

Konstantin Ashkinadze, P.Eng.

1228 Wershof Road, Edmonton, AB T6M 2M2 ♦ Cell (780) 945-9746 ♦ konstantin.A@pro-dynamic.com

CAREER OBJECTIVE

A position of Senior/Principal Structural Engineer /
Project Discipline Lead / Technical Lead / SME

P.ENG. MEMBERSHIP

- Alberta
- Saskatchewan
- British Columbia



HIGHLIGHTS OF QUALIFICATIONS

- Over 25 years Canadian and 10 years overseas (Russia) experience as a structural engineer
- Experience in industrial, commercial, civil and residential construction
- First-class academic record (Russian equivalent of doctorate degree)
- Experience in design, inspections, structural assessment and consulting
- Experience of project leadership and management, contracts, estimates, manpower planning, job progressing, interoffice and interdisciplinary coordination
- Computer skills: structural analysis (STAAD, S-Frame, PCA, Softek Structural Office), DYNA 6, AutoCAD, MathCAD
- Highly motivated, dedicated, creative; able and willing to assume responsibility

PROJECT EXPERIENCE

Samson AE building, Brandon, MB - Mathematical Modelling of Building Frame Damage After a Collision with a City Transit Bus; Arbitration Representation (02.2022 – present)

Nor-Alta Environmental Ltd., Edmonton – Foundation, Drainage, Sewerage, Grading Design for Steel Warehouse Building (2022)

Restocrete Inc. for Millar Western Pulp Mill, Whitecourt, AB – Slab Presses and Drying Fans Dynamic Equipment Assessment to Facilitate Foundation Rehabilitation (03-05.2022)

Court of Queen’s Bench: Town of Three Hills v. Bearden Engineering et. al – Town Hockey Arena Roof Collapse Investigation; Expert Witness Testimony (01-04.2022)

Park Towers Condominium, Edmonton, AB – Parkade Integrity Study (11.2021-05.2022)

Concrete Inc., Acheson, AB – 19,440 sq. ft Steel Warehouse Foundation Design (03-07.2021)

Concrete Inc. for Suncor Energy – Design of Precast Concrete Sleepers for Piperacks (05-06.2021)

Weir Minerals Canada – Dynamic Assessment of a Tailings Slurry Pump Skid (01-06.2021)

Weir Minerals Canada – Dynamic Assessment of a Vibrating Ore Screen (03-08.2021)
Phoenix Engineering Consultants Ltd. for Pinnacle Renewable Energy – Reliability Risk
Analysis of Westview Wood Pellet Shipping Terminal, Prince Rupert, BC (01-03, 2021)
ST Global Resources, Edmonton – Innovative Design of Oil Tank Cleaning Head (02.2021)
InterPipeline, Sherwood Park - Pre-Engineered Warehouse Steel Building Reframing (12.2020)
Bradken Manufacturing – Assessment of Pipe Expansion Joint for Slurry Tailings (03-04.2020)
PHS DKI Disaster Services, Edmonton – Warehouse Building Expansion (02.2019 – 10.2020)
New Turkish-Canadian Mosque Building, West Edmonton (10.2018 – 05.2021)
Dickinsfield Mall, Edmonton – Commercial Complex Renovation (10.2018 – 02.2020)
Dispovac – Hydrovac Tailings Facility Civil Development, Strathcona Co. (05.2019 – 12.2020)
Concrete Inc. – Peace River Cross Fishway Entrance, BC (02-05.2019)
LKS Construction Ltd. – New Petro Canada Gas Station, Grande Cache, AB (03-12.2020)
LKS Construction Ltd. – New Petro Canada Gas Station, Hinton, AB (05-06.2019)
LKS Construction Ltd. – New Mobil-1 Gas and Service Station, Hinton, AB (05-07.2019)
LKS Construction Ltd. – New Petro Canada Gas Station, Lamont, AB (06-09.2018)
ZCL Composites Ltd. – Fibreglass Tanks Fabrication Facilities, Canada & USA (2018-2019)
APTIM Canada Ltd. – ESSO Strathcona Refinery Tank Maintenance Project (05.2018)
2079424 Canada Ltd. – Elevator Installation in Existing Commercial Building (05-07.2018)
Touchtone Canada Inc. – Warehouse Building Expansion (Civil/ Structural) (02.2018 – 07.2021)
Pavilion Structures – Light Industrial Buildings (11.2017– 01.2018)
Jacobs Canada – Keyera and Pembina Redwater Cogen 1 GTG Foundation Assessment (09.2017)
miEnergy Inc., Saskatoon, SK – Multiple Solar Power Projects (2016 – present)
LED Pros – Multiple Road and Building Sign Projects (2016 – 2017)
Memory Express Freestanding and Attached Signs (2016 & 2018)
Dandelion Renewables – Solar Power Farms, Multiple Projects (2014 – 2017)
Jacobs Canada – Suncor Plant 93/94 Steam Generator Foundation (08.2017 – 07.2018)
Dandelion Renewables – 4.5MW Solar Plant, Milk River, AB (05.2017)
Dandelion Renewables – 15MW Solar Plant, Brooks, AB (04.2017)
Dandelion Renewables – Tribal Chiefs Ventures Rooftop Solar Array, Edmonton, AB (04.2017)
Dandelion Renewables – Riverdale Solar Gazebo, Edmonton, AB (04 – 05.2017)
Neubau Dorotheenquartier apartment tower (Germany) – Design of Concrete Diaphragms (2016)
New Memory Express Store Building, West Edmonton (06.2015 – 09.2016)
Lehigh Cement, K-Mill Pneumatic Cement Transport, Edmonton (05 – 07.2016)
Jacobs Industrial for Syncrude – Oil Tank Structural Assessment (04 – 05.2016)
Enbridge Wood Buffalo Pipeline Expansion (05.2015 – 07.2016)
Suncor Plant 300, Tailings Processing Facility, Fort McMurray (07 – 09.2015)
Shell Canada, Hydrocracker Unit, Scotford Plant, AB (05 – 08.2015)
Enbridge Hardisty Terminal, Husky Connection Upgrade (08.2014 – 05.2015)
Enbridge Cheecham Terminal, Line 35/37 Diluent Capacity Increase (05.2014 – 07.2015)
Enbridge, Montreal Terminal (QC), Line 9B Reversal (05 – 10.2014)
Enbridge Kerrobert Terminal (SK), Transient Mitigation Project (03.2014 – 02.2015)
Enbridge, Northern Gateway Project (DBM), AB/BC (01.2013 – 03.2014)
Enbridge, Clipper Pipeline Expansion Phase 1 and 2 (06.2012 – 06.2014)
Enbridge Edmonton Terminal, Investigation of Excessive Vibration of 3 Booster Pumps (2013)
Enbridge Edmonton Terminal, Investigation of Line 4 Piperack after Transient Event (2012)

Enbridge, Athabasca Pipeline Capacity Expansion, Alberta (03.2011 – 06.2012)
AltaSteel Ltd. Toll Industries Building Upgrade, Edmonton (09.2010 – 03.2011)
TransAlta Coal Sampling, Sundance / Keephills (10.2010 – 03.2011)
Gilead Pharmaceuticals Process Tower Elevator, Edmonton (05 – 09.2010); AP Process Tower 2
(04 – 05.2016)
ESSO Strathcona Refinery (Edmonton) – Rainwater Impoundment Basin Project (06 – 08.2010)
Precision Engineering at Conoco Phillips Gas Plant, Nordegg, AB (03 – 04.2010)
AltaSteel Ltd. Steelmaking, Edmonton – Ladle Turret Foundation (04 – 11.2010)
Husky Alliance, Lloydminster, AB (01.2010 – 03.2010)
Suncor Voyageur Utilities (08.2008 – 12.2009); Sulphur Plant (05 – 10.2012)
Petro Canada (Edmonton) EDD and RCP projects (12.2003 – 07.2008)
Alberta Transportation – Highway 759 Landslide Rehabilitation, Berrymoor, AB (2003)
Gold Bar Wastewater Treatment Plant – 2 stages or renovation (2000 and 2003)
Nova Chemicals (Joffre Plant) COP project (03 – 06.2003)
ESSO (Strathcona Refinery) Prism expansion project (08.2002 – 02.2003)
Syn crude UE-1 (06.2001 – 07.2002)
Petro Canada (Edmonton) 400 Tank Farm project (10.2000 – 06.2001)
Strathcona Seniors' Care Facility, Sherwood Park (05 – 09.2000)
Avonair Curling Club Renovation, Edmonton (05 – 08.2000)
Suncor Millennium Utilities (04.1999 – 03.2000)
Shell (Scotford) MEG Plant (09.1998 – 04.1999)
Universe Machine Corporation Industrial Buildings, Edmonton (1997 & 2002)
Valley Centre Mall Collapse Investigation, Whitecourt, AB (1996 – 1997)
Combined Precast-Monolithic Concrete Floor Slabs as a Replacement for Existing Wood
Floors in Historical Brick Buildings, Moscow, Russia (1990)
Interconnected Apartment Complexes, Naberezhnye Chelny, Russia (1985)
27-Storey Seismic-Resistant Apartment Buildings “City Gates”, Kishinev, Moldova (1985)

EMPLOYMENT HISTORY

2016 – present	Pro Dynamic Solutions Inc., Edmonton, AB <i>Founder, owner, chief civil / structural engineer</i>
03.2011 – 08.2016	Jacobs Engineering, Edmonton, AB <i>Principal / lead civil / structural engineer</i>
03.2010 – 03.2011	ECO-Technica Inc. (presently ONEC Group), Edmonton, AB <i>Senior / lead structural engineer</i>
12.2003 – 03.2010	Bantrel Co., Edmonton, AB <i>Senior / lead structural engineer</i>
08 – 11.2003	Techna-West Engineering Ltd. (presently Jacobs), Edmonton, AB <i>Senior structural engineer</i>
08.2002 – 06.2003	Bantrel Co., Edmonton, AB <i>Senior structural engineer</i>
06.2001 – 07.2002	CoSyn Technology, Edmonton, AB

Senior structural engineer

10.2000 – 06.2001	Colt Engineering (presently Worley Parsons), Edmonton, AB <i>Intermediate structural engineer</i>
04 – 09.2000	Stantec Consulting, Edmonton, AB <i>Intermediate structural engineer</i>
04.1999 – 03.2000	Bantrel Co., Edmonton, AB <i>Intermediate structural engineer</i>
09.1998 – 04.1999	Colt Engineering (presently Worley Parsons), Edmonton, AB <i>Intermediate structural engineer</i>
04.1996 – 08.1998	Brown Engineering, Edmonton, AB <i>Intermediate structural engineer</i>
06.1992 – 04.1995	Red Giant Manufacturing, Moscow, Russia <i>Department lead, chief automation specialist</i>
01.1989 – 05.1992	Central Institute for Monolithic Construction, Moscow, Russia <i>Structural engineer / researcher</i>
09.1985 – 12.1988	Central Research & Design Institute for Dwellings, Moscow, USSR <i>Structural engineer</i>

DUTIES

- Civil/structural discipline lead, area lead, group lead, senior engineer, Subject Matter Expert
- Design and construction supervision for industrial, commercial, public and residential buildings and their foundations (seismic and non-seismic)
- Hands-on design of modular and conventional piperacks, pipe supports, buildings and building foundations, equipment and control station supports
- Design and troubleshooting of dynamically loaded foundations for heavy equipment, mainline and booster pumps; design of anchors for transient loads in pipelines
- Design of shallow, pile, mat, and structural slab foundations for piperacks, platforms, buildings and equipment
- Design of area grading, earth-retaining structures, drainage and water retention systems
- Foundation and structural designs and testing for solar power facilities
- Design of freestanding and attached signages at roadways and commercial plazas
- Design for revamp and rehabilitation projects
- Design supervision, coordination and final check
- Contracts, estimates, work execution planning, manpower planning, job progressing
- Responsible for interoffice coordination and construction liaison
- Liaison with architectural, mechanical, electrical, piping stress, geotechnical consultants
- Mentorship to junior engineers
- Writing design and construction specifications, design manuals and aids
- Expert service for legal and insurance claims

DESIGN HIGHLIGHTS

- Structural assessments, code study and liability assessment for a collapsed roof of a town Hockey arena (QB: Town of Three Hills v. Bearden Engineering)
- Motional, static and dynamic modelling of building frame damage after a collision with a city transit bus; arbitration representation (Samson AE)
- Dynamic assessment of slab presses and drying fans for pulp processing (Restocrete for Millar)
- Parkade concrete slab integrity study in the presence of corrosion (Park Towers Condominium)
- Optimized mat foundation design for 19,440 ft² steel warehouse on very poor soils (Concrete Inc. Acheson)
- Development of probabilistic framework for reliability risk analysis of marine terminal structures, mooring facilities and silos (Phoenix Consultants for Pinnacle Renewable Energy)
- Dynamic assessment of grade-supported 140 tonne mobile tailings pump skid (Weir Minerals)
- Dynamic risk assessment of 20-tonne crushed ore screen vibration testing inside an existing factory building (Weir Minerals)
- Optimized design for oil tank shell lifting for foundation replacement (APTIM – ESSO)
- Modification of existing foundations for tailings pumps with lateral reactions up to 1750 kN (Suncor)
- Dynamically loaded reciprocating compressor foundation (Shell)
- Earth-filled modularized dynamically loaded oil pump foundation (Enbridge)
- Refurbishment and expansion of piperack on existing overloaded foundations to carry additional piping and transient anchors (Enbridge)
- Assessment of vibration of vertical and horizontal pumps considering foundation and machine casing dynamics (Enbridge)
- Foundations for transient pipe anchors with ~1000 kN impact loads (Enbridge)
- Innovative design for variable soil/rock anchors for construction in the mountains (Enbridge)
- Foundation for 120-ft-long horizontal vessel (Petro Canada)
- Design of a utility corridor for heavy haul road (Petro Canada)
- Multi-stage modular piperack upgrade (Syncrude)
- Design calculations for 450 ft tall guyed flare stack (Voyageur)
- Dynamically loaded turbine-driven compressor foundation and tabletop (Voyageur)
- Pile foundation for a 110-ton reciprocating compressor (Conoco Phillips)
- Concrete foundations for heavy moment frames of a 100 ft pipe bridge (ESSO)
- Modernization of existing steel support structure for 108-ton exchanger (Nova)
- Process-structure dynamic interaction modelling in investigation of excessive vibration of a deaerator support frame (Nova)
- Probabilistic assessment of reliability of foundation with cold-embrittled pile rebar welds (Jacobs)
- Foundation for steel arch underpass (Millennium)

- Catalog of arch truss structures for industrial tent warehouses (Techna-West)
- Design of steel sheet pile wall for tank secondary containment (Petro Canada)
- Civil development and runoff retention system design for 25-acre Hydrovac Tailings Facility (Dispovac)
- Design of underground piping and heavy retaining structures – structural, geotechnical and hydraulic (Millennium, Stantec)
- Structural slab foundation and a steel tower for passenger elevator (Gilead)
- Mat with tiedowns foundation for 75-ton steelmaking ladle turret suitable for a 2-week erection period (AltaSteel) – technological, structural and geotechnical
- Highly modularized solution for pre-separator structure and a pond outfall junction box (Sureway – ESSO RIB)
- Engineering for a 29' diameter dome support over a 40'×40' praying hall and a 55' tall minaret – the largest of this kind in Canada (Turkish-Canadian Mosque)
- Modification of 2400 m² commercial building for new Memory Express store
- Design and construction supervision for 10 m tall freestanding sign for Memory Express
- Design of new Strathcona Seniors' Care Facility (wood-framed) with irregular bearing pattern
- Design and construction supervision of helical anchor tieback system for Highway 759 rehabilitation after a landslide (Alberta Transportation)
- Finite-element analysis of overhanging concrete wall diaphragms for apartment building Neubau Dorotheenquartier, Dusseldorf, Germany
- Thermal efficiency assessment of industrial building walls to meet NECB on an existing facility (PHS-DKI)
- Socket-supported precast-monolithic concrete slabs for replacement of existing wood floors in historical brick buildings (Ministry of Culture of Russia)
- 27-storey seismic-resistant apartment building towers “City Gates” (Kishinev, Moldova) with intercrossing bearing walls of lightweight concrete
- Highly optimized design of 15MW solar farm for complex soil conditions: very weak soils, large and irregular frost heave (Dandelion – Brooks)
- Development of a relationship between pile static capacity and its driving time history for solar rack piles (Dandelion)

AWARDS

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| 06.2013 | Employee of the Quarter , <i>Jacobs Canada, Edmonton</i> |
| 06.2013 | Client Satisfaction Score 96.2% , <i>Enbridge CE-1/CE-2 project</i> <ul style="list-style-type: none">• Discipline Lead – Structural• Historical record-setting achievement on all Enbridge projects |

EDUCATION HISTORY

- 12.1985 – 12.1988 **Graduate School**, *Central Research & Design Institute for Dwellings, Moscow, USSR*
- 3-year research program in structures of seismic resistant civil buildings
 - Diploma of Candidate of Engineering (equivalent of Doctorate)
- 09.1980 – 06.1985 **Civil and Industrial Construction**, *Moscow State Construction University, Moscow, USSR*
- 5-year program in structural engineering and theory of structures
 - Diploma of Civil Engineer (with honours)

SUPPLEMENTARY EDUCATION

- 2006 – 2008 **Discipline Lead Training Program**, *Bantrel Co.*
- Dale Carnegie training
 - Situational Leadership training
 - Structured Lead Development Program
- 07.1996 – 03.2001 **Athabasca University**, *Athabasca, Alberta*
- University Certificate in Computing and Information Systems (with great distinction)
 - Recipient of 2001 academic award for best achievement on the program (average grade 92%)

LANGUAGES AND HOBBIES

- English; Russian (native language)
- Music: guitar, singing, composing
- Badminton: member of Edmonton District Badminton Club in 1999-2020
- Chess: 1st category (Russia)
2 times champion of Jacobs Edmonton office

REFERENCES

Available upon request.