OPERATING TANK 5000m³

FLACHBODENTANK 5000m³

1

C-1.1 GENERAL PLAN, TOP VIEW
ÜBERSICHTSPLAN, DRAUFSICHT

C-1.2 GENERAL PLAN, SECTIONS
ÜBERSICHTSPLAN, SCHNITTE

C-1.3 GENERAL PLAN, DETAILS
ÜBERSICHTSPLAN, DETAILS

C-1.3.1 GENERAL PLAN, DETAILS
ÜBERSICHTSPLAN, DETAILS

C-1.3.2 HINGED COVER
KLAPPDECKEL

C-1.4 DETAILS-MANHOLES AND LEAKAGE CONTROL PIT
DETAILS-MONTAGEÖFFNUNGEN UND LECKKONTROLLSCHACHT

C-1.5 CONSTRUCTION PLAN, PUMP HOUSE
BAUKONSTRUKTIONSPLAN, PUMPENHAUS

C-1.6 FORMWORK PLAN, PUMP HOUSE, ROOF AND WALLS
SCHALPLAN, PUMPENHAUS, DECKE UND WÄNDE

C-1.7 FORMWORK PLAN, PUMP HOUSE, SLAB AND WALL
SCHALPLAN, PUMPENHAUS, BODENPLATTE UND WAND

C-1.8 FORMWORK PLAN, ROOF SLAB
SCHALPLAN, DECKENPLATTE

C-1.9 FORMWORK PLAN, DETAILS ROOF- AND FLOOR SLAB
SCHALPLAN, DETAILS DECKEN- UND BODENPLATTE

S-1.1 COVERS, MANHOLES AND LEAKAGE CONTROL PIT
ABDECKUNGEN, FÜR MONTAGEÖFFNUNGEN UND LECKKONTROLLSCHACHT

S-1.2 LOWER REIMFORCEMENT FLOOR SLAB
UNTERE BEWEHRUNG BODENPLATTE

S-1.3 UPPER REIMFORCEMENT FLOOR SLAB
OBERE BEWEHRUNG BODENPLATTE

S-1.4 REINFORCEMENT LEAKAGE CONTROL PIT
BEWEHRUNG LECKKONTROLLSCHACHT

S-1.5 REINFORCEMENT TANK WALL
BEWEHRUNG TANKWAND

S-1.6 LOWER REIMFORCEMENT ROOF SLAB
UNTERE BEWEHRUNG DECKENPLATTE

S-1.7 UPPER REIMFORCEMENT ROOF SLAB
OBERE BEWEHRUNG DECKENPLATTE

S-1.8 REINFORCEMENT PUMP HOUSE WALLS
BEWEHRUNG PUMPENHAUSWÄNDE

S-1.9 REINFORCEMENT PUMP HOUSE ROOF SLAB
BEWEHRUNG PUMPENHAUSDECKE

S-1.10 STEEL TANK
STAHLTANK

S-1.11 DETAILS, STEEL TANK
DETAILS, STAHLTANK

S-1.12 TANK STAIRS AND SPLINTER PROTECTION DOORS
TANKTREPPE UND SPLITTERSCHUTZTÜREN

M-1.1 MECHANICAL INSTALLATION
MASCHINENTECHNISCH INSTALLATION

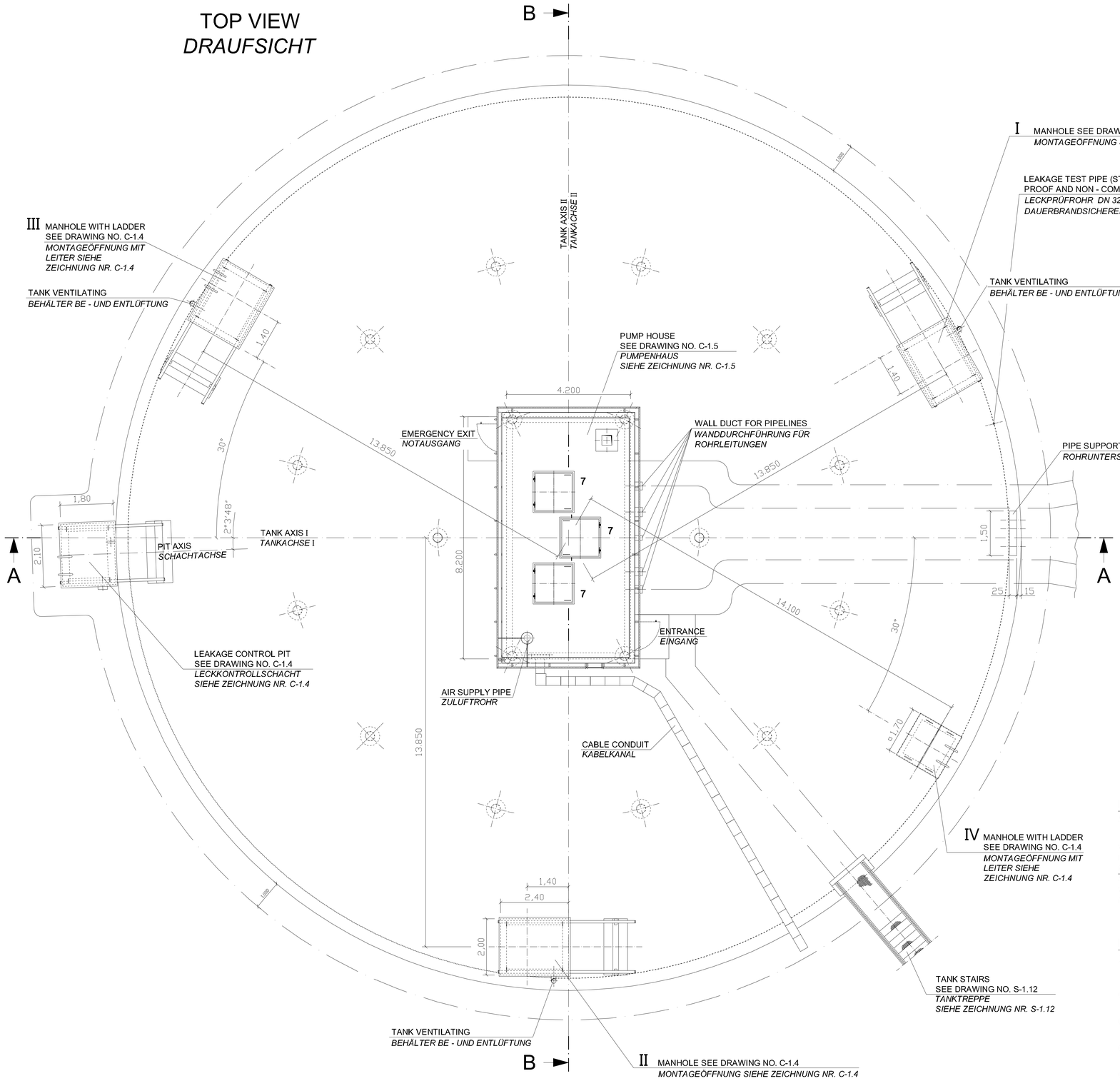
M-1.2 MECH. INSTALL. LEAKAGE CONTROL PIT AND DETAILS
MASCH. INSTALL. LECKKONTROLLSCHACHT U. DETAILS

E-1.1 GROUNDING- AND LIGHTNING PROTECTION PLAN
ERDUNGS- UND BLITZSCHUTZPLAN

E-1.2 ELEC. INSTALL. PUMP HOUSE A. LEAKAGE CONTROL PIT
ELEK. INST. PUMPENHAUS U. LECKKONTROLLSCHACHT

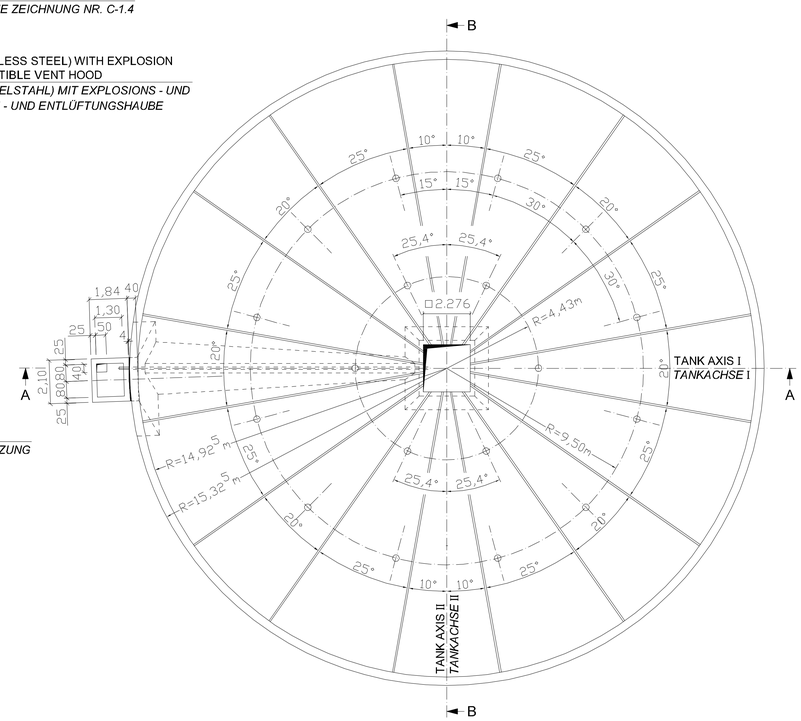
E-1.3 ELEC. DIAGRAMS PUMP HOUSE A. LEAKAGE CONTROL PIT
SCHALTPLÄNE PUMPENHAUS U. LECKKONTROLLSCHACHT

TOP VIEW
DRAUFSICHT



GROUND PLAN FLOOR SLAB
GRUNDRISS BODENPLATTE

CONCRETE WITH FINISH
BETON MIT ESTRICH
SCALE 1:100



NOTES
BEMERKUNGEN

WHEN MARKING OFF THE STRUCTURE LOCATION TO THE MANIFOLD / FILTER STATION IS TO BE PAID ATTENTION TO (ARRANGEMENT OF SUMP)
BEIM ABSTECKEN DES BAUWERKS LAGE ZUR VERTEILER / FILTERSTATION BEACHTEN (SUMPFANORDNUNG)

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.2	GENERAL PLAN, SECTIONS *ÜBERSICHTSPLAN, SCHNITTE*
C-1.3	GENERAL PLAN - DETAILS *ÜBERSICHTSPLAN - DETAILS*
C-1.4	DETAILS - MANHOLES AND LEAKAGE CONTROL PIT *DETAILS - MONTAGEÖFFNUNGEN UND LECKKONTROLLSCHACHT*
C-1.5	CONSTRUCTION PLAN, PUMP HOUSE *BAUKONSTRUKTIONSPLAN, PUMPENHAUS*
S-1.12	TANK STAIRS AND SPLINTER PROTECTION DOOR *TANKTREPPE UND SPLITTERSCHUTZTÜR*

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES
AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US	FLUGPLATZ STANDARDPLANUNG US
JET FUEL STORAGE AND DISPENSING SYSTEMS	FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING / BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION / BEZEICHNUNG: GENERAL PLAN, TOP VIEW / ÜBERSICHTSPLAN, DRAUFSICHT

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L · B · B
ANSCHRIFT: UNTERTORPLATZ 2 ; 76829 LANDAU
TELEFON: (06341) 912-274 TELEFAX: (06341) 912-265
LANDAU,
BY PACKY / IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN KOTSCHENEUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HENNING GOTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

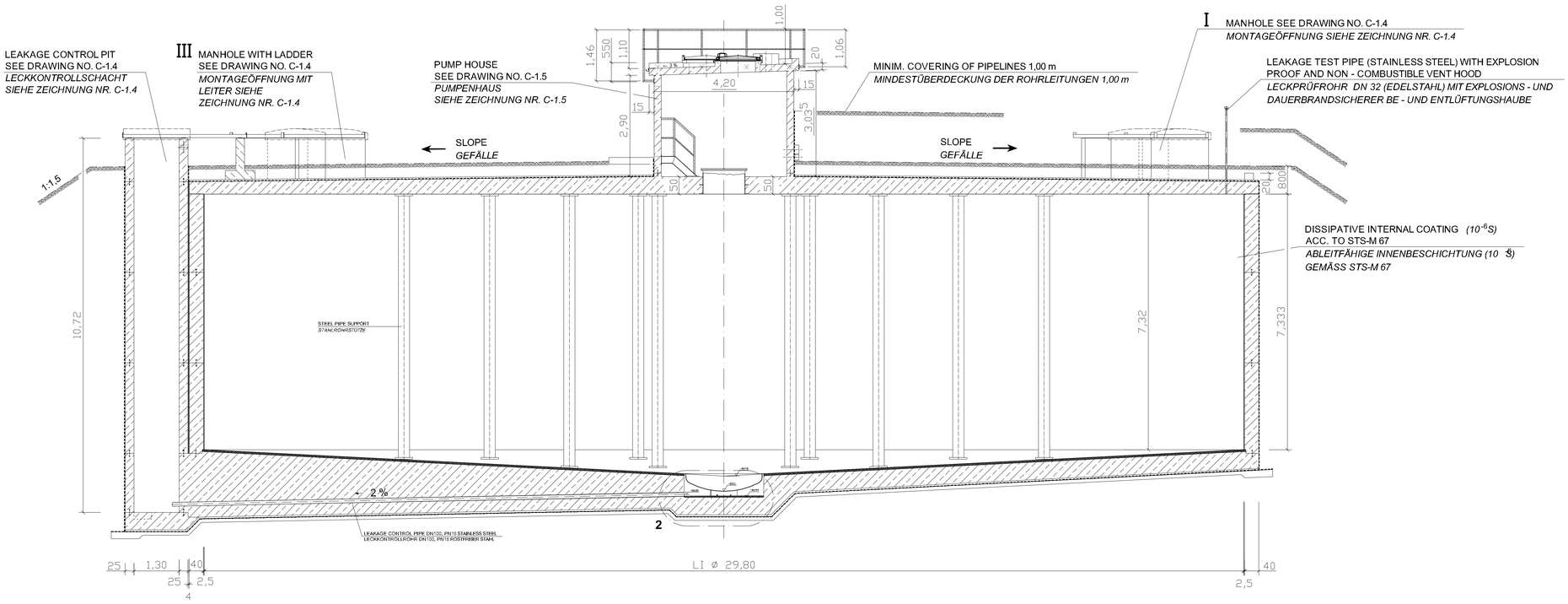
APPROVED/GENEHMIGT DATE/DATUM 6. MAI 2015
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SANKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFRICA / A7PO

SCALE/MASSSTAB 1:100 ; 1:50
STANDARD SHEET/STANDARD PLAN
C - 1.1
CAD-project path:
CAD-Project/dgnfile:

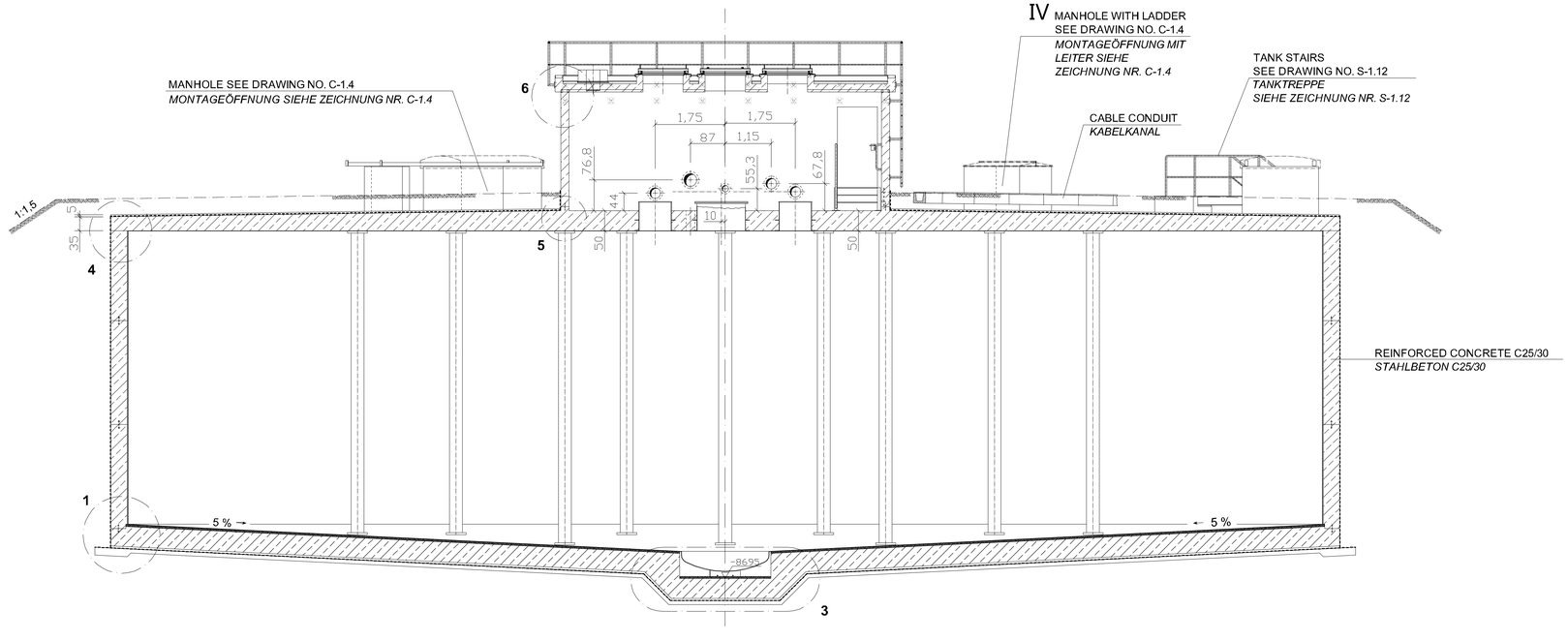
CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. PLAN-NR.
OF VON

SECTION *SCHNITT* A - A



SECTION *SCHNITT* B - B



PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.1	GENERAL PLAN, TOP VIEW *ÜBERSICHTSPLAN, DRAUFSICHT*
C-1.3	GENERAL PLAN - DETAILS *ÜBERSICHTSPLAN - DETAILS*
C-1.3.1	HINGED COVER *KLAPPDECKEL*
C-1.4	DETAILS - MANHOLES AND LEAKAGE CONTROL PIT *DETAILS - MONTAGEÖFFNUNGEN UND LECKKONTROLLSCHACHT*
C-1.5	CONSTRUCTION PLAN, PUMP HOUSE *BAUKONSTRUKTIONSPLAN, PUMPENHAUS*
S-1.1	COVERS , MANHOLES AND LEAKAGE CONTROL PIT ABDECKUNGEN FÜR MONTAGEÖFFNUNGEN UND LECKKONTROLLSCHACHT
S-1.12	TANK STAIRS AND SPLINTER PROTECTION DOOR *TANKTREPPE UND SPLITTERSCHUTZTÜR*

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING BAUWERK: OPERATING TANK 5000m³ FLACHBODENTANK 5000m³

DESIGNATION BEZEICHNUNG: GENERAL PLAN, SECTIONS ÜBERSICHTSPLAN, SCHNITTE

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUVERWALTUNG
LBB-NIEDERLASSUNG LANDAU
L - B - B
ANSCHREIT: UNTERTORPLATZ 1 ; 76829 LANDAU
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LANDAU,
IN VERTRETUNG
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STEFAN HOTSCHENEUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HENNING GOTZ

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EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED GENEHMIGT — DATE DATUM: 6. MAI 2015
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SIMKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFRICA / A7PO

SCALE MASSSTAB: 1:50

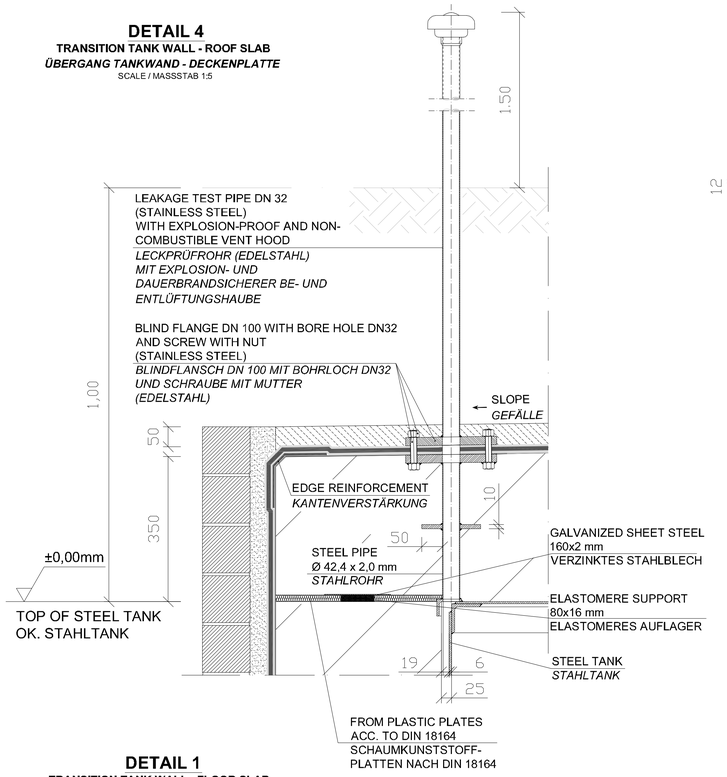
STANDARD SHEET STANDARD PLAN: C - 1.2

CAD-project pathl:
CAD-Proj(ektpfad:

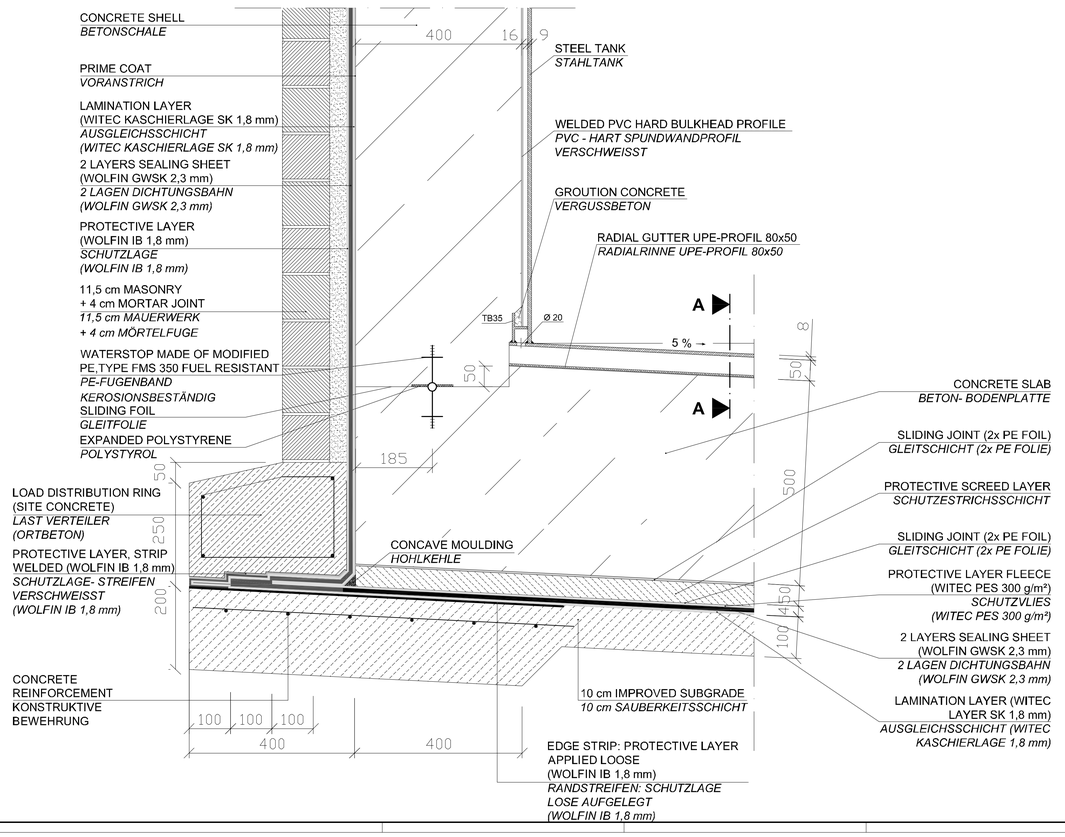
CONSTRUCTION PROJECT
BAUMASSNAHME

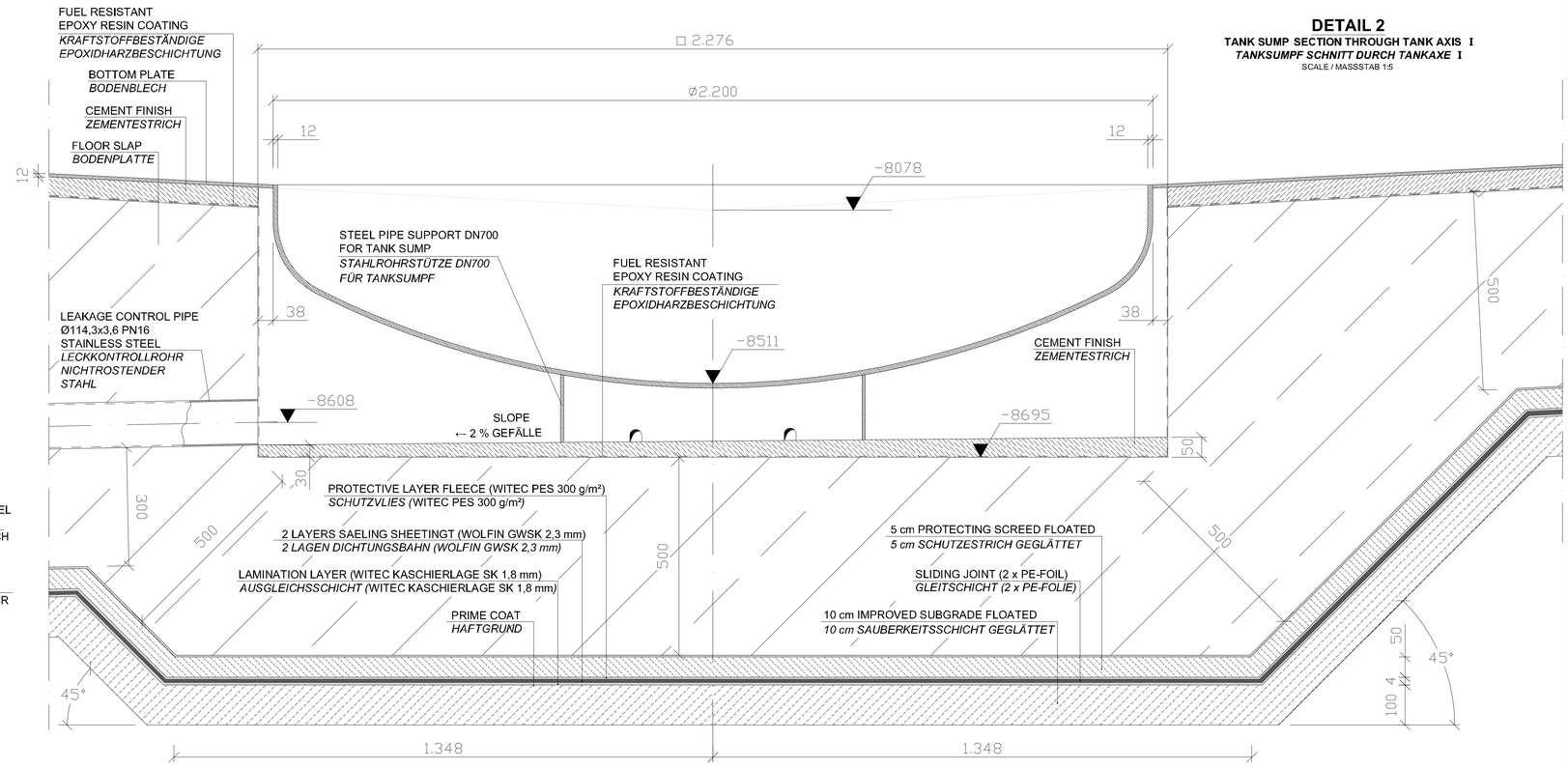
SHEET-NO. PLAN-NR. OF VON

DETAIL 4
TRANSITION TANK WALL - ROOF SLAB
ÜBERGANG TANKWAND - DECKENPLATTE
SCALE / MASSSTAB 1:5



DETAIL 1
TRANSITION TANK WALL - FLOOR SLAB
ÜBERGANG TANKWAND - BODENPLATTE
SCALE / MASSSTAB 1:5





DETAIL 2
TANK SUMP SECTION THROUGH TANK AXIS I
TANKSUMPF SCHNITT DURCH TANKAXE I
SCALE / MASSSTAB 1:5

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES
AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US	FLUGPLATZ STANDARDPLANUNG US
JET FUEL STORAGE AND DISPENSING SYSTEMS	FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING / BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION / BEZEICHNUNG: GENERAL PLAN , DETAILS / ÜBERSICHTSPLAN , DETAILS

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUSTREUERUNG
LBB-NIEDERLASSUNG LANDAU
L B - B
ANSCHRIFT: UNTERTORPLATZ 1, 76829 LANDAU
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LANDAU,
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ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN KOTSCHENREUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HERMING GÖTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED GENEHMIGT	DATE DATUM	SCALE MASSSTAB
ORIGINAL SIGNED BY IN ORIGINAL GEZ. GERALD SANKO COMMAND FUEL FACILITIES ENGINEER HQ USAFE - AFAFRICA / A PK	6. MAI 2015	1:50

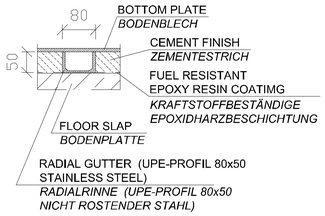
STANDARD SHEET / STANDARD PLAN: C - 1.3

CAD-project path:
CAD-file(s)/stamp:

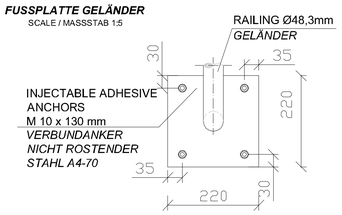
CONSTRUCTION PROJECT / BAUMASSNAHME

SHEET-NO. / PLAN-NR. OF / VON

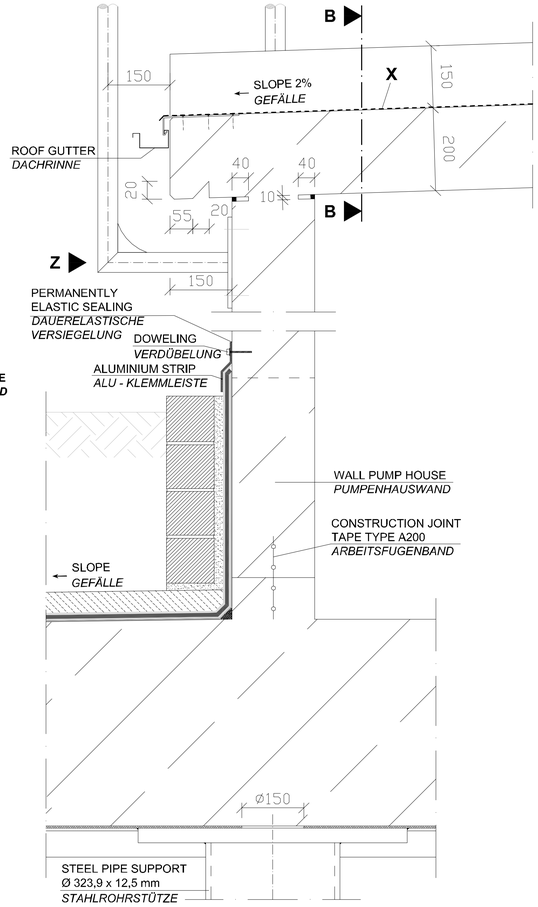
SECTION A - A
SCHNITT
RADIAL GUTTER
RADIALRINNE
SCALE / MASSSTAB 1:5



VIEW Z
ANSICHT
BASE PLATE RAILING
FUSSPLATTE GELÄNDER
SCALE / MASSSTAB 1:5



DETAIL 6
ROOF PUMP HOUSE
PUMPENHAUSDACH
SCALE / MASSSTAB 1:5

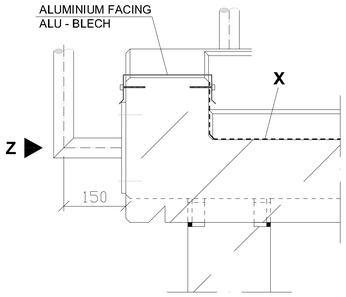


DETAIL 5
WALL PUMP HOUSE
PUMPENHAUSWAND
SCALE / MASSSTAB 1:5

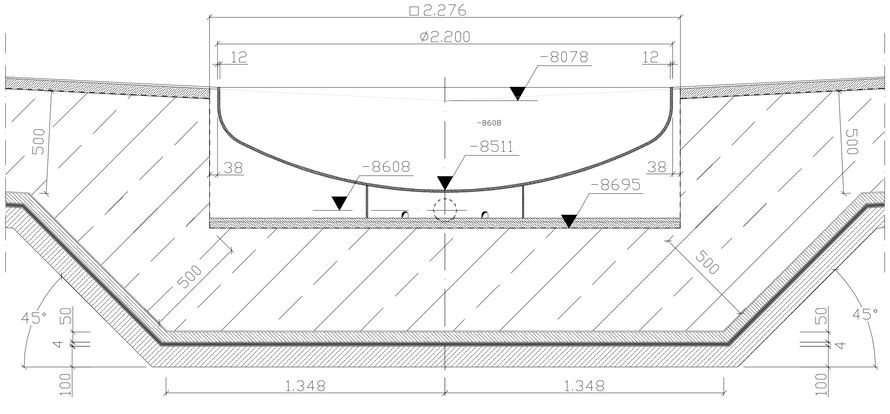
X

- TWO-LAYERED ROOF SEALING
- COMPENSATION AND VAPOUR BARRIER FOR UNVENTILATED ROOF
- SEPARATING LAYER
- PRIME COAT BITUMINOUS SOLUTION
- ZWEILAGIGE DACHABDICHTUNG
- AUSGLEICHS- UND DAMPFSPERRE FÜR UNBELÜFTETES DACH
- TRENNSCHICHT
- VORANSTRICH BITUMENLÖSUNG

SECTION B - B
SCHNITT
ROOF PUMP HOUSE
PUMPENHAUSDACH
SCALE / MASSSTAB 1:5



DETAIL 3
TANK SUMP SECTION THROUGH TANK AXIS II
TANKSUMPF SCHNITT DURCH TANKAXE II
SCALE / MASSSTAB 1:10



REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES
AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US	FLUGPLATZ STANDARDPLANUNG US
JET FUEL STORAGE AND DISPENSING SYSTEMS	FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING / BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION / BEZEICHNUNG: GENERAL PLAN , DETAILS / ÜBERSICHTSPLAN , DETAILS

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L · B · B
ANSCHRIFT: UNTERTORPLATZ 1, 76829 LANDAU
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LANDAU,
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ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN VOTSCHKINEUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HENNING GÖTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

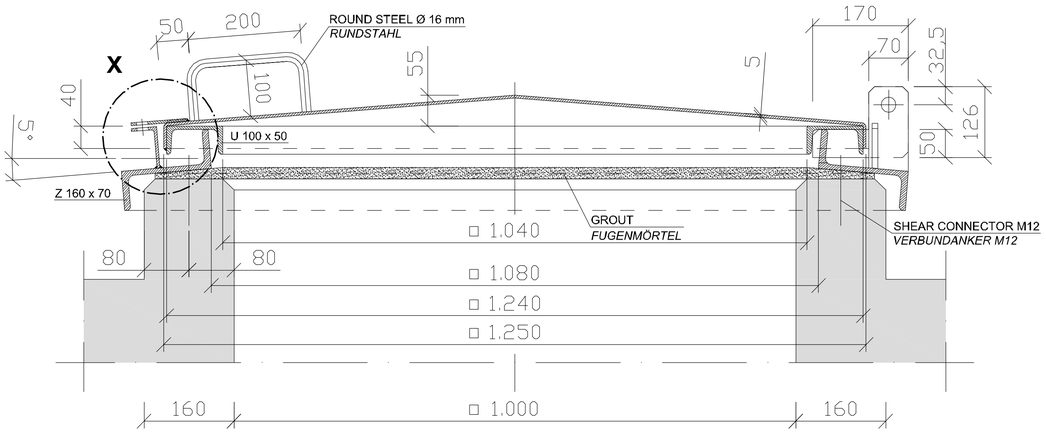
APPROVED/GENEHMIGT DATE/DATUM: 6. MAI 2015
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SANKO
COMMANDER FUEL FACILITIES ENGINEER
HQ USAFE - AFAFRICA / A PO

SCALE/MASSSTAB: 1:50
STANDARD SHEET/STANDARD PLAN: C - 1.3.1
CAD-project path: CAD-Projektpfad:

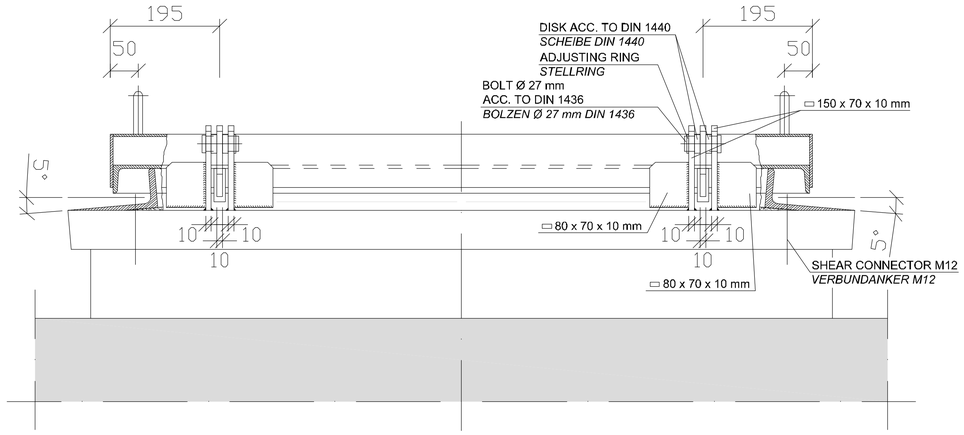
CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. PLAN-NR. OF VON

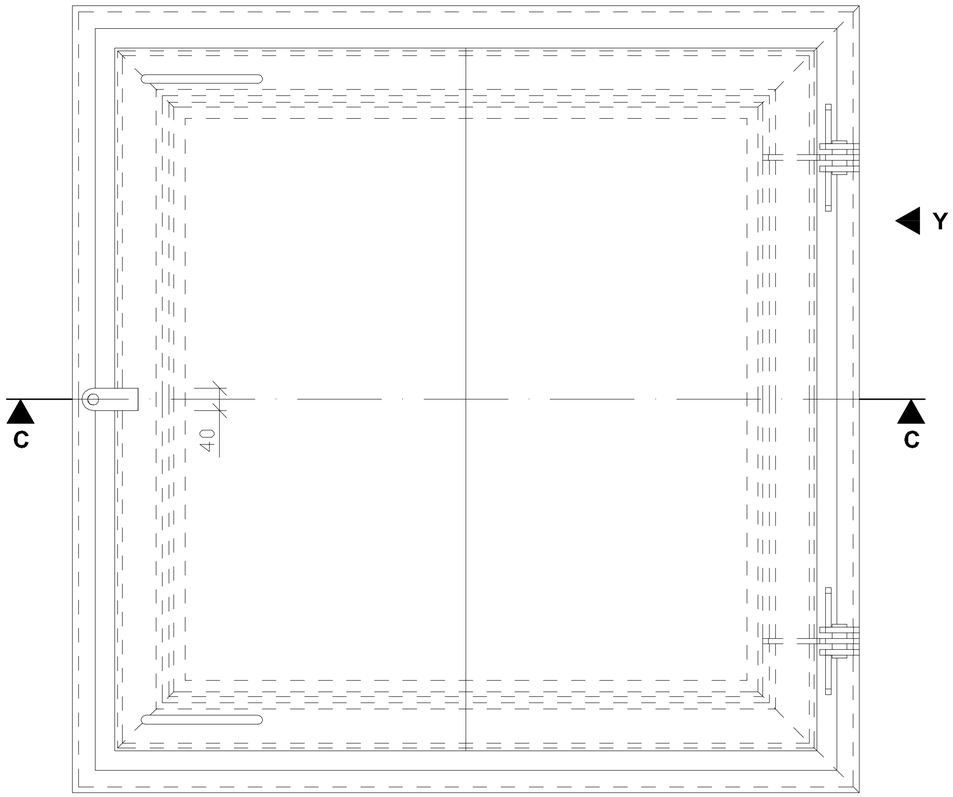
SECTION C - C
SCHNITT
SCALE / MASSSTAB 1:5



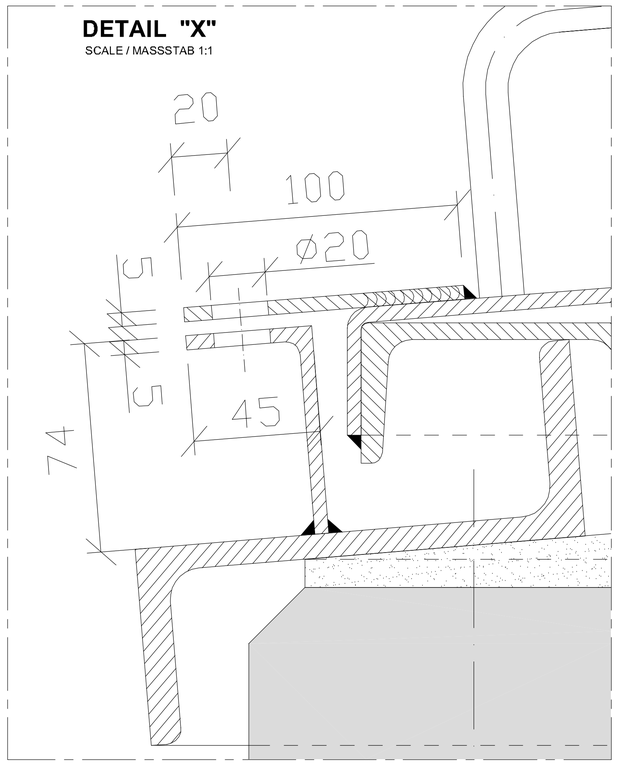
VIEW Y
ANSICHT
HINGED COVER
KLAPPDECKEL
SCALE / MASSSTAB 1:5



DETAIL 7
HINGED COVER
KLAPPDECKEL
SCALE / MASSSTAB 1:5



DETAIL "X"
SCALE / MASSSTAB 1:1



NOTES
BEMERKUNGEN

THE HINGED COVER MUST BE SECURED WITH ARMOURED PADLOCKS "PANZER" OF STAINLESS STEEL, LOCKING BOLT Ø 12mm

DIE KLAPPDECKEL SIND MIT GEPANZERTEN VORHÄNGESCHLÖSSER "PANZER" AUS EDELSTAHL, SCHLIESSBOLZEN Ø 12mm ZU SICHERN.

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING / BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION / BEZEICHNUNG: HINGED COVER / KLAPPDECKEL

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L · B · B
ANSCHRIFT: UNTERTORPLATZ 1 ; 76829 LANDAU
TELEFON: (06341) 912-276 TELEFAX: (06341) 912-291
LANDAU,
BY PROXY / IN VERTRETUNG
ORIGINAL SIGNED BY / IM ORIGINAL GEZ.
STEFAN KOTSCHENREUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
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HENNING GÖTZ

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APPROVED / GENEHMIGT — DATE / DATUM: 6. MAI 2015
ORIGINAL SIGNED BY / IM ORIGINAL GEZ.
GERALD SANIO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFRICA / APO

SCALE / MASSSTAB: 1:5 ; 1:10

STANDARD SHEET / STANDARD PLAN: C - 1.3.2

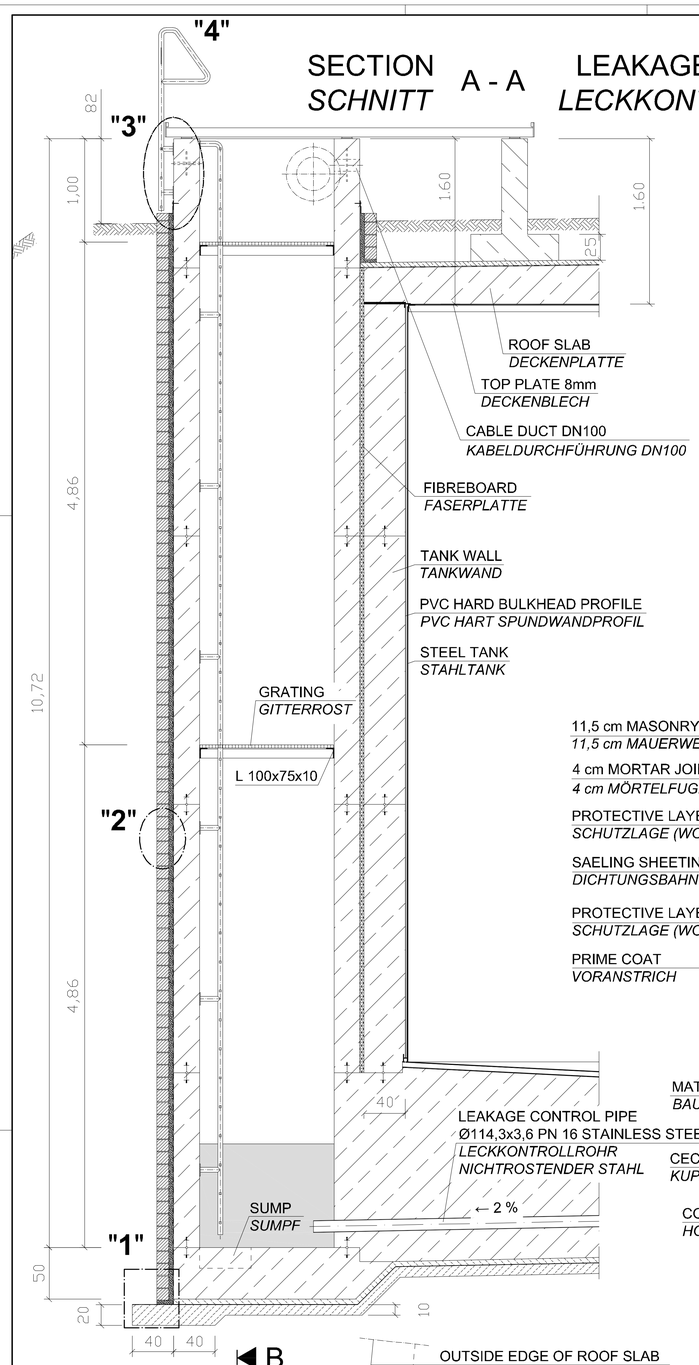
CAD-project path: / CAD-Projektpfad:

CONSTRUCTION PROJECT / BAUMASSNAHME

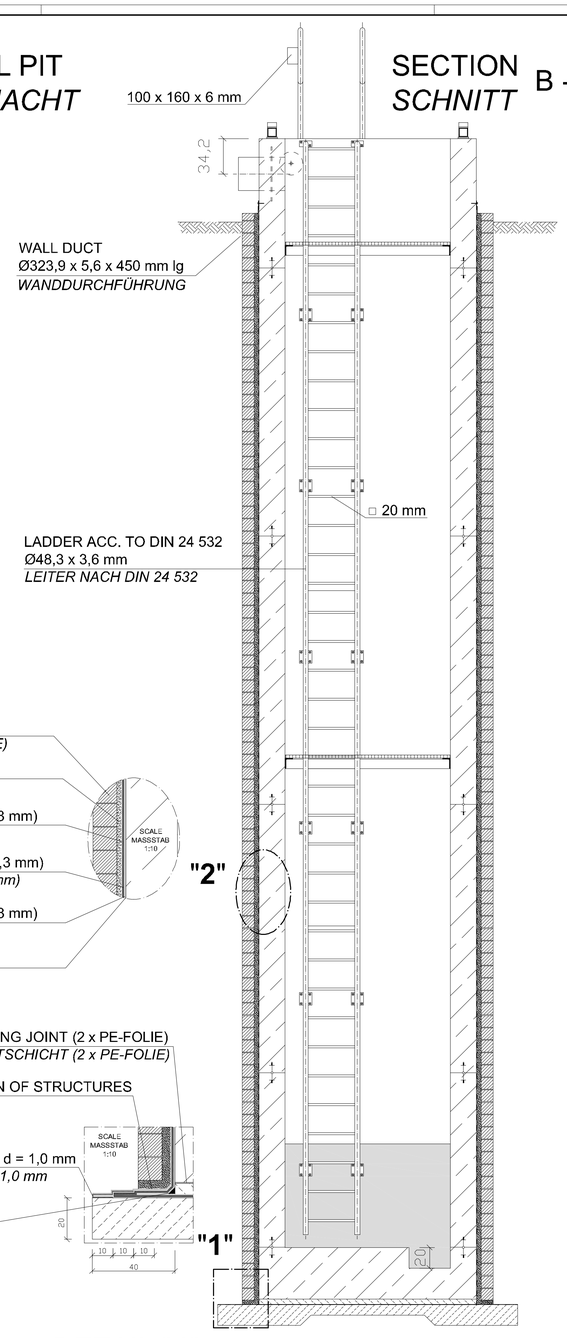
SHEET-NO. / PLAN-NR. — OF / VON

MANHOLES I - III (I AND II WITHOUT LADDER)
MONTAGEÖFFNUNGEN I-III (I UND II OHNE LEITER)

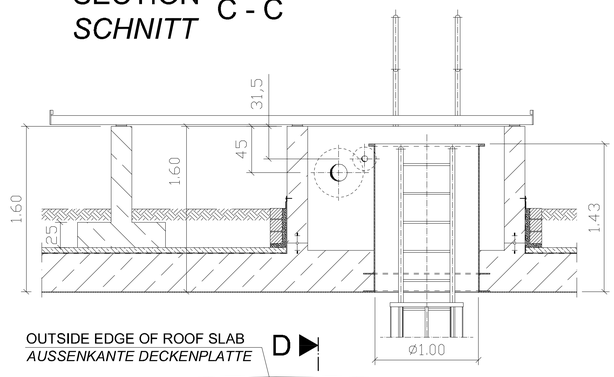
SECTION A - A *SCHNITT*
LEAKAGE CONTROL PIT *LECKKONTROLLSCHACHT*



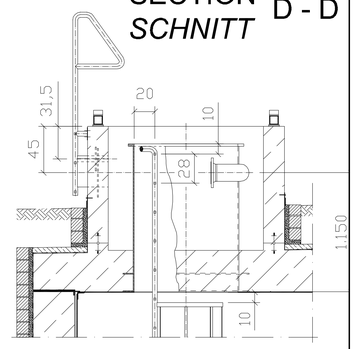
SECTION B - B *SCHNITT*

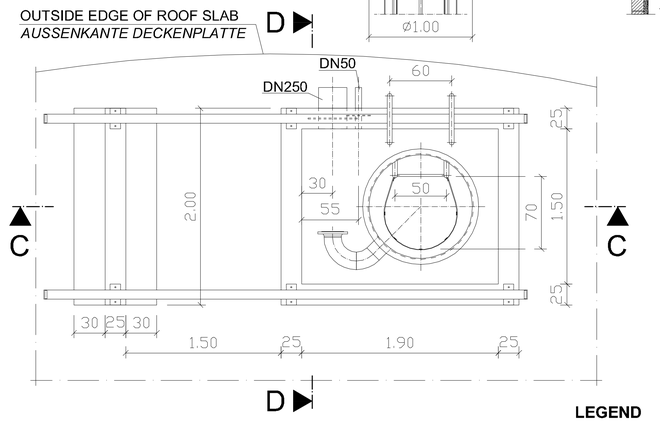


SECTION C - C *SCHNITT*



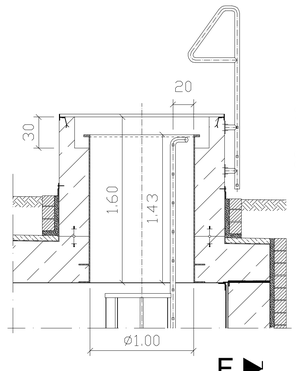
SECTION D - D *SCHNITT*





MANHOLE IV WITH LADDER
MONTAGEÖFFNUNG IV MIT LEITER

SECTION E - E *SCHNITT*



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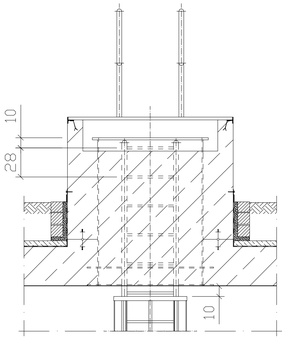
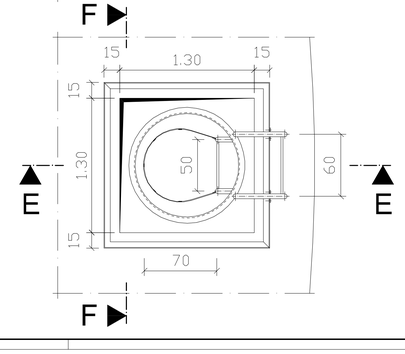
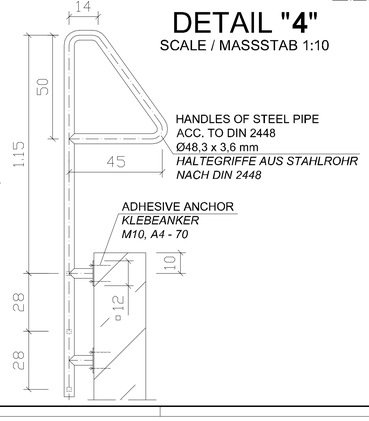
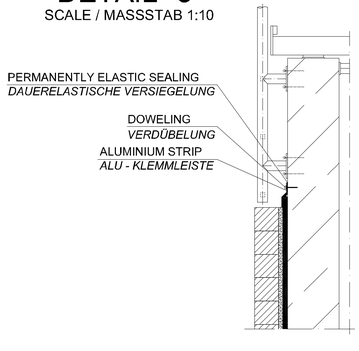


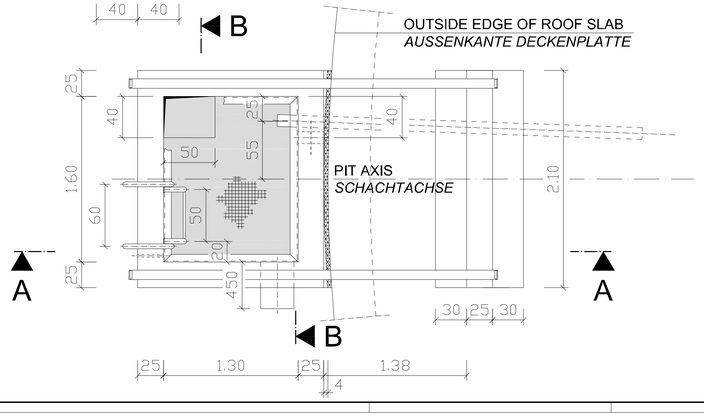


DETAIL "4"
SCALE / MASSSTAB 1:10



DETAIL "3"
SCALE / MASSSTAB 1:10





LEGEND
LEGENDE

FUEL RESISTANT PLASTIC COATING / DISSIPATIVE *(10^{-6} S)*
KRAFTSTOFFBESTÄNDIGE KUNSTSTOFFBESCHICHTUNG / ABLEITFÄHIG (10^{-6} S)

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.1	GENERAL PLAN, TOP VIEW *ÜBERSICHTSPLAN, DRAUFSICHT*
C-1.2	GENERAL PLAN - SECTIONS *ÜBERSICHTSPLAN - SCHNITTE*
S-1.1	COVERS , MANHOLES AND LEAKAGE CONTROL PIT ABDECKUNGEN FÜR MONTAGEÖFFNUNGEN UND LECKKONTROLLSCHACHT

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION BEZEICHNUNG: DETAILS - MANHOLES AND LEAKAGE CONTROL PIT / DETAILS - MONTAGEÖFFNUNGEN UND LECKKONTROLLSCHACHT

WORKED/BEARBEITET

PREPARED/AUFGESTELLT: LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG, LBB-NIEDERLASSUNG LANDAU, L - B - B, ANSCHRIFT: UNTERTORPLATZ 2 | 76829 LANDAU, TELEFON: (06341) 912-274 TELEFAX: (06341) 912-261, LANDAU, BY PAOV / IN VERTRETUNG, ORIGINAL SIGNED BY IN ORIGINAL GEZ., STEFAN KOTSCHENEUTHER

APPROVED/GENEHMIGT: AMT FÜR BUNDESBAU, WALLSTR.1, 55122 MAINZ, ORIGINAL SIGNED BY IN ORIGINAL GEZ., HENNING GOTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

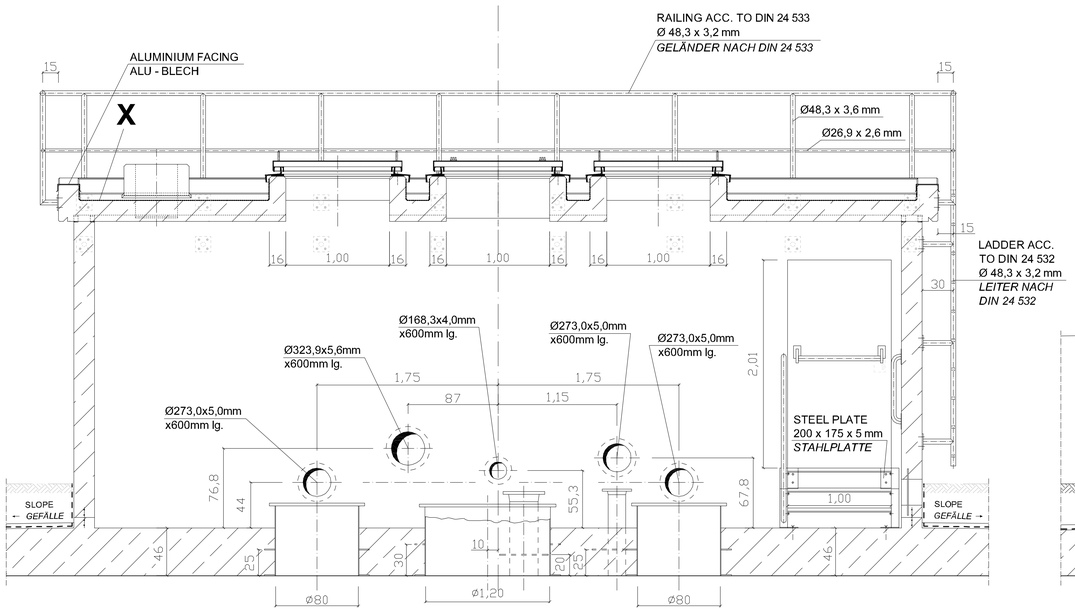
APPROVED/GENEHMIGT DATE DATUM 6. MAI 2015
ORIGINAL SIGNED BY IN ORIGINAL GEZ.
GERALD SANKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFRICA / A7PO

SCALE MASSSTAB 1:20 ; 1:10
STANDARD SHEET STANDARD PLAN
C - 1.4
CAD-project path: CAD-Projektpfad:

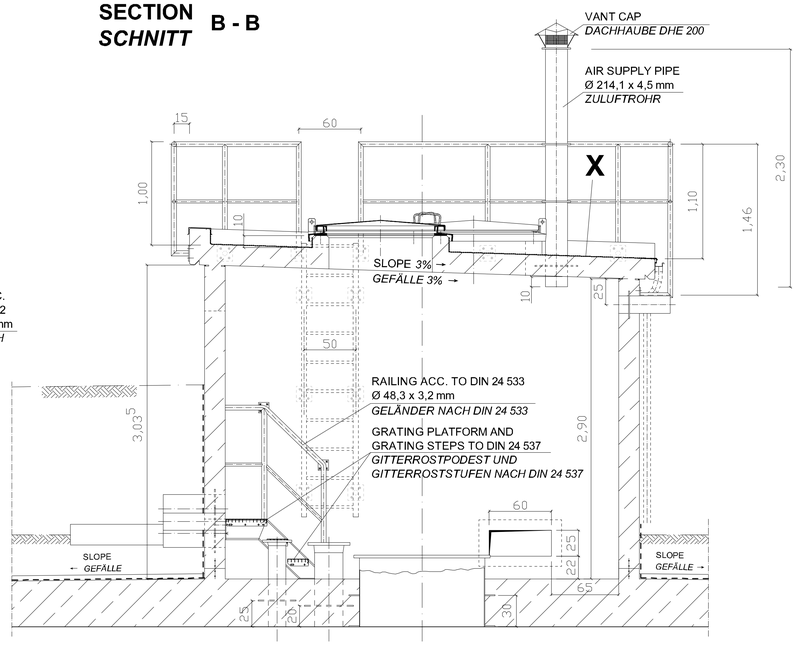
CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. PLAN-NR. OF VON

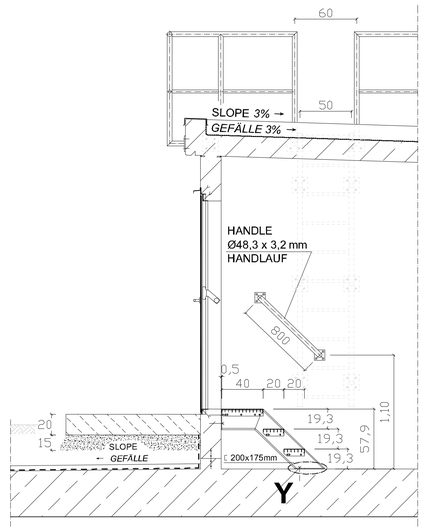
SECTION A - A
SCHNITT



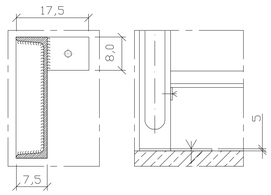
SECTION B - B
SCHNITT



SECTION C - C
SCHNITT

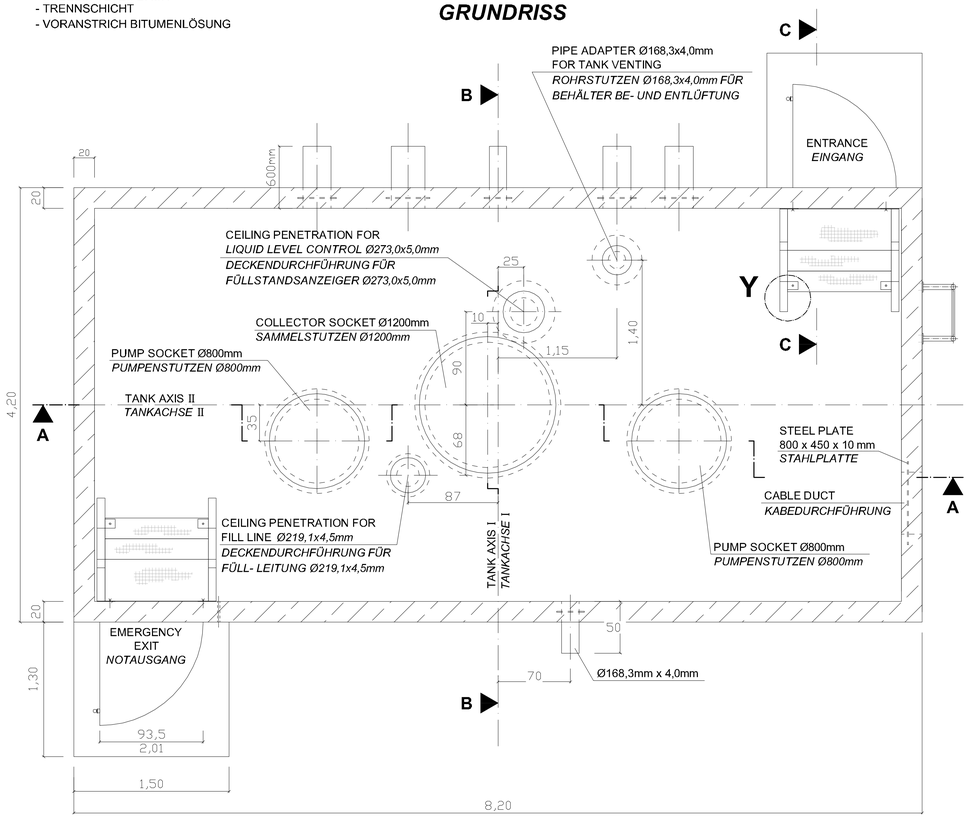


DETAIL "Y"
SCALE / MASSSTAB 1:5

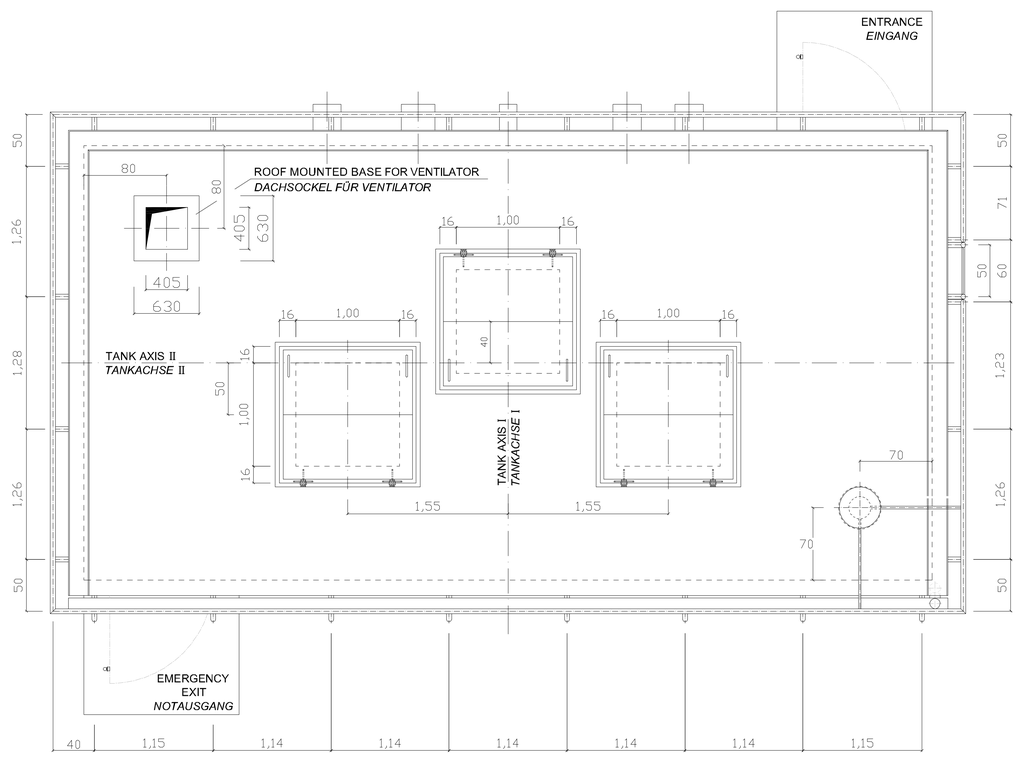


X
- TWO-LAYERED ROOF SEALING
- COMPENSATION AND VAPOUR BARRIER FOR UNVENTILATED ROOF
- SEPARATING LAYER
- PRIME COAT BITUMINOUS SOLUTION
- ZWEILAGIGE DACHABDICHTUNG
- AUSGLEICHS- UND DAMPFSPERRE FÜR UNBELÜFTETES DACH
- TRENNSCHICHT
- VORANSTRICH BITUMENLÖSUNG

GROUND PLAN
GRUNDRISS



TOP VIEW
DRAUFSICHT



PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.3	GENERAL PLAN - DETAILS *ÜBERSICHTSPLAN - DETAILS*
E-1.2	ELECTRICAL INSTALLATION, PUMP HOUSE AND LEAKAGE CONTROL PIT *ELEKTROTECHNISCHE INSTALLATION, PUMPENHAUS UND LECKKONTROLLSCHACHT*

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US	FLUGPLATZ STANDARDPLANUNG US
JET FUEL STORAGE AND DISPENSING SYSTEMS	FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION BEZEICHNUNG: CONSTRUCTION PLAN, PUMP HOUSE / BAUKONSTRUKTIONSPLAN, PUMPENHAUS

WORKED/BEARBEITET:

PREPARED/AUFGESTELLT: LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG, LBB-NIEDERLASSUNG LANDAU, L - B - B, ANSCHRIFT: UNTERTORPLATZ 1 | 76829 LANDAU, TELEFON: (06341) 912-274 TELEFAX: (06341) 912-301, LANDAU, BY PROXY / IN VERTRETUNG, ORIGINAL SIGNED BY / IN ORIGINAL GEZ., STEFAN KOTSCHENREUTHER

APPROVED/GENEHMIGT: AMT FÜR BUNDESBAU, WALLSTR.1, 55122 MAINZ, ORIGINAL SIGNED BY / IN ORIGINAL GEZ., HENNING GÖTZ

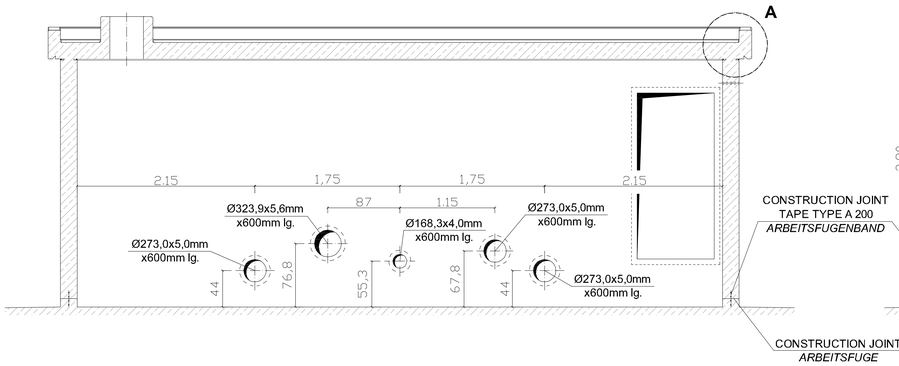
INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED GENEHMIGT	DATE DATUM	SCALE MASSSTAB	1:20 ; 1:5
ORIGINAL SIGNED BY / IN ORIGINAL GEZ., GERALD SANKO, COMMAND FUEL FACILITIES ENGINEER, HQ USAFE - AFAFRICA / LPC	6. MAI 2015	STANDARD SHEET / STANDARD PLAN	C - 1.5
		CAD-project path: / CAD-Projektpfad:	

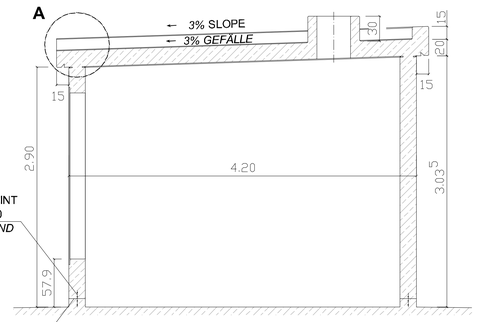
CONSTRUCTION PROJECT / BAUMASSNAHME

SHEET-NO. / PLAN-NR. OF / VON

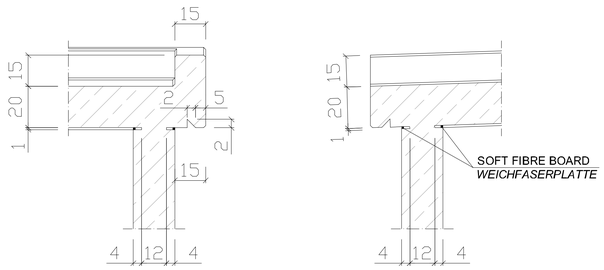
SECTION A - A
SCHNITT



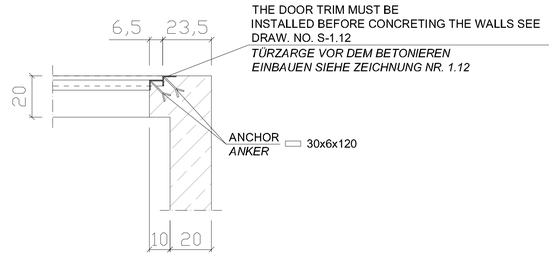
SECTION C - C
SCHNITT



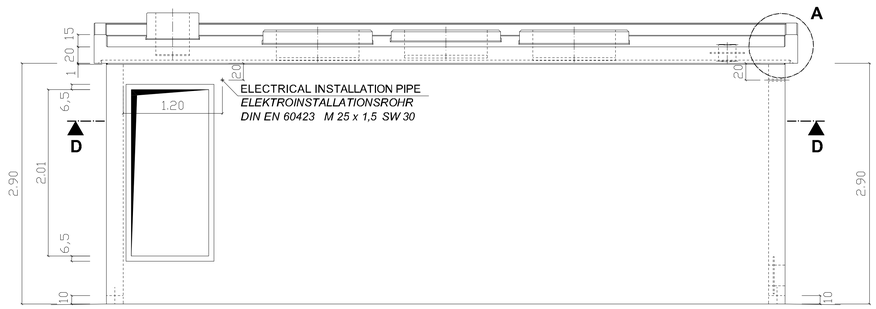
DETAIL A
SCALE 1:10
MASSSTAB 1:10



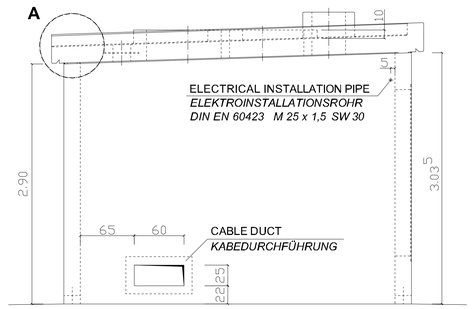
DETAIL B
SCALE 1:10
MASSSTAB 1:10



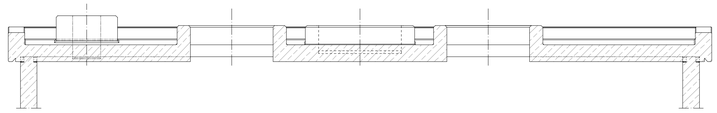
VIEW Z
ANSICHT



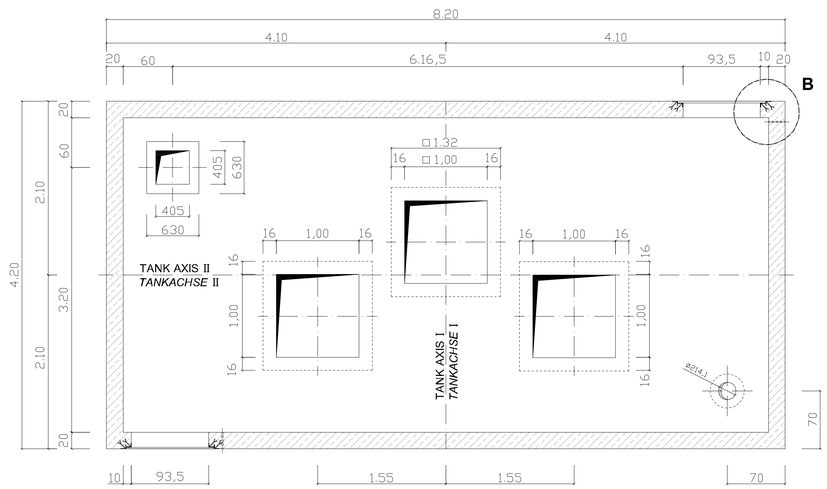
VIEW Y
ANSICHT



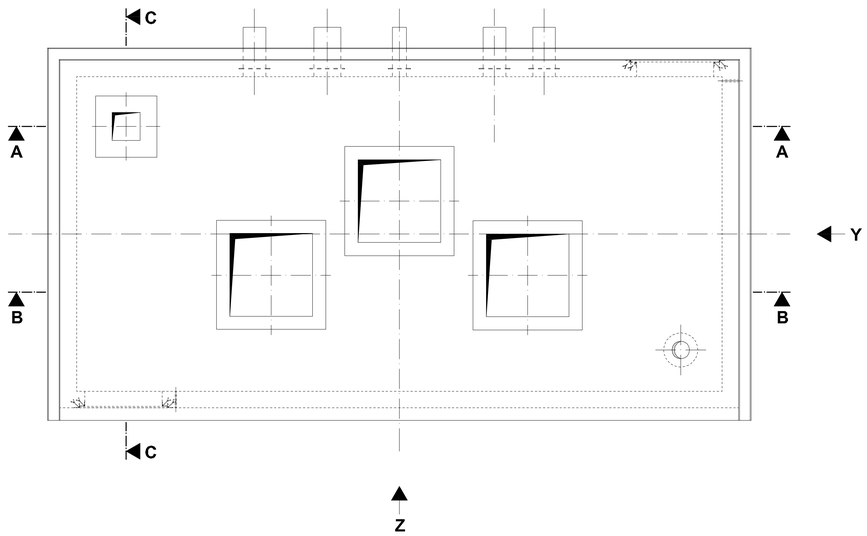
SECTION B - B
SCHNITT



SECTION D - D
SCHNITT



TOP VIEW
DRAUFSICHT



PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.5 CONSTRUCTION PLAN PUMP HOUSE
BAUKONSTRUKTIONSPLAN, PUMPENHAUS

C-1.12 TANK STAIRS AND SPLINTER PROTECTION DOOR
TANKTREPPE UND SPLITTERSCHUTZTÜR

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES
AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US	FLUGPLATZ STANDARDPLANUNG US
JET FUEL STORAGE AND DISPENSING SYSTEMS	FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING / BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION / BEZEICHNUNG: FORMWORK PLAN, PUMP HOUSE, ROOF AND WALLS / SCHALPLAN, PUMPENHAUS, DECKE UND WÄNDE

WORKED/BEARBEITET:

PREPARED/AUFGESTELLT:
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L - B - B
ANSCHRIFT: UNTERTORPLATZ 1 | 76829 LANDAU
TELEFON: (06341) 913-374 TELEFAX: (06341) 913-341
LANDAU,
BY PROXY / IN VERTRETUNG
ORIGINAL, SIGNED BY
IN ORIGINAL, GEZ.
STEFAN HOTSCHENREUTHER

APPROVED/GENEHMIGT:
AMT
FÜR
BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL, SIGNED BY
IN ORIGINAL, GEZ.
HENNING GÖTZ

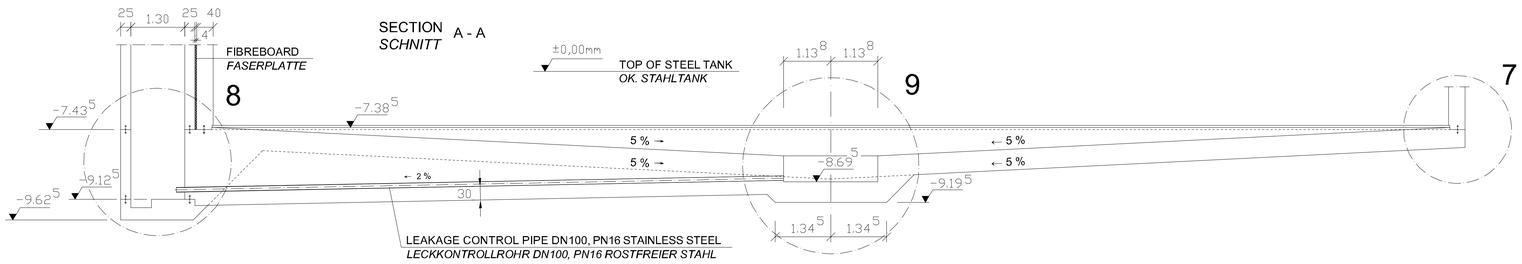
INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

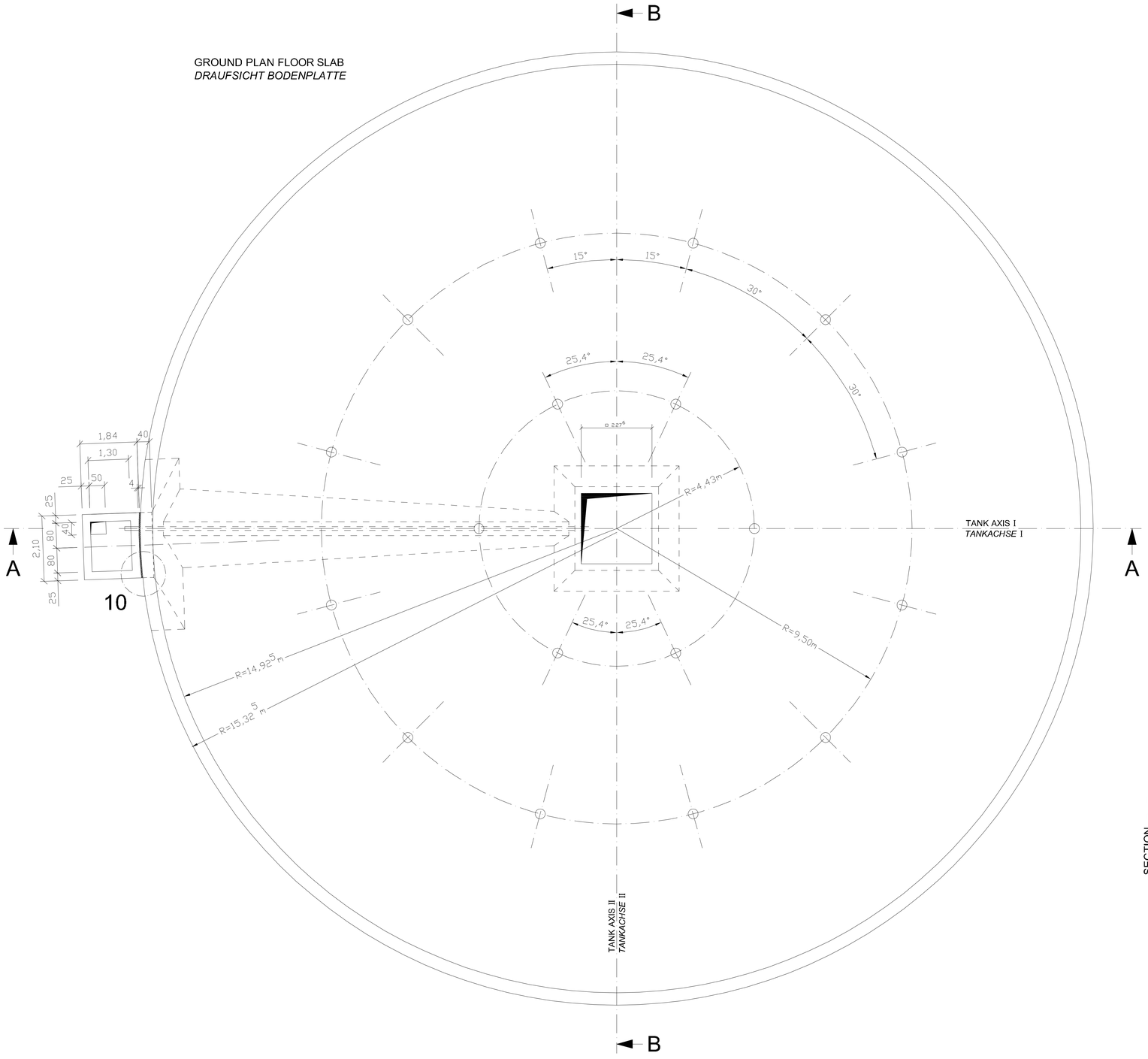
APPROVED / GENEHMIGT — DATE / DATUM: 6. MAI 2015
ORIGINAL, SIGNED BY
IN ORIGINAL, GEZ.
GERALD SANKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFRICA / LPRC

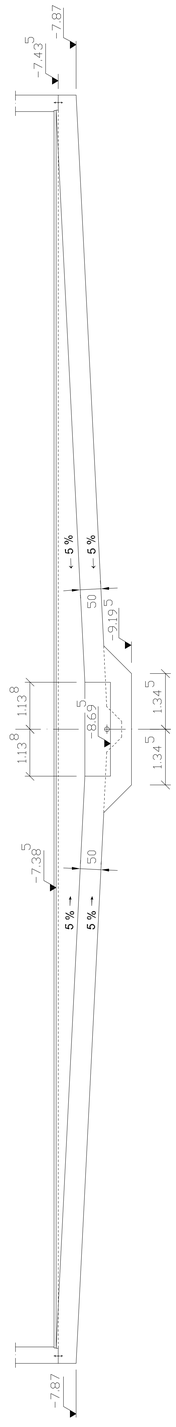
SCALE / MASSSTAB: 1:10 ; 1:25
STANDARD SHEET / STANDARD PLAN
C - 1.6
CAD-project path:
CAD-Project.dgn

CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. / PLAN-NR. OF / VON







PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.9 FORMWORK PLAN, DETAILS ROOF - AND FLOOR SLAB
SCHALPLAN, DETAILS DECKEN - UND BODENPLATTE

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION BEZEICHNUNG: FORMWORK PLAN. FLOOR SLAB AND WALL / SCHALPLAN, BODENPLATTE UND WAND

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L - B - B
ANSCHREIFT: UNTERTORPLATZ 1, 76829 LANDAU
TELEFON: (06341) 913-374 TELEFAX: (06341) 913-241
LANDAU,
BY PROXY / IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN KOTSCHENREUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HENNING GÖTZ

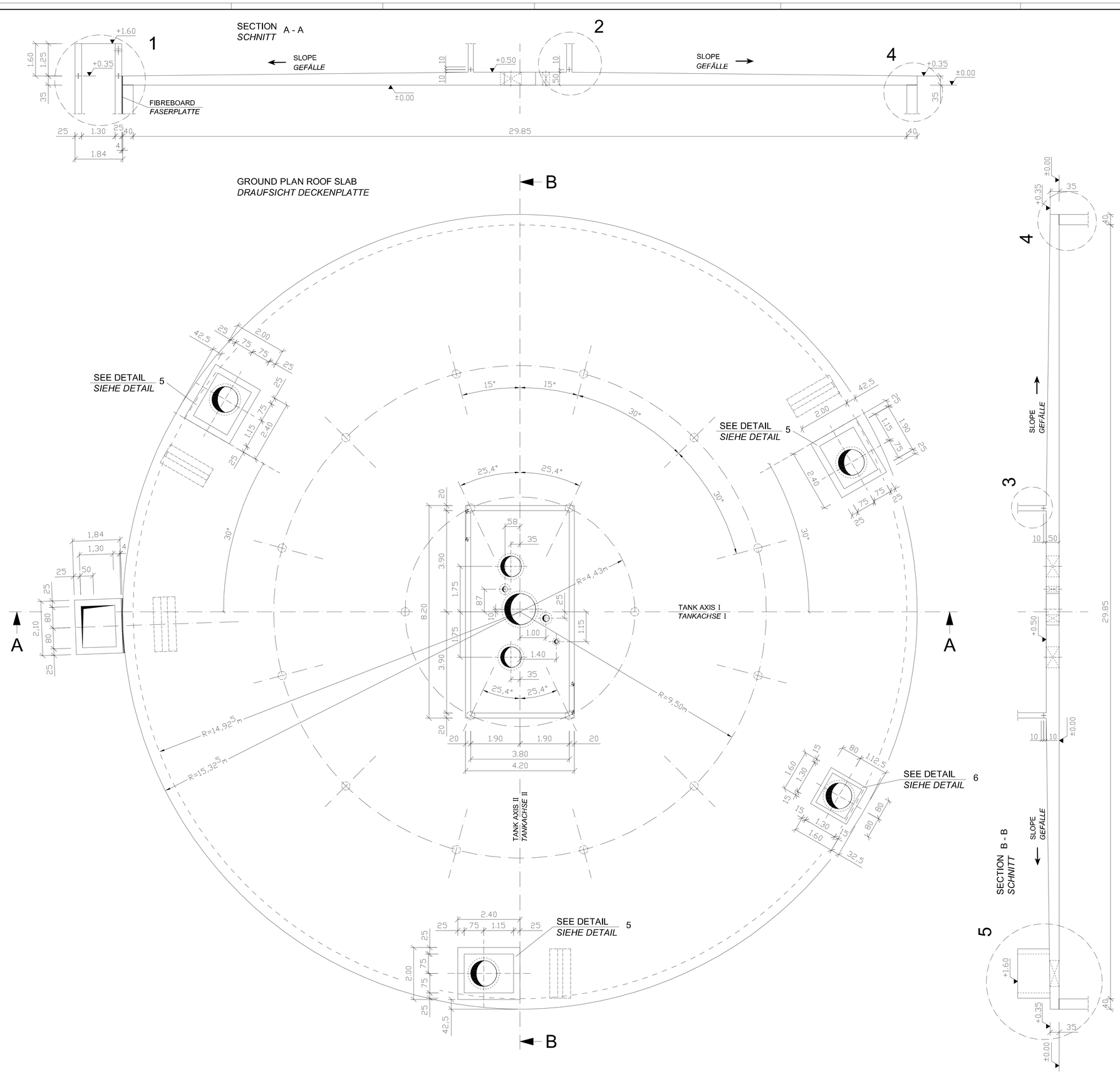
INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEführt FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED: GENEHMIGT — DATE DATUM: 6. MAI 2015
ORIGINAL SIGNED BY IN ORIGINAL GEZ.
GERALD SAMIO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFBCE / A PKI

SCALE MASSSTAB: 1:50
STANDARD SHEET STANDARD PLAN: C - 1.7
CAD-project.pstfx
CAD-Proj(ektpfx:

CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. PLAN-NR. OF VON



PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.4 DETAILS - MANHOLES AND LEAKAGE CONTROL PIT
DETAILS - MONTAGEÖFFNUNGEN UND LECKKONTROLLSCHACHT

C-1.9 FORMWORK PLAN, DETAILS ROOF - AND FLOOR SLAB
SCHALPLAN, DETAILS DECKEN - UND BODENPLATTE

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES
AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD
STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ
STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION BEZEICHNUNG: FORMWORK PLAN. ROOF SLAB / SCHALPLAN, DECKENPLATTE

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L · B · B
ANSCHRIFT: UNTERTORPLATZ 1 / 76829 LANDAU
TELEFON: (06341) 912-274 TELEFAX: (06341) 912-281
LANDAU,
BY PROXY / IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN HOTSCHENREUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HENNING GÖTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

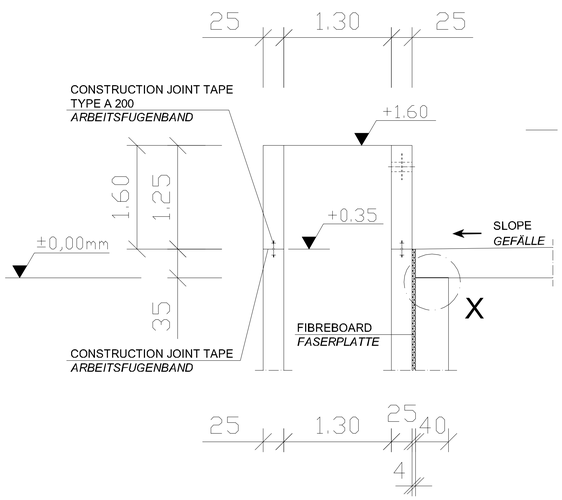
APPROVED GENEHMIGT — DATE DATUM: 6. MAI 2015
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SANKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFRICA / LPRO

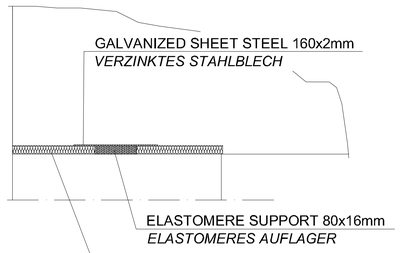
SCALE MASSSTAB: 1:50 ; 1:25
STANDARD SHEET
STANDARD PLAN
C - 1.8
CAD-project path:
CAD-Projektpfad:

CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO.
PLAN-NR.
OF
VON

DETAIL 1



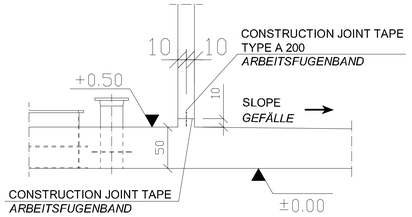


DETAIL "X"

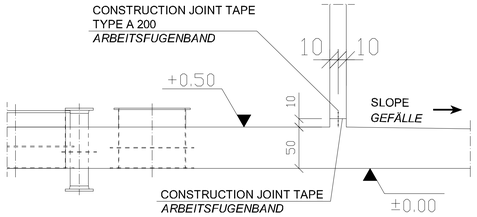
JOINT CONSTRUCTION
FUGENAUSBILDUNG

NO SCALE / *OHNE MASSSTAB*

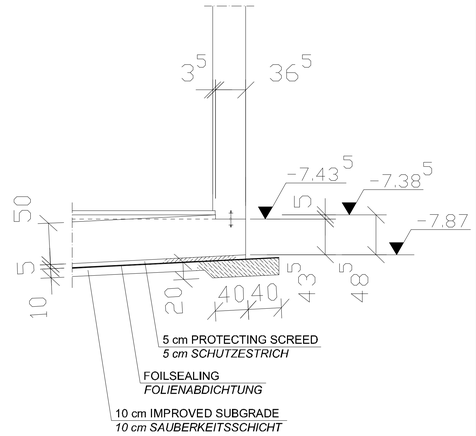
DETAIL 2



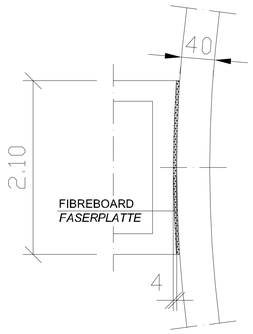
DETAIL 3



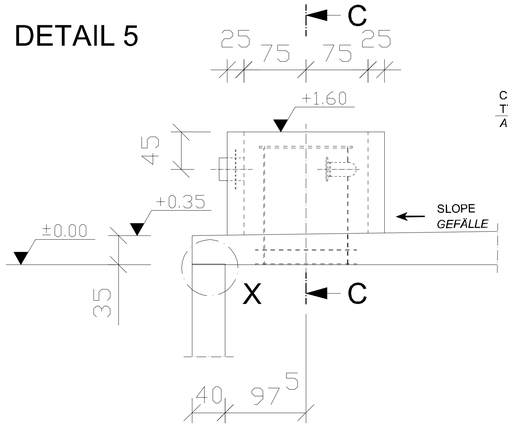
DETAIL 7



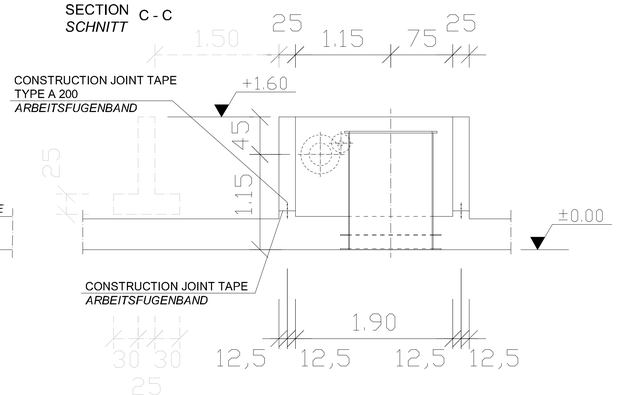
DETAIL 10



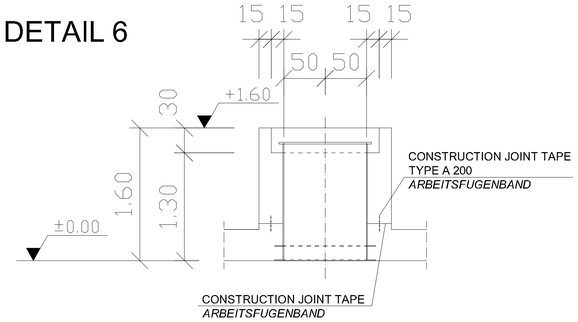
DETAIL 5



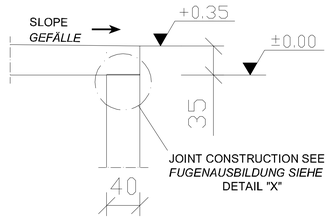
SECTION C - C
SCHNITT



DETAIL 6



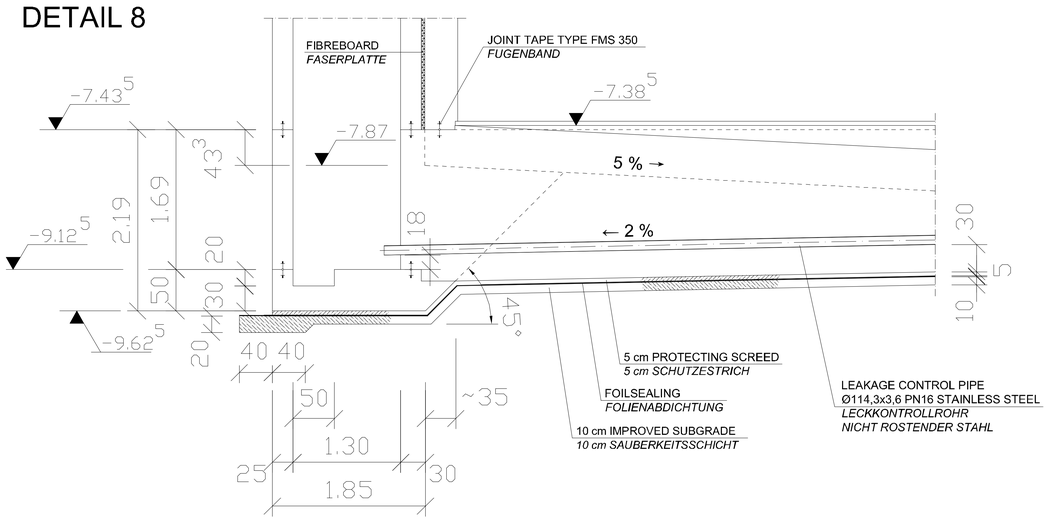
DETAIL 4



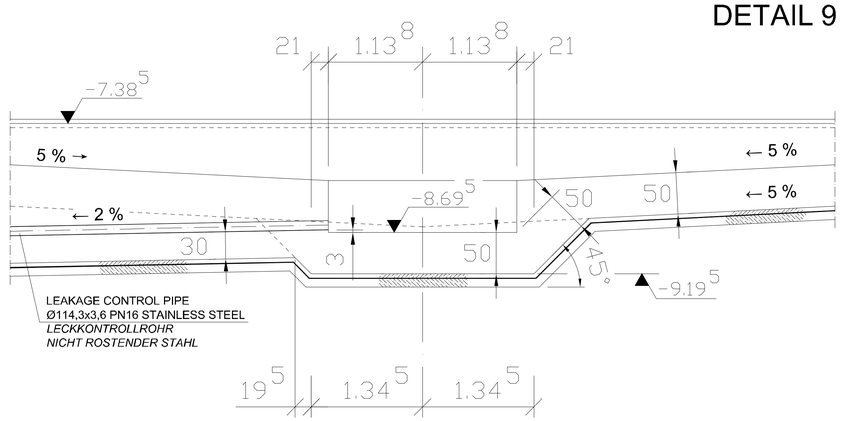
PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.4	DETAILS - MANHOLES AND LEAKAGE CONTROL PIT *DETAILS - MONTAGEÖFFNUNGEN UND LECKKONTROLLSCHACHT*
C-1.7	FORMWORK PLAN, FLOOR SLAB AND WALL *SCHALPLAN, BODENPLATTE UND WAND*
C-1.8	FORMWORK PLAN, ROOF SLAB *SCHALPLAN, DECKENPLATTE*

DETAIL 8



DETAIL 9



REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES
AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US	FLUGPLATZ STANDARDPLANUNG US
JET FUEL STORAGE AND DISPENSING SYSTEMS	FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING / BAUWERK: OPERATING TANK 5000m³
FLACHBODENTANK 5000m³

DESIGNATION / BEZEICHNUNG: FORMWORK PLAN, DETAILS ROOF- AND FLOOR SLAB
SCHALPLAN, DETAILS DECKEN- UND BODENPLATTE

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L B B
ANSCHRIFT: UNTERTORPLATZ 1, 76829 LANDAU
TELEFON: (06341) 812-274 TELEFAX: (06341) 812-301
LANDAU,
BY PROVY / IN VERTRETUNG
ORIGINAL, SIGNED BY
IN ORIGINAL, GEZ.
STEFAN KOTSCHENREUTHER

APPROVED/GENEHMIGT
AMT
FÜR
BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL, SIGNED BY
IN ORIGINAL, GEZ.
HENNING GÖTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEführt FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

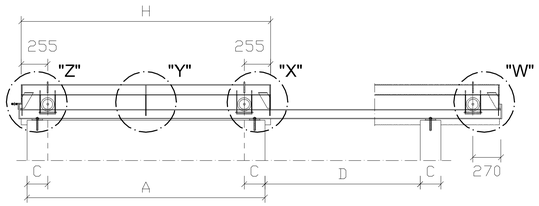
APPROVED / GENEHMIGT — DATE / DATUM: 6. MAI 2015
ORIGINAL, SIGNED BY
IN ORIGINAL, GEZ.
GERALD SANKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - VAFAFGA / LPRC

SCALE / MASSSTAB: 1:25
STANDARD SHEET / STANDARD PLAN
C - 1.9
CAD-project path:
CAD-file(s)/objfold:

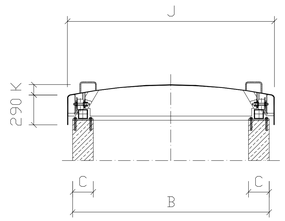
CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. / PLAN-NR. OF / VON

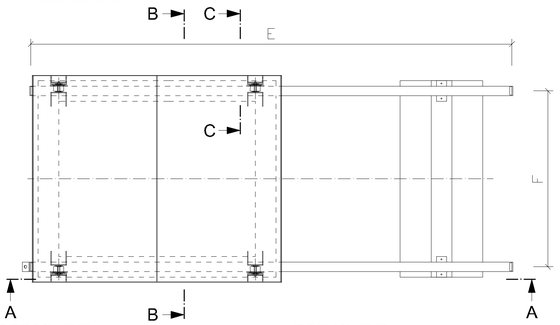
SECTION A - A
SCHNITT
SCALE / MASSSTAB 1:20



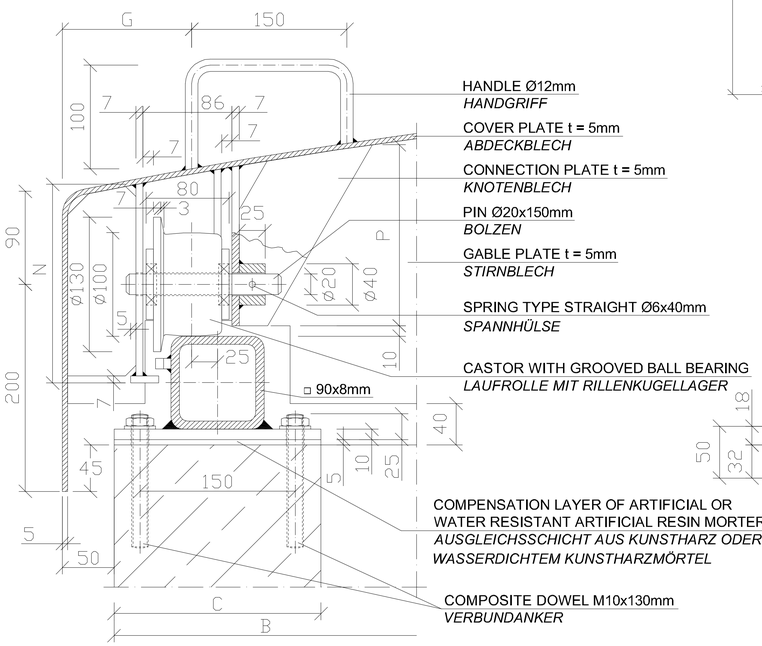
SECTION B - B
SCHNITT
SCALE / MASSSTAB 1:20



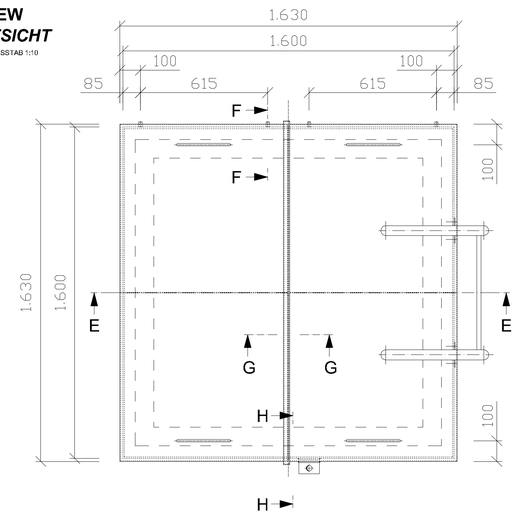
TOP VIEW
DRAUFSICHT
SCALE / MASSSTAB 1:20



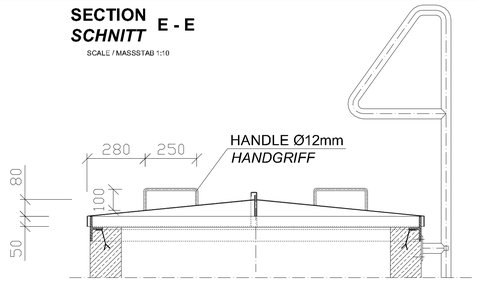
SECTION C - C
SCHNITT
SCALE / MASSSTAB 1:2

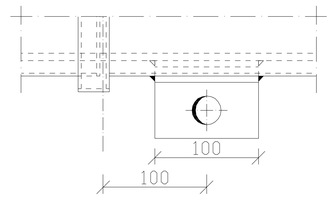


TOP VIEW
DRAUFSICHT
SCALE / MASSSTAB 1:10



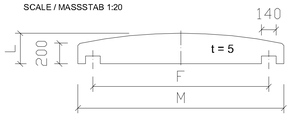
SECTION E - E
SCHNITT
SCALE / MASSSTAB 1:10



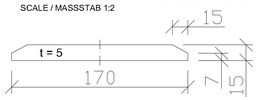


TOP VIEW "T"
DRAUFSICHT
SCALE / MASSSTAB 1:2

DETAIL "U"
GABLE PLATE AND CROSS BRACING
STIRNBLECH UND QUERVERSTEIFUNG
SCALE / MASSSTAB 1:20

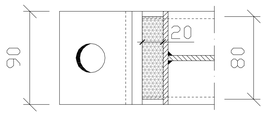


DETAIL "V"
GUIDE RAIL FOR LIFT-OFF PROTECTION
FÜHRUNGSSCHIENE FÜR ABHEBESICHERUNG
SCALE / MASSSTAB 1:2

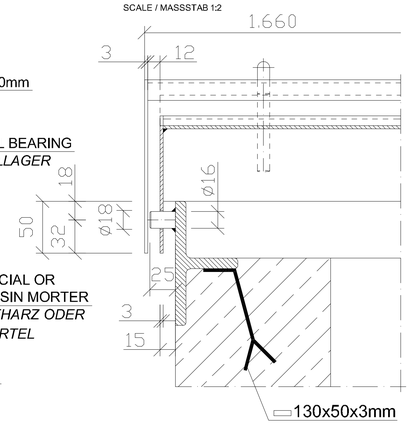


	A	B	C	D	E	F	G	H	J	K (5%v.J)	L	M	N	P
LEAKAGE CONTROL PIT *LECKKONTROLLSCHACHT*	1800	2100	250	1380	3545	1850	150	1910	2200	110	310	2190	≈ 197	≈ 180
MANHOLE *MONTAGEÖFFNUNG*	2400	2000	250	1500	4800	1750	125	2510	2100	105	300	2090	≈ 192	≈ 175

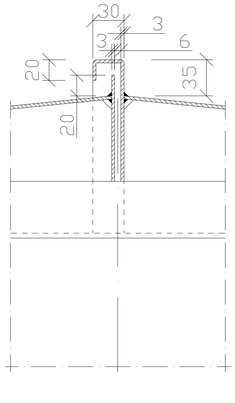
SECTION D - D
SCHNITT
SCALE / MASSSTAB 1:2



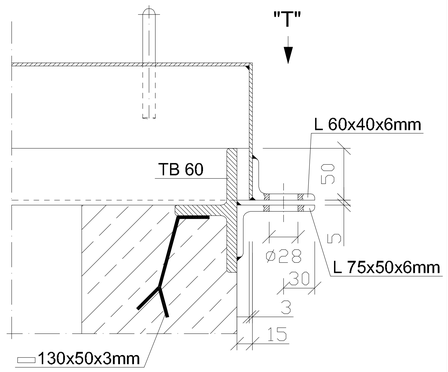
SECTION F - F
SCHNITT
SCALE / MASSSTAB 1:2



SECTION G - G
SCHNITT
SCALE / MASSSTAB 1:2



SECTION H - H
SCHNITT
SCALE / MASSSTAB 1:2



DETAIL "Z"
INTERLOCKING, STOP AND CASTOR
VERRIEGELUNG, ANSCHLAG UND LAUFROLLE
SCALE / MASSSTAB 1:2

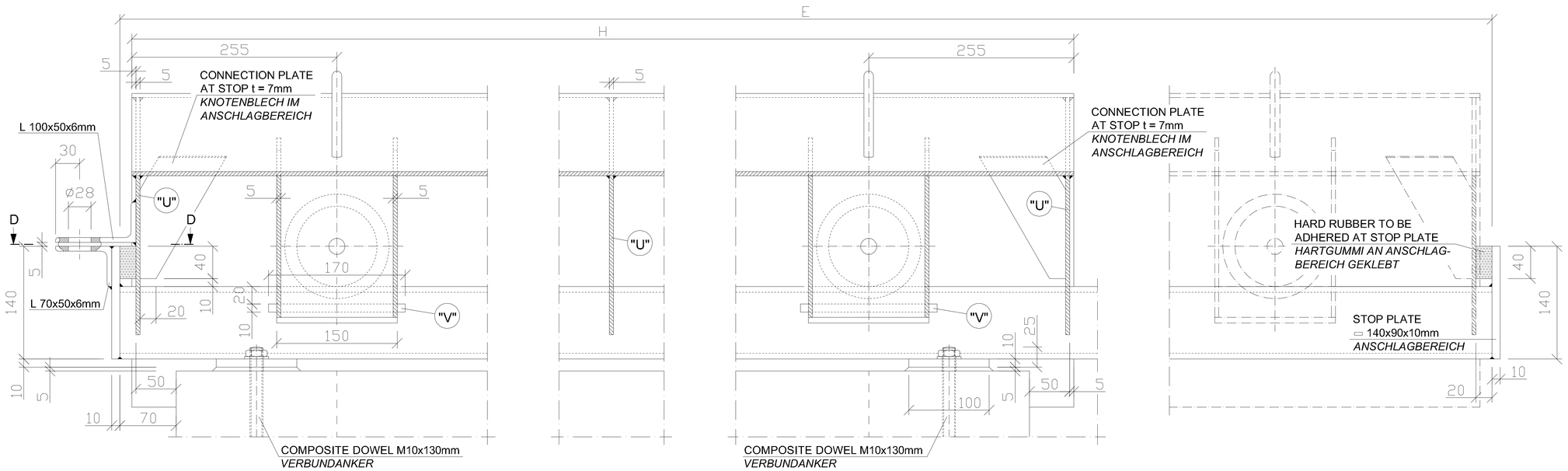
DETAIL "Y"
CROSS BRACING
QUERVERSTEIFUNG
SCALE / MASSSTAB 1:2

DETAIL "X"
CASTOR AND RAIL HOLDING
LAUFROLLE UND SCHIENENHALTERUNG
SCALE / MASSSTAB 1:2

DETAIL "W"
STOP
ANSCHLAG
SCALE / MASSSTAB 1:2

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.4 DETAILS - MANHOLES AND LEAKAGE CONTROL PIT
DETAILS - MONTAGEÖFFNUNGEN UND LECKKONTROLLSCHACHT



REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES
AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US	FLUGPLATZ STANDARDPLANUNG US
JET FUEL STORAGE AND DISPENSING SYSTEMS	FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING / BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION / BEZEICHNUNG: COVERS, MANHOLES AND LEAKAGE CONTROL PIT / ABDECKUNGEN, FÜR MONTAGEÖFFNUNGEN UND LECKKONTROLLSCHACHT

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUWESEN
LBB-NIEDERLASSUNG LANDAU
L - B - B
ANSCHRIFT: UNTERTORPLATZ 1 ; 76829 LANDAU
TELEFON: (06341) 912-274 TELEFAX: (06341) 912-201
LANDAU,
BY PROVY / IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN HOTSCHENEUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HENNING GÖTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

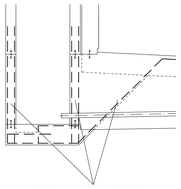
APPROVED/GENEHMIGT — DATE/DATUM: 6. MAI 2015
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SAMIO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFRICA / A7PO

SCALE/MASSSTAB: 1:2 ; 1:10 ; 1:20
STANDARD SHEET / STANDARD PLAN
S - 1.1
CAD-project path:
CAD-Projektpfad:

CONSTRUCTION PROJECT / BAUMASSNAHME

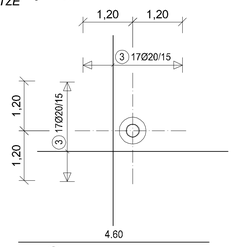
SHEET-NO. / PLAN-NR.
OF / VON

SECTION A - A
SCHNITT



REINFORCEMENT SEE DRAWING S-1.4
BEWEHRUNG SIEHE ZEICHNUNG

COLUMN 1 10 x
STÜTZE



3 408 Ø 20 L = 4.60 m

14.00

2 56 Ø 12 L = 14.0 m

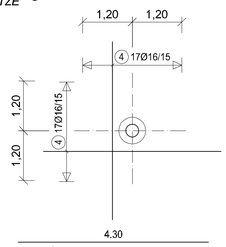
LINEAR METERS
LAUFENDE METER

70

1 1 Ø 12 L = 9360.0 m

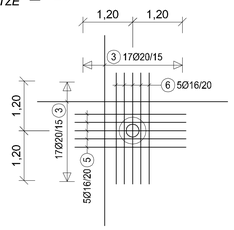
CUT ACC. TO FORMWORK
NACH SCHALUNG SCHNEIDEN

COLUMN 3 6 x
STÜTZE



4 204 Ø 16 L = 4.30 m

COLUMN 2 2 x
STÜTZE

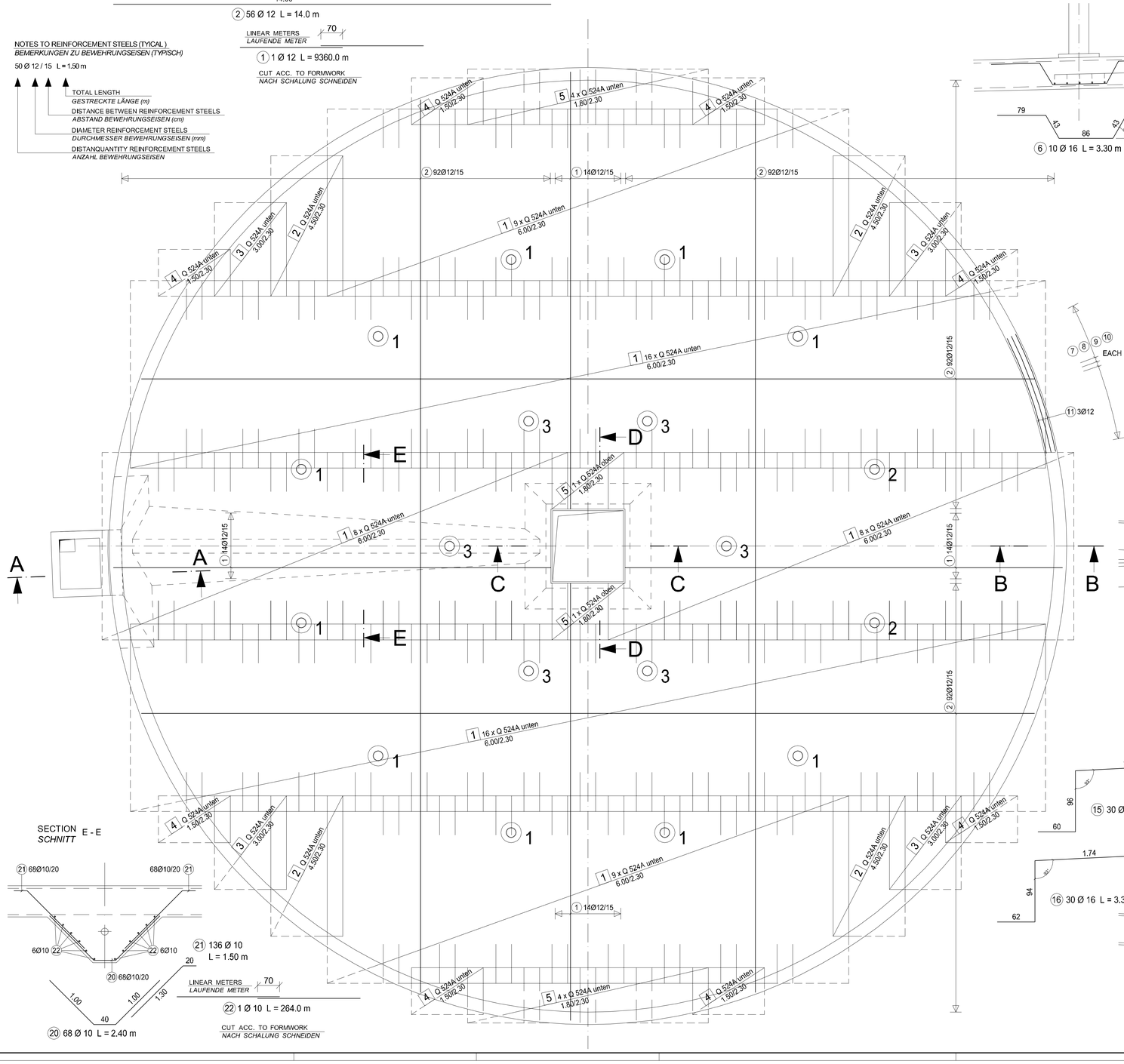


TOP VIEW FLOOR SLAB LOWER REINFORCEMENT
DRAUFSICHT BODENPLATTE UNTERE BEWEHRUNG

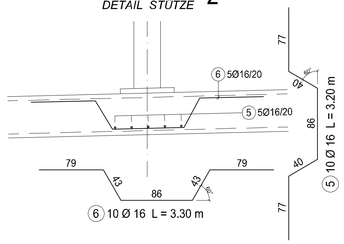
NOTES TO REINFORCEMENT STEELS (TYICAL)
BEMERKUNGEN ZU BEWEHRUNGSEISEN (TYPISCH)

50 Ø 12 / 15 L = 1.50 m

- TOTAL LENGTH *GESTRECKTE LÄNGE (m)*
- DISTANCE BETWEEN REINFORCEMENT STEELS *ABSTAND BEWEHRUNGSEISEN (cm)*
- DIAMETER REINFORCEMENT STEELS *DURCHMESSER BEWEHRUNGSEISEN (mm)*
- DISTANQUANTITY REINFORCEMENT STEELS *ANZAHL BEWEHRUNGSEISEN*

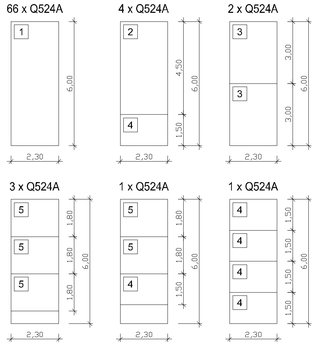


DETAIL COLUMN 2
DETAIL STÜTZE



6 10 Ø 16 L = 3.30 m

CUTTING SKETCH
SCHNEIDESKIZZE



WIRE MESH REQUIRED
MATTENBEDARF

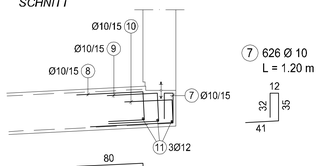
77 x Q524A 77 x 100,9 = 7769,3 kg

BENDING SCHEDULE
STAHLLISTE

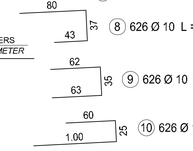
NO. *NR.*	PIECES *STÜCK*	Ø	LENGTH *LÄNGE*	Ø 8	Ø 10	Ø 12	Ø 16	Ø 20
1	56	12	14.0			784.0		
2	1	12	9360.0			9360.0		
3	408	20	4.60					1876.8
4	204	16	4.30				877.2	
5	10	16	3.20				32.0	
6	10	16	3.30				33.0	
7	626	10	1.20		751.2			
8	626	10	1.60		1001.6			
9	626	10	1.60		1001.6			
10	626	10	1.85		1158.1			
11	1	12	312.0			312.0		
12	38	16	5.10				193.8	
13	60	16	1.90				114.0	
14	30	16	4.70				141.0	
15	30	16	3.30				99.0	
16	30	16	3.30				99.0	
17	16	16	3.20				51.2	
18	8	16	4.20				33.6	
19	8	16	3.80				30.4	
20	68	10	2.40		163.2			
21	136	10	1.50		204.0			
22	1	10	264.0		264.0			
			Σ		4543.7	10456.0	1704.2	1876.8
			l kg/m		0.617	0.888	1.58	2.47
			kg		2803.5	9284.9	2692.6	4635.7

TOTAL WEIGHT
GESAMTGEWICHT 19 416.7 kg

SECTION B - B
SCHNITT



7 626 Ø 10
L = 1.20 m



8 626 Ø 10 L = 1.60 m

9 626 Ø 10 L = 1.60 m

10 626 Ø 10 L = 1.85 m

70 LINEAR METERS
LAUFENDE METER

11 1 Ø 12 L = 312.0 m

BENDED ACC. TO FORMWORK
NACH SCHALUNG BIEGEN

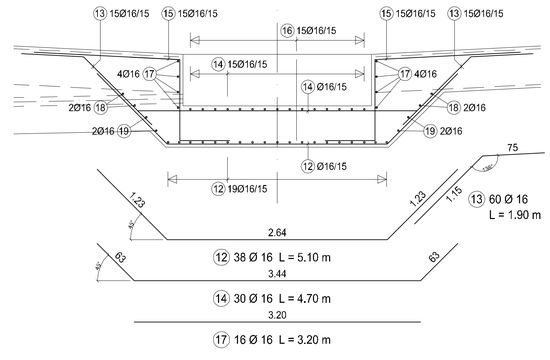
7 8 9 10 EACH 626Ø10/15

11 3Ø12

MATERIALS
BAUSTOFFE

CONCRETE *BETON*	C25/30 XC2 WF
REINFORCEMENT *BETONSTAHL*	BSt 500 S, BSt 500 M
CONCRETE COVER *BETONDECKUNG*	nom c = 3.5 cm
DIAMETER OF BENDING ROLL *BIEGEROLLENDURCHMESSER*	d_s < 20mm: $d_{Br} \geq 4d_s$ $d_s \geq$ 20mm: $d_{Br} \geq 7d_s$

SECTION C - C
SCHNITT



13 60 Ø 16
L = 1.90 m

12 38 Ø 16 L = 5.10 m

14 30 Ø 16 L = 4.70 m

17 16 Ø 16 L = 3.20 m

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.7	FORMWORK PLAN FLOOR SLAB AND WALL *SCHALPLAN BODENPLATTE UND WAND*
S-1.3	UPPER REINFORCEMENT FLOOR SLAB *OBERE BEWEHRUNG BODENPLATTE*
S-1.4	REINFORCEMENT LEAKAGE CONTROL PIT *BEWEHRUNG LECKKONTROLLSCHACHT*

SECTION E - E
SCHNITT

20 68 Ø 10 L = 2.40 m

21 136 Ø 10
L = 1.50 m

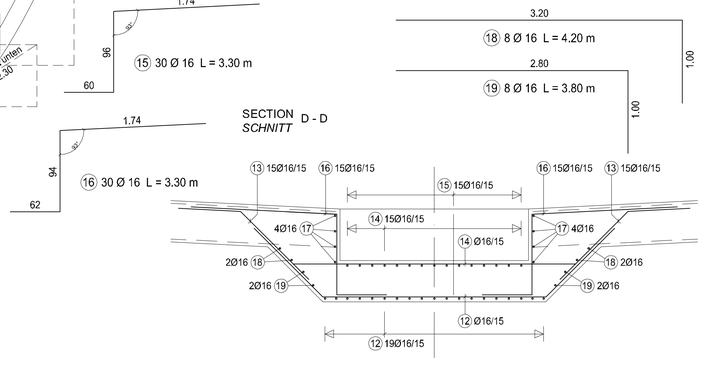
LINEAR METERS
LAUFENDE METER

70

22 1 Ø 10 L = 264.0 m

CUT ACC. TO FORMWORK
NACH SCHALUNG SCHNEIDEN

SECTION D - D
SCHNITT



REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION BEZEICHNUNG: LOWER REINFORCEMENT FLOOR SLAB / UNTERE BEWEHRUNG BODENPLATTE

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUVERWALTUNG
LBB-NIEDERLASSUNG LANDAU
L - B - B
ANSCHRIFT: UNTERFÖRRLATZ 1, 76829 LANDAU
TELEFON: (06341) 913-274 TELEFAX: (06341) 913-261
LANDAU,
IN VERTRETUNG / IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN KOTSCHENREUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HENNING GÖTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEführT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED GENEHMIGT DATE DATUM 6. MAI 2015

ORIGINAL SIGNED BY
IN ORIGINAL GEZ.

GERALD SANKO
COMMANDER FUEL FACILITIES ENGINEER
HQ USAFE - AFAFBCE / A7RC

SCALE MASSSTAB 1:50 ; 1:25

STANDARD SHEET STANDARD PLAN

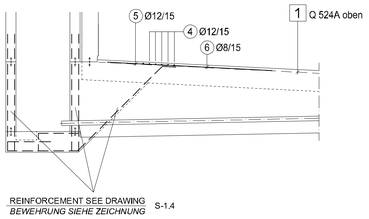
S - 1.2

CAD-project path:
CAD-Projektpfad:

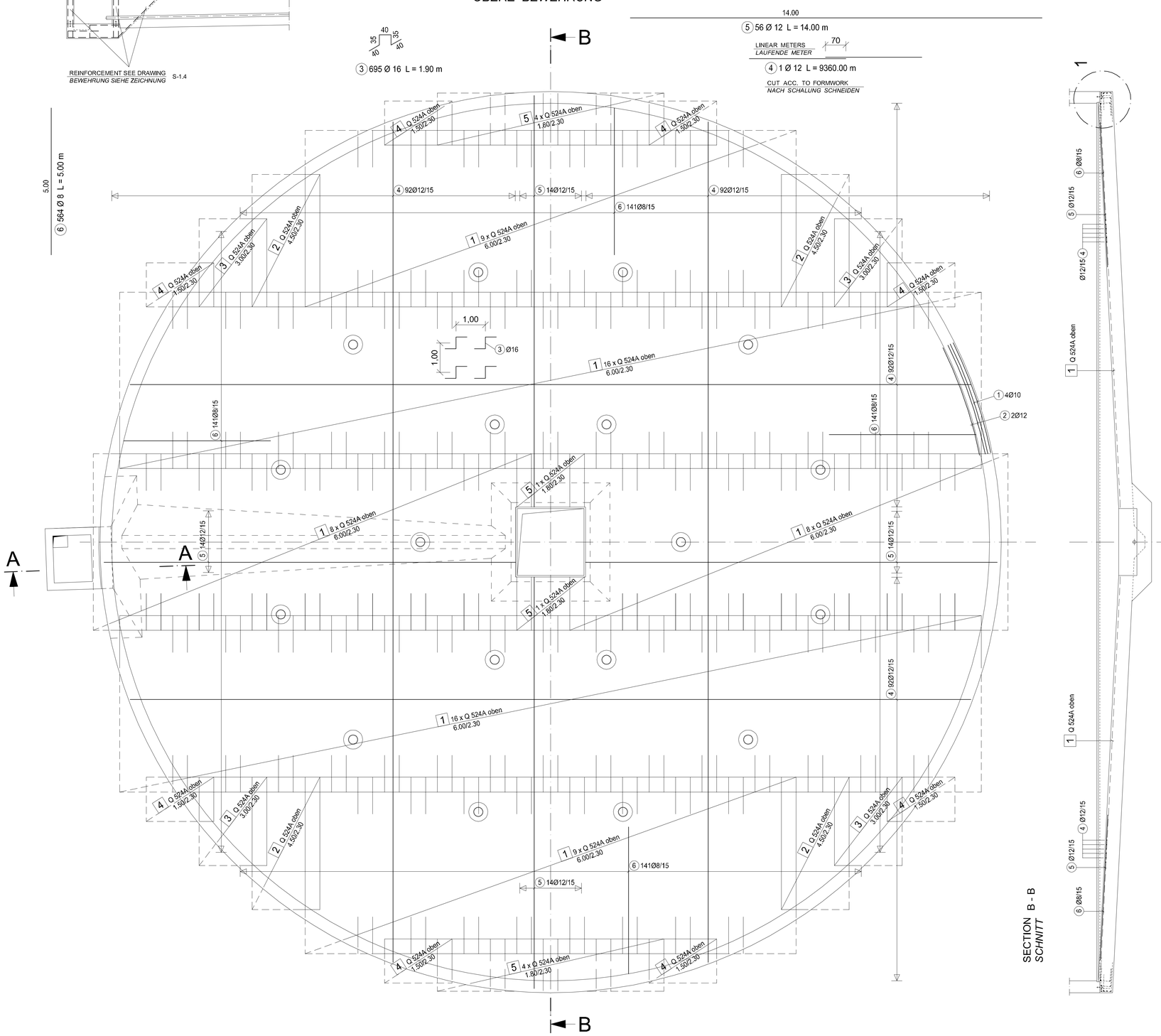
CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. PLAN-NR. OF VON

SECTION A - A
SCHNITT

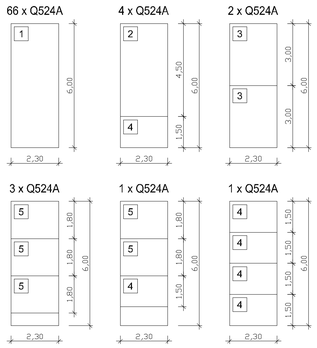


TOP VIEW FLOOR SLAB UPPER REINFORCEMENT
DRAUFSICHT BODENPLATTE OBERE BEWEHRUNG



SECTION B - B
SCHNITT

CUTTING SKETCH
SCHNEIDESKIZZE



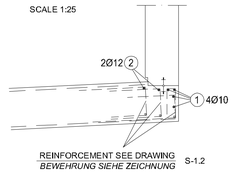
WIRE MESH REQUIRED
MATTENBEDARF

77 x Q524A 77 x 100,9 = 7769,3 kg

BENDING SCHEDULE
STAHLLISTE

NO. *NR.*	PIECES *STÜCK*	Ø	LENGTH *LÄNGE*	Ø 8	Ø 10	Ø 12	Ø 16	Ø 20
1	1	10	416.0		416.0			
2	1	12	208.0			208.0		
3	695	16	1.90				1320.5	
4	1	12	9360.0			9360.0		
5	56	12	14.00			784.0		
6	564	8	5.00	2820.0				
7								
8								
9								
10								
			Σ	2820.0	416.0	10352.0	1320.5	
			l kg/m	0.395	0.617	0.888	1.58	
			kg	1113.9	256.7	9192.6	2086.4	
TOTAL WEIGHT *GESAMTGEWICHT*				12 649.6 kg				

DETAIL 1
DETAIL
SCALE 1:25



70 LINEAR METERS *LAUFENDE METER*

2 1 Ø 12 L = 208.0 m

BENDED ACC. TO FORMWORK
NACH SCHALUNG BIEGEN

80 LINEAR METERS *LAUFENDE METER*

1 1 Ø 10 L = 416.0 m

BENDED ACC. TO FORMWORK
NACH SCHALUNG BIEGEN

MATERIALS
BAUSTOFFE

CONCRETE *BETON*	C25/30 XC2 WF
REINFORCEMENT *BETONSTAHL*	BSt 500 S, BSt 500 M
CONCRETE COVER *BETONDECKUNG*	nom c = 3.5 cm
DIAMETER OF BENDING ROLL *BIEGEROLLENDURCHMESSER*	d_s < 20mm: $d_{br} \geq 4d_s$ $d_s \geq$ 20mm: $d_{br} \geq 7d_s$

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.7	FORMWORK PLAN FLOOR SLAB AND WALL *SCHALPLAN BODENPLATTE UND WAND*
S-1.2	LOWER REINFORCEMENT FLOOR SLAB *UNTERE BEWEHRUNG BODENPLATTE*
S-1.4	REINFORCEMENT LEAKAGE CONTROL PIT *BEWEHRUNG LECKKONTROLLSCHACHT*

NOTES TO REINFORCEMENT STEELS (TYICAL)
BEMERKUNGEN ZU BEWEHRUNGSEISEN (TYPISCH)

50 Ø 12 / 15 L = 1.50 m

- TOTAL LENGTH *GESTRECKTE LÄNGE (m)*
- DISTANCE BETWEEN REINFORCEMENT STEELS *ABSTAND BEWEHRUNGSEISEN (cm)*
- DIAMETER REINFORCEMENT STEELS *DURCHMESSER BEWEHRUNGSEISEN (mm)*
- DISTANQUANTITY REINFORCEMENT STEELS *ANZAHL BEWEHRUNGSEISEN*

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING BAUWERK: OPERATING TANK 5000m³ FLACHBODENTANK 5000m³

DESIGNATION BEZEICHNUNG: UPPER REINFORCEMENT FLOOR SLAB OBERE BEWEHRUNG BODENPLATTE

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L - B - B
ANSCHRIFT: UNTERTORPLATZ 1, 76829 LANDAU
TELEFON: (06341) 913-274 TELEFAX: (06341) 913-265
LANDAU,
BY / NACH / IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN KOTSCHENEUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HENNING GÖTZ

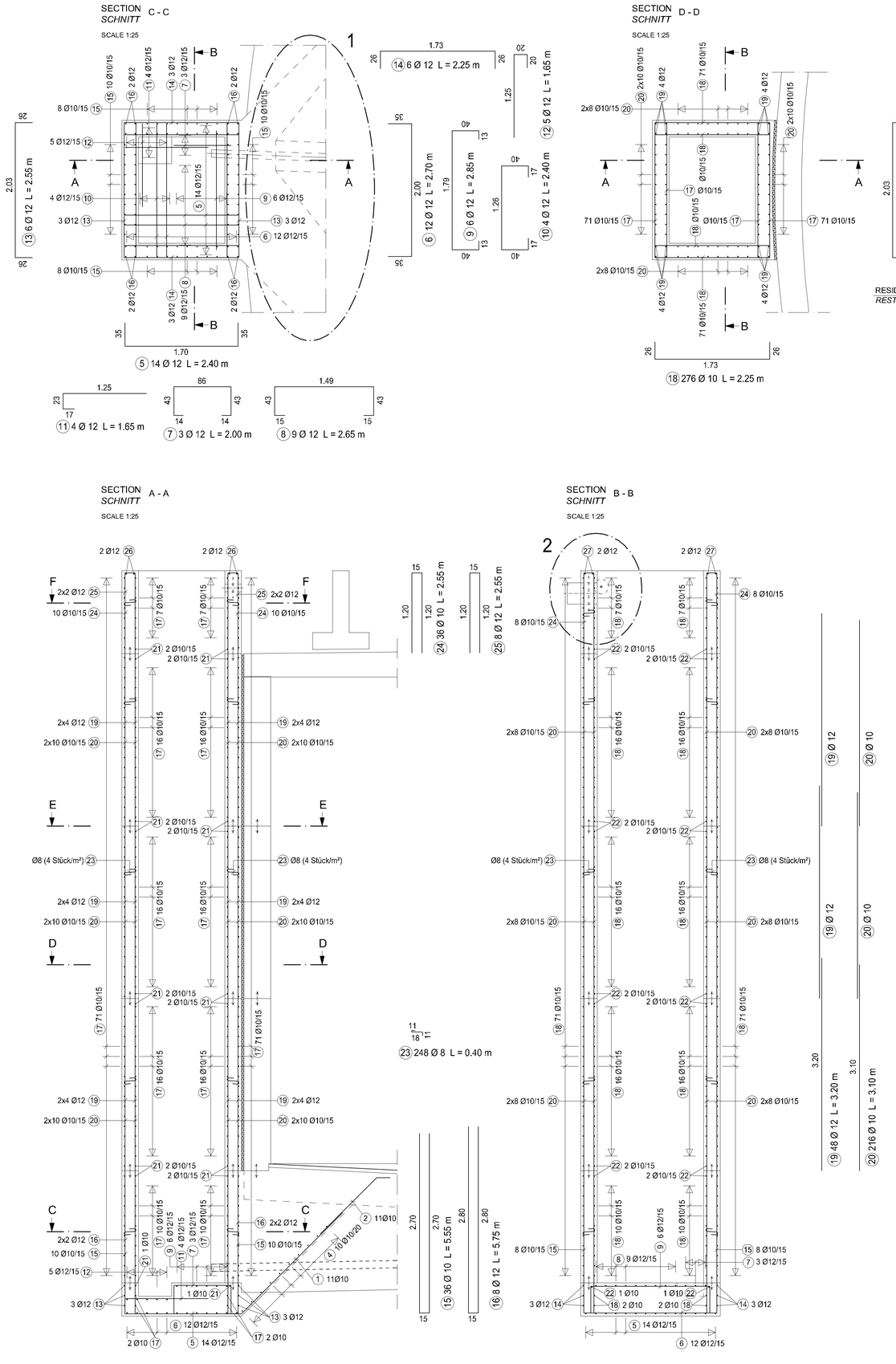
INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED/GENEHMIGT — DATE/DATUM: 6. MAI 2015
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SANKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFRICA / A7PO

SCALE/MASSSTAB: 1:50 ; 1:25
STANDARD SHEET / STANDARD PLAN
S - 1.3
CAD-project path:
CAD-Projektpfad:

CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. PLAN-NR.
OF VON



BENDING SCHEDULE
STAHLLISTE

NO. NR.	PIECES STÜCK	Ø	LENGTH LÄNGE	Ø 8	Ø 10	Ø 12	Ø 14	Ø 20
1	11	10	2.40		26.4			
2	17	10	1.40		23.8			
3	6	10	2.25		13.5			
4	1	10	50.0		50.0			
5	14	12	2.40			33.6		
6	12	12	2.70			32.4		
7	3	12	2.00			6.0		
8	9	12	2.65			23.9		
9	6	12	2.85			17.1		
10	4	12	2.40			9.6		
11	4	12	1.65			6.6		
12	5	12	1.65			8.3		
13	6	12	2.55			15.3		
14	6	12	2.25			13.5		
15	36	10	5.55		199.8			
16	8	12	5.75			46.0		
17	276	10	2.55		703.8			
18	276	10	2.25		621.0			
19	48	12	3.20			153.6		
20	216	10	3.10		669.6			
21	18	10	2.45		44.1			
22	18	10	2.15		38.7			
23	248	8	0.40	99.2				
24	36	10	2.55		91.8			
25	8	12	2.55			20.4		
26	4	12	2.60			10.4		
27	4	12	2.30			9.2		
28	2	10	2.30		4.6			
29	6	8	0.75	4.5				
			Σ	103.7	2487.1	405.9		
			l kg/m	0.395	0.617	0.888	1.21	1.58
			kg	41.0	1534.5	360.4		
TOTAL WEIGHT / GESAMTGEWICHT				1935.90 kg				

MATERIALS
BAUSTOFFE

CONCRETE / BETON	C25/30 XC3 WF
REINFORCEMENT / BETONSTAHL	BSt 500 S, BSt 500 M
CONCRETE COVER / BETONDECKUNG	nom c = 3.5 cm
DIAMETER OF BENDING ROLL / BIEGEROLLENDURCHMESSER	d_s < 20mm: $d_{br} \geq 4d_s$ $d_s \geq$ 20mm: $d_{br} \geq 7d_s$

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.7	FORMWORK PLAN FLOOR SLAB AND WALL *SCHALPLAN BODENPLATTE UND WAND*
C-1.8	FORMWORK PLAN ROOF SLAB *SCHALPLAN DECKENPLATTE*
S-1.2	LOWER REINFORCEMENT FLOOR SLAB *UNTERE BEWEHRUNG BODENPLATTE*
S-1.5	REINFORCEMENT TANK WALL *BEWEHRUNG TANKWAND*
S-1.6	LOWER REINFORCEMENT ROOF SLAB *UNTERE BEWEHRUNG DECKENPLATTE*
S-1.7	UPPER REINFORCEMENT ROOF SLAB *OBERE BEWEHRUNG DECKENPLATTE*

NOTES TO REINFORCEMENT STEELS (TYICAL)
BEMERKUNGEN ZU BEWEHRUNGSEISEN (TYPISCH)

50 Ø 12 / 15 L = 1.50 m

- TOTAL LENGTH / *GESTRECKTE LÄNGE (m)*
- DISTANCE BETWEEN REINFORCEMENT STEELS / *ABSTAND BEWEHRUNGSEISEN (cm)*
- DIAMETER REINFORCEMENT STEELS / *DURCHMESSER BEWEHRUNGSEISEN (mm)*
- DISTANQUANTITY REINFORCEMENT STEELS / *ANZAHL BEWEHRUNGSEISEN*

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING / BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESSIGNATION / BEZEICHNUNG: REINFORCEMENT LEAKAGE CONTROL PIT / BEWEHRUNG LECKKONTROLLSCHACHT

WORKED/BEARBEITET:

PREPARED/AUFGESTELLT:
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
ANSCHRIFT: UNTERFORMPLATZ 1, 76829 LANDAU
TELEFON: (06341) 912-274 TELEFAX: (06341) 912-391
LANDAU,
BY PROXY / IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN HOTSCHENEUTHER

APPROVED/GENEHMIGT:
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HENNING GÖTZ

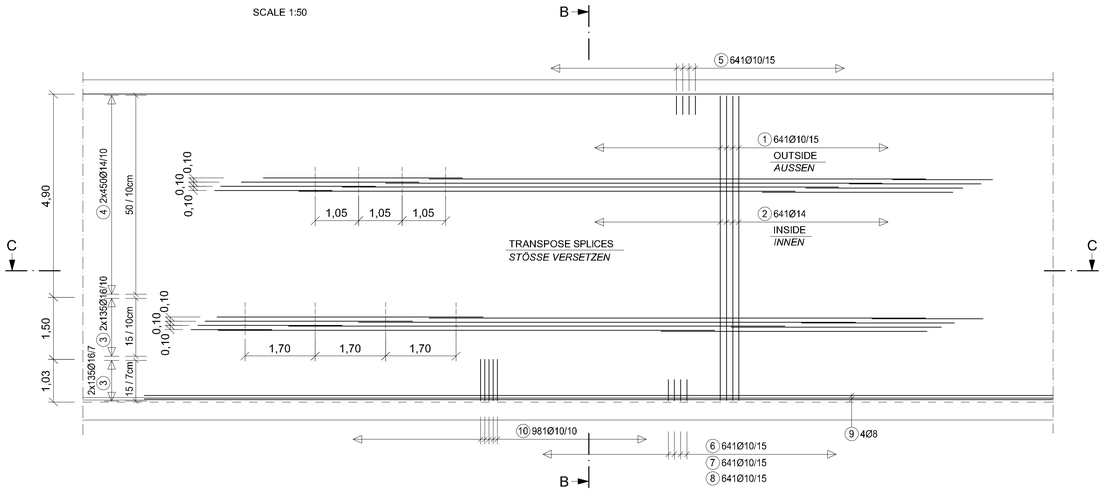
INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

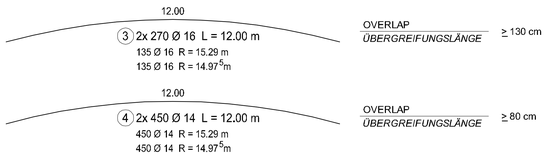
APPROVED / GENEHMIGT: DATE / DATUM: 6. MAI 2015
SCALE / MASSSTAB: 1:50 ; 1:25 ; 1:10
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SANKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFRICA / USFK
STANDARD SHEET / STANDARD PLAN
S - 1.4
CAD-project path:
CAD-Projektpfad:

CONSTRUCTION PROJECT
BAUMASSNAHME

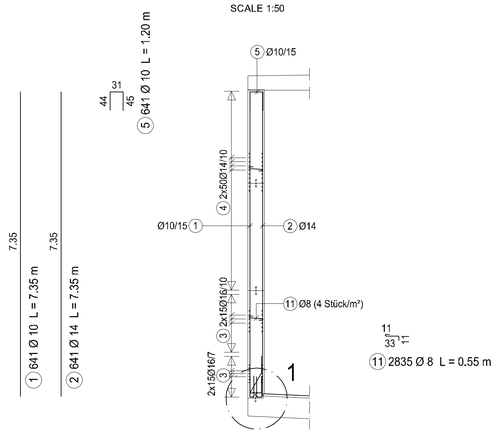
SHEET-NO. / PLAN-NR. OF / VON

SECTION A - A
SCHNITT
SCALE 1:50





SECTION B - B
SCHNITT
SCALE 1:50



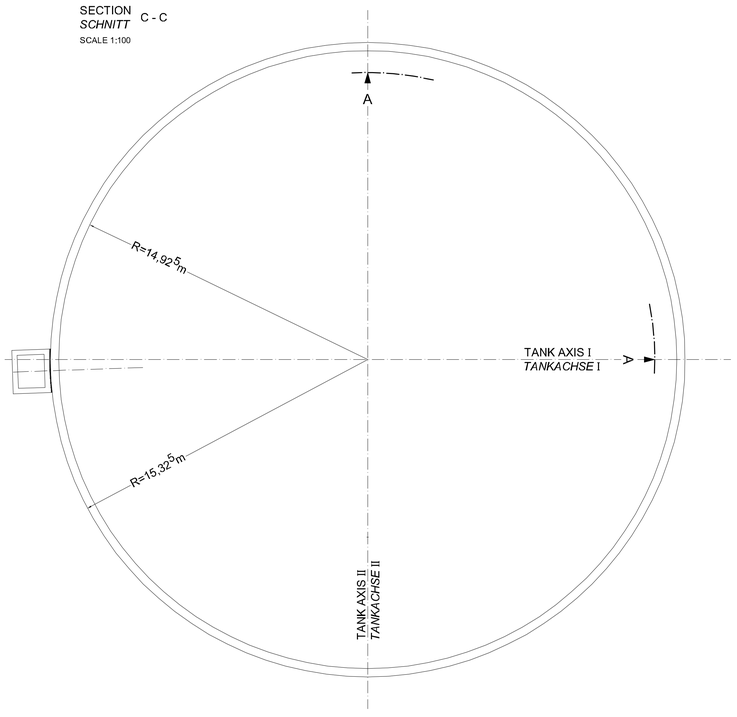
BENDING SCHEDULE
STAHLLISTE

NO. *NR.*	PIECES *STÜCK*	Ø	LENGTH *LÄNGE*	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16
1	641	10	7.35		4711.4			
2	641	14	7.35				4711.4	
3	540	16	12.00					6480.0
4	900	14	12.00				10800.0	
5	641	10	1.20		769.2			
6	641	10	1.10		705.1			
7	641	10	1.10		705.1			
8	641	10	1.10		705.1			
9	34	8	12.00	408.0				
10	961	10	1.15		1105.2			
11	2835	8	0.55	1559.3				
			Σ	1967.3	8701.1		15511.4	6480.0
			kg/m	0.395	0.617	0.888	1.21	1.58
			kg	777.1	5368.6		18768.8	10238.4
TOTAL WEIGHT *GESAMTGEWICHT*				35 152.9 kg				

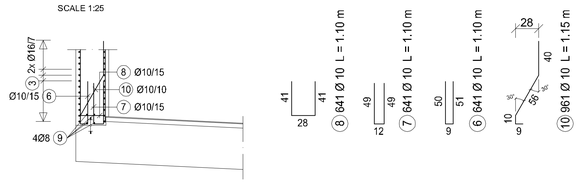
MATERIALS
BAUSTOFFE

CONCRETE *BETON*	C25/30 XC3 WF
REINFORCEMENT *BETONSTAHL*	BSt 500 S, BSt 500 M
CONCRETE COVER *BETONDECKUNG*	nom c = 3.5 cm
DIAMETER OF BENDING ROLL *BIEGEROLLENDURCHMESSER*	d_s < 20mm: $d_{br} \geq 4d_s$ $d_s \geq$ 20mm: $d_{br} \geq 7d_s$

SECTION C - C
SCHNITT
SCALE 1:100



DETAIL 1
DETAIL
SCALE 1:25



NOTES TO REINFORCEMENT STEELS (TYICAL)
BEMERKUNGEN ZU BEWEHRUNGSEISEN (TYPISCH)

50 Ø 12 / 15 L = 1.50 m

- TOTAL LENGTH *GESTRECKTE LÄNGE (m)*
- DISTANCE BETWEEN REINFORCEMENT STEELS *ABSTAND BEWEHRUNGSEISEN (cm)*
- DIAMETER REINFORCEMENT STEELS *DURCHMESSER BEWEHRUNGSEISEN (mm)*
- DISTANQUANTITY REINFORCEMENT STEELS *ANZAHL BEWEHRUNGSEISEN*

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.7 FORMWORK PLAN FLOOR SLAB AND WALL
SCHALPLAN BODENPLATTE UND WAND

S-1.4 REINFORCEMENT LEAKAGE CONTROL PIT
BEWEHRUNG LECKKONTROLLSCHACHT

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES
AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD
STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ
STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING / BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESSIGNATION / BEZEICHNUNG: REINFORCEMENT TANK WALL / BEWEHRUNG TANKWAND

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L · B · B
ANSCHRIFT: UNTERTORPLATZ 1 ; 76829 LANDAU
TELEFON : (06341) 912-274 TELEFAX: (06341) 912-285
LANDAU,
BY PAOLY J. IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN HOTSCHKINEUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HENNING GÖTZ

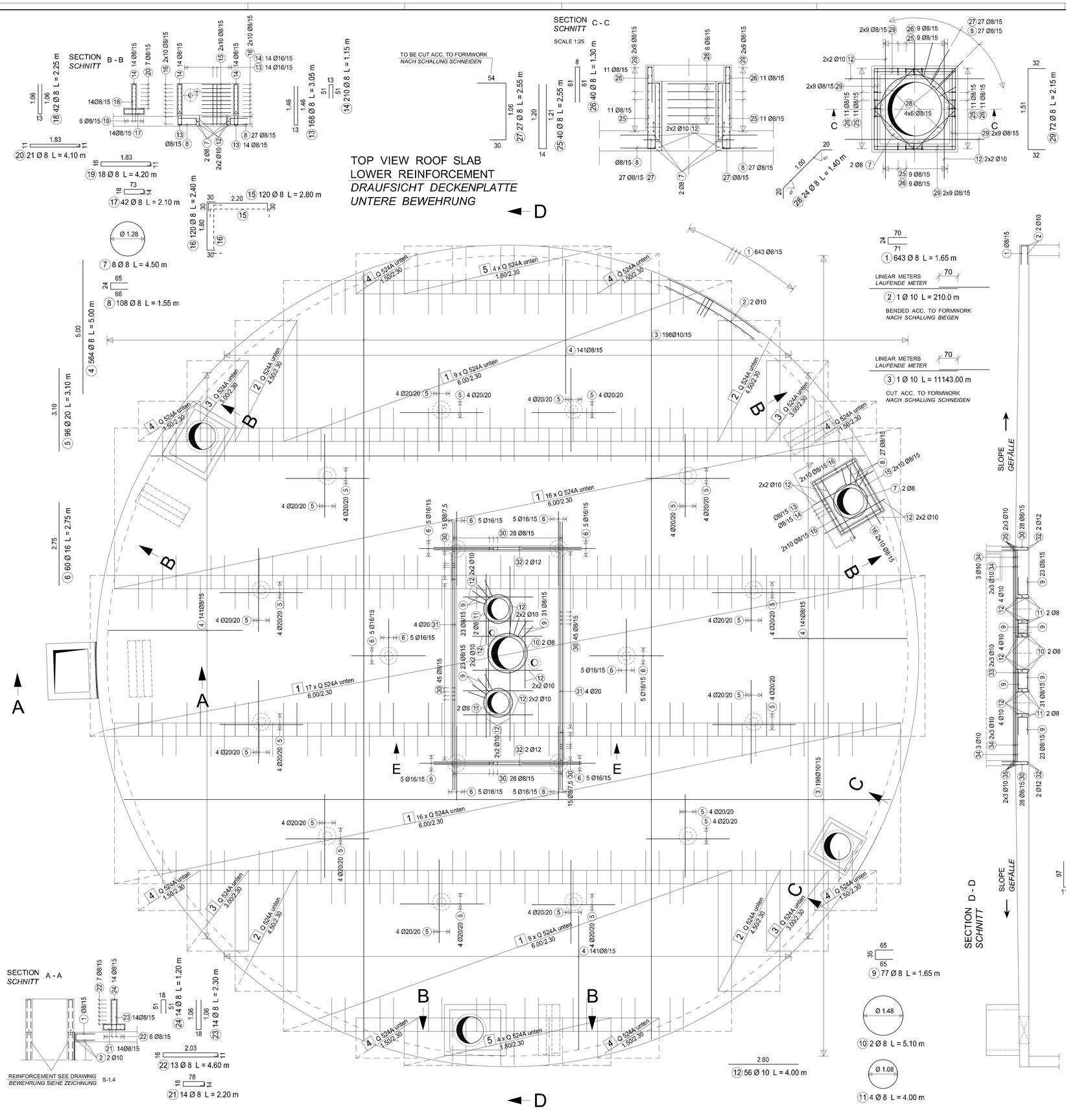
INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED/GENEHMIGT DATE/DATUM 6. MAI 2015
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SANKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - RAMSTEIN (LFM)

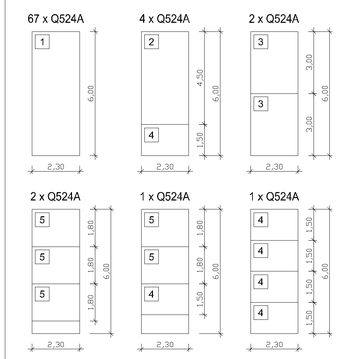
SCALE/MASSSTAB 1:100 ; 1:50 ; 1:25
STANDARD SHEET / STANDARD PLAN
S - 1.5
CAD-project path/CAD-Projektpfad:

CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. / PLAN-NR. OF / VON



CUTTING SKETCH
SCHNEIDESKIZZE



WIRE MESH REQUIRED
MATTENBEDARF

77 x Q524A 77 x 100,9 = 7769,3 kg

BENDING SCHEDULE
STAHLLISTE

NO. NR.	PIECES STÜCK	Ø	LENGTH LÄNGE	Ø 8	Ø 10	Ø 12	Ø 16	Ø 20
1	643	8	1.65	1061.0				
2	1	10	210.0		210.0			
3	1	10	11143.0		11143.0			
4	564	8	5.00	2820.0				
5	96	20	3.10					297.6
6	60	16	2.75				165.0	
7	8	8	4.50	36.0				
8	108	8	1.55	167.4				
9	77	8	1.55	119.4				
10	2	8	5.10	10.2				
11	4	8	4.00	16.0				
12	56	10	4.00		224.0			
13	168	8	3.05	512.4				
14	210	8	1.15	241.5				
15	120	8	2.80	336.0				
16	120	8	2.40	288.0				
17	42	8	2.10	88.2				
18	42	8	2.25	94.5				
19	18	8	4.20	75.6				
20	21	8	4.10	86.1				
21	14	8	2.20	30.8				
22	13	8	4.60	59.8				
23	14	8	2.30	32.2				
24	14	8	1.20	16.8				
25	40	8	2.55	102.0				
26	40	8	1.30	52.0				
27	27	8	2.55	68.9				
28	24	8	1.40	33.6				
29	72	8	2.15	154.8				
30	176	8	2.05	360.8				
31	8	20	10.00					80.0
32	4	12	5.50			22.0		
33	12	10	7.95		95.4			
34	36	10	1.20		43.2			
35	12	10	3.95		47.4			
			Σ	6864.0	11763.0	22.0	165.0	377.6
			kg/m	0.395	0.617	0.888	1.58	2.47
			kg	2711.3	7257.8	19.5	260.7	932.7
TOTAL WEIGHT GESAMTGEWICHT				11 182.0 kg				

MATERIALS
BAUSTOFFE

CONCRETE *BETON*	C25/30 XC3 WF
REINFORCEMENT *BETONSTAHL*	BSt 500 S, BSt 500 M
CONCRETE COVER *BETONDECKUNG*	nom c = 3.5 cm
DIAMETER OF BENDING ROLL *BIEGEROLLENDURCHMESSER*	d_s < 20mm: $d_{br} \geq 4d_s$ $d_s \geq$ 20mm: $d_{br} \geq 7d_s$

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.8	FORMWORK PLAN ROOF SLAB *SCHALPLAN DECKENPLATTE*
S-1.7	UPPER REINFORCEMENT ROOF SLAB *OBERE BEWEHRUNG DECKENPLATTE*
S-1.8	REINFORCEMENT PUMP HOUSE WALLS *BEWEHRUNG PUMPENHAUSWÄNDE*

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING BAUWERK: OPERATING TANK 5000m³
FLACHBODENTANK 5000m³

DESIGNATION BEZEICHNUNG: LOWER REINFORCEMENT ROOF SLAB
UNTERE BEWEHRUNG DECKENPLATTE

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L - B - B
ANSCHRIFT: UNTERTORPLATZ 2 | 76829 LANDAU
TELEFON: (06341) 913-274 TELEFAX: (06341) 913-241
LANDAU,
BY PAOLY / IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN KOTSCHENEUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HENNING GÖTZ

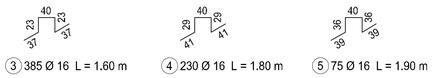
INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED: GENEHMIGT — DATE DATUM: 6. MAI 2015
SCALE MAESSTAB: 1:50 ; 1:25
ORIGINAL SIGNED BY IN ORIGINAL GEZ.
GERALD SAND
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFBCE / J PM
STANDARD SHEET STANDARD PLAN
S - 1.6
CAD-project.pdfx
CAD-Proj(xlt)pfx:d

CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. PLAN-NR. OF VON

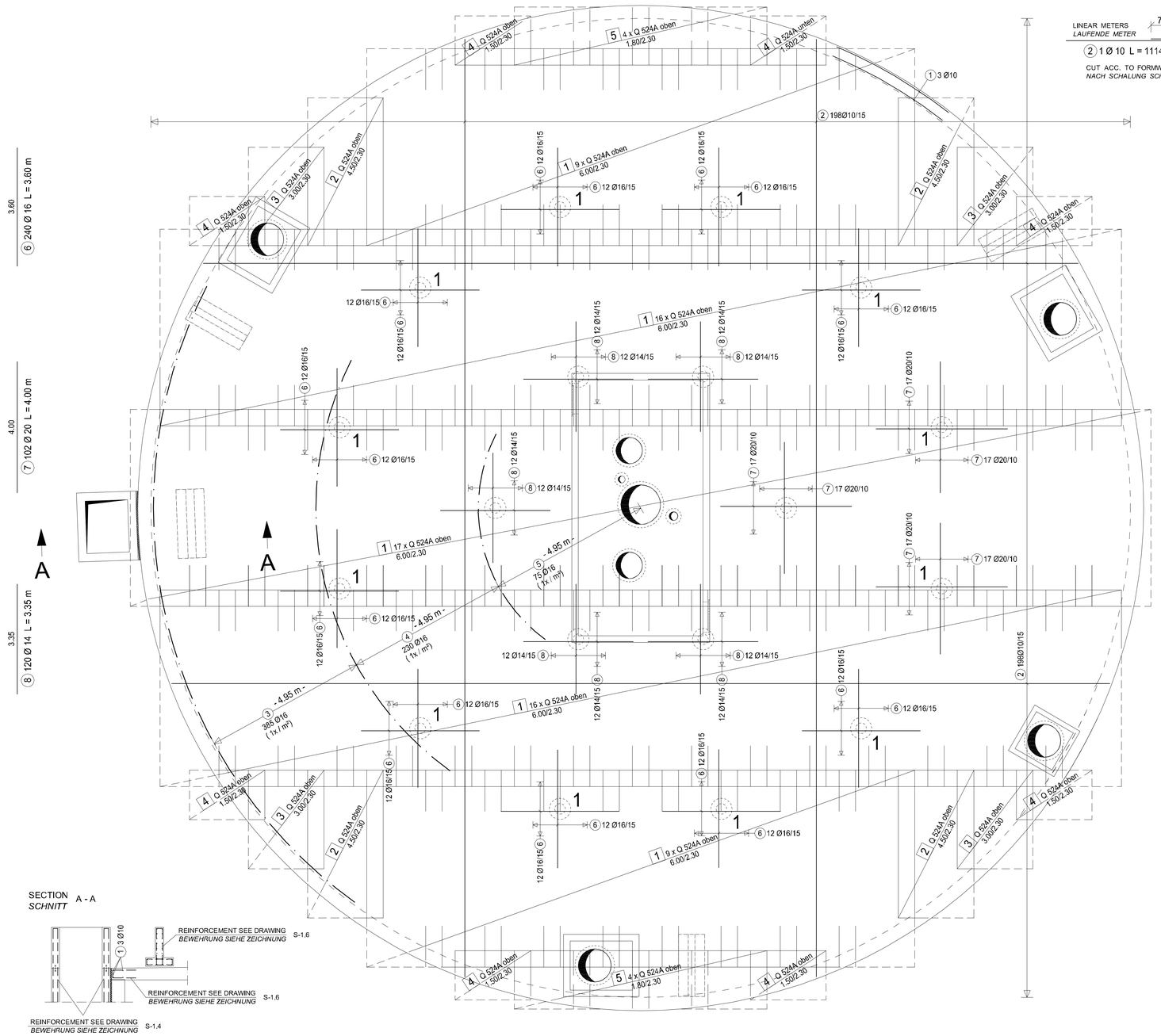
TOP VIEW ROOF SLAB
UPPER REINFORCEMENT
DRAUFSICHT DECKENPLATTE
OBERE BEWEHRUNG



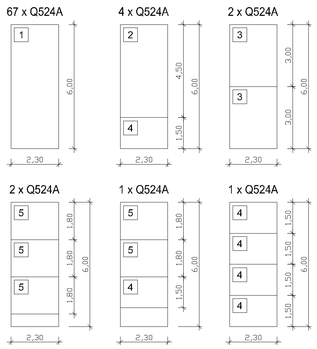
③ 385 Ø 16 L = 1.60 m ④ 230 Ø 16 L = 1.80 m ⑤ 75 Ø 16 L = 1.90 m

LINEAR METERS 70
LAUFENDE METER
① 1 Ø 10 L = 315.0 m
BENDED ACC. TO FORMWORK
NACH SCHALUNG BIEGEN

LINEAR METERS 70
LAUFENDE METER
② 1 Ø 10 L = 11143.00 m
CUT ACC. TO FORMWORK
NACH SCHALUNG SCHNEIDEN



CUTTING SKETCH
SCHNEIDESKIZZE



WIRE MESH REQUIRED
MATTENBEDARF

77 x Q524A 77 x 100,9 = 7769,3 kg

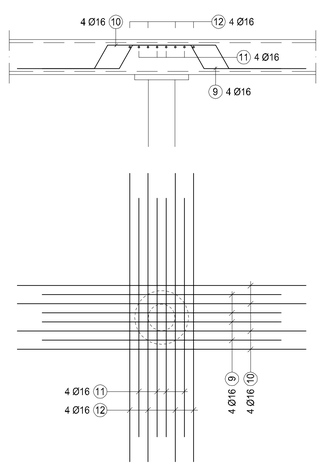
BENDING SCHEDULE
STAHLLISTE

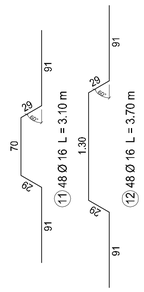
NO. *NR.*	PIECES *STÜCK*	Ø	LENGTH *LÄNGE*	Ø 8	Ø 10	Ø 14	Ø 16	Ø 20
1	1	10	315.0		315.0			
2	1	10	11143.0		11143.0			
3	385	16	1.60				616.0	
4	230	16	1.80				414.0	
5	75	16	1.90				142.5	
6	240	16	3.60				864.0	
7	102	20	4.00					408.0
8	120	14	3.35			402.0		
9	48	16	3.20				153.6	
10	48	16	3.80				182.4	
11	48	16	3.10				148.8	
12	48	16	3.70				177.6	
			Σ		11458.0	402.0	2698.9	408.0
			l kg/m	0.395	0.617	1.21	1.58	2.47
			kg		7069.6	486.4	4264.3	1007.8
TOTAL WEIGHT *GESAMTGEWICHT*					12 828.1 kg			

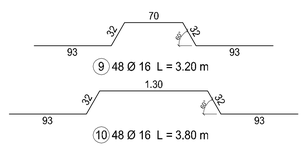
MATERIALS
BAUSTOFFE

CONCRETE *BETON*	C25/30 XC3 WF
REINFORCEMENT *BETONSTAHL*	BSt 500 S, BSt 500 M
CONCRETE COVER *BETONDECKUNG*	nom c = 3.5 cm
DIAMETER OF BENDING ROLL *BIEGEROLLENDURCHMESSER*	d_s < 20mm: $d_{br} \geq 4d_s$ $d_s \geq$ 20mm: $d_{br} \geq 7d_s$

DETAIL COLUMN 1
DETAIL STÜTZE
SCALE 1:25







9 48 Ø 16 L = 3.20 m
10 48 Ø 16 L = 3.80 m

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.8	FORMWORK PLAN ROOF SLAB *SCHALPLAN DECKENPLATTE*
S-1.6	LOWER REINFORCEMENT ROOF SLAB *UNTERE BEWEHRUNG DECKENPLATTE*
S-1.8	REINFORCEMENT PUMP HOUSE WALLS *BEWEHRUNG PUMPENHAUSWÄNDE*

SECTION A - A
SCHNITT

REINFORCEMENT SEE DRAWING S-1.6
BEWEHRUNG SIEHE ZEICHNUNG
REINFORCEMENT SEE DRAWING S-1.6
BEWEHRUNG SIEHE ZEICHNUNG
REINFORCEMENT SEE DRAWING S-1.4
BEWEHRUNG SIEHE ZEICHNUNG

NOTES TO REINFORCEMENT STEELS (TYICAL)
BEMERKUNGEN ZU BEWEHRUNGSEISEN (TYPISCH)

50 Ø 12 / 15 L = 1.50 m

- TOTAL LENGTH *GESTRECKTE LÄNGE (m)*
- DISTANCE BETWEEN REINFORCEMENT STEELS *ABSTAND BEWEHRUNGSEISEN (cm)*
- DIAMETER REINFORCEMENT STEELS *DURCHMESSER BEWEHRUNGSEISEN (mm)*
- DISTANQUANTITY REINFORCEMENT STEELS *ANZAHL BEWEHRUNGSEISEN*

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING BAUWERK: OPERATING TANK 5000m³ FLACHBODENTANK 5000m³

DESIGNATION BEZEICHNUNG: UPPER REINFORCEMENT ROOF SLAB OBERE BEWEHRUNG DECKENPLATTE

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESAMT FÜR LIEGENSCHAFTS- UND BAUVERWALTUNG
LBB-NIEDERLASSUNG LANDAU
L B B
ANSCHRIFT: UNTERTORPLATZ 1 ; 76829 LANDAU
TELEFON: (06341) 913-279 TELEFAX: (06341) 913-365
LANDAU,
BY PROXY / IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN KOTSCHENREUTHER

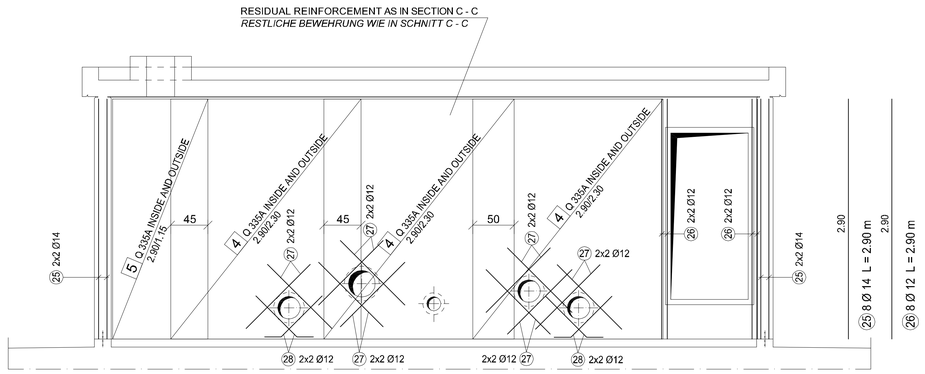
APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HEINRING GÖTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED GENEHMIGT DATE DATUM 6. MAI 2015
SCALE MASSSTAB 1:50 ; 1:25
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SANKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFBCE / LPRC
STANDARD SHEET STANDARD PLAN
S - 1.7
CAD-project path:
CAD-Proj(ektpfad:

CONSTRUCTION PROJECT
BAUMASSNAHME
SHEET-NO. PLAN-NR. OF VON

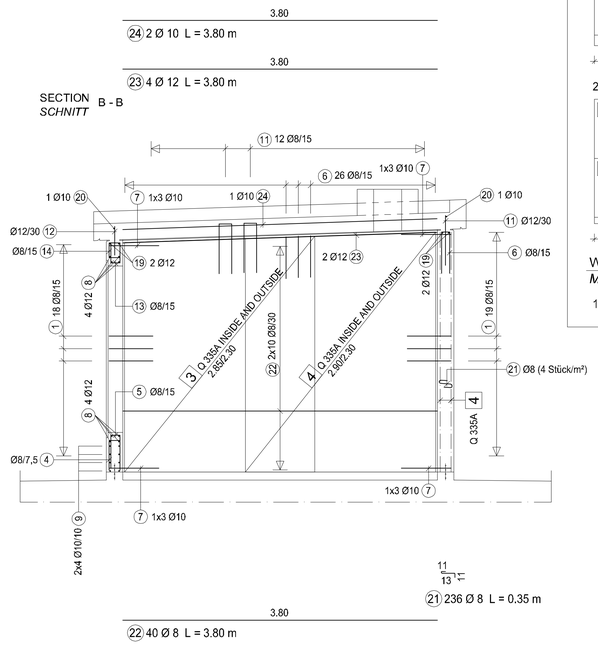
SECTION A - A
SCHNITT



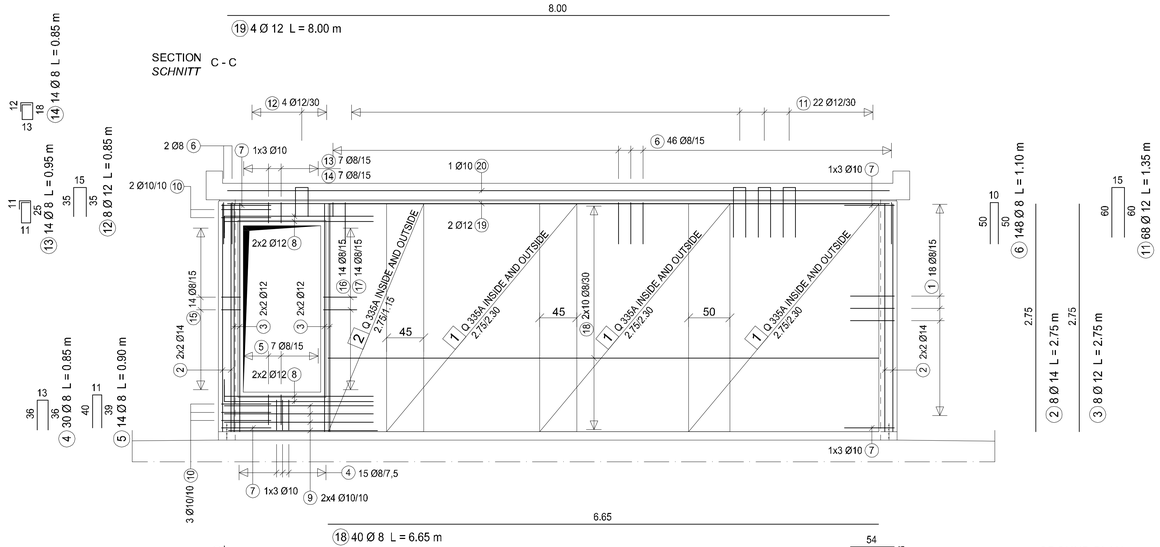
8.00
20 2 Ø 10 L = 8.00 m

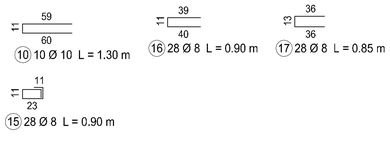
8.00
19 4 Ø 12 L = 8.00 m

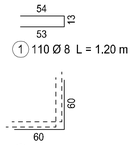
SECTION B - B
SCHNITT



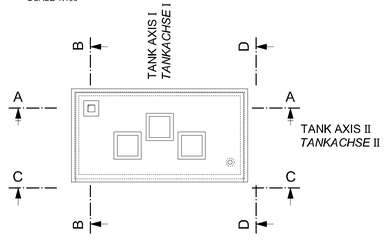
SECTION C - C
SCHNITT



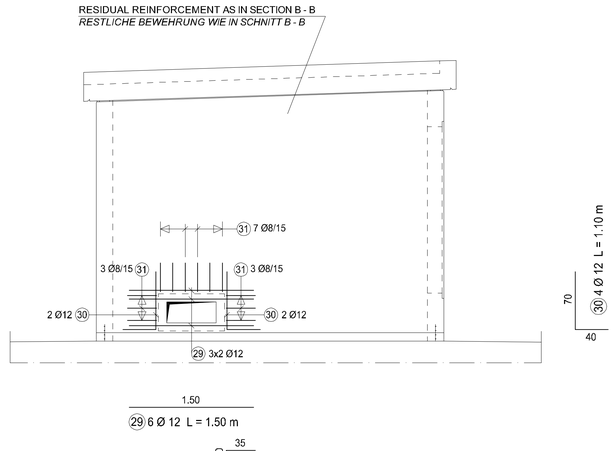




GROUND PLAN
GRUNDRISS
SCALE 1:100



SECTION D - D
SCHNITT

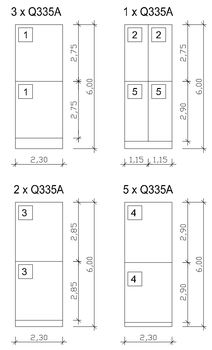


NOTES TO REINFORCEMENT STEELS (TYICAL)
BEMERKUNGEN ZU BEWEHRUNGSEISEN (TYPISCH)

50 Ø 12 / 15 L = 1.50 m

- TOTAL LENGTH
  GESTRECKTE LÄNGE (m)
- DISTANCE BETWEEN REINFORCEMENT STEELS
  ABSTAND BEWEHRUNGSEISEN (cm)
- DIAMETER REINFORCEMENT STEELS
  DURCHMESSER BEWEHRUNGSEISEN (mm)
- DISTANQUANTITY REINFORCEMENT STEELS
  ANZAHL BEWEHRUNGSEISEN

CUTTING SKETCH
SCHNEIDESKIZZE



WIRE MESH REQUIRED
MATTENBEDARF

11 x Q335A 11 x 74,3 = 817,3 kg

BENDING SCHEDULE
STAHLLISTE

NO. *NR.*	PIECES *STÜCK*	Ø	LENGTH *LÄNGE*	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16
1	110	8	1.20	132.0				
2	8	14	2.75				22.0	
3	8	12	2.75			22.0		
4	30	8	0.85	25.5				
5	14	8	0.90	12.6				
6	148	8	1.10	162.8				
7	12	10	1.20		14.4			
8	16	12	2.00			32.0		
9	16	10	1.80		28.8			
10	10	10	1.30		13.0			
11	68	12	1.35			91.8		
12	8	12	0.85			6.8		
13	14	8	0.95	13.3				
14	14	8	0.85	11.9				
15	28	8	0.90	25.2				
16	28	8	0.90	25.2				
17	28	8	0.85	23.8				
18	40	8	6.65	266.0				
19	4	12	8.00			32.0		
20	2	10	8.00		16.0			
21	236	8	0.35	82.6				
22	40	8	3.80	152.0				
23	4	12	3.80			15.2		
24	2	10	3.80		7.6			
25	8	14	2.90				23.2	
26	8	12	2.90			23.2		
27	24	12	1.10			26.4		
28	8	12	0.90			7.2		
29	6	12	1.50			9.0		
30	4	12	1.10			4.4		
31	13	8	0.80	10.4				
			Σ	943.3	79.8	270.0	45.2	
			l kg/m	0.395	0.617	0.888	1.21	1.58
			kg	372.6	49.2	239.8	54.7	
TOTAL WEIGHT *GESAMTGEWICHT*				716.3 kg				

MATERIALS
BAUSTOFFE

CONCRETE *BETON*	C25/30 XC3 WF
REINFORCEMENT *BETONSTAHL*	BSt 500 S, BSt 500 M
CONCRETE COVER *BETONDECKUNG*	nom c = 3.5 cm
DIAMETER OF BENDING ROLL *BIEGEROLLENDURCHMESSER*	d_s < 20mm: $d_{br} \geq 4d_s$ $d_s \geq$ 20mm: $d_{br} \geq 7d_s$

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.5	CONSTRUCTION PLAN, PUMP HOUSE *BAUKONSTRUKTIONSPLAN, PUMPENHAUS*
S-1.9	REINFORCEMENT PUMP HOUSE ROOF SLAB *BEWEHRUNG PUMPENHAUSDECKE*

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING / BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION / BEZEICHNUNG: REINFORCEMENT PUMP HOUSE WALLS / BEWEHRUNG PUMPENHAUSWÄNDE

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
ANSCHRIFT: UNTERFÖRLPLATZ 1 | 76829 LANDAU
TELEFON: (06341) 612-274 TELEFAX: (06341) 612-201
LANDAU,
IN VERTRETUNG / IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN KOTSCHENREUTHER

APPROVED/GENEHMIGT
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WALLSTR.1
55122 MAINZ
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HENNING GÖTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED / GENEHMIGT — DATE / DATUM: 6. MAI 2015
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SANKO
COMMANDER FUEL FACILITIES ENGINEER
HQ USAFE - AFAFEC/ J / PO

SCALE / MASSSTAB: 1:25

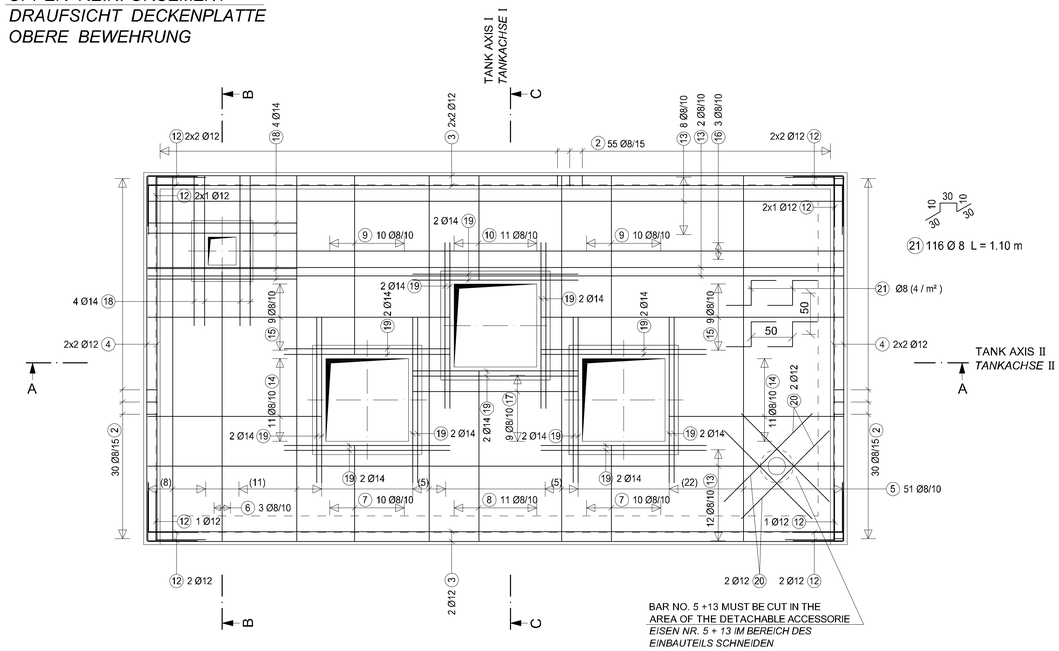
STANDARD SHEET / STANDARD PLAN: S - 1.8

CAD-proj/oct path:
CAD-file/objfdd:

CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. / PLAN-NR. OF VON

TOP VIEW ROOF SLAB
UPPER REINFORCEMENT
DRAUFSICHT DECKENPLATTE
OBERE BEWEHRUNG



16 6 Ø 8 L = 7.25 m (7.25)

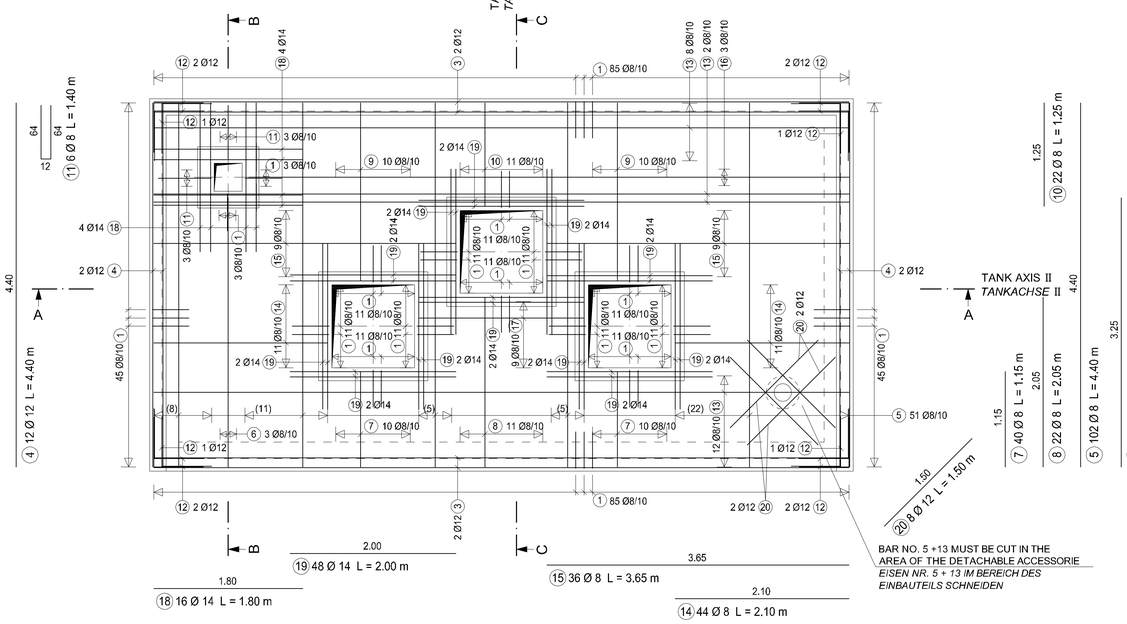
13 44 Ø 8 L = 8.40 m (8.40)

3 10 Ø 12 L = 8.40 m (8.40)

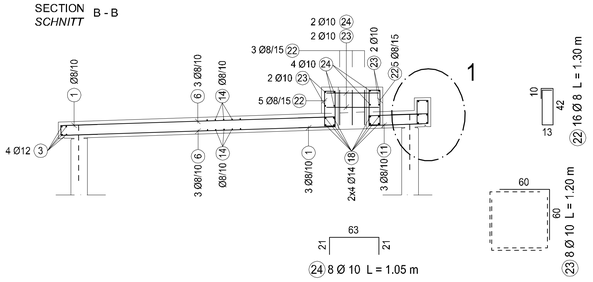
17 18 Ø 8 L = 2.00 m (2.00)

TOP VIEW ROOF SLAB
LOWER REINFORCEMENT
DRAUFSICHT DECKENPLATTE
UNTERE BEWEHRUNG

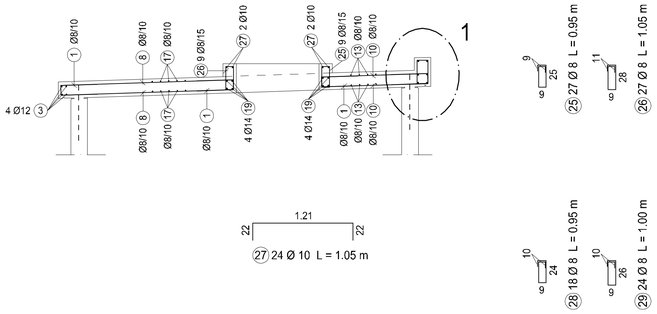
12 30 Ø 12 L = 1.20 m (60 / 60)



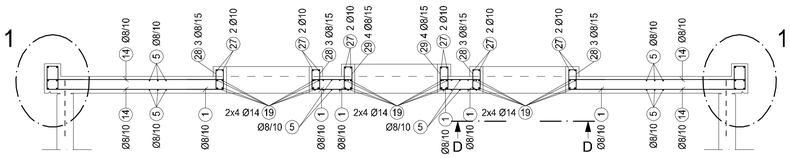
SECTION B - B
SCHNITT



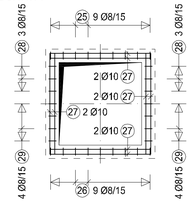
SECTION C - C
SCHNITT



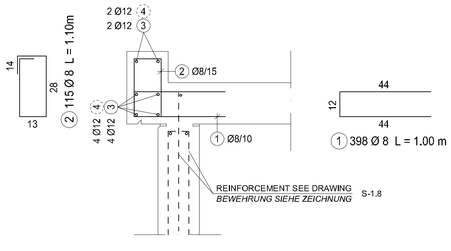
SECTION A - A
SCHNITT



SECTION D - D
SCHNITT



DETAIL 1
DETAIL
SCALE 1:10



NOTES TO REINFORCEMENT STEELS (TYICAL)
BEMERKUNGEN ZU BEWEHRUNGSEISEN (TYPISCH)

50 Ø 12 / 15 L = 1.50 m

- TOTAL LENGTH
  GESTRECKTE LÄNGE (m)
- DISTANCE BETWEEN REINFORCEMENT STEELS
  ABSTAND BEWEHRUNGSEISEN (cm)
- DIAMETER REINFORCEMENT STEELS
  DURCHMESSER BEWEHRUNGSEISEN (mm)
- DISTANQUANTITY REINFORCEMENT STEELS
  ANZAHL BEWEHRUNGSEISEN

BENDING SCHEDULE
STAHLLISTE

NO. *NR.*	PIECES *STÜCK*	Ø	LENGTH *LÄNGE*	Ø 8	Ø 10	Ø 12	Ø 14	Ø 16
1	398	8	1.00	398.0				
2	115	8	1.10	126.5				
3	10	12	8.40			84.0		
4	12	12	4.40			52.8		
5	102	8	4.40	448.8				
6	6	8	3.25	19.5				
7	40	8	1.15	46.0				
8	22	8	2.05	45.1				
9	40	8	2.15	86.0				
10	22	8	1.25	27.5				
11	6	8	1.40	8.4				
12	30	12	1.20			36.0		
13	44	8	8.40	369.6				
14	44	8	2.10	92.4				
15	36	8	3.65	131.4				
16	6	8	7.25	43.5				
17	18	8	2.00	36.0				
18	16	14	1.80				28.8	
19	48	14	2.00				96.0	
20	8	12	1.50			12.0		
21	116	8	1.10	127.6				
22	16	8	1.30	20.8				
23	8	10	1.20		9.6			
24	8	10	1.05		8.4			
25	27	8	0.95	25.7				
26	27	8	1.05	28.3				
27	24	10	1.05		25.2			
28	18	8	0.95	17.1				
29	24	8	1.00	24.0				
			Σ	2122.2	43.2	184.8	124.8	
			l kg/m	0.395	0.617	0.888	1.21	1.58
			kg	838.3	26.7	164.1	151.0	
TOTAL WEIGHT *GESAMTGEWICHT*				1180.1 kg				

MATERIALS
BAUSTOFFE

CONCRETE *BETON*	C25/30 XC3 WF
REINFORCEMENT *BETONSTAHL*	BSt 500 S, BSt 500 M
CONCRETE COVER *BETONDECKUNG*	nom c = 3.5 cm
DIAMETER OF BENDING ROLL *BIEGEROLLENDURCHMESSER*	d_s < 20mm: $d_{br} \geq 4d_s$ $d_s \geq$ 20mm: $d_{br} \geq 7d_s$

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.5	CONSTRUCTION PLAN, PUMP HOUSE *BAUKONSTRUKTIONSPLAN, PUMPENHAUS*
S-1.8	REINFORCEMENT PUMP HOUSE WALLS *BEWEHRUNG PUMPENHAUSWÄNDE*

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES
AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING BAUWERK: OPERATING TANK 5000m³ FLACHBODENTANK 5000m³

DESIGNATION BEZEICHNUNG: REINFORCEMENT PUMP HOUSE ROOF SLAB BEWEHRUNG PUMPENHAUSDECKE

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUGESTREUNG
LBB-NIEDERLASSUNG LANDAU
L B - B
ANSCHRIFT: UNTERTORPLATZ 1 ; 76829 LANDAU
TELEFON: (06341) 912-274 TELEFAX: (06341) 912-265
LANDAU,
BY PROVIDED IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN KOTSCHENREUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HENNING GÖTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEführt FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED GENEHMIGT — DATE DATUM: 6. MAI 2015
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SANKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFRICA / LNO

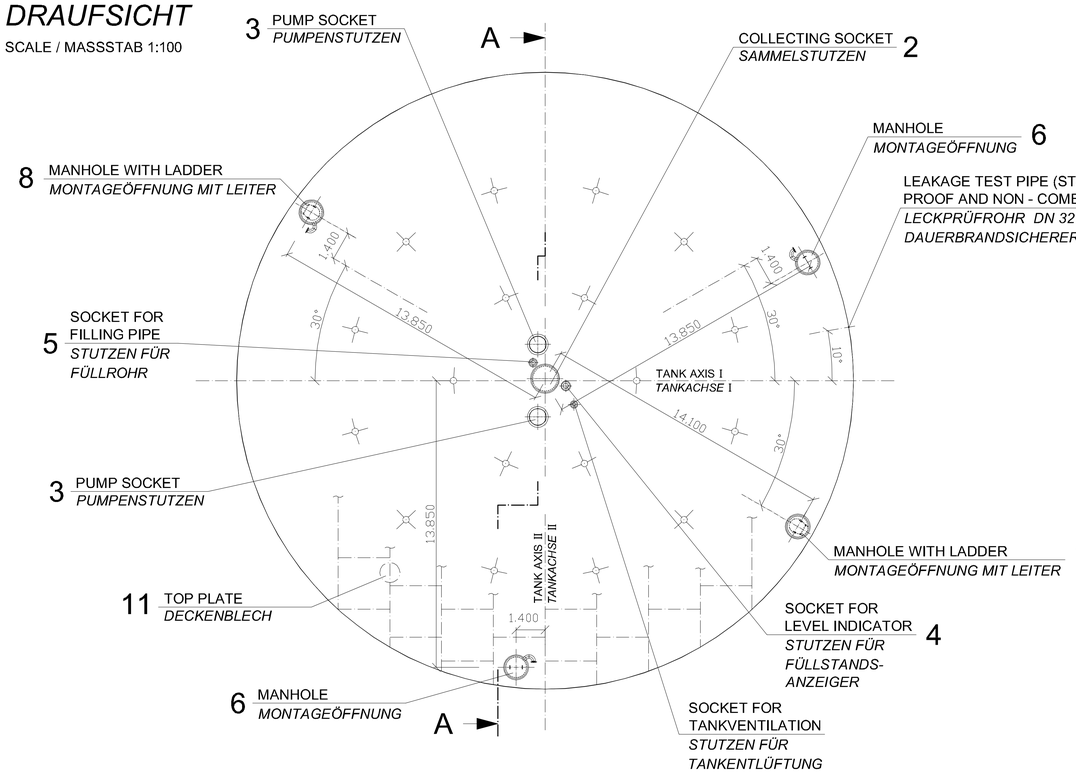
SCALE MASSSTAB: 1:25 ; 1:10
STANDARD SHEET STANDARD PLAN
S - 1.9
CAD-project path:
CAD-Proj/ablpfad:

CONSTRUCTION PROJECT
BAUMASSNAHME

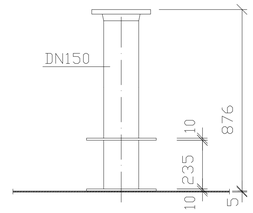
SHEET-NO. PLAN-NR. OF VON

TOP VIEW
DRAUFSICHT

SCALE / MASSSTAB 1:100

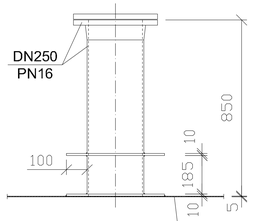


SOCKET FOR TANKVENTILATION
STUTZEN FÜR TANKENTLÜFTUNG
SCALE / MASSSTAB 1:10



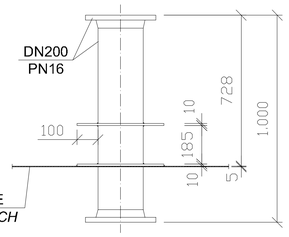
DETAIL "4"

SOCKET FOR LEVEL INDICATOR
STUTZEN FÜR FÜLLSTANDSANZEIGE
SCALE / MASSSTAB 1:10



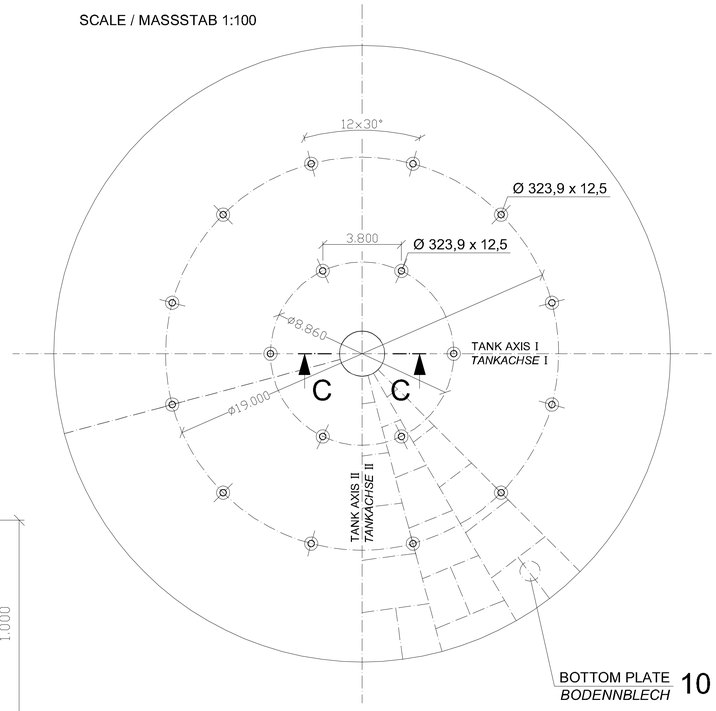
DETAIL "5"

SOCKET FOR FILLING PIPE
STUTZEN FÜR FÜLLROHR
SCALE / MASSSTAB 1:10



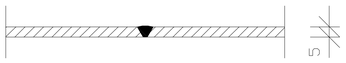
SECTION B - B
SCHNITT

SCALE / MASSSTAB 1:100



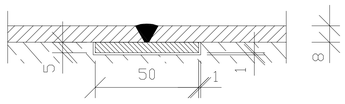
DETAIL "11"

TOP PLATE
DECKENBLECH
SCALE / MASSSTAB 1:1

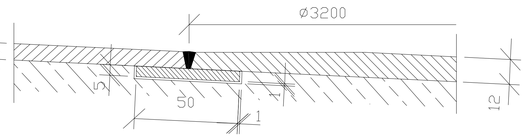


DETAIL "10"

BOTTOM PLATE
BODENBLECH
SCALE / MASSSTAB 1:1



CONNECTION BOTTOM PLATE - SUMP
ANSCHLUSS BODENBLECH - SUMPF
SCALE / MASSSTAB 1:1



NOTES
BEMERKUNGEN

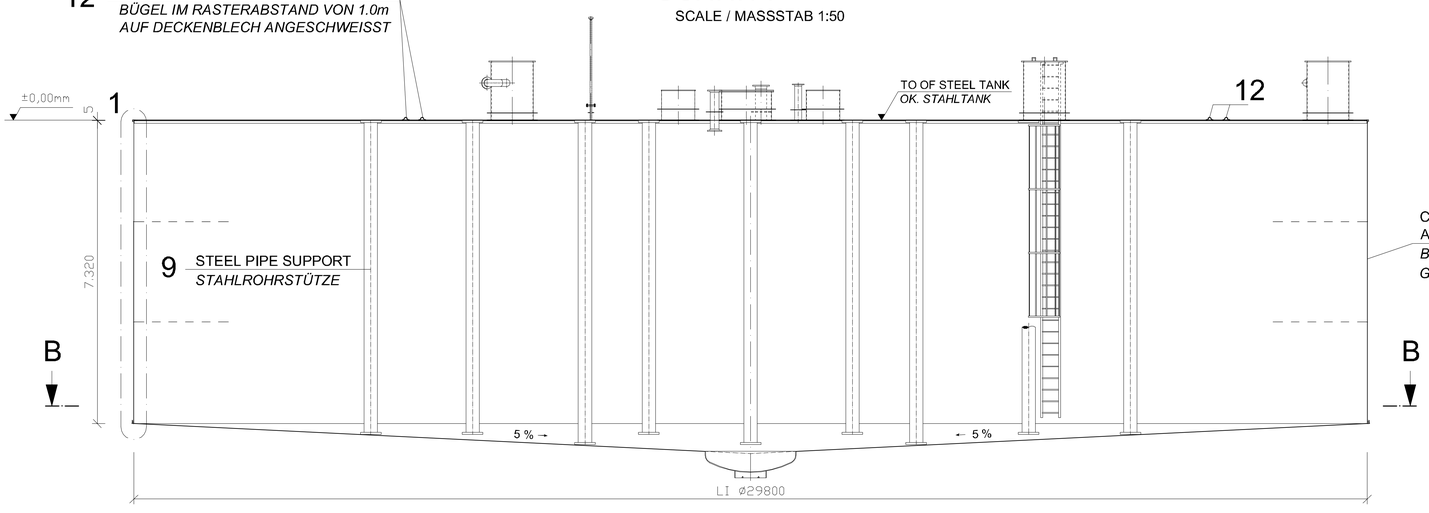
PLACING OF THE BOTTOM PLATES ACCORDING TO THE MOST FAVORABLE WELDING DESIGN AS SELECTED BY THE CONTRACTOR.
AUFTEILUNG DER BODENBLECHE ENTSPRECHEND DER GÜNSTIGSTEN SCHWEISSTECHNISCHEN AUSFÜHRUNG NACH WAHL DES A.N.

FOR INTERIOR COATING ALL EDGES WITHIN THE TANK MUST BE ROUNDED OFF TO RADIUS OF AT LEAST 3mm AND ALL WELDING SEAMS MUST BE SMOOTHENED.
FÜR DIE INNENBESCHICHTUNG MÜSSEN ALLE KANTEN INNERHALB DES TANKS AUF EINEN RADIUS VON MIND. 3mm ABGERUNDET UND ALLE SCHWEISSNÄHTE GLATTGESCHLIFFEN SEIN.

IN THE AREA OF PIPE SUPPORTS A DIRECT COMPRESSION CONNECTION IS FORCIBLE REQUIRED , I.E. THE BOTTOM PLATE OF THE TANK MUSTBE COMPLETLY SUPPORTED ON CONCRETE FLOOR SLAB.
IM BEREICH DER STAHLROHRSTÜTZEN IST EINE DIREKTE DRUCK-VERBINDUNG ZUR BODENPLATTE ZWINGEND ERFORDERLICH , D.H. DAS BODENBLECH MUSS VOLLSTÄNDIG AUF DEM BODEN AUFLIEGEN.

SECTION A - A
SCHNITT

SCALE / MASSSTAB 1:50



COATING OUTER SURFACE STEEL TANK
ACC. TO STS-M 72
BESCHICHTUNG AUSSENFLÄCHE STAHLTANK GEMÄSS STS-M 72

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

S-1.11 DETAILS - STEEL TANK
DETAILS - STAHLTANK

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING BAUWERK: OPERATING TANK 5000m³ FLACHBODENTANK 5000m³

DESIGNATION BEZEICHNUNG: STEEL TANK STAHLTANK

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L · B · B
ANSCHRIFT: UNTERTORPLATZ 1 ; 76829 LANDAU
TELEFON : (06341) 612-274 TELEFAX: (06341) 612-201
LANDAU,
BY PAOS / IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN HOTSCHKNEUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
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EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED GENEHMIGT: DATE DATUM 6. MAI 2015
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SANKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - RAMSTEIN (LFM)

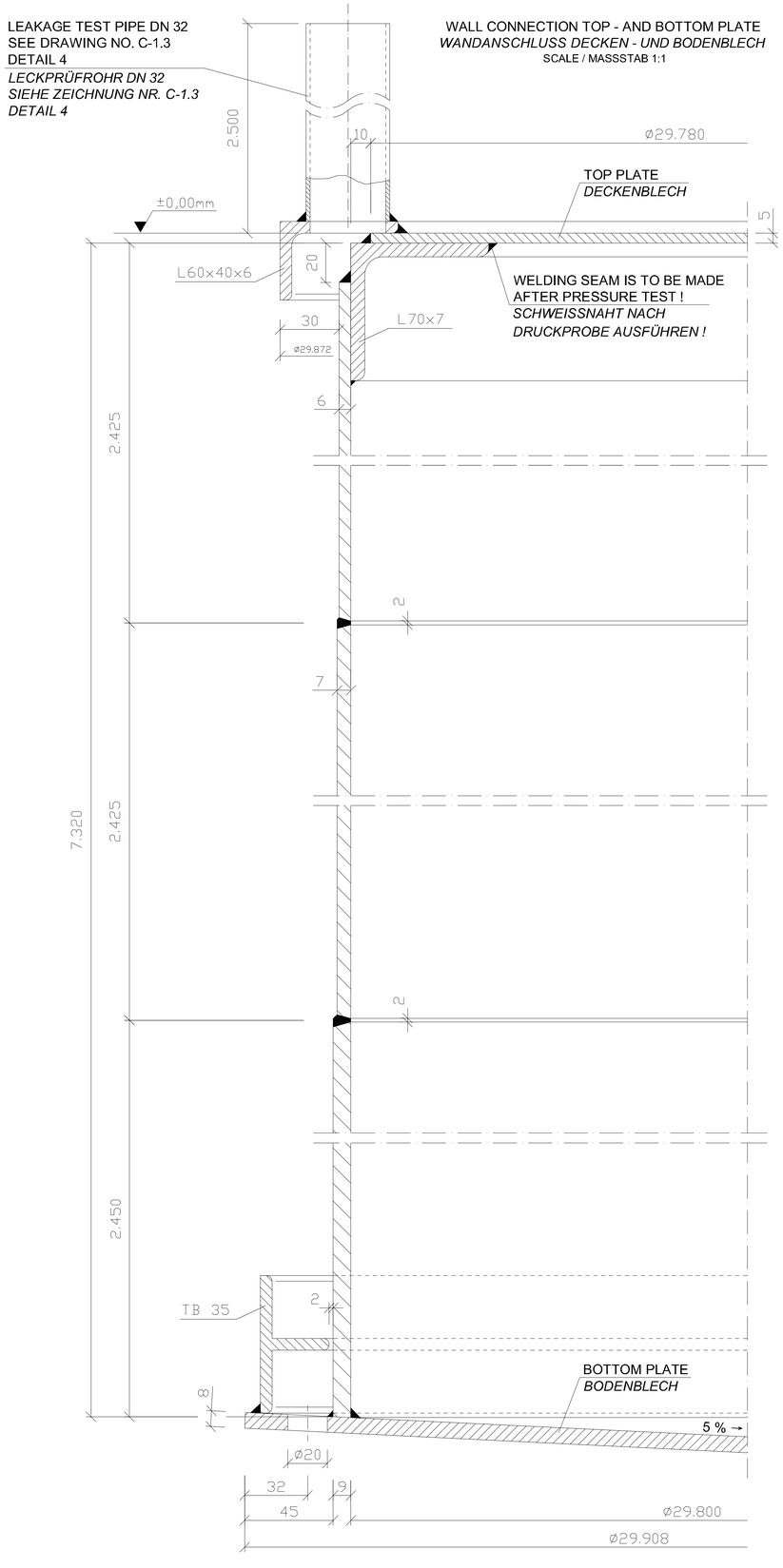
SCALE MASSSTAB: 1:100 ; 1:50 ; 1:10 ; 1:1

STANDARD SHEET STANDARD PLAN
S - 1.10

CAD-project path
CAD-Projektpfad:

CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. PLAN-NR.
OF VON

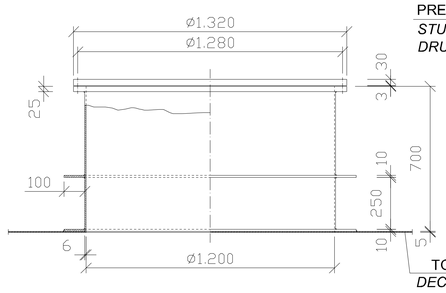


DETAIL "1"

WALL CONNECTION TOP - AND BOTTOM PLATE
WANDANSCHLUSS DECKEN - UND BODENBLECH
SCALE / MASSSTAB 1:1

DETAIL "2"

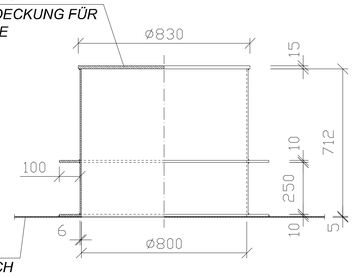
COLLECTING SOCKET
SAMMELSTUTZEN
SCALE / MASSSTAB 1:10



DETAIL "3"

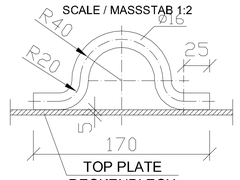
PUMP SOCKET
PUMPENSTUTZEN
SCALE / MASSSTAB 1:10

SOCKET COVER FOR
PRESSURE TEST
STUTZENABDECKUNG FÜR
DRUCKPROBE



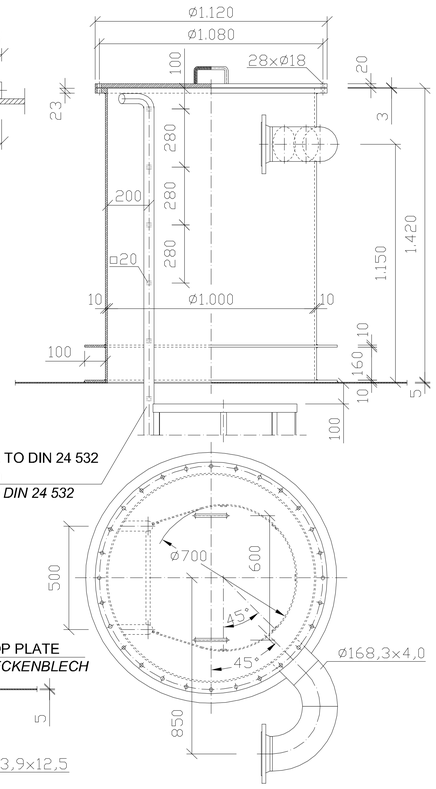
DETAIL "12"

BRACKET
BÜGEL
SCALE / MASSSTAB 1:2



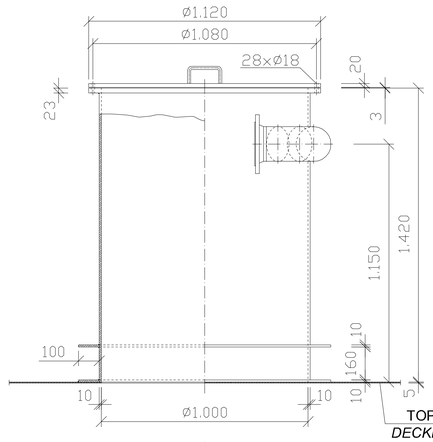
DETAIL "8"

MANHOLE WITH LADDER
MONTAGEÖFFNUNG MIT LEITER
SCALE / MASSSTAB 1:10



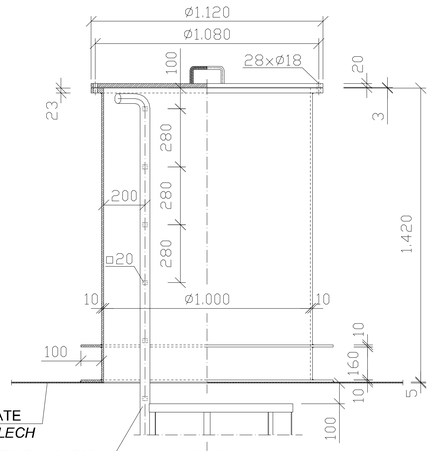
DETAIL "6"

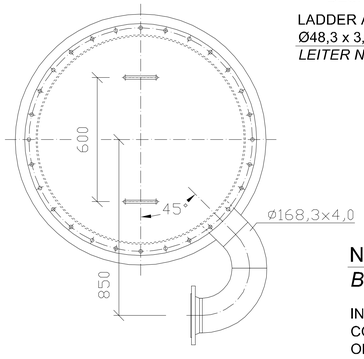
MANHOLE
MONTAGEÖFFNUNG
SCALE / MASSSTAB 1:10

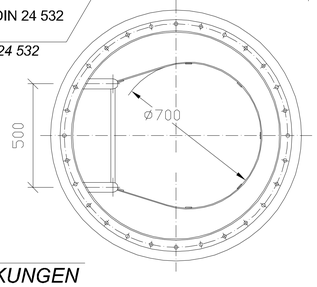


DETAIL "7"

MANHOLE WITH LADDER
MONTAGEÖFFNUNG MIT LEITER
SCALE / MASSSTAB 1:10

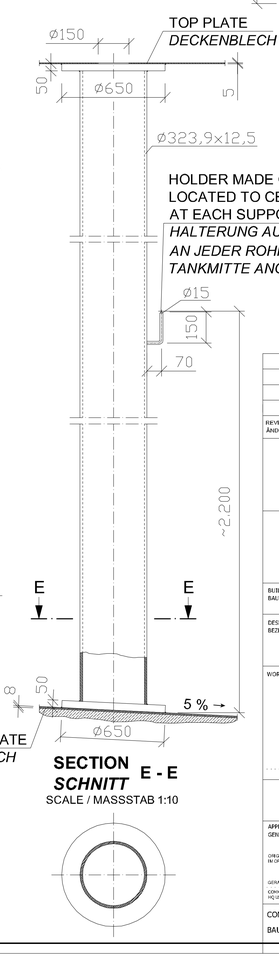






DETAIL "9"

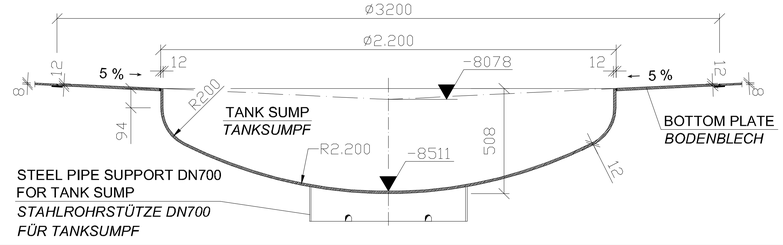
STEEL PIPE SUPPORT
STAHLROHRSTÜTZE
SCALE / MASSSTAB 1:10



HOLDER MADE OF SS
LOCATED TO CENTER OF TANK
AT EACH SUPPORT.
HALTERUNG AUS CR-NI-STAHL
AN JEDER ROHRSTÜTZE ZUR
TANKMITTE ANGEORDNET.

SECTION C - C
SCHNITT

SCALE / MASSSTAB 1:10



STEEL PIPE SUPPORT DN700
FOR TANK SUMP
STAHLROHRSTÜTZE DN700
FÜR TANKSUMPF

NOTES
BEMERKUNGEN

IN THE AREA OF PIPE SUPPORTS A DIRECT COMPRESSION CONNECTION IS FORCIBLE REQUIRED , I.E. THE BOTTOM PLATE OF THE TANK MUSTBE COMPLETLY SUPPORTED ON CONCRETE FLOOR SLAB.

IM BEREICH DER STAHLROHRSTÜTZEN IST EINE DIREKTE DRUCK-VERBINDUNG ZUR BODENPLATTE ZWINGEND ERFORDERLICH , D.H. DAS BODENBLECH MUSS VOLLSTÄNDIG AUF DEM BODEN AUFLIEGEN.

SECTION E - E
SCHNITT

SCALE / MASSSTAB 1:10

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

S-1.10 STEEL TANK / *STAHLTANK*

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES
AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD
STANDARD DESIGN US
JET FUEL STORAGE AND
DISPENSING SYSTEMS

FLUGPLATZ
STANDARDPLANUNG US
FLUGKRAFTSTOFF -
VERSORGUNGSANLAGEN

BUILDING / BAUWERK: OPERATING TANK 5000m³
FLACHBODENTANK 5000m³

DESIGNATION / BEZEICHNUNG: DETAILS , STEEL TANK
DETAILS , STAHLTANK

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L - B - B
ANSCHRIFT: UNTERTORPLATZ 1, 76829 LANDAU
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LANDAU,
BY PROXY / IN VERTRETUNG
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STEFAN VOTSCHKNEUTHER

APPROVED/GENEHMIGT
AMT
FÜR
BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
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HENNING GÖTZ

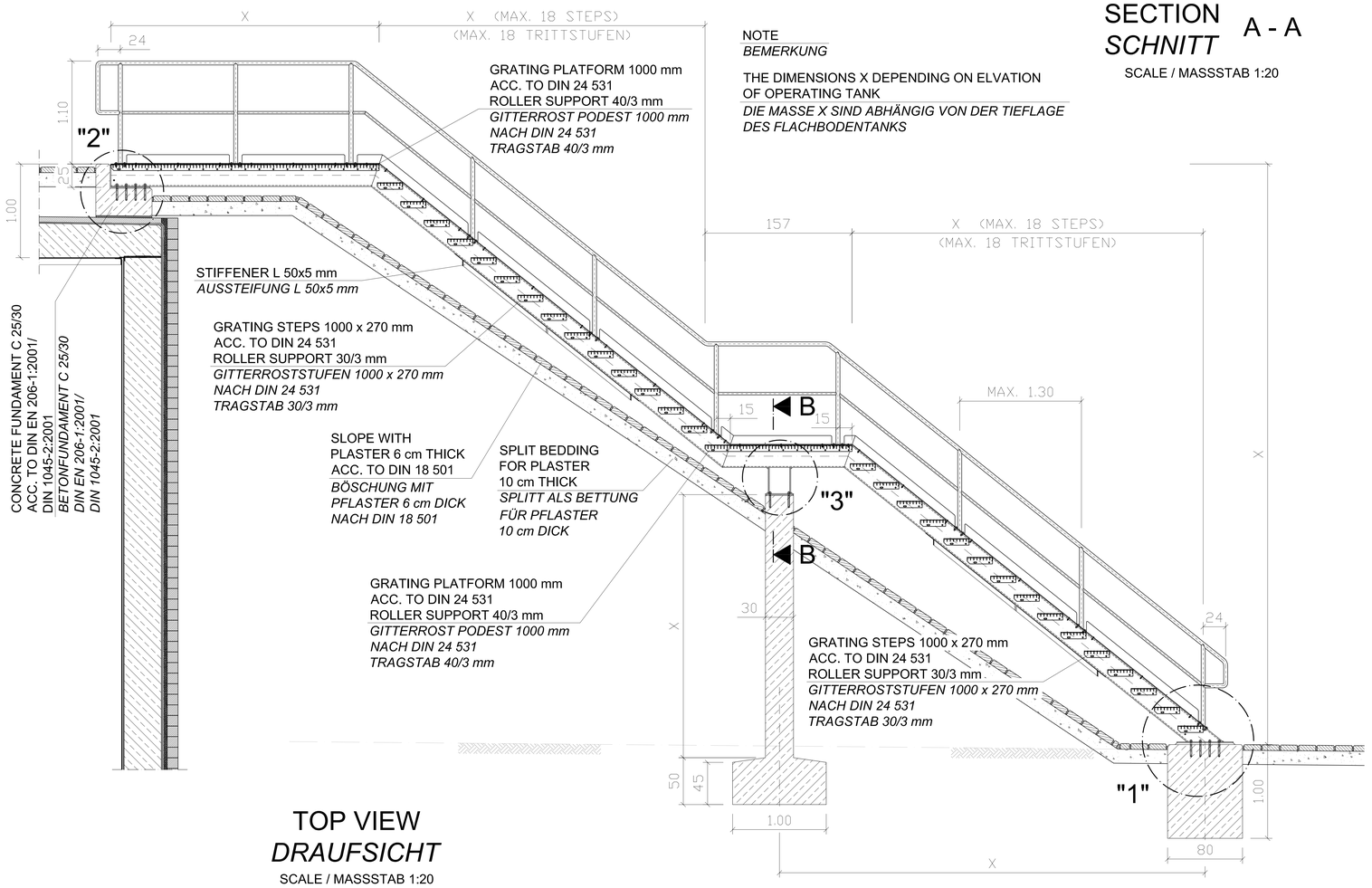
INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEführt FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED/GENEHMIGT DATE/DATUM 6. MAI 2015
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SANIO
COMMANDER FUEL FACILITIES ENGINEER
HQ USAFE - AFAFEQ / A PO

SCALE/MASSSTAB 1:1 ; 1:2 ; 1:10
STANDARD SHEET/STANDARD PLAN
S - 1.11
CAD-project path:
CAD-Projektpfad:

CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. PLAN-NR.
OF VON



NOTE
BEMERKUNG

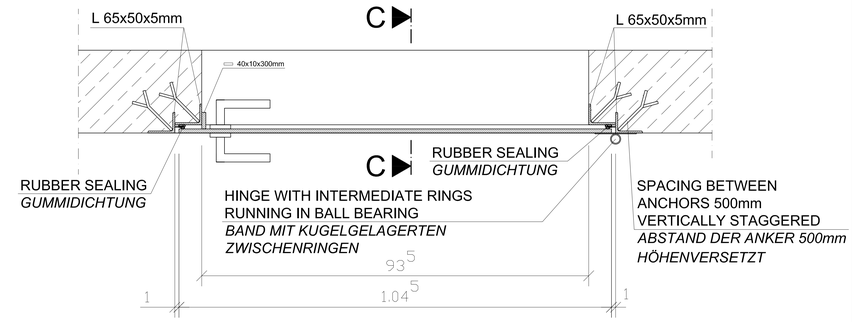
THE DIMENSIONS X DEPENDING ON ELVATION OF OPERATING TANK
DIE MASSE X SIND ABHÄNGIG VON DER TIEFLAGE DES FLACHBODENTANKS

SECTION A - A
SCHNITT

SCALE / MASSSTAB 1:20

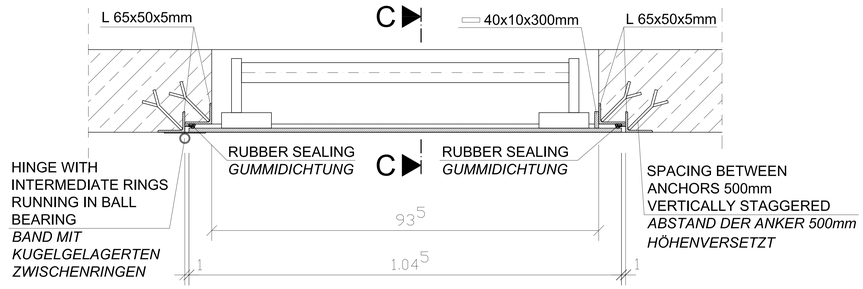
SECTION, SPLINTER PROTECTION DOOR ENTRANCE
SCHNITT, SPLITTERSCHUTZTÜR EINGANG

SCALE / MASSSTAB 1:5



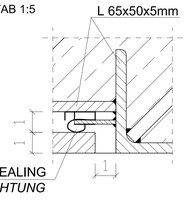
SECTION, SPLINTER PROTECTION DOOR EMERGENCY EXIT
SCHNITT, SPLITTERSCHUTZTÜR NOTAUSGANG

SCALE / MASSSTAB 1:5



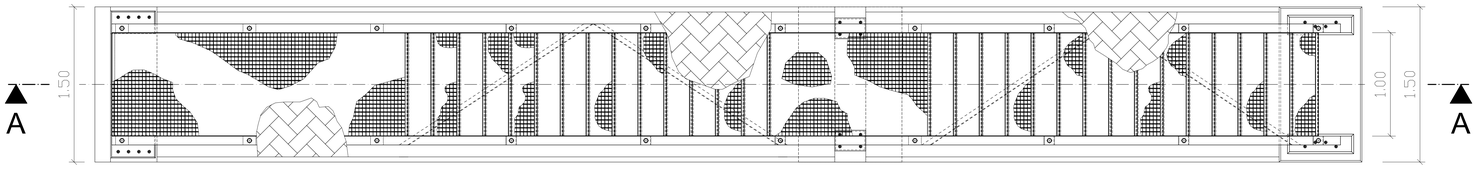
DETAIL RUBBER SEALING
DETAIL GUMMIDICHTUNG

SCALE / MASSSTAB 1:5



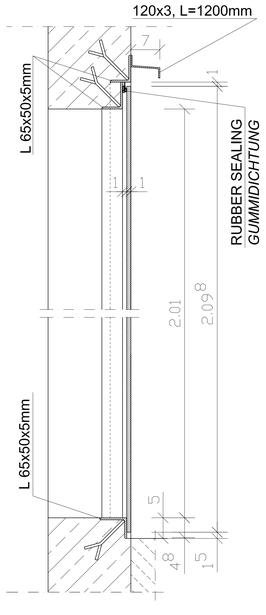
TOP VIEW
DRAUFSICHT

SCALE / MASSSTAB 1:20

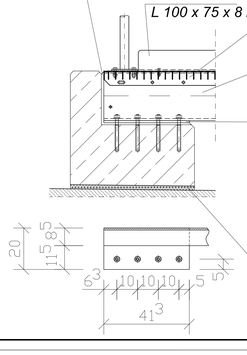


SECTION A - A
SCHNITT

SCALE / MASSSTAB 1:5



DETAIL "2"
SCALE/MASSSTAB 1:10



COMPENSATION LAYER OF
ARTIFICIAL MORTAR
AUSGLEICHSSCHICHT AUS
KUNSTHARZMÖRTEL

L 100 x 75 x 8 mm, GALV.
L 100 x 75 x 8 mm, VERZ.

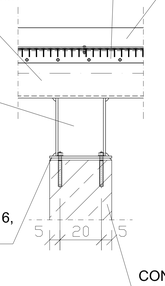
BASE PLATE St 37-2, GALV.
413 x 200 x 10 mm
WITH 4 BORINGS Ø18 mm
FOR COMPOSITE DOWELS M16,
WELDED WITH U 240
FUSSPLATTE St 37-2, VERZ.
413 x 200 x 10 mm
MIT 4 BORHUNGEN Ø18 mm
FÜR VERBUNDANKER M16,
MIT U 240 VERSCHWEISST

HARDPLATE FOR THE PROTECTION
OF THE INSULATION OF TANK SLAB
2 cm THICK
HARTFASERPLATTE ZUM SCHUTZ DER
ISOLIERUNG DER TANKDECKE
2 cm DICK

GRATING PLATFORM 1000 mm
ACC. TO DIN 24 531
ROLLER SUPPORT 40/3 mm
GITTERROST PODEST 1000 mm
NACH DIN 24 531
TRAGSTAB 40/3 mm

U 240 St 37-2, GALV.
U 240 St 37-2, VERZ.

DETAIL "3"
SCALE/MASSSTAB 1:10



GRATING PLATFORM 1000 mm
ACC. TO DIN 24 531
ROLLER SUPPORT 40/3 mm
GITTERROST PODEST 1000 mm
NACH DIN 24 531
TRAGSTAB 40/3 mm

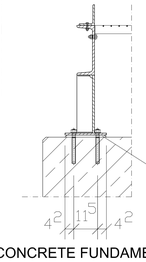
U 240 St 37-2, GALV.
U 240 St 37-2, VERZ.

ADJUSTED ON SITE
U 240 St 37-2, GALV.
ÖRTLICH ANPASSEN
U 240 St 37-2, VERZ.

BASE PLATE St 37-2, GALV.
300 x 200 x 10 mm
WITH 4 BORINGS Ø18 mm
FOR COMPOSITE DOWELS M16,
WELDED WITH U 240
FUSSPLATTE St 37-2, VERZ.
300 x 200 x 10 mm
MIT 4 BORHUNGEN Ø18 mm
FÜR VERBUNDANKER M16,
MIT U 240 VERSCHWEISST

L 100 x 75 x 8 mm, GALV.
L 100 x 75 x 8 mm, VERZ.

SECTION B - B
SCHNITT

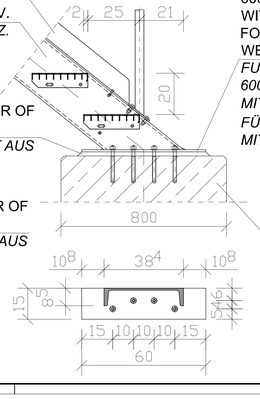


CONCRETE FUNDAMENT C 25/30
ACC. TO DIN EN 206-1:2001/DIN 1045-2:2001
BETONFUNDAMENT C 25/30
DIN EN 206-1:2001/DIN 1045-2:2001

DETAIL "1"
SCALE / MASSSTAB 1:10

L 100 x 75 x 8 mm, GALV.
L 100 x 75 x 8 mm, VERZ.

U 240 St 37-2, GALV.
U 240 St 37-2, VERZ.



COMPENSATION LAYER OF
ARTIFICIAL MORTAR
AUSGLEICHSSCHICHT AUS
KUNSTHARZMÖRTEL

COMPENSATION LAYER OF
ARTIFICIAL MORTAR
AUSGLEICHSSCHICHT AUS
KUNSTHARZMÖRTEL

BASE PLATE St 37-2, GALV.
600 x 150 x 10 mm
WITH 4 BORINGS Ø18 mm
FOR COMPOSITE DOWELS M16,
WELDED WITH U 240
FUSSPLATTE St 37-2, VERZ.
600 x 150 x 10 mm
MIT 4 BORHUNGEN Ø18 mm
FÜR VERBUNDANKER M16,
MIT U 240 VERSCHWEISST

CONCRETE FUNDAMENT C 25/30
ACC. TO DIN EN 206-1:2001/
DIN 1045-2:2001
BETONFUNDAMENT C 25/30
DIN EN 206-1:2001/
DIN 1045-2:2001

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES
AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD
STANDARD DESIGN US

JET FUEL STORAGE AND
DISPENSING SYSTEMS

FLUGPLATZ
STANDARDPLANUNG US

FLUGKRAFTSTOFF -
VERSORGUNGSANLAGEN

BUILDING / BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION / BEZEICHNUNG: TANK STAIRS AND SPLINTER PROTECTION DOORS / TANKTREPPE UND SPLITTERSCHUTZTÜREN

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L · B · B
ANSCHRIFT: UNTERTORPLATZ 1; 76829 LANDAU
TELEFON: (06341) 913-276 TELEFAX: (06341) 913-295
LANDAU,
BY PROXY / IN VERTRETUNG
STEFAN KOTSCHENREUTHER

APPROVED/GENEHMIGT
OBERFINANZDIREKTION KOBLENZ
ABB - ABTEILUNG BUNDESBAU
WALLSTR. 1
55122 MAINZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED / GENEHMIGT — DATE / DATUM

SCALE / MASSSTAB: 1:20 ; 1:10 ; 1:5 ; 1:1

STANDARD SHEET / STANDARD PLAN: S - 1.12

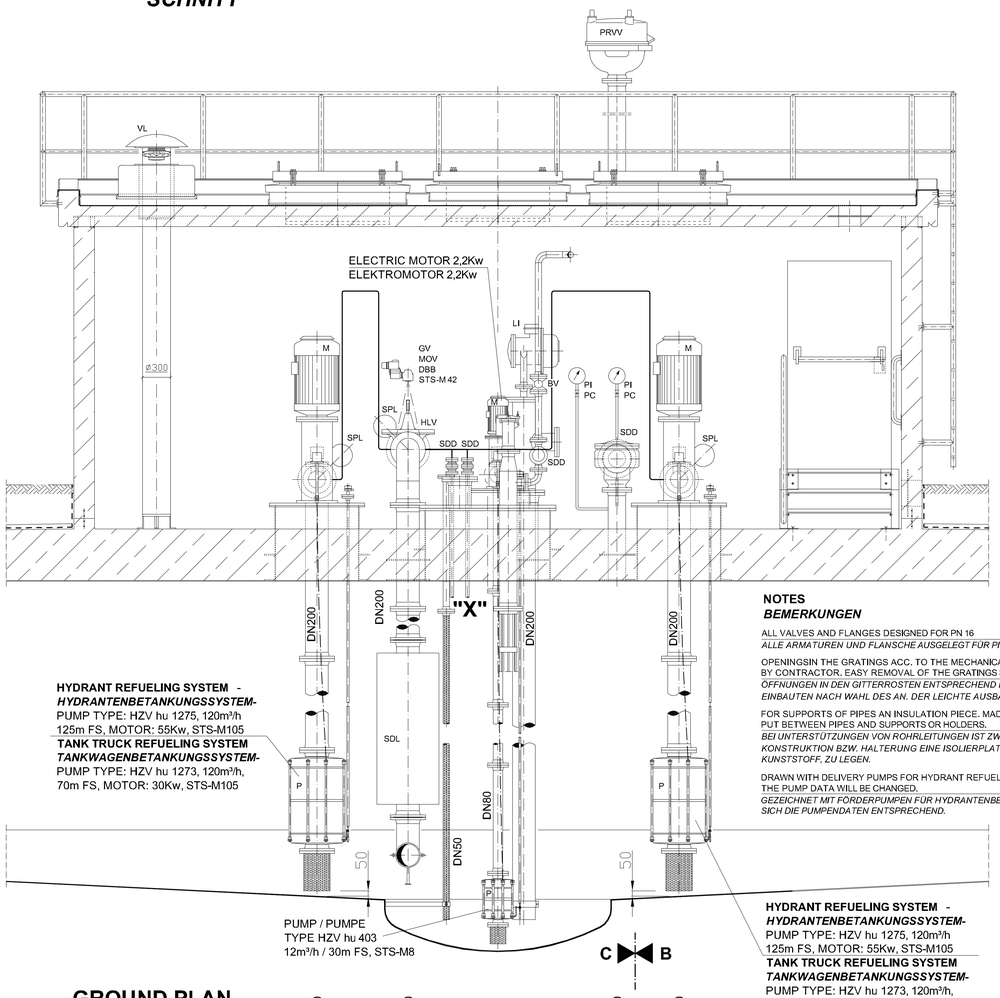
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFRICA / APO

CAD-project path:
CAD-Projektpfad:

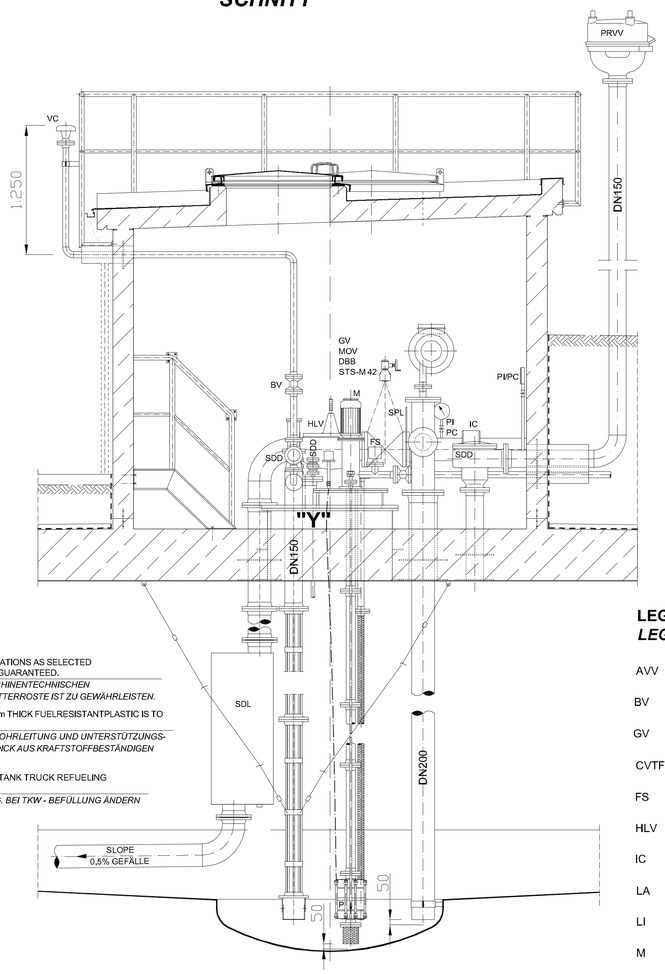
CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. / PLAN-NR. — OF / VON

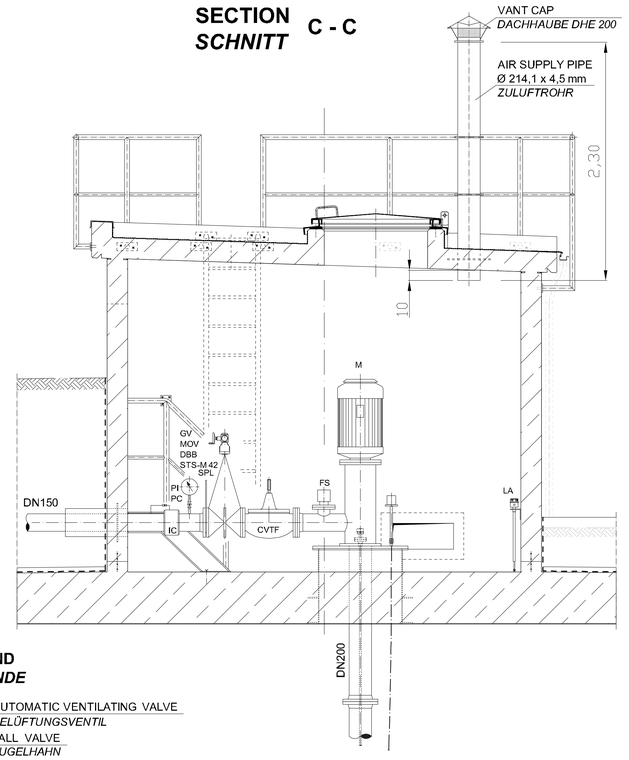
SECTION A - A
SCHNITT



SECTION B - B
SCHNITT



SECTION C - C
SCHNITT



NOTES
BEMERKUNGEN

ALL VALVES AND FLANGES DESIGNED FOR PN 16
ALLE ARMATUREN UND FLANSCHE AUSGELEGT FÜR PN 16

OPENINGSIN THE GRATINGS ACC. TO THE MECHANICAL INSTALLATIONS AS SELECTED BY CONTRACTOR. EASY REMOVAL OF THE GRATINGS SHALL BE GUARANTEED.
ÖFFNUNGEN IN DEN GITTERROSTEN ENTSPRECHEND DEN MASCHINENTECHNISCHEN EINBAUTEN NACH WAHL DES AN. DER LEICHTE AUSBAU DER GITTERROSTE IST ZU GEWÄHRLEISTEN.

FOR SUPPORTS OF PIPES AN INSULATION PIECE. MADE OF 10mm THICK FUELRESISTANTPLASTIC IS TO PUT BETWEEN PIPES AND SUPPORTS OR HOLDERS.
BEI UNTERSTÜTZUNGEN VON ROHRLEITUNGEN IST ZWISCHEN ROHRLEITUNG UND UNTERSTÜTZUNGS-KONSTRUKTION BZW. HALTERUNG EINE ISOLIERPLATTE 10mm DICK AUS KRAFTSTOFFBESTÄNDIGEN KUNSTSTOFF, ZU LEGEN.

DRAWN WITH DELIVERY PUMPS FOR HYDRANT REFUELING. FOR TANK TRUCK REFUELING THE PUMP DATA WILL BE CHANGED.
GEZEICHNET MIT FÖRDERPUMPEN FÜR HYDRANTENBETANKUNG. BEI TKW - BEFÜLLUNG ÄNDERN SICH DIE PUMPENDATEN ENTSPRECHEND.

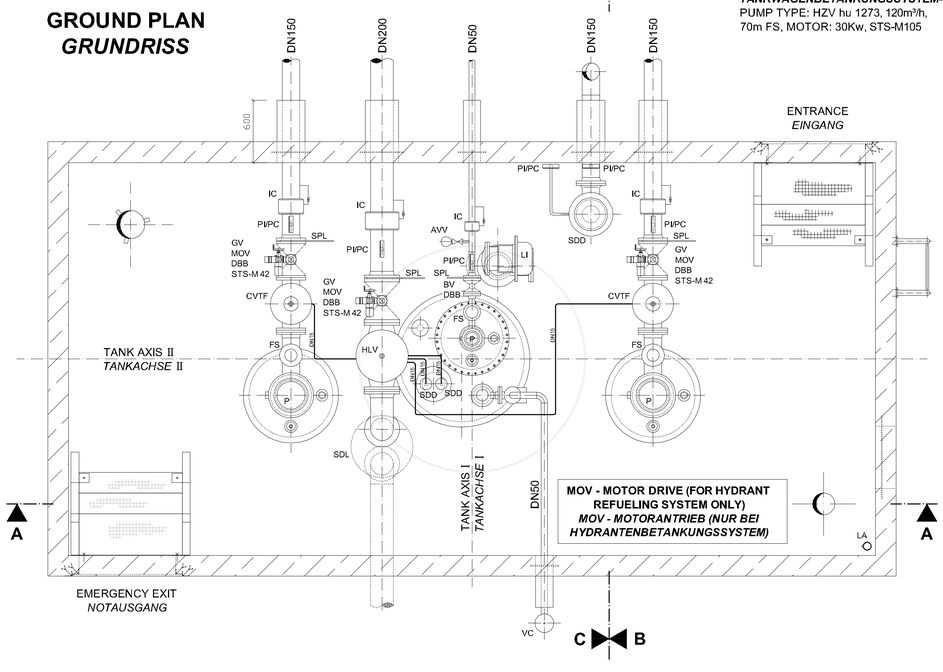
LEGEND
LEGENDE

AVV	AUTOMATIC VENTILATING VALVE / *BELÜFTUNGSVENTIL*	PC	PRESSURE GAUGE STOPCOCK / *MANOMETER - ABSPERRVENTIL*
BV	BALL VALVE / *KUGELHAHN*	PI	PRESSURE GAUGE / *MANOMETER*
GV	GATE VALVE / *ABSPERRSCHIEBER*	PRVV	PRESSURE RELIEF - VACUUM VALVE / *ÜBER - UNTERDRUCK MEMBRANVENTIL*
CVTF	PUMP START VALVE WITH FLOW LIMITATION / *PUMPENANFAHRVENTIL MIT MENGENBEGRENZUNG*	SDD	SAVETY DEVICE AGAINST DETONATION, DRY TYPE / *TROCKEN - DETONATIONSSICHERUNG*
FS	FLOW SWITCH / *STRÖMUNGSWÄCHTER*	SDL	SAVETY DEVICE AGAINST DETONATION, LIQUID TYPE / *FLÜSSIGKEITS - DETONATIONSSICHERUNG*
HLV	HIGH LEVEL SHUT - OF VALVE / *ÜBERFÜLLSICHERUNG*	SPL	SPADE PLATE / *BRILLENSTECKSCHEIBE*
IC	ISULATING COUPLING / *ISOLIERKUPPLUNG*	VC	VENTILATING CAP / *ENTLÜFTUNGSHAUBE*
LA	LIQUID PROBE / *FLÜSSIGKEITSSONDE*	VL	VENTILATOR / *VENTILATOR*
LI	LEVEL INDICATOR / *FÜLLSTANDSANZEIGER*	DBB	DOUBLE BLOCK AND BLEED
M	ELECTRIC MOTOR / *ELEKTROMOTOR*		
MOV	GATE VALVE WITH MOTOR / *ABSPERRARMATUR MIT MOTORANTRIEB*		
P	PUMP / *PUMPE*		

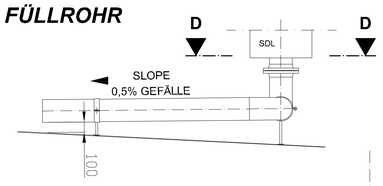
PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.2 GENERAL PLAN - DETAILS / *ÜBERSICHTSPLAN - DETAILS*

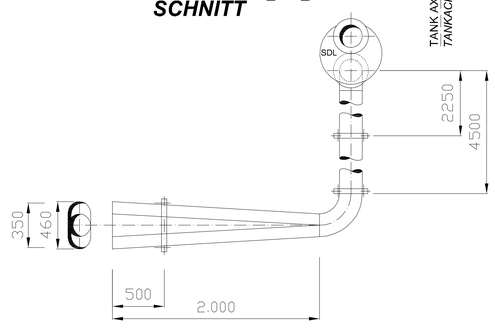
GROUND PLAN
GRUNDRISS



FILLING PIPE
FÜLLROHR

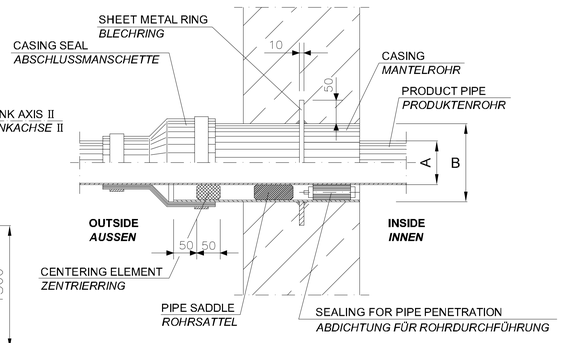


SECTION D - D
SCHNITT



DETAIL PIPE PENETRATION
DETAIL ROHRDURCHFÜHRUNG

NO SCALE / *OHNE MASSSTAB*



PRODUCT PIPE *PRODUKTENROHR*	A mm	B mm
DN 25	Ø 33,7	Ø 76,1
DN 50	Ø 60,3	Ø 168,3
DN 150	Ø 168,3	Ø 273
DN 200	Ø 273	Ø 323,9
EXAMPLE	BEISPIEL	

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION BEZEICHNUNG: MECHANICAL INSTALLATION WITH ISULATING COUPLING / MASCHINENTECHNISCHE INSTALLATION MIT ISOLIERKUPPLUNG

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
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L · B · B
ANSCHRIFT: UNTERTORPLATZ 1 | 76829 LANDAU
TELEFON: (06341) 912-274 TELEFAX: (06341) 912-201
LANDAU,
BY PROV I. IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN HOTSCHKINEITHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HENNING GOTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

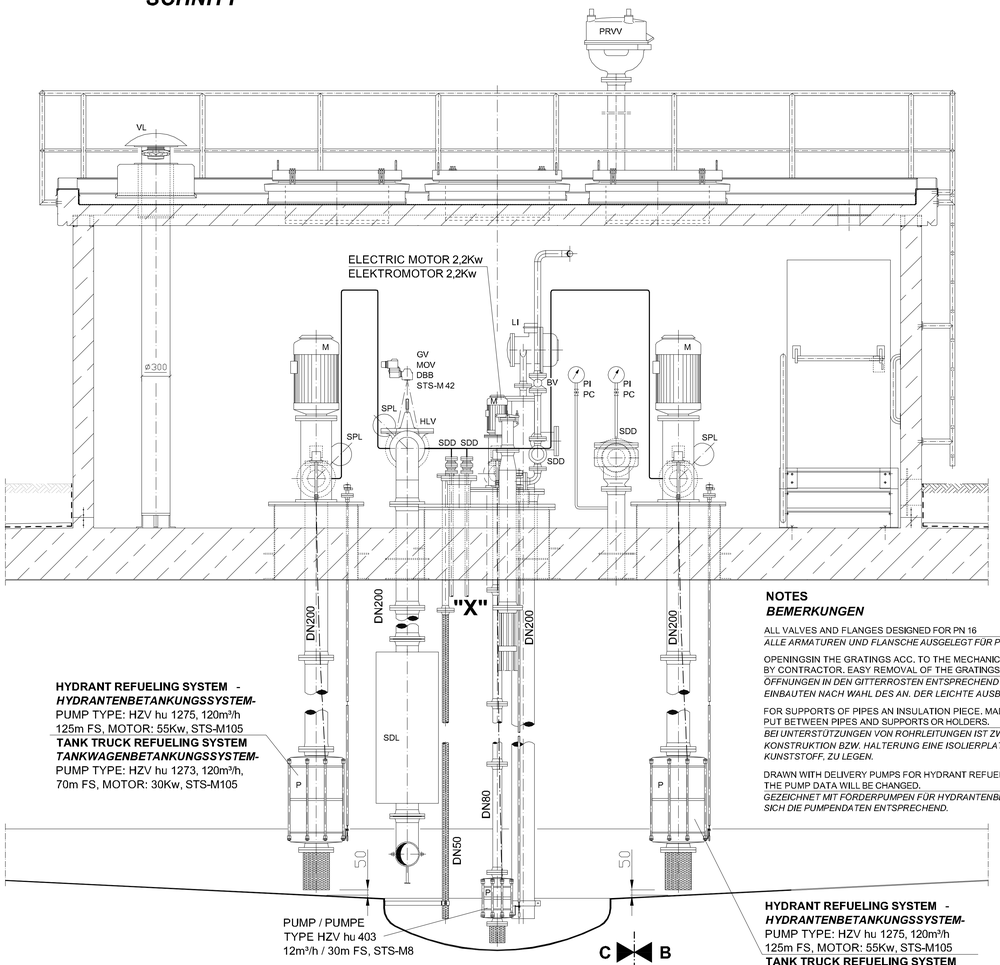
APPROVED GENEHMIGT: DATE DATUM 6. MAI 2015
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SANKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - RAMSTEIN AB, GERMANY

SCALE MASSSTAB: 1:20
STANDARD SHEET STANDARD PLAN
M - 1.1
CAD-project path CAD-Projektpfad:

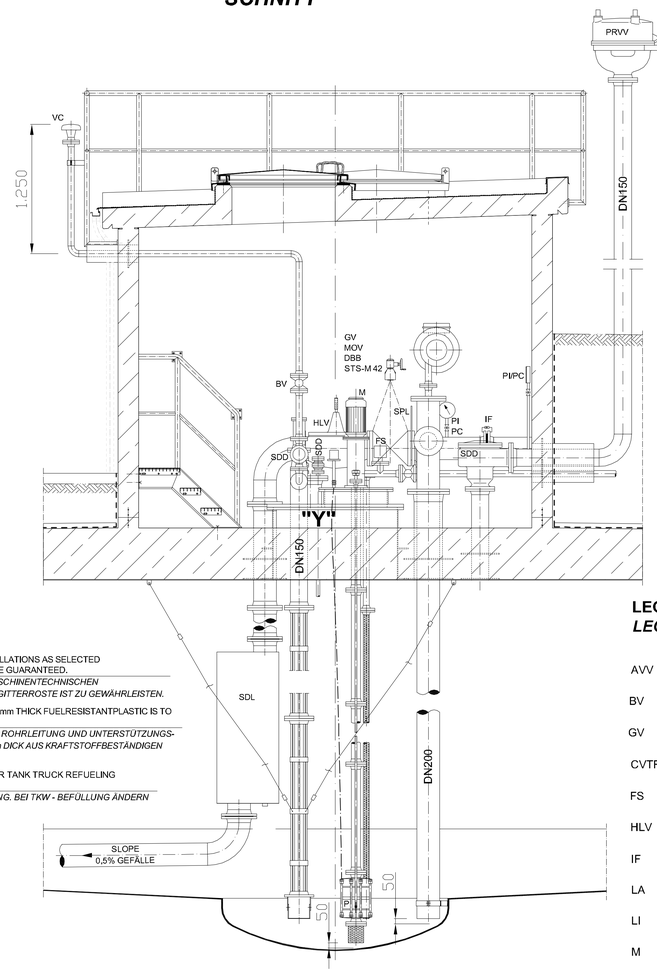
CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. PLAN-NR. OF VON

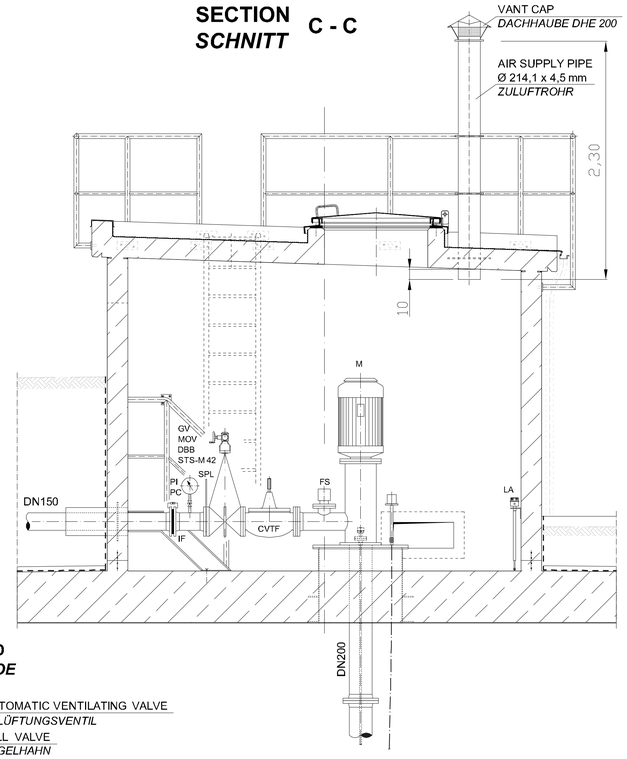
SECTION A - A
SCHNITT



SECTION B - B
SCHNITT



SECTION C - C
SCHNITT



NOTES
BEMERKUNGEN

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LEGEND
LEGENDE

AVV	AUTOMATIC VENTILATING VALVE *BELÜFTUNGSVENTIL*
BV	BALL VALVE *KUGELHAHN*
GV	GATE VALVE *ABSPERRSCHIEBER*
CVTF	PUMP START VALVE WITH FLOW LIMITATION *PUMPENANFAHRVENTIL MIT MENGENBEGRENZUNG*
FS	FLOW SWITCH *STRÖMUNGSWÄCHTER*
HLV	HIGH LEVEL SHUT - OF VALVE *ÜBERFÜLLSICHERUNG*
IF	ISULATING FLANGE *ISOLIERFLANSCH*
LA	LIQUID PROBE *FLÜSSIGKEITSSONDE*
LI	LEVEL INDICATOR *FÜLLSTANDSANZEIGER*
M	ELECTRIC MOTOR *ELEKTROMOTOR*
MOV	GATE VALVE WITH MOTOR *ABSPERRARMATUR MIT MOTORANTRIEB*
P	PUMP *PUMPE*
PC	PRESSURE GAUGE STOPCOCK *MANOMETER - ABSPERRVENTIL*
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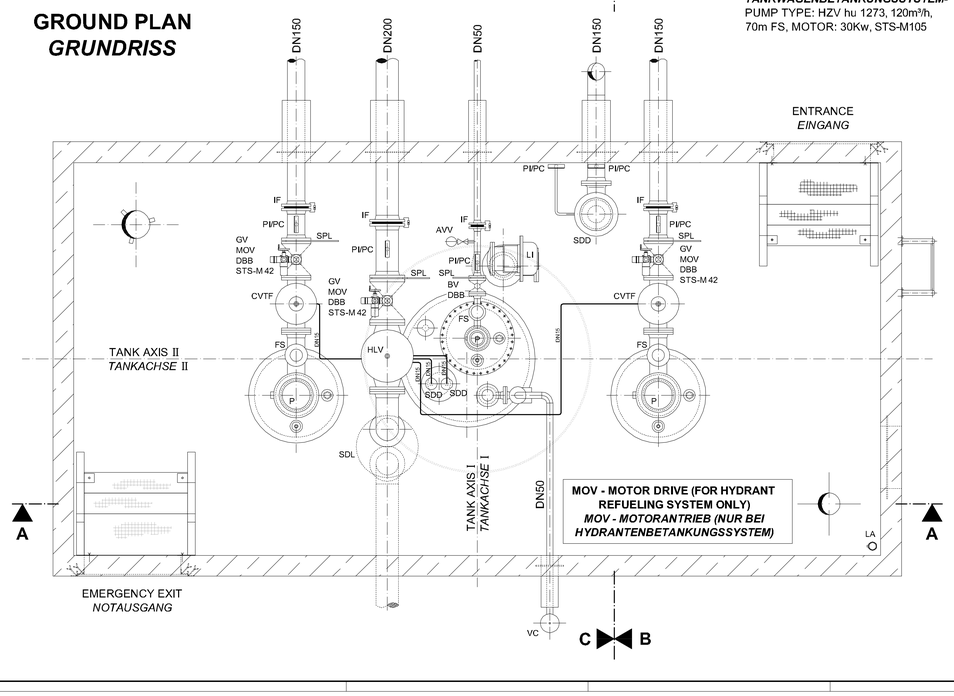
PRVV	PRESSURE RELIEF - VACUUM VALVE *ÜBER - UNTERDRUCK MEMBRANVENTIL*
SDD	SAVETY DEVICE AGAINST DETONATION, DRY TYPE *TROCKEN - DETONATIONSSICHERUNG*
SDL	SAVETY DEVICE AGAINST DETONATION, LIQUID TYPE *FLÜSSIGKEITS - DETONATIONSSICHERUNG*
SPL	SPADE PLATE *BRILLENSTECKSCHEIBE*
VC	VENTILATING CAP *ENTLÜFTUNGSHAUBE*
VL	VENTILATOR *VENTILATOR*
DBB	DOUBLE BLOCK AND BLEED

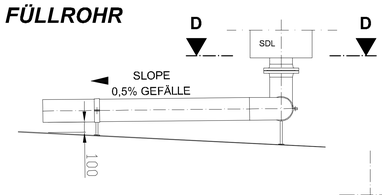
PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

C-1.2 GENERAL PLAN - DETAILS
ÜBERSICHTSPLAN - DETAILS

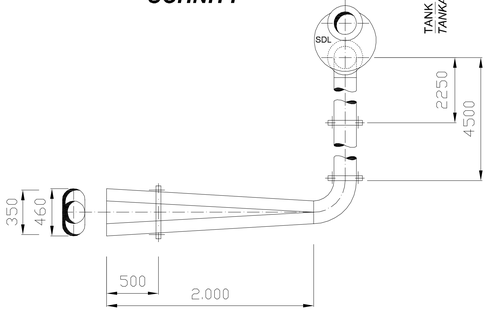
GROUND PLAN
GRUNDRISS



FILLING PIPE
FÜLLROHR

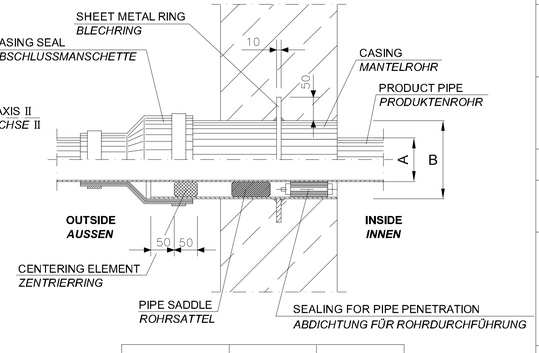


SECTION D - D
SCHNITT



DETAIL PIPE PENETRATION
DETAIL ROHRDURCHFÜHRUNG

NO SCALE / *OHNE MASSSTAB*



PRODUCT PIPE *PRODUKTENROHR*	A mm	B mm
DN 25	Ø 33,7	Ø 76,1
DN 50	Ø 60,3	Ø 168,3
DN 150	Ø 168,3	Ø 273
DN 200	Ø 273	Ø 323,9
EXAMPLE	BEISPIEL	

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
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BUILDING BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

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L · B · B
ABSCHNITT: UNTERTORPLATZ 1 | 76829 LANDAU
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LANDAU,
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STEFAN HOTSCHNEIDHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
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HENNING GÖTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

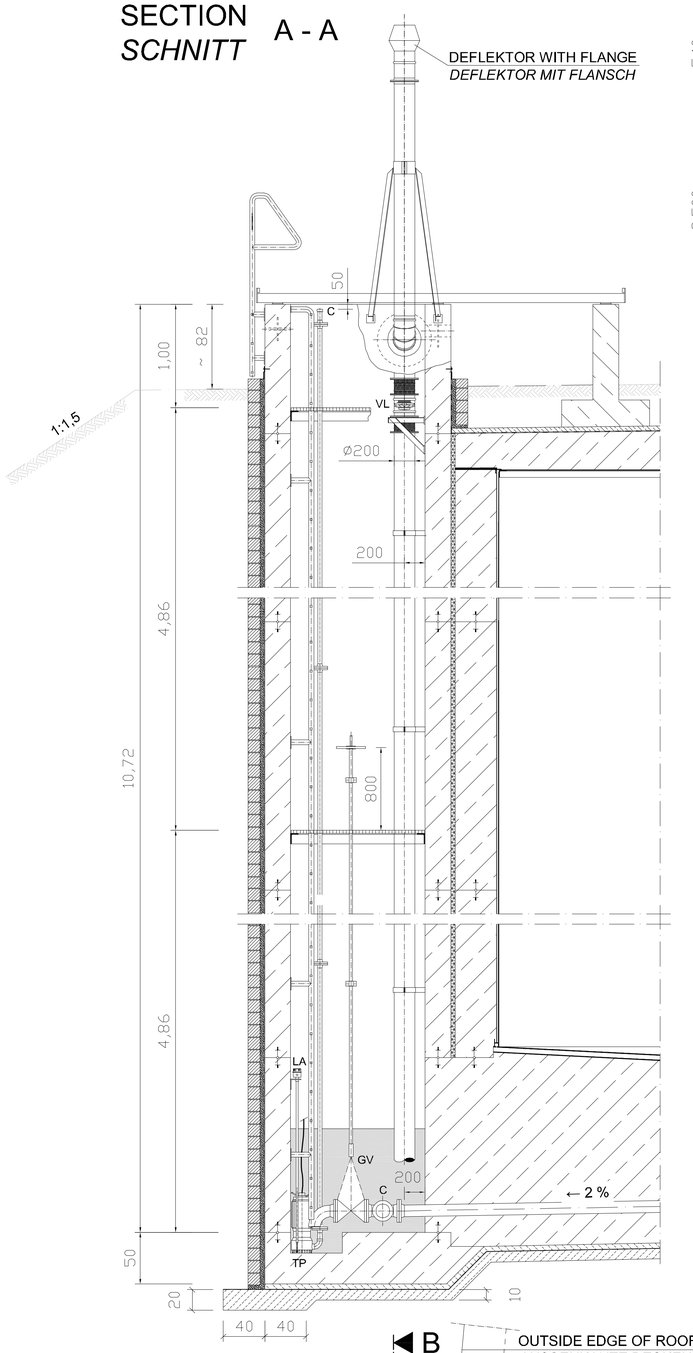
APPROVED GENEHMIGT — DATE DATUM: 6. MAI 2015
SCALE MASSSTAB: 1:20
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SANKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFBGA / LRMC
STANDARD SHEET
STANDARD PLAN
M - 1.1
CAD-project path:
CAD-Projektpfad:

CONSTRUCTION PROJECT
BAUMASSNAHME

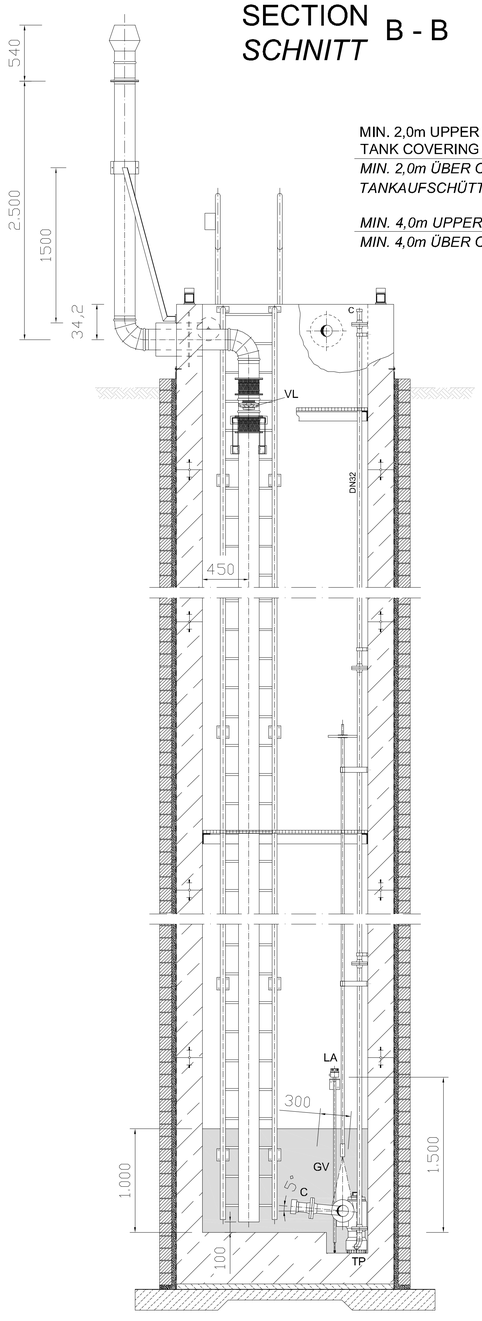
SHEET-NO.
PLAN-NR.
OF
VON

MANHOLE WITH VENTILATING
MONTAGEÖFFNUNG MIT ENTLÜFTUNG

SECTION A - A
SCHNITT



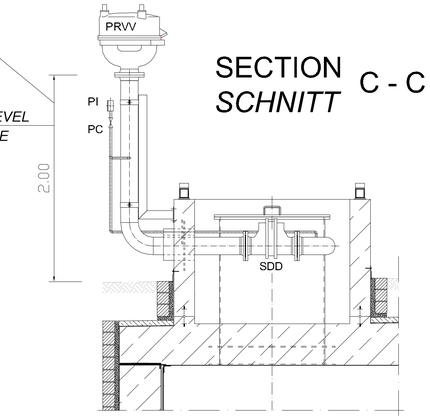
SECTION B - B
SCHNITT

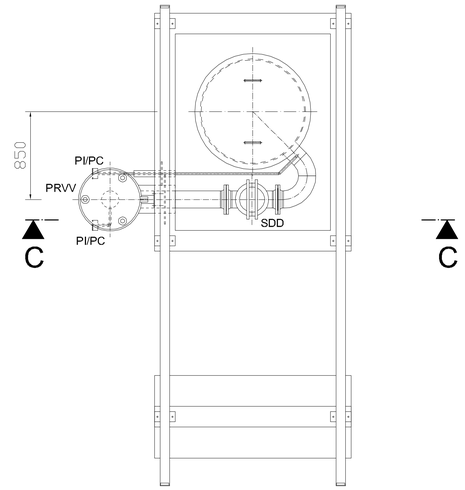


MIN. 2,0m UPPER TOP EDGE
TANK COVERING
MIN. 2,0m ÜBER O.K.
TANKAUFSCHÜTTUNG

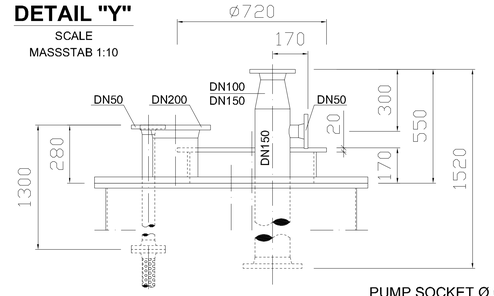
MIN. 4,0m UPPER GROUND LEVEL
MIN. 4,0m ÜBER O.K. GELÄNDE

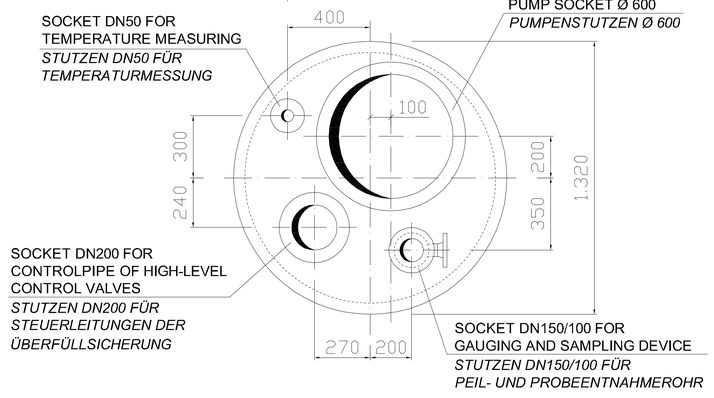
SECTION C - C
SCHNITT





DETAIL "Y"
SCALE
MASSSTAB 1:10





SOCKET DN50 FOR
TEMPERATURE MEASURING
STUTZEN DN50 FÜR
TEMPERATURMESSUNG

PUMP SOCKET Ø 600
PUMPENSTUTZEN Ø 600

SOCKET DN200 FOR
CONTROLPIPE OF HIGH-LEVEL
CONTROL VALVES
STUTZEN DN200 FÜR
STEUERLEITUNGEN DER
ÜBERFÜLLSICHERUNG

SOCKET DN150/100 FOR
GAUGING AND SAMPLING DEVICE
STUTZEN DN150/100 FÜR
PEIL- UND PROBEENTNAHMEROHR

LEGEND
LEGENDE

GV	GATE VALVE *ABSPERRSCHIEBER*
LA	LIQUID PROBE *FLÜSSIGKEITSSONDE*
PC	PRESSURE GAUGE STOPCOCK *MANOMETER - ABSPERRVENTIL*
PI	PRESSURE GAUGE *MANOMETER*
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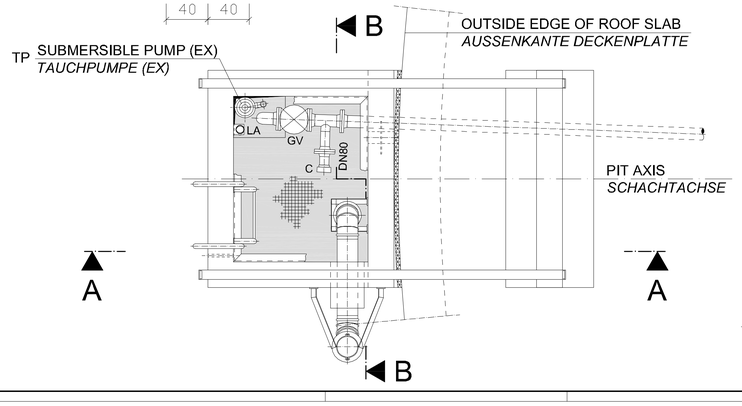
SDD	SAVETY DEVICE AGAINST DETONATION, DRY TYPE *TROCKEN - DETONATIONSSICHERUNG*
TP	SUBMERSIBLE PUMP *TAUCHPUMPE*
VL	VENTILATOR *VENTILATOR*
	FUEL RESISTANT PLASTIC COATING / DISSIPATIVE *(10^{-6} S)* *KRAFTSTOFFBESTÄNDIGE KUNSTSTOFFBESCHICHTUNG / ABLEITFÄHIG (10^{-6} S)*

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

M-1.1 MECHANICAL INSTALLATION
MASCHINENTECHNISCHE INSTALLATION

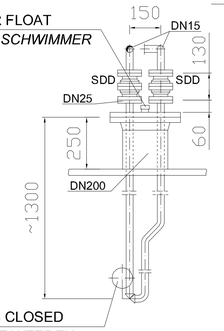


LEAKAGE CONTROL PIT
LECKKONTROLLSCHACHT

THE FLOAT OF THE HIGH-LEVEL CONTROL VALVE HAS TO BE INSTALLED IN THAT WAY THAT IN CASE OF A LIQUID LEVEL OF 230mm UNDER TANK ROOF THE HIGH-LEVEL CONTROL VALVE IS CLOSED
DER SCHWIMMER DER ÜBERFÜLLSICHERUNG MUSS SO EINGEBAUT WERDEN, DASS BEI EINEM FLÜSSIGKEITSSTAND VON 230mm UNTER DER BEHÄLTERDECKE DIE ÜBERFÜLLSICHERUNG GESCHLOSSEN IST.

DETAIL "X"
SCALE
MASSSTAB 1:10

HANDTESTING FOR FLOAT
HANDTESTER FÜR SCHWIMMER



NOTES
BEMERKUNGEN

ALL VALVES AND FLANGES DESIGNED FOR PN 16
ALLE ARMATUREN UND FLANSCHE AUSGELEGT FÜR PN 16

OPENINGSIN THE GRATINGS ACC. TO THE MECHANICAL INSTALLATIONS AS SELECTED BY CONTRACTOR. EASY REMOVAL OF THE GRATINGS SHALL BE GUARANTEED.
ÖFFNUNGEN IN DEN GITTERROSTEN ENTSPRECHEND DEN MASCHINENTECHNISCHEN EINBAUTEN NACH WAHL DES AN. DER LEICHTE AUSBAU DER GITTERROSTE IST ZU GEWÄHRLEISTEN.

FOR SUPPORTS OF PIPES AN INSULATION PIECE. MADE OF 10mm THICK FUELRESISTANTPLASTIC IS TO PUT BETWEEN PIPES AND SUPPORTS OR HOLDERS.
BEI UNTERSTÜTZUNGEN VON ROHRLEITUNGEN IST ZWISCHEN ROHRLEITUNG UND UNTERSTÜTZUNGS-KONSTRUKTION BZW. HALTERUNG EINE ISOLIERPLATTE 10mm DICK AUS KRAFTSTOFFBESTÄNDIGEN KUNSTSTOFF, ZU LEGEN.

DRAWN WITH DELIVERY PUMPS FOR HYDRANT REFUELING. FOR TANK TRUCK REFUELING THE PUMP DATA WILL BE CHANGED.
GEZEICHNET MIT FÖRDERPUMPEN FÜR HYDRANTENBETANKUNG. BEI TKW - BEFÜLLUNG ÄNDERN SICH DIE PUMPENDATEN ENTSPRECHEND.

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES
AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD
STANDARD DESIGN US

JET FUEL STORAGE AND
DISPENSING SYSTEMS

FLUGPLATZ
STANDARDPLANUNG US

FLUGKRAFTSTOFF -
VERSORGUNGSANLAGEN

BUILDING
BAUWERK: OPERATING TANK 5000m³
FLACHBODENTANK 5000m³

DESIGNATION
BEZEICHNUNG: MECHANICAL INSTALLATION, LEAKAGE CONTROL PIT AND DETAILS
MASCHINENTECHNISCHE INSTALLATION, LECKKONTROLLSCHACHT UND DETAILS

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L - B - B
ANSCHREIFT: UNTERTORPLATZ 2 | 76829 LANDAU
TELEFON: (06341) 913-274 TELEFAX: (06341) 913-241
LANDAU,
BY PROV / IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN KOTSCHENEUTHER

APPROVED/GENEHMIGT
AMT
FÜR
BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HENNING GÖTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

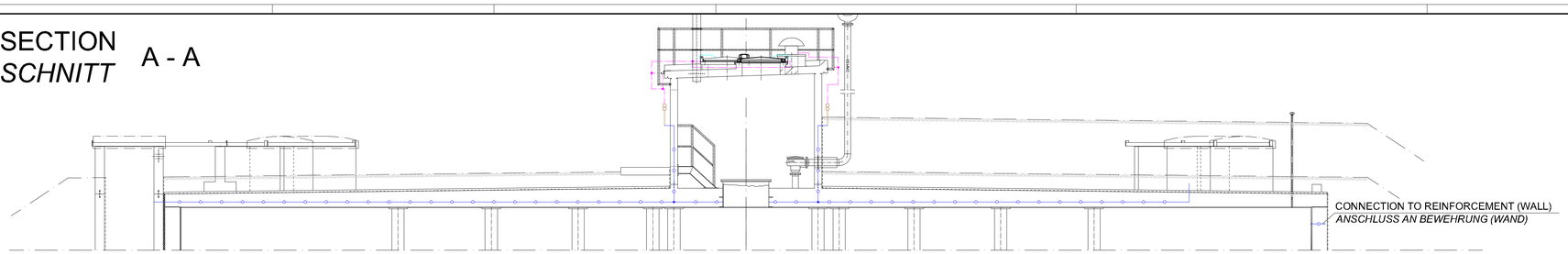
APPROVED GENEHMIGT — DATE DATUM: 6. MAI 2015
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SAND
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFRICA / A7PO

SCALE MASSSTAB: 1:20 ; 1:10
STANDARD SHEET
STANDARD PLAN
M - 1.2
CAD-project:pstfx
CAD-Proj:ol/dpfx:d

CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO.
PLAN-NR.
OF
VON

SECTION *SCHNITT* A - A



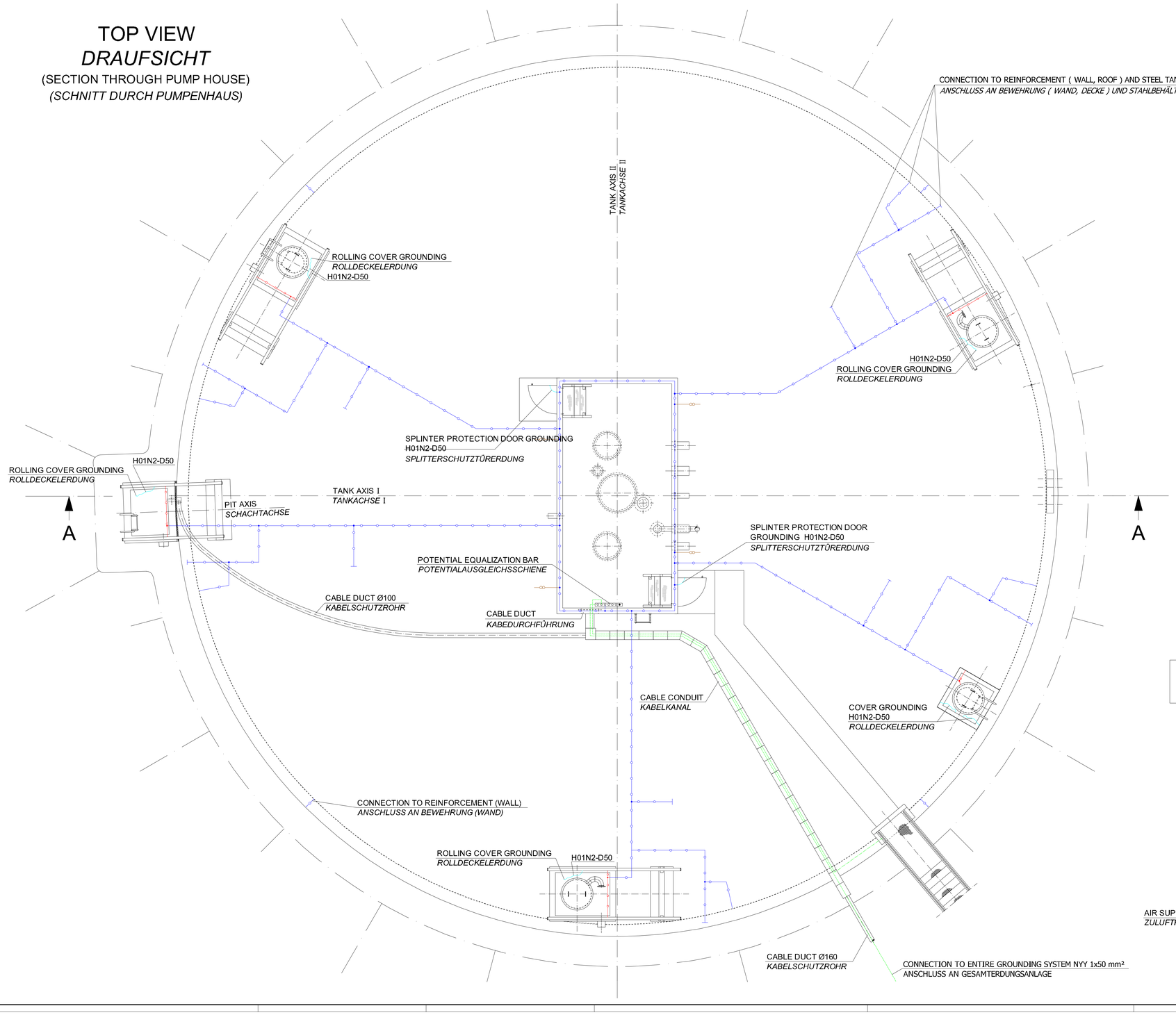
LEGEND
LEGENDE

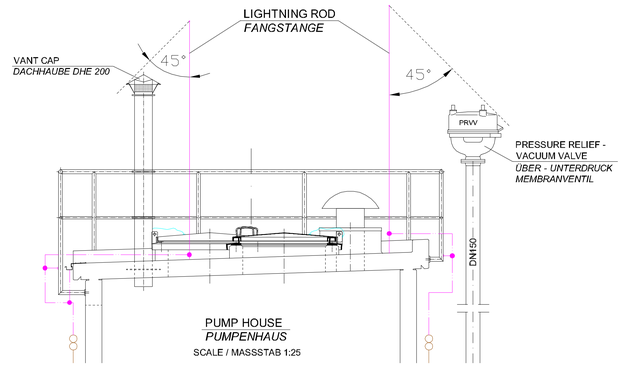
- DISCONNECTION POINT / *TRENNSTELLE*
- STEEL STRIP 30 x 3,5mm IN CONCRETE (STAINLESS STEEL, MATERIAL NO. 1.457) / *BANDSTAHL 30 x 3,5mm IM BETON (EDELSTAHL, WERKSTOFF NR. 1.457)*
- GALV. STEEL STRIP 30 x 3,5mm SURFACE - MOUNTED / *VERZ. BANDSTAHL 30 x 3,5mm AUF PUTZ*
- GALV. ROUND STEEL Ø 8mm / *VERZ. RUNDSTAHL Ø 8mm*
- NYY 1 x 50²
- H01N2 - D50

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

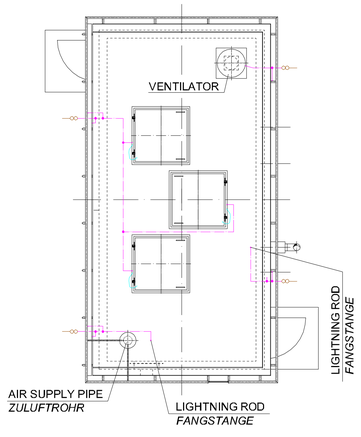
E-1.2 ELECTRICAL INSTALLATION , PUMP HOUSE AND LEAKAGE CONTROL PIT / *ELEKTROTECHNISCHE INSTALLATION , PUMPENHAUS UND LECKKONTROLLSCHACHT*

TOP VIEW
DRAUFSICHT
(SECTION THROUGH PUMP HOUSE)
(SCHNITT DURCH PUMPENHAUS)





TOP VIEW
DRAUFSICHT
PUMP HOUSE
PUMPENHAUS



REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING BAUWERK: OPERATING TANK 5000m³ FLACHBODENTANK 5000m³

DESIGNATION BEZEICHNUNG: GROUNDING - AND LIGHTNING PROTECTION PLAN ERDUNGS - UND BLITZSCHUTZPLAN

WORKED/BEARBEITET

PREPARED/AUFGESTELLT: LANDESBETRIEB LIEGENSCHAFTS- UND BAUGENEHMIGUNG, LBB-NIEDERLASSUNG LANDAU, ANSCHRIFT: UNTERTORPLATZ 1, 76829 LANDAU, TELEFON: (06341) 912-274 TELEFAX: (06341) 912-281, LANDAU, BY PROXY / IN VERTRETUNG ORIGINAL SIGNED BY IN ORIGINAL GEZ. STEFAN HOTSCHONEUTHER

APPROVED/GENEHMIGT: AMT FÜR BUNDESBAU, WALLSTR.1, 55122 MAINZ, ORIGINAL SIGNED BY IN ORIGINAL GEZ. HANNING GÖTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED GENEHMIGT DATE DATUM 6. MAI 2015

ORIGINAL SIGNED BY IN ORIGINAL GEZ.
GERALD SANKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFRICA / LNO

SCALE MASSSTAB 1:50 ; 1:25

STANDARD SHEET STANDARD PLAN

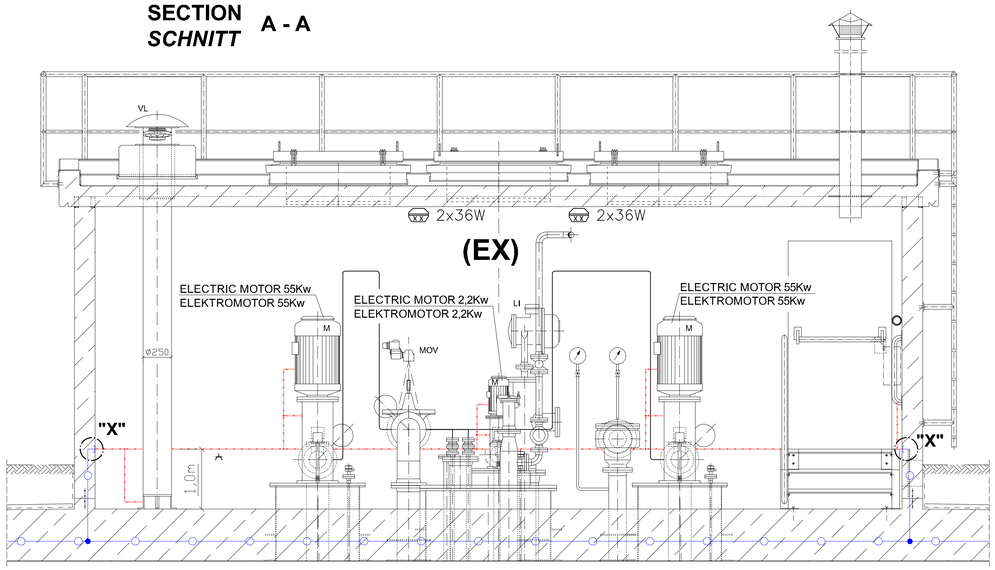
E - 1.1

CAD-pro(ect.path: CAD-Pro(ckt)ktpfad:

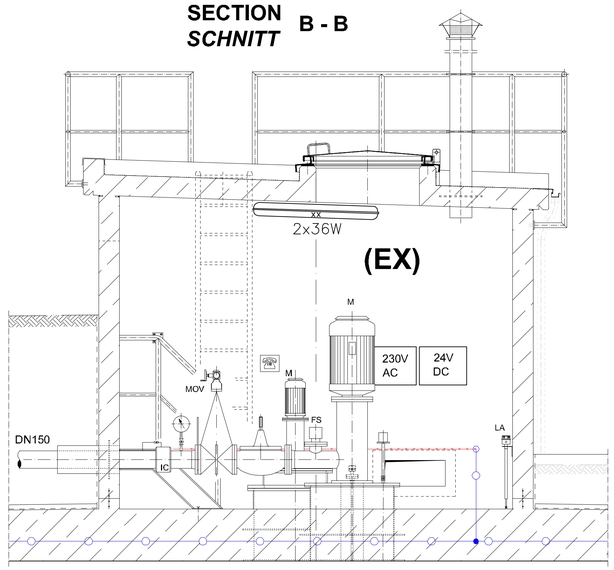
CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. PLAN-NR. OF VON

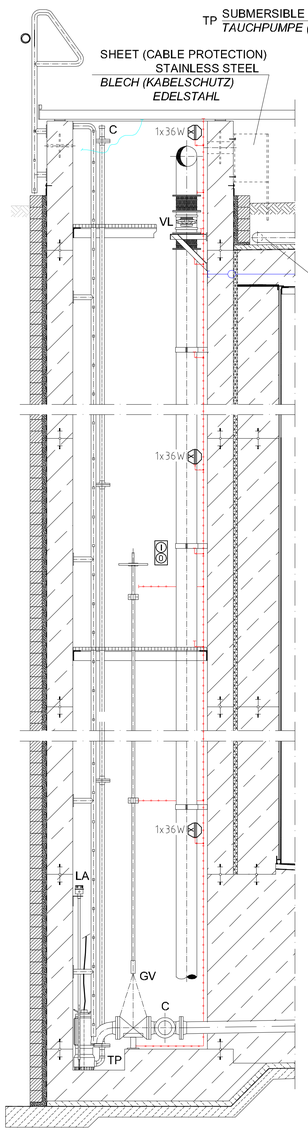
SECTION A - A
SCHNITT



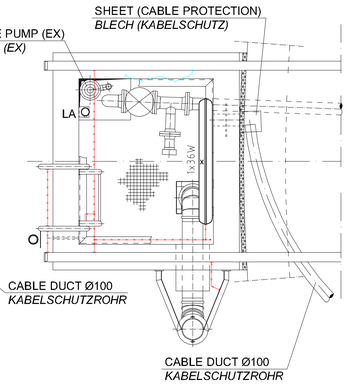
SECTION B - B
SCHNITT



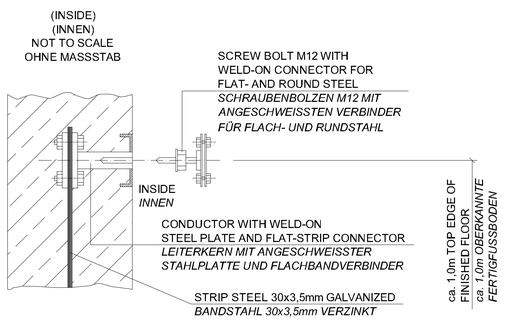
SECTION THROUGH LEAKAGE CONTROL PIT
SCHNITT DURCH LECKKONTROLLSCHACHT



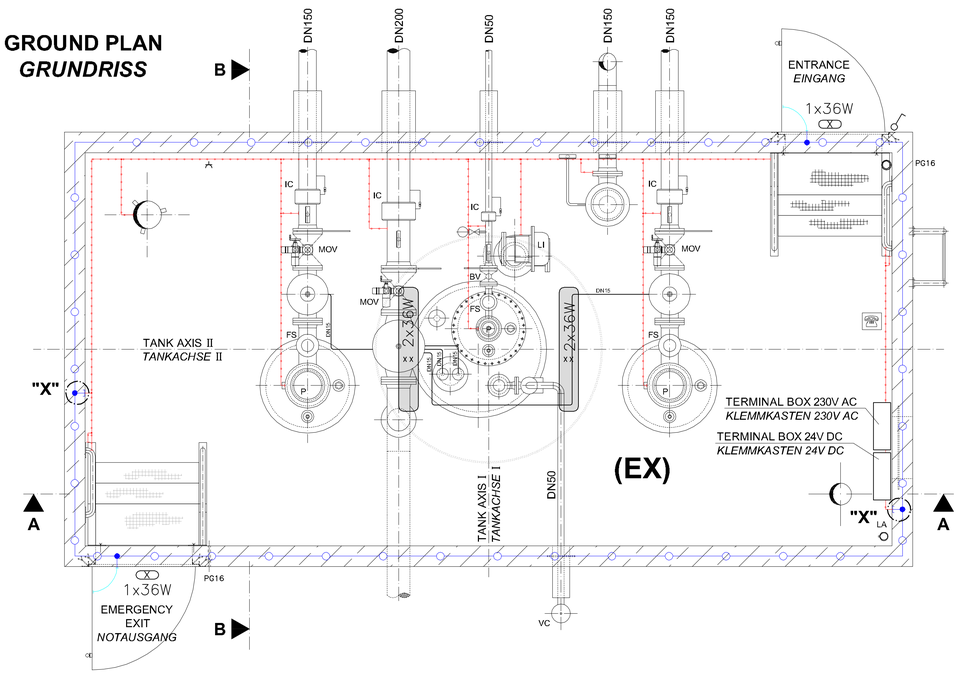
TOP VIEW
DRAUFSICHT



DETAIL "X" GROUNDING CONNECTION
ERDUNGSANSCHLUSS



GROUND PLAN
GRUNDRISS



LEGEND
LEGENDE

BV	BALL VALVE *KUGELHAHN*
FS	FLOW SWITCH *STRÖMUNGSWÄCHTER*
IC	ISULATING COUPLING *ISOLIERKUPPLUNG*
LA	LIQUID PROBE *FLÜSSIGKEITSSONDE*
LI	LEVEL INDICATOR *FÜLLSTANDSANZEIGE*
M	MOTOR *MOTOR*
MOV	GATE VALVE WITH MOTOR *ABSPERRARMATUR MIT MOTORANTRIEB*
TP	SUBMERSIBLE PUMP *TAUCHPUMPE*
VL	VENTILATOR *VENTILATOR*

STEEL STRIP 30 x 3,5mm IN CONCRETE
(STAINLESS STEEL, MATERIAL NO. 1.457)
BANDSTAHL 30 x 3,5mm IM BETON
(EDELSTAHL, WERKSTOFF NR. 1.457)

GALV. STEEL STRIP 30 x 3,5mm SURFACE - MOUNTED
VERZ. BANDSTAHL 30 x 3,5mm AUF PUTZ

H01N2 - D50

FLUORESCENT LAMP
LEUCHTSTOFFLEUCHTE

EXPL. PROOF SPARK GAP
EX- FUNKENSTRECKE

RECEPTACLE
STECKDOSE

SWITCH
SCHALTER

PUSH BUTTON
TASTER

PTC THERMISTOR
KALTLEITER

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

E-1.1	GROUNDING - AND LIGHTNING PROTECTION PLAN *ERDUNGS - UND BLITZSCHUTZPLAN*
E-1.3	ELECTRICAL DIAGRAMS, PUMP HOUSE AND LEAKAGE CONTROL PIT *SCHALTPLÄNE, PUMPENHAUS UND LECKKONTROLLSCHACHT*

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING / BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION / BEZEICHNUNG: WITH ISULATING COUPLING / MIT ISOLIERKUPPLUNG
ELECTR. INSTALLATION, PUMP HOUSE A. LEAKAGE CONTROL PIT
ELEKTR. INSTALLATION, PUMPENHAUS U. LECKKONTROLLSCHACHT

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L - B - B
ANSCHREIFT: UNTERTORPLATZ 1 ; 76829 LANDAU
TELEFON: (06341) 912-274 TELEFAX: (06341) 912-201
LANDAU,
BY PROVY / IN VERTRETUNG
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STEFAN HOTSCHENEUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
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HENNING GÖTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED/GENEHMIGT — DATE/DATUM: 6. MAI 2015 — SCALE/MASSSTAB: 1:50

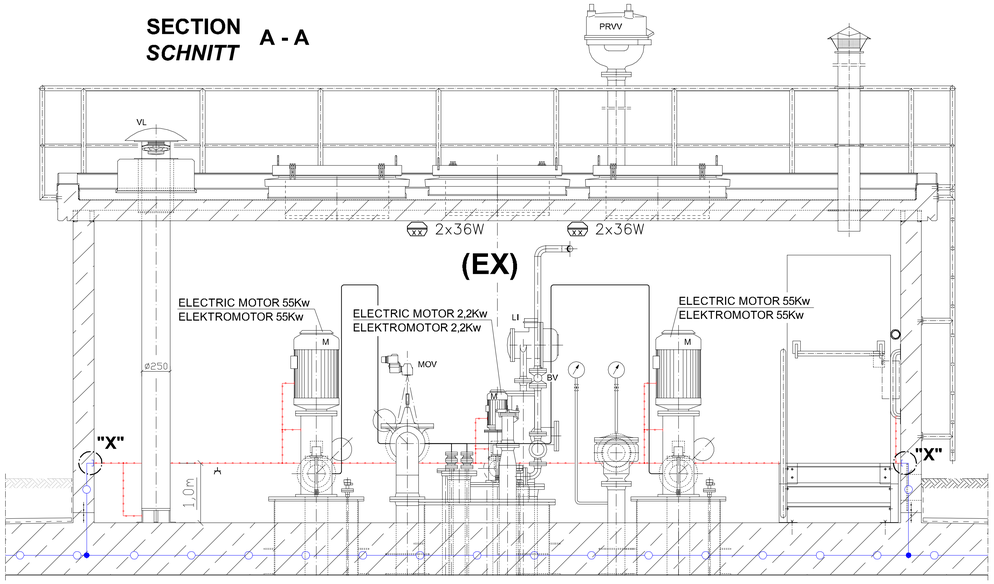
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SAMKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFRICA / A7RD

STANDARD SHEET / STANDARD PLAN
E - 1.2
CAD-project path:
CAD-Projektpfad:

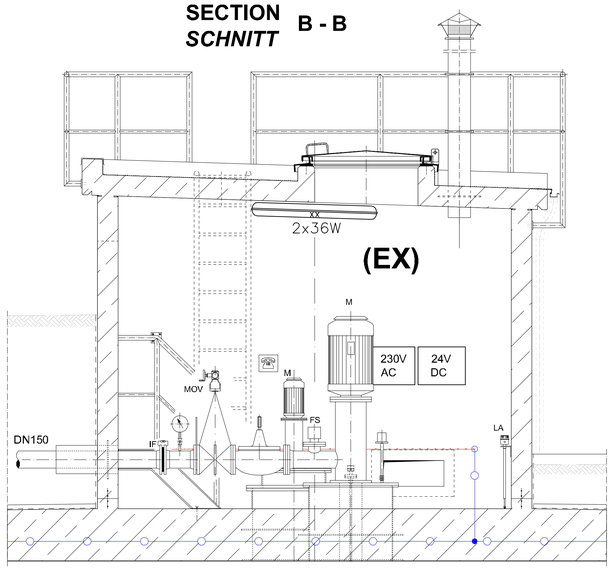
CONSTRUCTION PROJECT / BAUMASSNAHME

SHEET-NO. / PLAN-NR. / OF / VON

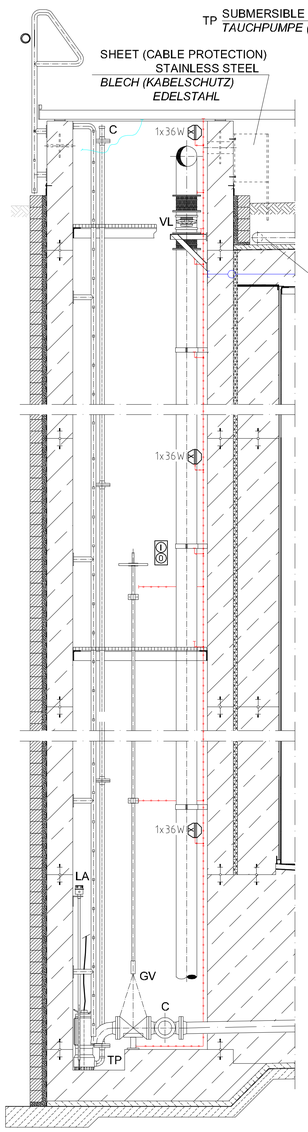
SECTION A - A
SCHNITT



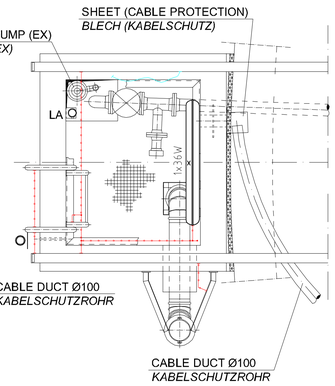
SECTION B - B
SCHNITT



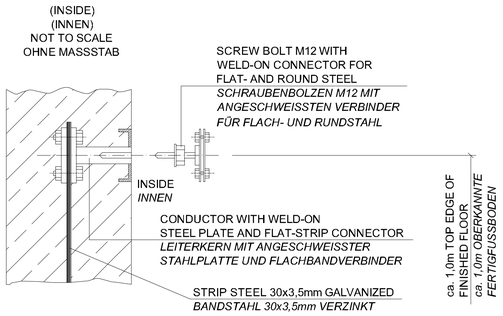
SECTION THROUGH LEAKAGE CONTROL PIT
SCHNITT DURCH LECKKONTROLLSCHACHT



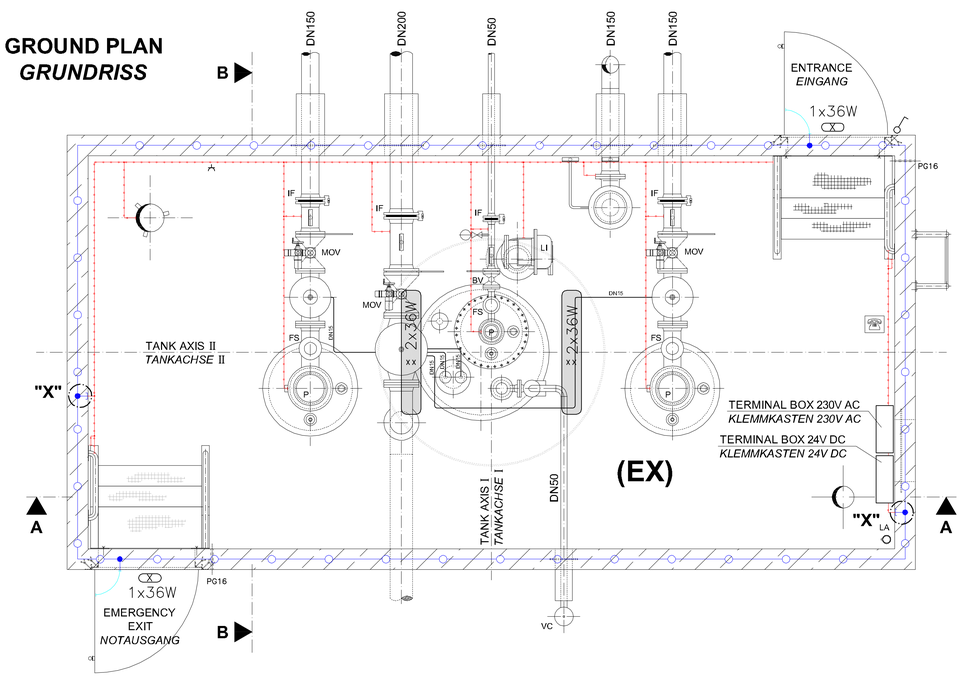
TOP VIEW
DRAUFSICHT



DETAIL "X" GROUNDING CONNECTION
ERDUNGSANSCHLUSS



GROUND PLAN
GRUNDRISS



LEGEND
LEGENDE

BV	BALL VALVE / *KUGELHAHN*
FS	FLOW SWITCH / *STRÖMUNGSWÄCHTER*
IF	ISULATING FLANGE / *ISOLIERFLANSCH*
LA	LIQUID PROBE / *FLÜSSIGKEITSSONDE*
LI	LEVEL INDICATOR / *FÜLLSTANDSANZEIGE*
M	MOTOR / *MOTOR*
MOV	GATE VALVE WITH MOTOR / *ABSPERRARMATUR MIT MOTORANTRIEB*
TP	SUBMERSIBLE PUMP / *TAUCHPUMPE*
VL	VENTILATOR / *VENTILATOR*

STEEL STRIP 30 x 3,5mm IN CONCRETE
(STAINLESS STEEL, MATERIAL NO. 1.457)
BANDSTAHL 30 x 3,5mm IM BETON
(EDELSTAHL, WERKSTOFF NR. 1.457)

GALV. STEEL STRIP 30 x 3,5mm SURFACE - MOUNTED
VERZ. BANDSTAHL 30 x 3,5mm AUF PUTZ

H01N2 - D50

FLUORESCENT LAMP
LEUCHTSTOFFLEUCHTE

EXPL. PROOF SPARK GAP
EX- FUNKENSTRECKE

RECEPTACLE
STECKDOSE

SWITCH
SCHALTER

PUSH BUTTON
TASTER

PTC THERMISTOR
KALTLEITER

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

E-1.1	GROUNDING - AND LIGHTNING PROTECTION PLAN / *ERDUNGS - UND BLITZSCHUTZPLAN*
E-1.3	ELECTRICAL DIAGRAMS, PUMP HOUSE AND LEAKAGE CONTROL PIT / *SCHALTPLÄNE, PUMPENHAUS UND LECKKONTROLLSCHACHT*

REVISION ÄNDERUNG	DATE DATUM	DESCRIPTION BESCHREIBUNG	BY VON	COUNTRY LAND

HEADQUARTERS
UNITED STATES AIR FORCES EUROPE
ENGINEERING & OPERATIONS

AIRFIELD STANDARD DESIGN US
JET FUEL STORAGE AND DISPENSING SYSTEMS

FLUGPLATZ STANDARDPLANUNG US
FLUGKRAFTSTOFF - VERSORGUNGSANLAGEN

BUILDING / BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION / BEZEICHNUNG: WITH ISULATING FLANGE / MIT ISOLIERFLANSCH
ELECTR. INSTALLATION, PUMP HOUSE A. LEAKAGE CONTROL PIT
ELEKTR. INSTALLATION, PUMPENHAUS U. LECKKONTROLLSCHACHT

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L - B - B
ANSCHREIFT: UNTERTORPLATZ 1 ; 76829 LANDAU
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STEFAN HOTSCHENREUTHER

APPROVED/GENEHMIGT
AMT FÜR BUNDESBAU
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EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

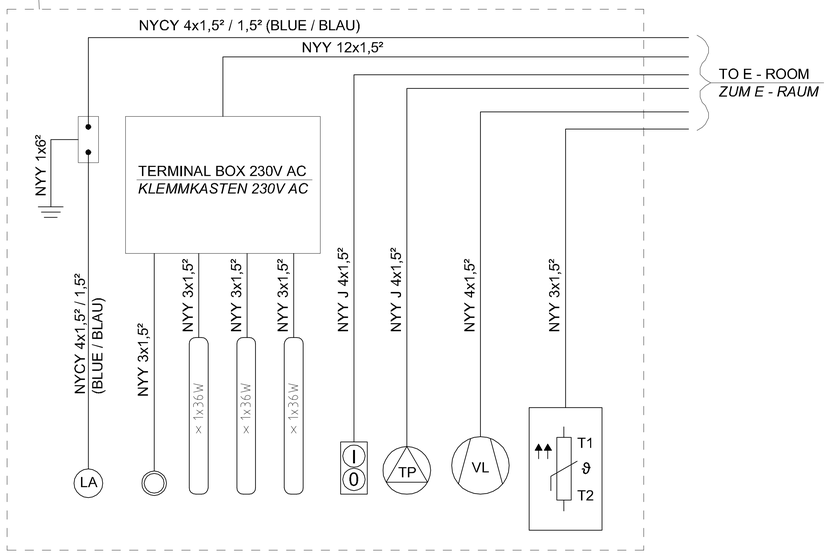
APPROVED GENEHMIGT — DATE DATUM: 6. MAI 2015
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SAMIO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - AFAFEN2 / 3 PM

SCALE MASSSTAB: 1:50
STANDARD SHEET
STANDARD PLAN
E - 1.2
CAD-project path:
CAD-Projektpfad:

CONSTRUCTION PROJECT
BAUMASSNAHME

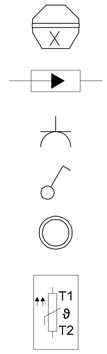
SHEET-NO.
PLAN-NR.
OF
VON

LEAKAGE CONTROL PIT
LECKKONTROLLSCHACHT



LEGEND
LEGENDE

FS	FLOW SWITCH *STRÖMUNGSWÄCHTER*	
IC	ISULATING COUPLING *ISOLIERKUPPLUNG*	
LA	LIQUID PROBE *FLÜSSIGKEITSSONDE*	
LI	LEVEL INDICATOR *FÜLLSTANDSANZEIGE*	
M	MOTOR *MOTOR*	
MOV	GATE VALVE WITH MOTOR *ABSPERRARMATUR MIT MOTORANTRIEB*	
TP	SUBMERSIBLE PUMP *TAUCHPUMPE*	
VL	VENTILATOR *VENTILATOR*	



FLUORESCENT LAMP
LEUCHTSTOFFLEUCHTE

EXPL. PROOF SPARK GAP
EX- FUNKENSTRECKE

RECEPTACLE
STECKDOSE

SWITCH
SCHALTER

PUSH BUTTON
TASTER

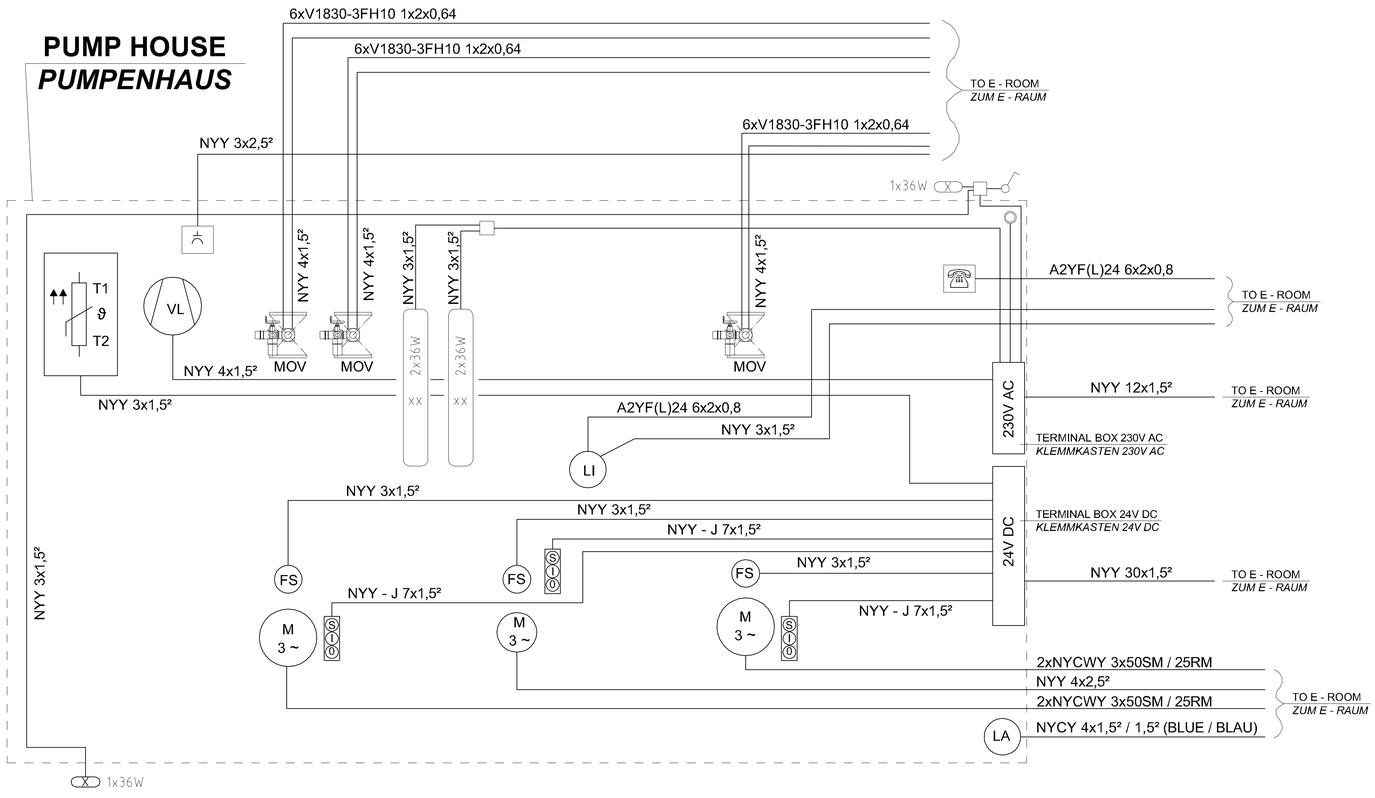
PTC THERMISTOR
KALTLEITER

PERTINENT DRAWINGS
ZUGEHÖRIGE ZEICHNUNGEN

E-1.1 GROUNDING - AND LIGHTNING PROTECTION PLAN
ERDUNGS - UND BLITZSCHUTZPLAN

E-1.2 ELECTR. INSTALLATION, PUMP HOUSE A. LEAKAGE CONTROL
ELEKTR. INSTALLATION, PUMPENHAUS U. LECKKONTROLLSCHACHT

PUMP HOUSE
PUMPENHAUS



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HEADQUARTERS
UNITED STATES
AIR FORCES EUROPE

ENGINEERING & OPERATIONS

AIRFIELD
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FLUGPLATZ
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FLUGKRAFTSTOFF -
VERSORGUNGSANLAGEN

BUILDING / BAUWERK: OPERATING TANK 5000m³ / FLACHBODENTANK 5000m³

DESIGNATION / BEZEICHNUNG: ELECTRICAL DIAGRAMS, PUMP HOUSE A. LEAKAGE CONTROL PIT / SCHALTPLÄNE, PUMPENHAUS U. LECKKONTROLLSCHACHT

WORKED/BEARBEITET

PREPARED/AUFGESTELLT
LANDESBETRIEB LIEGENSCHAFTS- UND BAUBETREUUNG
LBB-NIEDERLASSUNG LANDAU
L - B - B
ANSCHRIFT: UNTERTORPLATZ 1 | 76829 LANDAU
TELEFON: (06341) 912-274 TELEFAX: (06341) 912-241
LANDAU,
BY PROXY / IN VERTRETUNG
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
STEFAN KOTSCHENREUTHER

APPROVED/GENEHMIGT
AMT
FÜR
BUNDESBAU
WALLSTR.1
55122 MAINZ
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
HENNING GÖTZ

INTRODUCED FOR CONSTRUCTION PROJECTS IN EUROPE (EXCEPT GERMANY)
EINGEFÜHRT FÜR BAUMASSNAHMEN IN EUROPA (AUSSER DEUTSCHLAND)

APPROVED / GENEHMIGT — DATE / DATUM: 6. MAI 2015
ORIGINAL SIGNED BY
IN ORIGINAL GEZ.
GERALD SANKO
COMMAND FUEL FACILITIES ENGINEER
HQ USAFE - USAFE/DEA / LFMC

SCALE / MASSSTAB: 1:50

STANDARD SHEET / STANDARD PLAN: E - 1.3

CAD-project path:
CAD-Proj/ablpfad:

CONSTRUCTION PROJECT
BAUMASSNAHME

SHEET-NO. / PLAN-NR. OF / VON