BILL OF QUANTITIES (BOQ)

Proposed Standard Filling Station for NNPC Retail Limited

# BILL NO. 1: CANOPY AND CONTENERISED MOBILE FUEL STATION

# S/NO DESCRIPTION QTY UNIT RATE AMOUNT ELEMENT NR.1

# OEM CONTENERISED MOBILE FUELING STATION

179,190,000.00

29,016,000.00

6,000,000.00

# CANOPY & CONTENERISED STATION

# TO GENERAL SUMMARY 214,206,000.00

# S/NO DESCRIPTION QTY UNIT RATE AMOUNT (N)

# BILL NO. 8 EXTERNAL WORKS

# DRIVE WAYS AND PAVED AREAS

Clear site of all thick vegetation including cutting dawn Hedges and carting away debris

1,250 m2 150.00 187,500.00

# EXCAVATION

Excavate oversite average 150mm deep and remove to a distance 5,000 metres away from site

# FILLING

Provide for laterite filling to make up level to an average depth of 200mm, including watering and compacting with a 10-ton roller in layers of 150mm thick

100mm thick well-consolidated bed of hardcore filling to receive concrete bed (measured seperately)

Other Concrete Work Plain In-situ Concrete

Concrete ( 1:3:6-18mm aggregate) in:

188 m3

250 m3

125 m3

100mm thick base for kerbs 5 m3

Haunching around vertical sides of kerbs 6 m3

150 x 450mm high precast concrete kerbs 75 m

Reinforced In-situ Concrete

Concrete (1:2:4-20mm aggregate) developing minimum 25N/mm2 work strength at 28 days in:

# H 3 10,625,000.00

100mm thick ground floor slab cast in bays of 3,000 x 3,000mm 125 m 85,000.00

Reinforcement

BRC Mesh Fabric Reinforcement Type A393 in

J Ground floor slab 1,250 m2 800.00 1,000,000.00

Formwork

Sawn Formwork to:

Edges of slab, 200mm wide

Vertical sides of kerbs base, 100mm wide

Precast Concrete (1:2:4) Bollards size 750x400x600mm highplaced opposite side of Admin/Mini Mart building

# DRIVE WAYS AND PAVED AREAS TO SUMMARY

# S/NO DESCRIPTION QTY UNIT RATE AMOUNT (N)

Element Nr. 6

# DRAINAGE

45,750.00

2,035,000.00

-

# DRAINAGE TO SUMMARY 2,555,750.00

# SUMMARY

# EXTERNAL WORKS

# DRIVEWAYS, PARKINGS AND PAVED AREAS 14,672,400.00

# DRAINAGE 2,555,750.00

# EXTERNAL WORKS

# TO EXECUTIVE SUMMARY 17,228,150.00

# BILL NO. 3 FENCE

# BLOCKWORK FENCE

Excavation

H Ground beam 2 m3 85,000.00 170,000.00

Sawn formwork to:

To Collection 6,927,500.00

Allied Associates Ltd Page 1 Fence

Blockwork

Sanderete hollow blockwork in block size 450 x 225 x 225mm high built in cement mortar (1:3)

A 230mm thick walls 205 m2 8,000.00 1,640,000.00

Piers

450x450mm thick filled solid in Piers

Metal work

Supply and fix Double leaf single swing fabricated steel metal gate size 12000x1000mm high fixed to concrete

columns

Metal grille

Provide and fix fabricated metal grille size 2550x750mm high made up of 25mm hollow pipe in accordance with

the Architects drawing 22 nr

Finishings Cement and sand

12mm thick cement and sand render finish fair and

smooth on surface of walls 205 m2

Ditto in Piers 18 m2

Painting

Prepare and apply one undercoat and two finishing coats

of emulsion paint on new rendering 205 m2 1,900.00 389,500.00 H Ditto in Piers 18 m2 1,900.00 34,200.00

To Collection N 3,769,700.00

Collections

Page 1 6,927,500.00

page 2 3,769,700.00

# BLOCKWORK FENCE

Carried To Main Summary N 10,697,200.00

# GENERAL SUMMARY

# PROPOSED STANDARD FILLING STATION FOR NNPC RETAIL LIMITED

# ESTIMATED TOTAL COST N 317,931,277.00

Allied Associates Ltd page/2 General Summary

# NO DESCRIPTION QTY UNIT RATE AMOUNT

# BILL NO. 5 GENERATOR HOUSE

# SUBSTRUCTURE

# D: GROUND WORK

# D20: EXCAVATING AND FILLING

Excavating

Top soil for preservation

A 150mm average depth 9 m2 150.00 1,350.00

Pits

1.2m maximum depth; from below reduced level 4 m3 1,200.00 4,800.00

Trenches exceeding 300 wide

1.2m maximum depth; from 150mm below existing ground 8 m3 1,000.00 8,000.00 level

# D

Surface Treatment

Level and compact bottom of excavations 9 m2 100.00 900.00

Anti-termite treatment on surfaces of excavations 9 m2 200.00 1,800.00

Disposal

Excavated material

off site 11 m3 500.00 5,500.00

Carried to Collection N 22,350.00

Substructure Cont'd

Excavated material

Filling to excavations

over 250mm average thick; arising from excavations;

depositing in layers 150mm maximum thickness 6 m3 300.00 1,800.00 Selected excavated material

Filling to make up levels

over 300mm average thick; obtained off site; depositing

in layers 150mm maximum thickness 7 m3 4,000.00 28,000.00 Hardcore

Filling to make up levels

not exceeding 300mm thick 4 m3 5,000.00 20,000.00

# E: IN-SITU CONCRETE/LARGE PRECAST CONCRETE

# E10: IN-SITU CONCRETE

Plain; Concrete (1:3:6-all in aggregate)

Blinding bed

generally; poured on or against earth or unblinded

hardcore 1 m3 75,000.00 75,000.00

Plain; Concrete Grade 25; developing minimum 30N/mm2 work strength in 28 days

Foundations

generally 2 m3 85,000.00 170,000.00

Ramp

generally 1 m3 85,000.00 85,000.00

Reinforced; Concrete Grade 25; developing minimum 30N/mm2 work strength in 28 days

Beds

not exceeding 150mm thick 4 m3 85,000.00 340,000.00

Generator Platform 1 m3 85,000.00 85,000.00

Carried to Collection N 804,800.00

Reinforcement; High yield reinfocement to BS 4449 grade 410

m3 85,000.00 127,500.00

m3 85,000.00 32,300.00

m3 85,000.00 85,000.00

m

m2

m2

m2

m2

Substructure Cont'd

# F: MASONRY

# F10: BRICK/BLOCK WALLING

Blockwork; Hollow sandcrete blockwork in cement mortar (1:6); filled solid with concrete grade 25

Walls

A 230mm thick 23 m2 8,000.00 184,000.00

Clear polyethene sheet damp-proof membrane.

Polythene sheeting; 0.26mm single layer laid on unblinded

hardcore to receive concrete 32 m2 1450.00 46,400.00

Carried to Collection Below N 230,400.00

Collections

# SUBSTRUCTURE:

Carried to Summary N 2,168,750.00

# FRAME

# E: IN-SITU CONCRETE/LARGE PRECAST CONCRETE

# E10: IN-SITU CONCRETE

Reinforced; Concrete Grade 25; developing minimum 30N/mm2 work strength in 28 days

Columns

A generally 1 m3 85,000.00 85,000.00

# E20: FORMWORK FOR IN SITU CONCRETE

Formwork; Sawn formwork

columns

B rectangular 8 m2 4,000.00 32,000.00

# E: 30 REINFORCEMENT FOR IN SITU CONCRETE

Reinforcement; High yield reinfocement to BS 4449 grade 410

Straight and bent bars

8 - 16mm diameter bar 0.17 Ton 1,100,000.00 187,000.00

# FRAME:

Carried to Summary N 304,000.00

# ROOF

# E: IN-SITU CONCRETE/LARGE PRECAST CONCRETE E10: IN-SITU CONCRETE

Reinforced; Concrete Grade 25; developing minimum 30N/mm2 work strength in 28 days

roof beams

generally including gutters 2 m3 85,000.00 170,000.00

Roof slab

150mm thick roof slab 3 m3 85,000.00 255,000.00

G 10 - 16mm diameter bar 0.50 Ton

J41: Built up felt roof Covering

4mm thick single layer 'Paralon' NT4 water proof membrane on:

H On cement sand bed falling towards drain points 21 m2

D Parapet wall 19 m2

Waterproof cement and sand (1:3) bed

K 25mm thick bed 21 m2

L 15mm thick vertical sides of Parapet walls internally 19 m2

# ROOF:

Carried to Summary N 1,444,600.00

# EXTERNAL AND INTERNAL WALLS

# F: MASONRY

# F10: BRICK/BLOCK WALLING

Blockwork; Perforated block work to Architect specification

Walls

A 230mm thick 28 m2 8,000.00 224,000.00

Screen walls

B 230mm thick Screen walls 12 m2 8,000.00 96,000.00

# EXTERNAL AND INTERNAL WALLS:

Carried to Summary N 320,000.00

# WINDOWS AND DOORS

# L: WINDOWS/DOORS/STAIRS

# L11:METAL WINDOWS/ROOFLIGHTS/SCREENS/LOUVRES

# L21: METAL DOORS/SHUTTERS/HATCHES

Purpose Made Steel Heavy duty Steel Grille door to Architect's detail 'fixed in accordance with manufacturers instructions; complete with ironmongery; factory applied finish

Steel Grille Door

B Metal Grille door size 1390x2400mm high 1 nr 200,000.00 200,000.00

# WINDOWS AND DOORS:

Carried to Summary N 200,000.00

# WALL FINISHES

# H: CLADDING

# M20: PLASTERED/RENDERED/ROUGHCAST COATINGS

Render; Cement and sand (1:3); external walls

over 300mm wide; to concrete or blockwork 44 m2 2000.00 88,000.00

not exceeding 300mm wide; to concrete or blockwork 16 m 800.00 12,800.00

# M20: PLASTERED/RENDERED/ROUGHCAST COATINGS

Render; Cement and sand (1:3); Internal walls

# WALL FINISHES:

Carried to Summary N 342,550.00

# FLOOR FINISHES

# J: WATERPROOFING

# J10: SPECIALIST WATERPROOF RENDERING

Internal Works

Cement and sand (1:3) screeded paving

Floor

50mm thick - to falls and crossfalls and to slopes not

exceeding 15 degrees from the horizontal; to concrete 22 m2 2,000.00 44,000.00

External Works

Cement and sand (1:3) screeded paving

Floor

50mm thick - to falls and crossfalls and to slopes not

exceeding 15 degrees from the horizontal; to concrete 16 m2 2,000.00 32,000.00

# FLOOR FINISHES:

Carried to Summary N 76,000.00

# ELECTRICAL INSTALLATION

# ELECTRICAL INSTALLATION

# TO SUMMARY 61,110.00

# SUMMARY

Allied AssociateSs ULtBd STRUCTURE

Page 11

2,168,7G5e0n.e0r0ator House

# GENERATOR HOUSE

Carried to General Summary N 4,917,010.00

Cold Water Transfer pump, Electric/Electric (Bristol,or approved equal)Pump rating :2KW, 2850Rpm,50Hz with pressure tank,pressure guage,stainless steel impeller& pump body with flow rate :2.77Ltrs/sec. (1 duty & 1

standby basis) 2 Nr 120,000.00 240,000.00

# FIRE FIGHTING WATER PIPES AND PUMPS

Underground water Tank for Fire fighying

Sectionalised pressed steel water tank vol: 10,000 ltrs

bottom :6mm thickness side:5mm thickness

top:4mm thickness and all necessary accessories Finished with anti-corrossive paint.

Supply, instal and commision the following for fire pump pak for Hose reel system

Fire hose reel pump, Electric/Electric (Bristol or approved equal) Pump rating : 4KW,380volts 2850Rpm,50Hz with stainless steel impeller & pump body with flow rate : 28Ltrs/sec. (1 duty& 1 standby basis) pressure tank , switches and guages as required.

Fire hose reel with and including hose reel cabinet

CIVIL WORKS(inspection chambers)

Excavate for tank pits commencing at stripped level maximum depth not exceeding 4.00m

28 m3 750.00

21,000.00

Excavate ditto, for working space as before described 24 m3 1,200.00 28,800.00

Excavating and backfilling 400mmx 600mm deep trench with special backfilling materials for fire hose reel /cold

water pipe route 180 m 600.00 108,000.00

Disposal

Remove surplus excavated material from site 48 m3 250.00 12,000.00

Backfilling

Laterite filling around excavated working area 34 m3 300.00 10,200.00

To Collection 2,640,000.00

Surface Treatment

Level and compact bottom of pit excavation 18 m2 200.00 3,600.00

2

Allied AssociBates Lt"dDielrex" anti-termite solution applied to surfaces of piPt aegxec 2 62 m 300.00 18,600.00

Hardcore filling

150mm thick closely packed Hardcore filling to

receive concrete 42 m3

Other Concrete Work Plain In-situ Concrete

Concrete (1:4:8) in blinding to pit trench, 50mm thick 1 m3

Plain In-situ Concrete Cont'd

150mm thick plain insitu concrete in Tank base 3 m3

Reinforced In-situ Concrete

Concrete (1:2:4 - 20mm aggregate) developing minimum 25/mm2 work strength at 28 days

Column and column bases 2 m3

Beams 1 m3

Reinforcement

High Yield Steel Bar Reinforcement to B.S. 4449 in:

Tank Seat 0.45 ton 1,100,000.00 495,000.00

Fabric Reinforcement

J Reference A193T, weight 3.02kg/m2 (measured net)

with minimum 300mm side laps; 300mm end lsps 18 m2 1,000.00 18,000.00

To collection 1,221,200.00

Sawn Formwork to:

Vertical sides of columns 21 m2 4,000.00 84,000.00

Sides of Beams 9 m2 4,000.00 36,000.00

Pre-cast conrete

Pre-cast reinforced concrete slabs size 2520x750x

Allied Associates Lt1d25mm thick with 12mm diameter hihg yield bar reinforcement at 200mm centres both ways

Page 3 External Services

including all the necessary formwork 6 nr 20,000.00 120,000.00 F10: BLOCKWALLING

Sandcrete hollow blockwork bedded and jointed in cement and sand ( 1: 4) mortar

Walls; filled solid with in-situ concrete grade 25 and reinforced with 12mm diameter bars

230mm thick; stretcher bond with and including 2nr 12mm diameter high yield reinforcemeent bars in each

hole 28 m2

# P10: SUNDRY INSULATION/PROOFING WORK/ FIRE STOPS

Polythene sheeting; 0.26mm single layer laid on

unblinded hardcore to receive concrete 28 m2

Felt work

Provide and fix Paralon NT4 Felt 38 m2

Rendering

15mm thick rendering with water resistant cement

and sand internally 36 m2 700.00 25,200.00

To Collection 598,200.00

Allied Associates Ltd Page 4 External Services

To Collection Below 127,000.00

Collections

# A

# C

# D

Allied Associates Ltdoutdoor installation,rated at 50Hz, ambient temperature 400C off load tap changer, ONAN

Page 5 External Services

# D

# E

F Pre Fabricated approved TOILET booths 2 Nr 1,500,000.00 3,000,000.00

To Collection 4,060,800.00

To Collection Below 2,032,000.00

Collections

Page 6 10,537,000.00

Page 7 4,060,800.00

Page 8 2,032,000.00

# EXTERNAL ELECTRICAL INSTALLATION

Carried to Summary N 16,629,800.00

# SUMMARY

# EXTERNAL MECHANICAL INSTALLATIONS 7,586,400.00

# EXTERNAL ELECTRICAL INSTALLATION 16,629,800.00

External Services Carried to General Summary N 24,216,200.00

# PRELIMINARIES

# PRELIMINAEIES AND GENERAL CLAUSES

# PRELIMINARIES AND GENERAL CLAUSES

Carried To General Summary N 22,625,000.00