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# HOW TO BUILD A DECANTING EARTH BUND

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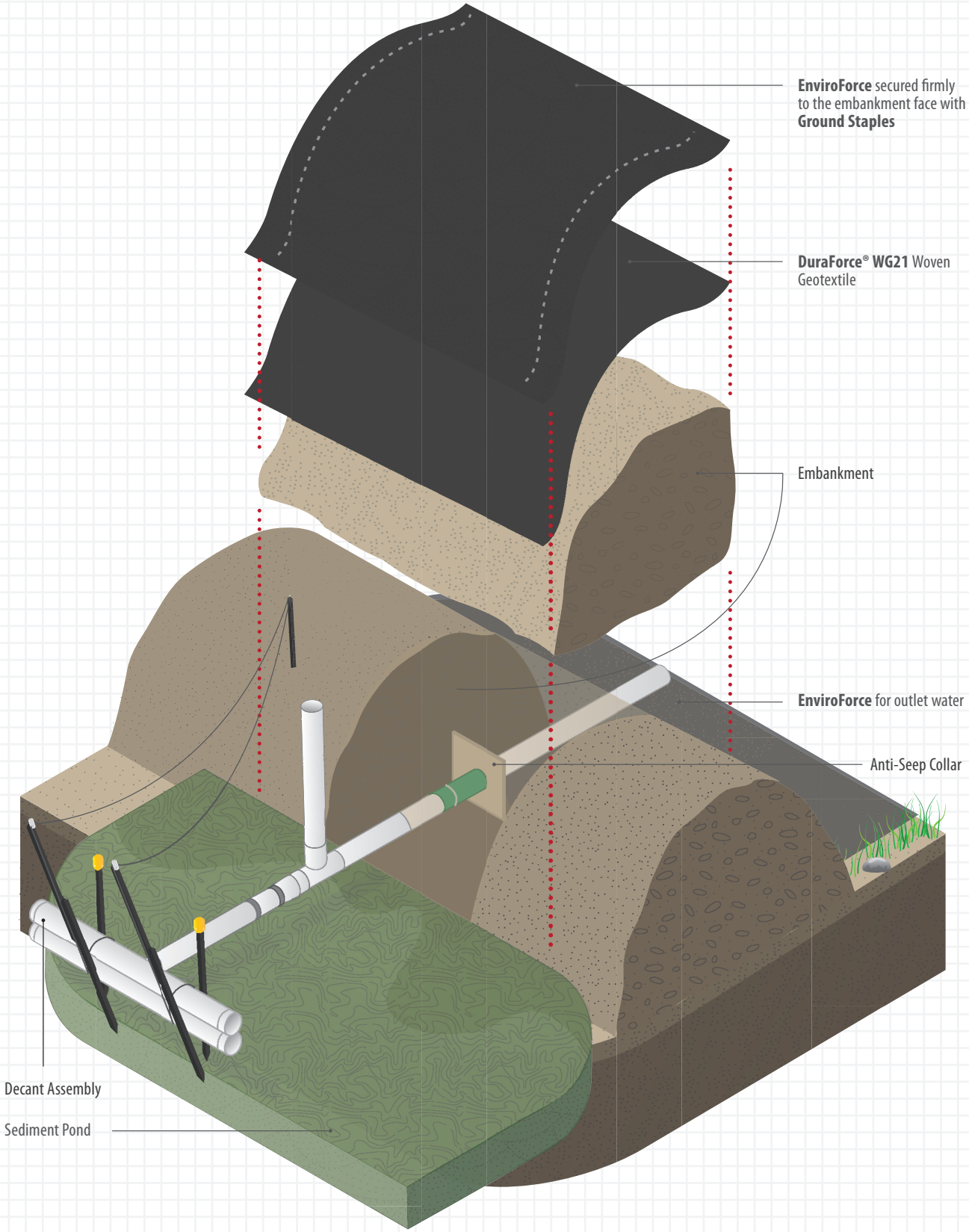
# HOW TO BUILD A DECANTING EARTH BUND

A temporary berm or ridge of compacted earth constructed to create impoundment areas where ponding of runoff can occur, and suspended material can settle before run off is discharged. Decanting Earth Bunds can be constructed across disturbed areas and around construction sites and subdivisions. Keep them in place until the disturbed areas are permanently stabilised or adequately replaced by other means.

Decanting Earth Bunds can assist the settling of sediment laden runoff, and are particularly useful for controlling runoff after top soiling and grassing before vegetation becomes established. Where works are occurring within the berm area, compact the topsoil over the berm area as bunds, adjacent and parallel to the berm. This will act as an impoundment area and control outfall while also keeping overland flow away from the construction area.

## DESIGN CRITERIA

- Decanting Earth Bunds need a constructed outlet structure and spillway (see following sections of this guide). The depth should be measured from the base of the Decanting Earth Bund to the top of the primary spillway.
- Construct the Decanting Earth Bunds such that the maximum contributing catchment does not exceed 0.3ha.
- Lay the discharge pipe at a 1-2% gradient, compact fill appropriately and incorporate an Anti-Seep Collar.
- Ensure all Anti-Seep Collars and their connections are watertight.
- Use a flexible thick rubber coupling to provide a connection between the decant arm and the primary spillway or discharge pipe. Fasten the flexible coupling using strap clamps, glue and/or screws to prevent it coming off.
- Ensure the section of pipe leading through and continuing downslope below the Decanting Earth Bund is non-perforated.
- On earthwork sites with slopes less than 10% and less than 200m in length, construct the Decanting Earth Bund with a minimum volume of 2% of the contributing catchment (20m³ for each 1,000m² of contributing catchment).
- On sites with slopes greater than 10% and/or 200m in length, construct Decanting Earth Bunds with a minimum volume of 3% of the contributing catchment (30m³ capacity for each 1,000m² of contributing catchment).
- Where possible, install the discharge pipes through the embankment as the embankment is being constructed.
- Fully stabilise the external batter face by vegetation or other means immediately after construction.
- Ensure all external bare areas associated with the Decanting Earth Bund are stabilised in a manner consistent with local authorities guidelines, such as mulch, cloth or vegetation.




| CODE | PRODUCT | SIZE |
|---|---|---|
| 13015 | Pond Decant T Bar | 110mm |
| 13283 | Flexible Coupling Kit | 110mm |
| 13194 | Pond Extension Kit | 1.8m |
| 13192 | Anti Seep Collar | 150mm |
| 76058 | Steel Y Posts | 1.5m |
| 76059 | Satety Caps | 100/Bag |

| CODE | PRODUCT | SIZE |
|---|---|---|
| 13317 | PVC Plain T Junction | 150mm |
| 13224 | Reducing Coupler | 150mm-110mm |
| 13147 | DuraForce® WG21 | 4m x 50m |
| 13227 | EnviroForce S1500 | 4m x 50m |
| 76051 | Ground Staples 130mm | 200/box |
| 76052 | Ground Staples 230mm | 200/box |

**MAINTENANCE:** Inspect and maintain Decanting Earth Bunds regularly and after each rainfall event to check for accumulated sediment which may cause overtopping. Check any discharge points for signs of scouring and install further armouring or other stabilisation if scouring is evident.

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## APPLICATION

- Decanting Earth Bunds can be constructed across disturbed areas and around construction sites and subdivisions to control catchments.
- Keep them in place until the disturbed areas are permanently stabilised or adequately replaced by other means.
- Decanting Earth Bunds are particularly useful for controlling runoff after top soiling and grassing, before vegetation becomes established. Where works are occurring within the berm area, compact the topsoil over the berm area as a bund, adjacent and parallel to the berm.*

**Refer to your local authorities guidelines*

## MATERIALS

- Decanting Earth Bunds need a constructed outlet structure and spillway as designed for Sediment Retention Pond.
- The section of pipe within the impoundment area should be
supported by a rigid post.
- The top opening of the upright pipe should be 100 mm lower than the stabilised spillway.
- The section of pipe leading through the bund and continuing down slope below the Decanting Earth Bunds must be non-perforated.
- The maximum contributing catchment should not exceed 0.3 ha.

*See your site plans for specification sheet*

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**DISCLAIMER**
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