

## **Alcides Panez**

## Senior CAD Designer

#### Education

Civil Engineer, Universidad Peruana de Ciencias Aplicadas (UPC), 2017 Degree in Agronomy, Universidad Daniel Alcides Carrión (UDAC), 2008

## **Experience Summary**

Mr. Panez has more than 6 years' experience in CAD design and topography. His project experience includes calculation of earthworks; design of mining facilities including heap leach pads (HLPs), process ponds, tailings impoundments, dumps access ways and channels; design of access roads; quality assurance and quality control in construction, and surface water management. He is experienced in environmental permitting at the Ministry of Energy and Mines (MEM), the General Directorate of Environmental Health (DIGESA), the Water National Authority (ANA), and the Environmental Assessment and Control Agency of Peru (OEFA). He has extensive knowledge of several engineering software programs including AutoCAD Civil 3D, Infrawork 360, Revit, Global Mapper, MS Project, and Primavera. He excels in client administrative-technical management, and has strong organization, leadership, and both verbal and written communication skills.

## **Project Experience**

### TAILINGS DAM - ANALYSIS OF ALTERNATIVES AND TRADE-OFF STUDY, YAURICOCHA | PERU

Designed tailings disposal alternatives using AutoCAD Civil 3D. Work included developing the layout of hydraulic works to convey runoff and the conceptual engineering to determine the best alternative for conventional or filtered tailings disposal. (Tierra Group, 2018 to Present)

#### RAISE OF LEACH PAD STAGE 04, CRESTÓN MASCOTA MINE | CHIHUAHUA, MEXICO

Design of a solution collection system distribution and disposal. Work included calculating quantities of pipelines, connections, and earthworks. (Tierra Group, 2018)

## RAISE OF LEACH PAD STAGE 03, LA TRINIDAD | MAZATLÁN, SINALOA MÉXICO

In charge of reviewing the existing information provided by the client, generating the leach pad raise, and calculating volumes and quantities with AutoCAD Civil 3D. (Tierra Group, 2017)

#### GEOLOGICAL-GEOTECHNICAL DRILLING | TOQUEPALA

In charge of coordinating administrative and logistic aspects of the project. (Tierra Group, 2017 to Present)

### MONITORING OF GEOTECHNICAL INSTRUMENTS, ANTAPACCAY | ESPINAR, CUSCO

In charge of coordinating administrative and logistic aspects of the project. (Tierra Group, 2017 to Present)

#### GEOLOGICAL DRILLING, ANTAPACCAY | ESPINAR, CUSCO

In charge of coordinating administrative and logistic aspects of the project. (Tierra Group, 2015 to 2017)

## DETAILED ENGINEERING OF SEDIMENTATION PONDS | SANTIAGO DE CHUCO, LA LIBERTAD

Civil design of sedimentation ponds PCN1 and PCN3. Responsible for the layout and section design including corridor areas, earthwork ponds, perimeter channels and inlet spillways, among other works. (Tierra Group, 2015 to 2016)

#### GEOMETRICAL DESIGN OF HV115 HIGHWAY | HUACHOCOLPA, HUANCAVELICA

Responsible for preparing technical documentation for the State Highway HV115 detour. Verification of environmental parameters, as well as obtaining approval of zero discharge while maintaining soil quality standards (Environmental Quality Standard (ECA). (Compañía Minera Caudalosa, 2014 to 2015)

### DETAILED ENGINEERING OF TAILINGS DAM RUBLO B | HUACHOCOLPA, HUANCAVELICA

Detailed engineering design using AutoCAD Civil 3D and a presentation using the BIM program, which required the design of access roads, perimeter channels and dams, as well as calculation of earthworks, and preparation of drawings. (Compañía Minera Caudalosa, 2014 to 2015)

## INTERNAL AUDITOR FOR THE CONSTRUCTION OF TAILINGS FACILITY C | HUACHOCOLPA, HUANCAVELICA

Verification of information, calculations, and report preparation. The audited amount for the Tailings Facility C construction project was S/.1'258,00.00 (currency: Nuevos soles). (Compañía Minera Caudalosa, 2014 to 2015)

## SOIL DECONTAMINATION PLAN | SANTIAGO DE CHUCO, LA LIBERTAD

Development of the Study on Environmental Conditions and Soil Decontamination Plan, according to the resolution issued by the corresponding entity, based on DS-002-2013-MINAM, the guiding documents for the preparation of environmental condition studies and the sampling guide. (Comarsa Cia. Minera Aurífera Santa Rosa, 2012 to 2014)

## ACID DRAINAGE REMEDIATION, SACALLA 09 WASTE DUMP | SANTIAGO DE CUCHO, LA LIBERTAD

Identified the origin and accumulation of acidic water in the mine, which was channeled and separated from rainwater. (Comarsa Cia. Minera Aurífera Santa Rosa, 2013 to 2014)

### INTEGRATED PAD 01 | SANTIAGO DE CHUCO, LA LIBERTAD

Pre-design and development of detailed engineering drawings for the HLP. Design of process ponds, crest channels, perimeter roads, and calculation of earthworks. (Comarsa Cia. Minera Aurífera Santa Rosa, 2013)

#### INTEGRATED PAD 02 | SANTIAGO DE CHUCO, LA LIBERTAD

Pre-design and development of detailed engineering drawings for the HLP. Design of process ponds, crest channels, perimeter roads, and calculation of earthworks, including liner system details. Design included the underdrain and surface drain systems and collection system. (Comarsa Cia. Minera Aurífera Santa Rosa, 2013)

## WASTE DUMP COCHAVARA 01 | SANTIAGO DE CHUCO, LA LIBERTAD

Pre-design and development of detailed engineering drawings for the waste rock dump. Design of process ponds, crest channels, perimeter roads, and calculation of earthworks, including liner system details. Design included the underdrain and surface drain systems. (Comarsa Cia. Minera Aurífera Santa Rosa, 2013)

#### WASTE DUMP SEDUCTORA 03 | SANTIAGO DE CHUCO, LA LIBERTAD

Pre-design and development of detailed engineering drawings for the waste rock dump. Design of process ponds, crest channels, perimeter roads, and calculation of earthworks, including liner system details. Design Included the underdrain and surface drain systems. (Comarsa Cia. Minera Aurífera Santa Rosa, 2013)

## CRESPO PROJECT, FEASIBILITY STUDY - HEAP LEACH PAD, TANKS AND PONDS, MINERA ARES S.A.C. | PERU

Development of quarry drawings, general layout of facilities, design drawings for the HLP and ponds, clearing and removal of vegetation, development of the liner system, etc. Internal paths within the facilities. (Ausenco Vector SAC, 2012)

# HEAP LEACH PAD DETAILED ENGINEERING - PHASE 1 PLS POND AND WASTE MATERIAL DUMP, LA ARENA S.A.C. | PERU

Development of quarry drawings, general layout of facilities, design of drawings for the HLP and ponds, clearing and removal of vegetation, development of the liner system, etc., and internal paths within the facilities. (Ausenco Vector SAC, 2012)

# DETAILED ENGINEERING - PAD PHASE I, PONDS AND WASTE DUMP REMOVAL, COMPAÑÍA MINERA MINASPAMPA S.A.C. | PERU

Pre-design and development of detailed engineering drawings for the waste rock dump. Design of process ponds, crest channels, and perimeter roads; calculation of earthworks and development of liner system details. Also designed the underdrain and the surface drain systems. (Ausenco Vector SAC, 2011 to 2012)



# MINE PIT DETAILED ENGINEERING, BAYOVAR PHOSPHATE PROJECT, COMPAÑÍA MINERA MISQUI MAYO S.R.L. | PIURA

Pre-design and development of general layout drawings, calculation of earthworks, etc. (Ausenco Vector SAC, 2011 to 2012)

## REGINA PROJECT - MINERA SILLUSTANI S.A. | QUILCAPUNO, PUNO

Basic engineering of the crest channels and acidic water management alternatives. Work included layouts, surface water runoff management, channels, etc. (Ausenco Vector SAC, 2011 to 2012)

#### EXPANSION AND IMPROVEMENT OF DRINKING WATER AND SEWER SYSTEMS | SICUANI, CUSCO

Topographic verification, processing, editing, and monitoring of field progress. Layout and design of conveying and pumping lines, preparation of drawings, design of project reservoirs, calculations, and estimation of earthworks. (Nippon Jogesuido Sekkei Co., 2009 to 2010)

#### STORMWATER DRAINAGE AND MITIGATION OF LOW-LYING AREAS | IQUITOS

Developed drainage areas for critical flood zones and stormwater runoff, presented in drawings according to contour line (topography) and AutoCAD criteria. (Nippon Jogesuido Sekkei Co., 2009 to 2010)

## EXPANSION AND IMPROVEMENT OF DRINKING WATER AND SEWER SYSTEMS | JAÉN (CAJAMARCA)

Topographic verification, data editing, and processing. Assisted with the design of reservoirs and special structures for HFD pipeline support and access roads. Developed drainage area drawings, supply systems, networks, utility connections, and calculations. Supervision and training of staff for the development of drawings, according to terms of reference and appropriate format for submittal. (Nippon Jogesuido Sekkei Co., 2009)

## EXPANSION AND IMPROVEMENT OF DRINKING WATER AND SEWER SYSTEMS | JAÉN (CAJAMARCA)

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# INSTALLATION OF PRIMARY AND SECONDARY NETWORKS FOR DRINKING WATER AND SEWER SYSTEMS | DISTRICT OF MIRAFLORES - AREQUIPA

Layout of reservoirs, conveying lines, field verification of layout, and special crossings (retention walls, concrete structures for pipeline protection, etc.). (Aquapro, 2009)

# FEASIBILITY STUDY, TECHNICAL FILE AND PROFILE, EXPANSION AND IMPROVEMENT OF DRINKING WATER AND SEWER SYSTEMS | TRIUNFO – LA JOYA – AREQUIPA SECTORS

Topographic verification, definition of pressure areas, water and sewage layout plans, utility connections, and pumping and conveying lines. Emitters, water tanks, calculations, preparation of the Residual Water Treatment Plant (RWTP), detail of special crossings, pipeline protection structures, retention walls, drainage and air valve details, catchment boxes, etc. (Aguapro, 2008 to 2009)

## WASTEWATER USE | VEGA PERU - AQUAPRO

Conceptual profile of a private project called "Use of Wastewater Vega Peru - Aquapro". Topographic development and layout of conveyance line Carapongo-La Encalada (central highway), field leveling, and design of conveyance line (18 km). (Aquapro, 2008 to 2009)

## **Employment History**

CURRENT EMPLOYER
POSITION

YEARS

TIERRA GROUP INTERNATIONAL S.A.C.

Civil Designer 2015 to Present



EMPLOYER COMPAÑÍA MINERA CAUDALOSA - KOLPA

Position Civil Designer
YEARS 2014 to 2015

EMPLOYER COMARSA CIA. MINERA AURÍFERA SANTA ROSA

Position Project Coordinator

YEARS 2012 to 2014

EMPLOYER AUSENCO VECTOR SAC

Position CAD Designer
YEARS 2010 to 2012

EMPLOYER NIPPON JOGESUIDO SEKKEI CO.

Position Design Assistant
YEARS 2009 to 2010

EMPLOYER AQUAPRO
POSITION CAD draftsman
YEARS 2008 to 2009

## Language Proficiency

Spanish: Native language
English: Basic - Intermediate

