



Identifying Market Opportunities Water and Wastewater Treatment Plants

Bob Collins
OCS Annual General Meeting
London, October 2008



Identifying Opportunities



- How do we effectively identify emerging markets?
- How can we track whether a market is at its peak?
- Are you getting your 'fair share'?

In-depth Market Analysis



Market Analysis



- **Ontario Construction Secretariat**
- **Statistics Canada**
 - Building Permits
 - Labour Force Survey
 - 2006 Census
- **Construction Sector Council**
- **Reed Construction (Canadata)**
- **Financial Institutions**



Investment Opportunities?



- **Construction investment has been steadily growing for more than 10 years but pace is expected to slow.**
- **Short-term uncertainty that may impact construction investment.**
 - US economy, Canadian \$, oil prices
- **Construction investment**
 - water and wastewater
 - power facilities (Darlington)
 - hospitals (building infrastructure)
 - bridges, roads and highways



Water and Wastewater



- an aging infrastructure
- significant investment over the next 15 years
- Could range between \$1 – 2 billion per year with an initial focus on the large urban areas
- non-union contractors are successfully bidding and winning these projects
- Union used to have a strong presence - some trades still do

WWTP Assessment



- Near and long term growth opportunities
- Need a better understanding of recent trends and challenges
- Who are the key players? Why?

Scope of Work



- In-person and phone interviews with select contractors and trade unions.
- Phase 1 - general contractors active and not active in the water and wastewater sector.
- Phase 2 - selected trade contractors and labour groups.

Over 30 industry leader interviews



Industry's Perspective on:



- Recent market trends.
- Why are some contractors becoming more successful in the market?
- What are the challenges in bidding and winning water and wastewater projects? (e.g., size of project, location, company capacity, market expertise, project staging, availability of trade contractors / skilled labour, project financing, pre-qualification conditions, etc)
- How can these challenges be addressed?
- What can unionized contractors do to recapture lost market share?



WWTP Overview



A review of over 300 recent WWTP projects representing \$2 billion of investment revealed:

- A majority of the work is being done by a small group of contractors – the top 20 contractors account for 70% of the total value.
- There has been an increasing presence of larger projects (\$50m+).

WWTP Overview



- Larger projects appear to be dominated by a select group of contractors, in particular North America Construction Ltd. (NAC) and Kenaidan.
- Recent distribution of spending has been primarily concentrated in large urban centres in the GTA, central and southwestern regions.

Key Players (2002 – 2008)



Contractor Name	Total (\$)	No. of Proj
North America Const (1993) Ltd	648,669,793	22
Kenaidan Contracting Ltd	484,713,000	12
Alberici Ltd *	156,149,000	2
Bennett Contr / Bennett Mech *	141,985,900	11
King City Group Ltd	139,128,174	7
Maple Reinders	114,315,000	20
Detra Builders Inc	114,294,753	25
HIRA Ltd	94,567,684	15
Pomerleau Inc *	83,100,000	1
Torbear Contracting Inc	82,099,670	3
Bondfield Const Co Ltd *	80,833,300	2
Stone Town Const Ltd	67,337,256	14
Ellis-Don Construction Ltd *	65,767,290	2
The John Hayman & Sons Co Ltd *	64,553,830	7
ASCO Construction Ltd	52,074,994	9
Peak Eng & Const Ltd	50,374,242	19
Wellington Const Ltd	47,460,672	24
Thomas Fuller Const Co (1958) *	41,390,121	5

* Indicates contractor is signature to one or more ICI collective agreement



Key Players (2007/08)



- Estimated \$1.0 Billion awarded
- 5 contractors accounted for 70%

Contractor Name	Total (\$)	No. of Proj
North America Const (1993) Ltd	232,346,480	3
Kenaidan Contracting Ltd	208,377,000	3
Alberici Ltd *	135,000,000	1
King City Group Ltd	75,569,870	2
Bennett Mech Installations Ltd *	54,568,000	3
Total:	705,861,350	

* Indicates contractor is signature to one or more ICI collective agreement

** Estimated based on a recent 'low bid' announcement.



Primary Drivers



- **Current work load (all sectors)**
- **Type of project / experience**
- **Competition (Who else is bidding?)**
- **Availability of skilled labour**
- **Availability of experienced trade contractors**

Primary Drivers



- **Quality of the bid documents**
- **Owner / municipality**
 - previous experience
- **Consulting engineer / cost consultants**
- **Who is running the job**
 - which municipal department, engineers, inspectors, etc.

Contractor Work Load



- The volume of institutional work has impacted the number of general and trade contractors available to bid WWTP projects.
- No sign of the level of activity easing off in 2008 or 2009.
- Contractors are keeping an eye on WWTP but as long as there is other 'preferred work', their involvement would be limited.

Experience / Competition



- Project expertise and proven track record is critical for pre-qualifying and winning bids.
- The market is very specialized with key contractors self-performing various aspects of the project – maintaining core crews with expertise.
- Contractors such as North America and Kenaidan specialize in WWTP; performing many components in-house; seen as a big advantage.

Experience / Competition



- **Need for qualified project managers / supervisors / foreman – becoming more difficult to find and retain.**

Skilled Labour



- **Critical to have contractors and workers that understand the overall system – ‘how it works from start to finish’.**
- **You need qualified trades people with experience in water and wastewater market – its not a matter of just following the drawings**
- **No severe shortages but the traditional pools of labour have been diminished to minimum levels causing concerns on the available ‘skills’.**
- **Emphasis on ‘skill sets not bodies’.**

Key Trades



- **Key Components**
 - Formwork / Concrete
 - Rodwork
 - Mechanical
 - Electrical
- **Contractors noted that it is critical for the formwork and mechanical trades to have previous experience on water and wastewater projects**
 - know how the 'system' works.

Quality of Bid Documents



- **Tendering process has deteriorated**
- **Increased volume of work appears to have drawn in less experienced engineering firms and this has impacted the quality of the drawings and pricing (budgets).**
- **Several addendums are not uncommon prior to submission of bids**
- **Increased risk**

Challenges



- Better understanding of unsuccessful bids; it's not always the labour cost.
- Declining number of project managers/supervisors/foreman with skills and experience in WWTP – current workforce is ageing and the long term impact will be significant.
- Dealing with poor bid documents.
- Low bid mentality.

Challenges



- Contractors (general and trade) willingness to bid given other market opportunities; strong non-union WWTP competition; and the high cost of submitting bids with low margins.
- in some regions there are no union bids
- Worker willingness to work WWTP given other opportunities
- Future direction must emphasize the importance of key trades and contractors related to WWTP.

Challenges



- **Strength of other markets may limit the opportunity to establish solutions for WWTP – key trades are busy and less willing to make adjustments.**
- **Non-union contractors have greater flexibility in terms of assigning tasks across work functions; geographic mobility.**
- **Establishing stronger union partnerships when working outside local areas. To be competitive contractors need to establish better working relationships and flexibility when working outside their area.**



Challenges



- **Industry is facing productivity issues.**
- **Industry needs to step back and look at skills development (new entry and upgrade training) and work ethic - job site readiness.**
- **Only a limited number of contractors with the experience and capacity to bid larger WWTP projects.**



Moving Forward



- What can we do to move ahead?
- All parties (contractors and labour) need to recognize the growth opportunity and partner to establish fair solutions to regain market share.
- Establish a Committee to review the challenges and opportunities; make recommendations for action.



Moving Forward



There are many opportunities!

Eastern
+\$150 million

Niagara
+\$200 million

Kitchener –Waterloo
+\$300 million

