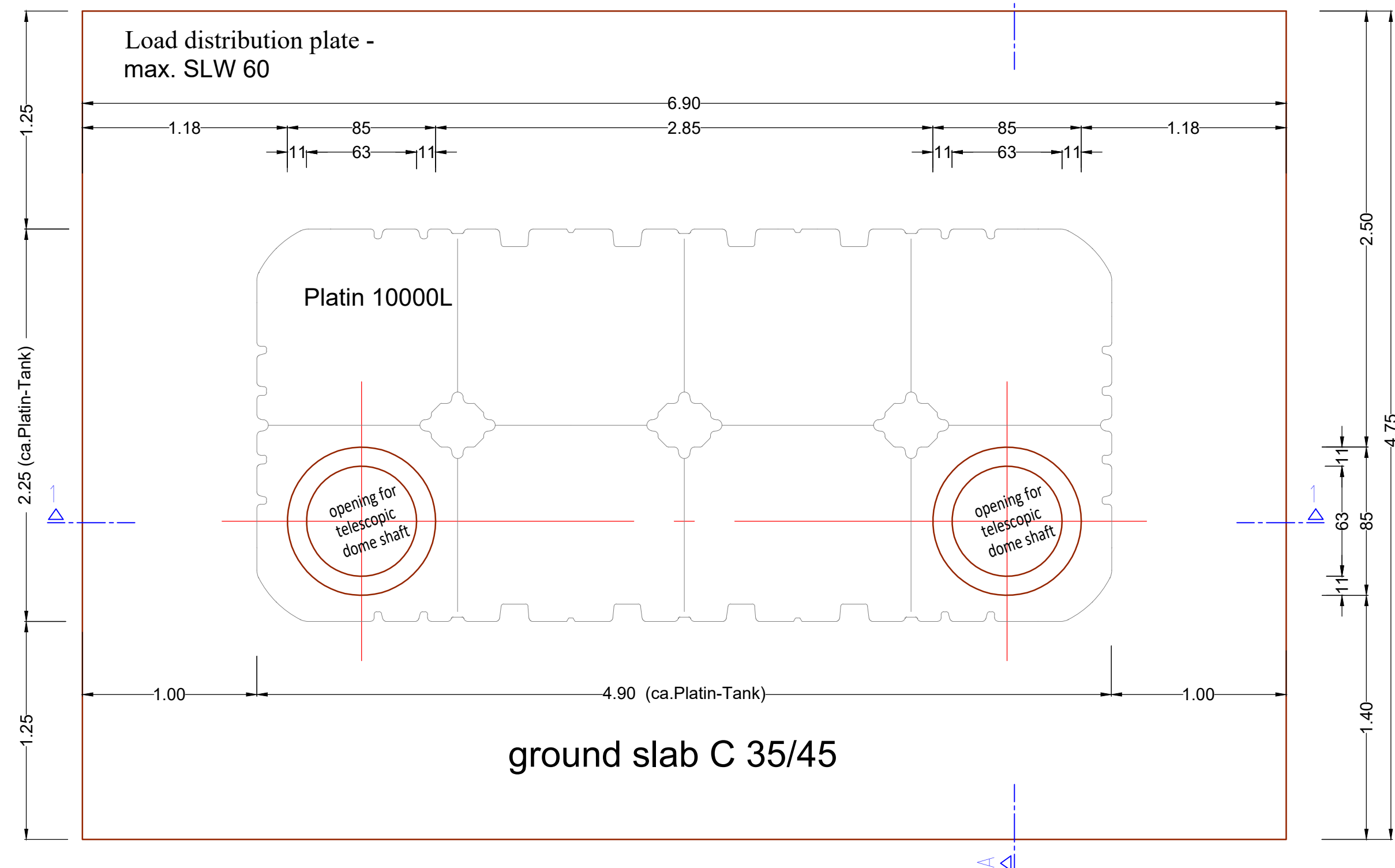


layout ground slab thickness = 30 cm



Rebar - BOM BSt - B 500 A					
position	piece	Ø	length m	TL m	weight kg
1	28	14	2,05	57,40	69,45
2	14	14	2,63	36,82	44,55
3	14	14	2,20	30,80	37,27
4	28	14	2,00	55,86	67,59
5	4	14	1,45	5,80	7,02
6	4	14	2,50	10,00	12,10
7	14	14	2,35	32,90	39,81
8	14	14	3,28	45,92	55,56
9	50	14	4,60	230,00	278,30
10	62	14	1,53	94,86	114,78
11	54	14	5,43	293,22	354,80
12	14	14	2,75	38,50	46,59
13	4	14	1,25	5,00	6,05
14	2	14	3,25	6,50	7,87
15	37	14	6,75	249,75	302,20
16	47	14	1,50	70,50	85,31
17	39	14	7,55	294,45	356,28
18	4	14	7,37	29,48	35,67
19	4	14	5,22	20,88	25,26
20	16	14	1,90	30,40	36,78
21	24	16	1,90	45,60	72,05
Total amount (rebar - B500 A)					
14	1,21 kg/m	1639,04 m	1983,24 kg		
16	1,58 kg/m	45,60 m	72,05 kg		
Total			2055,29 kg		

Supporting cages				
position	piece	TYP	length m	weight kg
1	20	DBV-BS13	2,00	12,58

Floor slab, can be driven on by SLW 60 or LM1 according to DIN technical report 101

Concrete with a tensile strength of $f_{ct,eff}$ of no more than 70% of the average tensile resistance f_{ctm} after 5 days (max $f_{ct,eff,5d} = 0.7 f_{ctm,28d}$) was assumed when limiting the crack width.
Crack width limitation of the floor slab $w_{cal} \leq 0.30$ mm.

Observe the information from the construction management when selecting the concrete quality and concrete composition! Additional surface protection or use of concrete additives may be necessary, depending on requirements.

The floor slab must be placed on a uniform, load-bearing subsoil. Soil layers that are not load-bearing must be replaced with lean concrete or similar. 5 cm of lean concrete must be placed under the floor slab as granular subbase, with 2 layers of PE films between the floor slab and lean concrete.
A load-bearing section installed in layers and sufficiently compacted with a capillary-breaking and draining function is required to make the foundation frost-proof. The depth of the frost-resistant foundation must be specified to match the situation on site.

The plan is based on the following assumed soil indices:
- Floor category 1, density 20 kN/m³, friction angle 35°
- Constrained modulus: $E_s = 25000$ kN/m²
The reliability of the above values must be reviewed by the responsible construction manager after production of the backfilling and before application of the lean concrete. It must be documented in a written record!
If the responsible construction manager is lacking the expertise required for this, he must have a corresponding specialist engineer involved.

All sizes must be reviewed at the construction site!

The plan only applies in connection with the plans of the competent specialist engineers! Deviations must be reported to the construction management at once; the executing person shall be liable for non-observation.

For bending shapes, see round-steel extensions
For bending shapes see mat extensions

round steel B500: --	Reinforcing steel DIN 488	Check the number and sizes of the rods before cutting to size! Secure the position of the reinforcement with spacers!
----------------------	---------------------------	--

Minimum values of the bending roll diameters at one-time bending in accordance with DIN EN 1992-1-1/NA			
	Hooks / angle hooks Loops (D min)	Diagonal rods or other bent rods (D min)	
	Rod diameter Ø	Minimum values of the concrete coverage, orthogonal to the bending level	
	<20mm	>100mm	>50mm
	4 Ø	7 Ø	10 Ø
			15 Ø
			20 Ø

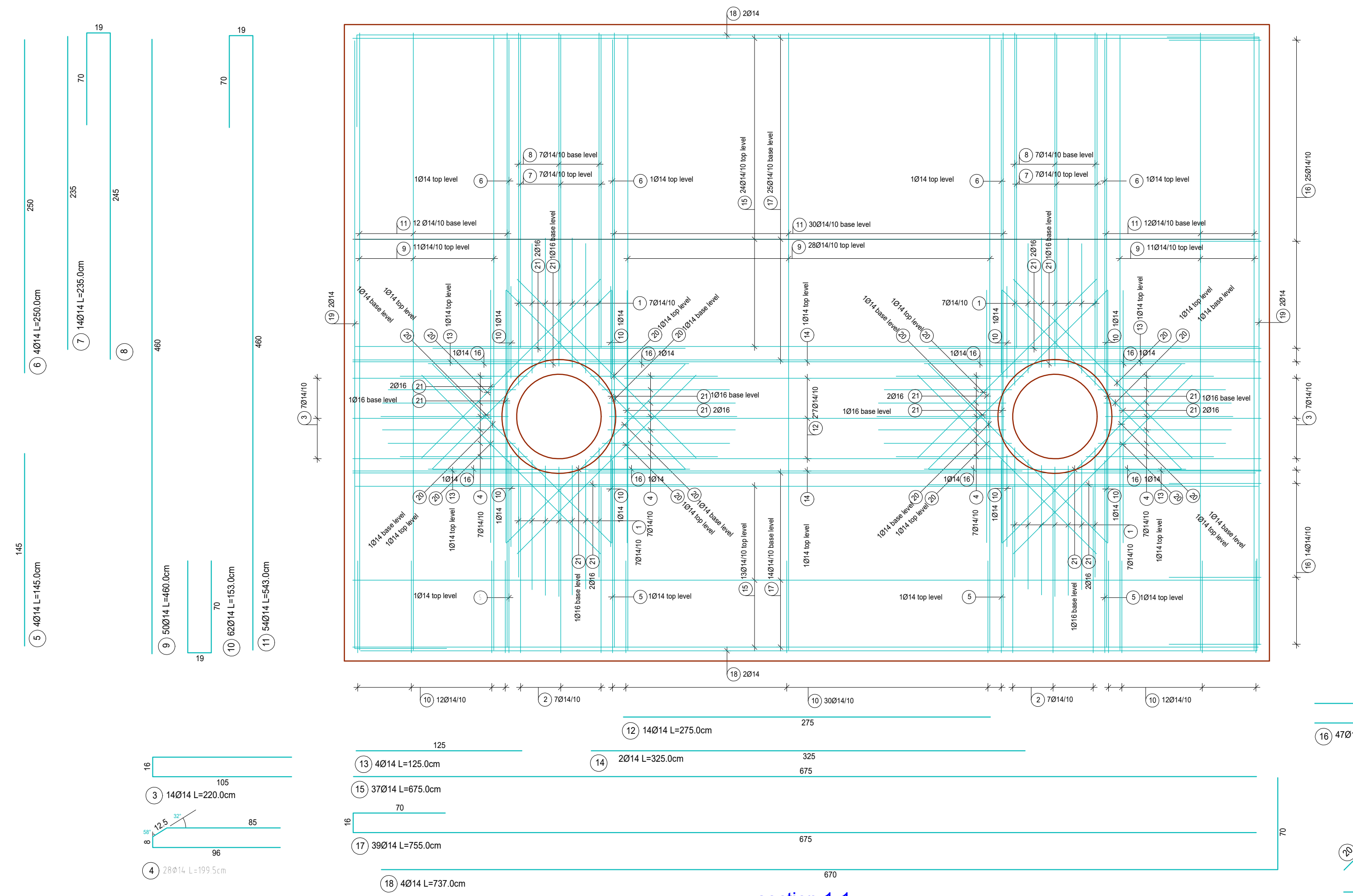
Spacers				
Components	Designation	Type	Distance in longitudinal direction	Distance in transverse direction
Floor slab	DBV- 55 -L1/F	B2	Ø 700mm/mind. 2 Stick	Ø 700mm/mind. 2 Stick
	DBV- 50 -L2/F	C1	Ø 700mm	Ø 700mm

Concrete quality in accordance with DIN EN 1992-1-1/NA					
Components	Concrete quality	Exposure classes	Concrete coverage		Special features
			Allowance AC (%)	Installation size (mm)	
Lean concrete	C12/15	X0, WF	Unreinforced		--
Floor slab	Top	C35/45	15	60	--
	Lateral	C35/45	15	55	--
	Bottom	C35/45	15	50	--

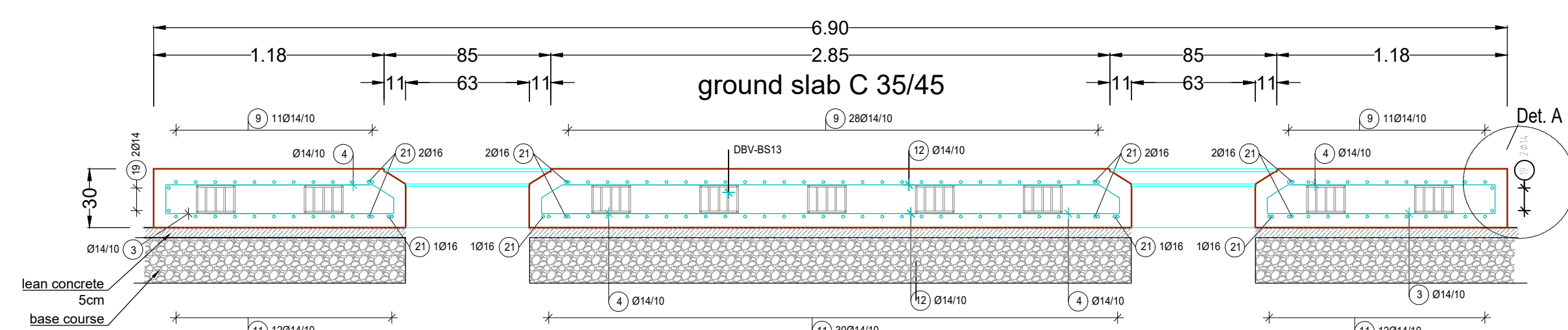
revision			
revision			
Concrete reinforcement layout			
Load distribution plate für Platin - Tank 10000 L - SLW 60			
gezeichnet drawn	ISC	Gewicht weight	Otto Graf GmbH Carl-Zeiss-Str. 2-6 DE-79331 Teningen mail@graf.info www.graf.info
Datum date	2019.10.08	Toleranz tolerance	+/- 3%
Maßstab scale	M 1:25	Einheiten units	mm [inch] gal. = US gal.
1			



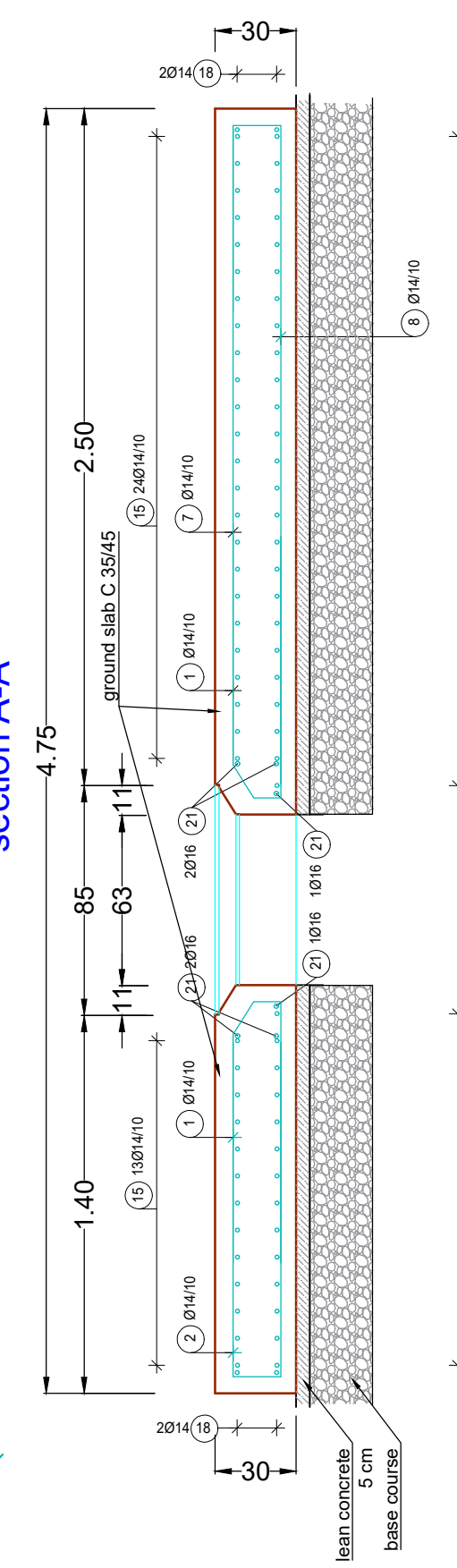
upper and lower reinforcement layout



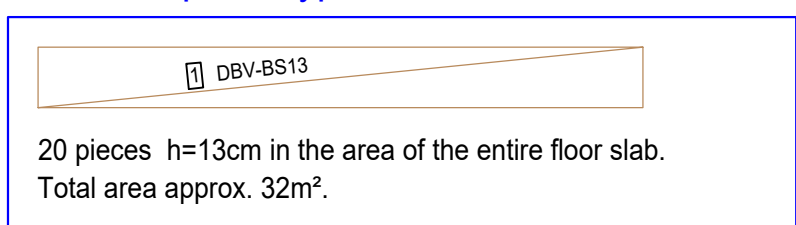
section 1-1



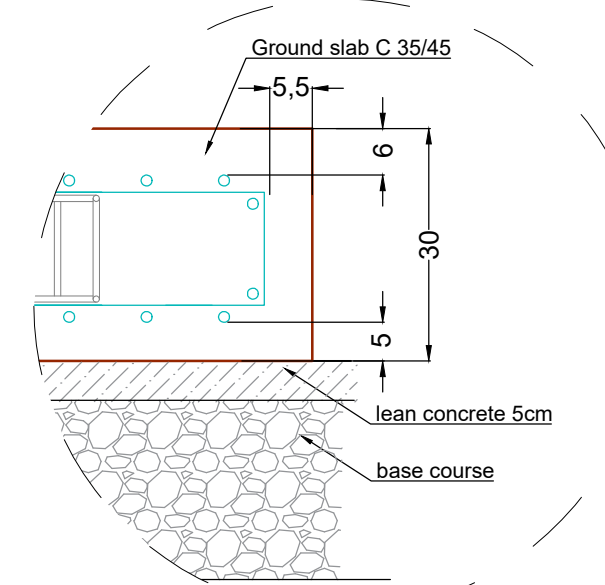
section A-A



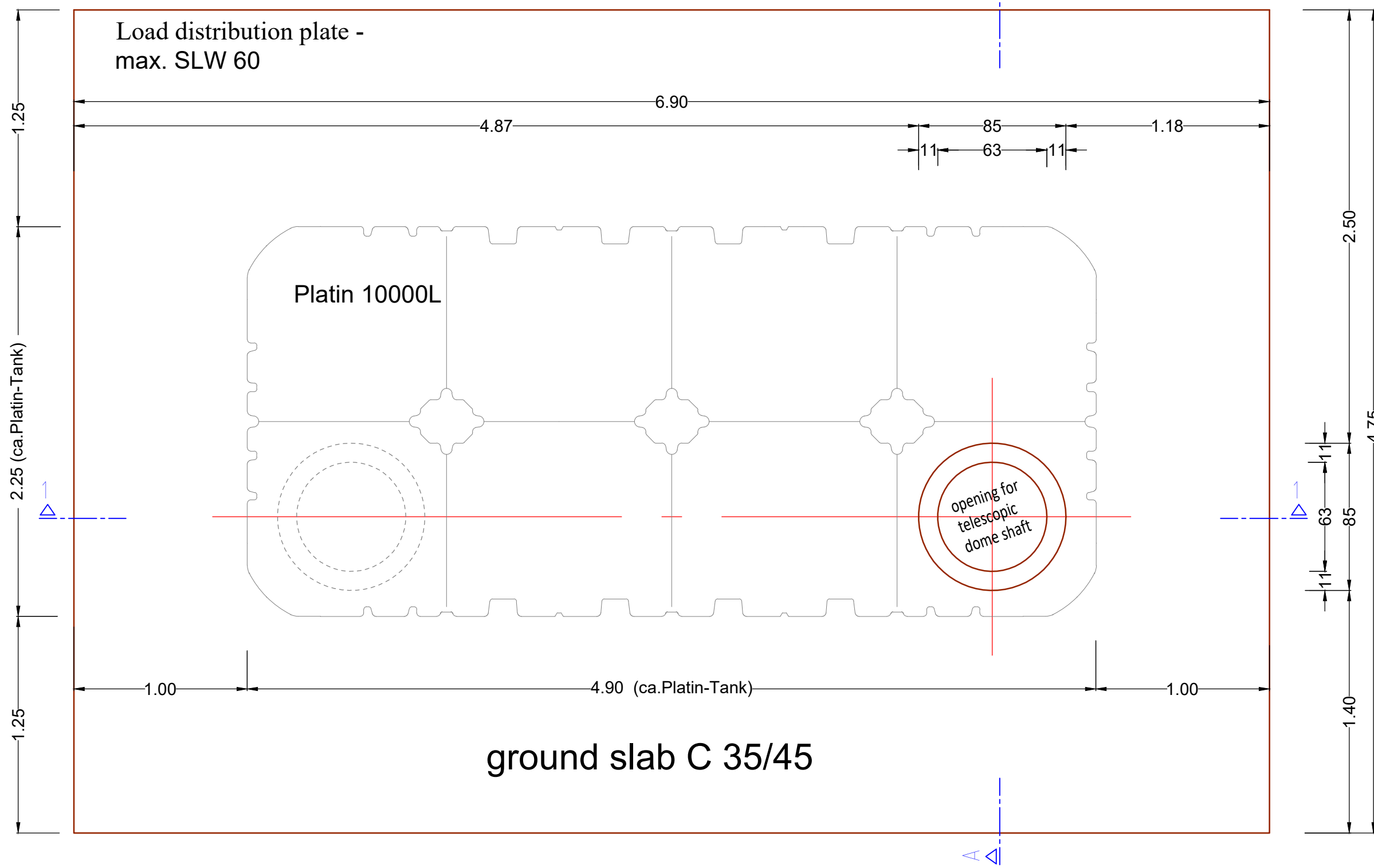
Spacer type DBV-BS



detail A M 1:10



layout ground slab thickness = 30 cm



Rebar - BOM BST - B 500 A					
position	piece	Ø	length m	TL m	weight kg
1	14	14	2,05	28,70	34,73
2	7	14	2,63	18,41	22,28
3	14	14	2,20	30,80	37,27
4	14	14	2,00	28,00	33,88
5	2	14	1,45	2,90	3,51
6	2	14	2,50	5,00	6,05
7	7	14	2,35	16,45	19,90
8	7	14	3,28	22,96	27,78
9	59	14	4,60	271,40	328,39
10	65	14	1,53	99,45	120,33
11	61	14	5,43	331,23	400,79
12	14	14	4,75	66,50	80,47
13	2	14	1,25	2,50	3,03
14	2	14	4,98	9,96	12,05
15	37	14	6,75	249,75	302,20
16	43	14	1,50	64,50	78,05
17	39	14	7,55	294,45	356,28
18	4	14	7,37	29,48	35,67
19	4	14	5,22	20,88	25,26
20	8	14	1,90	15,20	18,39
21	12	16	1,90	22,80	36,02
Total amount (rebar - B500 A)					
14	1,21 kg/m	1608,52 m	1946,31 kg		
16	1,58 kg/m	22,80 m	36,02 kg		
Total			1982,33 kg		

Supporting cages					
position	piece	TYP	length m	width m	weight kg
1	20	DBV-BS13	2,00	0,20	12,58

Floor slab, can be driven on by SLW 60 or LM1 according to DIN technical report 101

Concrete with a tensile strength of $f_{ct,eff}$ of no more than 70% of the average tensile resistance f_{ctm} after 5 days (max $f_{ct,eff,5d} = 0.7 f_{ctm,28d}$) was assumed when limiting the crack width.
Crack width limitation of the floor slab $w_{cal} \leq 0.30$ mm.

Observe the information from the construction management when selecting the concrete quality and concrete composition! Additional surface protection or use of concrete additives may be necessary, depending on requirements.

The floor slab must be placed on a uniform, load-bearing subsoil. Soil layers that are not load-bearing must be replaced with lean concrete or similar. 5 cm of lean concrete must be placed under the floor slab as granular subbase, with 2 layers of PE films between the floor slab and lean concrete.
A load-bearing section installed in layers and sufficiently compacted with a capillary-breaking and draining function is required to make the foundation frost-proof. The depth of the frost-resistant foundation must be specified to match the situation on site.

The plan is based on the following assumed soil indices:
- Floor category 1, density 20 kN/m³, friction angle 35°
- Constrained modulus: $E_s = 25000$ kN/m²
The reliability of the above values must be reviewed by the responsible construction manager after production of the backfilling and before application of the lean concrete. It must be documented in a written record!
If the responsible construction manager is lacking the expertise required for this, he must have a corresponding specialist engineer involved.

All sizes must be reviewed at the construction site!

The plan only applies in connection with the plans of the competent specialist engineers! Deviations must be reported to the construction management at once; the executing person shall be liable for non-observation.

For bending shapes, see round-steel extensions
For bending shapes see mat extensions

round steel B500: --	Reinforcing steel DIN 488	Check the number and sizes of the rods before cutting to size! Secure the position of the reinforcement with spacers!
----------------------	---------------------------	--

Minimum values of the bending roll diameters at one-time bending in accordance with DIN EN 1992-1-1/NA

Hooks/ angle hooks Loops (D min)	Diagonal rods or other bent rods (D min)	
	Minimum values of the concrete coverage orthogonal to the bending level	
Rod diameter Ø	>100mm	>50mm
<20mm	+7 Ø	+5 Ø
4 Ø	7 Ø	10 Ø
7 Ø	10 Ø	15 Ø
10 Ø	15 Ø	20 Ø

Spacers				
Components	Designation	Type	Distance in longitudinal direction	Distance in transverse direction
Floor slab	Lateral	DBV- 55 -L1/F	1/200mm/mind 2 Stck	1/200mm/mind 2 Stck
	Bottom	DBV- 50 -L2/F	1/200mm	1/200mm

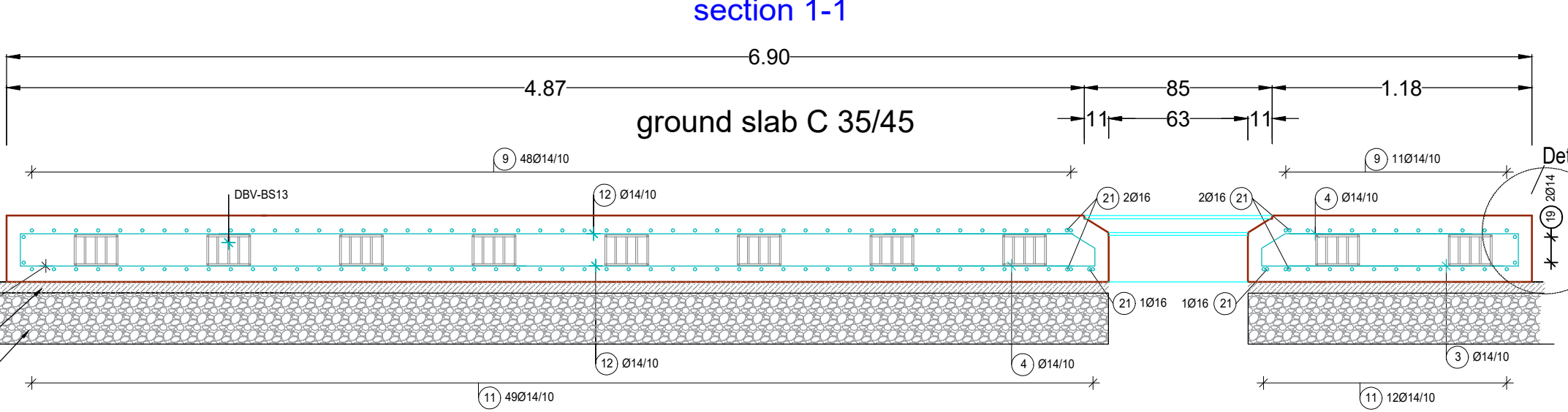
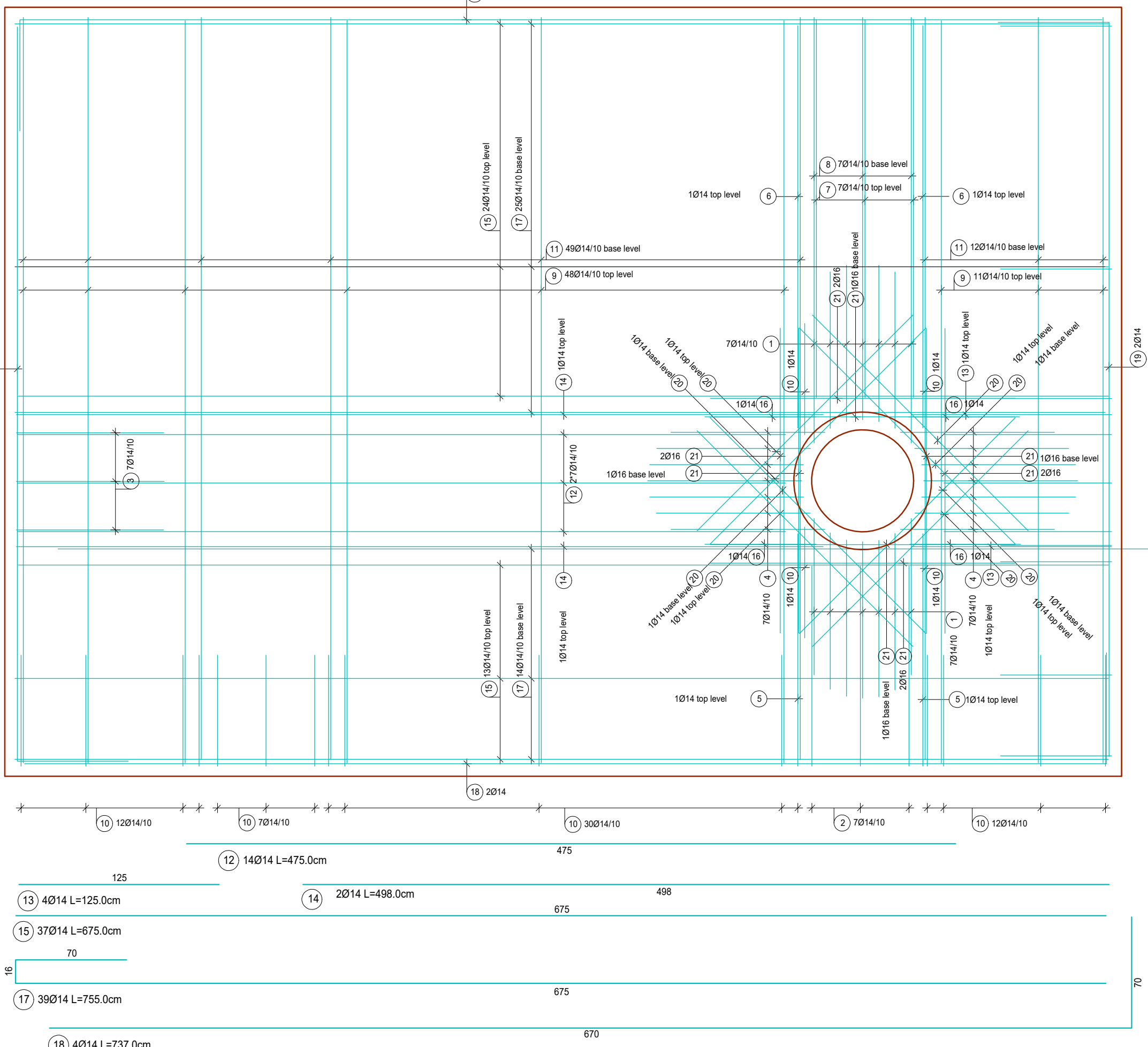
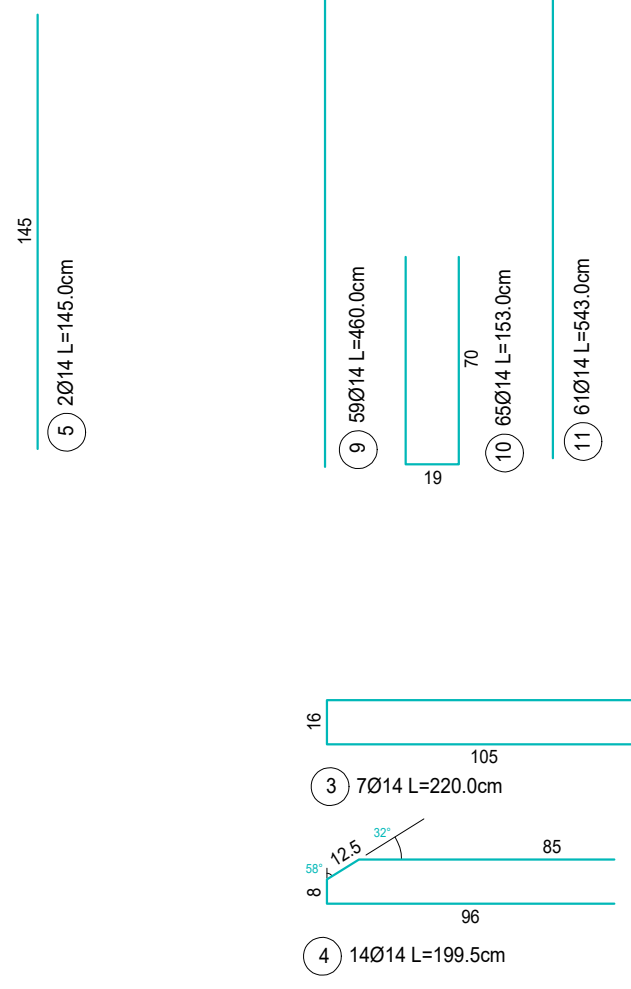
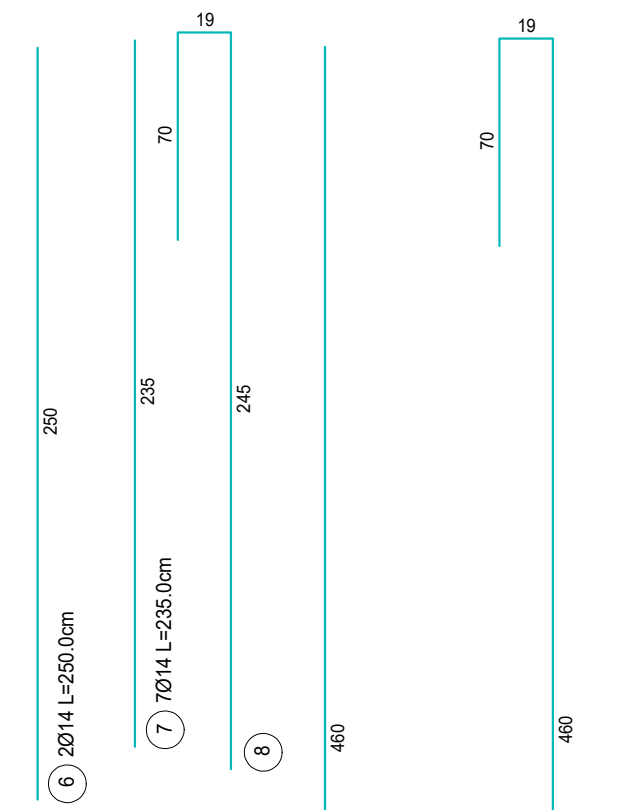
Concrete quality in accordance with DIN EN 1992-1-1/NA

Components	Concrete quality	Exposure classes	Concrete coverage		Special features
Lean concrete	C12/15	X0, WF	Allowance 15mm	Installation size 15mm	
Floor slab	C35/45	XC4, XD3, XF2, XM1, WA	15	60	--
	C35/45	XC3, XD1, XF2, WF	15	55	--
	C35/45	XC2, WF	15	50	--

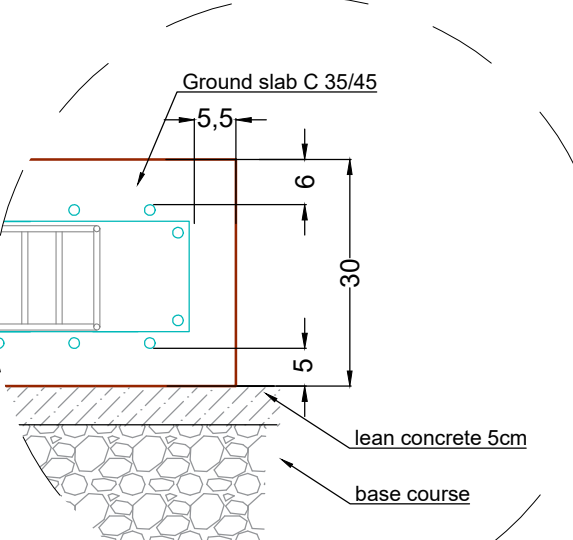
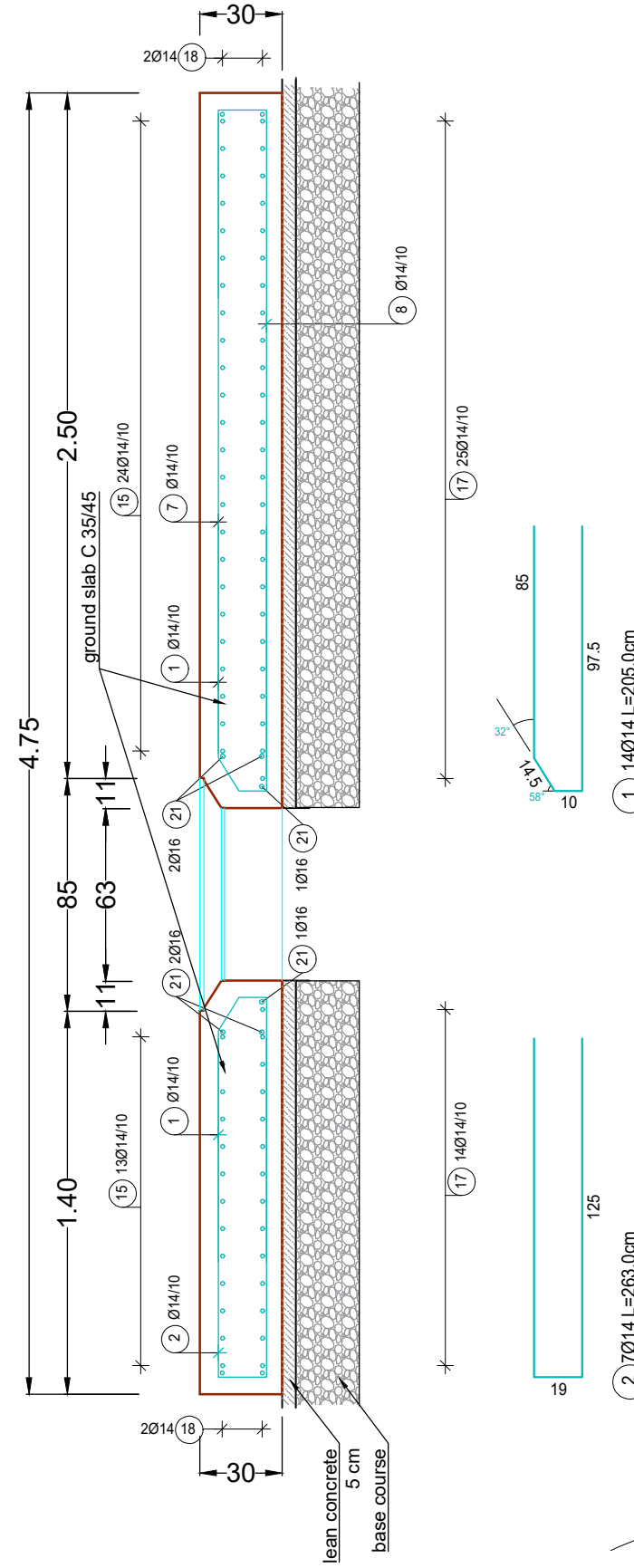
revision			
revision			
D	Concrete reinforcement layout		

Load distribution plate für Platin - Tank 10000 L - SLW 60			
gezeichnet drawn	ISC	Gewicht weight	Otto Graf GmbH Carl-Zeiss-Str. 2-6 DE-79331 Tengen mail@graf.info www.graf.info

Datum date	2020.07.22	Toleranz tolerance	+/- 3%
Maßstab scale	M 1:25	Einheiten units	mm [inch] gal. = US gal.



section A-A



Spacer type DBV-BS

