

# EXPLANATORY NOTES ON COSTINGS FOR TAMS II

**Version 8 - 28<sup>th</sup> February 2018.**

**Note 1:** This notice replaces all previous interpretations.

**Note 2:** Some assumptions have been made, but these do not affect overall costs. Also, to avoid the mathematics being even more complicated, some minor simplifications have been made in the detailed costing procedures.

**Note 3:** Buildings and structures should be measured as accurately as possible. All dimensions should be recorded to the nearest 0.01 metre, i.e. to the nearest centimetre: (19.67 m, and not 19.674 m). All dimensions used in the reference costs are metric (i.e. metres (m), metres squared (m<sup>2</sup>), metres cubed (m<sup>3</sup>), litres (l)).

**Note 4:** Demolition Costs. The cost of the demolition of existing walls, or any other part of a building, in extensions cannot be grant-aided.

**Note 5:** All changes from the previous version are highlighted in red.

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# 1 General Items

1.1 **Points of Measurement.** Houses are measured internally, from the inner face of an external wall (see Fig. 1). A house with a feed passage (internal or external) shall be measured as follows : (a) the animal area is measured from the back wall of the house, (or from the inner flange of the stanchion where there are troughs or feed barriers) to the flange on the animal area side of the feed passage stanchion; (b) a creep area is measured from the back wall of the creep to the flange on the cow area side of the stanchion at the front of the creep; (c) the length of a building is to be taken between the internal faces of the gable walls, or if there are no walls, between the animal area side of the gable frame stanchions; (d) feed passages are measured from the flange(s) on the animal area side of the stanchion; (e) the length of a drive-through feed passage is measured between the internal faces of the building. A single entrance feed passage is measured from the internal face at the entrance to the internal face of the back wall; (f) the length of a unroofed feed passage or feed passage with a canopy only (i.e. feed passages along the outside of a building), is to be taken between the external faces of the gable frame stanchions of the animal area, or if there are walls at one or both ends of the feed passage between the internal faces of the walls; (g) the length of a building for ancillary concrete shall be taken as the external length of the working side of the building. See also figures 2.1 and 2.2.

**Note:** The totals of the width measurements (creep / animal area/ feed passage / animal area) equals the side-wall to side-wall dimension.

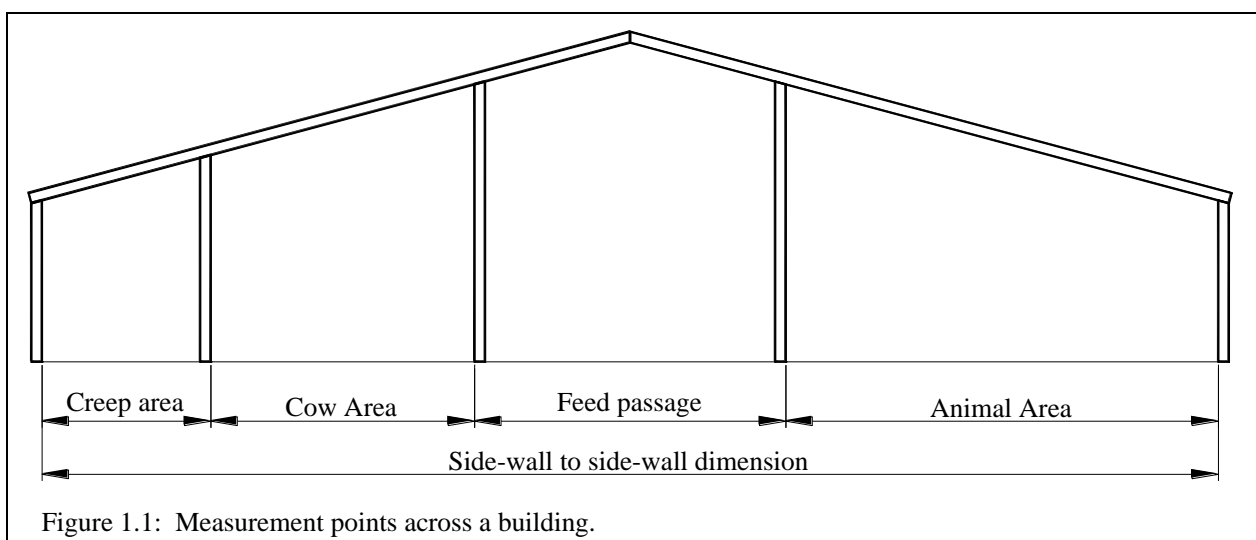


Figure 1.1: Measurement points across a building.

- 1.2 **Site Development.** There is no allowance made for difficult site development works, e.g. levelling a sloping site, rock breaking. However, the reference costs include standard site preparation costs such as topsoil removal, digging for standard foundations and preparing ground for foundations, etc.
- 1.3 **Own Labour Cost** (Direct constructional work by applicant or family member). This cost is the accepted rate for own labour. It is used to calculate the receipted cost of the works. It is at no time ever added to the reference cost of the works undertaken. The main reference costs as given include the cost of labour. Own labour is only permitted for the investments indicated in the relevant schemes Terms and Conditions.
- 1.4 **“Conversion”** means the work involved in upgrading an existing structure for a new purpose (e.g. loose house to cubicle house). “Extension” means the addition of an extra structure to a building that is otherwise unchanged. Conversions are not eligible under the TAMS II schemes. Extensions are eligible for grant-aid.
- 1.5 **Common Walls.** Where new buildings are being constructed, there are no deductions for any common walls, either within buildings for a single use (e.g. a group of calving pens) or for walls between buildings with different uses (e.g. parlour / dairy / plant room).  
Where, however, a new building is being attached to an existing building [e.g. a new slatted house alongside an existing cubicle house, where the existing wall is shared] then the cost of the existing common wall is deducted from the cost of the new building, at the **common wall** deduction rate (per linear metre).
- 1.6 **Calculation of reference costs with equations.** To assist in the calculation of the reference cost of structures / items where there is an equation, a spreadsheet has been developed. The spreadsheet is available on the Department’s website beside the National Reference Cost document and also under the heading “TAMS II Support Documents”.
- 1.7 **Standard for Completion of works.** All structures and equipment shall be completed in accordance with the relevant specification for the works. These explanatory notes have been prepared on the basis that the applicant has read and is aware of the relevant specifications that may be applicable to the particular investment.

## **2 Animal Housing Areas (see attached sketches)**

- 2.1 **Roofed animal area.** Enter the total roof area, in metres squared, of the structure within which there is an area being grant-aided. This is to included all the animal areas and the area of any canopies and **Other Roofed Areas** within the structure.
- 2.2 **Other Roofed area.** Enter the area, in metres squared, of any part of the roofed structure which is not otherwise included as an animal area or part of a roofed cattle crush or cattle enclosure, e.g.: the area of any milking parlour, dairy, plant-room or roofed collecting yard within the structure.
- 2.3 **Unroofed animal area.** Enter the total area of unroofed animal area, in metres squared, that is to be grant-aided.
- 2.4 **Loose Area.** These are costed per metre squared, using length and width. This rate is for any concrete floored areas for the housing of bovines that is not slatted, cubicle beds or passage way in cubicle houses. The Loose Area rate includes the following: Roof, end cladding, gutters, pen dividers, walls, drinkers, electrical wiring and fittings. Enter the internal length and internal width, in metres, of each loose house area into the investment tab on the on-line system.
- 2.5 **Slatted Area.** These are costed per metre squared, using length and width. This rate is for any slatted floor areas for the housing of bovines that does not have cubicle beds facing onto the slats. The slatted animal area rate includes the following: Roof, gutters, slats, tank extension covers, safety manhole covers, pen dividers, walls, drinkers, electrical wiring and fittings, end cladding. Up to a maximum of 1.0 metres width of concrete can be included as slatted area. See also clause 2.27. Any additional concrete must be recorded as **lie-back to slatted area or loose area**. Enter the internal length and internal width, in metres, of each slatted house area into the investment tab on the on-line system. The dimensions to be given exclude the area for the external agitation point.
- 2.6 **Lie-back to slatted area.** These are costed per metre squared, using length and width. This rate is to be used for a solid floor area behind a slatted area. The area may be bedded. The lie-back to slatted area includes the following: Roof, gutters, slats, tank extension covers, safety manhole covers, pen dividers, walls, drinkers, electrical wiring and fittings, end cladding. Enter the internal length and internal width, in metres, of each lie-back to slatted area into the investment tab on the on-line system.

- 2.7 **Solid Floor Area with Cubicles.** These are costed per metre squared, using length and width. This rate is for any solid floor area with cubicles for the housing of bovines. The whole area of cubicles and passages not over a tank is costed at the Solid Floor Area with Cubicles rate. The Solid Floor Cubicle house rate includes the following: Roof, gutters, walls, drinkers, electrical wiring and fittings, end cladding cubicle beds, cubicle dividers and concrete passages. Enter the internal length and internal width, in metres, of each solid floor area with cubicle into the investment tab on the on-line system.
- 2.8 **Slatted and cubicle area over tank.** These are costed per metre squared, using length and width. This rate is for any slatted floor area with cubicles facing onto the slats, and for suspended cubicle beds for the housing of bovines. The crossover points may be included as slatted and cubicle area rate, however, an area of slats at the end of a single line of cubicles is to be cost as a slatted area. Up to a maximum of 1.0 metres width of concrete along the feed barrier can be included as slatted and cubicle area over tank. The slatted cubicle house rate includes the following: Roof, gutters, walls, cubicle beds, slats, drinkers, electrical wiring and fittings, end cladding, tank extension covers, safety manhole covers and slats. The entire area over the tank and any cubicle facing onto the slats are to be costed at the Slatted and cubicle area over tank rate. Enter the internal length and internal width, in metres, of each slatted and cubicle area over tank into the investment tab on the on-line system.
- 2.9 **Calf Creep.** These are costed per metre squared, using length and width. This rate is to be used for any calf creep areas attached to suckler cow housing. The rate includes the entire structure, all fittings and creep gate between the calf creep and cow area. Enter the internal length and internal width of the creep area into the investment tab on the on-line system.
- 2.10 **Calving Pen.** These are costed per metre squared, using length and width. This rate shall be used for the entire floor area of the calving pen. It includes the entire structure and all fittings, including a calving gate. The calving pen must be completed in accordance with S.147 to get this rate. Enter the overall internal length and internal width of the calving pens into the investment tab on the on-line system.
- 2.11 **Isolation Pen.** These are costed per metre squared, using length and width. This rate shall be used for the entire floor area of the isolation pen. It includes the entire structure and all fittings. The Isolation pen must be completed in accordance with S.147 to get this rate.

Enter the overall internal length and internal width of the isolation pens into the investment tab on the on-line system.

**2.12 Automatic Slurry Scrapers with new Drive. Moved to 2.29.**

**2.13 Unroofed Slatted feed Area. (*Slatted Area – unroofed*)** These are costed per metre squared, using length and width. The slatted area, plus maximum 1 m width of concrete, within the barriers is multiplied by the **Slatted Area – unroofed rate**. The rate includes the any pen divisions, gates at the end of the slatted area, drinkers, slats, up to 1.0 metres wide of solid concrete floor area running alongside the slats, tank extension covers and safety manhole covers. Enter the internal length and width of the slatted feed area into the investment tab on the on-line system.

**2.14 Solid area as part of unroofed slatted feed area.** This are costed per metre squared, using length and width. This rate is to be used for any concrete area over 1.0 metres width in an unroofed slatted feed area. Enter the total length of the concrete area by the concrete width excluding the first 1.0 metres, into the investment tab on the on-line system.

**2.15 Roofing of livestock feedyards.** This are costed per metre squared, using length and width. This rate is to be used when a new roof is being constructed over an existing uncovered animal area. The rate is to be used for the entire roof area. Enter the internal length and width, in metres, of the new roof area into the investment tab on the on-line system.

**2.16 Bull Pen with exercise area.** These are costed per metre squared, using length and width. This rate shall be used for the entire floor area of the Bull pen. It includes the entire structure and all fittings. The bull pen must be completed in accordance with S.160 to get this rate. Enter the internal length and internal width, in metres, of the bull pen, including exercise area into the investment tab on the on-line system.

**2.17 Bull Pen without exercise area.** These are costed per metre squared, using length and width. This rate shall be used for the entire floor area of the Bull pen. It includes the entire structure and all fittings. The bull pen must be completed in accordance with S.160 to get this rate. Enter the internal length and internal width, in metres, of the bull pen into the investment tab on the on-line system.

**2.18 Calf Housing with penning.** These are costed per metre squared, using length and width. The rate shall be used for the entire floor area of the calf house, with penning. The rate covers the entire structure and all required fittings (concrete floor, penning, feed passages,

roof, electrics, etc). Where calf housing is constructed within the same building as other animal housing, the dividing line between the different types shall be taken as the centre line of the feed passage, or the centre of the pen divider, as relevant. Enter the internal length and internal width, in metres, of the calf house into the investment tab on the on-line system.

2.19 **Calf house no penning.** These are costed per metre squared, using length and width. The rate shall be used for the entire floor area of the loose calf house. The rate covers the entire structure and all required fittings. Where calf housing is constructed within the same building as other animal housing, the dividing line between the different types shall be taken as the centre line of the feed passage, or the centre of the pen divider, as relevant. Enter the internal length and internal width, in metres, of the loose calf house into the investment tab on the on-line system.

2.20 **Solid Floor Sheep house with penning.** These are costed per metre squared, using length and width. The rate shall be used for the entire floor area of the sheep house, with penning. The rate covers the entire structure and all required fittings (concrete floor, penning, feed passages, roof, electrics, etc). Where there are two types of sheep house within the one building, the dividing line between the different types shall be taken as the centre line of the feed passage, or the centre of the pen divider as relevant. Enter the internal length and internal width, in metres, of the sheep house into the investment tab on the on-line system.

2.21 **Solid floor sheep house no penning.** These are costed per metre squared, using length and width. The rate shall be used for the entire floor area of the loose sheep house. The rate covers the entire structure and all required fittings. Where there are two types of sheep house within the one building, the dividing line between the different types shall be taken as the centre line of the feed passage, or the centre of the pen divider as relevant. Enter the internal length and internal width, in metres, of the loose sheep house into the investment tab on the on-line system.

2.22 **Slatted house for sheep.** These are costed per metre squared, using length and width. The rate shall be used for the entire floor area of the slatted sheep house. The rate covers the entire structure and all required fittings. Where there are two types of sheep house within the one building, the dividing line between the different types shall be taken as the centre line of the feed passage, or the centre of the pen divider as relevant. Enter the internal

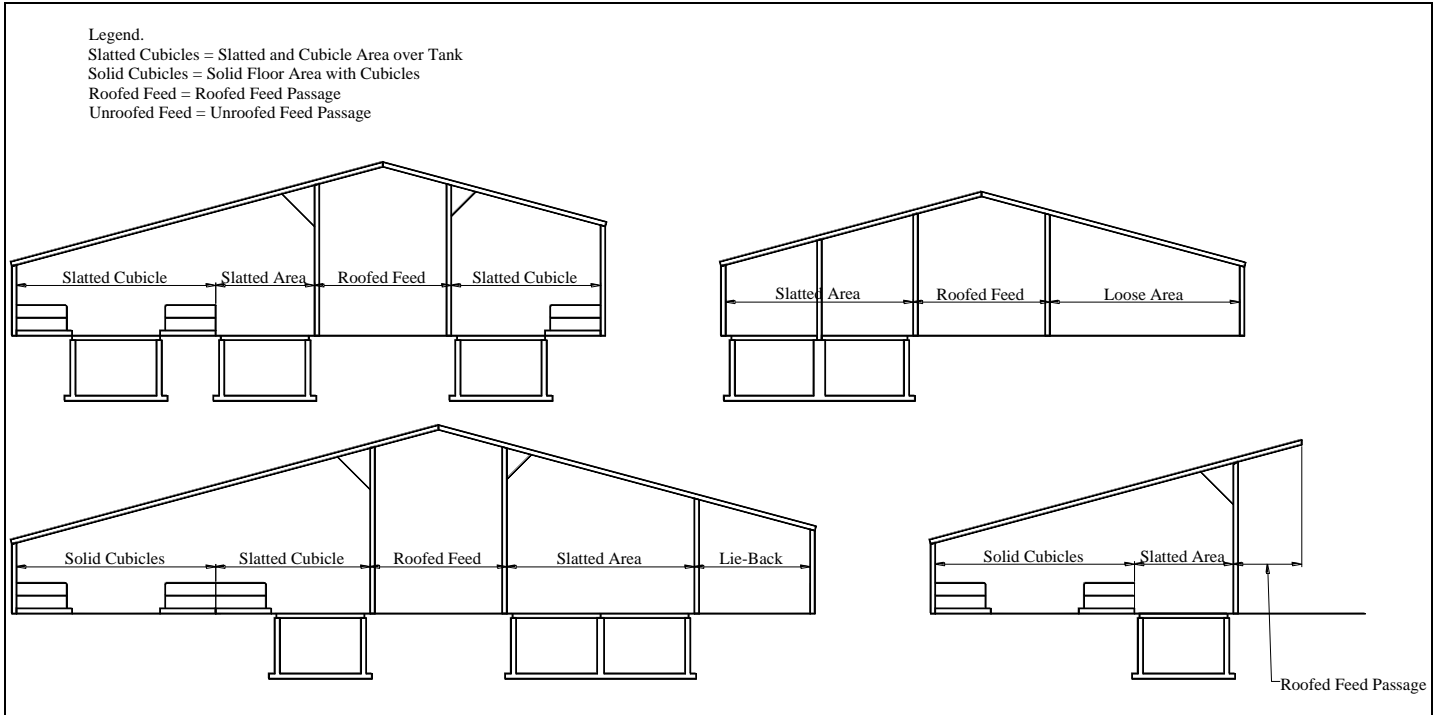


length and internal width, in metres, of the slatted sheep house into the investment tab on the on-line system.

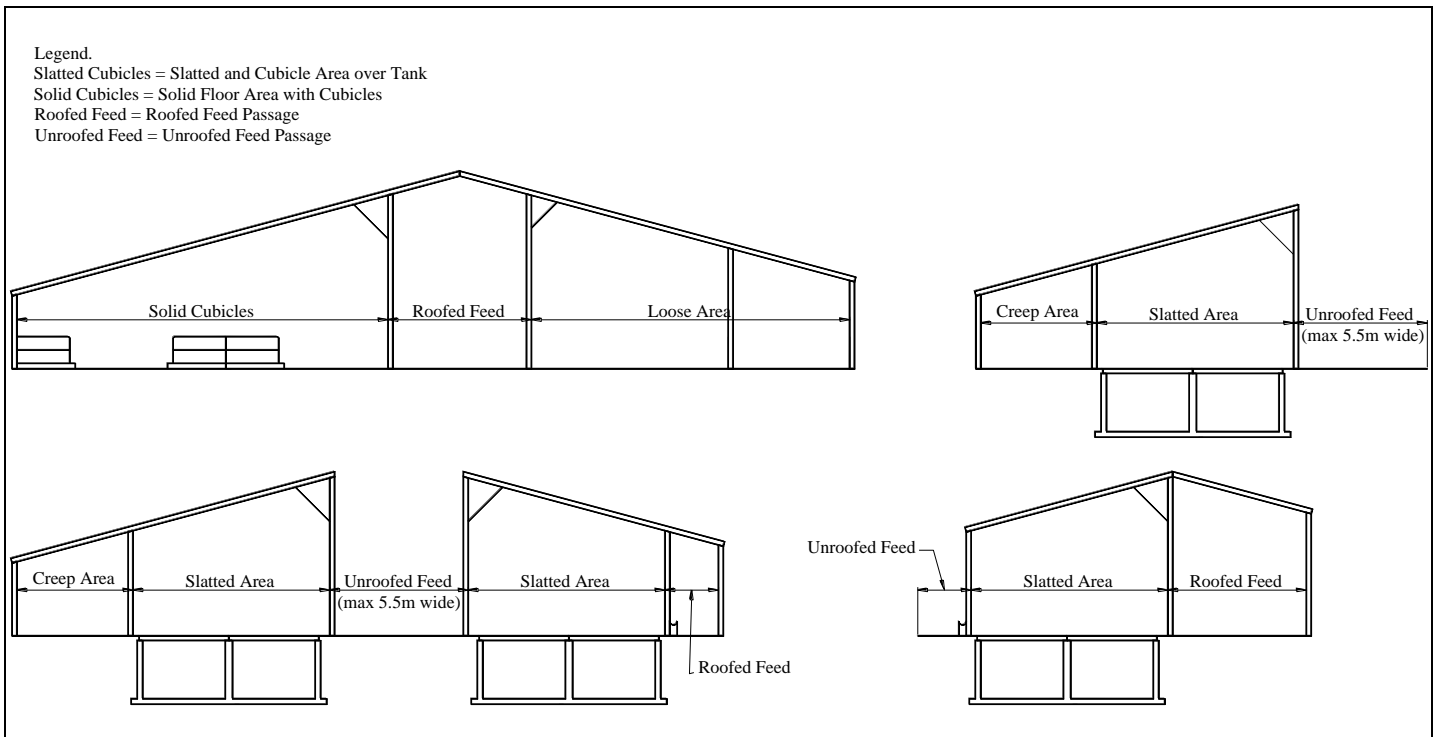
- 2.23 **Goat house with penning.** These are costed per metre squared, using length and width. The rate shall be used for the entire floor area of the goat house, with penning. Where there are two types of goat house within the one building, the dividing line between the different types shall be taken as the centre line of the feed passage, or the centre of the pen divider as relevant. The rate covers the entire structure and all required fittings (concrete floor, penning, feed passages, roof, electrics, etc). Enter the internal length and internal width, in metres, of the goat house into the investment tab on the on-line system.
- 2.24 **Goat House no penning.** These are costed per metre squared, using length and width. The rate shall be used for the entire floor area of the loose goat house. The rate covers the entire structure and all required fittings. Where there are two types of goat house within the one building, the dividing line between the different types shall be taken as the centre line of the feed passage, or the centre of the pen divider as relevant. Enter the internal length and internal width, in metres, of the loose goat house into the investment tab on the on-line system.
- 2.25 **Animal houses may consist of multiple types of individual areas under the one roof,** as well as feed passages and cattle handling facilities. The sketches below in figures 2.3 to 2.6 show sample layouts of buildings and the relevant dimensions and measuring points.
- 2.26 **Animal housing over existing tanks.** Where an animal house is constructed over an existing slatted tank, the cost of the existing tank cover has to be deducted from the animal area rate. This is done by inputting the area of “Existing slats – cattle”, “Existing slats – sheep”, “Existing tank extension cover” and number of “Existing manhole covers” as appropriate. Enter the internal length and internal width of each area, in metres, of existing slats / existing tank extension cover and the number of existing manhole covers into the investment tab on the on-line system.
- 2.27 **Tank extension greater than 2.5m** beyond any one end of a slatted house. Where, due to need to provide adequate slurry storage, the tank has to extend beyond the house by more than 2.5m, at any one point, the tank extension cover required for the portion over the 2.5m may be applied for as per clause 9.3. For example, if the tank extends by 3.0m beyond the slatted house at one end, it is permitted to apply for an additional 0.5m length of tank cover

(i.e.  $3.0 - 2.5 = 0.5$ ). The remainder of the tank cover and the safety manhole cover is included in the animal area cost.

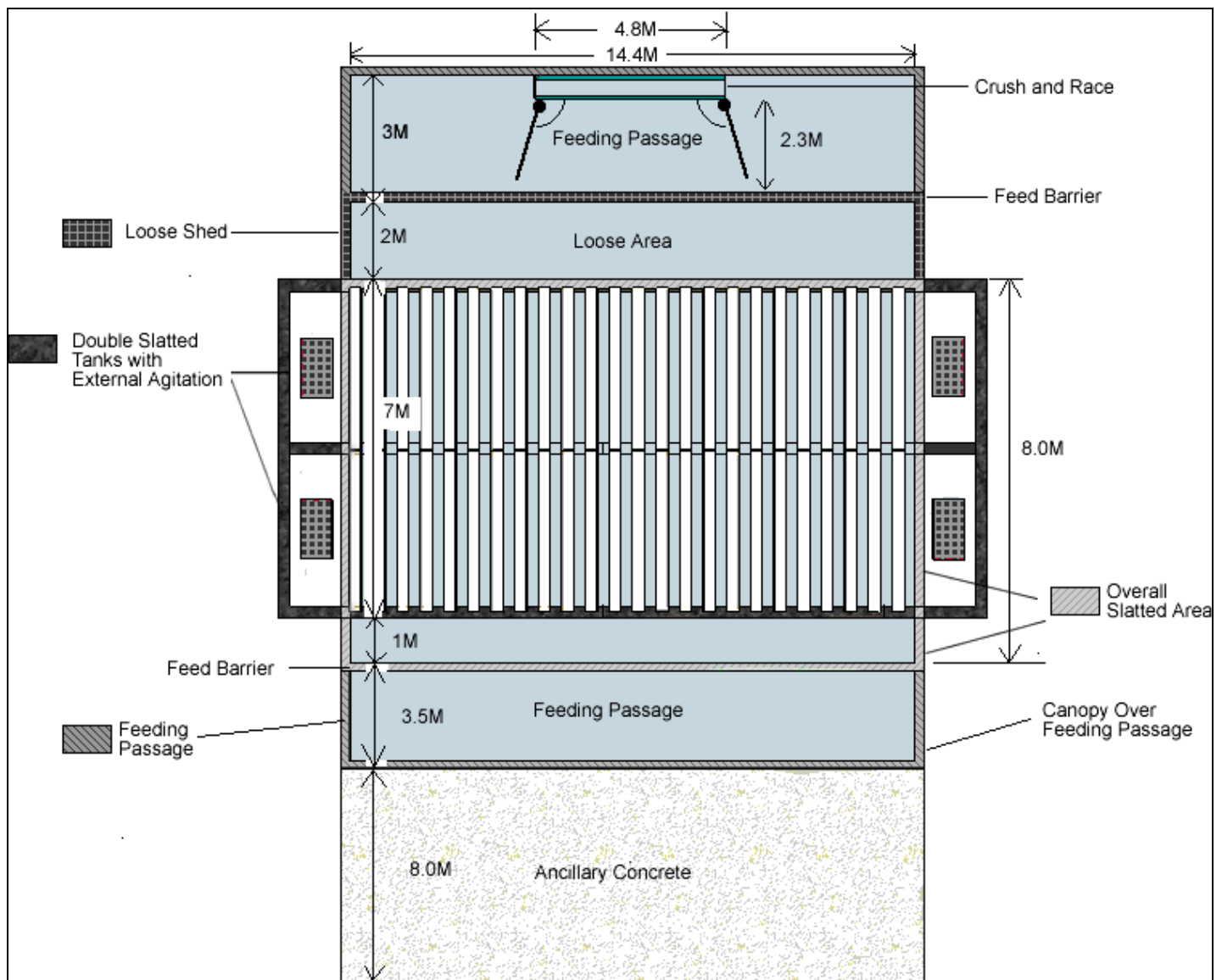
- 2.28 **Where a solid floor area is constructed over a tank**, e.g. a loose house with solid slabs as floor suspended over a tank, the area shall be costed as a slatted house as per clause 2.5 above. The drawings shall indicated that the area is to have heavy duty slabs installed rather than slats.
- 2.29 **Automatic Slurry Scrapers with new Drive**. These are costed per passage that is scraped. For example if the proposed number of scraped passages is 4, to calculate the reference cost of the scraper system multiply 4 x 2280 and then add 2375. This gives a cost of €11,495.00 for the scraper system for 4 passages, **including new drive**. Enter the total number of passages that are to have automatic scrapers installed into them into the investment tab on the on-line system.
- 2.30 **Automatic Slurry Scrapers – with existing Drive**. This is to be used where additional scraper units are added to an existing scraper drive unit. These are costed per new passage that is scraped. Enter the total number of new passages that are to have automatic scrapers installed, into the investment tab on the on-line system.
- 2.31 **Robotic Slurry Scraper**. These are costed per unit purchased. This covers the cost of the robotic scraper and base unit. Enter the total number of Robotic Slurry Scrapers that are to be purchased into the investment tab on the on-line system.



**Figure 2.1:** Measurement points for various animal areas.



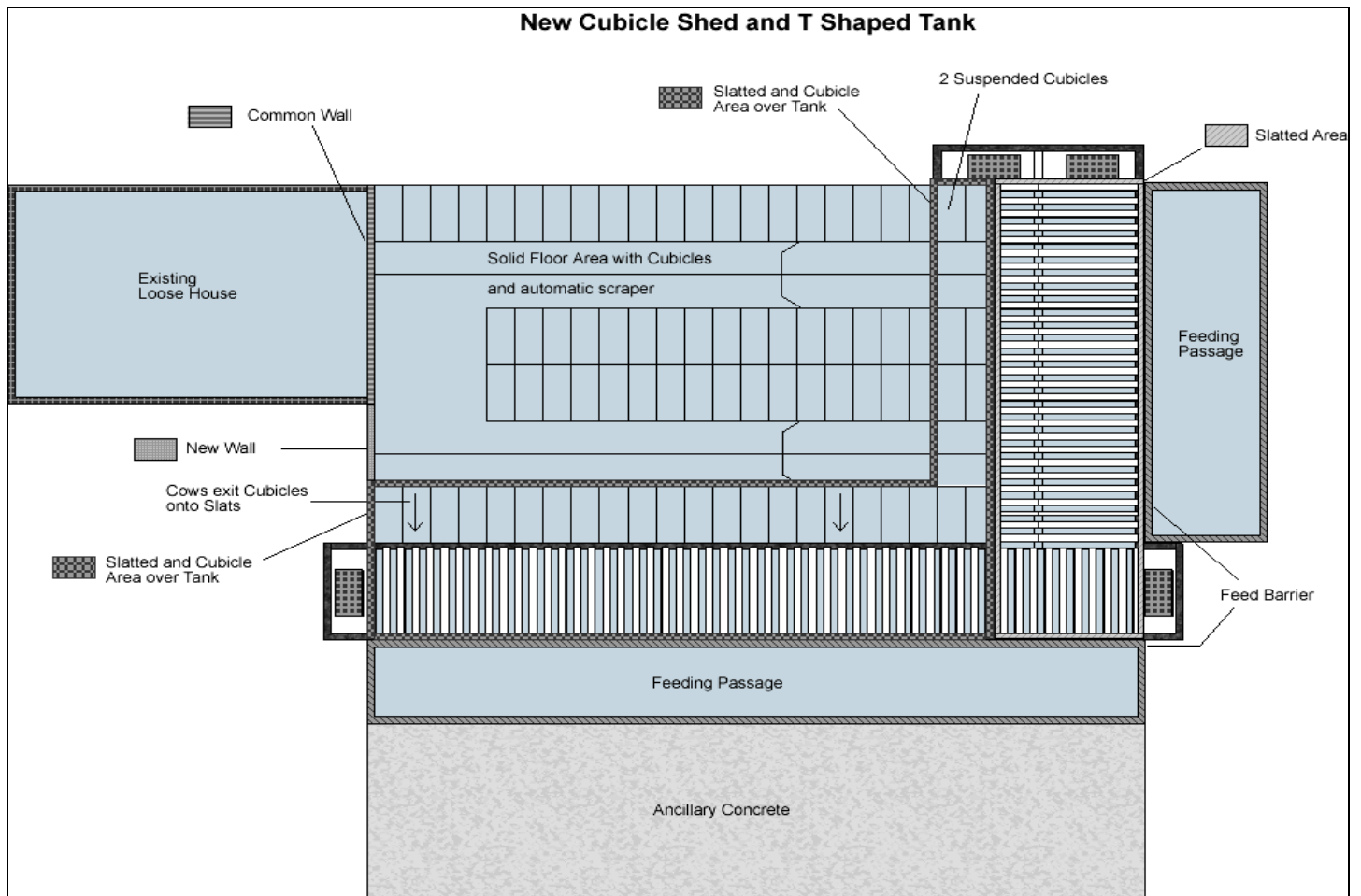
**Figure 2.2:** Measurement points for various animal areas.



**Figure 2.3:** Slatted house, with feeding passage either side, cattle crush within a feed passage and ancillary concrete. Relevant clauses are 2.1, 2.5, 2.6, 3.2, 3.3, 4.1, 4.2, 8.4, 8.8.

Main Structure	Sub Structure	Length	Width	m <sup>2</sup>	m <sup>3</sup>	Cost
Animal Housing						€39,000
	Roofed Feed passage	14.4	3.5			
	Slatted Area	14.4	8			
	Loose Area	14.4	2			
	Roofed Feed passage	14.4	3			
	Semi-Automatic skulling gate and back gate	1				
	Single side race	4.8				
	Gates for enclosure	4.6				
	Ancillary Concrete				115.2	
Mass Concrete Tank						€19,500
	Square or Rectangular Tank				279.79	

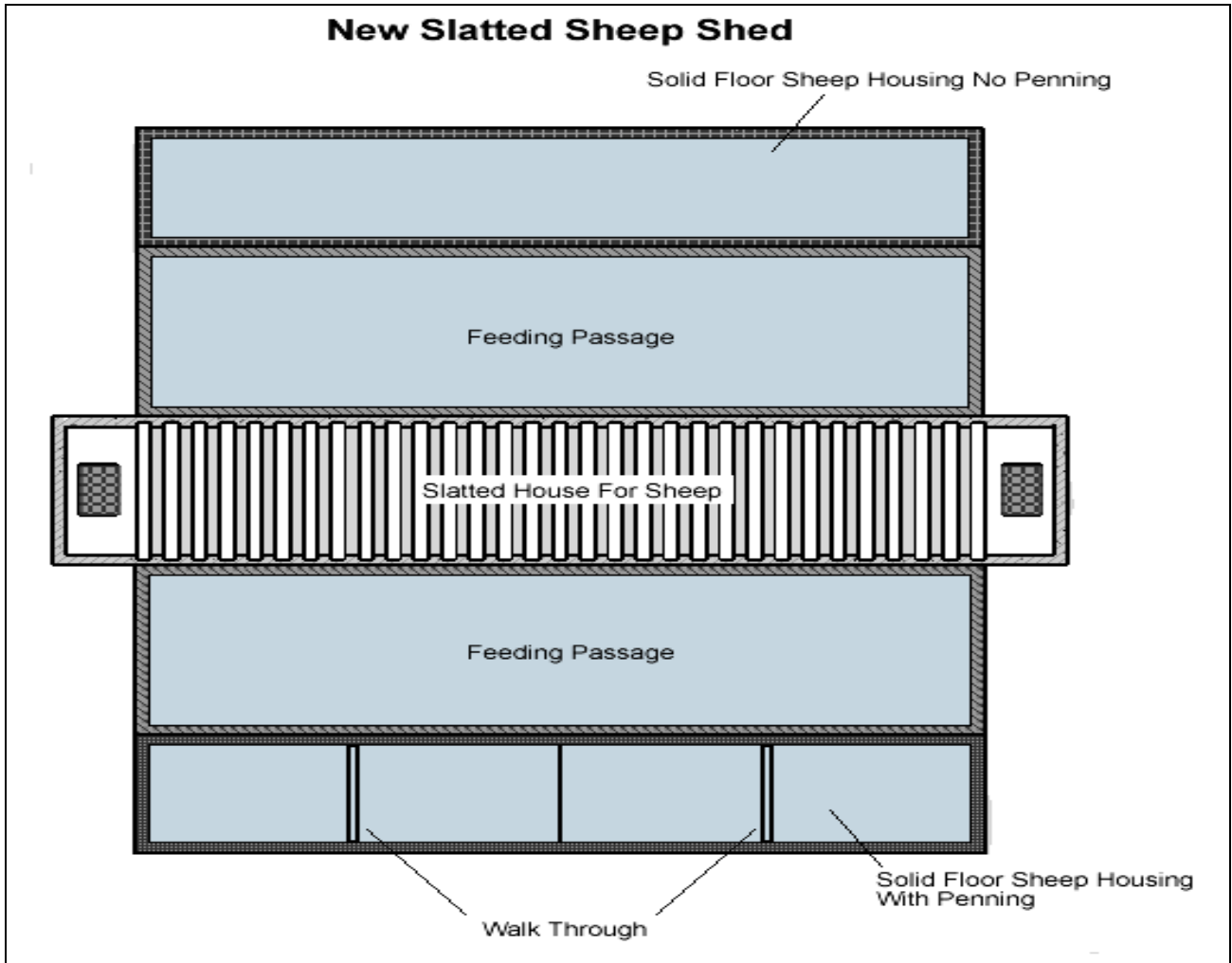
**Table 2.1:** Costing of Figure 2.3.



**Figure 2.4:** Combination of solid floor cubicle house and slatted cubicle house with T shaped tank, two feed passages and common wall with existing loose house. Relevant clauses are: 1.5, 2.1, 2.5, 2.7, 2.8, 2.12, 3.2, 3.3, 3.4, 8.4, 8.8.

Main Structure	Sub Structure	Length	Width	m <sup>2</sup>	m <sup>3</sup>	Cost
Animal Housing						€102,500
	Slatted and cubicle area over tank	10.8	2.4			
	Common wall	8.0				
	Slatted Area	17.0	4.6			
	Roofed Feeding Passage	17.0	4.0			
	Solid Floor area with cubicles	24.0	10.8			
	Slatted and cubicle area over tank	26.4	6.2			
	Roofed Feeding passage	31.0	2.5			
	Ancillary Concrete			248.00		
Automatic Slurry Scrapers						€6,500
	No scraped passages	2				
Mass Concrete Tank						€42,000
	T-Shaped Tank				583.08	

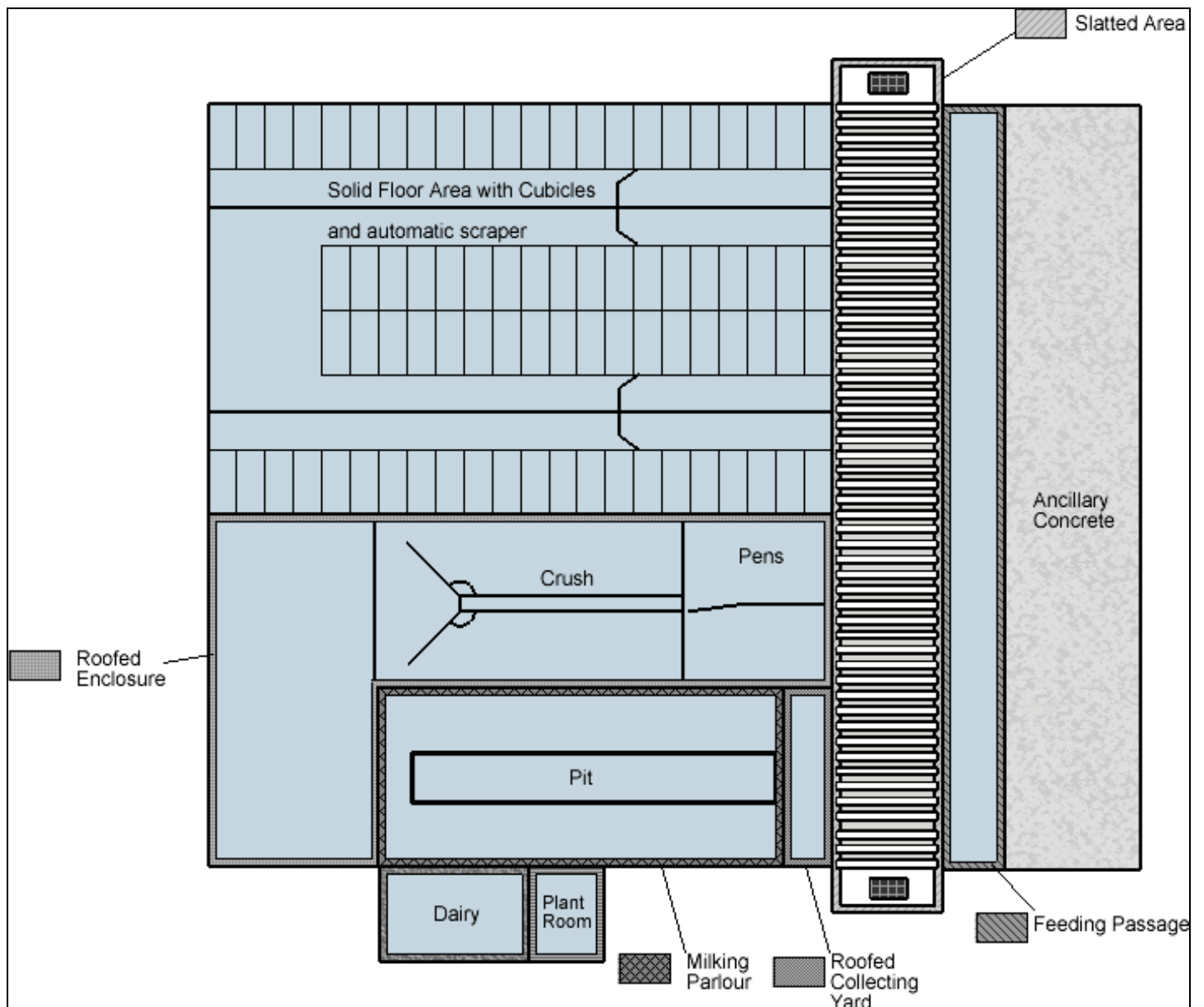
**Table 2.1:** Costing of Figure 2.4



**Figure 2.5:** New slatted and solid floor sheep house. Relevant clauses are: 2.1, 2.20, 2.21, 2.22, 3.3 and 8.4.

Main Structure	Sub Structure	Length	Width	m <sup>3</sup>	Cost
Animal Housing					€35,900
	Solid Floor Sheep housing no penning	14.4	4.9		
	Slatted House for Sheep	14.4	9.1		
	Solid Floor sheep house with penning	14.4	4.9		
Mass Concrete Tank					€13,500
	Square or Rectangular Tank			158.69	

**Table 2.3:** Costing of Figure 2.5



**Figure 2.6:** Integrated Dairy unit. Relevant clauses are: 2.1, 2.5, 2.7, 2.12, 3.2, 3.3, 4.1, 4.2, 4.3, 8.4, 13.1, 13.3, 13.5 and 13.7.

Main Structure	Sub Structure	Length	Width	m <sup>2</sup>	m <sup>3</sup> or litre	Cost
Animal Housing						€106,000
	Solid Floor area with cubicles	26.4	13.2			
	Slatted Area	29.4	4.1			
	Roofed feed passage	29.4	2.5			
	Ancillary Concrete			161.7		
	Roof over enclosure (including floor)	16.2	7.2			
	Roof over enclosure (including floor)	19.2	6.2			
	Semi-Automatic skulling gate and back gate	1				
	Double sided race	8.0				
	Gates for enclosure	17.5				
Automatic Slurry Scrapers						€6,500
	No scraped passages	2				
Mass Concrete Tank						€23,000
	Square or Rectangular Tank				295.49	
Dairy Structure						€35,000
	Milking parlour Area			84.00		
	Dairy Area			25.00		
	Plant Room Area			5.00		
	Roof over Collecting yard			10.00		
	Solid Collecting yard			10.00		
Milking Machine						€40,000
	Cluster Units (New Machine or extension)	14				
In-Parlour meal feeding system						€18,000
	Batch / multi place Meal Feeders	28				
	Meal Troughs	28				
	Meal Bin	8				
Milk Storage and Cooling						€25,000
	Internal Bulk Tank Volume (incl Auto Washer and compressor)				10,000	

**Table 2.4:** Costing of Figure 2.6

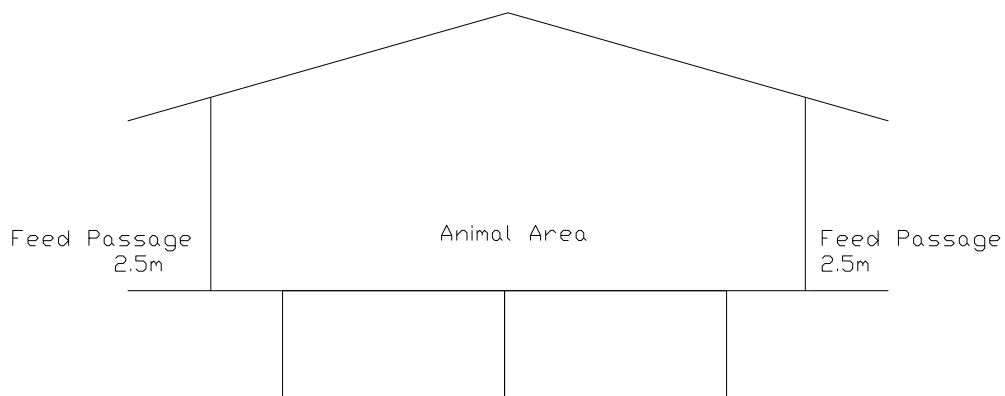


### **3 Feed Passages and External Concrete**

- 3.1 **Applications for ancillary concrete, feed passages or sliding doors** can only be made as part of an application for a new building, except in relation to clause 19.11.
- 3.2 **Ancillary Concrete.** Ancillary concrete is only permitted for the investments indicated in the relevant schemes Terms and Conditions. The cost is based on metres squared area of concrete to be provided. Concrete equivalent to an 8 metres wide apron across the longest working side of the eligible structure may be provided with each eligible structure being grant-aided. This concrete is additional to any unroofed feed passage that may be present. The concrete must adjoin the eligible structure. Enter the total area of concrete, in metres squared, to be provided within the eligible structure into the investment tab on the on-line system.
- 3.3 **Roofed Feed passages.** These are costed per metre squared, using internal length and internal width. This rate is to be used for any area of feed passage under a roof, with the exception of feed passages in calf, sheep and goat housing. The roof must extend at least 1.0 metres over the feed passage for this rate to be used. This rate includes the roof, concrete floor, feed barrier, stub wall and electrics. In the case of single sided cattle houses and double sided houses with feeding along the sides, the **roofed feed passage** rate is used for the area under the canopy, all additional feed passage is costed at the **ancillary concrete** rate. Enter the length and width into the investment tab on the on-line system.
- 3.4 **Unroofed Feed passage.** These are costed per metre squared, using length and width. This rate is to be used for any fully unroofed feed passage and any feed passage where the roof extends less than 1.0 metres over it, with the exception of feed passages in calf, sheep and goat housing. This rate includes the concrete floor, feed barrier and stub wall. This rate shall only be used up to a maximum of 5.5 metres wide of a feed passage. Concrete beyond 5.5 metres can only grant-aided as ancillary concrete, up to a maximum additional width of 8.0 metres. Enter the length and width, in metres, (up to a maximum of 5.5m) of the unroofed feed passage into the investment tab on the on-line system.
- 3.5 **Feed passage over tank (suspended feed passage).** These are costed per metre squared, using length and width. This rate is to be used for any suspended feed passage, with the exception of feed passages in calf, sheep and goat housing. This rate includes the roof, suspended passage, feed barrier, stub wall and electrics. Enter the length and width, in metres, of the feed passage over tank into the investment tab on the on-line system. In

cases where the suspended feed passage extends beyond the roof overhang, the additional area of slab is paid at **Area of HD slab for fully external tank outside animal area and feed passage** rate under the “Mass Concrete Tank” main structure.

- 3.6 **Meal troughs.** Where there are troughs at the back of a slatted pen (see figure 2.3) the concreted passage width is paid at appropriate feed passage rate (either roofed or unroofed) as set out above.
- 3.7 **Sliding Doors.** These are costed per metre squared, using height and width. Only sliding doors at the end of the feed passage need to be costed. Enter the length and width of each sliding door into the investment tab on the on-line system. Unless the size of the sliding doors is clearly indicated on the drawings, they shall be taken to be the same size as the opening.



**Figure 3.1:** Double width houses with roofed feed passages on either side

## **4 Cattle Handling Facilities**

- 4.1 **Cattle crushes within a building that is being grant-aided.** The cost of cattle crushes and races are calculated based upon the component parts and location of the crush and race. In each case the “Semi-automatic skulling gate and back gate” must be selected – once for each cattle crush and race to be constructed. The appropriate race must then be selected. If the race is to be constructed alongside an existing wall, or the wall of a building to be grant-aided, then select a single sided race in animal area. If the race is away from any other wall or barrier, select a double sided race in animal area. If the race is being constructed under the roof of an animal house, but outside of what is otherwise an animal area upon which grant-aid is being sought, then the roof may be grant-aided using the **Roof over cattle crush and race** rate. Enter the number of skulling gates and length of the appropriate race, and roof area (if relevant) into the investment tab on the on-line system. These cattle crushes must be entered under the Animal Housing as the main structure.
- 4.2 **Costing of cattle enclosure with cattle crush and race within a building that is being grant-aided.** These shall be costed on component parts, when constructed as dedicated enclosures for a cattle crush and race. The floor and roof cost are calculated together per metre squared and the barriers, walls and gates around the cattle enclosure are costed per linear metre. The system allows for fully solid enclosures only with a combination of walls, barriers and gates around the enclosure. For the system to calculate the cost of the cattle enclosure, it is necessary to enter the total area, in metres squared, of the enclosure, the length, in linear metres of barriers and walls around the cattle enclosure and the length of the entrance gate(s) to the cattle enclosure into the investment tab on the on-line system. Any barriers which are also used for animal penning shall not be included as part of the enclosure penning length.
- 4.3 **Cattle crushes - unroofed.** The cost of unroofed cattle crushes and races are calculated based upon the component parts and location of the crush and race. In each case the “Semi-automatic skulling gate and back gate” must be selected – once for each cattle crush and race to be constructed. The appropriate race must then be selected. If the race is to be constructed alongside an existing wall, or the wall of a building to be grant-aided, then select a single sided race. If the race is away from any other wall or barrier, select a double sided race. If the race is being constructed in an existing animal area (either roofed or

unroofed) then use the appropriate double or single sided race in animal area rate. If the race is being constructed outside of an existing animal area then use the appropriate double or single sided race over new concrete rate. Enter the number of skulling gates and length of the appropriate race into the investment tab on the on-line system. These cattle crushes must be entered under the Unroofed Fixed Cattle Crushes/Races as the main structure.

- 4.4 **Costing of Unroofed cattle enclosure with cattle crush and race.** These shall be costed on component parts, when constructed as a dedicated enclosure for a cattle crush and race. The floor area is calculated per metre squared and the barriers, walls and gates around the cattle enclosure are costed per linear metre. The system allows for fully solid enclosures with a combination of walls, barriers and gates around the enclosure. For the system to calculate the cost of the cattle enclosure, it is necessary to enter the total area, in metres squared, of solid concrete within the enclosure, the length, in linear metres of barriers and walls around the cattle enclosure and the length of the entrance gate(s) to the cattle enclosure into the investment tab on the on-line system. The floor area of the cattle enclosure is to be measured inside the walls / barriers surrounding the cattle enclosure. If it is found that the area claimed as a cattle enclosure is excessive, compared to the numbers of bovines on the holding at time of application, the eligible area will be reduced to a maximum of 2 m<sup>2</sup> per bovine on the holding. The calculation for the eligible area will be based on the number of bovines present on the holding at time of application. These cattle enclosures must be entered under the Unroofed **Enclosures** as the main structure.
- 4.5 **Mobile Cattle crushes.** Cost is per unit, excluding penning. Minimum 2.0 metres long, fitted with a sculling gate (manual or automatic) and back gate. Enter the number of mobile cattle crushes to be grant-aided into the investment tab on the on-line system.
- 4.6 **Mobile Cattle penning.** Cost is per linear metre of penning. A maximum of 75 linear metres of penning is eligible for grant-aid. Enter the number of metres of penning required into the investment tab on the on-line system.
- 4.7 **Calving gate in existing House.** The cost is per linear metre length of calving gate installed and includes installation. This option is only for calving gates being installed in existing houses. The calving gate must be as per specification S.138. The total length, in metres, of calving gates to be installed should be entered into the investment tab on the on-line system.

- 4.8 **Cattle Weighing scales.** Cost is per unit. May be used in conjunction with either mobile or fixed cattle handling units. Enter the number of cattle weighing scales to be grant-aided into the investment tab on the on-line system.
- 4.9 **Leg Hoist / Lifter.** Cost is per unit. May be used in conjunction with either mobile or fixed cattle handling units. Enter the number of leg hoist / lifters to be grant-aided into the investment tab on the on-line system.
- 4.10 **Head Scoop.** Cost is per unit. May be used in conjunction with either mobile or fixed cattle handling units. Enter the number of head scoops to be grant-aided into the investment tab on the on-line system.
- 4.11 **Calf De-horning Crate.** Cost is per unit. Enter the number of calf-dehorning crates to be grant-aided into the investment tab on the on-line system.
- 4.12 **Batch AI Crush.** Cost is per linear metre. The length is measured from the entrance gate to exit gate in a straight line along the breast rail. Enter the length of the crush to be grant-aided into the investment tab on the on-line system.

## **5 Horse Handling Facilities**

- 5.1 **Horse Stocks.** Cost is per unit. Enter the number of horse stocks to be grant-aided into the investment tab on the on-line system.

## **6 Sheep Handling Facilities**

- 6.1 **Fixed Sheep Handling Unit.** This rate is to be used for the entire area of fixed handling units that do not include a dip tank. The rate is per metre square and includes all penning and concrete. The unit shall be constructed in accordance with S.136. Enter the total internal area, in metre squared, of the handling unit into the investment tab on the on-line system.
- 6.2 **Fixed Sheep handling unit with dip tank.** This rate is to be used for the entire area of fixed handling units that include a dip tank. The rate is per metre square and includes all penning, concrete and the dip tank. The unit shall be constructed in accordance with S.136. Enter the total internal area, in metre squared, of the handling unit with dip tank into the investment tab on the on-line system.

- 6.3 **Portable Sheep Handling Race with wheels (including footbath).** Cost is per unit, excluding penning. The unit shall be as described in specification S.136A. Enter the number of handling races to be grant-aided into the investment tab on the on-line system.
- 6.4 **Portable basic sheep handling race.** Cost is per unit, excluding penning. The unit shall be as described in specification S.136A. Enter the number of handling races to be grant-aided into the investment tab on the on-line system.
- 6.5 **Weighing Scales.** Cost is per unit. These can be grant-aided for either fixed or mobile units. Enter the number of weighing scales to be grant-aided into the investment tab on the on-line system.
- 6.6 **Rollover Crate.** Cost is per unit. These can be grant-aided for either fixed or mobile units. Enter the number of rollover crates to be grant-aided into the investment tab on the on-line system.
- 6.7 **Mobile Sheep Batch Footbath** is based on unit cost. Enter the number of batch footbaths to be grant-aided into the investment tab on the on-line system.
- 6.8 **Sheep penning for mobile unit.** Cost is per linear metre of penning. A maximum of 75 linear metres of penning is eligible for grant-aid. Included here is a forcing gate. Enter the number of metres of penning required into the investment tab on the on-line system.
- 6.9 **Sheep Adoption unit front.** Cost is per unit. Enter the number of adoption unit fronts to be grant-aided into the investment tab on the on-line system.
- 6.10 **Sheep Adoption unit front with penning.** Cost is per unit. The units must have a minimum of 3.5m of penning – this 3.5m excludes the adoption unit front. Enter the number of adoption unit fronts with penning to be grant-aided into the investment tab on the on-line system.
- 6.11 **PDA EID tag reader and management software package** is based on unit cost. Enter the number of PDA EID tag readers (including management software package) to be grant-aided into the investment tab on the on-line system.
- 6.12 **EID tag reader and software** is based on unit cost. Enter the number of EID readers (including management software package) to be grant-aided into the investment tab on the on-line system.

## **7 General Safety Elements**

- 7.1 **Safety rails on silo walls.** These are costed per linear metre of new safety rail provided. Enter the length, in metres, of new safety rail to be grant-aided in to the investment tab on the on-line system.
- 7.2 **Replacement of a hinged door/sheeted gate with a new sliding door or roller door on agricultural buildings.** The rate is per m<sup>2</sup> of new sliding door or roller door provided. Enter the area, in metres squared, of new sliding doors/ roller doors to be grant-aided into the investment tab on the on-line system.
- 7.3 **Retrofitting roof clear-sheet (roof light) with safety cages.** The rate is for the safety cage only, it does not cover the cost of replacing the actual clear light. The rate is per each clear-sheet (rooflight) fitted with a safety cage in accordance with S.101C. The single roof light is to be selected used for cases where the clear light sheet spans between two purlins only. The double roof-light rate is to be used where the clear light spans across three purlins only and the triple roof-light rate is to be used where the clear light spans between four or more purlins. Enter the number of each type of safety cage to be grant-aided into the investment tab on the on-line system.
- 7.4 **Wiring / Rewiring existing farm building.** This rate is per m<sup>2</sup> of building to be rewired. Calculate the internal area of the building and multiply by the “Wiring / Rewiring existing farm building” rate. Enter the area of the buildings, in metres squared, to be rewired into the investment tab on the on-line system.
- 7.5 **Yard Lights (min 200W equivalent, either metal halide or LED).** This cost is per light installed. Multiply rate by number of new lights to be installed. Enter the number of yard lights to be installed into the investment tab on the on-line system.
- 7.6 **Wheel changing crate.** These are costed on a unit basis. Enter the number of wheel changing crates into the investment tab on the on-line system.
- 7.7 **Wheel pumping crate - manual pumping.** These are costed on a unit basis. Enter the number of manual wheel pumping crates into the investment tab on the on-line system.
- 7.8 **Wheel pumping crate - fully automatic.** These are costed on a unit basis. Enter the number of fully automatic wheel pumping crates into the investment tab on the on-line system.

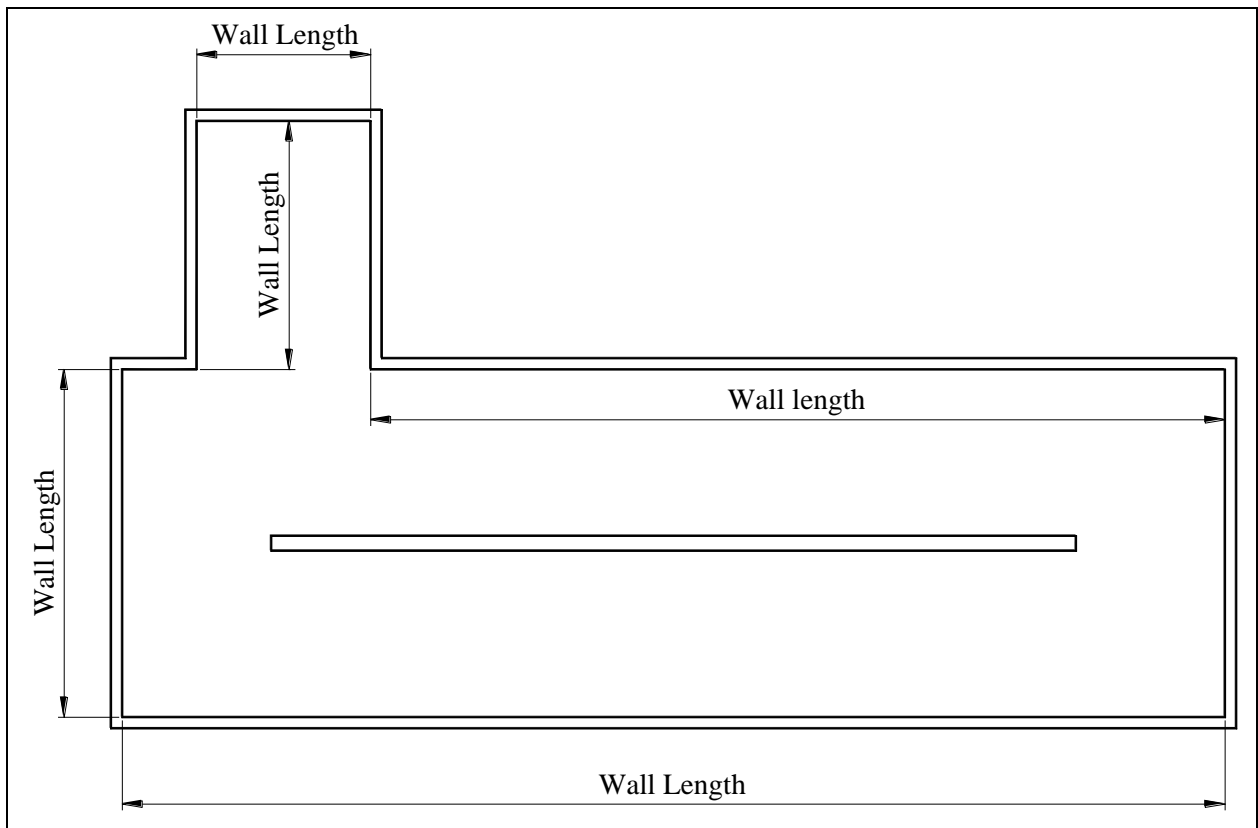
## **8 Slurry Storage Tanks**

- 8.1 **Pre-cast concrete tanks.** The cost is calculated by use of the equation given, where  $x$ = volume of the tank in litres and  $y$  = the cost of the tank. For example if the proposed tank is of mass concrete and 10,000 litres capacity, to get the cost of the tank multiply 10,000 x 0.22 and then add 4000. This gives a cost of €6,200.00 for the tank. This includes the cost of the cover over the tank. Enter the total capacity of the tank, in litres, the investment tab on the on-line system.
- 8.2 **Geo-membrane lined slurry/effluent stores.** These are costed per cubic metre capacity. The cost is calculated by use of the equation given, where  $x$ = volume of the tank in metres cubed and  $y$  = the cost of the tank. For example if the proposed tank is 1,000 metres cubed capacity, to get the cost of the tank multiply 1,000 x 1,000 x -0.0005 (= -500), then multiply 1,000 x 11.4 (=11,400). Next add -500 + 11400 + 7,850 = €18,750. This gives a cost of €18,750.00 for the tank. The cost covers the full construction of the store, excluding the safety fence. Enter the liquid storage capacity of the store, in metres cubed, into the investment tab on the on-line system.
- 8.3 **Circular over ground slurry stores.** These are costed per cubic metre capacity. The cost is calculated by use of the equation given, where  $x$ = volume of the tank in metres cubed and  $y$  = the cost of the tank. For example if the proposed tank is 1,500 metres cubed capacity, to get the cost of the tank multiply 1,000 x 23.5 and then add 20,900. This gives a cost of €56,150.00 for the tank. The cost covers the full construction of the store, including the floor. Enter the total capacity of the tank, in metres cubed, into the investment tab on the on-line system.
- 8.4 **Mass concrete slurry storage tanks** shall be costed using the tank costing spreadsheets. There are different spreadsheets for the different shaped tanks. The principal behind the spreadsheets is set out below in clauses 8.5 to 8.23. The elements in clauses 8.5 to 8.10 need to be reviewed and entered into the spreadsheet. Once the relevant spreadsheet has been completed, the **Cubic Capacity of Tank** and the **Reference Cost per Cubic Metre Total Capacity**, as calculated by the spreadsheet, must be entered into the investment tab on the on-line system. The tank covers, fencing and agitation platform substructures are only to be used where the tank is not within an area that is being grant-aided. The tank fencing, agitation platforms and tank covers are costed as per clauses 9.1, 9.2 and 9.7 respectively.



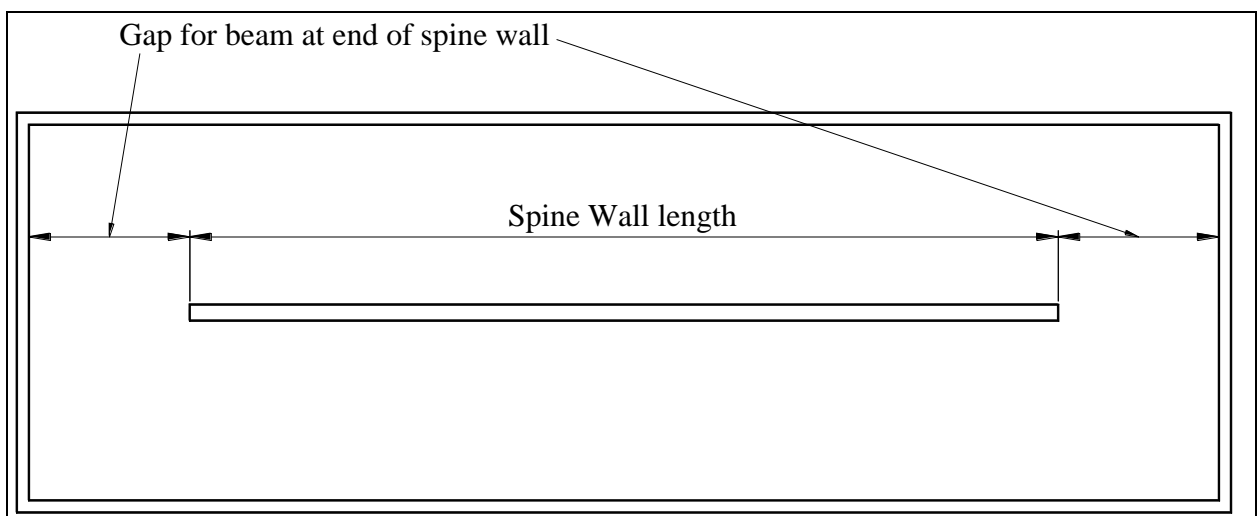
**8.5 Tank wall lengths and wall widths.** Enter the internal length of each tank walls in the space provided on the tank costing spreadsheet and also the thickness of the wall. The wall thickness must be selected from the drop down list that can be accessed when the box for the wall thickness is selected. The wall lengths are measured as shown in figure 8.1. In cases where an entire wall is being omitted, as the new tank is being built alongside an existing tank using the existing tanks wall, then the cost of the new wall has to be deducted by selecting value “Y” under the “Existing Wall” heading on the spreadsheet. No more than two existing tank walls shall be used for the construction of a new tank. However, when the existing wall is being removed, no deduction is required to compensate for the cost of removing the existing wall.

**8.6 Tanks in existing buildings.** Where tanks are constructed within existing buildings, an allowance of 8% extra to the basic cost (excavation, backfill, outer walls and floor) to cover the cost of work in confined space and for temporary supports to the existing structure during construction work is permitted. (There is no extra allowance for spine walls or beams.) The allowance is only for the portion of the tank that is to be within the existing building. It is necessary to enter the percentage of the building that is within an existing building into the spreadsheet. To calculate the percentage within an existing building, firstly calculate the overall plan area of the tank. Then calculate the plan area of the tank within the existing building. Then divide the area of the tank within the existing building by the overall tank area. Then multiply this final figure by 100. For example if the tank is 30 metres long by 3.5 metres wide and the tank extends 10 metres into an existing building, the percentage within the building is calculated as follows. Total area of tank =  $30 \times 3.5 = 105 \text{ m}^2$ . Area within existing building =  $10 \times 3.5 = 35 \text{ m}^2$ . Percentage within existing building =  $35/105 \times 100 = 33.3\%$ . Round to nearest whole percent. So the percentage within the existing building = 33%. So in this case enter 33% into the relevant box on the spreadsheet and enter Y in the box to indicate that the tank is within an existing building.



**Figure 8.1:** Wall measurement points.

8.7 **Simple excavation.** Where tanks are constructed either partially or completely above ground level (due to sloped ground or other reason) it is necessary to calculate the percentage portion of the tank that is above ground level so that only the actual volume of excavation and backfill is calculated by the spreadsheet. The percentage of the tank that is above ground is to be estimated as accurately as possible. Once the percentage above ground has been estimated, enter this figure into the relevant box on the spreadsheet and enter Y in the box to indicate that the tank is partially or fully above ground.



**Figure 8.2:** Sketch showing spine wall length and beam gap length.

- 8.8 **Spine Walls.** The total length of each thickness (either 300mm or 500mm) of spine wall needs to be entered into the tank costing spreadsheet. The spine wall length is as indicated in figure 8.2. There may be multiple spine walls present and the length of each spine wall needs to be allowed for. Enter the total length of each spine wall into the relevant box in the tank costing spreadsheet and enter Y in the box to indicate that a spine wall is present.
- 8.9 **Beams at the end of spine walls.** The length of the gaps at the end of the spine walls to be spanned by a beam and the number of beams at the end of spine walls needs to be entered into the tank costing spreadsheet. Enter the total gap length to be spanned by beams at the end of the spine walls and the number of gaps present into the tank costing spreadsheet.
- 8.10 **Beams at gaps.** If there is to be a beam located at any of the “Gaps” indicated on the tank costing spreadsheet, enter Y into the relevant box on the spreadsheet.
- 8.11 **Measurement of Tanks.** Tanks are costed on a component basis:-
- Each linear metre of external wall;
  - Each linear metre of any spine wall;
  - The floor area of the tank;
  - The excavated volume of soil;
  - The volume of backfill.
- 8.12 **Calculation of tank walls.** The external tank wall length is calculated from the internal length of the tank with additions for the wall thickness. The external width is also calculated in the same manner which means, in effect, that each corner is counted twice. (This is to allow for the extra cost of constructing corners.) The internal depth is measured directly from the top of the wall to the floor of the tank. The costings give a linear metre rate for each wall height and thickness of wall.
- 8.13 **Calculation of tank floor.** External Tank Length + 0.5m multiplied by External Tank Width + 0.5m.
- 8.14 **Calculation of excavated volume.** External Tank Length + 2metres multiplied by External Tank Width + 2 metres multiplied by Internal Depth + 0.5metres. Where simple or very little excavation is required (sloped ground or existing dug-out storage) then only actual volume excavated is calculated.
- 8.15 **Calculation of backfilling.** Calculate the length of all the external tank walls added together, and add on an extra 4m (this allows for the backfill in the four corners). This

figure is multiplied by the internal depth of the tank, and then multiplied by 1.0m. This gives the cubic content of backfilling. Where simple or very little backfilling is required (sloped ground) then only actual volume backfilled is calculated.

- 8.16 **Spine Walls.** The length of each spine wall is measured and multiplied by the appropriate rate. (No **foundation** rate is allowed to be given for spine walls.) All reinforced concrete beams are costed at the **beam** rate. The length of the beam is considered to be the opening width plus 0.3m (150mm bearing at each end).
- 8.17 **Pillars and beam spine walls,** when used in place of a solid spine wall for the length of the tank, shall be costed as if an equivalent solid 300mm reinforced concrete spine wall is in place.
- 8.18 **Cost of extended tank covers for tanks under animal houses.** The cost of any external covers for tanks extending beyond the end of an animal building are included in the cost of the animal area
- 8.19 **Tanks for silage effluent.** Where purpose built tanks are used to store silage effluent, there is an additional allowance of 5% to basic cost (excavation, backfill, outer walls and floor) for 45N concrete as per Clause 7.3 of S123. Such tanks shall be costed using the “Silage effluent Tank” spreadsheet tab. The spreadsheet automatically adds on the extra 5% allowance. (Tanks constructed of concrete block shall not be used for silage effluent storage).
- 8.20 **Where steel reinforcing is required for 4m wide tanks** and over, an allowance for steel mesh will automatically be made by the spreadsheet.
- 8.21 **Costing of shallow tanks.** Shallow tanks (1.2m deep or less) are costed in the same manner as standard tanks and using the same spreadsheet. Pillar and beam spine walls in shallow tanks are costed as if they are solid spine walls.
- 8.22 **Costing of slurry channels / transfer channels.** Slurry channels / transfer channels are costed as per shallow tanks.
- 8.23 **Disruptive Excavation or rock breaking.** There are no additional allowances for difficult excavations, whether caused by rock, high water table, or soft ground.
- 8.24 **Extending a tank by more than 3 metres.** Where an existing slurry tank is being extending by more than 3 metres, the cost of the new portion of the tank is calculated as if the tank was being built free standing. This is to compensate for the cost of removing the

existing tank wall. The new portion of tank is to be costed using the tank costing spreadsheet and applied for as if it were a separate tank. The tanks are to be joined in accordance with S.123A.

**8.25 Store cover with submersible pump.** (For geo-membrane lined store only.) These are costed per metre squared, using length and width measurements at surface level (top of banks). The cost is calculated by use of the equation given, where  $x$  = surface area of the tank in metres squared and  $y$  = the cost of the cover and submersible pump combined. For example if the proposed tank surface area is 1,000 metres squared (20m x 50m), to get the cost of the cover multiply 1,000 x 13.5 (= 13,500), then add 828 = €14,328. This gives a cost of €14,328.00 for the cover, floaters and submersible pump. Enter the surface area at ~~ground level~~ of the geo-membrane lined slurry/effluent stores, in metres squared, into the investment tab on the on-line system.

## **9 Slurry Tank Covers / Fencing**

- 9.1 **Safety fencing for slurry and effluent stores (including gate).** Cost is per linear metre of fencing provided. The length to use is the total fence length plus the length of any gates in the fence line. Enter the length, in metres, of safety fencing required for each slurry store into the investment tab on the on-line system.
- 9.2 **Safety Agitation Platform for slurry tanks / geo-membrane lined stores.** The cost is per unit provided. Enter the number of safety agitation platforms required for the slurry store into the investment tab on the on-line system.
- 9.3 **Cover for fully external slurry and effluent stores.** This is for a new cover on a fully external store only and is costed per  $m^2$  of cover provided. Enter the total metres square of cover to be installed on the tank into the investment tab on the on-line system. The sub-investments to be used are:
- Area of HD slab for fully external tank outside animal area and feed passage,
  - Area of HD slat for fully external tank outside animal area,
  - Manhole covers for fully external tank.
- 9.4 **Safety covers on external agitation points or manholes.** This rate covers the safety manhole cover only and is to be included for each new safety manhole cover being provided. The cost of the slab / slat, that the safety manhole cover is in, is calculated separately. Enter the number of safety covers required into the investment tab on the on-line system.

- 9.5 **Replacement of damaged slats (single/twin/gang) or removal of existing internal agitation point and replacement by gang slat.** This rate covers the cost of the slat plus an allowance for a narrow strip of concrete along the ends of the slats. The cost of any replacement beams, solid spine walls or pillar and beam spine walls is not included. The rate is to be multiplied by the actual area of slab being replaced. The rate is to be multiplied by the actual area of slat being replaced. The slat replacement shall be completed as per specification S.123S. Enter the number of square metres of replacement slat required over the tank into the investment tab on the on-line system.
- 9.6 **Replacement slab over slurry store.** This rate covers the cost of the replacement slab plus an allowance for a narrow strip of concrete along the ends of the slabs. The cost of any replacement beams, solid spine walls or pillar and beam spine walls is not included. The rate is to be multiplied by the actual area of slab being replaced. The slab replacement shall be completed as per specification S.123S. Enter the number of square metres of replacement slab required into the investment tab on the on-line system.
- 9.7 **Tank cover over new grant-aided tank** in an existing animal house / area. Where a tank has been constructed in an existing animal house / area, the slats, slabs and safety manhole covers over the tank may be grant-aided using the appropriate sub-investments. The sub-investments to be used are as follows:
- New cattle Slat for new tank in existing animal area,
  - New sheep Slat for new tank in existing animal area,
  - New HD Slab for new tank in existing animal area,
  - New HD Slat for new tank in existing animal area,
  - New external manhole cover for new tank in existing animal area.

For new standard cattle or sheep slats it is necessary to enter the length and width, in metres, of each slatted area (cattle or sheep) into the investment tab on the on-line system.

For heavy duty (HD) slats and slabs it is necessary to enter the relevant area in metres squared into the investment tab on the on-line system. Also the number of manhole covers to be provided needs to be entered into the investment tab on the on-line system.

## **10 Slurry Agitation Systems**

- 10.1 **Removal of end wall of tank and provision of external agitation point.** This rate is per new agitation point provided and includes the removal of the existing tank wall, the extension of the tank (excavation, backfill, floor, walls) and both the new tank cover and safety manhole cover. The tank extension shall be completed as per specification S.123A. The number of new agitation points (number of safety manholes) to be provided shall be entered into the investment tab on the on-line system. It is possible to provide two agitation points at one end of a double slatted tank.
- 10.2 **Circulation pipe (6") to allow for agitation of slurry.** This cost is per linear metre of pipe and fittings installed for slurry agitation. Enter the total length, in metres, of pipe, including fittings, to be installed into the investment tab on the on-line system.
- 10.3 **Simple Aeration Systems.** This rate is per  $m^2$  of tank that the aeration system is to be installed in, **including new air supply**. Calculate the internal area of the tank in which the tank is to be installed, and using the equation calculate the reference cost of the simple aeration system. For example if the tank in which the aeration system is to be installed is 236 metres squared, to get the cost of the aeration system calculate 236 to the power 0.44 (11.06831) then multiply x 1320. This gives a cost of €14,610.17 for the simple aeration system for a 236 $m^2$  tank. Simple aeration systems shall be installed in accordance with specification S.123D. Enter the number of square metres of tank in which the agitation system will be installed, into the investment tab on the on-line system.
- 10.4 **Simple Aeration Systems on existing air supply.** This rate is per  $m^2$  of tank that the aeration system is to be installed in. Calculate the internal area of the tank in which the tank is to be installed, and using the equation calculate the reference cost of the simple aeration system on existing air supply. For example if the tank in which the aeration system is to be installed is 236 metres squared, to get the cost of the aeration system on existing air supply calculate 236 to the power 0.44 (11.06831) then multiply x 1320. Then subtract 12,000. This gives a cost of €2,610.17 for the simple aeration system for a 236 $m^2$  tank. Simple aeration systems shall be installed in accordance with specification S.123D. Enter the number of square metres of tank in which the agitation system on existing air supply will be installed, into the investment tab on the on-line system.

## **11 Manure Pits**

- 11.1 **Manure Pit with Walls.** This rate is to be used for manure pits with walls for at least 40% of the length of the manure pit perimeter. This rate includes the walls and channels that are required. **The walled manure pit is to be measured internally between the walls.** All measurements are to be taken at floor level. Enter the internal length and internal width of the walled manure pit into the investment tab on the on-line system.
- 11.2 **Manure Pit no walls.** This rate is to be used if there are no walls around the manure pit or if the wall length is less than 40% of the length of the manure pit perimeter. The rate includes all kerbs and channels that are required. **The manure base is measured** from the outer edge of the kerbs [a maximum of 200mm from the channel]. Enter the length and width of the manure pit into the investment tab on the on-line system.
- 11.3 **Manure pit roof:** These are costed per metre squared, using length and width. This rate is to be used when a new roof is being constructed over a new manure pit. Grant-aid will not be paid on a manure pit roof over an existing manure pit. The rate is to be used for the entire roof area. Enter the internal length and width (distance between inside faces of stanchions), in metres, of the new roof into the investment tab on the on-line system.

## **12 Dungsteads**

- 12.1 **Dungsteads** are not eligible for grant-aid.



## **13 Milking Parlour and Dairy Costs**

13.1 **Milking parlour.** The milking parlour cost is per metre square and shall be constructed as per specification S.106. The rate includes all structural work, doors, electrics and stall work. This rate shall also be used for the cost of the location of robotic milking machines and includes the human access area to the robot controls. The building is to be measured, internally, between the outer walls. Where there are no walls, the building is to be measured between the inside faces of the stanchions (uprights) supporting the roof structure. The length of a herringbone milking parlour is measured from the end of the pit where the cows enter, to a maximum of 2 metres beyond the front end of the pit where the cows exit the cow stands. For rotary milking parlours the maximum permitted area is as follows:

- The maximum payment for a milking parlour for a rotary milking machine is a square area equal to the diameter of the machine plus 3 metres (1.5 metres all round), e.g.: for a 15 metre diameter rotary machine, the maximum area of milking parlour will be 18.0 m x 18.0 m = 324.0 metres squared. This area must be clearly delineated from other areas within the building. If the actual area around the rotary milking machine is less than the machine diameter plus 3 metres, then only the actual area may be used. The area of the collecting yard approaching the machine may not be included with the milking parlour.

Enter the total internal area, in square metres, of the milking parlour into the investment tab on the on-line system.

13.2 **Extensions to milking parlour structure where building is extended.** The extension shall be costed as a new parlour. This applies no matter how small the extension. There is no requirement to deduct the wall between old and new parlours.

13.3 **New dairy.** The cost of a **dairy for a milking parlour** is per metre square. The rate shall be used for the entire dairy and includes the entire structure and fittings. The dairy shall be constructed as per S.106. The building is to be measured, internally, between the outer walls. Where there are no walls, the building is to be measured between the inside faces of the stanchions (uprights) supporting the roof structure. Enter the total internal area, in square metres, of the dairy into the investment tab on the on-line system.

- 13.4 **Dairy extensions.** These shall be costed as for a new dairy and shall be completed to S.106.
- 13.5 **Plant Room.** The cost of the plant room is calculated per metre square. The rate is to be used for the entire plant room area and includes the entire structure. The plant room shall be constructed in accordance with S.106. The building is to be measured, internally, between the outer walls. Where there are no walls, the building is to be measured between the inside faces of the stanchions (uprights) supporting the roof structure. Enter the total internal area, in metres square, of the plant room into the investment tab on the on-line system.
- 13.6 **Plant room extensions.** These shall be costed as for a new plant room and shall be completed in accordance with S.106.
- 13.7 **Costing of collecting yards.** These shall be costed on component parts, when constructed as a dedicated collecting yards to milking parlours. The floor areas, both slatted and solid, are calculated per metre squared and any roof provided is calculated per metre squared. The barriers, walls and gates around the collecting yard are costed per linear metre. The system allows for either, fully solid collecting yards, fully slatted collecting yards, or a combination of both. For the system to calculate the cost of the collecting yard, it is necessary to enter the total internal area, in metres squared, of solid concrete (if any) within the collecting yard, the total area, in metres squared, of slats (if any) in the collecting yard and the total internal area, in metres squared, of any roof present over the collecting yard into the investment tab on the on-line system. Also it is necessary to input, the length, in linear metres of barriers and walls around the collecting yard and the length of the entrance gate to the collecting yard. Backing gates are not eligible for grant-aid. The floor area of the collecting yard is to be measured inside the walls / barriers surrounding the collecting yard. Costing of manhole covers and manhole slabs outside of covered collecting yard.

## **14 Milking Machine and Milk Cooling Equipment**

- 14.1 **Milking Machine.** Cost is calculated by multiplying the number of cluster units by the Milking Machine rate. Milking machine equipment includes, but is not limited to: wash line, milk line, vacuum line, vacuum pump, milk pump, pulsators, clusters, swing over arms, milk indicator, automatic cluster removers, milk filter, vacuum regulator. This rate only covers the machine itself, it does not include any stall work, mangers, feeders, etc.

- Input the number of cluster units to be installed into the investment tab on the on-line system.
- 14.2 **Rotary Milking machine.** Cost is calculated by multiplying the number of cluster units by the **Rotary Machine** rate. Input the number of cluster units to be installed into the investment tab on the on-line system.
- 14.3 **Robotic Milking Machines.** The cost given is per robotic unit. This rate also includes the buffer tank, milk cooler and feeder. Enter the number of robotic milking machines to be grant-aided into the investment tab on the on-line system.
- 14.4 **Autowashers.** The cost is per auto-washer to be installed. Enter the number of milking machine auto-washers to be grant-aided into the investment tab on the on-line system
- 14.5 **Water Heater.** The cost is calculated by multiplying the capacity of the heater (in litres) by the **Water Heater** rate. Enter the capacity of the water heater in litres into the investment tab on the on-line system.
- 14.6 **Heat Transfer Units. (For dairy.)** The cost is per Heat transfer Unit installed. This rate is for units that take heat from the bulk milk tank or ice builder compressor to heat water. Enter the number of heat transfer units to be installed into the investment tab on the on-line system.
- 14.7 **Bulk Milk Tank/Bulk Milk Silo.** The cost is calculated by use of the equation given, where  $x$  = volume of the tank in litres and  $y$  = the cost of the tank. For example if the proposed tank is 10,000 litres capacity, to get the reference cost of the tank multiply 10,000 x 1.3231 and then add 12548. This gives a cost of €25,779.00 for the tank. This cost includes the compressors and autowashers for the milk tank. The buffer tank for a robotic milking machine cannot be grant-aided as a bulk milk tank or milk silo, as it is included as part of the robotic milking machine rate. Enter the volume of the bulk milk tank or bulk milk silo into the investment tab on the on-line system.
- 14.8 **Ice Builder.** The cost is calculated by multiplying this rate by the size in Kcals. This is for free standing ice builders that are separate to bulk milk tanks that can be used to provide cooling for a bulk milk tank or plate cooler. Enter the size rating, in Kcals, of the ice builder into the investment tab on the on-line system.
- 14.9 **Ice Bank Bulk Milk tanks,** where there is an ice bank as an integral part of the bulk milk tank. These are costed as standard Bulk Milk tanks.

14.10 **Plate Coolers.** The cost is based on the milk flow rate through the plate cooler. The cost is calculated by use of the equation given, where  $x$ = the capacity of the plate cooler in litres per hour milk flow and  $y$  = the reference cost of the plate cooler. Enter the maximum milk flow rate, in litres, through the plate cooler into the investment tab on the on-line system.

14.11 **On-demand water heaters** can be grant-aided. **These are costed based on the heat output of the on-demand water heater, in kW. Enter the heat output rating, in kW, of the on-demand water heater into the investment tab on the on-line system.**

## **15 Meal Bins and In-parlour Feeders**

15.1 **Meal Bins on new base** are costed on a cubic metre capacity. The Grain Bin/ Meal Bin shall be completed in accordance with S.110. The reference cost is calculated by use of the equation given, where  $x$ = the capacity of the bin in  $m^3$  and  $y$  = the cost of the meal bin. For example if the proposed meal bin capacity is 8 metres cubed, to get the cost of the meal bin multiply  $8 \times 68.51$  and then add 2202. This gives a reference cost of €2,750.08 for the meal bin. The rate includes the meal bin, concrete pad and installation. Enter the volume, in metres cubed, into the investment tab on the on-line system. *(As a rough guide, to calculate the required volume for a given tonnage, multiply the required tonnage by 1.39 to get the required volume. The actual required volume for a given tonnage will depend upon what is being stored in the meal bin.)*

15.2 **Meal Bins on existing base** are costed on a cubic metre capacity. The Grain Bin/ Meal Bin shall be completed in accordance with S.110. The reference cost is calculated by use of the equation given, where  $x$ = the capacity of the bin in  $m^3$  and  $y$  = the cost of the meal bin. For example if the proposed meal bin capacity is 8 metres cubed, to get the cost of the meal bin multiply  $8 \times 68.51$  and then add 2202. This gives a reference cost of €2,750.08 for the meal bin. The rate covers the installation of a new grain bin / meal bin on an existing concrete pad that meets the requirements of S.110. Enter the volume, in metres cubed, into the investment tab on the on-line system. *(As a rough guide, to calculate the required volume for a given tonnage, multiply the required tonnage by 1.39 to get the required volume. The actual required volume for a given tonnage will depend upon what is being stored in the meal bin.)*

15.3 **Meal feeding systems** are costed on a per cow place basis, and **can be installed either with or without augers.** If augers are not installed, it is important to select the relevant meal

feeding system “without auger” sub investment, however, the meal feeders must be fed by either an existing auger or from a loft – it is not permitted to fill the feeder hoppers using buckets or bags from ground level or off a ladder. The meal feeding system for a robotic milking machine cannot be grant-aided as a meal feeding system, as it is included as part of the robotic milking machine rate. Enter the number of cow feed places to be provided into the investment tab on the on-line system.

15.3.1 **Batch Meal Feeding Systems for Milking Parlours** are meal feeding systems where by a fixed ration is given to each cow in a feeding space.

15.3.2 **Individual Meal Feeding Systems for Milking Parlours** are meal feeding systems whereby a computerised system gives a different amount of meal to each cow in a given feeding space. The systems may be fully automatically controlled (EID) or controlled through an electronic control panel in the parlour where the operator identifies the individual cows. The rate excludes the cost of the transponders. This means that for individual feeders that the system must be able to feed a variable amount to an individual cow- 1.1 kilo to cow 1, 2.5 kilos to cow 2, 1.8 kilos to cow 3, and so on, by typing into a control panel in the parlour, or putting the cow’s number into the panel. A system of pressing a button once or twice (or more) to vary the capacity is a batch system.

15.3.3 Whether a system is pneumatically controlled or electrically controlled does not determine if it is batch or individual.

The receipts for meal feeders need to indicate the control system supplied, so that it is possible to evaluate if the system is batch or individual.

15.4 **Troughs** for meal feeding systems are costed separately to the feeders. Troughs are costed per place provided. The use of pipes (e.g. corri-pipe or wavin pipe) cut in half and supported on a frame is not eligible for grant-aid. Enter the number of feeding places provided into the investment tab on the on-line system.

15.5 **Auger - Not Required.** In cases where an auger is not required as part of a new meal feeding system (e.g. meal flows from loft directly into augers) a deduction shall be made for the cost of the augers. In a herringbone parlour there would be two augers required, so in such cases it is necessary to deduct two augers. Enter the number of augers to be deducted from the meal feeding system into the investment tab on the on-line system.

15.6 **Meal Bin for Robotic milking machine on new base.** See 15.1 above.

**15.7 Meal Bins for Robotic milking machine on existing base** are costed on a cubic metre capacity. The Grain Bin/ Meal Bin shall be completed in accordance with S.110. The reference cost is calculated by use of the equation given, where  $x$ = the capacity of the bin in  $m^3$  and  $y$  = the cost of the meal bin. For example if the proposed meal bin capacity is 8 metres cubed, to get the cost of the meal bin multiply 8 x 68.51 and then add 1900. This gives a reference cost of €2,750.08 for the meal bin. The rate covers the installation of a new grain bin / meal bin on an existing concrete pad that meets the requirements of S.110. Enter the volume, in metres cubed, into the investment tab on the on-line system. *(As a rough guide, to calculate the required volume for a given tonnage, multiply the required tonnage by 1.39 to get the required volume. The actual required volume for a given tonnage will depend upon what is being stored in the meal bin.)*

## **16 Low-Emission Slurry Spreading Equipment**

- 16.1 **Slurry tanker.** A slurry tanker is only eligible when purchased along with a low-emission spreading attachment. The reference cost of the slurry tanker is based on the capacity in litres. For example if the proposed slurry tanker is 10,000 litres capacity, to get the reference cost of the slurry tanker multiply 10,000 x 2.2 and then subtract 5600. This gives a cost of €16,400.00 for the slurry tanker. The capacity, in litres, of the tanker needs to be entered into the investment tab on the on-line system.
- 16.2 **Trailing Shoe Attachment (as per figure 16.1 below).** A trailing shoe attachment is only eligible when purchased along with a slurry tanker. A trailing shoe must be able to part the grass and place the slurry directly onto the soil, rather than on top of the grass. The reference cost of the trailing shoe attachment is based on the spreading width of the attachment in metres. For example if the proposed attachment is 8 metres wide, to calculate the reference cost of the attachment multiply 8 x 1770 and then add 7900. This gives a cost of €22,060.00 for the attachment. The width of the trailing shoe attachment, in metres, needs to be entered into the investment tab on the on-line system.

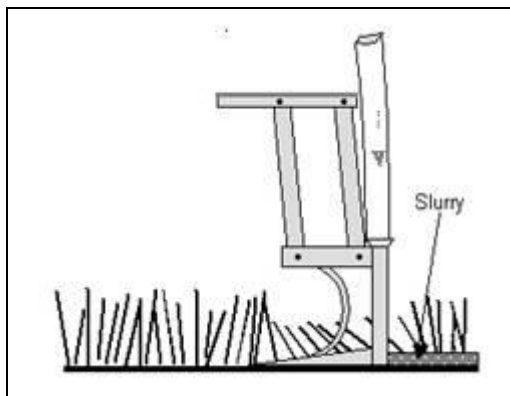


Figure 16.2: Trailing Shoe attachment

- 16.3 **Shallow Injection Attachment (as per figure 16.2 below).** A shallow injection attachment is only eligible when purchased along with a slurry tanker. The cost of the shallow injection attachment is based on the spreading width of the attachment in metres. The width of the shallow injection attachment, in metres, needs to be entered into the investment tab on the on-line system.

The shallow injection system must place the slurry below ground level, directly into the soil. Systems that cut a slot in the soil and then place the slurry on top (such as the “Slurry

spike”) are not classified as shallow injection systems – they are classified as dribble bar systems as per 16.4.

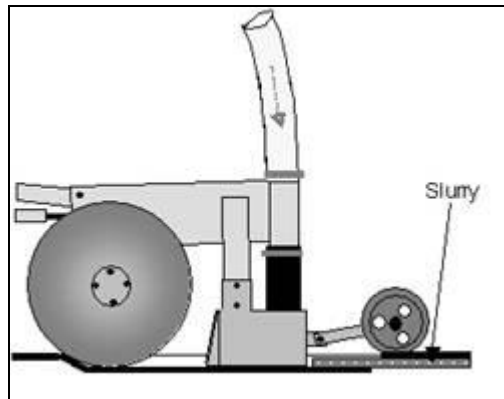


Figure 16.2: Shallow injector attachment.

16.4 **Dribble bar attachment (as per figure 16.3 below).** A dribble bar attachment (also sometimes know as a band spreader) may be purchased either with or without a slurry tanker. If for an existing tanker, it is to be applied for under “Retrofit dribble bar to existing tanker”. The cost of the dribble bar attachment is based on the spreading width of the attachment in metres. The width of the dribble bar attachment, in metres, needs to be entered into the investment tab on the on-line system.

Systems that cut a slot in the soil and then place the slurry on top (such as the “Slurry spike”) are classified as dribble bar systems as per this clause. **General dribble bars are not required to cut a slot in the soil.**

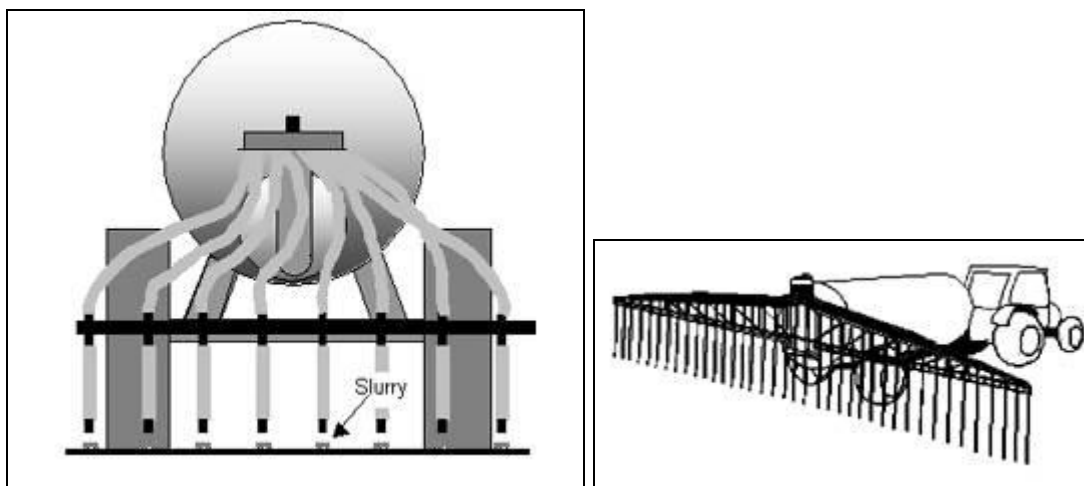


Figure 16.3: Sketch showing Dribble bar attachment on slurry tanker.

16.5 **Umbilical System (as per figure 16.4 below).** When applying for an umbilical system, the “Base pump, hose reel and fittings” element must be purchased in every case. The lay flat hose and spreader attachments may only be applied for if the Base pump, hose reel and



fittings have been selected. A maximum of 500 metres of lay flat hose will be grant-aided. The cost of each spreader attachment is based on the spreading width of the attachment in metres. The number of base units (base pump, hose reel and fittings) being purchased must be entered into the investment tab on the on-line system, along with the length of lay flat hose in metres. The width of the desired spreading attachment, in metres, needs to be entered into the investment tab on the on-line system.

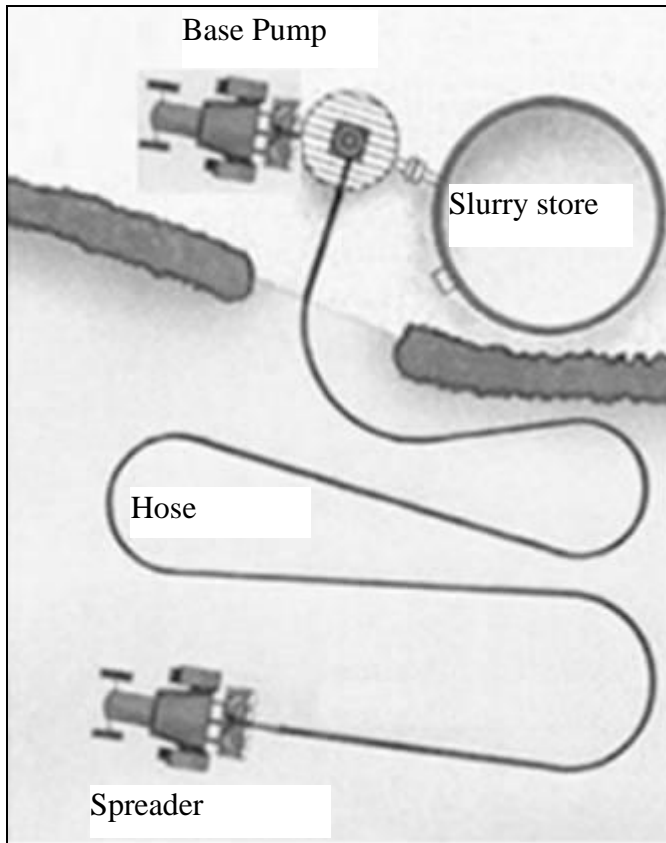


Figure 16.4: Sketch showing umbilical system

## **17 Pig and Poultry items**

- 17.1 **Water meter for pig and poultry housing.** These are costed per water meter installed. Enter the number of water meters to be installed into the investment tab on the on-line system.
- 17.2 **Solar panels for electricity production (photovoltaic) and solar panels for water heating** (permanently attached to buildings used for pig / poultry / egg production). These are costed per metre squared of solar panel installed. Enter the total area, in metre squared, of solar panels to be installed into the investment tab on the on-line system.
- 17.3 **Air source heat pumps.** The cost of these is calculated based on the rated capacity of the unit in kilowatts (kW). Enter the rated capacity, in kilowatts, of the air-source heat pump into the investment tab on the on-line system.
- 17.4 **Biomass boiler.** The cost of these is calculated based on the rated capacity of the unit in kilowatts (kW). The biomass boiler must be set up to heat either pig or poultry houses. Enter the rated capacity, in kilowatts, of the biomass boiler into the investment tab on the on-line system.
- 17.4.1 **Biomass** is the biodegradable fraction of products, waste and residues of biological origin from agriculture, forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste. As such a biomass boiler can be fuelled with wood chip, wood pellets, wood residue, straw, miscanthus, poultry litter, etc.
- 17.5 **Heat recovery units within building.** (For pigs and poultry.) The cost of these is calculated based on the area of the house that they are extracting heat from. They are used for broiler units and pig units. Enter the total area of the broiler house, in metres squared, that heat is being extracted from into the investment tab on the on-line system.

## **18 Pig Only elements**

- 18.1 **New Wet-Feed mixing system to allow feed to ferment (controller, tanks and pumps).** This rate covers the installation of a new wet mix feed kitchen, including all controllers and sufficient storage tanks, to enable the fermentation of wet feed to aid in the reduction of medication usage. Enter the number of new wet feed kitchens into the investment tab on the on-line system.

- 18.2 **Upgrade existing wet feed system to allow feed to ferment (new tanks and pumps).** This rate covers the upgrading of an existing wet feed kitchen to provide additional storage tanks and control system to enable fermentation of wet feed to aid in the reduction of medication usage. Enter the number of wet feed kitchens to be upgraded into the investment tab on the on-line system.
- 18.3 **Frequency controller for feed pumps and feed mixer motors.** These are costed per motor unit on which they are installed. Enter the number of motors that will have a frequency controller added into the investment tab on the on-line system.
- 18.4 **Individual pen Fixed in Water medicine dispenser for pig unit.** These are costed per pen that has been re-plumbed to allow for individual treatment of pens. The rate includes the medicine mixing unit and re-plumbing of the pens. Enter the number of pens that will have in water medicine treatment systems installed into the investment tab on the on-line system.
- 18.5 **Individual pen Fixed in feed medicine dispenser for pig unit.** These are costed per pen where the feed system has been modified to allow for individual treatment of pens. The rate includes the medicine mixing unit and modification of the feed system for each pen. Enter the number of pens that will have in feed medicine treatment systems installed into the investment tab on the on-line system.
- 18.6 **Energy efficient lighting for farrowing, weaner and fatterer houses.** These are costed be light fitting installed. The rate includes the new lights, dimmer control and wiring required to install the lights. Enter the number of light fittings to be installed for each house type into the investment tab on the on-line system.
- 18.7 **Insulated doors for pig housing.** Replacement insulated doors are costed per metre squared. Enter the total area, in metres squared, of insulated doors to be installed into the investment tab on the on-line system.
- 18.8 **Wall and roof insulation for farrowing, weaner and fatterer houses.** Replacement wall and roof insulation is costed per metre squared of new insulation provided. Enter the total area of new roof and wall insulation, in metres squared, into the investment tab on the on-line system.
- 18.9 **Ventilation System for farrowing house.** The cost of upgrading the ventilation system is per sow place. The cost includes replacement fans and control units. Enter the total

number of sow places in the house where the ventilation system is being upgraded into the investment tab on the on-line system.

- 18.10 Ventilation System for weaner house.** The cost of upgrading the ventilation system is per metre squared of weaner house. The cost includes replacement fans and control units. Enter the total area, in metres squared, of weaner house where the ventilation system is being upgraded into the investment tab on the on-line system.
- 18.11 Ventilation System for fattener house.** The cost of upgrading the ventilation system is per metre squared of fattener house. The cost includes replacement fans and control units. Enter the total area, in metres squared, of fattener house where the ventilation system is being upgraded into the investment tab on the on-line system.
- 18.12 Electrical Heat Pads and Water Heat Pads for farrowing houses.** These are both costed per sow place in the farrowing house. The cost includes the supply and installation of the heat pads. Enter the number of sow places where heat pads are being installed into the investment tab on the on-line system.
- 18.13 Electrical Heat Pads and Water Heat Pads for weaner houses.** These are both costed per metre squares of pad provided. The cost includes the supply and installation of the heat pads. Enter the total area, in metres squared, of heat pads that are being installed into the investment tab on the on-line system.
- 18.14 Indirect Heating system for weaner house.** This is costed per metre squared of weaner house in which it is to be installed. The cost includes the full installation of the heating system, but excludes any boiler. Enter the total area, in metres squared, of weaner house where the indirect heating system is being installed into the investment tab on the on-line system.
- 18.15 Insulated Creep boxes - Covered for farrowing houses.** The insulated creep boxes are costed per metre squared. Enter the total area, in metres squared, of new insulated creep boxes to be installed into the investment tab on the on-line system.
- 18.16 Creep covers for weaner houses.** The creep covers are costed per metre squared. Enter the total area, in metres squared, of new creep covers to be installed into the investment tab on the on-line system.

## **19 Poultry Only Elements**

- 19.1 **Roof and wall Insulation for poultry house.** Replacement wall and roof insulation is costed per metre squared of new insulation provided. Enter the total area of new roof and wall insulation, in metres squared, into the investment tab on the on-line system.
- 19.2 **Insulated Doors for poultry house.** Replacement insulated doors are costed per metre squared. Enter the total area, in metres squared, of insulated doors to be installed into the investment tab on the on-line system.
- 19.3 **Energy efficient lighting for free range layer house and broiler houses.** These are costed by light fitting installed. The rate includes the new lights, dimmer control and wiring required to install the lights. Enter the number of light fittings to be installed for each house type into the investment tab on the on-line system.
- 19.4 **Ventilation fans and control system for free range layer house and broiler houses.** The cost of upgrading the ventilation system is per new fan installed. The cost includes replacement fans, chimneys and control units. Enter the number of new fans to be installed in the poultry house into the investment tab on the on-line system.
- 19.5 **Replacement concrete floor for temperature control.** The cost is based on the total area of new concrete floor provided. Enter the total area, in metres squared, of new concrete to be provided in the broiler house into the investment tab on the on-line system.
- 19.6 **Indirect heating system.** This is costed per metre squared of broiler house in which it is to be installed. The cost includes the full installation of the heating system, but excludes any boiler. Enter the total area, in metres squared, of broiler house where the indirect heating system is being installed into the investment tab on the on-line system.
- 19.7 **Concrete outside pop holes for free range poultry houses.** . The cost is based on the total area of new concrete provided. Enter the total area, in metres squared, of new concrete to be provided outside the pop-holes of the broiler house into the investment tab on the on-line system.
- 19.8 **Drinker system for poultry broiler house.** The replacement of drinker systems in broiler houses is costed per metre squared of house. The rate includes the installation and plumbing of the new drinker system, and winches to lift the drinkers. Enter the total area of the broiler house where the new drinker system is to be installed into the investment tab on the on-line system.

19.9 **Drinker system for free range poultry layer house.** The rate is per linear metre of new drinker provided. The rate includes the installation and plumbing of the new drinker system. Enter the total length, in metres, of new drinker to be provided into the investment tab on the on-line system.

19.10 **Fixed in Water medicine dispenser for poultry unit.** This rate is per unit installed. Enter the number of medicine dispenser units to be grant-aided into the investment tab on the on-line system.

19.11 **Ancillary Concrete.** Concrete equivalent to an 8m wide apron across the gable of the house may be provided for each poultry house. The concrete must adjoin the poultry house. Enter the total area, in metres squared, of ancillary concrete being applied for into the investment tab on the on-line system.

## **20 Organic Pig Housing**

- 20.1 **Pig Kennels.** This rate covers the cost of pig kennels for free organic pigs and is per metre squared. Enter the total area, in metres squared, of pig kennels to be provided into the investment tab on the on-line system.
- 20.2 **Permanent Pig fencing.** This rate is per linear metre of fencing to be constructed. The rate for pig fencing includes the cost of any gates that may be provided. Enter the total length, in metres, of permanent pig fencing required into the investment tab on the on-line system.

## **21 Organic Poultry Housing**

- 21.1 **Organic Free Range Laying Hen House.** This rate shall be used for the entire floor area of the Organic laying hen house. It includes the entire structure and all fittings. Enter the internal length and internal width, in metres, of the poultry house into the investment tab on the on-line system.
- 21.2 **Organic Free Range broiler house.** This rate shall be used for the entire floor area of the Organic free range broiler house. It includes the entire structure and all fittings. Enter the internal length and internal width, in metres, of the poultry house into the investment tab on the on-line system.
- 21.3 **Permanent fencing of Organic Poultry Run.** This rate is per linear metre of fencing to be constructed. The rate for poultry fencing includes the cost of any gates that may be provided. Enter the total length, in metres, of permanent poultry fencing required into the investment tab on the on-line system.
- 21.4 **Ancillary Concrete.** Concrete equivalent to an 8m wide apron across the gable of the house may be provided with each poultry house. The concrete must adjoin the poultry house. Enter the total area of concrete, in metres squared, to be provided within the poultry into the investment tab on the on-line system.
- 21.5 **Mobile Organic Free Range Laying Hen House.** This rate shall be used for the entire floor area of the mobile organic laying hen house. It includes the entire structure and all fittings. Enter the internal length and internal width, in metres, of the poultry house into the investment tab on the on-line system.

21.6 **Mobile Organic Free Range broiler house.** This rate shall be used for the entire floor area of the mobile organic free range broiler house. It includes the entire structure and all fittings. Enter the internal length and internal width, in metres, of the poultry house into the investment tab on the on-line system.

## **22 Organic horticulture Structures**

22.1 **Polytunnel.** This rate is per metre square and includes the entire structure, fittings and ground works (excluding concrete floor). Enter the internal length and internal width, in metres, of the polytunnel into the investment tab on the on-line system.

22.2 **Irrigation System.** This rate is per metre square for the irrigation system. Enter the total area covered by the irrigation system, in metres squared, into the investment tab on the on-line system.

22.3 **Concrete Floor.** This is per metre square of concrete floor to be installed. Enter the total area of concrete floor to be constructed, in metres squared, into the investment tab on the on-line system.

## **23 Organic Hay / Straw Store**

23.1 **Hay Store / Straw Store.** These are costed per metre square for the entire area. The hay / straw store shall be constructed in full accordance with specification S.101, S.102 and S.104. Enter the internal length and internal width, in metres, of the hay / straw store into the investment tab on the on-line system.

## **24 Organic Grain Store**

24.1 **Organic Grain Store.** These are costed per metre square for the entire area. The grain store shall be constructed in full accordance with specifications S.101, S102 and S.109. Enter the internal length and internal width, in metres, of the grain store into the investment tab on the on-line system. Where the Grain store is built sharing a wall with an existing building, then the length of this wall, in metres, shall be put into the investment tab on the on-line system against the substructure “Common wall”.



- 24.2 **Pedestal Ventilation System for Organic grain Store.** These are costed per m<sup>2</sup> area of the grain store in which they are installed. Enter the total internal area, in metres squared, of the grain store into the investment tab on the on-line system.
- 24.3 **Organic Grain Bin / Meal Bin on new base** are costed on a cubic metre capacity. The Grain Bin/ Meal Bin shall be completed in accordance with S.110. The cost is calculated by use of the equation given, where x= the capacity of the bin in m<sup>3</sup> and y = the cost of the meal bin. The rate includes the meal bin, concrete pad and installation. Enter the volume, in metres cubed, into the investment tab on the on-line system.
- 24.4 **Organic Grain Bin / Meal Bins on existing base** are costed on a cubic metre capacity. The Grain Bin/ Meal Bin shall be completed in accordance with S.110. The reference cost is calculated by use of the equation given, where x= the capacity of the bin in m<sup>3</sup> and y = the cost of the meal bin. For example if the proposed meal bin capacity is 8 metres cubed, to get the cost of the meal bin multiply 8 x 68.51 and then add 2202. This gives a reference cost of €2,750.08 for the meal bin. The rate covers the installation of a new grain bin / meal bin on an existing concrete pad that meets the requirements of S.110. Enter the volume, in metres cubed, into the investment tab on the on-line system. *(As a rough guide, to calculate the required volume for a given tonnage, multiply the required tonnage by 1.39 to get the required volume. The actual required volume for a given tonnage will depend upon what is being stored in the meal bin.)*
- 24.5 **Ancillary Concrete.** Concrete equivalent to an 8m wide apron across the working side of the grain store may be provided with each Organic grain store. The working side is determined to be the long end for single sided houses and the gable end for double-sided houses. The concrete must adjoin the grain store. Enter the total area of concrete, in metres squared, to be provided within the grain store into the investment tab on the on-line system.
- 24.6 **Under floor Ventilation System.** These are costed per m<sup>2</sup> area of the grain store in which they are installed. Enter the total internal area, in metres squared, of the grain store into the investment tab on the on-line system.
- 24.7 **On floor Ventilation System.** These are costed per m<sup>2</sup> area of the grain store in which they are installed. Enter the total internal area, in metres squared, of the grain store into the investment tab on the on-line system.

- 24.8 **Grain store concrete A-segment dividers.** These are costed per m<sup>2</sup> area of the dividers to be provided. Enter the length and height of the dividers to be installed, in metres, into the investment tab on the on-line system. Use a separate line for each different height of divider.
- 24.9 **Doorway grain retainer – steel.** These are costed per m<sup>2</sup> area of the doorway grain retainer to be provided. Enter the length and height of each doorway retainer to be installed, in metres, into the investment tab on the on-line system. Use a separate line for each separate doorway retainer.

## **25 Organic Potato Store**

- 25.1 **Organic Potato Store.** These are costed per metre square for the entire area. The potato store shall be constructed in full accordance with specification S.101, S.102 and S.118. Enter the internal length and internal width, in metres, of the potato store into the investment tab on the on-line system. Where the potato store is built sharing a wall with an existing building, then the length of this wall, in metres, shall be put into the investment tab on the on-line system against the substructure “Common wall”.
- 25.2 **Ventilation System for Organic Potato Store.** These are costed per m<sup>2</sup> area of the potato store in which they are installed. Enter the total internal area, in metres squared, of the potato store into the investment tab on the on-line system.
- 25.3 **Ancillary Concrete.** Concrete equivalent to an 8m wide apron across the working side of the potato store may be provided with each Organic potato store. The working side is determined to be the long end for single sided houses and the gable end for double-sided houses. The concrete must adjoin the potato store. Enter the total area of concrete, in metres squared, to be provided within the potato store into the investment tab on the on-line system.

## **26 Organic Produce Store**

- 26.1 **Organic Produce Store.** These are costed per metre square for the entire area. The produce store shall be constructed in full accordance with specification S.101, S.102 and S.105. Enter the internal length and internal width, in metres, of the produce store into the investment tab on the on-line system. Where the produce store is built sharing a wall with

an existing building, then the length of this wall, in metres, shall be put into the investment tab on the on-line system against the substructure “Common wall”.

26.2 **Ancillary Concrete.** Concrete equivalent to an 8m wide apron across the working side of the produce store may be provided with each Organic produce store. The working side is determined to be the long end for single sided houses and the gable end for double-sided houses. The concrete must adjoin the produce store. Enter the total area of concrete, in metres squared, to be provided within the produce store into the investment tab on the on-line system.

## **27 Organic Slat Removal**

27.1 **Organic Replace slats with slabs.** This is costed per metre square. The new suspended concrete slab shall be constructed in accordance with S.123 and S.117. Enter the total area, in metres squared, of slab to be installed into the investment tab on the on-line system.

## **28 Rainwater harvesting**

28.1 **Covered Drains uPVC** (150mm and 225mm) are costed per linear metre. These drains are for the purpose of rainwater harvesting only. If the drains have to be put under existing concrete then the higher rates should be used. Enter the total length, in metres, of each drain size into the investment tab on the on-line system.

28.2 **Manholes and Sump tanks** are costed per item. The reference cost includes the cost of a heavy duty lid. Enter the number of each item into the investment tab on the on-line system.

28.3 **Gutters and RWP (Rain Water Down-Pipes)** are costed per linear metre. These are only eligible to be installed on buildings from which rainwater is being harvested. Enter the total length, in metres, of each gutter size into the investment tab on the on-line system.

28.4 **Sump Pumps.** These are costed on a per item basis. Enter the number of sump pumps to be grant-aided into the investment tab on the on-line system.

28.5 **Filters.** These are costed dependent upon the area of roof that each filter is serving. Enter the number of each size of filter to be grant-aided into the investment tab on the on-line system.

- 28.6 **Tanks for rainwater harvesting.** The cost is calculated by use of the equation given for each tank type, where  $x$ = volume of the tank in litres and  $y$  = the cost of the tank. For example if the proposed tank is of mass concrete and 40,000 litres capacity, to get the cost of the tank multiply 40,000 x 0.1104 and then add 2976.3. This gives a cost of €7,392.30 for the tank. This includes the cost of the lid and calmed inlet and overflow. Enter the cubic capacity of each tank type into the investment tab on the on-line system. The capacity of each individual tank must be entered separately.
- 28.7 **Rainwater treatment.** These are costed on a per item basis. Enter the number of treatment systems to be installed into the investment tab on the on-line system.
- 28.8 **Water Meter.** These are costed on a per item basis. Where the rainwater system is being installed in a piggery, then water meters shall be installed as part of the works. Enter the number of water meters to be installed into the investment tab on the on-line system.
- 28.9 **Header tank to allow quick fill of water into sprayer / bowser.** These are costed based on the capacity, in litres, of the header tank. The cost is calculated by use of the equation given, where  $x$ = volume of the tank in litres and  $y$  = the cost of the tank. For example if the proposed tank has a 5,000 litres capacity, to get the cost of the tank multiply 5,000 x 0.2203 and then add 3989.2. This gives a cost of €5,090.70 for the tank. This includes the cost of the cover and supports. Enter the capacity of the tank, in litres, into the investment tab on the on-line system. The capacity of each individual tank must be entered separately.
- 28.10 **Mobile water tanker to fit onto existing trailer.** These are costed based on the capacity, in litres, of the mobile water tanker. The cost is calculated by use of the equation given, where  $x$ = volume of the tank in litres and  $y$  = the cost of the tank. For example if the proposed tank has a 10,000 litres capacity, to get the cost of the tank multiply 10,000 x 0.3555 and then add 1250.7. This gives a cost of €4,805.70 for the tank. Enter the capacity of the tank, in litres, into the investment tab on the on-line system. The capacity of each individual tank must be entered separately.
- 28.11 **Mobile water tanker.** These are costed based on the capacity, in litres, of the mobile water tanker. The cost is calculated by use of the equation given, where  $x$ = volume of the tank in litres and  $y$  = the cost of the tank. For example if the proposed tank has a 10,000 litres capacity, to get the cost of the tank multiply 10,000 x 1.983 and then subtract 5043.5. This gives a cost of €14,786.50 for the tank. Enter the capacity of the tank, in litres, into

the investment tab on the on-line system. The capacity of each individual tank must be entered separately.

## **29 Organic Machinery / Equipment**

- 29.1 **Straw chopper.** These are costed on a unit basis. Enter the number of straw choppers into the investment tab on the on-line system.
- 29.2 **Toppers.** Both mounted and trailed toppers are costed per linear metre width. Enter the width of the relevant topper into the investment tab on the on-line system.
- 29.3 **Mower.** All mowers are costed per linear metre width. Enter the width of the mower into the investment tab on the on-line system.
- 29.4 **Haybobs.** These are costed on a unit basis. Enter the number of haybobs into the investment tab on the on-line system.
- 29.5 **Slurry Pump/ Agitator.** These are costed on a unit basis. Every slurry pump/ agitator must have a grid attached so that when in place over an agitation point, the grid covers the agitation point, preventing a person from slipping past the agitator into the slurry tank. Enter the number of slurry pumps / agitators into the investment tab on the on-line system.
- 29.6 **Loader (Front-Mounted).** These are costed on a unit basis. Enter the number of front-mounted loaders into the investment tab on the on-line system.
- 29.7 **Dung Fork.** These are costed based on the width of the dung fork. These are forks to be attached to a tractor front loader. They may be either a standard dung fork, grab, shear grab or bucket grab. Enter the width of the dung fork into the investment tab on the on-line system.
- 29.8 **Dung Spreader.** These are costed based on their capacity in metres cubed. Enter the volume, in metres cubed, of the dung spreader into the investment tab on the on-line system.
- 29.9 **Seeders - Tractor Mounted.** These are costed per linear metre width. Enter the width of the seeder into the investment tab on the on-line system.
- 29.10 **Harrow - Tractor Mounted.** These are costed per linear metre width. Enter the width of the harrow into the investment tab on the on-line system.

- 29.11 **Disc cultivator.** These are costed per linear metre width. Enter the width of the disc cultivator into the investment tab on the on-line system.
- 29.12 **Laser Guidance weeder hoe system.** These are costed per linear metre width. Enter the operating width of the weeder hoe system into the investment tab on the on-line system.
- 29.13 **Mulcher (Trailed).** These are costed per linear metre width. Enter the width of the mulcher into the investment tab on the on-line system.
- 29.14 **Two-wheeled tractor with detachable rotary tiller.** These are costed based on the horse power of the two-wheeled tractor. Enter the rated horse power of the two-wheeled tractor unit into the investment tab on the on-line system.
- 29.15 **Grain Dryer.** These are based on the rated output in tonnes per hour. Enter the rated capacity of the grain dryer in to the investment tab on the on-line system.
- 29.16 **Grain Cleaner.** These are based on the rated output in tonnes per hour. Enter the rated capacity of the grain cleaner in to the investment tab on the on-line system.
- 29.17 **Insect Netting.** This is costed per metre squared of netting to be grant-aided. Enter the total area, in metres squared, of insect netting into the investment tab on the on-line system.
- 29.18 **Bird and Hail Netting.** This is costed per metre squared of netting to be grant-aided. Enter the total area, in metres squared, of bird and hail netting into the investment tab on the on-line system.

### **30 Silage Bases**

- 30.1 **Silage Stores** are costed based on the separate cost of Base, Channels, Walls and Apron as appropriate for the structure.
- 30.2 If an existing silo or base has been grant aided within the previous seven years, no grant is available for the resurfacing works.
- 30.3 **The apron in front of a silo** should be a defined area with a drainage channel at the leading edge: if no channel, the apron shall slope back to the main channel (S. 128). It is part of the base and constructed to the same standard and costed as such. [It is also a defined CLASS 8 structure for planning purposes].

- 30.4 **A silo base** is measured from the outer edge of the kerbs, or a maximum of 400mm beyond the channels (or the front edge of a defined 45N apron). Enter the length and width of both the silage base and silage apron, in metres, into the investment tab on the on-line system.
- 30.5 **Effluent Channels** are costed separately to the silage base. The channels are costed per linear metre length, and there are two types (as defined in S.120 and S.128). The total length, in metres, of each channel type should be entered into the investment tab on the on-line system.
- 30.6 **Kerb along silo base.** These are costed separately to the silage base. The kerbs are costed per linear metre length. The total length, in metres, of kerb to be provided should be entered into the investment tab on the on-line system.
- 30.7 **The height of a silo wall** is measured on the outside of the wall at the front of the silage pit. The height of the wall is as shown in Figure 1 of S. 120 (Dimension H, i.e. from the top of the foundation to the top of the wall). Enter the total length, in metres, of the planned wall height into the investment tab on the on-line system.
- 30.8 **Measurement of a walled silo base.** This shall be calculated using the internal length and width of the floor; the apron area is measured as per clause 30.4. Where a silo is divided by a common wall, the two areas shall be costed separately. All measurements are to be taken at floor level. Enter the length and width of both the walled silage base and silage apron, in metres, into the investment tab on the on-line system.
- 30.9 **Length of walls in a walled silo.** The length of the walls in a walled silo are measured along the outside face of the wall. No deductions are required at corners.
- 30.10 **Common Walls between two silos.** For common walls between two silos, select the appropriate wall height and enter the total length of Common Wall into the investment tab on the on-line system.
- 30.11 **Guide rail for silo wall.** These are costed per linear metre of new safety rail provided. Enter the length, in metres, of new safety rail to be grant-aided in to the investment tab on the on-line system.
- 30.12 **Ancillary Concrete.** Concrete equivalent to an 8m wide apron across the working side of the silage pit may be provided with each silage pit. The working side is determined to be where the silage apron is located. The concrete must adjoin the silage pit. Enter the total

area of concrete, in metres squared, to be provided within the silage pit into the investment tab on the on-line system.

**30.13 Safety Gates for Raised Apron.** These are costed separately to the silage base. The safety gates are costed per linear metre length. The total length, in metres, of gates to be provided should be entered into the investment tab on the on-line system.

## **31 Sheep Fencing**

**31.1 Fencing.** Multiply the appropriate fence type cost by number of linear metres being constructed. Fence costs are the same for those constructed on a bank as at field level.

**31.2 Gateways.** Cost is per gateway in new fence. Gateways cannot be paid in existing fences or in gaps in hedgerows.

## **32 Tillage Scheme Grain Stores and Grain Treatment**

**32.1 Tillage Scheme Grain Store.** These are costed per metre square for the entire area. The grain store shall be constructed in full accordance with specifications S.101, S102 and S.109. Enter the internal length and internal width, in metres, of the grain store into the investment tab on the on-line system. Where the Grain store is built sharing a wall with an existing building, then the length of this wall, in metres, shall be put into the investment tab on the on-line system against the substructure “Common wall”.

**32.2 Under floor Ventilation System.** These are costed per m<sup>2</sup> area of the grain store in which they are installed. Enter the total internal area, in metres squared, of the grain store into the investment tab on the on-line system.

**32.3 On floor Ventilation System.** These are costed per m<sup>2</sup> area of the grain store in which they are installed. Enter the total internal area, in metres squared, of the grain store into the investment tab on the on-line system.

**32.4 Pedestal Ventilation System.** These are costed per m<sup>2</sup> area of the grain store in which they are installed. Enter the total internal area, in metres squared, of the grain store into the investment tab on the on-line system.

**32.5 Grain store concrete A-segment dividers.** These are costed per m<sup>2</sup> area of the dividers to be provided. Enter the length and height of the dividers to be installed, in metres, into the



investment tab on the on-line system. Use a separate line for each different height of divider.

- 32.6 **Doorway grain retainer – steel.** These are costed per m<sup>2</sup> area of the doorway grain retainer to be provided. Enter the length and height of each doorway retainer to be installed, in metres, into the investment tab on the on-line system. Use a separate line for each separate doorway retainer.
- 32.7 **Ancillary Concrete.** Concrete equivalent to a 16m wide apron across the working side of the grain store may be provided with each tillage scheme grain store. The working side is determined to be the long end for single sided houses and the gable end for double-sided houses. The concrete must adjoin the grain store. Enter the total area of concrete, in metres squared, to be provided within the grain store into the investment tab on the on-line system.
- 32.8 **Grain dryer – Batch, direct or indirect heat.** Both direct and indirect fired batch grain driers are costed based on the capacity, in metres cubed (m<sup>3</sup>), that the drier can dry in one batch. The cost is calculated by use of the relevant equation given, where x= capacity, in m<sup>3</sup>, of the drier and y = the cost of the drier. For example if the proposed direct fired drier has a capacity of 10 m<sup>3</sup>, to get the cost of the direct fired drier multiply 10 by 1203.8 and then add 36284. This gives a cost of €48,322.00 for the direct fired drier. Select the appropriate type of drier (either direct fired or indirect fired) to be purchased and then enter the working capacity, in m<sup>3</sup>, of the drier into the investment tab on the on-line system. A new sub investment must be selected for each drier.
- 32.9 **Grain dryer - Continuous flow - direct or indirect heat.** Both direct and indirect fired continuous flow grain driers are costed based on the capacity, in tonnes per hour, that the drier can dry in one hour. The cost is calculated by use of the relevant equation given, where x= capacity, in tonnes per hour, of the drier and y = the cost of the drier. For example if the proposed direct fired continuous flow grain drier has a capacity of 60 tonnes per hour, to get the cost of the direct fired continuous flow drier multiply 60 by 1826.9 and then add 71067. This gives a cost of €180,681.00 for the direct fired continuous flow drier. Select the appropriate type of drier (either direct fired or indirect fired) to be purchased and then enter the working capacity, in tonnes per hour, of the drier into the investment tab on the on-line system. A new sub investment must be selected for each continuous flow drier.

- 32.10 **Grain elevator / augers (not for grain dryers – grain driers come equipped with all required augers).** These are costed on a unit basis. Enter the number of grain elevators/ augers into the investment tab on the on-line system.
- 32.11 **Grain mill (roller/crimper).** Grain mills are costed based on the nominal dry rolling capacity, in tonnes per hour. The cost is calculated by use of the equation given, where  $x$  = capacity, in tonnes per hour, of the grain mill and  $y$  = the cost of the grain mill. For example if the proposed grain mill has a capacity of 5 tonnes per hour, to get the cost of the grain mill multiply 5 by 1496 and then add 6128.2. This gives a cost of €13,608.20 for the  $1496x + 6128.2$ . Enter the working capacity, in tonnes per hour, of the grain mill into the investment tab on the on-line system. A new sub investment must be selected for each grain mill.
- 32.12 **Liquid treatment applicator.** These are costed on a unit basis. Enter the number of liquid treatment applicators into the investment tab on the on-line system.
- 32.13 **Powder treatment applicator.** These are costed on a unit basis. Enter the number of powder treatment applicators into the investment tab on the on-line system.

### **33 Tillage Machinery and Equipment**

- 33.1 **GPS Steering Control for Tractors / Combines.** These are costed on a per unit basis, per tractor /combine fitted both new and retrofit. A new sub investment line must be selected for each tractor /combine to be fitted. Enter “1” into the investment tab on the on-line system for each sub investment line.
- 33.2 **Yield Monitors for combine.** These are costed on a per unit basis, per combine fitted. A new sub investment line must be selected for each combine to be fitted. Enter “1” into the investment tab on the on-line system for each sub investment line.
- 33.3 **Sprayers.** Only field crop horizontal boom sprayers are covered by the TAMS II scheme. Both mounted and trailed sprayers are costed based on the capacity of the main spray tank, regardless of the boom width. The cost is calculated by use of the relevant equation given, where  $x$  = volume of the spray tank in litres and  $y$  = the cost of the sprayer. For example if the proposed mounted sprayer has electronic control with a main spray tank capacity of 1,200 litres, to get the cost of the sprayer multiply 1,200 by 11.694 and then add 9758.5. This gives a cost of €23,791.30 for the sprayer. Select the appropriate type of sprayer

(electronic control, GPS control or GPS ready) to be purchased and then enter the working capacity, in litres, of the sprayer into the investment tab on the on-line system. A new sub investment must be selected for each sprayer. The capacity entered into the system is to be the nominal working capacity of the sprayer. A front mounted tank may be present, however, is not covered by grant-aid – the main tank size excludes the capacity of any front mounted tank. **A GPS ready machine is only permitted if the applicant has an existing GPS unit that meets the requirements of S.195, and it will be required that the machine be connected to the existing unit.**

- 33.4 **Full GPS section Control for sprayers – retrofit.** This is for the retrofitting of full GPS control to an existing sprayer – it does not apply to the purchase of new sprayers. The cost is based per unit. Enter the number of sprayers to be retrofitted with full GPS control into the investment tab on the on-line system.
- 33.5 **Self-propelled sprayer.** These are costed per unit basis regardless of tank size or boom width. Enter the number of self-propelled sprayers to be purchased into the investment tab on the on-line system. A new sub investment line is required for each self-propelled sprayer to be purchased.
- 33.6 **Disc stubble cultivator- trailed and mounted.** These are costed per linear metre of working width. The cost is calculated by use of the relevant equation given, where  $x =$  working width of the disc cultivator and  $y =$  the cost of the disc cultivator. For example if the proposed trailed disc cultivator has a working width of 4.5m, to get the cost of the disc cultivator multiply 4.5 by 2980.5 and then add 22081. This gives a cost of €35,493.25 for the trailed disc cultivator. Enter the working width of the disc cultivator into the investment tab on the on-line system. There are separate lines for trailed and mounted disc cultivators. Each disc cultivator must be entered as a separate sub investment.
- 33.7 **Tine stubble cultivator- trailed and mounted.** These are costed per linear metre of working width. The cost is calculated by use of the relevant equation given, where  $x =$  working width of the tine cultivator and  $y =$  the cost of the tine cultivator. For example if the proposed trailed tine cultivator has a working width of 4.5m, to get the cost of the trailed tine cultivator multiply 4.5 by 5800.7 and then add 16268. This gives a cost of €42,371.15 for the trailed tine cultivator. Enter the working width of the tine cultivator into the investment tab on the on-line system. There are separate lines for trailed and

mounted tine cultivators. Each tine cultivator must be entered as a separate sub investment.

- 33.8 **Combined Tine and Disc cultivator- trailed and mounted.** These are costed per linear metre of working width. The cost is calculated by use of the relevant equation given, where  $x$  = working width of the combined tine and disc cultivator and  $y$  = the cost of the combined tine and disc cultivator. For example if the proposed trailed combined tine and disc cultivator has a working width of 5.0m, to get the cost of the combined tine and disc cultivator multiply 5.0 by 8094 and then add 15113. This gives a cost of €55,583.00 for the trailed combined tine and disc cultivator. Enter the working width of the combined tine and disc cultivator into the investment tab on the on-line system. There are separate lines for trailed and mounted combined tine and disc cultivators. Each combined tine and disc cultivator must be entered as a separate sub investment.
- 33.9 **Seed broadcaster to mount on cultivator.** These are costed on a unit basis. Enter the number of seed broadcasters into the investment tab on the on-line system.
- 33.10 **Min till tine and disc drill – trailed and mounted.** These are costed per linear metre of working width. The cost is calculated by use of the relevant equation given, where  $x$  = working width of the min till tine and disc drill and  $y$  = the cost of the min till tine and disc drill. For example if the proposed trailed min till tine and disc drill has a working width of 4.0m, to get the cost of the trailed min till tine and disc drill multiply 4.0 by 11499 and then add 20214. This gives a cost of €66,210.00 for the min till tine and disc drill. Enter the working width of the min till tine and disc drill into the investment tab on the on-line system. There are separate lines for trailed and mounted min till tine and disc drill. Each min till tine and disc drill must be entered as a separate sub investment.
- 33.11 **Min till tine and disc drill - trailed, seed and fertilizer.** These are costed per linear metre of working width. The cost is calculated by use of the equation given, where  $x$  = working width of the min till tine and disc drill with fertilizer and  $y$  = the cost of the min till tine and disc drill with fertilizer. For example if the proposed trailed min till tine and disc drill with fertilizer has a working width of 4.0m, to get the cost of the trailed min till tine and disc drill with fertilizer multiply 4.0 by 13554 and then add 15546. This gives a cost of €69,762.00 for the min till tine and disc drill with fertilizer. Enter the working width of the min till tine and disc drill with fertilizer into the investment tab on the on-line

system. Each min till tine and disc drill with fertilizer must be entered as a separate sub investment.

33.12 **Direct drill.** These are costed per linear metre of working width. The cost is calculated by use of the equation given, where  $x$ = working width of the direct drill and  $y$  = the cost of the direct drill. For example if the proposed direct drill has a working width of 3.0m, to get the cost of the direct drill multiply 3.0 by 8312.5 and then add 57000. This gives a cost of €81,937.50 for the direct drill. Enter the working width of the direct drill into the investment tab on the on-line system. Each direct drill must be entered as a separate sub investment.

33.13 **Strip till drill.** These are costed per linear metre of working width. The cost is calculated by use of the equation given, where  $x$ = working width of the strip till drill and  $y$  = the cost of the strip till drill. For example if the proposed strip till drill has a working width of 3.0m, to get the cost of the strip till drill multiply 3.0 by 15670 and then add 13761. This gives a cost of €60,771.00 for the strip till drill. Enter the working width of the strip till drill into the investment tab on the on-line system. Each strip till drill must be entered as a separate sub investment.

33.14 **Strip till drill - seed and fertiliser.** These are costed per linear metre of working width. The cost is calculated by use of the equation given, where  $x$ = working width of the strip till drill with fertilizer and  $y$  = the cost of the strip till drill with fertilizer. For example if the proposed strip till drill with fertilizer has a working width of 3.0m, to get the cost of the strip till drill with fertilizer multiply 3.0 by 5352.2 and then add 47943. This gives a cost of €63,999.60 for the strip till drill with fertilizer. Enter the working width of the strip till drill with fertilizer into the investment tab on the on-line system. Each strip till drill with fertilizer must be entered as a separate sub investment.

33.15 **Heavy Cambridge Roller.** Moved to 33.23.

33.16 **Potato Harvesting webs for salad potatoes.** These are costed per linear metre of web to be fitted. There are different rates for 1 and 2 row harvesters and also for main and intake webs. Select the appropriate web and enter the length, in metres, of the web required. A new sub investment is required for each web.

33.17 **Separator segments / dolmens for salad potatoes.** These are costed per segment / dolmen to be fitted to the potato harvester. Enter the total number of individual dolmens /

segments required for the potato harvester into the investment tab on the on-line system. A new sub investment is required for the dolmens / segments for each harvester.

- 33.18 **Full GPS Section control for Fertilizer spreader.** This is for the additional cost of installing full GPS control (section control, headland control, weigh cells and GPS control unit) to a new fertilizer spreader – it does not apply to upgrading existing fertilizer spreaders and does not include the cost of the base fertilizer spreader. It is not to be added to the cost of a full fertilizer spreader. The cost is based per unit. Enter the number of new fertilizer spreaders with full GPS control into the investment tab on the on-line system.
- 33.19 **Fertilizer Spreader – Mounted with Full GPS Control / Fully GPS Ready.** These are costed based on capacity, in litres. The cost is calculated by use of the equation given, where  $x$  = the capacity of the mounted fertilizer spreader, in litres, and  $y$  = the cost of the fertilizer spreader. For example if the proposed mounted Fertilizer Spreader has a capacity of 2,200 litres, to get the cost of the mounted fertilizer spreader multiply 2,200 by 1.06 and then add 17,600. This gives a cost of €19,932.00 for the mounted fertilizer spreader. This is for the full cost of a mounted fertilizer spreader fitted with full GPS control of spread width, application rate, headland control and recording of areas to which fertilizer has been applied. Enter the capacity of the mounted fertilizer spreader, in litres, into the investment tab on the on-line system. A bogey to carry a mounted fertilizer spreader is not covered by the scheme, however, a fertilizer spreader on a bogey is described as a mounted fertilizer spreader. **A GPS ready machine is only permitted if the applicant has an existing GPS unit that meets the requirements of S.195, and it will be required that the machine be connected to the existing unit.**
- 33.20 **Fertilizer Spreader – Trailed with Full GPS Control / Fully GPS Ready.** These are costed per unit. This is for the full cost of a trailed fertilizer spreader fitted with full GPS control of spread width, application rate, headland control and recording of areas to which fertilizer has been applied. Enter the number of trailed fertilizer spreaders into the investment tab on the on-line system. **A GPS ready machine is only permitted if the applicant has an existing GPS unit that meets the requirements of S.195, and it will be required that the machine be connected to the existing unit.**
- 33.21 **GPS Standalone Unit.** These are costed per unit. The cost includes the control unit, display and GPS receiver. Enter the number of GPS Standalone Units in the investment tab on the on-line system. This unit is not to be used with a grant-aided Fertilizer spreader

or grant-aided GPS Controlled sprayer, as the cost of the GPS control unit is included in those reference costs. If this investment is chosen, it is in addition to any control units purchased as part of GPS controlled fertilizer spreaders, GPS controlled sprayers, GPS Steering Control for Tractors, or Yield Monitors for combines

**33.22 Heavy Cambridge Roller.** These are costed per linear metre of working width. The cost is calculated by use of the equation given, where  $x$  = working width of the Heavy Cambridge Roller and  $y$  = the cost of the Heavy Cambridge Roller. For example if the proposed Heavy Cambridge Roller has a working width of 6.0m, to get the cost of the Heavy Cambridge Roller multiply 6.0 by 4412.6 and then subtract 13209. This gives a cost of €13,266.00 for the Heavy Cambridge Roller. Enter the working width of the Heavy Cambridge Roller into the investment tab on the on-line system. Each Heavy Cambridge Roller must be entered as a separate sub investment.

**33.23 Furrow Press.** These are costed per linear metre of working width. The cost is calculated by use of the equation given, where  $x$  = working width of the furrow press and  $y$  = the cost of the furrow press. For example if the proposed furrow press has a working width of 4.0m, to get the cost of the furrow press multiply 4.0 by 17428 and then subtract 33764. This gives a cost of €35,948.00 for the furrow press. Enter the working width of the furrow press into the investment tab on the on-line system. Each furrow press must be entered as a separate sub investment.

**33.24 Heavy Cambridge Roller with Paddles.** These  $y = 3342.4x - 1290.1$  are costed per linear metre of working width. The cost is calculated by use of the equation given, where  $x$  = working width of the Heavy Cambridge Roller with paddles and  $y$  = the cost of the Heavy Cambridge Roller with paddles. For example if the proposed Heavy Cambridge Roller with paddles has a working width of 6.0m, to get the cost of the Heavy Cambridge Roller with paddles multiply 6.0 by 3342.4 and then subtract 1290.1. This gives a cost of €18,764.30 for the Heavy Cambridge Roller with paddles. Enter the working width of the Heavy Cambridge Roller with paddles into the investment tab on the on-line system. Each Heavy Cambridge Roller with paddles must be entered as a separate sub investment.

### **34 Grass Measuring Equipment.**

34.1 **Precision Grass Measuring Equipment.** These are costed per unit. The cost includes the system hardware and plate/pole. The applicant must have a compatible smart device (phone or tablet) when purchasing the equipment. Enter the number of grass measuring devices in the investment tab on the on-line system.

### **35 Hydraulic Motor to replace PTO Shaft**

35.1 **Hydraulic Motor to replace PTO Shaft (permanently fixed to machine).** These are costed per unit. The cost includes the fitting of the unit. These may be fitted to either a new machine or retrofitted to an existing machine. They shall be used to replace the PTO drive for low-power requirement machines. The hydraulic motor shall be driven by the hydraulics of the tractor, and connected to the tractor using hydraulic pipes. The hydraulic motor shall be permanently fixed to the machine for which they are being used. There shall be a shut-off system located beside the hydraulic motor, outside of the tractor. A separate hydraulic motor shall be fitted to each machine. Enter the number of hydraulic motors into the investment tab on the on-line system. A new line is required for each hydraulic motor to be purchased.



## **Appendix I: Date of clause revisions and additions**

### **Version 1 (effective from 8<sup>th</sup> June 2015):**

Clauses present: 1.1 to 1.5; 2.1 to 2.25; 3.1 to 3.7; 4.1 to 4.11; 5.1; 6.1 to 6.10; 7.1 to 7.; 8.1 to 8.23, 9.1 to 9.6; 10.1 to 10.3; 11.1 to 11.3; 12.1; 13.1 to 13.7; 14.1 to 14.10, 15.1 to 15.3; 16.1 to 16.5; 17.1 to 17.5; 18.1 to 18.6; 19.1 to 19.11, 20.1 to 20.2; 21.1 to 21.4; 22.1 to 22.2; 23.1; 24.1 to 24.4; 25.1 to 25.3; 26.1 to 26.2; 27.1; 28.1 to 28.8; 29.1 to 29.18.

### **Version 2 (effective from 16<sup>th</sup> July 2015):**

New Clauses: Note 5 and clauses 1.8, 2.26, 8.24 and 30.1 to 30.12.

New Figures: 2.5 and 2.6.

Clauses modified: 2.13, 8.2, 8.3, 9.7, 10.3, 11.3, 13.1, 15.1, 16.1 and 16.2

### **Version 3 (effective from 14<sup>th</sup> October 2015):**

New Clauses: 14.11

New Tables: 2.1 to 2.4

Clauses modified: 1.3, 15.2.2

Figures modified: Figure 2.1 renumbered to Figure 2.3, Figure 2.2 renumbered to Figure 2.1 and Figure 2.3 renumbered to Figure 2.2.

### **Version 4 (effective from 24<sup>th</sup> March 2016):**

New Clauses: 2.27, 21.5, 21.6

Clauses modified: 2.5, 2.13, 2.18, 2.19, 2.20, 2.21, 2.22, 2.23, 2.24, 3.3, 3.4, 3.5, 4.3, 4.4, 8.5, 14.3, 16.2, 22.1

Tables modified: Table 2.3

### **Version 5 (effective from 9<sup>th</sup> June 2016):**

New Clauses: 31.1, 31.2

### **Version 6 (effective from 8<sup>th</sup> March 2017):**

New Clauses: 1.7, 7.6, 7.7, 7.8, 24.5 to 24.8, 28.9 to 28.11, 32.1 to 32.13, 33.1 to 33.18

Clauses modified: 1.6, 2.8, 2.13, 3.1, 3.7, 16.3, 16.4, 24.2, 30.8

Figures modified: 2.2

### **Version 7 (effective from 30<sup>th</sup> June 2017):**

New Clauses: 2.28, 15.4, 22.3, 33.21, 33.22, 33.23, 34.1

Clauses modified: 22.1, 33.5, 33.20

### **Version 8 (effective from 28<sup>th</sup> February 2018):**

New Clauses: 2.30, 2.31, 4.12, 6.11, 6.12, 8.25, 10.4, 15.2, 15.3.3, 15.6, 15.7, 15.8, 24.4, 30.13, 33.22, 33.23, 33.24, 35.1

Clauses modified: 1.1, 2.12, 2.29, 4.4, 4.6 (portion deleted), 6.8 (portion deleted), 8.19, 10.3, 14.6, 14.11, 15.1, 15.2 renumbered to 15.3, 15.2.1, renumbered to 15.3.1, 15.2.2, renumbered to 15.3.2, 15.3 renumbered to 15.4, 15.4 renumbered to 15.5, 16.3, 16.4, 17.5, 24.3, 24.4 renumbered to 24.5, 24.5 renumbered to 24.6, 24.6 renumbered to 24.7, 24.7 renumbered to 24.8, 24.8 renumbered to 24.9, 30.4, 33.1, 33.3, 33.15 (portion deleted), 33.19, 33.20

Tables Modified: 2.1