NOTE:
1. Repair all rills or gullies and properly compact prior to installation.
2. Install check dams in ditches perpendicular to the flowline.
3. Adjust check dam spacing based on site-specific conditions.

RIPRAP CHECK DAM SPACING
(See Note 3)

<table>
<thead>
<tr>
<th>DITCH GRADE (G)</th>
<th>CHECK DAM SPACING (S) max. (ft)</th>
</tr>
</thead>
<tbody>
<tr>
<td>7%</td>
<td>40</td>
</tr>
<tr>
<td>8% and 9%</td>
<td>30</td>
</tr>
<tr>
<td>5-10%</td>
<td>20</td>
</tr>
</tbody>
</table>

RIPRAP CHECK DAM
WITH ROLLED EROSION CONTROL PRODUCT

CROSS SECTION
V-DITCH

CROSS SECTION
FLAT-BOTTOM DITCH

PROFILE VIEW

Rolled erosion control product
Class 1 riprap
6" - 12" (typ.)
6"

Check Dam Spacing
(5)

Class 1 riprap
Ponded water
Ditch Grade (G)
Rolled erosion control product

6"
NOTES TO THE DESIGNER
Last Updated: August 2014

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
None

Typical Pay Item Used
- 15706-0200 Soil erosion control, check dam [EA]
- 62901-[0100 through 1400] Rolled erosion control product, type xx [SQYD]
  or 62901-[0100 through 1400] Rolled erosion control product, type xx [ACRE]

Updates
January 2011
- Updated FLH Standard drawing by adding RECP under check dams
August 2014
- Updated border