RU - ROAD SEGMENT UPGRADING

PRE-TREATMENT page ___ of ___

Contract #: **Contract name:**

Stream/Road: **Date (mm/dd/yy):** **Evaluator:**

	Feature # or Road Name			
	Proposed Feature Type Code		Keep track of delivery volumes as you move along the road to help estimate the total.	
	1. Length of road to be upgraded: (ft)			
	2. Number of stream crossings to be decommissioned along segment:			
	3. Road segment physical condition: *Excl, Good, Fair, Poor, Fail*			
	4. Has there been sediment delivery from the road segment in the last 10 years?			
	a. Sediment sources: SFE, FLS, LAN, CUT, NRL, EFL, DIV, RRG, NRG, OTH		Past (3b)	Future (4b)
	b. Estimate total past delivery: (cy/10 yr)		Mass wasting volume	
	5. Is there potential for sediment delivery from the road in the next 10 years?			
	a. Erosion potential: LOW, MOD/LOW, MOD, MOD/HIG, or HIG			
	b. Minimum future delivery volume or "sediment savings": (cy/10 yr)			
	6. Is decreasing potential for future sediment delivery a goal?			
	7. Estimate pre-treatment percent connectivity: (%)		Fluvial erosion volume	
	8. Is decreasing percent connectivity a goal of the upgrade?			
	a. Targeted percent connectivity: (%)			
	9. Is dewatering existing gullies and active or potential landslides a goal?*			
	10. Is excavating fill slopes, landings and side cast a goal?			
Road Drainage	11. Does road/spring drainage disperse into the correct channel or watershed?		[(Sum the lengths of ditch/road surface draining to each crossing - CU question 3i) / (total length of road)] x 100 = percent connectivity	
	12. Is returning road/spring drainage to the correct channel or watershed a goal?			
	13. Is reducing fine grain sediment delivery by reducing bare soil area a goal?			
	14. Is minimizing fine sediment delivery by seasonally closing the road a goal?			
	15. Road surfaces: *DRT, ROC, PAV, OTH*			
	16. Is reducing the road surface erosion rate by resurfacing a goal?			
	17. Road surface shapes: *CRN, FLT, INS, OUT, TCU, OTH*			
	18. Is dispersing road runoff by changing the road surface shape a goal?			
	19. If there is a ditch, does any portion of it need cleaning or improvement?			
	20. Is improving road drainage by cleaning or adding a ditch a goal?			
	21. Are berms interfering with the intended road drainage pattern?			
	22. Is restoring the intended drainage pattern by removing/breaching berms a goal?			
	23. Existing road drainage structures: *DRC, RLD, NON, OTH*			
	a. Are there gullies or hill slope instability at drainage outlets?			
	b. Are structures frequent enough to prevent erosion from concentrated runoff?			
	c. Do structures drain so that sediment is not delivered to a stream?			
	d. Do rolling dips drain the road surface without affecting road use?			
	e. Problems: ALN, APP, COR, CRS, NTG, OVT, PLG, UNS, WSH, OTH		Surface Erosion Discharge	
	24. Is reducing connectivity by adding or upgrading drainage structures a goal?		Qs = [(A x E)/27] x T x D	
Comments			Qs = sediment delivery (yds^3) from surface erosion A = exposed area (ft^2) T = time (years) E = erosion rate (ft/yr) D = delivery ratio (% of erosion delivered to stream).	

* Use EC checklist for other landslide/gully treatments. **Y**=Yes, **N**=No, **P**=Partially, **D**=Don't know, **A**=Not Applicable. CRMEP June 2006 Draft