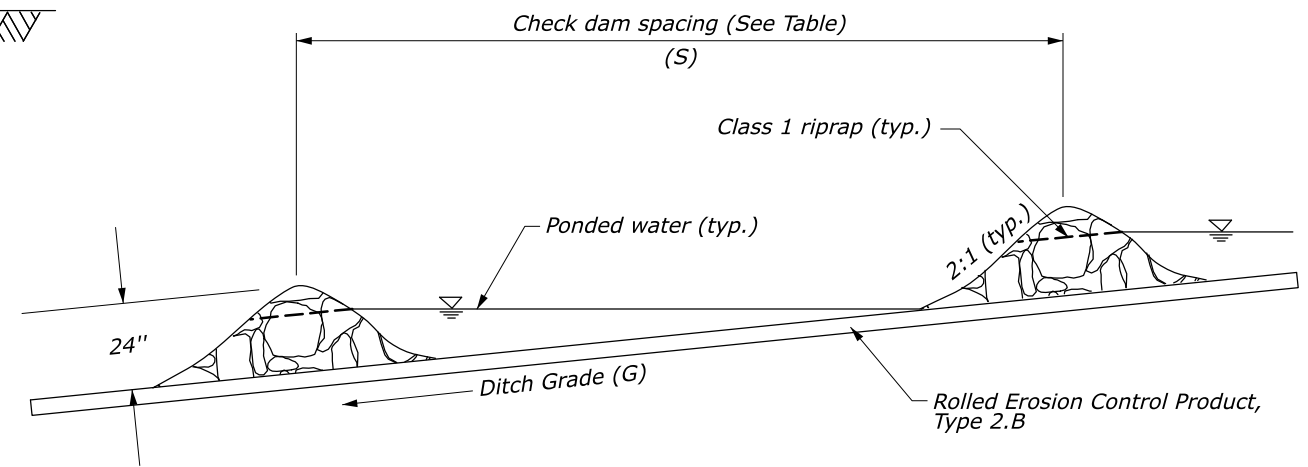
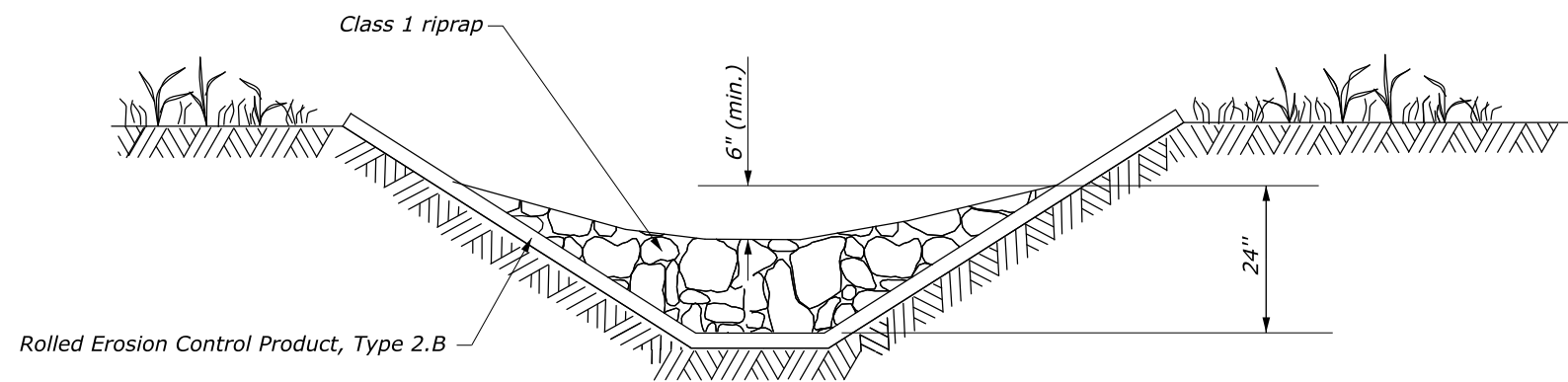


V DITCH



DITCH PROFILE VIEW



TRAPEZOIDAL DITCH

DITCH CROSS SECTION VIEW

CHECK DAM SPACING TABLE	
DITCH GRADE (G)*	SPACING (S) LNFT
2%	75
3%	50
4%	40
5%	30
6%	25

* Do not use Check Dams below 2% or above 6% ditch grades.

NO SCALE

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION OFFICE OF FEDERAL LANDS HIGHWAY	
EFLHD DETAIL	
CHECK DAM WITH ROLLED EROSION CONTROL PRODUCT	
DETAIL APPROVED FOR USE	DETAIL
APPROVED: MARCH 2015	E157-06
REVISED: SEPTEMBER 2020	



NOTES TO THE DESIGNER

March 19, 2018

General Information

1. **Appropriate Applications.** Check dams reduce scour in a channel or ditch and provide runoff treatment by reducing flow velocity and encouraging sediment deposition. Appropriate applications include:
 - Use riprap check dams in conjunction with RECP lining in ditches steeper than 5% or 6%.
 - Steep channels where storm water runoff velocities exceed 3 ft/s.
 - During the establishment of grass linings in ditches.
2. **Limitations.**
 - Not used in live streams.
 - Drainage areas 10 acres or less.
3. **Layout Guidance.**
 - Install the first check dam about 15 ft from the outfall and at regular intervals based on slope gradient and soil type (steeper slopes and more erosive soils (e.g. loose sand or silt) will require shorter spacing between check dams).
 - When installing a series of check dams in a channel, install outlet stabilization measures below the final dam, such as riprap or geotextile, to minimize erosion potential.
 - The type of RECP to use is site-specific. Coordinate with Hydraulics to select the type of RECP.

Applicable SCRs

Typical Pay Item Used

- 15706-0200 Soil Erosion Control, Check Dam [EA]
 - 62901-[0000 through 1400] Rolled Erosion Control Product, Type x.x [SQYD]
 - 62902-[0000 through 1400] Rolled Erosion Control Product, Type x.x [ACRE]
(Include pay items 62901 and 62902 when RECP is not incidental to Check Dam pay item).
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Updates

Added the 62902 pay items for RECP to the list.