40	0.52	0.64	0.77	0.91	1.00	1.00
C	1.00	0.63	0.38	0.23	0.15	0.12	0.10	0.10	0.12	0.15	0.19	0.24	0.30	0.36	0.49	0.64	0.80	0.97	1.00	1.00	1.00
D	1.00	0.63	0.39	0.24	0.16	0.12	0.11	0.11	0.13	0.17	0.21	0.27	0.33	0.40	0.56	0.73	0.91	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

10-YEAR STORM EI=90.00
COVER-MANAGEMENT CONDITION--1

VERY LOW RIDGES (0.5-2")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
B	1.00	0.57	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.55	0.61	0.75	0.90	1.00	1.00	1.00	1.00	1.00
C	1.00	0.70	0.55	0.50	0.50	0.50	0.50	0.55	0.61	0.69	0.79	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.78	0.67	0.63	0.62	0.62	0.64	0.69	0.77	0.87	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.48	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.33	0.40	0.46
B	1.00	0.59	0.36	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.33	0.37	0.41	0.50	0.59	0.70	0.80	0.91	1.00	1.00
C	1.00	0.67	0.50	0.41	0.38	0.37	0.37	0.40	0.44	0.49	0.55	0.63	0.70	0.79	0.97	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.73	0.58	0.51	0.48	0.48	0.48	0.51	0.56	0.63	0.71	0.81	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.54	0.26	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.18	0.22	0.27	0.33	0.39	0.46
B	1.00	0.60	0.36	0.23	0.17	0.15	0.15	0.15	0.16	0.17	0.19	0.22	0.24	0.27	0.33	0.39	0.46	0.53	0.60	0.70	0.79
C	1.00	0.66	0.45	0.34	0.28	0.26	0.26	0.26	0.29	0.32	0.37	0.42	0.47	0.53	0.66	0.80	0.95	1.00	1.00	1.00	1.00
D	1.00	0.69	0.50	0.40	0.35	0.33	0.33	0.34	0.37	0.42	0.48	0.55	0.62	0.70	0.88	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.32	0.15	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.12	0.17	0.22	0.27	0.32	0.38	0.45
B	1.00	0.62	0.37	0.22	0.14	0.10	0.09	0.09	0.09	0.10	0.11	0.13	0.15	0.16	0.21	0.25	0.30	0.35	0.40	0.46	0.53
C	1.00	0.65	0.42	0.28	0.21	0.17	0.16	0.15	0.17	0.19	0.22	0.25	0.29	0.33	0.43	0.53	0.64	0.75	0.87	1.00	1.00
D	1.00	0.67	0.45	0.32	0.25	0.21	0.20	0.20	0.22	0.25	0.29	0.34	0.39	0.45	0.59	0.73	0.89	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.32	0.15	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.08	0.12	0.17	0.21	0.27	0.32	0.38	0.45
B	1.00	0.60	0.34	0.18	0.09	0.05	0.05	0.05	0.05	0.05	0.06	0.07	0.09	0.11	0.15	0.19	0.24	0.29	0.34	0.40	0.47
C	1.00	0.61	0.35	0.20	0.12	0.08	0.06	0.06	0.07	0.08	0.10	0.12	0.15	0.17	0.24	0.30	0.37	0.45	0.52	0.62	0.72
D	1.00	0.62	0.37	0.21	0.13	0.09	0.08	0.07	0.09	0.11	0.13	0.17	0.20	0.24	0.33	0.42	0.53	0.63	0.74	0.88	1.00

10-YEAR STORM EI=90.00
COVER-MANAGEMENT CONDITION--2

VERY LOW RIDGES (0.5-2")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.56	0.63
B	1.00	0.64	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.57	0.65	0.73	0.83	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.78	0.67	0.63	0.62	0.62	0.64	0.69	0.77	0.87	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.84	0.76	0.74	0.73	0.73	0.74	0.80	0.87	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.53	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.34	0.39	0.45	0.51
B	1.00	0.64	0.44	0.35	0.31	0.30	0.30	0.32	0.36	0.40	0.45	0.50	0.57	0.63	0.78	0.93	1.00	1.00	1.00	1.00	1.00
C	1.00	0.73	0.58	0.51	0.48	0.48	0.48	0.51	0.56	0.63	0.71	0.81	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.77	0.64	0.58	0.56	0.56	0.56	0.59	0.65	0.73	0.83	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4")

Hyd.	Slope % 0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.57	0.30	0.16	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.18	0.22	0.27	0.32	0.37	0.43	0.49
B	1.00	0.64	0.42	0.29	0.24	0.22	0.21	0.21	0.23	0.26	0.29	0.33	0.37	0.42	0.52	0.63	0.74	0.86	0.98	1.00	1.00
C	1.00	0.69	0.50	0.40	0.35	0.33	0.33	0.34	0.37	0.42	0.48	0.55	0.62	0.70	0.88	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.72	0.55	0.45	0.41	0.39	0.39	0.40	0.44	0.50	0.57	0.65	0.74	0.84	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.34	0.18	0.10	0.08	0.08	0.08	0.08	0.08	0.08	0.08	0.09	0.11	0.15	0.20	0.24	0.29	0.34	0.40	0.47
B	1.00	0.64	0.40	0.26	0.18	0.14	0.13	0.13	0.14	0.15	0.18	0.20	0.23	0.26	0.33	0.41	0.49	0.58	0.66	0.78	0.89
C	1.00	0.67	0.45	0.32	0.25	0.21	0.20	0.20	0.22	0.25	0.29	0.34	0.39	0.45	0.59	0.73	0.89	1.00	1.00	1.00	1.00
D	1.00	0.68	0.47	0.35	0.28	0.25	0.23	0.23	0.25	0.30	0.35	0.41	0.48	0.55	0.72	0.90	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.32	0.16	0.07	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.07	0.09	0.13	0.18	0.23	0.28	0.33	0.39	0.46
B	1.00	0.60	0.35	0.19	0.11	0.07	0.05	0.05	0.05	0.06	0.08	0.10	0.11	0.13	0.18	0.23	0.28	0.34	0.40	0.47	0.54
C	1.00	0.62	0.37	0.21	0.13	0.09	0.08	0.07	0.09	0.11	0.13	0.17	0.20	0.24	0.33	0.42	0.53	0.63	0.74	0.88	1.00
D	1.00	0.62	0.37	0.22	0.14	0.10	0.09	0.09	0.10	0.13	0.16	0.20	0.25	0.30	0.41	0.53	0.66	0.80	0.93	1.00	1.00

10-YEAR STORM EI=90.00
COVER-MANAGEMENT CONDITION--3

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.53	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.57	0.68	0.80	0.92	1.00	1.00	1.00
B	1.00	0.68	0.52	0.50	0.50	0.50	0.50	0.50	0.57	0.64	0.73	0.83	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.79	0.69	0.65	0.64	0.64	0.66	0.71	0.79	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.85	0.78	0.76	0.75	0.75	0.76	0.82	0.89	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.57	0.33	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.38	0.45	0.53	0.60	0.68	0.78	0.88
B	1.00	0.66	0.47	0.38	0.35	0.34	0.34	0.37	0.40	0.45	0.51	0.58	0.65	0.72	0.89	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.74	0.59	0.52	0.50	0.49	0.49	0.52	0.58	0.65	0.74	0.83	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.78	0.66	0.60	0.58	0.57	0.57	0.61	0.67	0.75	0.85	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.34	0.21	0.15	0.15	0.15	0.15	0.15	0.15	0.15	0.17	0.18	0.20	0.25	0.29	0.34	0.40	0.45	0.52	0.58
B	1.00	0.65	0.44	0.32	0.26	0.24	0.24	0.24	0.27	0.30	0.34	0.38	0.43	0.48	0.60	0.73	0.86	1.00	1.00	1.00	1.00
C	1.00	0.70	0.51	0.41	0.36	0.35	0.34	0.35	0.39	0.44	0.50	0.57	0.65	0.73	0.92	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.72	0.55	0.46	0.42	0.40	0.40	0.41	0.45	0.51	0.59	0.67	0.77	0.87	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.36	0.21	0.13	0.09	0.08	0.08	0.08	0.08	0.09	0.11	0.12	0.14	0.18	0.22	0.27	0.31	0.36	0.42	0.49
B	1.00	0.64	0.41	0.27	0.20	0.16	0.15	0.14	0.15	0.17	0.20	0.23	0.27	0.30	0.39	0.48	0.58	0.68	0.78	0.92	1.00
C	1.00	0.67	0.46	0.32	0.25	0.22	0.21	0.20	0.22	0.26	0.30	0.35	0.41	0.47	0.61	0.77	0.93	1.00	1.00	1.00	1.00
D	1.00	0.68	0.48	0.35	0.29	0.25	0.24	0.24	0.26	0.30	0.36	0.42	0.50	0.58	0.75	0.94	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.33	0.17	0.09	0.05	0.05	0.05	0.05	0.05	0.05	0.07	0.08	0.10	0.14	0.19	0.23	0.28	0.33	0.40	0.46
B	1.00	0.61	0.35	0.20	0.11	0.07	0.06	0.05	0.06	0.07	0.09	0.11	0.13	0.16	0.21	0.27	0.34	0.40	0.47	0.56	0.64
C	1.00	0.62	0.37	0.22	0.13	0.09	0.08	0.08	0.09	0.11	0.14	0.17	0.21	0.25	0.34	0.44	0.55	0.66	0.78	0.92	1.00
D	1.00	0.62	0.38	0.23	0.14	0.11	0.09	0.09	0.10	0.13	0.17	0.21	0.26	0.31	0.43	0.55	0.69	0.83	0.98	1.00	1.00

10-YEAR STORM EI=90.00
COVER-MANAGEMENT CONDITION--4

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.54	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.61	0.73	0.86	0.99	1.00	1.00	1.00
B	1.00	0.71	0.57	0.52	0.51	0.51	0.52	0.57	0.64	0.72	0.82	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.81	0.73	0.69	0.69	0.69	0.70	0.76	0.83	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.87	0.80	0.78	0.77	0.77	0.79	0.84	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.57	0.34	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.34	0.41	0.48	0.57	0.65	0.74	0.85	0.96
B	1.00	0.68	0.51	0.42	0.39	0.39	0.39	0.41	0.45	0.51	0.58	0.65	0.73	0.82	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.75	0.62	0.55	0.53	0.52	0.52	0.56	0.62	0.69	0.78	0.88	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.79	0.67	0.62	0.60	0.59	0.59	0.63	0.69	0.77	0.87	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.59	0.35	0.21	0.15	0.15	0.15	0.15	0.15	0.15	0.16	0.18	0.20	0.22	0.27	0.32	0.37	0.43	0.49	0.56	0.63
B	1.00	0.66	0.46	0.35	0.29	0.27	0.27	0.27	0.30	0.34	0.38	0.43	0.49	0.55	0.69	0.84	0.99	1.00	1.00	1.00	1.00
C	1.00	0.71	0.53	0.43	0.38	0.37	0.36	0.37	0.41	0.47	0.53	0.61	0.69	0.79	0.99	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.73	0.56	0.47	0.43	0.41	0.41	0.42	0.47	0.53	0.61	0.70	0.79	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.36	0.21	0.13	0.09	0.08	0.08	0.08	0.09	0.10	0.11	0.13	0.15	0.18	0.23	0.27	0.32	0.37	0.43	0.49
B	1.00	0.65	0.43	0.29	0.21	0.18	0.16	0.16	0.17	0.20	0.23	0.27	0.31	0.35	0.45	0.56	0.67	0.79	0.91	1.00	1.00
C	1.00	0.68	0.46	0.34	0.27	0.23	0.22	0.22	0.24	0.28	0.32	0.38	0.44	0.51	0.67	0.83	1.00	1.00	1.00	1.00	1.00
D	1.00	0.69	0.48	0.36	0.29	0.26	0.25	0.25	0.27	0.32	0.37	0.44	0.52	0.60	0.78	0.98	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.33	0.17	0.09	0.05	0.05	0.05	0.05	0.05	0.05	0.07	0.09	0.10	0.14	0.19	0.24	0.28	0.34	0.40	0.46
B	1.00	0.61	0.36	0.20	0.12	0.08	0.06	0.06	0.07	0.08	0.10	0.13	0.15	0.18	0.25	0.32	0.39	0.47	0.55	0.65	0.76
C	1.00	0.62	0.37	0.22	0.14	0.10	0.08	0.08	0.09	0.12	0.15	0.19	0.23	0.28	0.38	0.49	0.60	0.73	0.85	1.00	1.00
D	1.00	0.62	0.38	0.23	0.15	0.11	0.09	0.09	0.11	0.14	0.18	0.22	0.27	0.32	0.45	0.58	0.72	0.87	1.00	1.00	1.00

10-YEAR STORM EI=90.00
COVER-MANAGEMENT CONDITION--5

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.51	0.58	0.65	0.72	0.89	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.74	0.62	0.57	0.56	0.56	0.58	0.63	0.70	0.79	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.84	0.76	0.74	0.73	0.73	0.74	0.80	0.87	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.89	0.84	0.82	0.82	0.82	0.83	0.88	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.39	0.30	0.30	0.30	0.30	0.30	0.30	0.31	0.35	0.39	0.44	0.49	0.60	0.71	0.84	0.97	1.00	1.00	1.00
B	1.00	0.70	0.54	0.47	0.44	0.43	0.43	0.46	0.51	0.57	0.64	0.73	0.82	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.77	0.64	0.58	0.56	0.56	0.56	0.59	0.65	0.73	0.83	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.81	0.70	0.65	0.63	0.63	0.63	0.66	0.73	0.82	0.92	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.62	0.38	0.26	0.19	0.17	0.17	0.17	0.18	0.20	0.23	0.26	0.29	0.32	0.39	0.47	0.56	0.65	0.74	0.85	0.96
B	1.00	0.68	0.48	0.37	0.32	0.30	0.30	0.31	0.34	0.38	0.43	0.49	0.56	0.63	0.78	0.95	1.00	1.00	1.00	1.00	1.00
C	1.00	0.72	0.55	0.45	0.41	0.39	0.39	0.40	0.44	0.50	0.57	0.65	0.74	0.84	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.74	0.58	0.49	0.45	0.44	0.43	0.45	0.49	0.56	0.65	0.74	0.85	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.63	0.38	0.24	0.16	0.12	0.10	0.10	0.11	0.12	0.14	0.15	0.18	0.20	0.25	0.30	0.36	0.43	0.49	0.57	0.65
B	1.00	0.66	0.44	0.30	0.23	0.19	0.18	0.18	0.19	0.22	0.26	0.30	0.35	0.40	0.51	0.64	0.77	0.91	1.00	1.00	1.00
C	1.00	0.68	0.47	0.35	0.28	0.25	0.23	0.23	0.25	0.30	0.35	0.41	0.48	0.55	0.72	0.90	1.00	1.00	1.00	1.00	1.00
D	1.00	0.69	0.49	0.37	0.31	0.27	0.26	0.26	0.29	0.34	0.40	0.47	0.55	0.64	0.84	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.34	0.18	0.10	0.06	0.05	0.05	0.05	0.05	0.06	0.08	0.10	0.11	0.15	0.20	0.24	0.29	0.34	0.41	0.47
B	1.00	0.61	0.36	0.21	0.12	0.08	0.07	0.07	0.08	0.09	0.12	0.15	0.18	0.21	0.29	0.37	0.46	0.55	0.64	0.76	0.88
C	1.00	0.62	0.37	0.22	0.14	0.10	0.09	0.09	0.10	0.13	0.16	0.20	0.25	0.30	0.41	0.53	0.66	0.80	0.93	1.00	1.00
D	1.00	0.63	0.38	0.23	0.15	0.11	0.10	0.10	0.11	0.15	0.19	0.24	0.29	0.35	0.48	0.63	0.78	0.95	1.00	1.00	1.00

10-YEAR STORM EI=90.00

COVER-MANAGEMENT CONDITION--6

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.62	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.52	0.59	0.67	0.75	0.84	1.00	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.78	0.67	0.63	0.62	0.62	0.64	0.69	0.77	0.87	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.87	0.80	0.78	0.77	0.77	0.79	0.84	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.91	0.86	0.85	0.84	0.84	0.85	0.90	0.96	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.63	0.42	0.32	0.30	0.30	0.30	0.30	0.32	0.36	0.41	0.46	0.51	0.57	0.70	0.84	0.99	1.00	1.00	1.00	1.00
B	1.00	0.73	0.58	0.51	0.48	0.48	0.48	0.51	0.56	0.63	0.71	0.81	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.79	0.67	0.62	0.60	0.59	0.59	0.63	0.69	0.77	0.87	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.82	0.71	0.67	0.65	0.64	0.64	0.68	0.75	0.84	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.63	0.40	0.28	0.22	0.20	0.19	0.20	0.21	0.24	0.27	0.30	0.34	0.38	0.47	0.56	0.66	0.77	0.88	1.00	1.00
B	1.00	0.69	0.50	0.40	0.35	0.33	0.33	0.34	0.37	0.42	0.48	0.55	0.62	0.70	0.88	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.73	0.56	0.47	0.43	0.41	0.41	0.42	0.47	0.53	0.61	0.70	0.79	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.74	0.59	0.50	0.46	0.45	0.45	0.46	0.51	0.58	0.66	0.76	0.87	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.63	0.39	0.25	0.17	0.13	0.12	0.12	0.12	0.14	0.16	0.18	0.21	0.24	0.30	0.37	0.44	0.51	0.59	0.69	0.79
B	1.00	0.67	0.45	0.32	0.25	0.21	0.20	0.20	0.22	0.25	0.29	0.34	0.39	0.45	0.59	0.73	0.89	1.00	1.00	1.00	1.00
C	1.00	0.69	0.48	0.36	0.29	0.26	0.25	0.25	0.27	0.32	0.37	0.44	0.52	0.60	0.78	0.98	1.00	1.00	1.00	1.00	1.00
D	1.00	0.70	0.50	0.38	0.31	0.28	0.27	0.27	0.30	0.35	0.41	0.49	0.57	0.67	0.88	1.00	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.60	0.34	0.19	0.10	0.06	0.05	0.05	0.05	0.06	0.07	0.09	0.10	0.12	0.16	0.20	0.25	0.30	0.35	0.41	0.48
B	1.00	0.62	0.37	0.21	0.13	0.09	0.08	0.07	0.09	0.11	0.13	0.17	0.20	0.24	0.33	0.42	0.53	0.63	0.74	0.88	1.00
C	1.00	0.62	0.38	0.23	0.15	0.11	0.09	0.09	0.11	0.14	0.18	0.22	0.27	0.32	0.45	0.58	0.72	0.87	1.00	1.00	1.00
D	1.00	0.63	0.38	0.24	0.15	0.12	0.10	0.10	0.12	0.15	0.20	0.25	0.30	0.37	0.50	0.66	0.82	0.99	1.00	1.00	1.00

10-YEAR STORM EI=90.00

COVER-MANAGEMENT CONDITION--7

VERY LOW RIDGES (0.5-2") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.77	0.65	0.61	0.60	0.60	0.62	0.67	0.75	0.84	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.88	0.82	0.80	0.80	0.80	0.81	0.86	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.95	0.92	0.92	0.91	0.91	0.92	0.95	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

LOW RIDGES (2-3") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.72	0.57	0.49	0.47	0.46	0.46	0.49	0.54	0.61	0.69	0.78	0.88	0.98	1.00	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.80	0.69	0.63	0.61	0.61	0.61	0.64	0.71	0.80	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.84	0.76	0.72	0.70	0.70	0.70	0.74	0.80	0.89	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.87	0.80	0.77	0.76	0.76	0.76	0.79	0.86	0.94	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 3 - RUSLE CONTOUR P SUBFACTORS FOR ON-GRADE CONDITION

MODERATE RIDGES (3-4") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.69	0.50	0.39	0.34	0.32	0.32	0.33	0.36	0.41	0.46	0.53	0.60	0.68	0.85	1.00	1.00	1.00	1.00	1.00	1.00
B	1.00	0.73	0.57	0.48	0.44	0.43	0.42	0.43	0.48	0.55	0.63	0.72	0.82	0.93	1.00	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.76	0.62	0.54	0.50	0.49	0.48	0.50	0.55	0.63	0.72	0.83	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.78	0.65	0.57	0.54	0.53	0.52	0.54	0.60	0.68	0.79	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

HIGH RIDGES (4-6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.66	0.45	0.31	0.24	0.21	0.19	0.19	0.21	0.24	0.28	0.33	0.38	0.44	0.56	0.70	0.85	1.00	1.00	1.00	1.00
B	1.00	0.69	0.49	0.37	0.30	0.27	0.26	0.25	0.28	0.33	0.39	0.46	0.53	0.62	0.81	1.00	1.00	1.00	1.00	1.00	1.00
C	1.00	0.71	0.51	0.40	0.33	0.30	0.29	0.29	0.32	0.38	0.45	0.54	0.64	0.74	0.98	1.00	1.00	1.00	1.00	1.00	1.00
D	1.00	0.72	0.53	0.42	0.36	0.33	0.32	0.31	0.35	0.41	0.50	0.60	0.71	0.83	1.00	1.00	1.00	1.00	1.00	1.00	1.00

VERY HIGH RIDGES (>6") Slope %

Hyd.	0	1	2	3	4	5	6	8	10	12	14	16	18	20	24	28	32	36	40	45	50
A	1.00	0.61	0.36	0.21	0.13	0.09	0.07	0.07	0.08	0.10	0.13	0.16	0.19	0.23	0.31	0.41	0.50	0.60	0.71	0.84	0.97
B	1.00	0.62	0.38	0.23	0.15	0.11	0.10	0.09	0.11	0.14	0.18	0.23	0.28	0.34	0.46	0.60	0.75	0.91	1.00	1.00	1.00
C	1.00	0.63	0.39	0.24	0.16	0.12	0.11	0.11	0.13	0.17	0.22	0.28	0.34	0.41	0.57	0.74	0.92	1.00	1.00	1.00	1.00
D	1.00	0.63	0.39	0.25	0.17	0.13	0.12	0.12	0.14	0.18	0.24	0.31	0.38	0.46	0.64	0.83	1.00	1.00	1.00	1.00	1.00

HYDROLOGIC GROUP C

EI = 120

Pc SUBFACTOR - CONTOUR

Cover Mgt. Code	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	Cover Mgt. Code
Ridge Height	V Low	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	Ridge Height
Slope																		
2	0.88	0.90	0.78	0.68	0.61	0.93	0.81	0.70	0.62	0.97	0.83	0.71	0.63	1.00	0.85	0.73	0.64	2
4	0.87	0.89	0.74	0.59	0.47	0.92	0.76	0.60	0.48	0.96	0.79	0.63	0.49	1.00	0.82	0.64	0.50	4
6	0.88	0.90	0.73	0.57	0.43	0.93	0.76	0.60	0.45	0.96	0.79	0.61	0.46	1.00	0.81	0.64	0.47	6
8	0.91	0.93	0.76	0.58	0.43	0.95	0.79	0.60	0.45	0.98	0.81	0.63	0.46	1.00	0.84	0.64	0.47	8
10	0.96	0.98	0.81	0.63	0.46	0.99	0.84	0.64	0.47	1.00	0.87	0.67	0.48	1.00	0.89	0.69	0.50	10
12	1.00	1.00	0.88	0.67	0.48	1.00	0.90	0.70	0.50	1.00	0.94	0.72	0.52	1.00	0.96	0.75	0.54	12
14	1.00	1.00	0.96	0.74	0.53	1.00	0.99	0.77	0.55	1.00	1.00	0.80	0.57	1.00	1.00	0.83	0.59	14
16	1.00	1.00	1.00	0.82	0.59	1.00	1.00	0.85	0.61	1.00	1.00	0.88	0.64	1.00	1.00	0.93	0.67	16
18	1.00	1.00	1.00	0.91	0.66	1.00	1.00	0.95	0.68	1.00	1.00	0.99	0.73	1.00	1.00	1.00	0.76	18
20	1.00	1.00	1.00	1.00	0.73	1.00	1.00	1.00	0.77	1.00	1.00	1.00	0.82	1.00	1.00	1.00	0.86	20
24	1.00	1.00	1.00	1.00	0.91	1.00	1.00	1.00	0.97	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	24

HYDROLOGIC GROUP D

EI = 120

Pc SUBFACTOR - CONTOUR

Cover Mgt. Code	2	3	3	3	3	4	4	4	4	5	5	5	5	6	6	6	6	Cover Mgt. Code
Ridge Height	V Low	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	V Low	Low	Mod	High	Ridge Height
Slope																		
2	1.00	0.98	0.84	0.72	0.64	1.00	0.85	0.73	0.64	1.00	0.88	0.74	0.64	1.00	0.89	0.75	0.65	2
4	1.00	0.98	0.81	0.64	0.50	1.00	0.82	0.64	0.50	1.00	0.84	0.67	0.51	1.00	0.86	0.67	0.52	4
6	1.00	0.98	0.80	0.63	0.46	1.00	0.81	0.64	0.47	1.00	0.84	0.65	0.49	1.00	0.86	0.67	0.49	6
8	1.00	0.99	0.83	0.64	0.46	1.00	0.84	0.64	0.47	1.00	0.87	0.67	0.48	1.00	0.88	0.67	0.49	8
10	1.00	1.00	0.88	0.68	0.49	1.00	0.89	0.69	0.50	1.00	0.92	0.71	0.51	1.00	0.93	0.73	0.52	10
12	1.00	1.00	0.94	0.74	0.53	1.00	0.96	0.75	0.54	1.00	0.98	0.78	0.55	1.00	0.99	0.79	0.56	12
14	1.00	1.00	1.00	0.81	0.59	1.00	1.00	0.83	0.59	1.00	1.00	0.86	0.62	1.00	1.00	0.88	0.63	14
16	1.00	1.00	1.00	0.91	0.65	1.00	1.00	0.93	0.67	1.00	1.00	0.96	0.70	1.00	1.00	0.98	0.71	16
18	1.00	1.00	1.00	1.00	0.74	1.00	1.00	1.00	0.76	1.00	1.00	1.00	0.79	1.00	1.00	1.00	0.81	18
20	1.00	1.00	1.00	1.00	0.83	1.00	1.00	1.00	0.86	1.00	1.00	1.00	0.90	1.00	1.00	1.00	0.92	20
24	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	24

TABLE 4 - CONTOURING P SUBFACTOR VALUE ADJUSTED FOR FURROW GRADES EXCEEDING SPECIFICATIONS IN THE CONTOUR STANDARD

Contouring P SubFactor Value	Ratio of Furrow Grade to Profile Grade									
	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
0.04	0.34	0.47	0.57	0.65	0.72	0.78	0.84	0.90	0.95	1.00
0.06	0.36	0.48	0.57	0.65	0.72	0.79	0.85	0.90	0.95	1.00
0.08	0.37	0.49	0.58	0.66	0.73	0.79	0.85	0.90	0.95	1.00
0.10	0.38	0.50	0.59	0.67	0.74	0.80	0.85	0.90	0.95	1.00
0.12	0.40	0.51	0.60	0.68	0.74	0.80	0.86	0.91	0.95	1.00
0.14	0.41	0.52	0.61	0.68	0.75	0.81	0.86	0.91	0.96	1.00
0.16	0.43	0.54	0.62	0.69	0.75	0.81	0.86	0.91	0.96	1.00
0.18	0.44	0.55	0.63	0.70	0.76	0.82	0.87	0.91	0.96	1.00
0.20	0.45	0.56	0.64	0.71	0.77	0.82	0.87	0.92	0.96	1.00
0.22	0.47	0.57	0.65	0.71	0.77	0.82	0.87	0.92	0.96	1.00
0.24	0.48	0.58	0.66	0.72	0.78	0.83	0.88	0.92	0.96	1.00
0.26	0.49	0.59	0.67	0.73	0.78	0.83	0.88	0.92	0.96	1.00
0.28	0.51	0.60	0.67	0.74	0.79	0.84	0.88	0.92	0.96	1.00
0.30	0.52	0.61	0.68	0.74	0.79	0.84	0.89	0.93	0.96	1.00
0.32	0.54	0.62	0.69	0.75	0.80	0.85	0.89	0.93	0.97	1.00
0.34	0.55	0.64	0.70	0.76	0.81	0.85	0.89	0.93	0.97	1.00
0.36	0.56	0.65	0.71	0.76	0.81	0.86	0.90	0.93	0.97	1.00
0.38	0.58	0.66	0.72	0.77	0.82	0.86	**0.90**	0.93	0.97	1.00
0.40	0.59	0.67	0.73	0.78	0.82	0.86	0.90	0.94	0.97	1.00
0.42	0.60	0.68	0.74	0.79	0.83	0.87	0.91	0.94	0.97	1.00
0.44	0.62	0.69	0.75	0.79	0.84	0.87	0.91	0.94	0.97	1.00
0.44	0.63	0.70	0.76	0.80	0.84	0.88	0.91	0.94	0.97	1.00
0.48	0.64	0.71	0.76	0.81	0.85	0.88	0.92	0.95	0.97	1.00
0.50	0.66	0.72	0.77	0.82	0.85	0.89	0.92	0.95	0.97	1.00
0.52	0.67	0.73	0.78	0.82	0.86	0.89	0.92	0.95	0.98	1.00
0.54	0.69	0.75	0.79	0.83	0.87	0.90	0.92	0.95	0.98	1.00
0.56	0.70	0.76	0.80	0.84	0.87	0.90	0.93	0.95	0.98	1.00
0.58	0.71	0.77	0.81	0.85	0.88	0.91	0.93	0.96	0.98	1.00
0.60	0.73	0.78	0.82	0.85	0.88	0.91	0.93	0.96	0.98	1.00
0.62	0.74	0.79	0.83	0.86	0.89	0.91	0.94	0.96	0.98	1.00
0.64	0.75	0.80	0.84	0.87	0.89	0.92	0.94	0.96	0.98	1.00
0.66	0.77	0.81	0.85	0.88	0.90	0.92	0.94	0.96	0.98	1.00
0.68	0.78	0.82	0.86	0.88	0.91	0.93	0.95	0.97	0.98	1.00
0.70	0.79	0.83	0.86	0.89	0.91	0.93	0.95	0.97	0.98	1.00
0.72	0.81	0.85	0.87	0.90	0.92	0.94	0.95	0.97	0.99	1.00
0.74	0.82	0.86	0.88	0.90	0.92	0.94	0.96	0.97	0.99	1.00
0.76	0.84	0.87	0.89	0.91	0.93	0.95	0.96	0.97	0.99	1.00
0.78	0.85	0.88	0.90	0.92	0.94	0.95	0.96	0.98	0.99	1.00
0.80	0.86	0.89	0.91	0.93	0.94	0.95	0.97	0.98	0.99	1.00

TABLE 4 cont'd. -

Contouring P SubFactor Value	Ratio of Furrow Grade to Profile Grade									
	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
0.82	0.88	0.90	0.92	0.93	0.95	0.96	0.97	0.98	0.99	1.00
0.84	0.89	0.91	0.93	0.94	0.95	0.96	0.97	0.98	0.99	1.00
0.86	0.90	0.92	0.94	0.95	0.96	0.97	0.98	0.99	0.99	1.00
0.88	0.92	0.93	0.95	0.96	0.96	0.97	0.98	0.99	0.99	1.00
0.90	0.93	0.94	0.95	0.96	0.97	0.98	0.98	0.99	0.99	1.00
0.92	0.95	0.96	0.96	0.97	0.98	0.98	0.99	0.99	1.00	1.00
0.94	0.96	0.97	0.97	0.98	0.98	0.99	0.99	0.99	1.00	1.00
0.96	0.97	0.98	0.98	0.99	0.99	0.99	0.99	1.00	1.00	1.00
0.98	0.99	0.99	0.99	0.99	0.99	1.00	1.00	1.00	1.00	1.00
1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

TABLE 5A CONTOUR STRIPCROPPING PRACTICE (P) SUBFACTOR TABLE

STRIPCROPPING (P) SUBFACTOR VALUES FOR SOD BASED ROTATIONS[1/]

STRIPS	CLEAR, SPRING SEEDED HAY[2/]					WITH SMALL GRAIN SEEDING[3/]		
2	1.0	.86	.82	.78	.77	.84	.79	.77
4	1.0	.81	.72	.69	.66	.77	.69	.67
	2-3	**2-4**	**2-5**	**2-6**	**2-7**	**2-(4,5)**	**2-(6,5)**	**2-(7,5)**

COVER-MANAGEMENT CONDITION PAIRINGS

STRIPCROPPING (P) SUBFACTOR VALUES FOR RESIDUE-SURFACE ROUGHNESS OR SMALL GRAIN BASED ROTATIONS[4/]

STRIPS	HIGH RESIDUE, VERY ROUGH FALLOW[5/]				MODERATE RESIDUE, ROUGH FALLOW & SMALL GRAIN[6/]				
2	.97	.87	.81	.79	.92	.85	.81	.91	.86
4	.95	.83	.75	.70	.88	.78	.73	.87	.80
	3-4	**3-5**	**3-6**	**3-7**	**4-5**	**4-6**	**4-7**	**5-6**	**5-7**

COVER-MANAGEMENT CONDITION PAIRINGS

Tables based on an average row gradient of 0.5%, low ridge height (2-3 inches), 12% RUSLE slope gradient with the number of strips listed spanning 100% of the RUSLE slope length, and only 2 cover-management conditions being on the RUSLE slope at any given time.

1/ Rotations where cross-slope sod strips are alternated with cross-slope cultivated strips down the slope. Sediment deposition is induced by the sod.

2/ Sod-based rotations where hay crop is established in the spring without a nurse or companion crop of small grain. Half of the strips are always in hay, which is condition 2.

3/ Sod-based rotations where a companion crop of small grain is sown with hay seed, or hay crop is sown in stubble after small grain harvest. Half of the strips are always in hay.

4/ Rotations where cross-slope strips of contrasting residue amounts or surface roughness are alternated down the slope, or strips of small grain alternate with clean tilled row crops. Sediment deposition is induced by a strip that is either rougher surfaced or more residue covered, or has standing small grain or small grain stubble. Seasonal shifts in location of the sediment trapping versus sediment producing strip during the cropping year are acceptable as long as the contrasting cover strip types alternate at all times.

5/ Rotations where strips with greater than 75% residue cover or roughness depressions 7 inches or deeper alternate with strips of lesser cover or shallower tillage depressions at all times.

6/ Rotations where strips with greater than 40% but less than 75% residue cover or surface roughness depressions, 4-6 inches deep, or strips of growing small grain or small grain stubble, alternate with strips of lesser cover or shallower tillage depressions at all times.

TABLE 5B FIELD STRIPCROPPING PRACTICE (P) SUBFACTOR TABLE

STRIPCROPPING (P) SUBFACTOR VALUES FOR SOD BASED ROTATIONS[1/]

STRIPS	CLEAR, SPRING SEEDED HAY[2/]					WITH SMALL GRAIN SEEDING[3/]		
2	1.0	.91	.88	.86	.85	.89	.86	.86
4	1.0	.83	.81	.80	.79	.82	.80	.79
	2-3	**2-4**	**2-5**	**2-6**	**2-7**	**2-(4,5)**	**2-(6,5)**	**2-(7,5)**
	COVER-MANAGEMENT CONDITION PAIRINGS							

STRIPCROPPING (P) SUBFACTOR VALUES FOR SMALL GRAIN BASED ROTATIONS[4/]

STRIPS	HIGH RESIDUE, VERY ROUGH FALLOW[5/]				MODERATE RESIDUE, ROUGH FALLOW & SMALL GRAIN[6/]				
2	.97	.92	.88	.87	.95	.90	.89	.94	.92
4	.95	.88	.84	.82	.91	.86	.84	.92	.89
	3-4	**3-5**	**3-6**	**3-7**	**4-5**	**4-6**	**4-7**	**5-6**	**5-7**
	COVER-MANAGEMENT CONDITION PAIRINGS								

Tables based on an average row gradient of 3.0%, low ridge height (2-3 inches), 12% RUSLE slope gradient with the number of strips listed spanning 100% of the RUSLE slope length, and only 2 cover-management conditions being on the RUSLE slope at any given time.

1/ Rotations where cross-slope sod strips are alternated with cross-slope cultivated strips down the slope. Sediment deposition is induced by the sod.

2/ Sod-based rotations where hay crop is established in the spring without a nurse or companion crop of small grain. Half of the strips are always in hay, which is condition 2.

3/ Sod-based rotations where a companion crop of small grain is sown with hay seed, or hay crop is sown in stubble after small grain harvest. Half of the strips are always in hay.

4/ Rotations where cross-slope strips of contrasting residue amounts or surface roughness are alternated down the slope, or strips of small grain alternate with clean tilled row crops. Sediment deposition is induced by a strip that is either rougher surfaced or more residue covered, or has standing small grain or small grain stubble. Seasonal shifts in location of the sediment trapping versus sediment producing strip during the cropping year are acceptable as long as the contrasting cover strip types alternate at all times.

5/ Rotations where strips with greater than 75% residue cover or roughness depressions 7 inches or deeper alternate with strips of lesser cover or shallower tillage depressions at all times.

6/ Rotations where strips with greater than 40% but less than 75% residue cover or surface roughness depressions, 4-6 inches deep, or strips of growing small grain or small grain stubble, alternate with strips of lesser cover or shallower tillage depressions at all times.

TABLE 5C BUFFER STRIPCROPPING PRACTICE (P) SUBFACTOR TABLES

NO. OF	CROP-BUFFER STRIP RATIOS[1/]											
STRIPS	9:1	4:1	9:1	4:1	9:1	4:1	9:1	4:1	9:1	4:1	9:1	4:1
2	.90	.77	.89	.77	.90	.77	.90	.78	.92	.79		
3	.72	.70	.72	.70	.72	.70	.73	.70	.75	.70		
4	.74	.64	.71	.64	.73	.64	.74	.65	.80	.67		
5	.65	.64	.65	.64	.65	.64	.68	.64	.73	.64		
	3-1		**4-1**		**5-1**		**6-1**		**7-1**			

COVER-MANAGEMENT CONDITION PAIRINGS, **UNHARVESTED BUFFERS**

NO. OF	CROP-BUFFER STRIP RATIOS[1/]											
STRIPS	9:1	4:1	9:1	4:1	9:1	4:1	9:1	4:1	9:1	4:1	9:1	4:1
2	.99	.99	.93	.86	.92	.82	.92	.80	.94	.82		
3	.98	.98	.82	.82	.78	.77	.76	.74	.78	.73		
4	.98	.98	.81	.76	.79	.72	.78	.70	.83	.72		
5	.98	.98	.75	.73	.74	.70	.73	.69	.77	.70		
	3-2		**4-2**		**5-2**		**6-2**		**7-2**			

COVER-MANAGEMENT CONDITION PAIRINGS, **HARVESTED BUFFERS**

Tables based on an average row gradient of 0.5%, low ridge height (2-3 inches), 12% RUSLE slope gradient with the number of strips listed spanning 100% of the RUSLE slope length, a continuous cover-management condition on all cultivated crop strips, and the position of the buffer/crop strips on the slope as shown below. Use upper table for buffer strips that are left in an unharvested condition, condition 1. They may be mowed for maintenance purposes. Use lower table for buffer strips that are mowed and harvested for forage, condition 2.

[1/] Ratio of cultivated crop strip to perennial sod (buffer) strip. 9-1 ratio means 10% of the RUSLE slope length is in buffer strip(s). 4-1 ratio is 20% of the RUSLE slope length in buffer strip(s).

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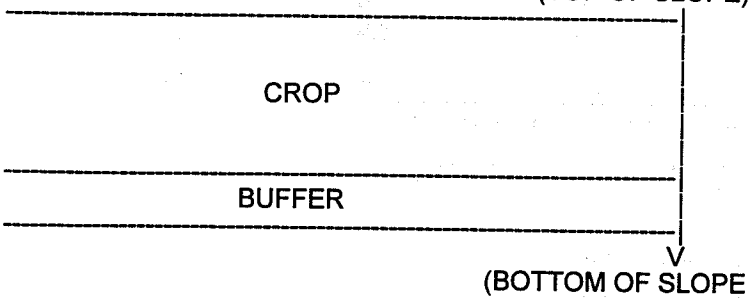
TWO STRIP SYSTEM

POSITION OF STRIPS ON RUSLE SLOPE



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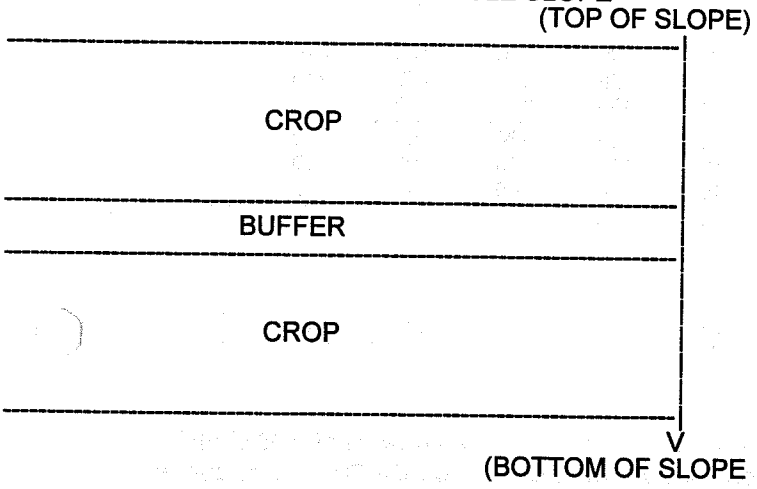
THREE STRIP SYSTEM

POSITION OF STRIPS ON RUSLE SLOPE



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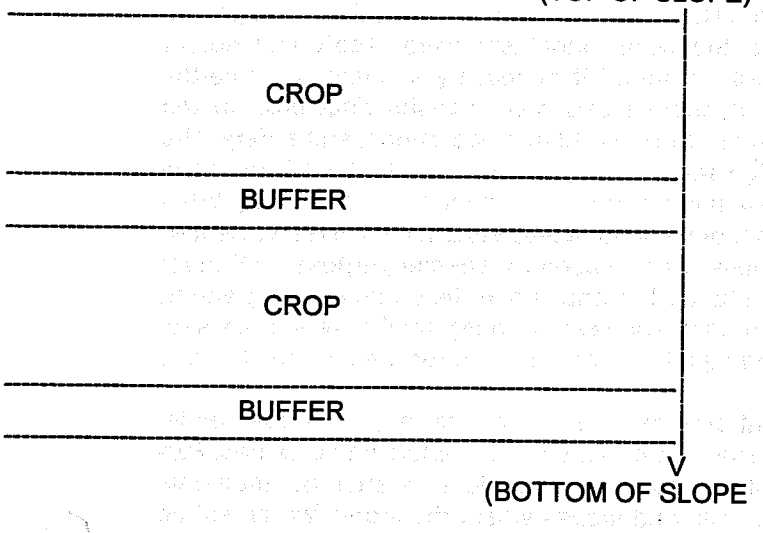
FOUR STRIP SYSTEM

POSITION OF STRIPS ON RUSLE SLOPE



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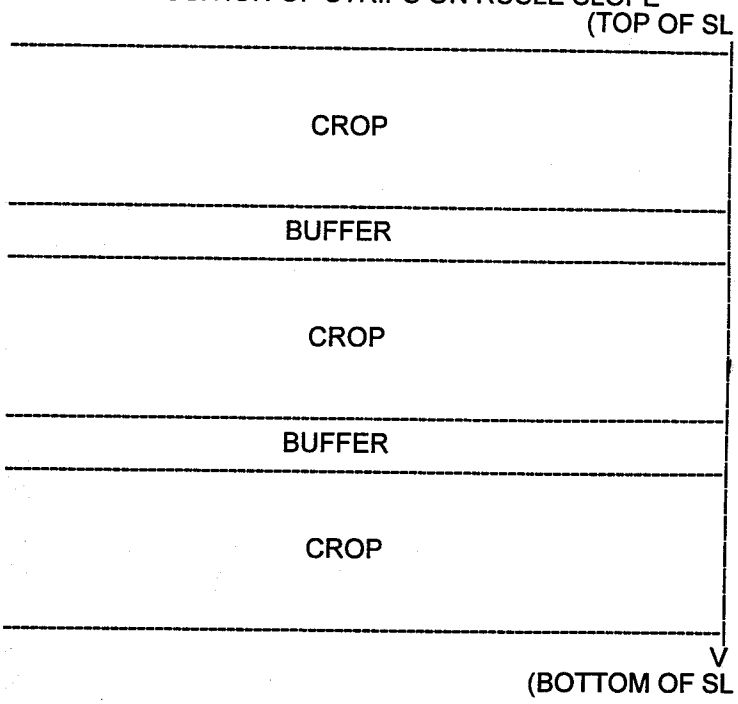
FIVE STRIP SYSTEM

POSITION OF STRIPS ON RUSLE SLOPE



NOTE: Some deviation from the relative position of the strips a shown here is to be expected and is allowed.

Table 1.—Terrace P factors

Horizontal interval (ft)	Horizontal interval (m)	Closed outlets[1]	Open outlets, with percent grade of[2] 0.1-0.3	0.4-0.7	0.8
Less than 110	Less than 33	0.5	0.6	0.7	1.0
110-140	33-42	0.6	0.7	0.8	1.0
140-180	43-54	0.7	0.8	0.9	1.0
180-225	55-68	0.8	0.8	0.9	1.0
225-300	68-90	0.9	0.9	1.0	1.0
More than 300	More than 90	1.0	1.0	1.0	1.0

NOTE: If contouring or stripcropping P factors are appropriate, they can be multiplied by the terrace P factor for the composite P factor.

[1]"P" factors for closed outlet terraces also apply to terraces with underground outlets and to level terraces with open outlets.
[2]The channel grade is measured on the 300 ft of terrace or the one-third of total terrace length closest to the outlet, whichever distance is less.

Table 2.—Maximum horizontal spacing for terraces

Slope	USLE R factor of 0-35		35-175		More than 175		With contour stripcropping		For concentrated flow control	
Percent	*ft*	*m*	*ft*	*m*	*ft*	*m*	*ft*	*m*	*ft*	*m*
0-2	700	210	500	150	450	130	600	180	700	210
2-4	700	210	400	120	300	90	600	180	700	210
4-6	600	180	400	120	200	60	600	180	600	180
6-9	400	120	300	90	150	45	400	120	500	150
9-12	400	120	250	75	150	45	250	75	500	150
12-18	250	75	200	60	150	45	150	45	400	120
More than 18	250	75	200	60	150	45	150	45	300	90
Minimum spacing required, all slopes	200	60	150	45	90	27	90	27	200	60

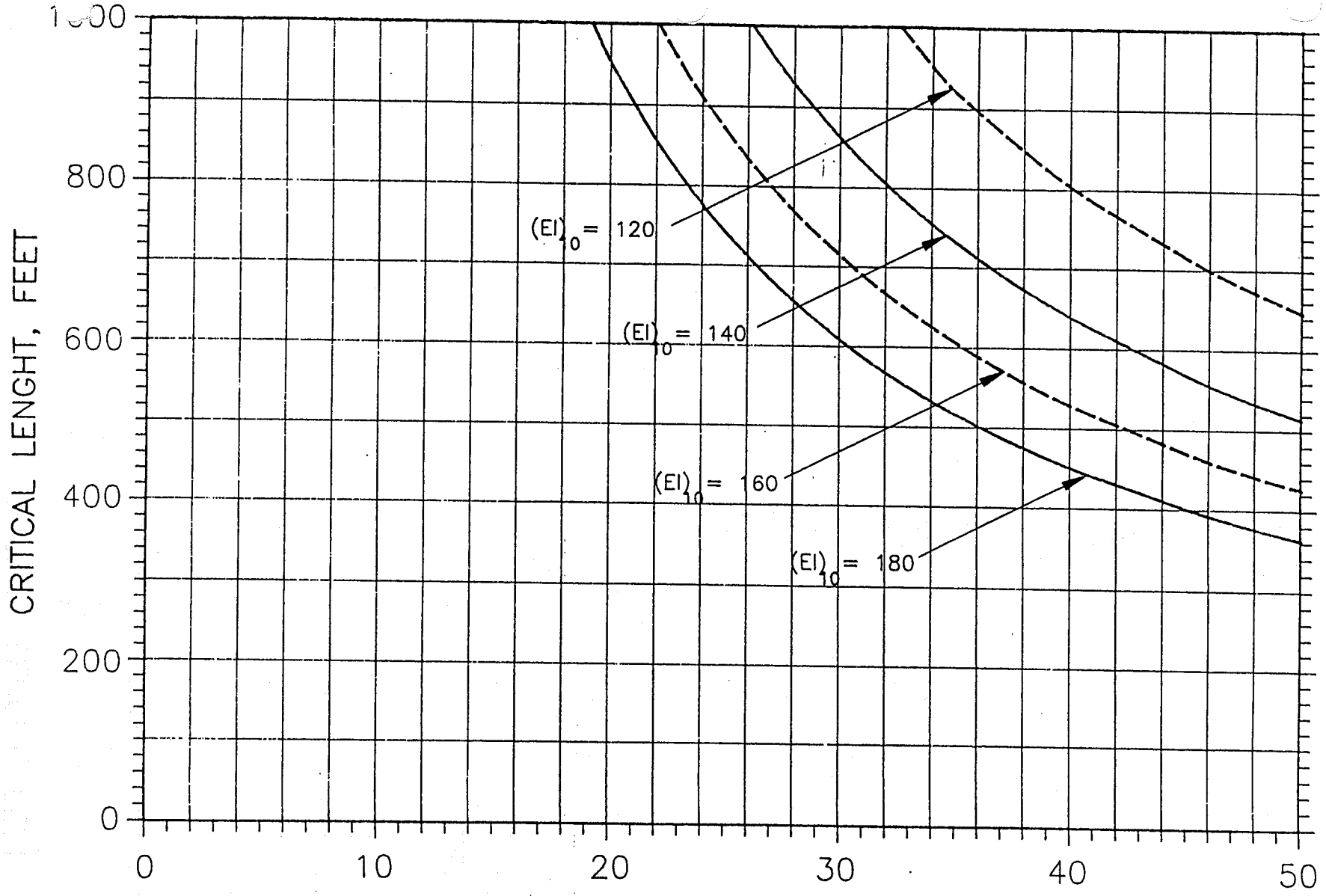
Alinement. Terraces shall be parallel if feasible and as parallel as practicable. Curves shall be long and gentle to accommodate farm machinery. Land forming, extra cut or fill along the terrace line, multiple outlets, variations in grade, channel blocks, and other methods shall be used to achieve good alinement.

Field efficiency may be used to compare alternative terrace systems. Field efficiency is the ratio of time required to farm the field being planned, to that required to farm a rectangular field of the same acreage ½ mi long.

Capacity. The terrace shall have enough capacity to control the runoff from a 10-year frequency, 24-hour storm without overtopping. For terraces with underground outlets, the capacity shall be increased by the estimated 10-year sediment accumulation, unless provisions are made to maintain the design capacity through maintenance. Terrace systems designed to provide flood protection or to function with other structures shall have adequate capacity to control a storm of a frequency consistent with the potential hazard. When the capacity is determined by the formula $Q = AV$ and the V is calculated by using Manning's formula, an n value of 0.06 shall be used for bare channels; and SCS-TP-61, Handbook of Channel Design for Soil and Water Conservation, or equivalent, shall be used for vegetated channels.

Cross section. The terrace cross section shall be proportioned to fit the land slope, the crops grown, and the farm machinery used. Additional height shall be added if necessary to provide for settlement, channel sediment deposits, ridge erosion, the effect of normal tillage operations, and safety. The ridge shall have a minimum width of 3 ft (1 m) at the design elevation. The minimum slope of a vegetated front or back ridge slope is 2:1. If necessary, steeper slopes may be used for special purposes but must be stable. The opening at the outlet end of gradient and open-end level terraces shall have a cross section equal to that specified for the terrace channel.

End closures. Level terraces may have open ends, partial end closures, or complete end closures. Partial and complete end closures shall be used only on soils and slopes where the stored water will be absorbed by the soil without appreciable crop damage or where underground outlets are provided.

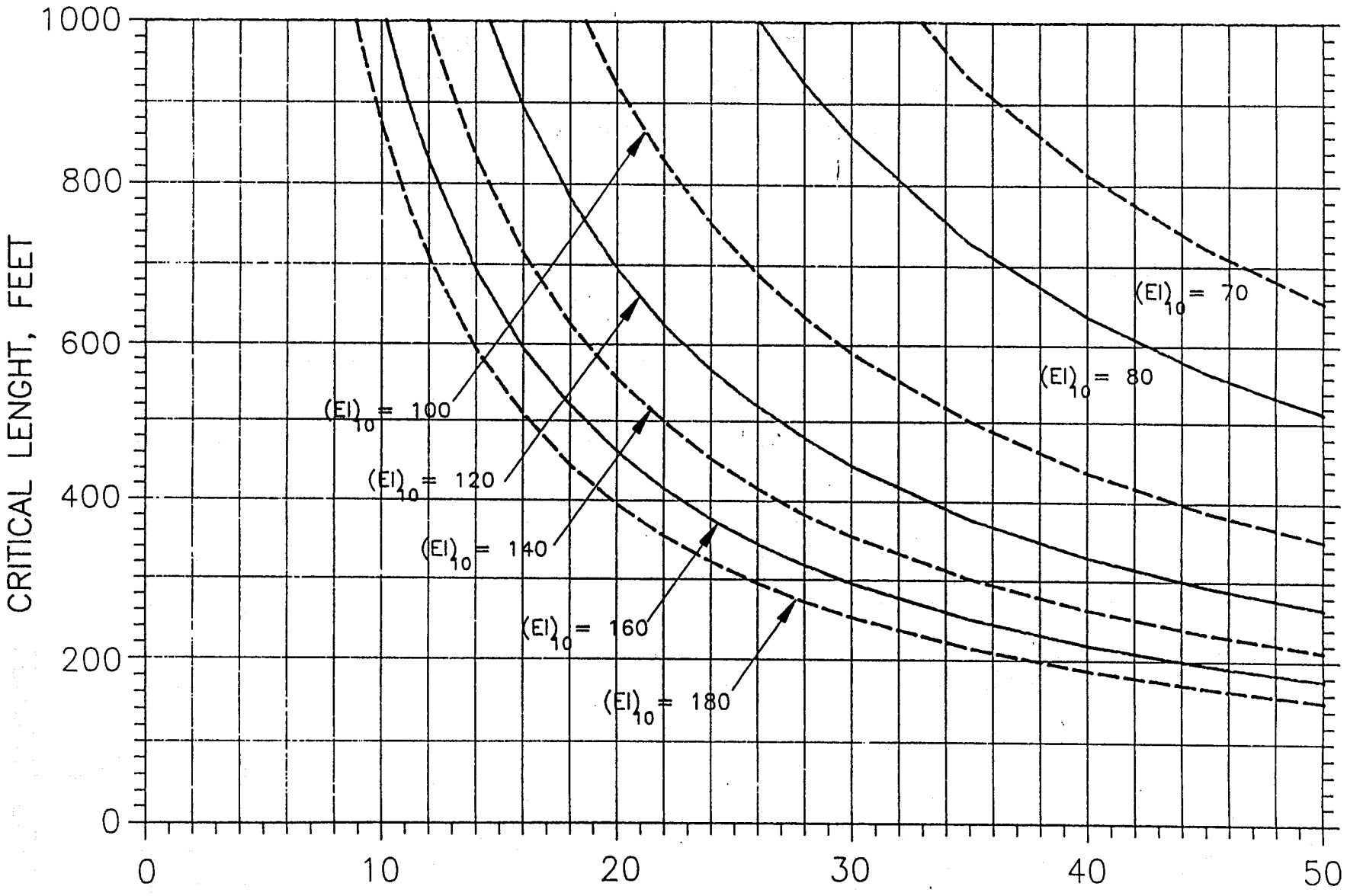


Hydrologic Soil Group A

Cropland Cover Management Condition 3

Use for Contouring where R applies

Figure 1

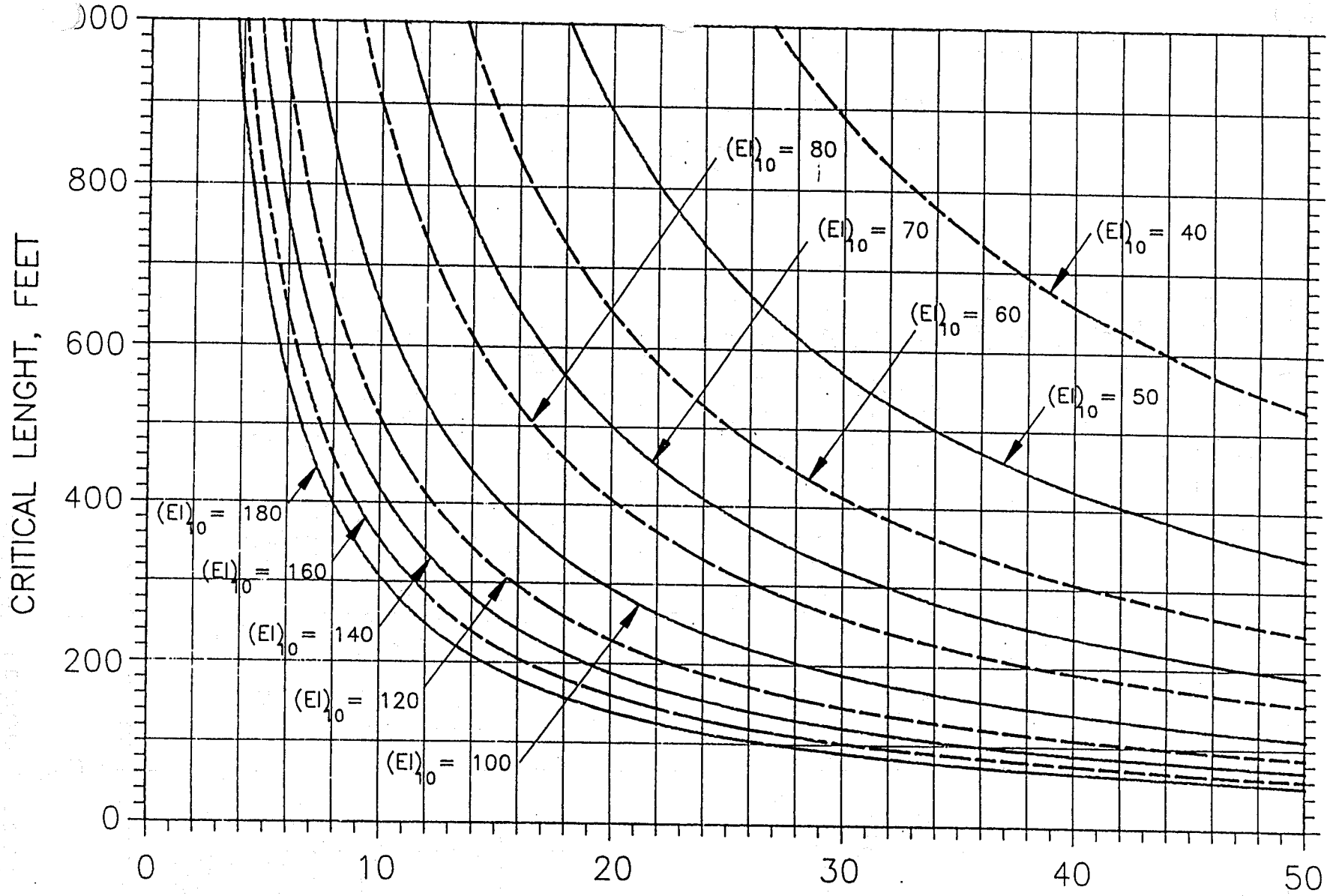


Hydrologic Soil Group A

Cropland Cover Management Condition 4

Use for Contouring where R applies

Figure 2

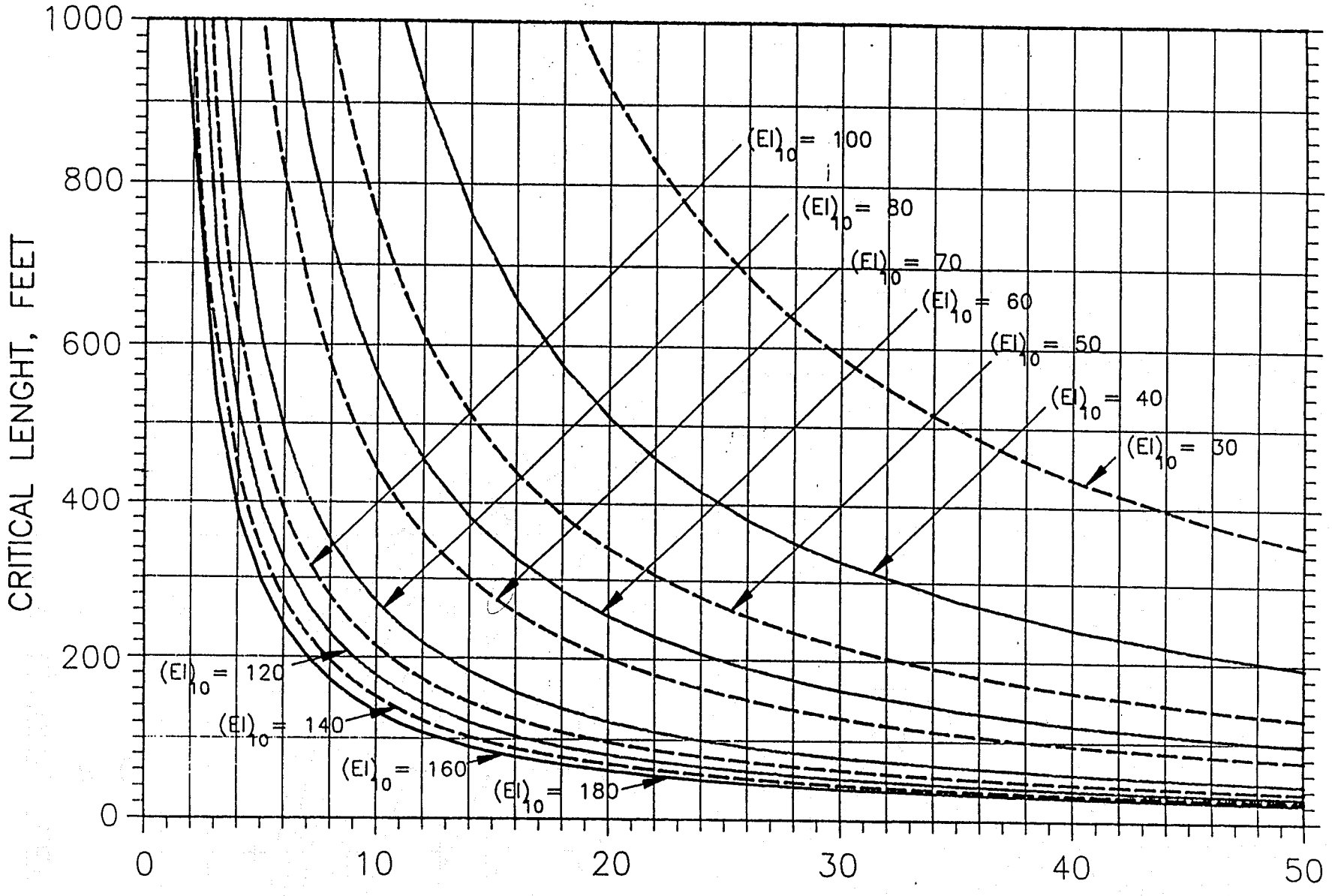


Hydrologic Soil Group A

Cropland Cover Management Condition 5

Use for Contouring where R applies

Figure 3

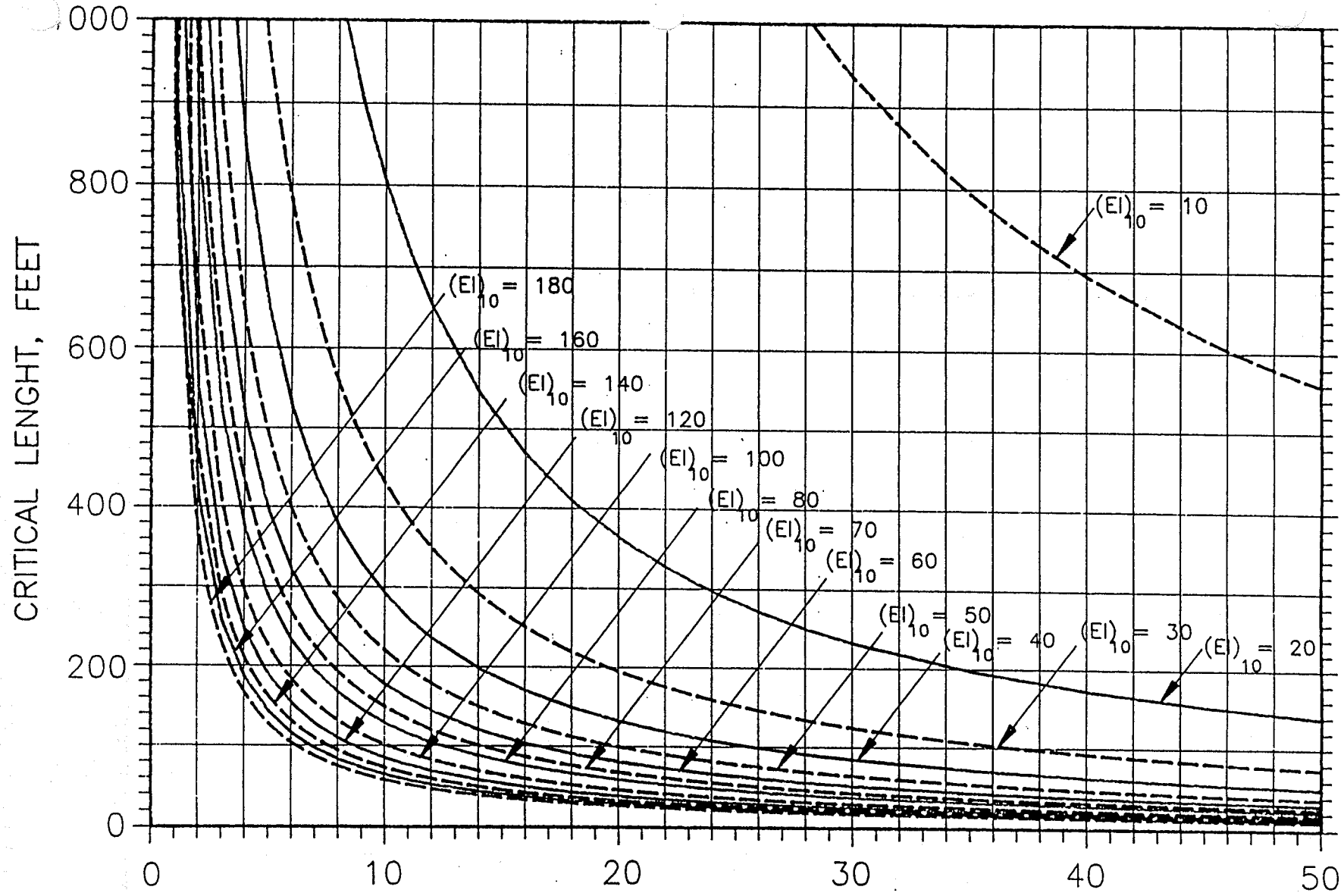


Hydrologic Soil Group A

Cropland Cover Management Condition 6

Use for Contouring where R applies

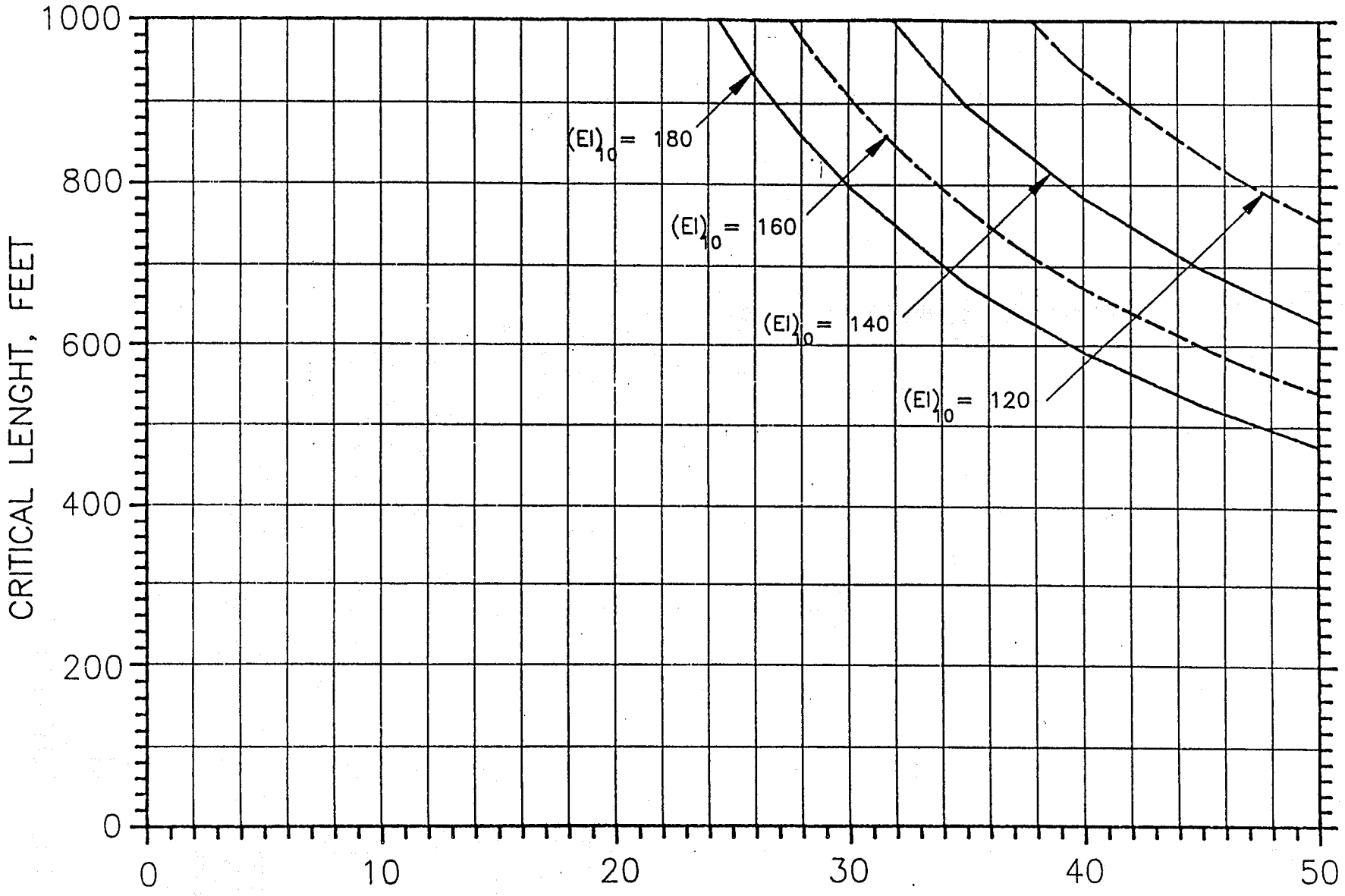
Figure 4



Hydrologic Soil Group A

Cropland Cover Management Condition 7

Use for Contouring where R applies

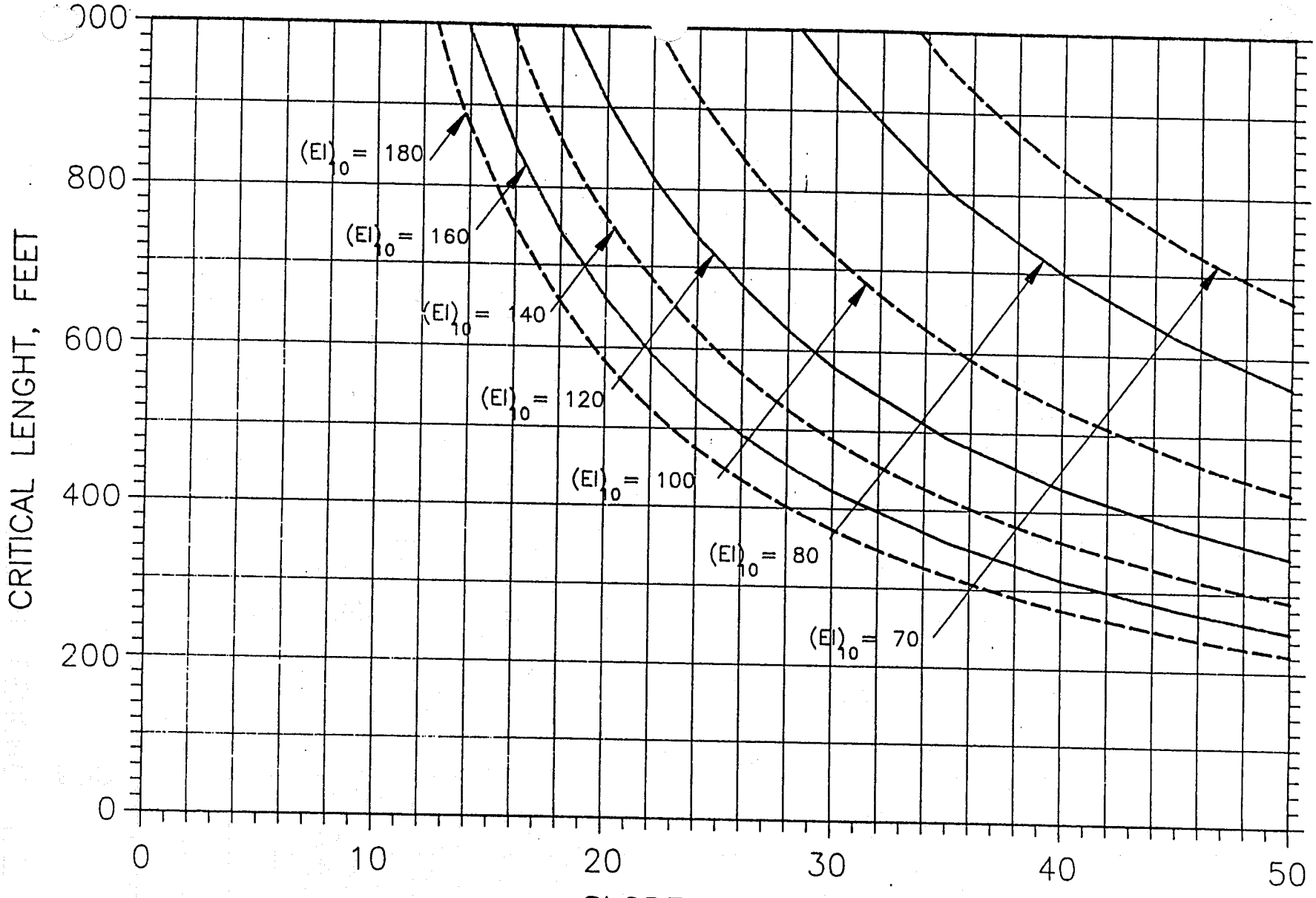


Hydrologic Soil Group B

Cropland Cover Management Condition 2

Use for Contouring where R applies

Figure 6

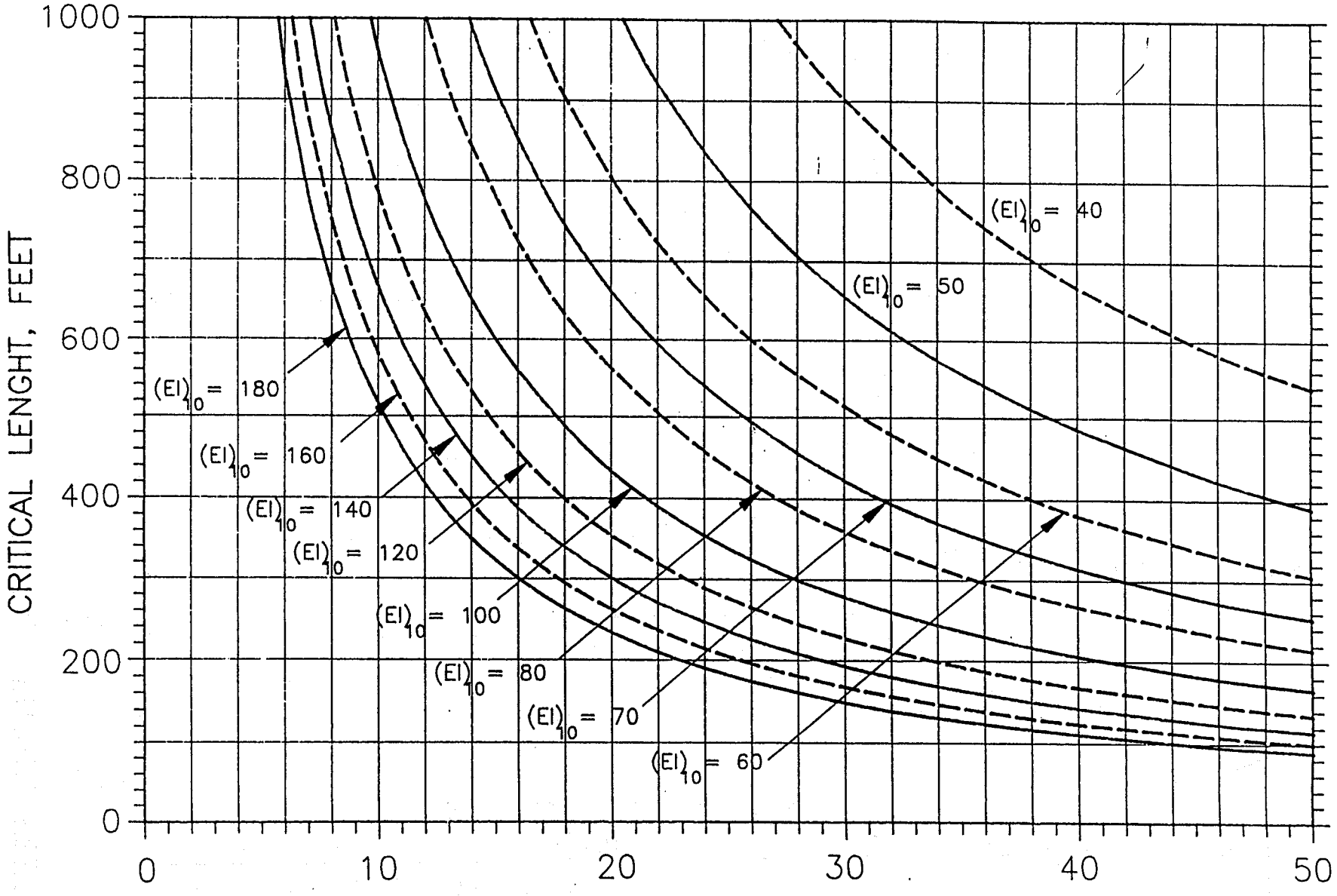


Hydrologic Soil Group B

Cropland Cover Management Condition 3

Use for Contouring where R applies

Figure 1

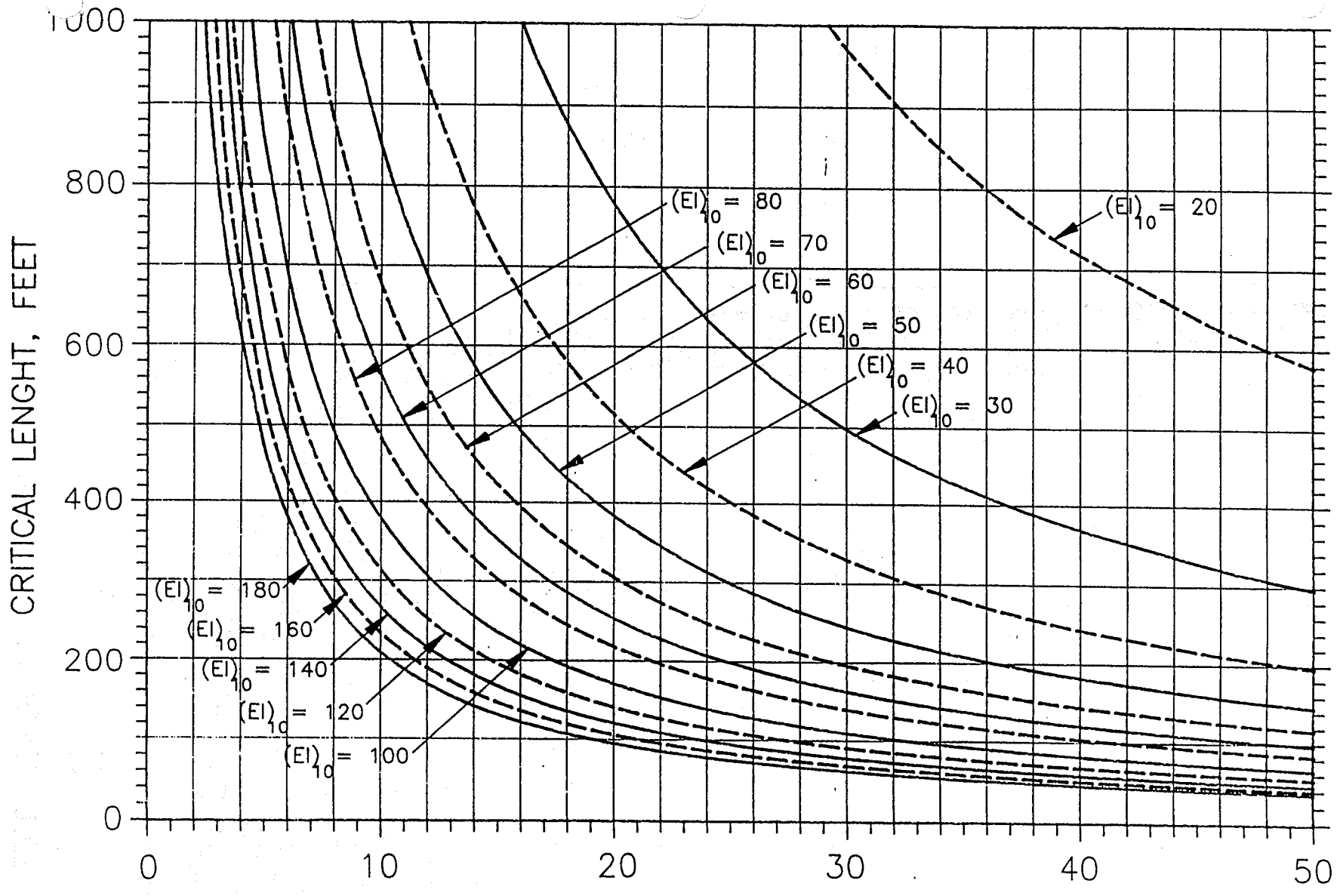


Hydrologic Soil Group B

Cropland Cover Management Condition 4

Use for Contouring where R applies

Figure 8

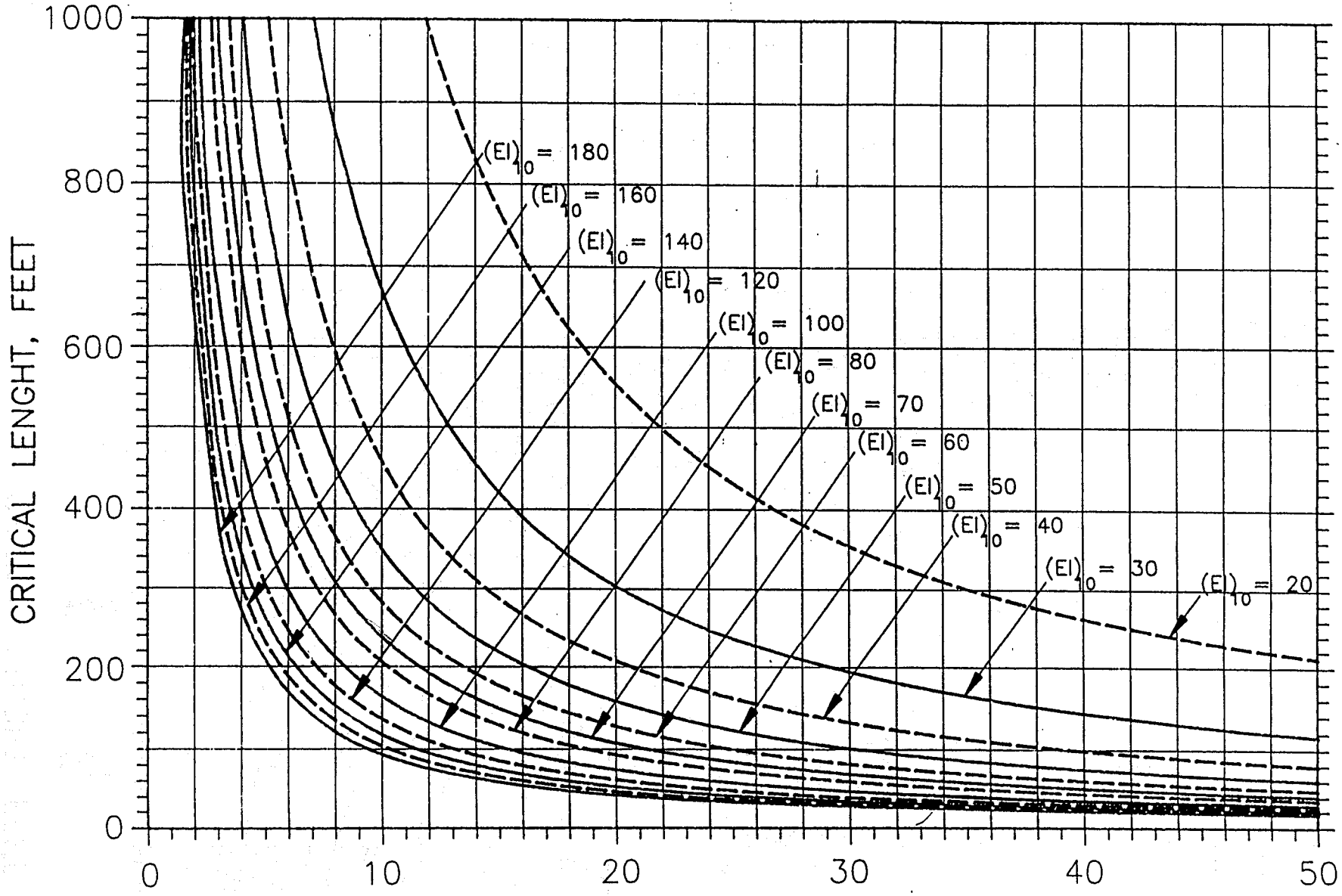


Hydrologic Soil Group B

Cropland Cover Management Condition 5

Use for Contouring where R applies

Figure 9

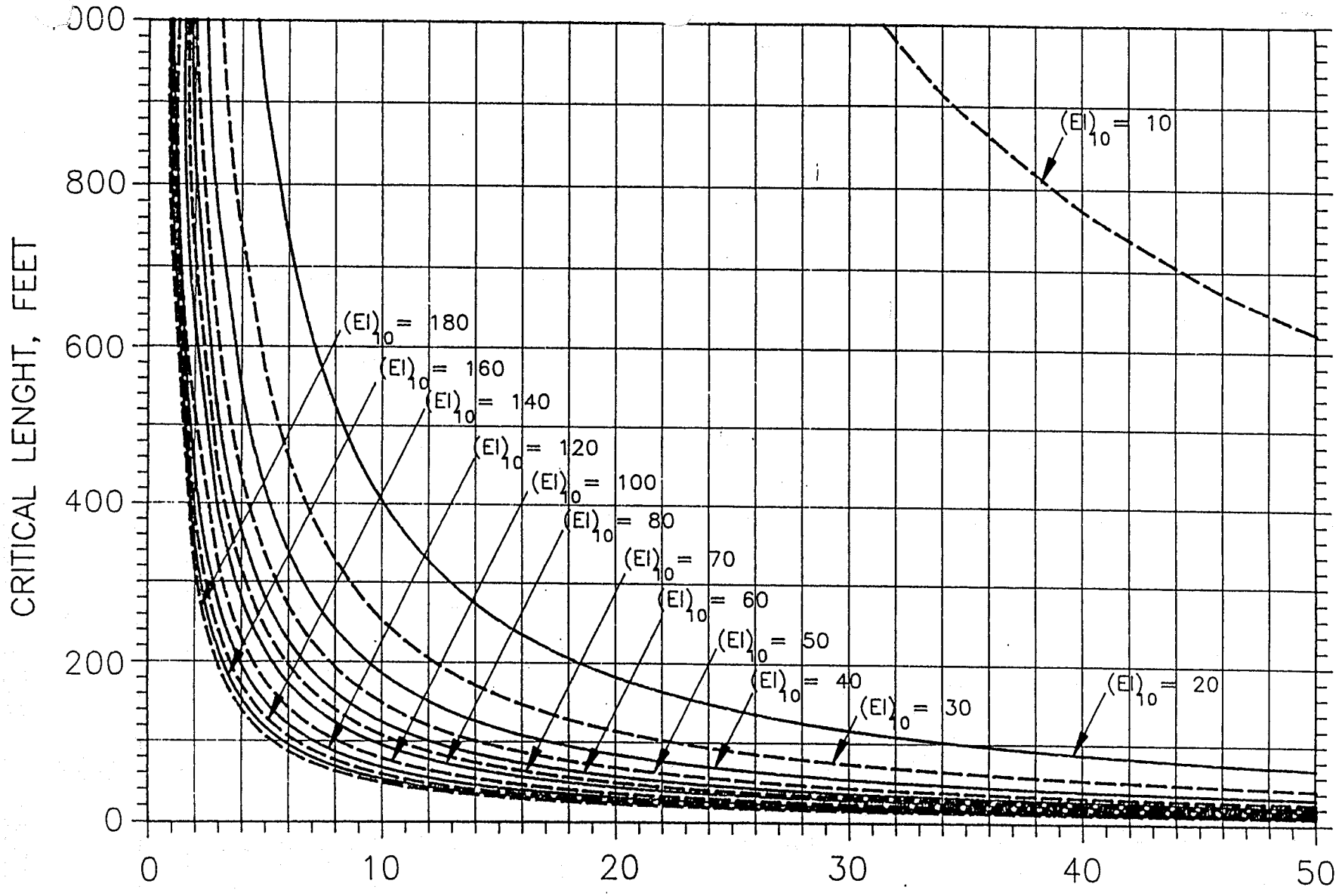


Hydrologic Soil Group B

Cropland Cover Management Condition 6

Use for Contouring where R applies

Figure 10

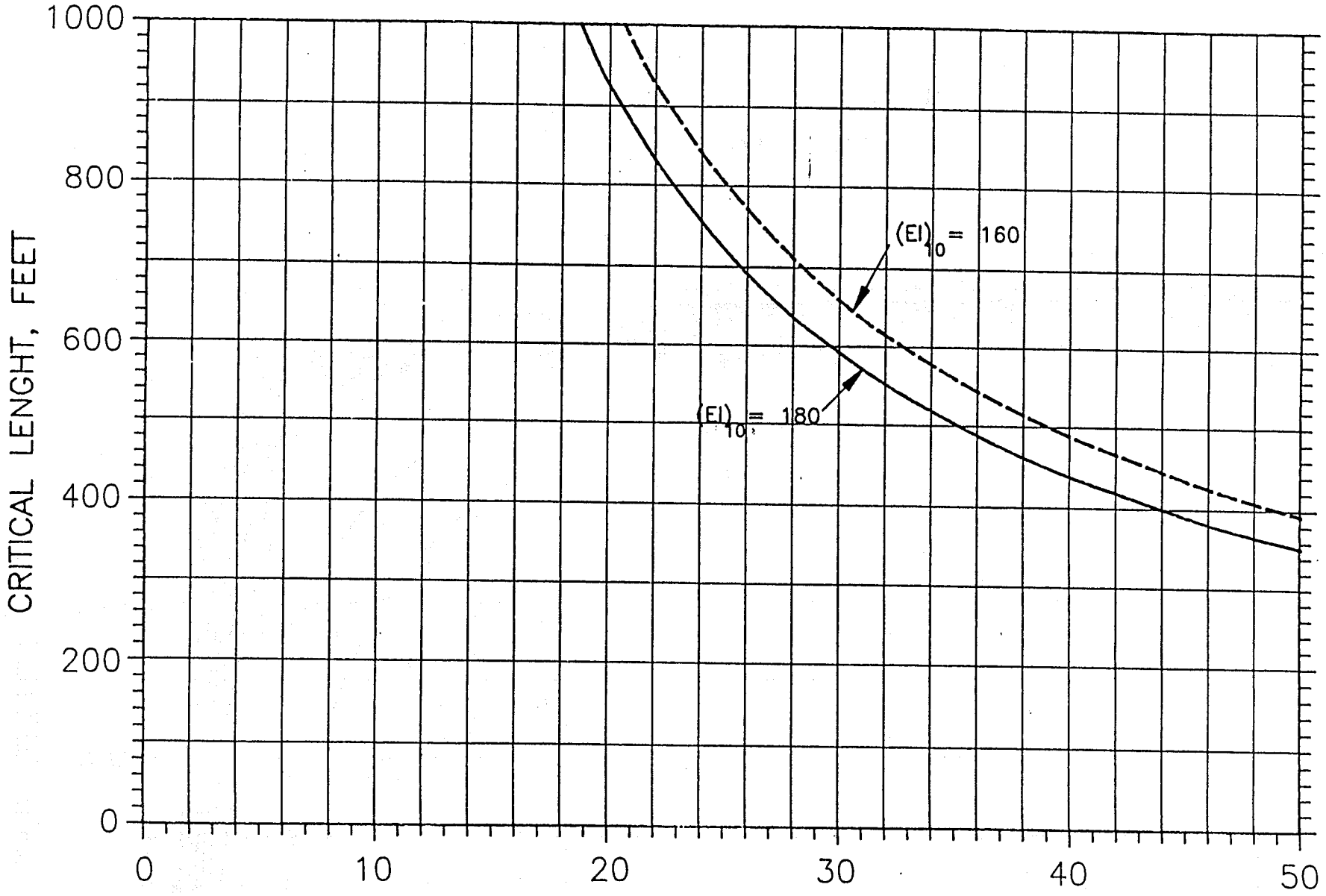


Hydrologic Soil Group B

Cropland Cover Management Condition 7

Use for Contouring where R applies

Figure 11

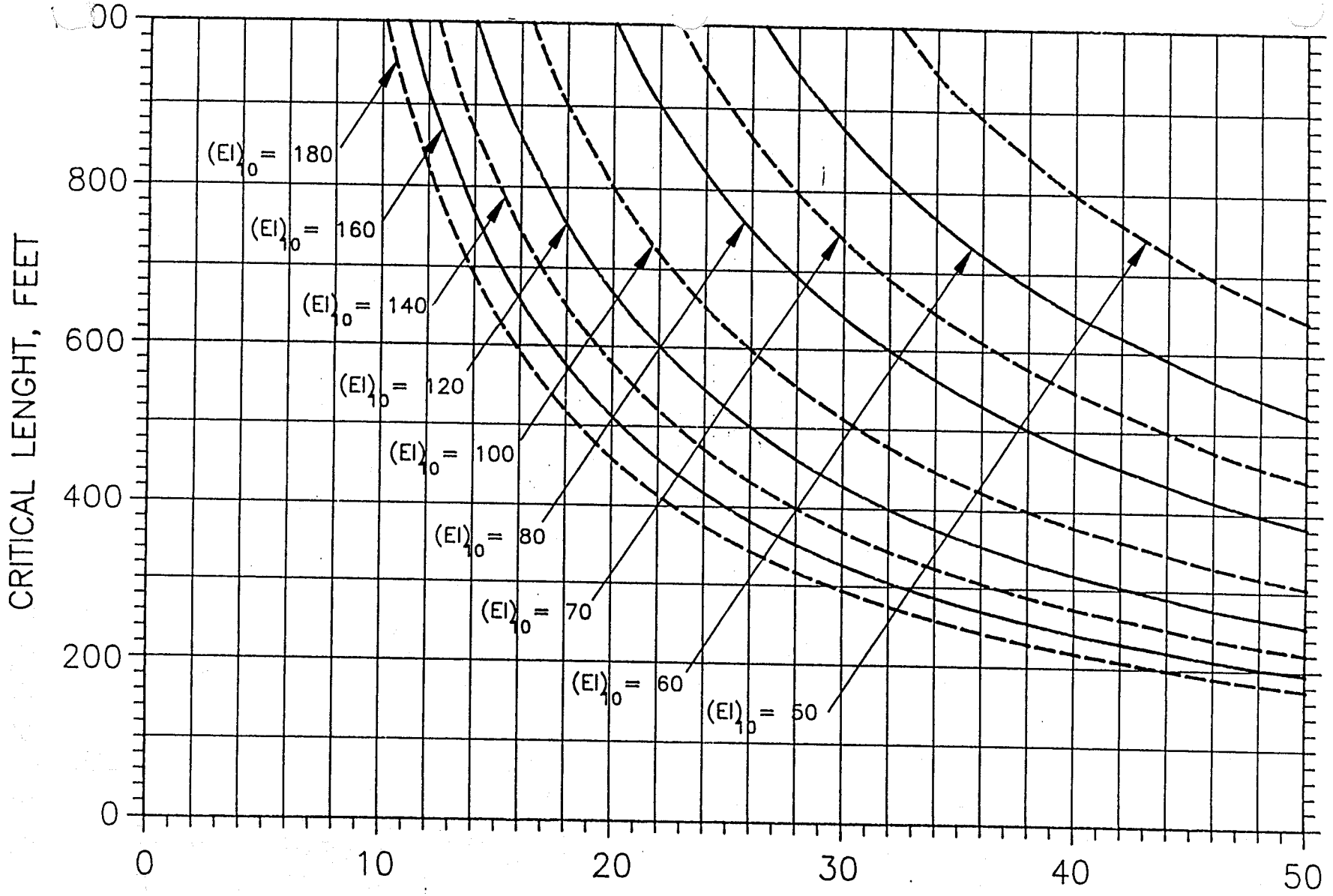


Hydrologic Soil Group C

Cropland Cover Management Condition 2

Use for Contouring where R applies

Figure 12

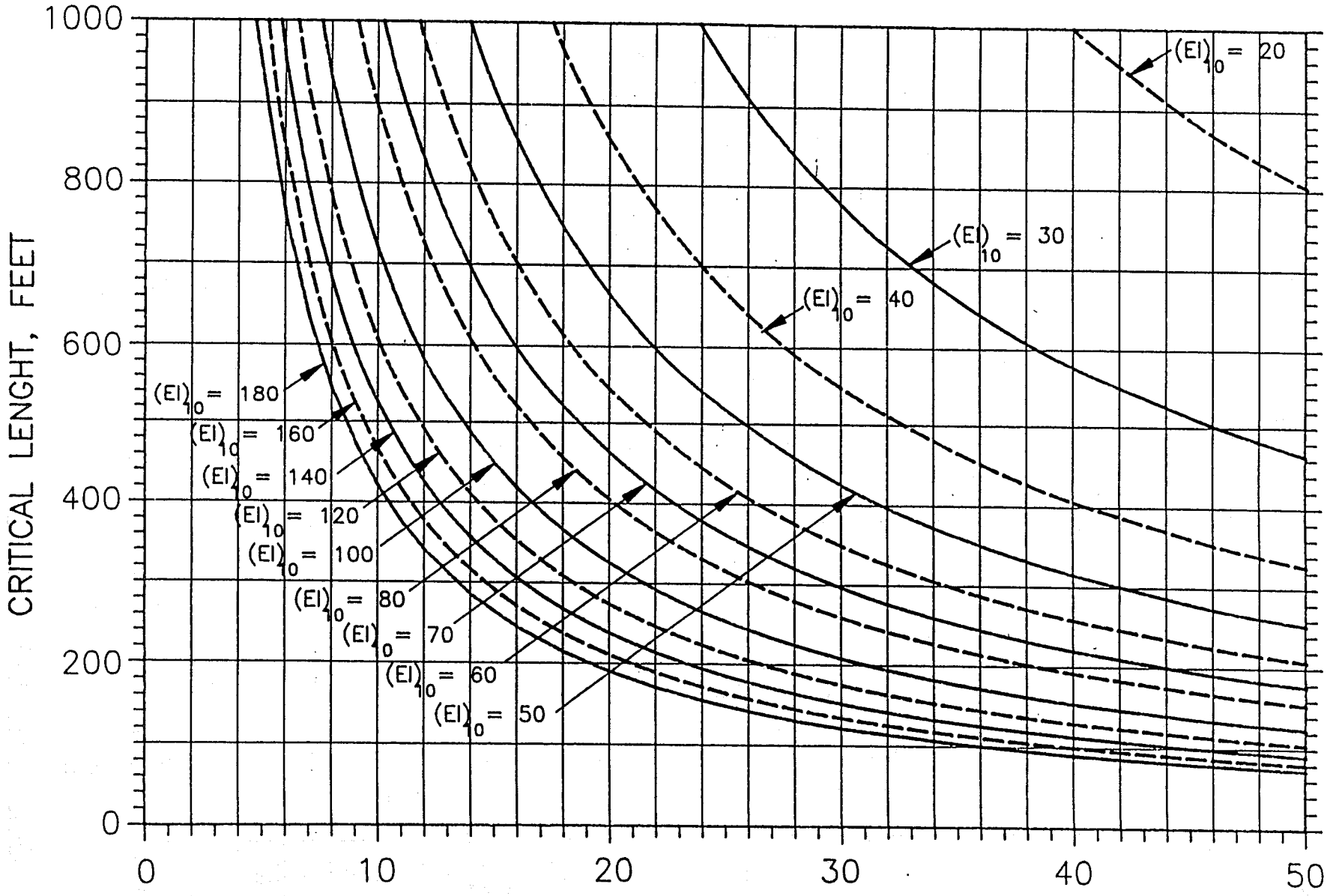


Hydrologic Soil Group C

Cropland Cover Management Condition 3

Use for Contouring where R applies

Figure 13

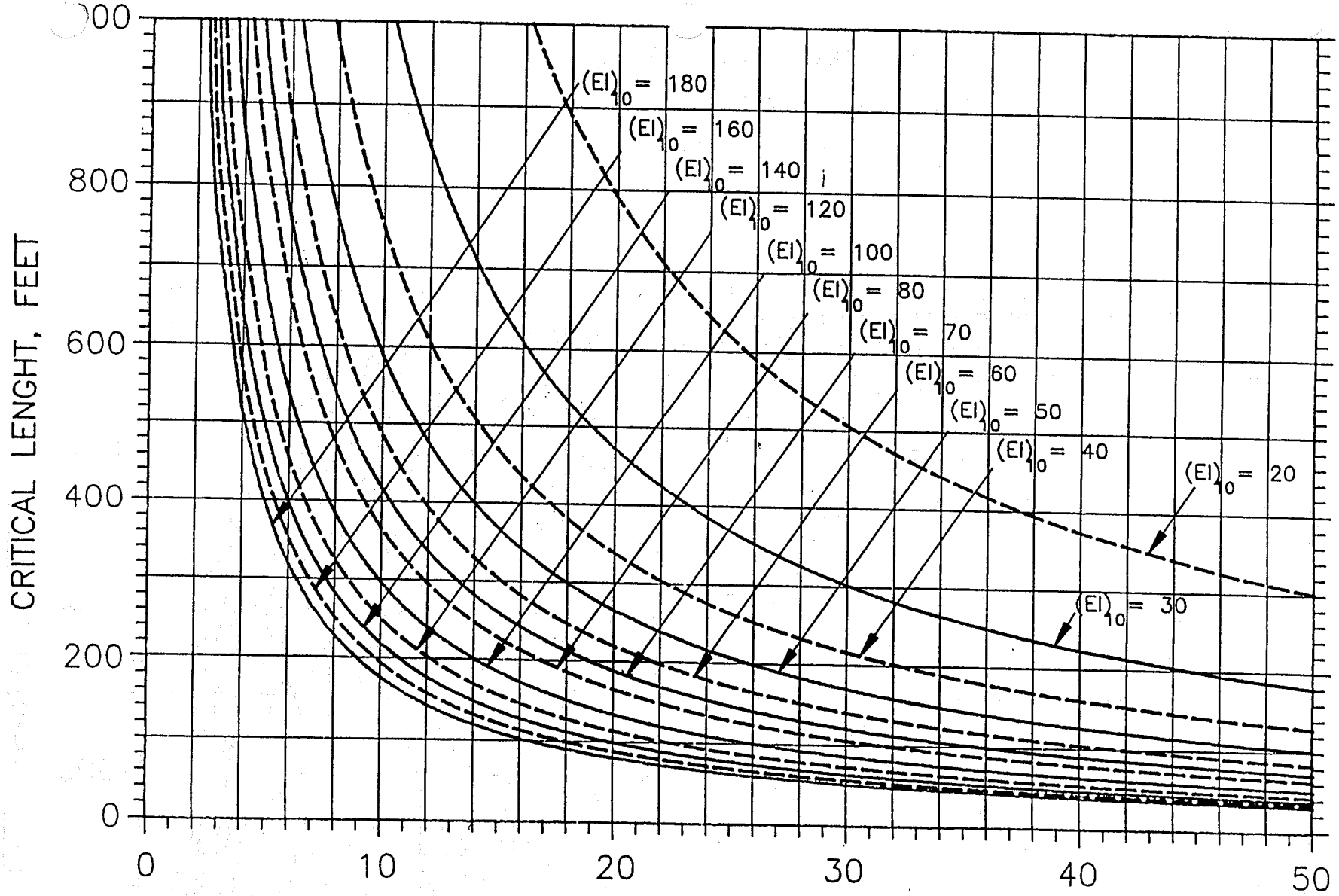


Hydrologic Soil Group C

Cropland Cover Management Condition 4

Use for Contouring where R applies

Figure 14

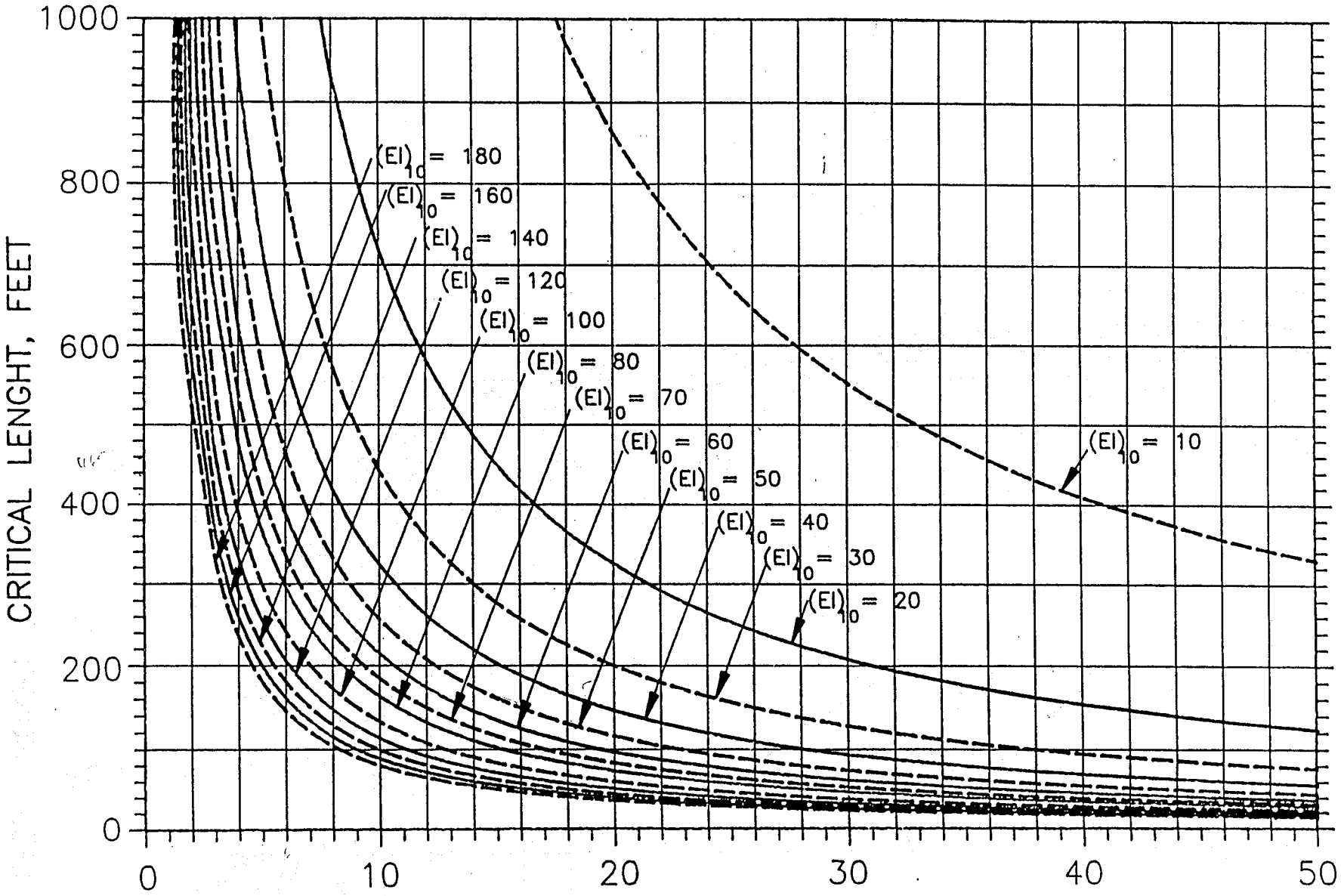


Hydrologic Soil Group C

Cropland Cover Management Condition 5

Use for Contouring where R applies

Figure 15

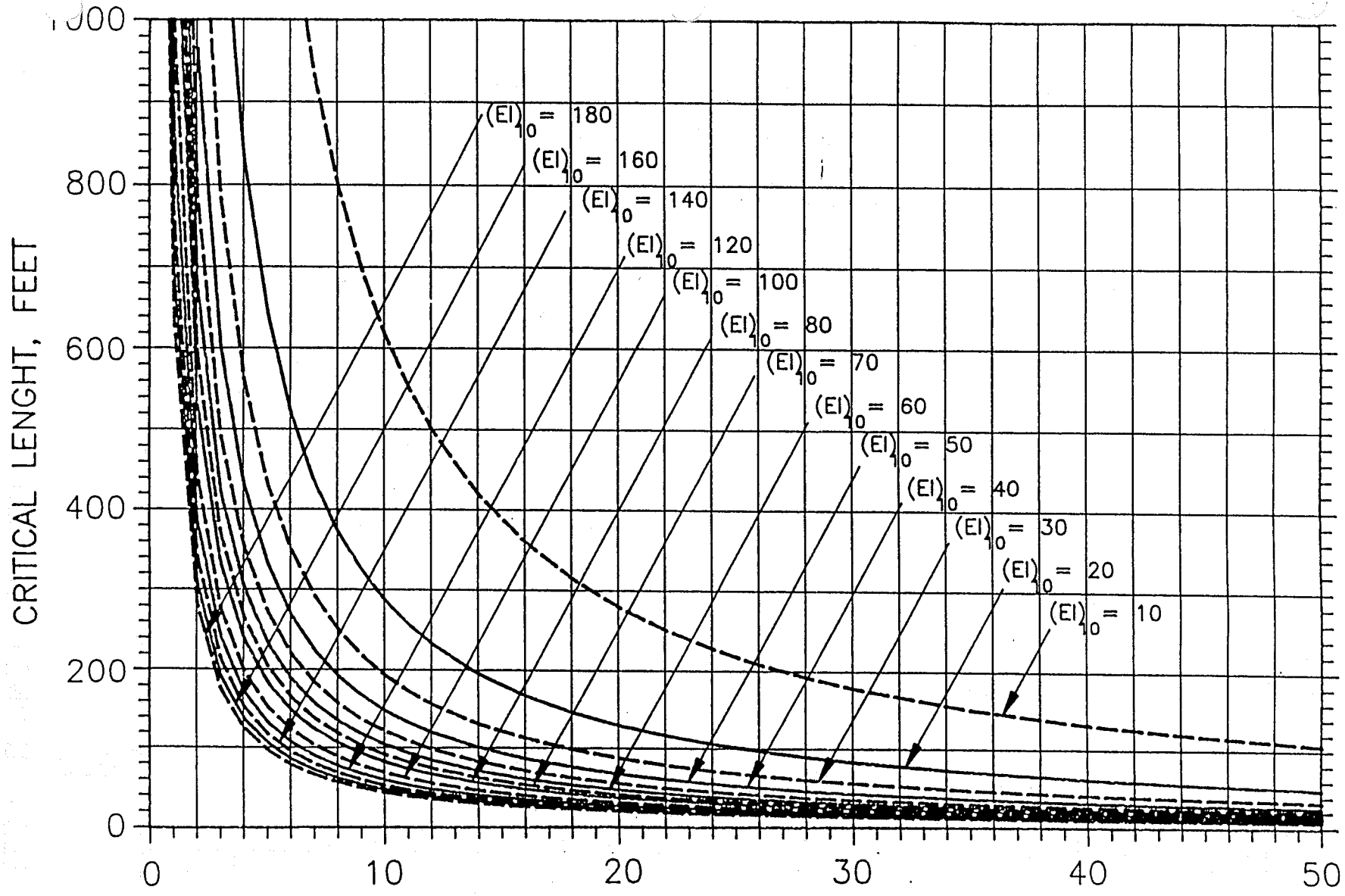


Hydrologic Soil Group C

Cropland Cover Management Condition 6

Use for Contouring where R applies

Figure 16

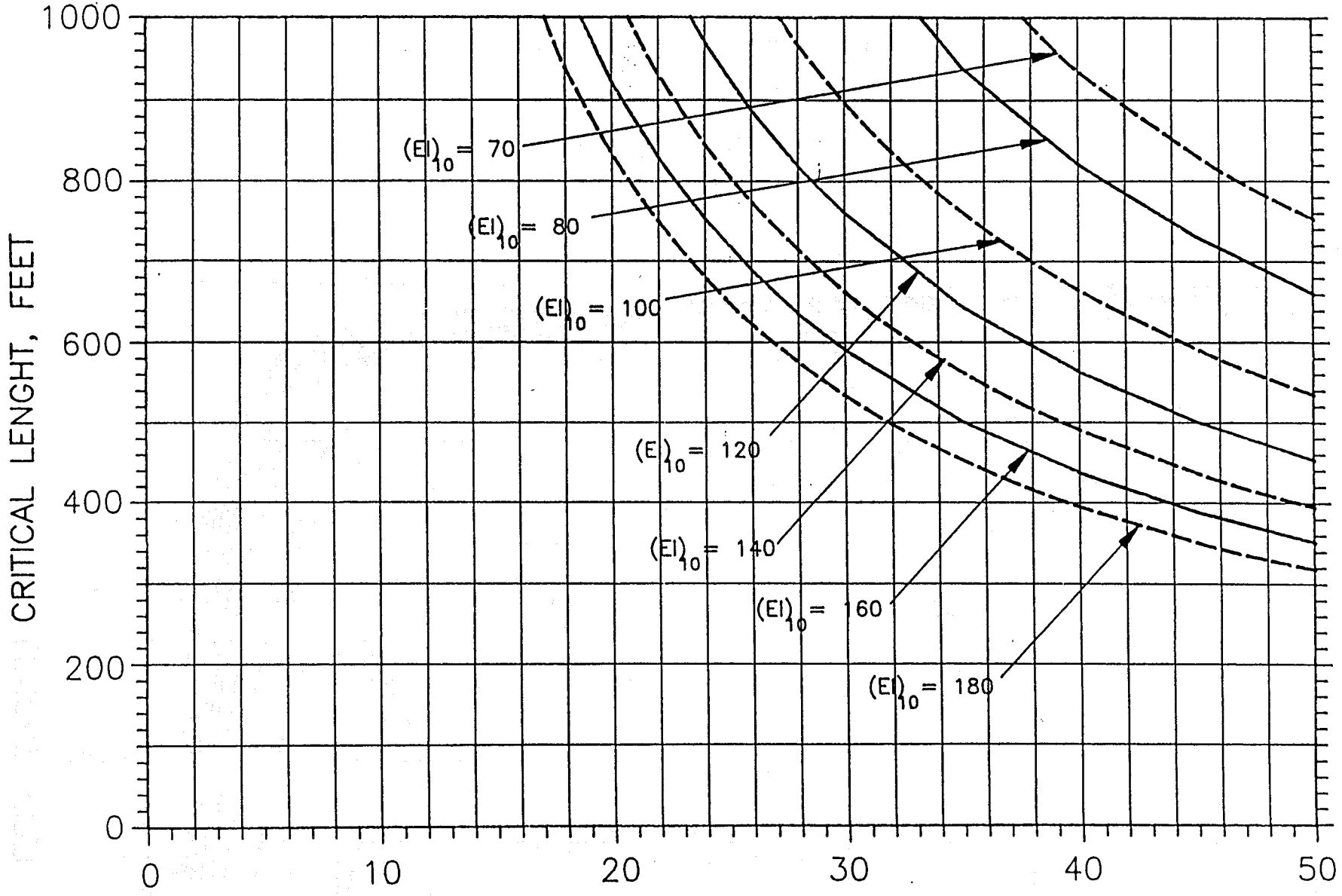


Hydrologic Soil Group C

Cropland Cover Management Condition 7

Use for Contouring where R applies

Figure 1/

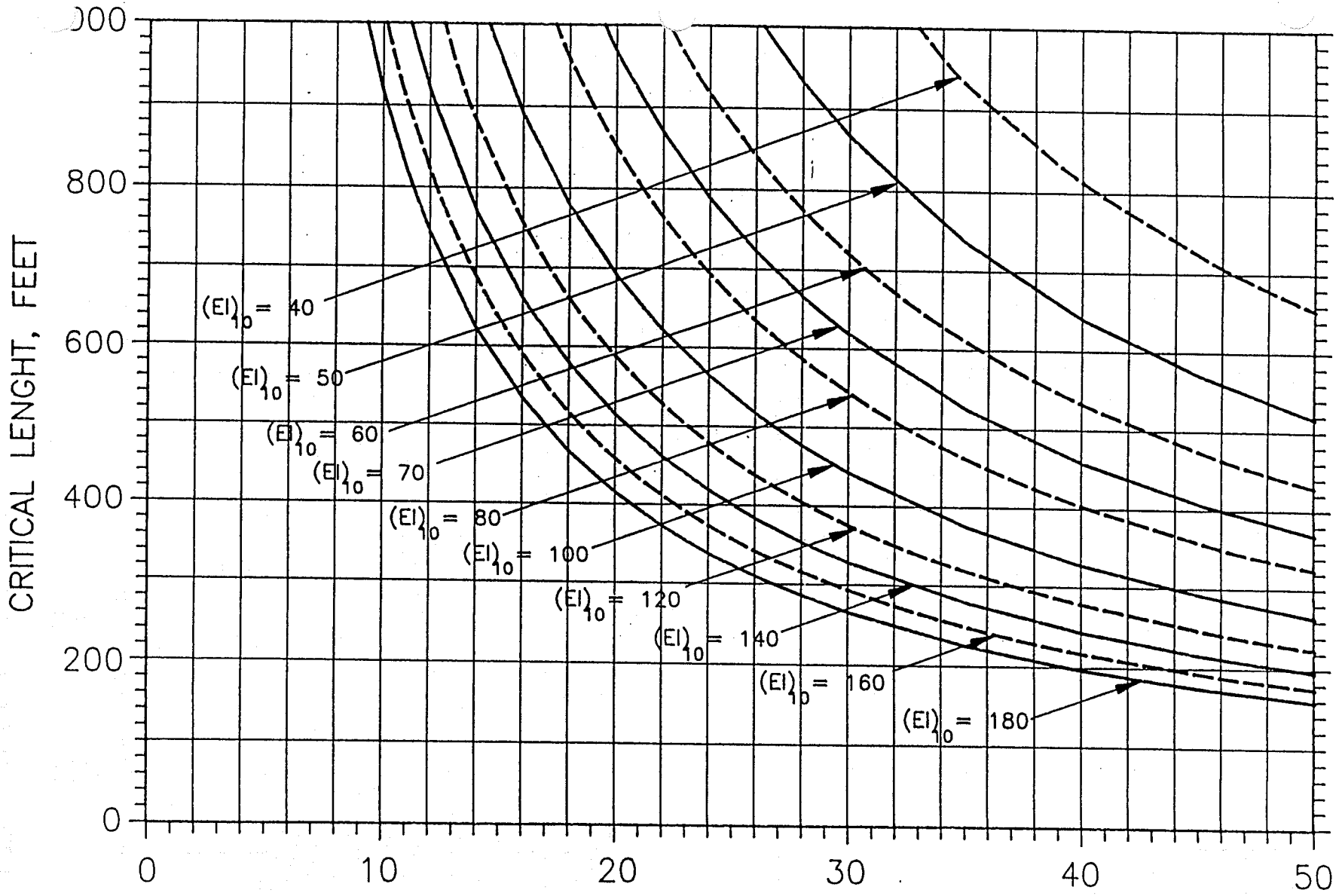


Hydrologic Soil Group D

Cropland Cover Management Condition 2

Use for Contouring where R applies

Figure 18

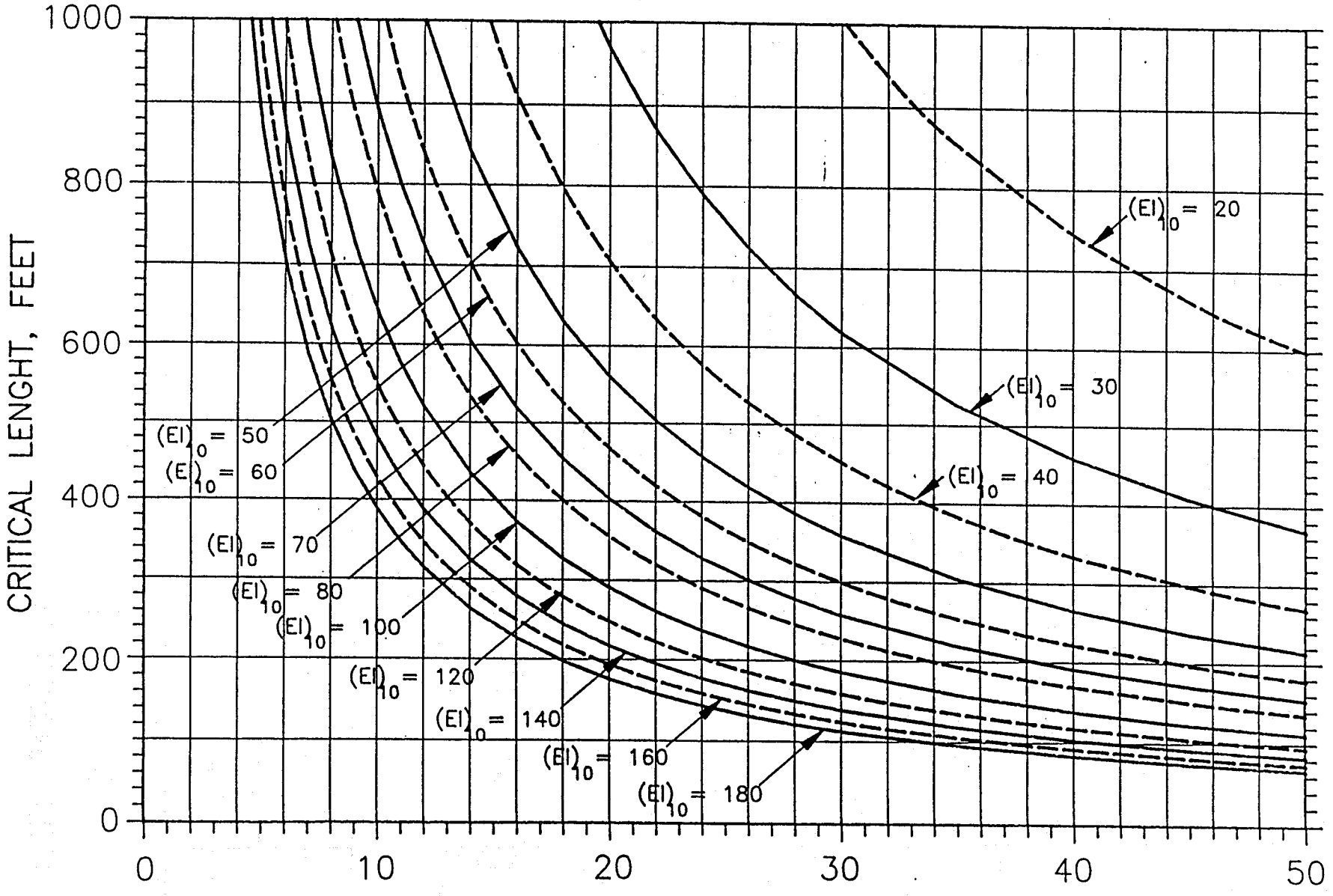


Hydrologic Soil Group D

Cropland Cover Management Condition 3

Use for Contouring where R applies

Figure 19

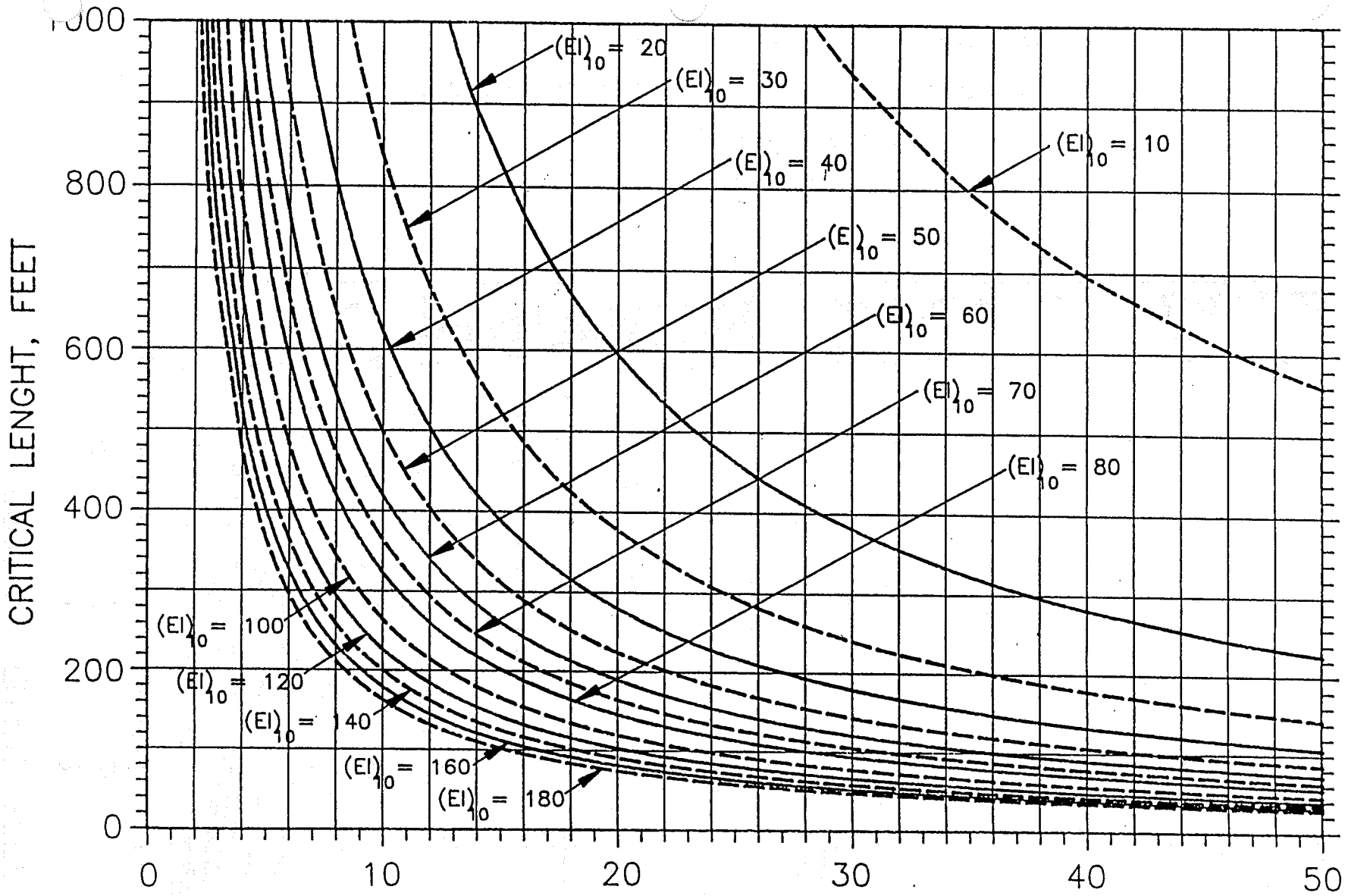


Hydrologic Soil Group D

Cropland Cover Management Condition 4

Use for Contouring where R applies

Figure 20

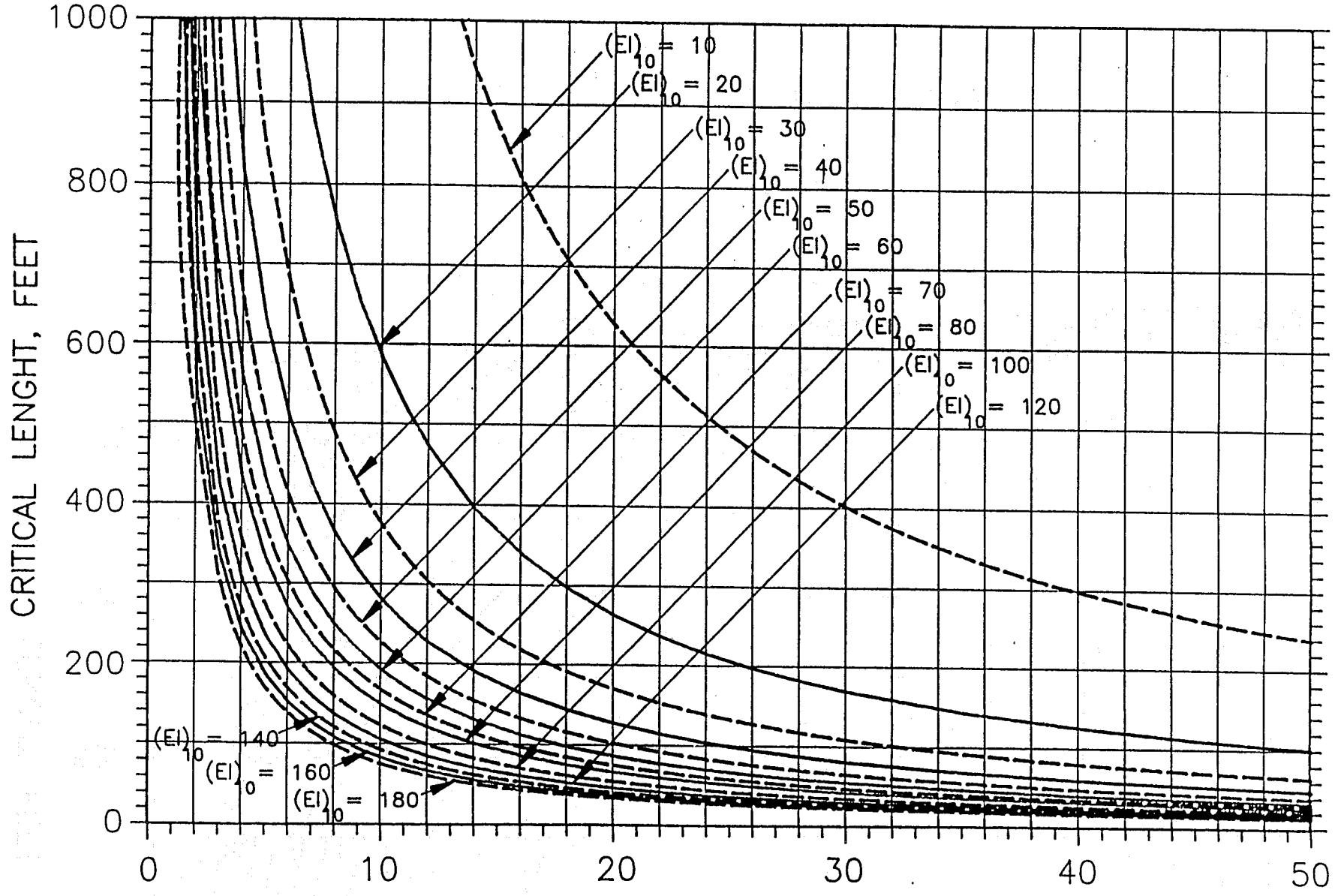


Hydrologic Soil Group D

Cropland Cover Management Condition 5

Use for Contouring where R applies

Figure 21

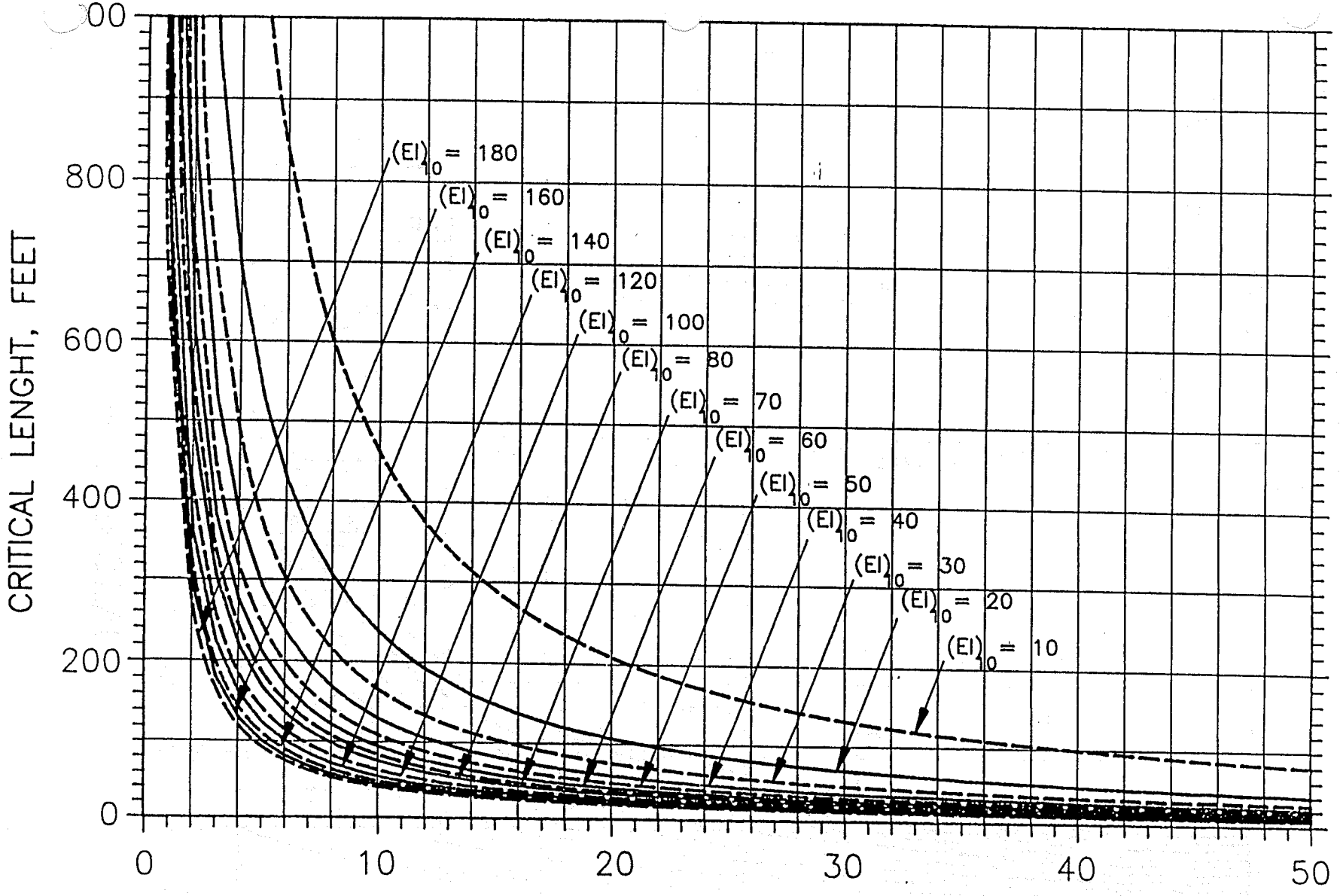


Hydrologic Soil Group D

Cropland Cover Management Condition 6

Use for Contouring where R applies

Figure 22



Hydrologic Soil Group D

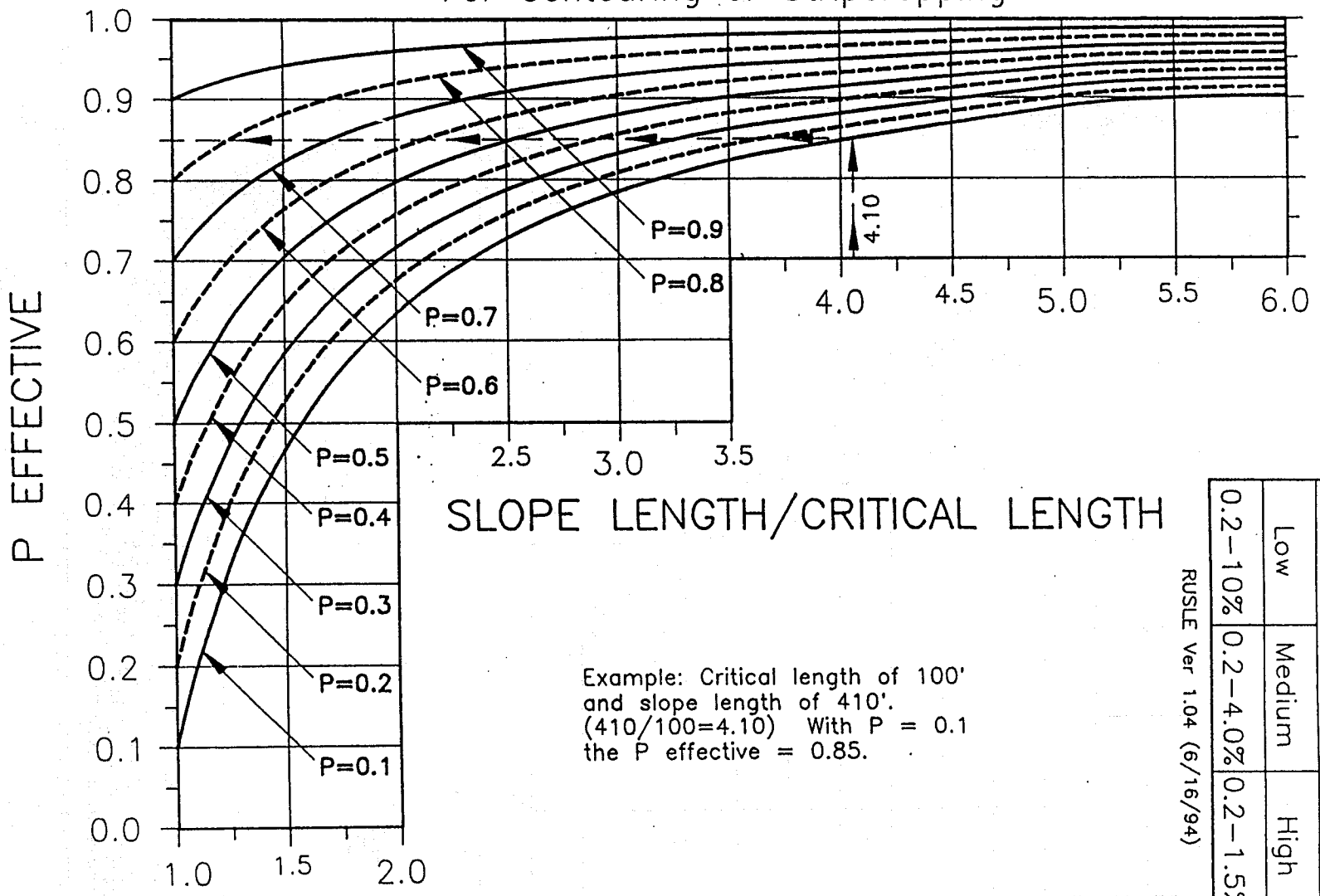
Cropland Cover Management Condition 7

Use for Contouring where R applies

Figure 23

RUSLE P SUBFACTOR ADJUSTMENT

For Contouring or Stripcropping



Example: Critical length of 100' and slope length of 410'. (410/100=4.10) With P = 0.1 the P effective = 0.85.

Applicable Slope Range		
Rill/Interrill Ratio		
Low	Medium	High
0.2–10%	0.2–4.0%	0.2–1.5%

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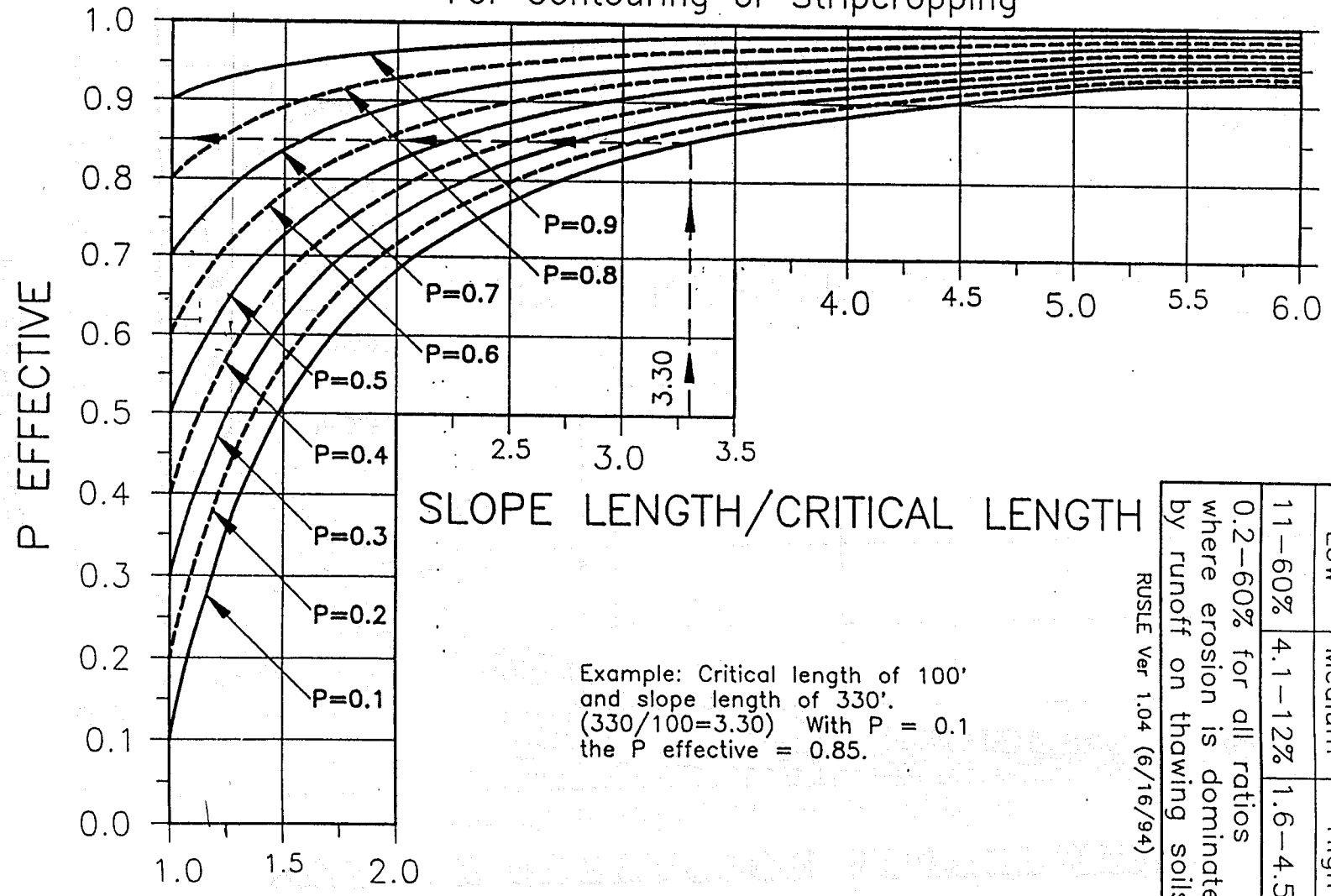
RUSLE P SUBFACTOR ADJUSTMENT

For Contouring or Stripcropping



Example: Critical length of 100' and slope length of 330'. (330/100=3.30) With P = 0.1 the P effective = 0.85.

Applicable Slope Range		
Rill/Interrill Ratio		
Low	Medium	High
11–60%	4.1–12%	1.6–4.5%
0.2–60% for all ratios where erosion is dominated by runoff on thawing soils.		

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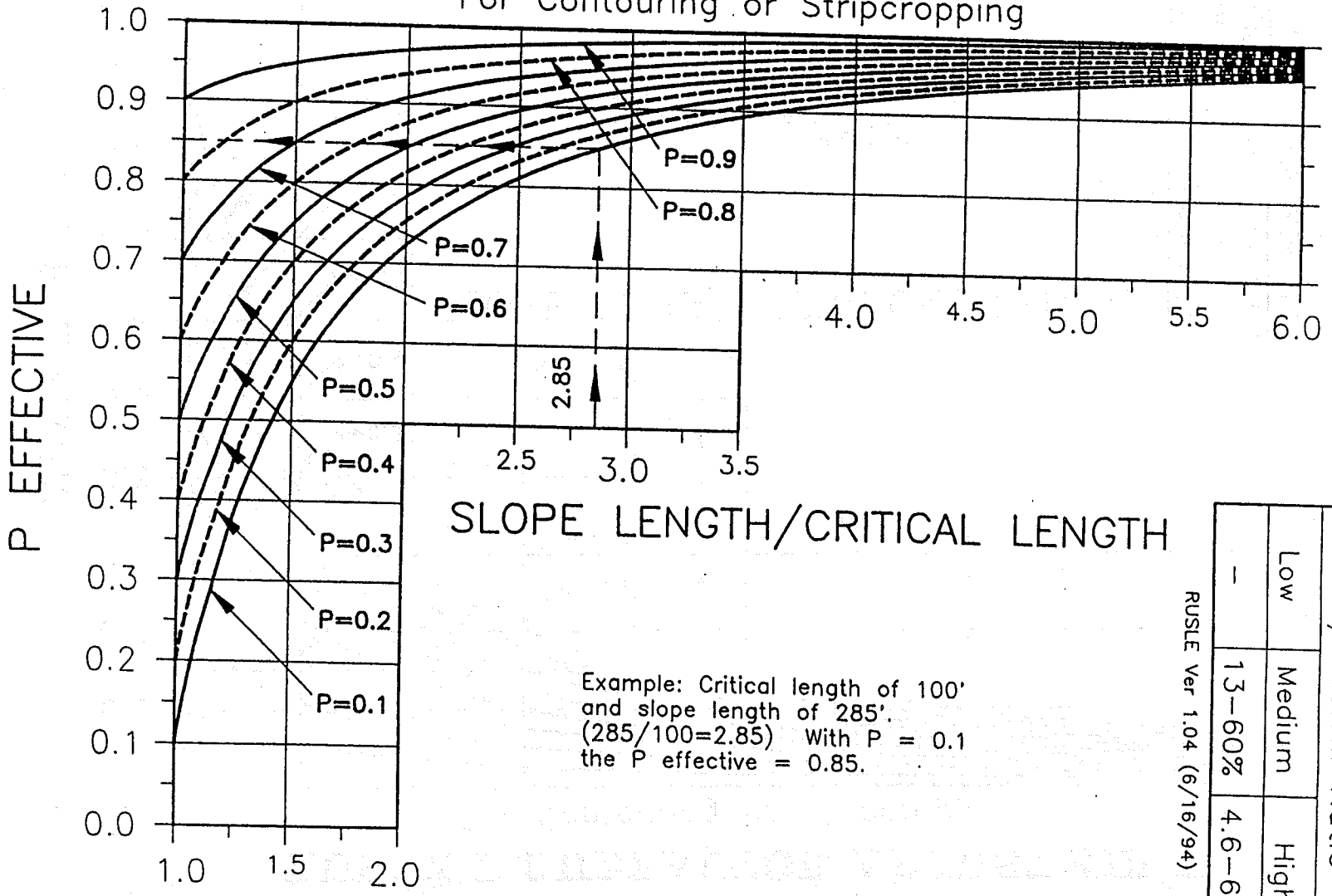
RUSLE P SUBFACTOR ADJUSTMENT

For Contouring or Stripcropping



Example: Critical length of 100' and slope length of 285'. (285/100=2.85) With P = 0.1 the P effective = 0.85.

Applicable Slope Range		
Rill/Interrill Ratio		
–	Low	13–60%
	Medium	4.6–60%
	High	

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Figure 31