# Al Medved

Willowick, OH

-Email me on Indeed: http://www.indeed.com/r/Al-Medved/0a20d6072891c527

- # Seasoned AutoCAD User in the building construction discipline.
- # Construction Document Specialist, experienced at permit acquisition.
- # Drawing experience in several engineering disciplines. M/E/P & A/C/S
- # Field Representative for the owner.
- # Construction Meetings Agent for Architect, experienced Field Status person.
- # Capable to produce requirements of design and satisfy AHJ sticking points.
- # Experience with Life Safety Code, NFPA and ADAAG.
- # Installation knowledge of independent systems for the implementation of owner's equipment.

# Work Experience

## **AutoCAD Designer of Power Distribution Systems**

BC&OD Engineers LLC - Willowick, OH May 2018 to October 2018

See description in earlier history
AutoCAD Designer of Bio-Gas related building features and sites

quasar energy group - Independence, OH February 2017 to April 2018

#### Biogas Facilities.

Description: Biogas is the term applied to the naturally emitted methane gas created from the decomposing biological materials. The process gas is collected in a gas-tight vessel, sent to and burned as a fuel in a generator driven by an industrial engine. The generator creates electricity and sends it to the grid. The nutrient rich bi-product sludge is eventually brought up in temperature to a microbe-killing level, and the sludge is distributed for use in farming communities as a fertilizer. The facility housing the operation requires engineering of all the typical industrial plant disciplines and is usually set in an agricultural area or in a similarly outfitted water treatment plant area.

Employment was as a full-time hourly contractor, charged with creating and/or modifying Construction Documents using AutoCAD 2018 and Office Suite. Assignment was to the engineering department, which was responsible for "design-build documentation" aimed primarily at "company self-performed" construction. Later, management contracts were switched to those requiring "bid-set style" CD, in which many documents were transferred to the bid format. Original duties were of an Architectural nature, demand later switched to heavy involvement of Structural, and Site, with many drafting chores in Process Piping, some Plumbing, and some HVAC.

The work involved custom drawings of all the modules of the plant. My drawings included:

Completed plan, elevation, section and details of steel buildings intended to protect industrial equipment from the elements. These include structural foundations, framing.

Changes to existing architectural design drawings for prior developed operations building including offices, break room, storage, lab and restroom.

Structural: complete structural slabs for buildings and equipment, including footer and rebar. Concrete pit construction for incoming material. Typically 24'x 24'x 12' deep with rebar reinforcing for 12"t. walls, surface drainage externally, with pit-internal, process pump accommodations.

Site layout of design as driven by the requirements of the process, complete with tractor-trailer roadways, utility lines, UG process piping, pit placement, sales-gas collection and refining buildings, site contours, site lighting, electrical location, condensate drainage, flare placement, truck scale location, liquids tank location.

Changes to existing drawings using collection of data from other sources and extended coordination techniques: refine descriptions of repair to existing tanks, site location of new buildings and created new contours. Designed retaining walls where required.

#### **AutoCAD Designer of Exterior Curtainwall Systems**

Midwest Curtainwalls - Cleveland, OH November 2015 to September 2016

Designed Curtainwall Product for use in exterior envelope of bldgs.

## **AutoCAD Designer of Power Distribution Systems**

BC&OD Engineers - Eastlake, OH September 2013 to October 2015

Collaborate with professional engineers on their design creating electrical drawings in AutoCAD including Power Distribution, Single-Line Diagram, Power, Lighting, Equipment Layout, Schedules and much more. Projects partial list: Republic Steel, Goodyear Tire & Rubber Co. Industrial production facilities worldwide. Systems design experience in industrial vehicle-tire plants, steel production.

## **AutoCAD Designer of Buildings and Spaces (Arch & Interiors)**

Vocon Design Inc - Cleveland, OH April 2004 to February 2010

Project Skills required extensive use of Microsoft Office Suite

Work directly with other professionals to meet team's goals.

Assist as needed with preliminary project analysis, programming, scheduling and objectives.

Coordinate activities & create calendar for meetings, field visits, submittals, mock-ups.

Locate existing drawings, analyze surveys.

Field Survey: digital photographs, investigate conditions, measure & record features.

Discuss project with AHI early in the process to define areas of special interest.

Assess compliance; revise new design to conform as necessary.

Assist in research for components in project, contribute to a comprehensive specification.

Use specifications for shop drawing exam and approval.

Document the shop drawing submittal and adjudication process.

Review design and red-line drawing sets.

Coordinate project elements. Coordinate other disciplines & their related codes.

Use of AutoCAD for take-off's. Use of Excel for tabulations.

Conduct meetings formalize an action plan, record comments, formalize into minutes and distribute.

Administer drawing changes to field; Bulletins and Revisions.

Answer RFI's, write response letters, produce re-submittal, and assist with project closeout.

Drawing Type Experience across these respective construction disciplines:

Site / Civil Structural Architectural Interiors MEP

Plat Plan Foundation Floor Plans Furniture Plan HVAC Plans

Topography Plan Framing Elevation Data Routing Plan Fixture Schedule

Site Layout Slabs Section and Details Partition Plan Plumbing Plan
Cut and Fill Schedules Reflected Ceiling Details Process Piping
Utility Plan Details Equipment Layout Schedules Power Distribution
Drainage Plan Paving Plan & Sections Egress Plan Finish Plan Single-Line Diagram
Landscape Plan Door Schedule Low Voltage Panel Schedule
Lighting & power
Signage Plan Window schedule plans

# AutoCAD Designer of Power Distribution Systems AutoCAD Designer and Drawing Coordinator

BC&OD Engineers LLC - Willowick, OH Vector Technical Inc - Willoughby, OH November 2018 to March 2020.

Worked as a full-time contractor on location for a chemical company.

Hired to reduce the number of drawings in the company database. The database through the use of AutoDesk Vault software. Suspect drawings in the database consisted of many duplicate copies, outdated facility equipment & systems, unfunded improvements and planned schemes for new construction that never came to fruition. The project required a print for each drawing (in B-size format) and then sort into categories to be turned over to each of the plant's engineers for their judgement of usefulness in the future.

Most drawings were AutoCAD originals or converted from a prior system. Some drawings were represented by PDF's (electronic scans of hand drawn drawings).

As the project proceeded, many drawings were analyzed to determine whether the drawing could be retired to reduce information redundancy. For this task, the goal was to reduce the overall number of drawings to the "minimum number required to physically build the existing building, today". The project is a success and remains a work in progress (paused by COVID-19).

Also, and equally important, was the duty to field measure the existing buildings for undocumented changes over the history of the plant. This included time to understand and internalize the plant administrators' stringent safety requirements. The plant location is both an office park and an industrial chemical plant demanding an additional level of operational awareness. Human safety on the property is paramount.

Field visits were prioritized by the need for data in each of the next successive projects. Data was verified "as needed". Data acquired from field visits were entered into AutoCAD External References (xref's) which were sorted per discipline. Assembled "subject" drawings were made up of the numerous xref's within the drawing structure. This format provides for the most easily updated drawings once the project is complete.

The new drawings are used for facilities management, project construction, and planning.

Operational unity was developed over decades and involved many corporate managers. Our four-person group successfully ironed out old issues and new working guidelines were established through weekly meetings to increase team efficiency. New rules were being developed prior to the onset of the Covid-19 crisis, to bring about a new standard for drawing appearance and assembly - both printed and functional.

#### Education

#### Some College in Law Enforcement

Lakeland Community College

# Skills

- Plumbing
- HVAC
- Farming
- CAD
- Sales
- Assembly
- Laboratory experience
- Tractor-trailer
- Water treatment
- Research
- Microsoft Excel
- Paving
- Landscape maintenance
- Microsoft Office
- Construction
- Autodesk
- AutoCAD
- Facilities management
- Industrial equipment
- Low voltage
- Quality assurance