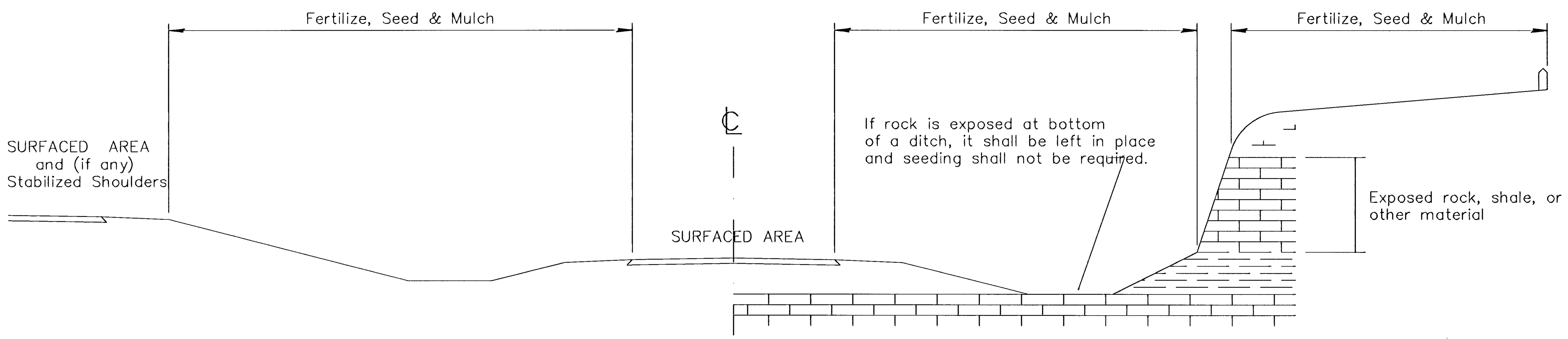
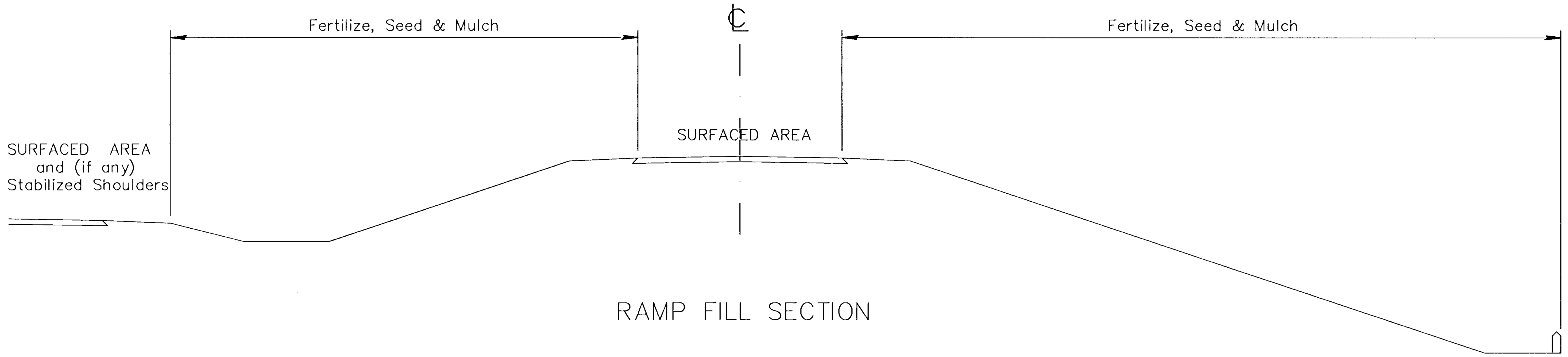
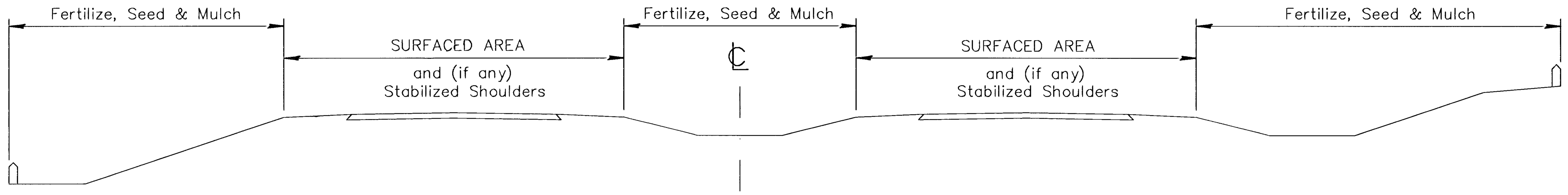
FHWA REGION NO.	STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
7	KANSAS			34	46



RAMP CUT SECTION



RAMP FILL SECTION



FILL SECTION

CUT SECTION

TYPICAL SECTION -- DUAL PAVEMENT

GENERAL: The entire disturbed area, excepting the paved or surfaced areas, steep rocky slopes and areas of undisturbed native sod or other desirable vegetation shall be fertilized (limed when required), seeded, and mulched. Soil preparation shall conform to the Standard Specifications except as noted below.

All borrow areas shown on the plans are to be fertilized, seeded, and mulched. However, operation in borrow areas where crops are growing may be omitted when requested by the owner.

It shall not be required to till the area to bare ground prior to permanent seeding. If temporary cover has provided stable slopes with no erosion, seed the permanent grasses into the existing cover. If there has been erosion that requires repair prior to seeding, then it may be necessary to regrade the area, resulting in bare ground.

FERTILIZER: A ratio and application rate that equals or exceeds the required minimum rate per acre of N, P_2O_5, K_2O listed in Summary of Seeding Quantities will be acceptable.

MULCHING: Mulch shall be spread uniformly over all disturbed areas and punched in the soil, unless otherwise noted on the plans. The rate of application per acre, thickness in place, for the various mulching materials are as follows:

Prairie Hay Mulching	1 3/4 - 2 1/4 Tons per Acre	= 1 1/2 "	loose depth spread uniformly over acre.
Bromegrass Mulching	1 3/4 - 2 1/4 Tons per Acre	= 1 1/2 "	loose depth spread uniformly over acre.
Wheat or Oats Straw Mulching	1 1/2 - 2 Tons per Acre	= 3"	loose depth spread uniformly over acre.
Wood Chips Mulching	4 - 5 Tons per Acre	= 1-2"	loose depth spread uniformly over acre.
Wood Fiber Mulching	3/4 - 1 Tons per Acre	=	spread uniformly over acre.

Other vegetative mulches (Acceptable only with the Engineer's concurrance).

The above rates are a guide. It will be at the discretion of the Engineer to determine what rate is sufficient for adequate protection of newly seeded areas.

The amount of mulch in the bid quantities is estimated. The total mulch required shall be determined in the field. ~~The bid item for mulching shall be paid for by one of the following ways: A) Plan quantity as shown on Summary of Quantities, Seeding Sheet or Water Pollution Control Sheet, B) Slope measurement as measured in field, or C)~~ Drill ~~measurement less 5% as measured at the time of seeding.~~

SUMMARY OF SEEDING QUANTITIES

P.L.S. RATE/ACRE		* ACRES		~~BID ITEM~~ PAID FOR AS "SITE RESTORATION"	QUANTITY	UNIT
SHLDR	OTHER	SHLDR	OTHER			
			0.80			

* NOTE: ~~Projects of less than 5 acres shall be bid as "Seeding" by the lump sum.~~ All disturbed areas shall be seeded, fertilized and mulched at the listed rate per acre. The acres are estimated.

SHLDR = Shoulder Turf Mix: includes a 15 foot wide strip along the stabilized shoulder on each side of each traveled way, plus all median areas less than 60 feet wide.

OTHER = All other turf areas.

SEEDING PERIODS

COOL SEASON	WARM SEASON
February 15 to April 20 and August 15 to Sept. 30	November 15 to June 1
SPECIES	SPECIES
Bluegrasses	Bluestems
Bromegrasses	Buffalograss
Canada Wildrye	Eastern Gamagrass
Fescues	Foxtail Millet
Ryegrasses	Gramas
Wheatgrasses	Indiangrass
Reed Canarygrass	Lovegrasses
	Switchgrass
	Wildflower Mixes

When "Cool Season" species are mixed with "Warm Season" species, in areas of 2 hectares or more, the mixture shall be seeded during the "Warm Season". In areas of less than 2 hectares, the mixture of "Cool Season" and "Warm Season" species may be seeded during the "Warm or Cool Seasons".

NO.	DATE	REVISIONS	BY	APP'D
4				
3				
2				
1	5/10/99	Revised Standard	WCL	RDR

KANSAS DEPARTMENT OF TRANSPORTATION

EROSION CONTROL