Alberta's Pipeline Training Centre

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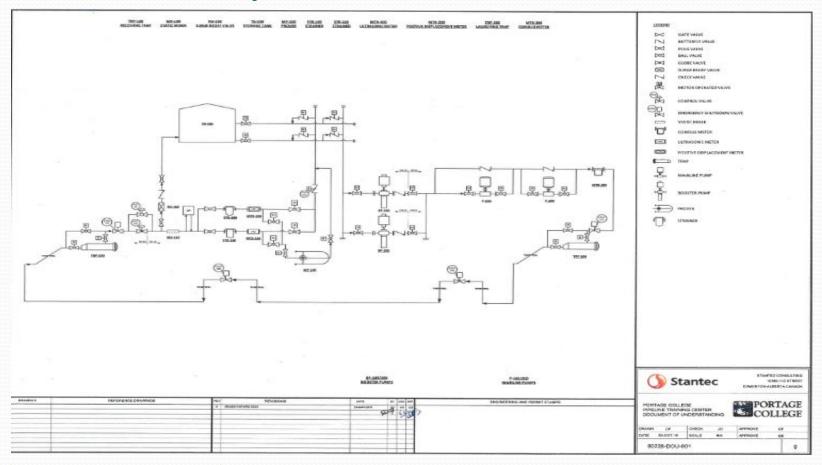
What's missing and needed here?

- The public face of the pipeline industry requires an independent focus. One that grows both reputation of the Canadian Pipeline Industry and the Canada's energy sector as a whole.
- The transmission industry requires a neutral place where research and applied skills are pragmatically tasked, independently assessed, and owned wholly for the public good.
- Public Good, not to emblazon a single corporate social image.

Due Diligence Activities

- Customized Industry training —Heavy Equipment Operator(2011), SAGD-Operator (2012), Heavy Equipment Technician (2015)
- Alberta Rural Development Network Research Preliminary Inventory of Training, Professional Programs, Infrastructure and Expertise October 2013
- Hanover Research Environmental Scan Pipeline Industry – April 2014
- Hanover Research Pipeline Training Centres May 2014
- Hanover Research -Pipeline Industry Training Needs November 2014
- Stantec Business Case for Alberta Government

Process Loop



https://youtu.be/us7oXgT7reo

What we have 4 million invested in

- Onsite Camp
- 140 acres of Portage Property; 80 being purchased
- Equipment Simulation Lab
- Heavy Equipment Operator Certificate
- Introduction to Pipeline, Enbridge & Aboriginal Partners
- Safety training



Aerial map of Pipeline Training Centre







Using Training to Develop Construction Site



















Facts

- Canada has the second largest pipeline system in the world. Proposed builds would make it the largest.
- Energy sector alone moves close to 6 trillion cubic feet of natural gas, and is capable of moving 2 billion barrels of petroleum products.
- For the general public pipeline safety isn't about workplace safety so much as real and possible integrity breeches of the pipelines themselves.

Our Energy Sector is . . .

- A driver of the provincial and national economies.
- Critically important to Canada's long-term prosperity.
- Canadians are not telling the narrative of Energy Sector security and Transmission safety.
- Subjected to negative PR and dirty oil campaigns.

Alberta's Energy Sector is . . . Canada's, too, eh.

- Seeing increasing and effective opposition to national and international transmission lines, routes and end destinations.
- The case to build more pipelines is not strengthened by uniform communications or the general public's knowledge of what's really good in the industry.
- Showing weak localized awareness of pipeline safety and its integrity.

Alberta's Energy Sector is . . . Well, troubled.

- Experiencing catastrophic job losses.
- Protestors are disrupting public dialogue on bringing Western Canada's oil to our Canadian refining and sales shorelines.
- Pipeline failures/leaks erode public confidence and encourage naysayers running against pipeline and upstream developments.

Too many laying claim . . .

- Canada is presenting to the world too many organizations claiming sponsored leadership in the upstream and transmission industries safety and training fields.
- Too many vested organizations give inadequate evidence of who is truly working for the Canadian public's good.

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Why Canada's Pipeline Training Centre?

- The Governments of Canada and Alberta, in partnership with Portage College and the Transmission Industry, must work to establish Alberta's global leadership role.
- The GOA can demonstrate that Alberta leads the world in transmission material sciences, petroleum and transmission industry social policy analysis, and pipeline workplace training. Canada also needs Alberta to do this work!
- Clean up the image of dirty oil not by defense, but by fact.

What's missing and needed here?

- Canada will not be seen as a world leader in pipelining until it has a nationally sponsored Pipeline Training Centre.
- Corporate training programs and government regulatory systems alone are not enough to grow public confidence in either compliance, environmental responsibility or workplace safety.

Why are we here?

- Governments and industry can collaborate on the PTC to advance the safety and prosperity of Canadians.
- The PTC will promote Canada's international reputation for responsible resource management, facilitate applied research and commercialization, and engage research scientists with industry, employees, and citizens supporting and those not supporting the expansion of Canada's energy industry.



















Pipeline Centre of Specialization



Finalize Campus Plan - Stantec Engineering Phase 1 - \$55M in GOA BLMS Develop Programs - coned first



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Global Warning

 "Warnings that oil industry safety standards are being jeopardized by a shortage of experienced staff..."

www.oilandgasproductnews.ca

Labor force challenges

 54% of Canadian employers in the pipeline industry were concerned that they would not be able to fill skilled positions in the future, largely due to an existing ageing workforce and increased demand.

Research Says . . .

- In research commissioned by the College, it was shown that there are labour market shortages, and notwithstanding the current industry downturn these are predicted to get worse.
- The research also indicated that there is strong unmet student demand for pipeline related programs in Alberta.

Pipeline Centre of Specialization

Charter Members

- Village of Boyle
- County of Athabasca
- Buffalo Lake Métis Settlement
- Alberta Energy Corridor
- Community Futures Tawatina Region
- Alberta Human Services
- Western Economic
 Diversification Canada
- Wajax Equipment

Aligned with Industry Objectives

- Employers can host worksite training
- Global Market training & Entrepreneurial training
- Hiring graduates will reduce on the job training
- Costs of training local vs central Alberta
- Camp life simulation for suitability & leadership awareness
- Youth engagement

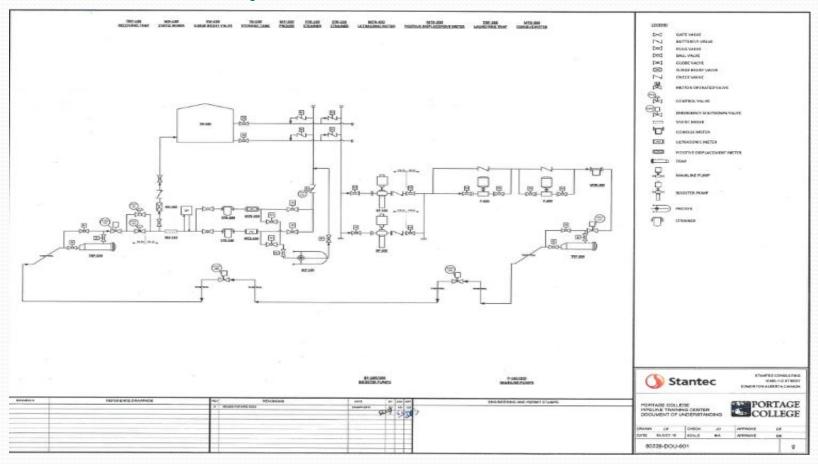
Aligned with Government of Alberta Objectives

- Increased Aboriginal participation rates
- Regional population growth and business retention in the North
- Training on responsible energy development, effective regulation and innovative energy technologies
- State of the art training centre open to all Albertans, all Post-secondary Institutions and all Researchers
- Training delivered in workshops to minimize time loss on the job
- Owned by Canadians for Canadians

Train as if You were Building it to Operate

- The Pipeline Training Centre is a real time, all weather, boots-on-the ground training facility utilizing 120 acres of bio-diverse land.
- The Pipeline Training Centre will provide access to a four-quad Pipeline Process Loop situated on 10 exclusive acres.

Process Loop



https://youtu.be/us7oXgT7reo

Alberta's Infrastructure

- Portage College will collaborate with all pipeline training PSI stakeholders in the design of the fourquad process loop.
- We'd like an interprovincial or territorial partner, too.
- The process loop will provide for cooperative learning opportunities in existing and new programming being developed by Alberta's PSIs.

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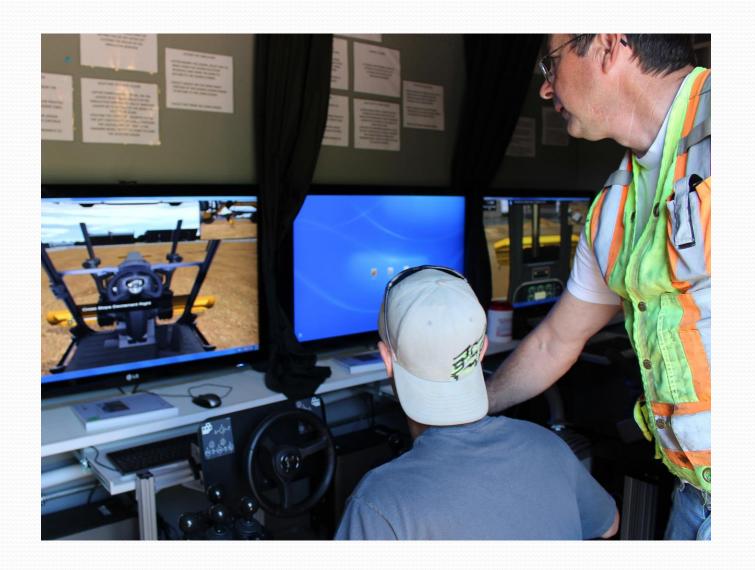
Using Training to Develop Construction Site



















Pipeline Construction Worker Training

6 communities each nominated 3 students
Kehewin Cree Nation
Frog Lake First Nation
Saddle Lake Cree Nation
Buffalo Lake Métis
Settlement
Kikino Métis Settlement
Onion Lake Cree Nation

Enbridge secured contracts from Midwest Pipelines for work placement





https://www.youtube.com/watch?v=IvTKeVF1UxA&feature=youtu.be

Future Programs of study

- Pipeline Installation and Maintenance Technologist
- Gas plant Operator
- Entrepreneurial Training create your own pipeline or heavy equipment company
- Control room operator
- Crane, Rigging, side boom and loading safety
- Aboriginal Land Management
- Bridging course for current pipeline inspectors
- Pipeline design
- Environmental Standards and Laws
- Intro to Civil Engineering
- Disaster Response and Recovery

- Pipeline Construction Pilot Program Part One: <u>https://youtu.be/IvTKeVF1UxA</u>
- Pipeline Construction Pilot Program Part Two: <u>https://youtu.be/d-8avg8SCwI</u>
- Heavy Equipment Operator 30 second Teaser Video: <u>https://youtu.be/v2SCvrBgwYw</u>
- Pipeline Training Centre Process Loop: <u>https://youtu.be/us7oXgT7reo</u>

Wrap up

Thank you