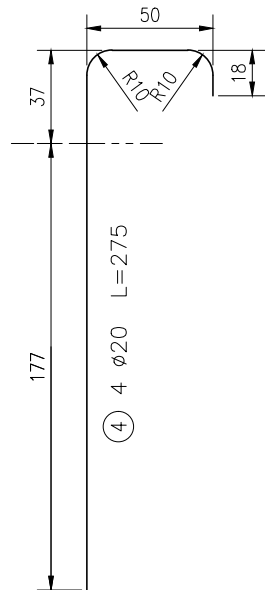
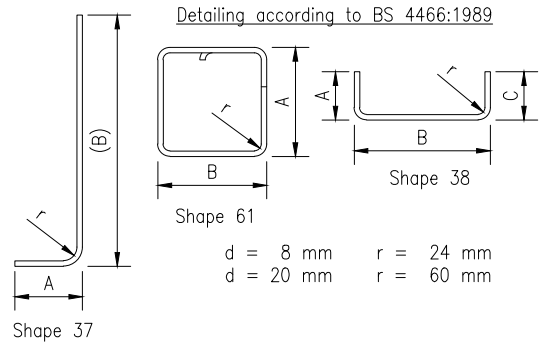
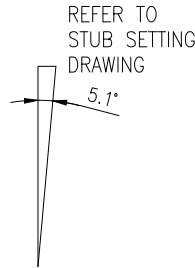
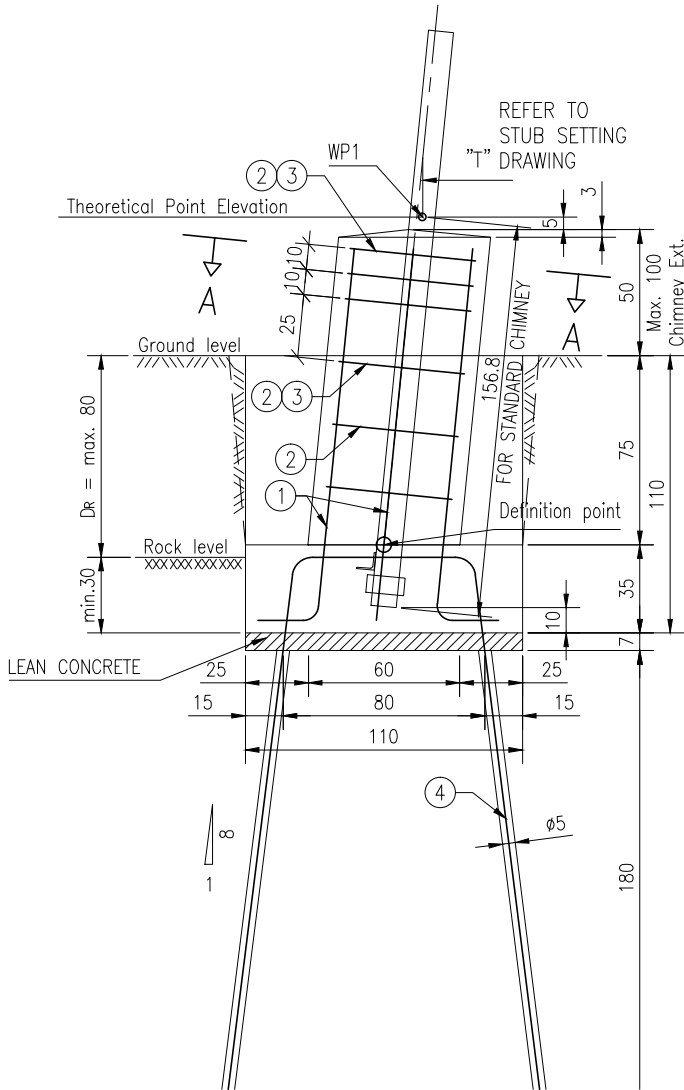
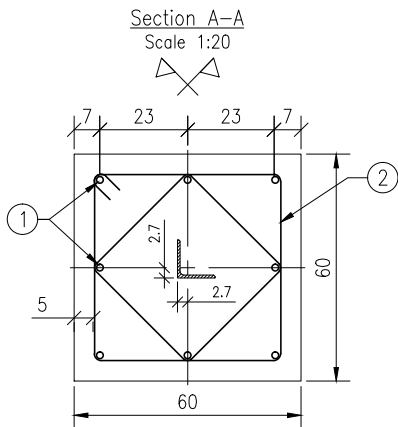
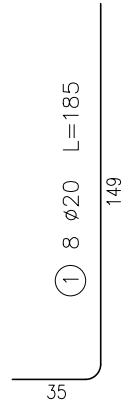
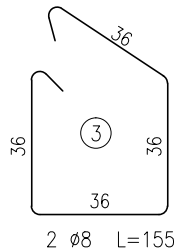
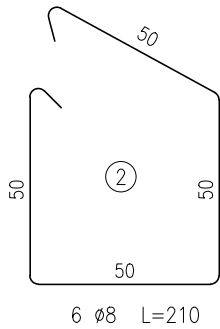


| BASE WIDTH [mm] | | |
|-----------------|-----------|------|
| TOWER TYPE | BODY EXT. | T |
| M | +0 | 4800 |
| | +3 | 5400 |
| | +6 | 6000 |



BAR SCHEDULE – STANDARD CHIMNEY

| Member | Bar mark | Type and size | No.of bars | Length of each bar mm | Shape code | A mm | B mm | C mm | D mm | E/R mm |
|---|----------|---------------|------------|-----------------------|------------|-----------------------|---------|-------|------|--------|
| Chimney | 1 | X20 | 8 | 1850 | 37 | 350 | 1490 | — | — | — |
| Chimney | 2 | X8 | 6 | 2100 | 61 | 500 | 500 | — | — | — |
| Chimney | 3 | X8 | 2 | 1550 | 61 | 360 | 360 | — | — | — |
| Anchors | 4 | X20 | 4 | 2750 | — | 2140 | 500 | 180 | — | 100 |
| SUMMARY OF MATERIALS AND WORKS (ONE LEG) | | | | | | | ø20 | ø16 | ø8 | |
| Total length per dia. : | | | | | | m | 25.8 | 15.7 | | |
| Unit weight of reinforcing steel : | | | | | | kg | 2.467 | 0.395 | | |
| Total weight of reinforcing steel (per dia) : | | | | | | kg | 63.6 | 6.2 | | |
| Total weight of reinforcement : | | | | | | | 69.8 Kg | | | |
| Excavation : 1.416 m ³ | | | | | Concrete : | 0.871 m ³ | | | | |
| Backfilling : 0.720 m ³ | | | | | Blinding : | 0.085 m ³ | | | | |
| | | | | | Mortar : | 0.0119 m ³ | | | | |

BAR SCHEDULE – EXTENDED CHIMNEY (+50cm)

| Member | Bar mark | Type and size | No.of bars | Length of each bar mm | Shape code | A mm | B mm | C mm | D mm | E/R mm |
|---|----------|---------------|------------|-----------------------|------------|------|-----------------------|---------|-------|--------|
| Chimney | 1 | X20 | 8 | 2350 | 37 | 350 | 1990 | — | — | — |
| Chimney | 2 | X8 | 8 | 2100 | 61 | 500 | 500 | — | — | — |
| Chimney | 3 | X8 | 3 | 1550 | 61 | 360 | 360 | — | — | — |
| Pad | 4 | X20 | 4 | 2750 | — | 2140 | 500 | 180 | — | 100 |
| SUMMARY OF MATERIALS AND WORKS (ONE LEG) | | | | | | | ø20 | ø16 | ø8 | |
| Total length per dia. : | | | | | | | m | 29.8 | 21.5 | |
| Unit weight of reinforcing steel : | | | | | | | kg | 2.467 | 0.395 | |
| Total weight of reinforcing steel (per dia) : | | | | | | | kg | 73.5 | 8.5 | |
| Total weight of reinforcement : | | | | | | | | 82.0 Kg | | |
| Excavation : 1.416 m ³ | | | | | Concrete : | | 1.053 m ³ | | | |
| Backfilling : 0.720 m ³ | | | | | Blinding : | | 0.085 m ³ | | | |
| | | | | | Mortar : | | 0.0119 m ³ | | | |

NOTES:

GENERAL NOTES:

- DIMENSIONS IN cm OR AS SPECIFIED.
- STUB ANGLE MODIFIED FROM DRAWING NO. KC06.0040_OHL_STR_22-05-03 sh.016.
- DIMENSION "T" TO BE CHECKED WITH TOWER'S ERECTION DRAWINGS.
- IF ROCK LEVEL IS LOWER THAN $D_R = 80\text{cm}$ THE TOTAL DEPTH OF THE FOUNDATION SHALL BE INCREASED TO ENSURE THE MINIMUM 30cm EMBEDMENT OF THE PAD IN ROCK.

FOUNDATION DESIGN PARAMETERS:

- CONSIDERED WATER LEVEL IS ALWAYS BELOW FOUNDATION.
- SOIL TYPE ROCK:
 - SOIL UNIT WEIGHT: 1900 kg/m^3 .
 - ULTIMATE BEARING CAPACITY: 30 daN/cm^2 .
 - ALLOWABLE BEARING CAPACITY: 10 daN/cm^2 .
- LOADING AS SHOWN IN TOWER DESIGN CALCULATION.
- IF ANY OF THE ABOVE ASSUMPTIONS ARE FOUND TO BE INVALID IMMEDIATELY CEASE CONSTRUCTION AND CONTACT THE ENGINEER.

CONCRETE MATERIAL:

- MINIMUM 28 DAYS COMPRESSIVE STRENGTH: 25 N/mm^2 .
- REINFORCED CONCRETE DESIGN, BAR SCHEDULE, DETAILING AND EXTENSIONS OF REBARS WILL BE ACCORDING TO BS 8110 AND BS 4466. REBAR EXTENSION BY OVERLAPPING ON 50 DIA.
- CONCRETE COVER: 5 cm.
- LEAN CONCRETE SHALL HAVE THE FOLLOWING RATIO OF CEMENT : FINE AGGREGATE : COARSE AGGREGATE = 1 : 3 : 5, MEASURED BY VOLUME.

REINFORCING STEEL MATERIAL:

- ϕ = REBAR DIAMETER IN mm.
- REINFORCED CONCRETE DESIGN, BAR SCHEDULE, DETAILING AND EXTENSIONS OF REBARS WILL BE ACCORDING TO BS 8110 AND BS 4466. REBAR EXTENSION BY OVERLAPPING ON 50 DIA.
- MAIN REINFORCEMENT SHALL BE DEFORMED BARS OF HIGH TENSILE STEEL WITH MINIMUM YIELD STRENGTH: $F_y = 500 \text{ N/mm}^2$.
- LINKS SHALL BE OF PLAIN BARS OF MILD STEEL WITH MINIMUM YIELD STRENGTH: $F_y = 240 \text{ N/mm}^2$.

| | | | | | |
|--|----------|----------------------|--|---------|----------|
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| | | | | | |
| 01 | 27/05/13 | First issue; | | | |
| REV. | dd/mm/yy | REVISION DESCRIPTION | PG | SI | VR |
| | | | DRAWN | CHECKED | APPROVED |
| <div><div><div>CG Holdings Belgium NV</div><div>Systems Division</div><div>Antwerpsesteenweg 167, B-2800 Mechelen Tel. : +32(0)15/283 333 Fax : +32(0)15/283 491 www.cgglobal.com</div></div></div> | | | CLIENT: | | |
| | | | MINISTRY OF ENERGY - REPUBLIC OF KENYA | | |
| <div>ISO Symbol:</div> <div></div> <div>SCALE: 1/30</div> <div>LAYOUT: A3</div> | | | DRAWING TITLE : | | |
| | | | 132 kV OHL Nanyuki - Isiolo - Meru Rock Anchor Foundation Type MFR for Tower Type M | | |
| THIS DRAWING SHALL NOT BE COPIED,REPRODUCED,TRANSMITTED OR GRANTED TO THIRD PARTIES WITHOUT OUR PRIOR AGREEMENT | | | DRAWING No.: 100008-L0-DG-CW08 | | |