



# Storage of Xbloc and XblocPlus



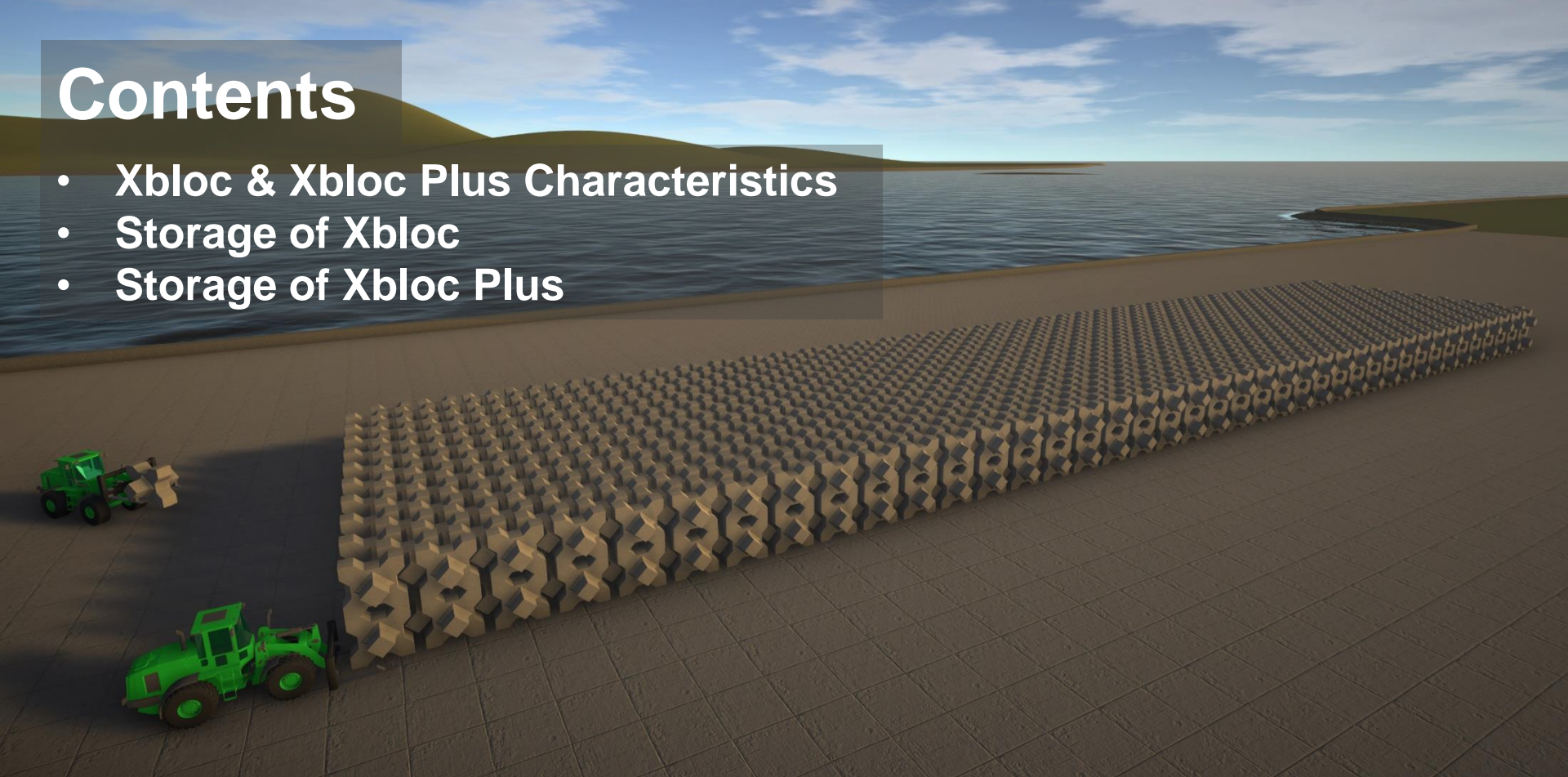
Delta Marine  
Consultants

30 September 2019



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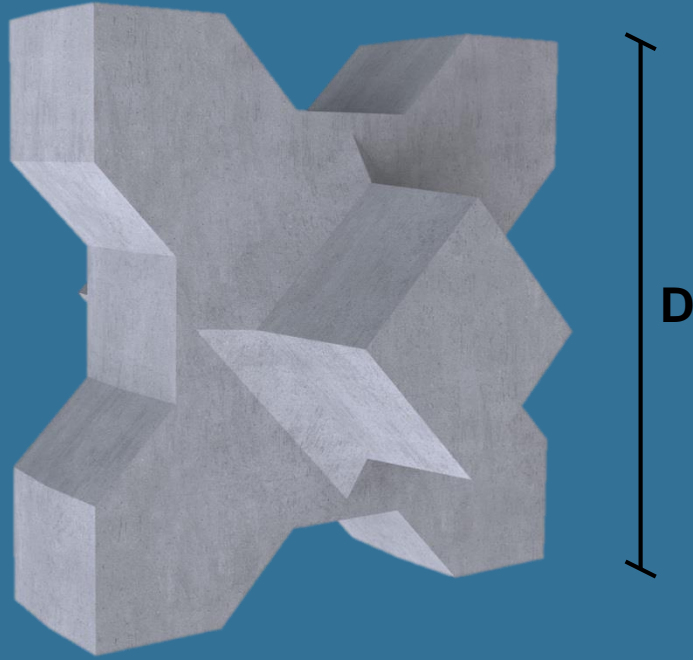
- Xbloc & Xbloc Plus Characteristics
- Storage of Xbloc
- Storage of Xbloc Plus



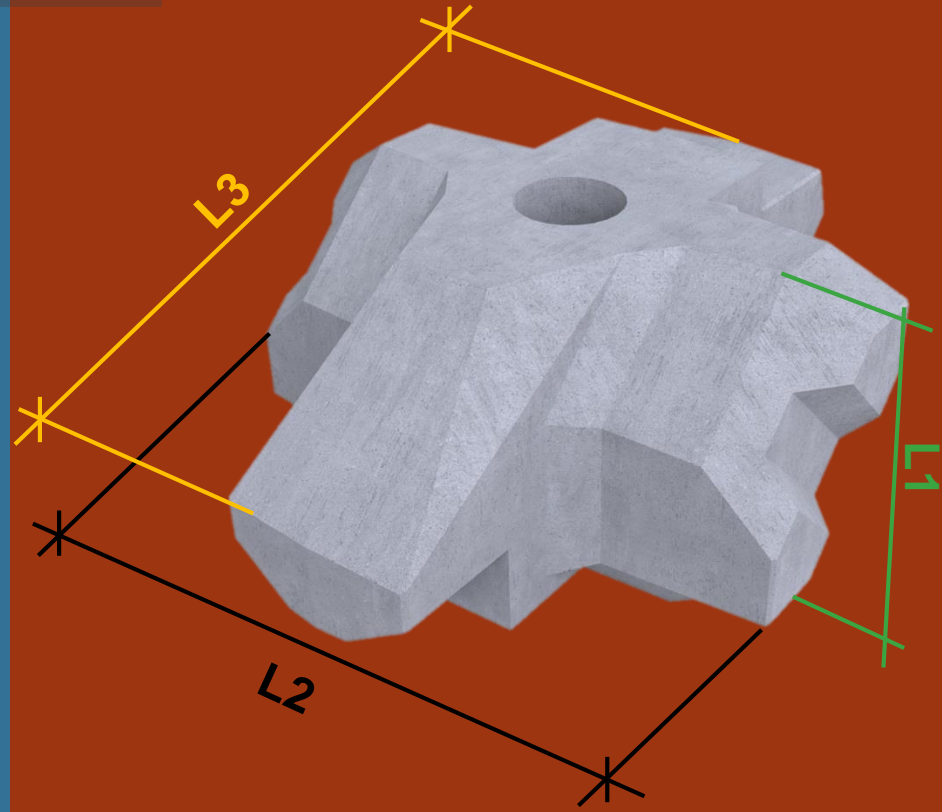


# Xbloc & Xbloc Plus Characteristics

## XblocPlus Width & Length



**Xbloc Unit Height**



# Xbloc Storage

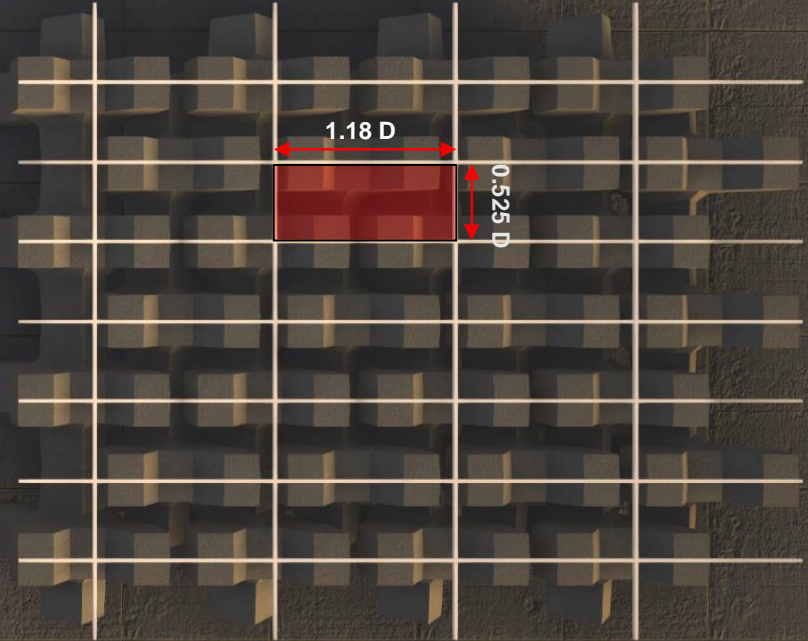
Area per Block (No Boundary effect)



$$0.62D^2/N$$

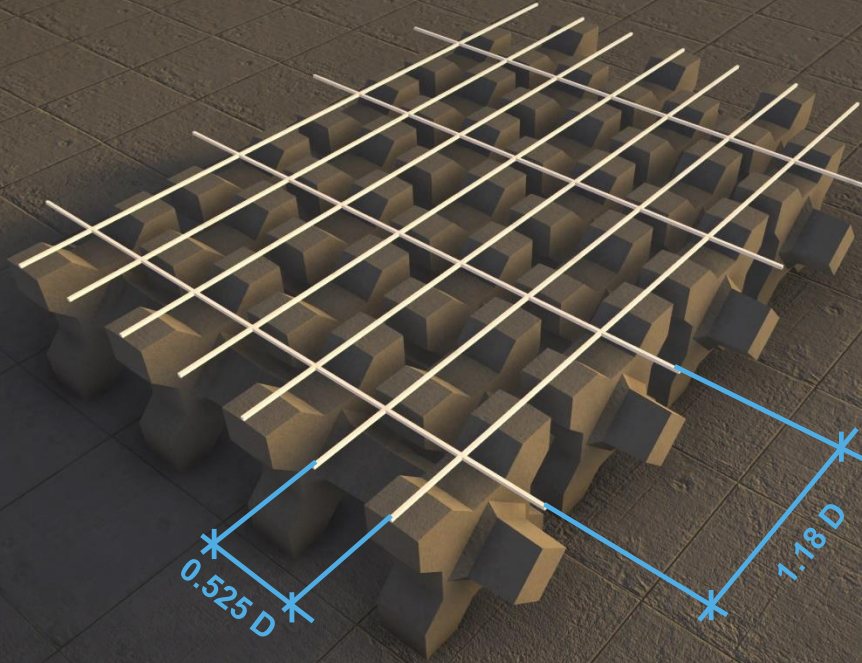
$D = \text{Block Unit Height [m]}$

$N = \text{No. Layers}$



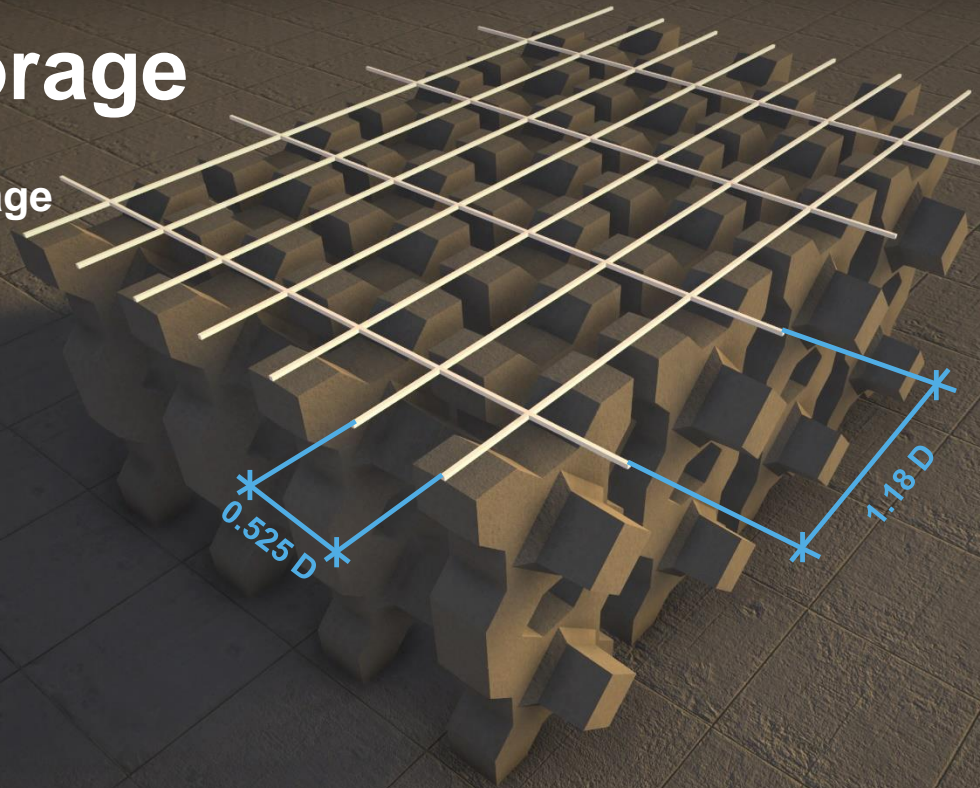
# Xbloc Storage

- One Layer Storage
- 28 Xbloc Units



# Xbloc Storage

- Two Layers Storage
- 56 Xbloc Units



# Xbloc Plus Storage

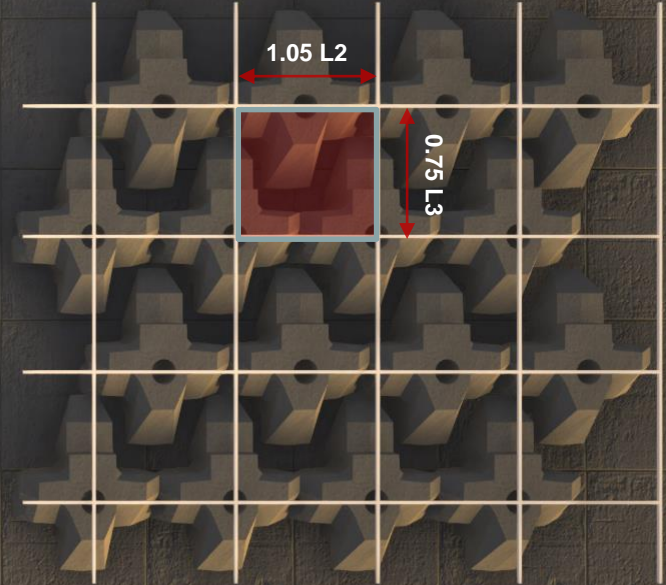
Area per Block (No Boundary effect)



$$2.74V^{(2/3)}/N$$

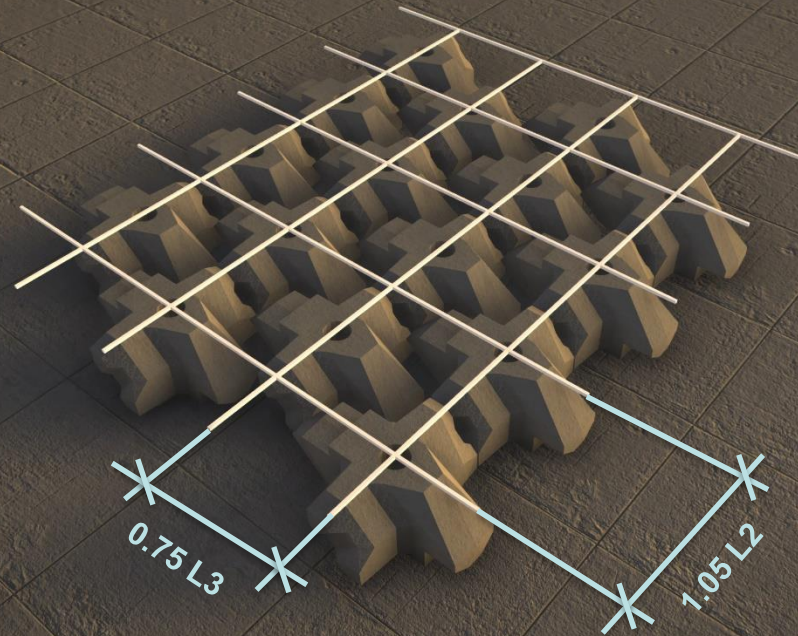
$V = \text{Block Size [m}^3\text{]}$

$N = \text{No. Layers}$



# Xbloc Plus Storage

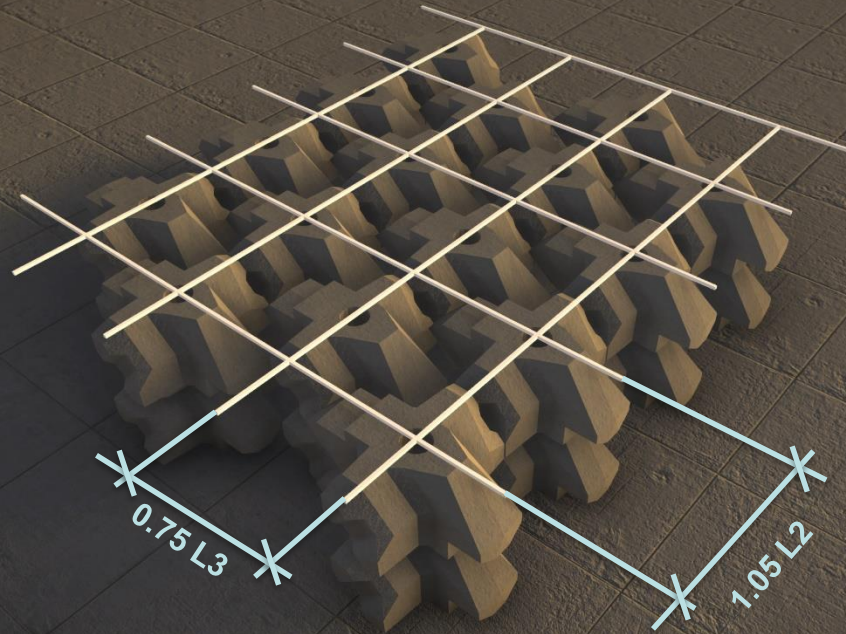
- One Layer Storage
- 16 XBlocPlus Units





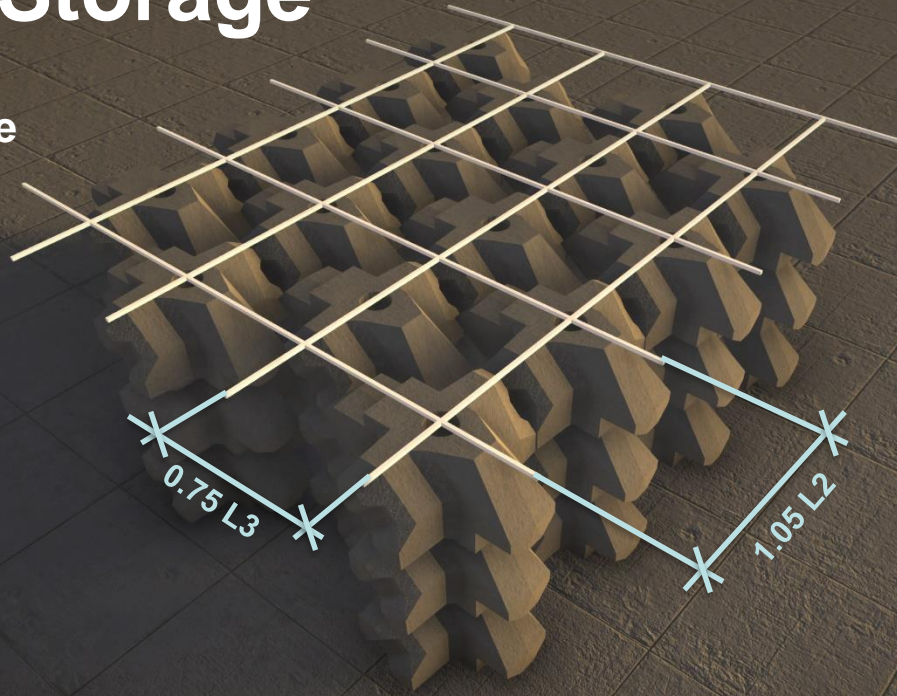
# Xbloc Plus Storage

- Two Layer Storage
- 32 XBlocPlus Units



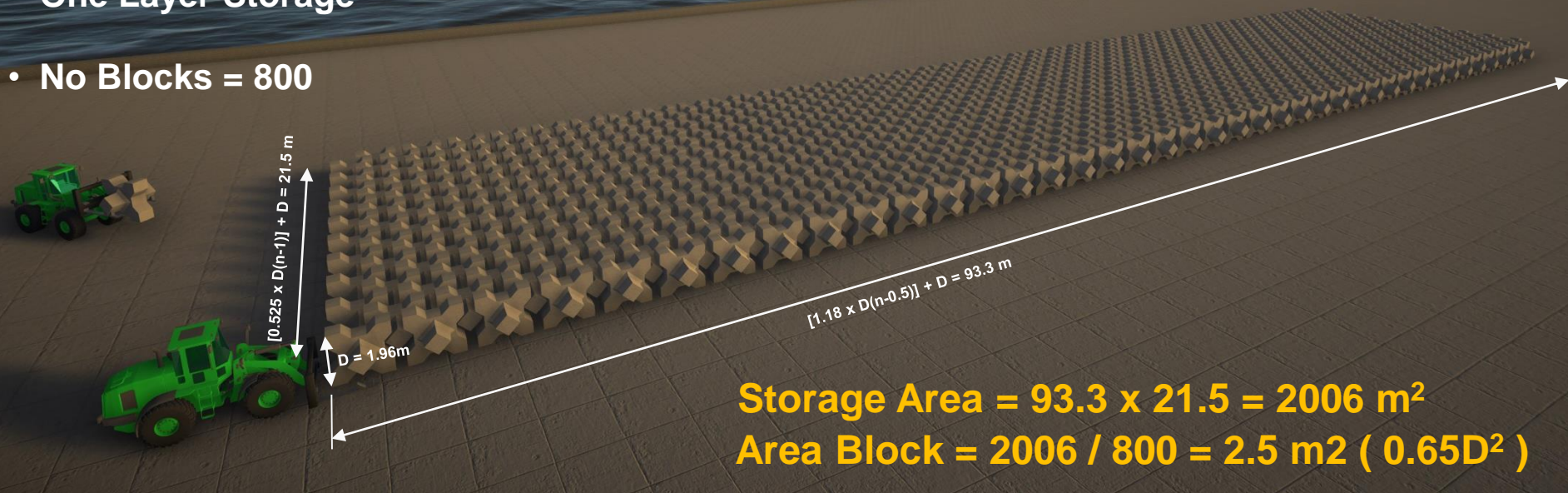
# Xbloc Plus Storage

- Three Layer Storage
- 48 XBlocPlus Units



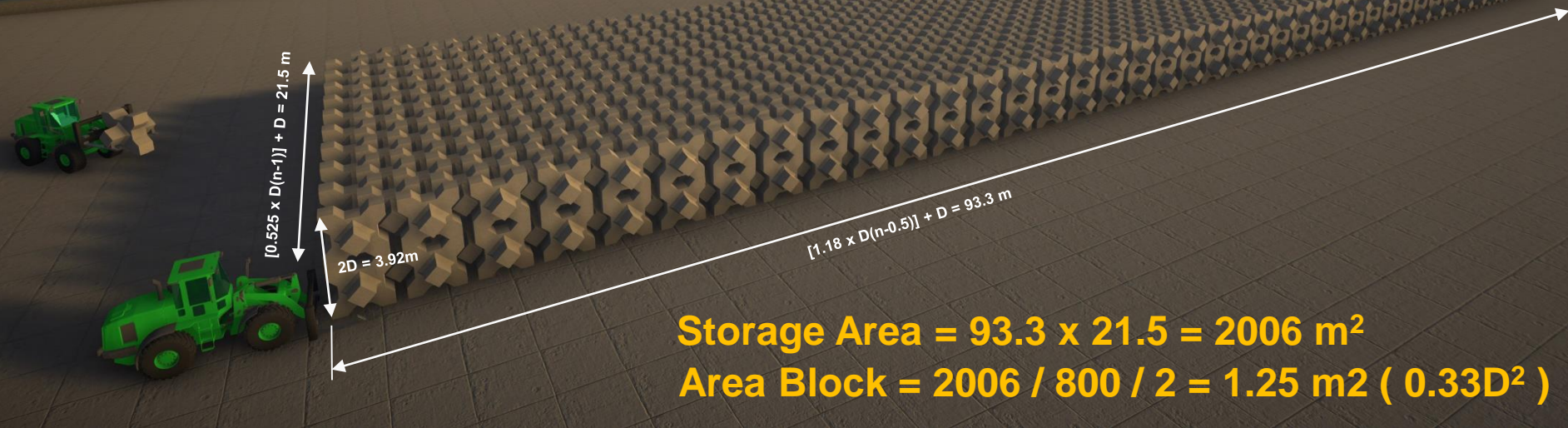
# Xbloc Storage

- 40 x 20 Xbloc of 2.5 m<sup>3</sup>
- One Layer Storage
- No Blocks = 800



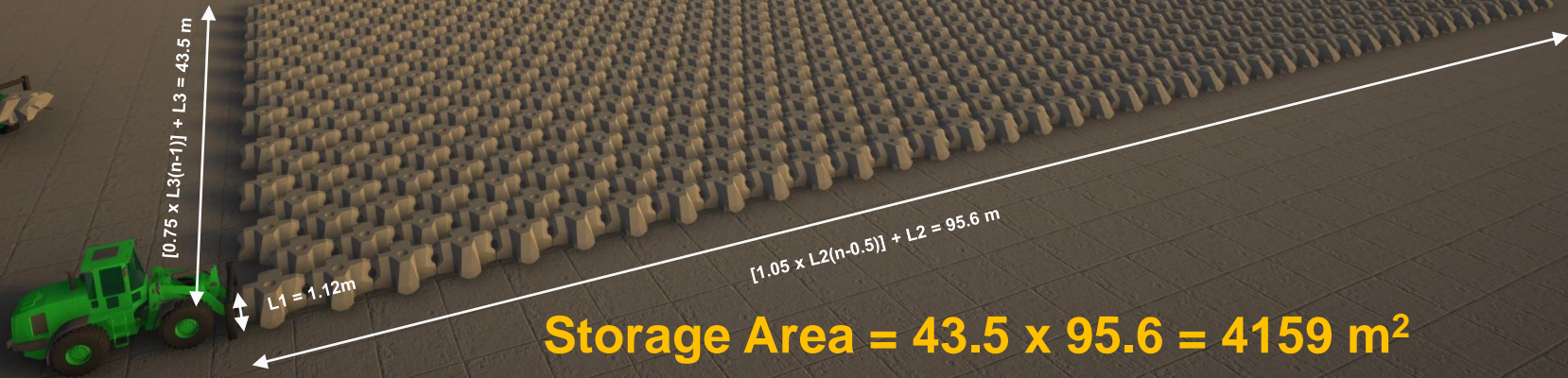
# Xbloc Storage

- 40 x 20 Xbloc of 2.5 m<sup>3</sup>
- Two Layers Storage
- No Blocks = 1600



# Xbloc Plus Storage

- 40 x 20 XblocPlus of 2.5 m<sup>3</sup>
- One Layer Storage
- No Blocks = 800



**Storage Area =  $43.5 \times 95.6 = 4159 \text{ m}^2$**   
**Area Block =  $4159 / 800 = 5.2 \text{ m}^2 (2.82V^{2/3})$**

# Xbloc Plus Storage

- 40 x 20 XblocPlus of 2.5 m<sup>3</sup>
- Two Layer Storage
- No Blocks = 1600

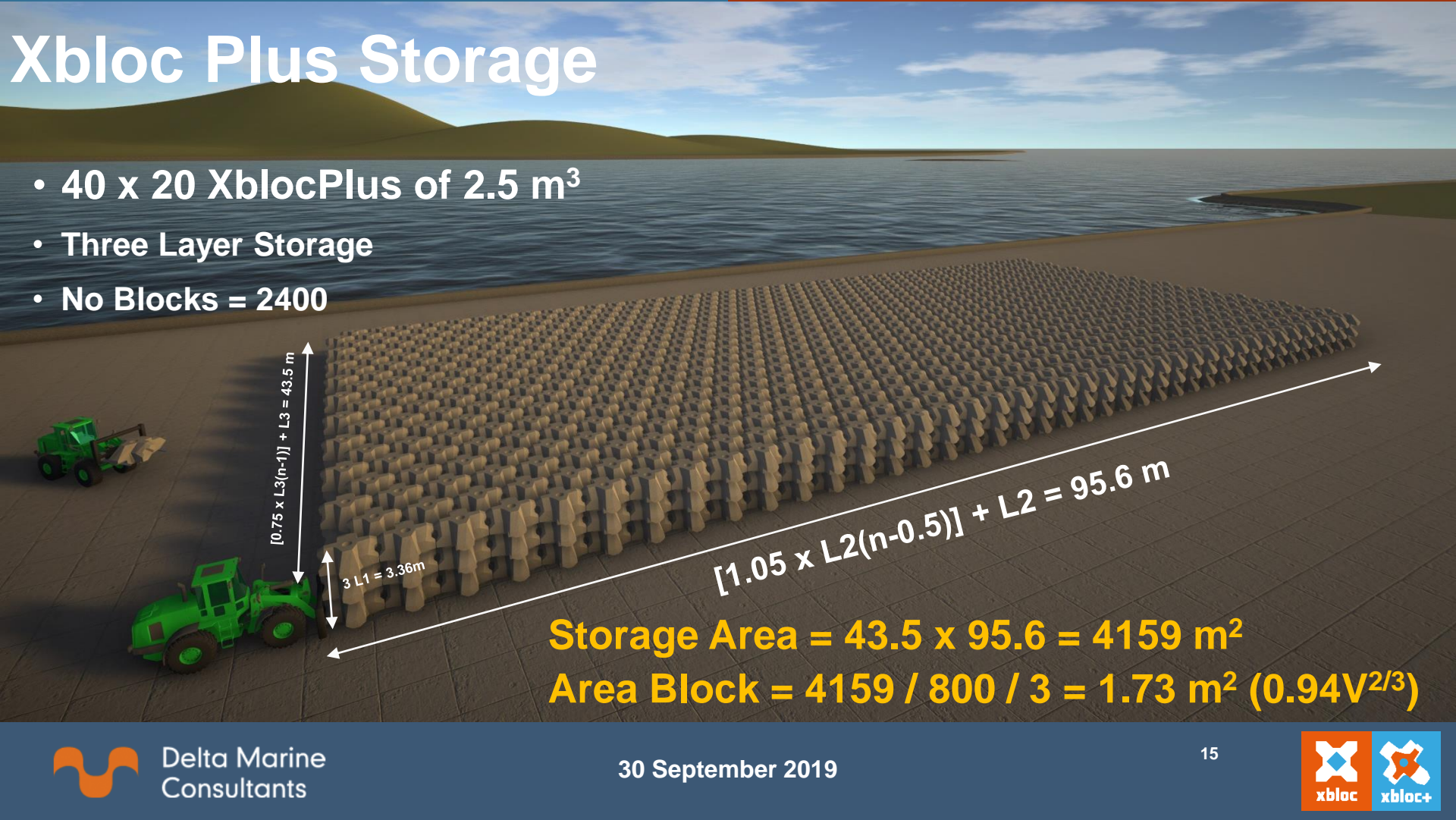


**Storage Area = 43.5 x 95.6 = 4159 m<sup>2</sup>**

**Area Block = 4159 / 800 / 2 = 2.6 m<sup>2</sup> (1.41V<sup>2/3</sup>)**

# Xbloc Plus Storage

- 40 x 20 XblocPlus of 2.5 m<sup>3</sup>
- Three Layer Storage
- No Blocks = 2400



A 3D rendering of a large storage area for Xbloc Plus blocks. The blocks are arranged in a rectangular grid on a paved surface. A green tractor is visible on the left side. The storage area is divided into three layers. The total length of the storage area is 43.5 m, and the total width is 95.6 m. The formulas for these dimensions are provided in the image.

$$[0.75 \times L3(n-1)] + L3 = 43.5 \text{ m}$$

$$3 L1 = 3.36 \text{ m}$$

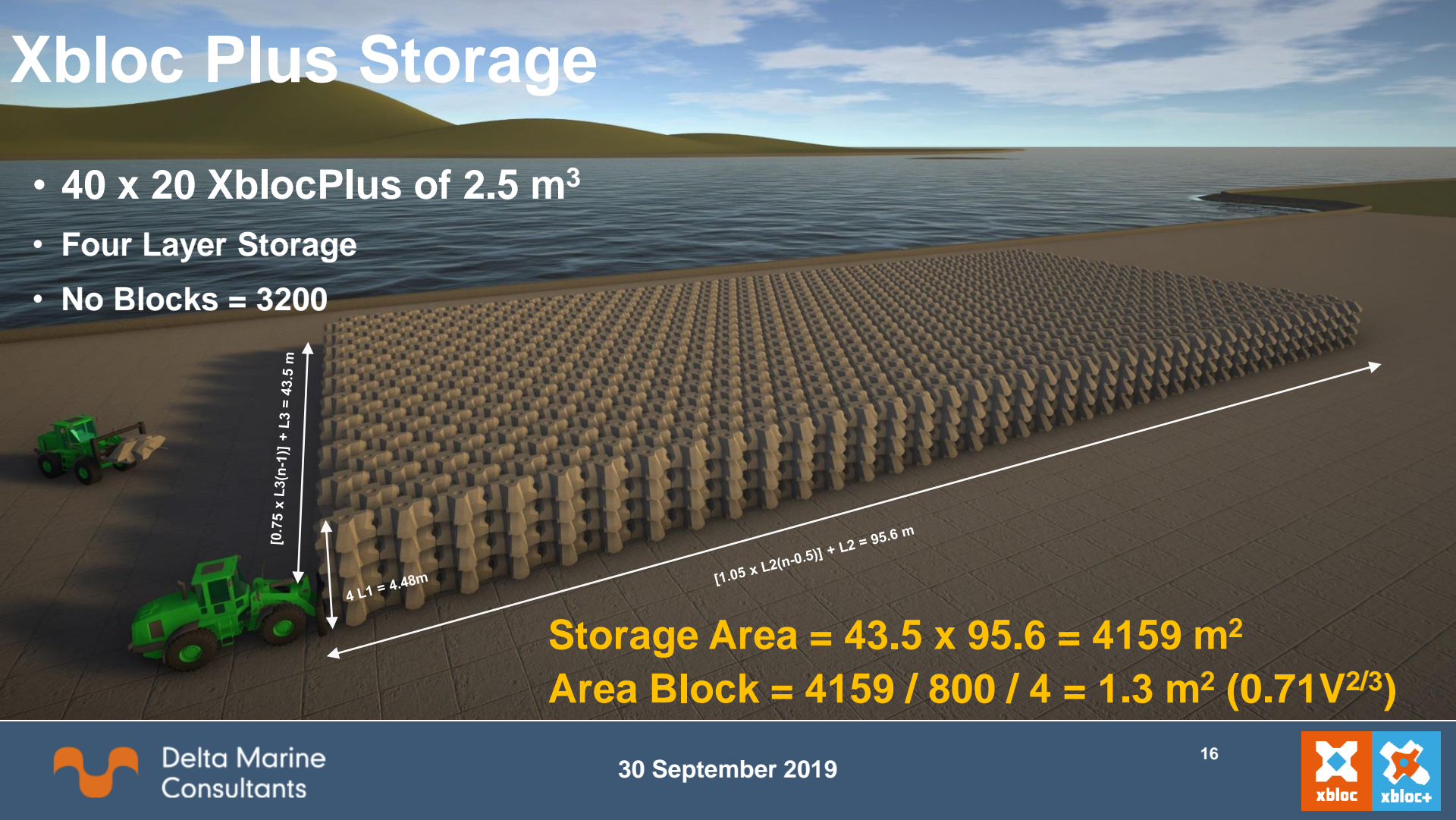
$$[1.05 \times L2(n-0.5)] + L2 = 95.6 \text{ m}$$

$$\text{Storage Area} = 43.5 \times 95.6 = 4159 \text{ m}^2$$

$$\text{Area Block} = 4159 / 800 / 3 = 1.73 \text{ m}^2 (0.94V^{2/3})$$

# Xbloc Plus Storage

- 40 x 20 XblocPlus of 2.5 m<sup>3</sup>
- Four Layer Storage
- No Blocks = 3200



A 3D rendering of a large storage area for Xbloc Plus blocks. The blocks are arranged in a grid pattern on a paved surface. A green tractor is visible on the left. The storage area is bounded by a white line. The height of the stack is indicated by a vertical double-headed arrow with the formula  $[0.75 \times L3(n-1)] + L3 = 43.5 \text{ m}$ . The length of the storage area is indicated by a diagonal double-headed arrow with the formula  $[1.05 \times L2(n-0.5)] + L2 = 95.6 \text{ m}$ . The height of a single layer is indicated by a vertical double-headed arrow with the formula  $4 L1 = 4.48 \text{ m}$ .

$$[0.75 \times L3(n-1)] + L3 = 43.5 \text{ m}$$

$$4 L1 = 4.48 \text{ m}$$

$$[1.05 \times L2(n-0.5)] + L2 = 95.6 \text{ m}$$

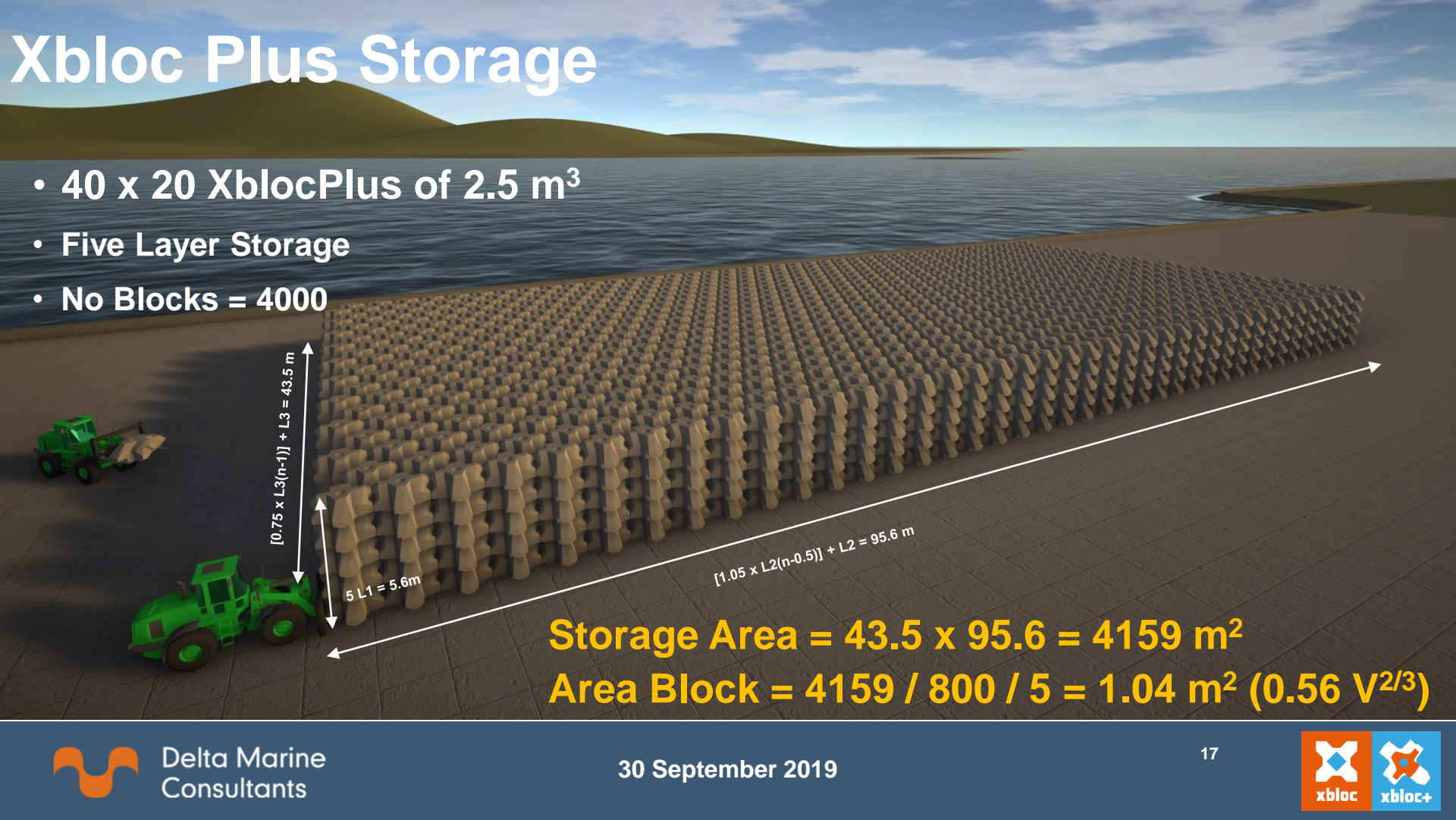
$$\text{Storage Area} = 43.5 \times 95.6 = 4159 \text{ m}^2$$

$$\text{Area Block} = 4159 / 800 / 4 = 1.3 \text{ m}^2 (0.71V^{2/3})$$



# Xbloc Plus Storage

- 40 x 20 XblocPlus of 2.5 m<sup>3</sup>
- Five Layer Storage
- No Blocks = 4000



A 3D rendering of a large storage area for Xbloc Plus blocks. The blocks are arranged in a grid pattern, forming a long, narrow structure. Two green tractors are visible in the foreground, one near the blocks and one further away. The background shows a body of water and a distant shoreline under a blue sky with light clouds. White arrows and text indicate the dimensions and formulas for the storage area and the blocks themselves.

$$[0.75 \times L3(n-1)] + L3 = 43.5 \text{ m}$$

$$5 L1 = 5.6 \text{ m}$$

$$[1.05 \times L2(n-0.5)] + L2 = 95.6 \text{ m}$$

$$\text{Storage Area} = 43.5 \times 95.6 = 4159 \text{ m}^2$$

$$\text{Area Block} = 4159 / 800 / 5 = 1.04 \text{ m}^2 \quad (0.56 V^{2/3})$$