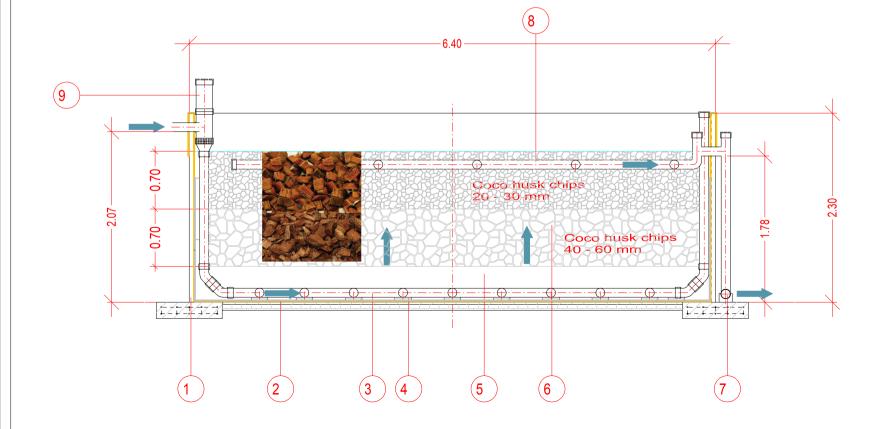
Items material pro reactor tank

- 1. OXFAM rigid water tank: D= 6.4 m x 0.8 corrugated galvanized steel tank; volume 75 m³; without roof; 1x bottom yavle 2 inch; ground preparation and foundation according to tank specification and local ground loading rating: 1 item
- 2. EPDM synthetic rubber tank liner with 1.25 mm thickness, reinfocing scrim, welded to fit D=6,4 m and height of 2.3 m, allowing min. 300 mm turn down on outside with brass eyelets spaced at 1 m centres around edge. EPDM liner protected bothsides with geotextile 300 g/m³, inside geotextile after filling the filter materal to be cut at a height 1.5 m above the bottom
- 3. Distribution layer: PVCU pipe D 110 mm PN10, length 55 m with 84x 10 mm boreholes on the bottom sidel; 45° elbow D 110 mm fit to pipe 4 items; T-junction D 110 mm fit to pipe 20 items; cap D 110 mm fit to distribution arm pipe 20 items; cap D 110 mm fit to ventilation pipe with 2x 10 mm boreholes (DON'T GLUE joint)
- 4. Spacer blocks: best class bricks placed under the distribution pipes; 84 items
- Filter material I: coco nut husk chips 40 60 mm in grain size, before procurement samples need to be aproved by BORDA: 24 m³
- Filter material II: coco nut husk chips 20 30 mm in grain size, before procurement samples need to be aproved by BORDA; 24 m³
- Out-side overflow pipe: PVCU pipe D 110 mm PN 10, with clamb system bolted onto the foundation, length 2.0 m; T-junction D 110 mm fit to pipe 1 item. cap D 110 mm fit to pipe with 2x 10 mm boreholes 1 item (DON'T GLUE joint)
- 8. Collection layer: PVCU pipe D 110 mm PN10, length 30 m with 42x 15 mm boreholes on the top sidel: 90° elbow D 110 mm fit to pipe 1 items; T-junction D 110 mm fit to pipe 11 items; cap D 110 mm fit to distribution arm pipe 10 items; cap D 110 mm fit to ventilation 2x 100 borehole (DON'T GLUE joint)
- 9. Inlet: Flexible connector D 110 mm, PVCU pipe PN10, 2x D 200 mm length 400 mm (DON'T GLUE joint); reducer D 200 to D 110 mm, 1 item; end-cap D 200 mm fit to pipe with 4x 10 mm boreholes (DON'T GLUE the joint) 18/49/milevel filter mesh steanless steel 3 mm mesh size 10 mm fit into the D 200 mm pipe



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- 4. All dimensions have to be checked and co-related with the structural design and any discrepancy or omission shall be brought to the notice
- 5. According to the DEWATS quality management all indicated tolerances have to be kept and will be checked

Legend:

GL - Ground level BR - Baffled Reactor PGF- Planted gravel filter

ABR- Anerobic baffled reactor PBL- Pipe inner bottom level

BORDA Bremen Overseas Research and **Development Association**

Am Deich 45 D-28199 Bremen, Germany

www.borda.org

	Date:	Name:
Work out:	06/01/2020	
Proved:		

Scale:

OXFAM_CxB_Phase 2 File: DR 3.3

Document:

Detail Engineering

Project phase

Oxfam Bangladesh

Title:

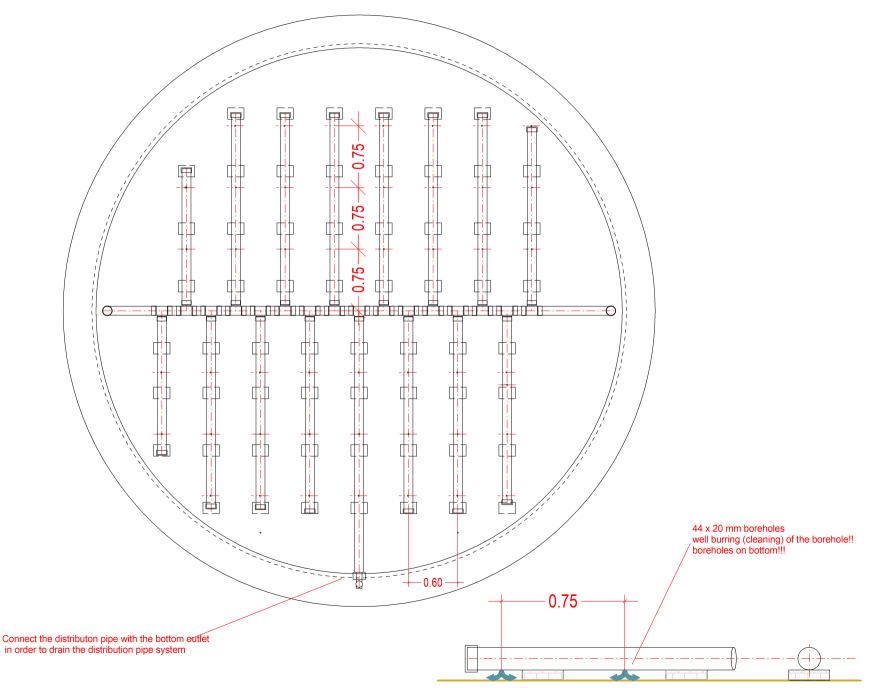
Client

Up-flow filter - cross section

Project:

OXFAM-CxB FSPT Phase II

- 3. Distribution layer: PVCU or HDPE pipe D 110 mm MPA 10, length 55 m with 84x 10 mm boreholes on the bottom side!; 45° elbow D 110 mm fit to pipe 4 items; T-junction D 110 mm fit to pipe 20 items; cap D 110 mm fit to distribution arm pipe 20 items; cap D 110 mm fit to ventilation pipe with 2x 10 mm boreholes (DON'T GLUE joint)
- 4. Spacer blocks: best class bricks placed under the distribution pipes; 84 items



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Legend:

WL - Water level
BL - Bottom level
BR - Baffled Reactor
PGF - Planted gravel filter
ABR- Anerobic baffled reactor
PBL - Pipe inner bottom level

BORDA Bremen Overseas Research and Development Association

Am Deich 45 D-28199 Bremen, Germany

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Scale:

File: OXFAM_CxB_Phase 2

Document: DR 3.4

Project phase: Detail Engineering

Client:

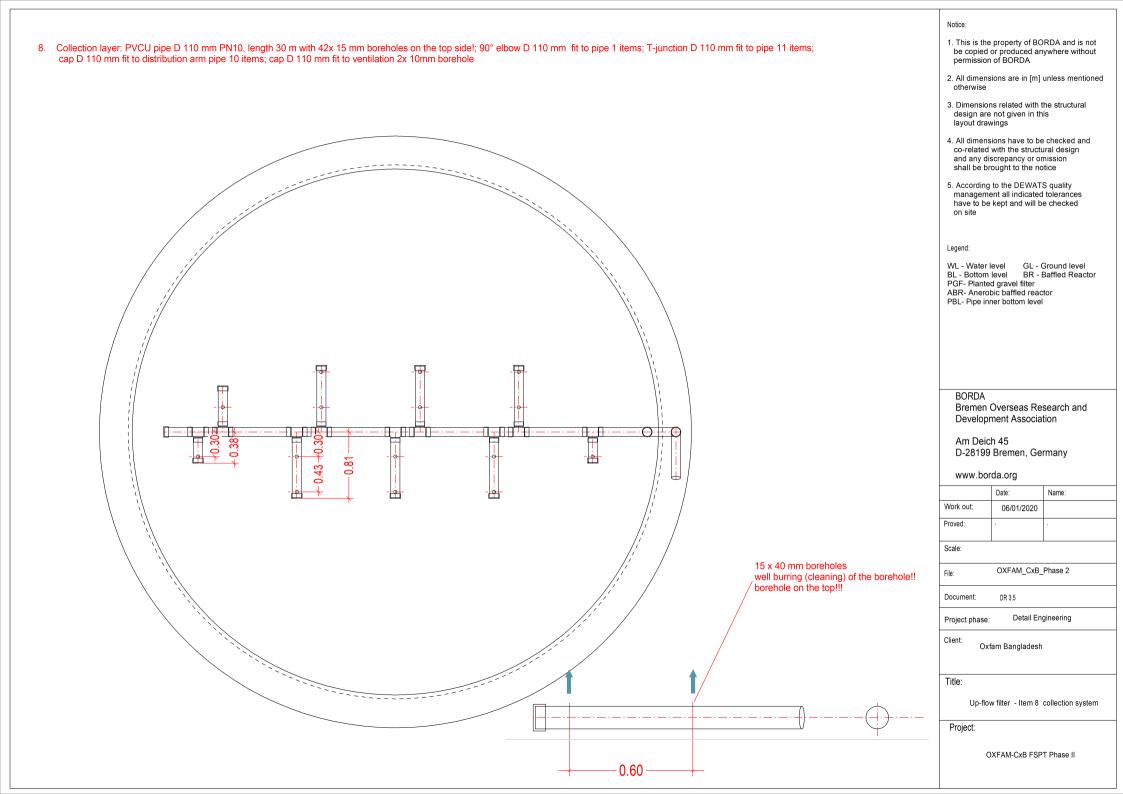
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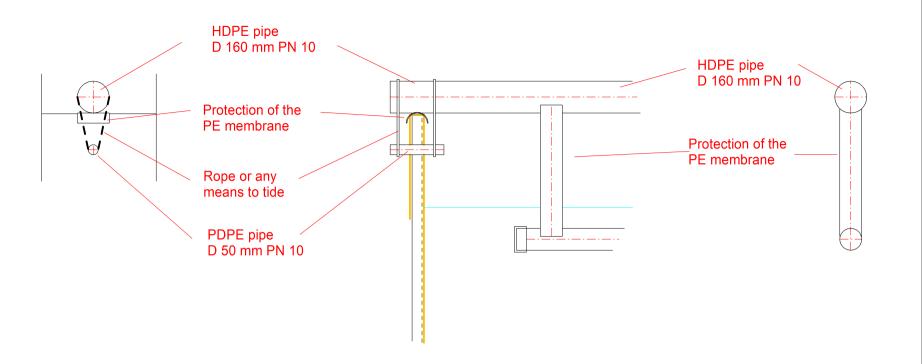
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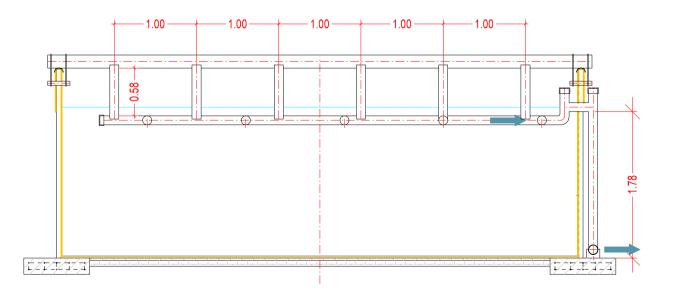
Up-flow filter - Item 3 distribution system

Project:

OXFAM-CxB FSPT Phase II







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- 5. According to the DEWATS quality management all indicated tolerances have to be kept and will be checked on site

Legend:

WL - Water level BL - Bottom level PGF- Planted gravel filter ABR- Anerobic baffled reactor PBL- Pipe inner bottom level

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Proved:		

Scale:

File: OXFAM_CxB_Phase 2

Document: DR 3.5.1

Project phase: Detail Engineering

Client:

Oxfam Bangladesh

Title:

Up-flow filter - cross section

Project:

OXFAM-CxB FSPT Phase II

