ENGINEERING DRAWINGS

FOR

ENGINEERING DESIGN OF WASH FACILITIES ACROSS BORNO, ADAMAWA AND YOBE (BAY) STATES

Service Contract No: YOL SC 14

GANYE - GOVERNMENT PRIMARY AND SECONDARY SCHOOL SANGASSUMI

CLIENT: USAID/MERCY CORPS

CONSULTANTS:

KONSADEM ASSOCIATES LTD
Engineers & Consultants
30, Onireke Layout,
P.M. B. 5478, Ibadan, NIGERIA.
E-mail: konsadem@gmail.com

2ML CONSULTING NIGERIA LTD
Office 8, B1-Close Off 69(A) Road
Gwarinpa Abuja,

MAY, 2021.
1 NO. NEW SOLAR POWERED BOREHOLE (Location to be determined by Geophysical survey)
Lockable Temporary Steel Cap

250mm dia. API Steel/UPVC Casing

Cement grout in borehole annulus 6m from ground level

Backfill with cutting from drill hole

250/150mm dia. mild steel/UPVC Adapter

Gravel pack with 2-4mm dia. gravel inserted to a minimum of 3m above the screen

150mm dia. stainless steel/UPVC screen

1.5m length of 150mm dia. plain casing as sump

Borehole depth as specified
Depending on dimension of solar panel

PLAN VIEW

40 x 40mm Angle bar

SIDE VIEW

Depending on dimension of solar panel

80mm

PROTECTIVE FRAME FOR SOLAR PANEL
NOTE:
Soil bearing capacity is to be determined by contractor on site for the foundation of tower.

SIDE VIEW

60x60x6mm base iron diagonal bracing
60x60x6mm tie beam
8mm Gusset Plate welded to stanchion
60x60x6mm base iron diagonal bracing

DETAIL-X

60x60x6mm base iron diagonal bracing
8mm Gusset Plate welded to stanchion
60x60x6mm tie beam
60x60x6mm base iron diagonal bracing

DETAIL-Y

60x60x6mm base iron diagonal bracing
60x60x6mm tie beam

DETAIL-Z

16mm thick base plate
Reinforced concrete (1:2:4)
22mm dia. rod with threaded end
4 N0s. 22.5mm dia. hole
4 N0s. 22mm dia. holedown bolt
152X152x37 UC on 16mm base plate
100x50x25mm STEEL GRATING

1500x1000x500 STEEL LADDER DETAILS

BRACING

25mm THICK M.5 FLAT BAR

25mm THICK GAUGE SQUARE PIPE FOR STEP @ 400C/C
TYPICAL GATE VALVE DETAILS

PLAN GATE VALVE IN FULL SIZE BOX

SECTION A-A

SECTION B-B

CLIENT: USAID/MERCY CORPS

CONSULTANT: KONSADEM ASSOCIATES LTD

ENGINEERING DESIGN OF WASH FACILITIES ACROSS BORNO, ADAMAWA, AND YOBE (BAY) STATES

SERVICE CONTRACT NO: YOL SC 14

STATE: ADAMAWA

DESIGNER: Engr Soji Ganye

USAID/BAY/AD-GAN

CONSULTANT: 2ML CONSULTING NIGERIA LTD

GOVERNMENT PRIMARY AND SECONDARY SCHOOL, SANGASSUMI

ENGINEER: Damola

ADAPTED FROM: 2ML CONSULTING NIGERIA LTD

E-mail: konsadem@gmail.com

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E-mail: konsadem@gmail.com
FOUR COMPARTMENT POR FLUSH LATRINE

TWO COMPARTMENT POUR FLUSH LATRINE

TEACHERS

RAMP

Water Taps

SOAK PIT

Guard rails
Compartment for physically challenged

150mm Thick sandcrete dwarf screen wall, 1600mm high

100mm Dia. Waste water pipe to Soak away pit

Inspection Chamber

Made by:

Date:

Mark:

Revision

CHECKED:

Traced:

Drawn:

Date:

CLIENT:

Ref. No:

Designed:

PROJECT

ENGINEERING DESIGN OF WASH FACILITIES ACROSS BORNO, ADAMAWA AND YOBE (BAY) STATES

Service Contract No:

USAID/MERCY CORPS

USAID/BAY/BU-00

CONSULTANT

KONSADEM ASSOCIATES LTD

2ML CONSULTING NIGERIA LTD

GOVT PRY/SEC GIRLS SCH, SANGSSUMI

POUR FLUSH LATRINE SECTIONS

GANYE

(GANAGASSARO)

ADAMAWA

BB00U 1

USAID/BAY/BU-00
250mm X 50mm thick mass concrete coping with plates
225mm X 25mm Thick hardwood fascia board covered with flat pan
Corrugated long span aluminium roofing sheet gauge 0.45mm
100mm DIA. PVC VENT PIPE
50mm X 100mm Treated H. WALL PLATE
50mm X 50mm Treated H. wood purlin @ 506mm Centres
50mm x 75mm Treated H. wood rafters
250mm X 400mm VITRIFIED WHITE WALL TILES LAID ON WALL AT 1200mm ABOVE FLOOR LEVEL
300mm X 300mm VITRIFIED ROUGH WHITE FLOOR TILES LAID ON TOILET FLOOR AND URINARY TROUGHS