**Tank Drawing Script**

**viewtops** - sets the workspace so that the user is viewing the top of the object

`viewtops <- viewtop1`

**layer1** - Layer new creates a new grey layer "tank."

`layer1 <- layer_new("tank", grey)`

Northeast Isometric View

**tank1** - Calls the **Tank Program** to create a tank based on three inputs.

Note: `p1` is a dummy variable used only in the program help section to designate the matrix below.

```r
tank1 <- Tank(PlantOrigin, p1, TPlantWall)

PlantOrigin =
p1 =
```
• $x: L_{\text{Sed}}$
• $y: W_{\text{Sed}}$
• $z: H_{\text{Sed}}$

$T_{\text{PlantWall}} = 0.15m$

**boxt** - Creates a box based on two points.
boxt <- box(PlantOrigin,sedbottomboxdim)

PlantOrigin =

sedbottomboxdim =
  • x: -L_{Sed}
  • y: W_{Sed}
  • z: \text{outerdiameter}(ND_{SedSludge})

ND_{SedSludge} = \text{Sludge pipe diameter in sedimentation tank}
uniont - UnionAll selects all the objects in the workspace and unions them into a single object.
uniont <- unionAll

layerset - LayerSet selects the layer that the user is currently working in.
layerset <- layerSet("0")

layerfreeze1 - LayerFreeze locks the selected layer so that it cannot be edited.
layerfreeze1 <- layerfreeze("tank")