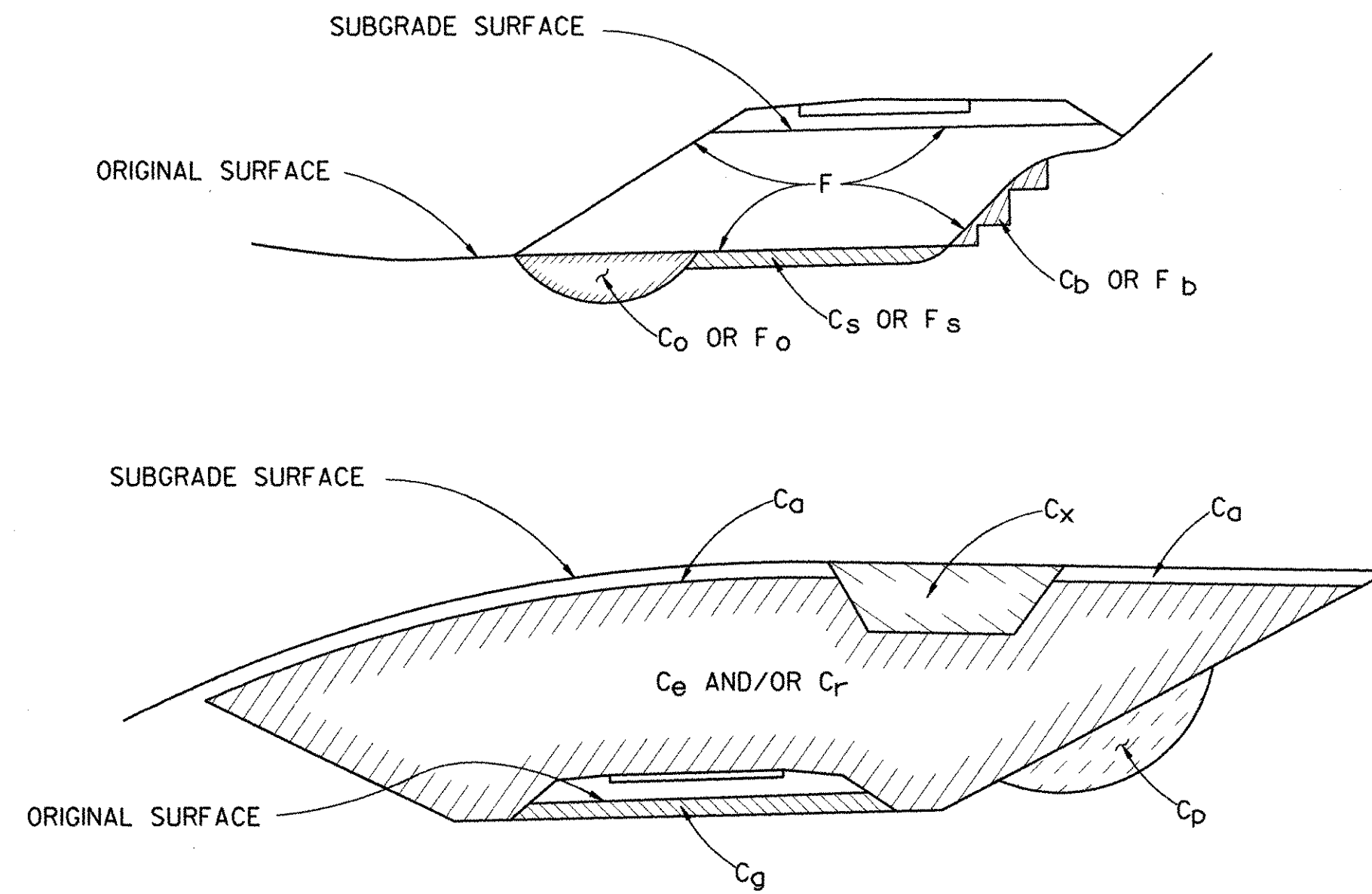


FED. ROAD REG. NO.	STATE	FEDERAL AID PROJECT NO.	SHEET NO.	TOTAL SHEETS
I	N.Y.	0146001	44	92
BENNINGTON CONNECTOR S.H. 98-2				
P.I.N. 1306.60				
WHITEHOUSE BRIDGE - VERMONT STATE LINE S.H. 1426				
RENSSELAER COUNTY				

SUMMARY OF EARTHWORK (ITEMS 203.02 M & 203.03 M) (m ³)					
SOURCE	EXCAVATION			EMBANKMENT	
	T _e	C _r *	T _u	203.02 M	203.03 M
				C _T	F _T
SUBTOTAL, DWG. ES-2	16974	784	1457	19328	17550
TOTALS	16974	784	1457	19328	17550

* SEE NOTE 2, THIS SHEET.



NOTES:

1. THE CONTRACTOR'S ATTENTION IS DIRECTED TO THE FACT THAT CONDITIONS AND QUANTITIES AS SHOWN ON THESE TABLES ARE ESTIMATED, AND ARE FOR THE PURPOSE OF PREPARING AN ESTIMATE. IN ANY EVENT, THESE CONDITIONS AND QUANTITIES ARE NOT TO BE DEEMED OR CONSIDERED BY THE CONTRACTOR AS A WARRANTY OR REPRESENTATION BY THE STATE OF ACTUAL FIELD CONDITIONS TO BE ENCOUNTERED OR EXACT QUANTITIES OF WORK TO BE PERFORMED.
2. EXISTING PAVEMENT TO BE REMOVED IS LABELED AS Cr FOR THE PURPOSES OF ACCOUNTING.

C_e - PORTION OF CUT ASSUMED TO BE EARTH SUITABLE FOR EMBANKMENT CONSTRUCTION, EXCLUDING C_p & C_g.
C_r - PORTION OF CUT ASSUMED TO BE ROCK, INCLUDING C_g IF APPLICABLE.
C_p - EXCAVATION FROM CUT SLOPE NECESSARY TO PLACE SLOPE PROTECTION.
C_b - EXCAVATION FOR REQUIRED BENCHING, (BOTH LONGITUDINAL AND TRANSVERSE).
C_g - EXCAVATION FOR SUBGRADE IMPROVEMENT.
T_e - (C_e + C_p + C_b + C_g) TOTAL EARTH EXCAVATION ASSUMED SUITABLE FOR EMBANKMENT CONSTRUCTION.
C_o - EXCAVATION OF UNSUITABLE MATERIAL BENEATH EMBANKMENT : SWAMP OR DUMP.
C_a - EXCAVATION OF TOPSOIL (UNSUITABLE MATERIAL) IN CUT. ASSUME 75 mm.
C_s - EXCAVATION OF TOPSOIL (UNSUITABLE MATERIAL) UNDER EMBANKMENT.
C_x - EXCAVATION OF UNSUITABLE MATERIAL IN CUT : SWAMP OR DUMP.
T_u - (C_o + C_a + C_s + C_x) TOTAL EXCAVATION ASSUMED UNSUITABLE FOR EMBANKMENT CONSTRUCTION.
C_T - (T_e + T_u + C_r) TOTAL EXCAVATION.
F_b - FILL REQUIRED TO REPLACE BENCHES.
F_o - FILL REQUIRED TO REPLACE UNSUITABLE MATERIAL BENEATH EMBANKMENTS.
F_s - FILL REQUIRED TO REPLACE TOPSOIL REMOVED BENEATH EMBANKMENTS.
F - FILL REQUIRED TO COMPLETE EMBANKMENT TO SUBGRADE SURFACE & SIDE SLOPES AFTER FOUNDATION IS PREPARED.
F_T - (F_b + F_o + F_s + F) TOTAL FILL REQUIRED.
T_A - (T_e f_e + C_r f_r) THE VOLUME WHICH THE SUITABLE EXCAVATED MATERIAL COULD OCCUPY IN EMBANKMENT.
f_e - SHRINKAGE FACTOR FOR EARTH.
f_r - SHRINKAGE FACTOR FOR ROCK.

**EARTHWORK
SUMMARY
SHEET**

SURVEYED BY	C.H.A. & V.S.E.	DATE	12/93
DESIGNED BY	D.W.E.	DATE	2/04
DRAWN BY	C.A.K.	DATE	2/04
CHECKED BY	T.P.K.	DATE	2/04
DESIGN FILE NO.	NYES1.DGN		
PROJ. NAME	BENNINGTON - HOOSICK D.P.I. 0146(II) C/1		
PROJ. NO.	P.I.N. 1306.60		
SHEET	44 OF	92	DWG NO. ES-1