

O.S.P.E. LAND DRAINAGE COMMITTEE

2016 DRAINAGE PRACTITIONERS MEETING

FINAL MINUTES OF MEETING

Thursday October 20, 2016, 7:00 p.m.

Holiday Inn Hotel and Conference Centre – Oak Conference Room
Guelph, Ontario

1.0 General Business

- 1.1 Attendance sheets were circulated at the meeting and there were 60 people in attendance. Chairman Tony Peralta called the meeting to order at 7:05 p.m.
- 1.2 Accept agenda, moved – Gerard Rood, 2nd – Bill Dietrich, carried.
- 1.3 Adopt minutes from last meeting – October 23, 2015, moved -John Kuntze, 2nd – Jeff Dickson, carried.
- 1.4 Business arising from the minutes – none.
- 1.5 Correspondence – Chairman Tony Peralta advised that decisions of the Tribunal and Referee are posted to the CANLII website. There was a request made for hard copies of the decisions to be sent out and this would likely have a fee. Tony asked for a show of hands from those who might be interested in hard copies and there was not much interest.

2.0 Chairman's Report – Tony Peralta, P.Eng.

This has been a tough year. Several practitioners have been lost due to retirement and moving to other jobs.

Training and workshops have been done.

The Committee is looking for advocacy and O.S.P.E. (Ontario Society of Professional Engineers) has been asked for help. O.S.P.E. posted a blog on their site about the state of the industry. We are trying to reach a younger community. We want to approach and talk to young students. We are looking for the possibility of a curriculum item in the future. We will be pushing for more information to go out and education.

Great Lakes Protection Act - there is a presentation tomorrow about the Great Lakes St. Lawrence Cities Initiative. This group is working for reduced phosphorus loading in the Great Lakes. This initiative has been taken to reduce the concerns before legislation is put in place. The agricultural industry and the drainage industry are participating.

There will be a DFO Guidelines presentation at the Conference.

MTO has a new drainage design tool that will be presented tomorrow.

Sid Vander Veen will also be presenting tomorrow.

The committee wants to know if there is more case study interest.

The Agriculture, Food and Rural Affairs Appeals Tribunal has been invited since there has been a desire for some dialogue. Practitioners are looking for comments from the Tribunal on directions to take. Chair Kirk Walstedt and Tribunal members Ed Dries and Andy McBride are in attendance.

3.0 Agriculture Food & Rural Affairs Appeal Tribunal (A.F.R.A.A.T.) Report and Discussions

Andy McBride gave the official report for the year. During the last year, there have been 48 decisions. 27 dealt with farm tax matters. There were 21 others, 19 of which were related to drainage. 14 Drainage Act hearings have been completed this year. Six are still to be held with five scheduled. Two appeals are on hold. There were two decisions regarding costs. There was a Section 76 Application that was approved. There were six appeals received and withdrawn. One appeal was filed late and the request for extension of time was denied. There were two requests made for review of Tribunal decisions; one was granted and one was submitted too late. There was one appeal over which the Tribunal determined it did not have jurisdiction and it was referred to the Referee. There were 36 drainage matters in total. Five were regarding Section 54 assessments. Two regarded Section 48 technical aspects. Five appeals dealt with both. There were two Section 64 appeals regarding quality. There was one Section 76 application. Last year there were only 11 hearings.

The Tribunal is currently comprised of 19 members, nine lawyers, two retired drainage engineers and eight lay members.

Tony Peralta proceeded to read questions to the Tribunal from the survey that was done and presented to the Land Drainage Committee. The first question stated that some decisions are helpful and some are critical.

Kirk Walstedt responded saying that each panel is different. He noted that either Ed or Andy are always on the Tribunal panel for drainage appeals. The Tribunal is not an educational body. The Tribunal is an adjudicative body and they are not mediators or moderators. There are always opportunities to settle before the Tribunal hearing. Members of the Tribunal try to be respectful. If an engineer is flagrantly wrong, then they have to address this. Engineers have to pay attention to details. The Tribunal is not a training group.

Ed Dries noted that hearings uncover problems with reports. They try to bring correction to matters without being over-critical. If there are 15 to 20 mistakes in a report, there could be an abrupt tone. They try to correct problems if they can. If the Tribunal is unable to correct them they will send the report back.

Andy McBride noted that when they arrive at the hearing they expect the engineer to be the expert. His experience is that this is not always the case. He noted that he might be abrasive sometimes during such a hearing.

Tony Peralta provided the second question stating that practitioners would like the Tribunal to frame decisions as learning tools. Kirk Walstedt responded that the Tribunal is not a teaching body. Hopefully their decisions help engineers with future works.

Tony Peralta presented the third question asking if the Tribunal can help young engineers to improve their works.

Kirk Walstedt advised that they try to provide well reasoned and thought out decisions. Sid Vander Veen teaches courses to assist practitioners. The Tribunal tries not to be overbearing. They typically go above and beyond to help. The decisions are the only avenue to teach.

Ed Dries commented that they need to make the appellants comfortable too. Experience, knowledge and background are good tools. O.M.A.F.R.A. and O.S.P.E. or others can offer training. A course or program for practitioners is good so that they are more comfortable. He is surprised that drainage superintendents are not more involved in the hearings. It is an educational and experience thing. The panel wants to hear everything. The practitioners should get comfortable and he suggested that they don't be shy but present all the evidence.

Andy McBride commented that going to the Tribunal is part of the job. He suggested that young people should find a mentor. If necessary, they can contact the Tribunal office. Practitioners can talk to the two coordinators. They can help the engineer with their questions. He recommended that practitioners use the coordinators for information. Kirk noted that Saad Sadiki and Tracey Henderson are currently the two coordinators.

Tony presented the fourth question. When decisions are made to set aside drainage reports it leaves the municipality with costs. How can this be addressed?

Ed Dries commented that to set aside a report it has to be drastically wrong. This has occurred since the earlier days back in the 1970s. When a report content is drastically wrong it has to be redone. He noted that this doesn't happen often. He expects that because the practitioners are here it won't happen to them. There are some people out there who take on projects but lack any knowledge. The Tribunal makes their decision based on the evidence. Each hearing goes situation by situation. By being here the practitioners are being pro-active.

Tony asked what should happen with the costs. Ed responded that it is situational. The panel has to decide. They hope for an appropriate thought and acceptable decision.

Tony presented question number five. It asked why there are comments from the Tribunal when items are not under their jurisdiction or purview.

Kirk Walstedt responded that they give reasons why items might not be in their jurisdiction. They have to have reasons when sending things to the Referee. There are eight different vice-chairs of the Tribunal who each write differently.

Andy McBride commented that you can only determine by experience when a matter is for the Referee. The appellant has to decide the appeal route. When the Tribunal is considering the evidence, there is a need to make a determination.

Tony raised question six stating that it is typical for the engineer to provide an overview at the start of a hearing. Why is this not consistent?

Kirk noted that there is a suggested guideline for procedures. He typically does it for his hearings. It is up to each panel to decide on how to proceed. He suggested that they can address this with the Tribunal members at their annual meeting.

Ed has seen deviation from the process and this can create discomfort. The engineer should just do an overview at the start and not present all his evidence. The opening remarks should not include too much information. An educational process could help with this. Kirk noted that he has reigned in engineers in the past.

Tony stated that this was the extent of the questions so far. He will now open discussions to the floor. He noted that questions should be of a general nature and not be geared to specific decisions.

John Kuntze commented that he understands the Tribunal was not for teaching. Practitioners are looking for direction at this type of meeting. The Land Drainage Committee has been trying to provide sessions and workshops for the past five years. The cycle is expected to start again next year. He noted that today we did "other" reports pursuant to the Drainage Act. He presented today on how to present to the Tribunal. His research shows that there has never been a presentation on this since the 1969 creation of the Tribunal. In 1997 Andrew Osyany did a presentation and Mr. Briscoe did one before that. He would like input on his presentation from the Tribunal. He noted that we need to work together. If we have guidelines they should be followed.

John's question is regarding site examination by the Tribunal. In the past, the chairman always said that they would go to the site. Do any members of the panel go now?

Kirk Walstedt commented that they very seldom go to the sites now. If they go it would be as a whole panel so that there is a level playing field. Andy McBride commented that one vice-chair told him the whole group would have to be bussed out to the site. Attending at the site has been discouraged.

John stated that during his presentation he encouraged engineers to provide pictures and other evidence that may be useful to the Tribunal. He also stated that it is important for the engineer to call witnesses. Ed Dries commented that the drainage engineer should call more drainage superintendents as witnesses. John agreed with Ed's comment. Andy noted that hearings without aerials and contour plans are lacking. This information should be included at all hearings.

John noted that there is typically an exchange of documents. This results in better preparation. It appears that the appellant statement has disappeared from the process. Kirk Walstedt noted that his hearings include statements from the appellant. Ed commented that he always sees it. Kirk noted that they don't accept new evidence at hearings unless all agree.

John noted that when the Tribunal alters the report there is no instruction to do a revised report. He does them for a better future service. He asked if there is a requirement to do so.

Ed Dries spoke to report modifications. He agrees with making corrections. The question is the extent of the changes. Most decisions don't change the context or content. For example, sometimes a pipe length or a change to the assessment schedule is required. He has encouraged the panel to send the report back to the engineer to make revisions as per the order of the Tribunal. It depends on the extent of change needed. He believes the panel has to determine what should be done.

John asked if the engineer and the municipality should sort this out. Ed likes to see the report revised without going back to the engineer.

John asked about the reference to cost of the report at the end of the decisions that are issued. Ed was not sure where this came from. Andy McBride said that there were some questions in the past so they have tried to clarify that the original report cost is part of the project cost.

John stated that he tries to create one report version for the project. This is mostly a concern if a design change occurs.

Andy McBride spoke regarding courses. The final report of the Select Drainage Committee dated June 1974 on page 74 and 75 lists the qualifications of engineers and surveyors. They still apply. There was a course in the 1980s with John Johnston that lasted four days over two weekends. John noted that the course was on report preparation but nothing on the Tribunal process or procedure. He also commented that there was a mock trial before the Drainage Referee.

Bill Mayes, the chair of the D.S.A.O., asked if the Tribunal directs change to the design, who is liable for the design? Kirk Walstedt commented that whoever the Tribunal directs takes the responsibility for the changes.

Bill asked if after changes are ordered and the engineer makes more changes, what can owners and the municipality do? Ed Dries stated that there is no authority to go beyond the orders. This opens the door to appeals and going back to the Tribunal.

Tony Peralta noted that Jack Young used to teach an O.L.S. course on drainage.

Paul Courey commented on the overview. He noted that we don't want details at the start of the hearing. The engineer should provide just enough information for the Tribunal to understand the project. Kirk stated that he agrees and that the overview should set the stage for the hearing. Paul suggested that the Tribunal shouldn't allow audience questions because they distract from the hearing focus.

Jeff Dickson asked if John was referring the report back in his comment. Ed Dries clarified that John had been speaking about the report being sent back for revision.

Neil Morris introduced himself and advised that he works with K. Smart Associates. He has gone to three hearings. Engineers have helped him with his projects. He asked if the clerk can recommend that an engineer have an experienced engineer support him at the hearing. Kirk stated that there is no problem with someone being there. However, it is your report so you need to defend it and not someone else. Neil stated that he understands that the author of the report is responsible. Kirk suggested getting help before the hearing.

Tony Peralta noted that it was 8:15 PM. He said that the questions would be stopped now. Kirk commented that they will always try to have Tribunal representatives at these practitioners' meetings.

4.0 Drainage Referee Report

Tony noted that we have Referees Rob Waters and Andrew Wright present at the meeting.

Rob Waters presented a brief summary of work being done by the Referee office. They are busier now than in the past. They have nine or 10 active cases. He noted that the Referee moves slower than the Tribunal. The Referee hearing is more procedural. They now allow for pretrials. He also commented that the Tribunal is not a mediator. The Referee is trying to reduce costs and will try to work out a settlement. They find that a three day hearing to settle is cheaper than a one week or longer procedure with the high cost of lawyers and other expenses.

Andrew Wright noted that he was on the Tribunal in the past. They often went to the site led by Herb Todgham. They had seen the drain. The problem was a decision that stated that no evidence at the hearing was available to amend the site opinion. The court threw this decision out. Subsequent to that, the Tribunal got gun shy. That decision put an end to the practice of attending at the site.

Andrew noted that the Referee hearing is very expensive and an extensive legal process. He suggested that we try to avoid it if you can. Sometimes cases can last for years. They need to give notice to everyone on the drain if a hearing is held because it could affect them. It is wise to look for more expedient and less expensive ways to address a concern.

Rob Waters noted that the drain walk was very helpful in some cases. He would do it if requested. The information from seeing the site was invaluable to the proceedings.

Paul Courey spoke to viewing the drain. The Drainage Act provides for the Referee to make a view. He thinks that the Tribunal could adjourn and go to tour the drain and then return and report on same. It would have to be done the right way.

5.0 O.M.A.F.R.A. Report – Sid Vander Veen, P.Eng.

Sid asked that everyone review a copy of his presentation that will be included with the meeting minutes.

Sid went on to discuss that grants for construction are becoming an issue.

He provided an update on the Drainage Engineers Guide. He expects that it will be sent out within two weeks for peer review. They hope to publish it by the summer of 2017. The guide can be used for future training.

Sid spoke to the Northern Ontario Heritage Fund Corporation that provides tile drainage grants. This has resulted in more work in the North part of the province.

Sid remains involved with the Drains Action Working Group (D.A.W.G.). This group is making progress with the DFO.

The Drainage Act and Section 28 Regulations Team (D.A.R.T.) has seen little action. It is hoped that this will move forward in the future.

Sid noted that there has been some action on franchise agreements. There is currently a decision under review that involves a Union Gas pipeline move.

There are several E.B.R. (Environmental Bill of Rights) postings that people might want to look at and these are listed in his report.

It was 40 years ago that agricultural land drainage in Ontario saw the revised Drainage Act come out. It was developed in 1973 and the 1975 revised Act came out in 1976.

Sid spoke to the need of using “municipal drain” when describing drains or can we use other names like “McBride Creek”. He suggested that other names might be found more environmentally friendly.

Sid introduced Alex Barry and had him provide O.M.A.F.R.A. statistics that are included within the report that was prepared by Sid and attached to this document.

6.0 Elections of New Members

Election of new members:

Tony Peralta stated that Jeff Dickson and John Kuntze are up for re-election.

Sid Vander Veen ran the election – 2 positions – only practising engineers can nominate and must be practitioners who have done a report in the last year.

Sid recorded nominations

Stand:

Yes – Jeff Dickson - Burnside

No – Jeremy Taylor – Burnside

Yes – John Kuntze – K. Smart

Nominations Closed

Jeff and John elected by acclamation.

7.0 New Business

Juan Rojas – Kawartha Lakes

Asked about prescriptive rights. Is there a database. They have an old subdivision that drains into a farmer’s field. The owner only developed part of the lands. The Drainage has been in place for 30+ years.

Rob Waters - the subdivision agreement should have had a stormwater management design.

Juan commented that they don’t have one. Rob went on to advise that it would be the common law of water. The farmer has to bring action. Since the municipality assumed the storm drainage pipes it would be their problem.

Dan Krutsch – Landmark Engineers

Had questions about natural channel design. This appears to be an environmental issue. He attended a workshop last year for enhancing drainage design. When he tried to encompass

those details in the drain design the DFO rejected it. He asked what the LDC is doing - there is a big issue with D.F.O. - there appears to be a lack of physical science knowledge. How is it moving to a more practical process - they spent twice as much on environmental design as for the actual report.

Tony Peralta - the LDC has a DFO liaison member. It appears to be boiling down to the individual biologists. People can raise questions tomorrow during the DFO presentation.

Neil Morris - observed that it depends where you are in the province

Tony Peralta - he has completed a couple of projects with good help from the DFO.

Jeff Dickson - noted that sometimes we need to question the biologist and push back. They had a project that was done with their aquatic resource specialist assisting the contractor for five days. DFO did a drone inspection and complained about the works. He asked the DFO to justify their complaints and it became a non-issue. He recommended that an engineer go to Jenn Thomas or Thomas Hogarth at DFO with questions or concerns if critical.

8.0 Adjournment

9:20 – Jeremy Taylor moved to adjourn

Will Bartlett– 2nd

Carried.

THE ONTARIO MINISTRY OF AGRICULTURE, FOOD & RURAL AFFAIRS

Annual Report Presented at the **DRAINAGE PRACTITIONERS MEETING**

Sid Vander Veen, P. Eng., Drainage Coordinator & Alex Barrie, EIT., Project Engineer
Environmental Management Branch, October 20, 2016

KEY MINISTRY CONTACTS

- The Honourable Jeff Leal is the Minister. He is from the Peterborough area.
- George McCaw continues as Director of Environmental Management Branch
- Len Senyshyn continues as Manager of the Approvals, Certification and Licensing Unit and is responsible for the Ministry's drainage programs.
- Your specific drainage contacts are:
 - Becky Curran provides administrative support for the drainage programs. She can be reached at 519-826-4049 or by email at becky.curran@ontario.
 - Andy Kester is the Drainage Analyst/Inspector and is responsible for the review and processing of tile loans and of grants under the *Drainage Act*. He is also responsible for inspections and contractor training under the *Agricultural Tile Drainage Installation Act*. Andy can be reached 519-826-3551 or by email at andy.kester@ontario.ca
 - Sid Vander Veen is the Drainage Coordinator and is responsible for policy, issues management, training for the *Drainage Act* and *Tile Drainage Act*. Sid can be reached by phone at 519-826-3552 or by email at sid.vanderveen@ontario.ca
- Jacqui Laporte and Peter Doris are Environmental Specialists who assist with drainage issues
- Tim Brook is the Water Management Engineer. He leads the contractor training and has also been heavily involved in the Drainage Engineers Guide.
- Rob Waters continues as Drainage Referee and Edward (Ted) Oldfield and Andrew Wright as Acting Drainage Referees. 2016 marks the 125th anniversary of the Drainage Referee position. Byron Moffat Britton was appointed as the first Drainage Referee in 1891.

REPORT ON 2016 COURSES:

In the winter and spring of 2016, the following courses were held:

COURSE NAME	LOCATION	2016 DATES	ATTENDANCE
Primary Drainage Course	Marden	Jan. 11 - 15	28
Advanced Drainage Course	Marden	Feb. 1 – 11	23
Drainage Superintendents Course	Guelph	Feb. 29 – Mar. 4	34
Rural Municipal Drainage Course	Renfrew	March 23	22
Calculating Drainage Assessments	Renfrew	March 24	17
Rural Municipal Drainage Course	London	April 6	54
Calculating Drainage Assessments	London	April 7	36
Rural Municipal Drainage Course	Niagara	April 13	13
Calculating Drainage Assessments	Niagara	April 14	6
Rural Municipal Drainage Course	Sudbury	April 20	8
Calculating Drainage Assessments	Sudbury	April 21	6

Participants at the Drainage Superintendents Course were:

- Municipal Staff: 17 Lower Tier and 2 Upper Tier
- 9 Engineering Firms, 4 non associated participants and 2 other (CA and DFO)

Total participation at the Rural Municipal Drainage Courses was 97 and at the Calculating Drainage Assessment Courses: 65

2017 DRAINAGE COURSE SCHEDULE:

The following courses are scheduled:

COURSE NAME	LOCATION	2017 DATES
Primary Drainage Course	Marden	January 16 - 20
Advanced Drainage Course	Marden	February 6 - 16
Ag. Erosion Control Structures	Marden	February 27 – March 3
Drainage Superintendents Course	Guelph	March 6 - 10
Rural Municipal Drainage Course	Brockville	March 22
Calculating Drainage Assessments	Brockville	March 23
Rural Municipal Drainage Course	London	March 29
Calculating Drainage Assessments	London	March 30
Rural Municipal Drainage Course	Leamington	April 5
Calculating Drainage Assessments	Leamington	April 6
Rural Municipal Drainage Course	New Liskeard	April 12
Calculating Drainage Assessments	New Liskeard	April 13

AGRICULTURAL DRAINAGE INFRASTRUCTURE PROGRAM (ADIP)

Grant Payments:

- We had a significant backlog of older construction/improvement grant applications; most of the backlog has been paid. There are a few outstanding grant applications.
- Grant applications for the 2015/16 fiscal year:
 - Maintenance: All paid. These are the grant applications submitted in March/April 2015 for work performed in 2014.
 - Superintendent: Approximately 90% paid – these are the grant applications submitted in January 2016 for the costs incurred in 2015.
 - Construction: We received 162 grant applications totaling \$5.37 million. Of these, 13 projects (\$0.5 million) were processed. The remainder have not been processed because of insufficient budget. They have been carried over to the current fiscal year.
- Grant applications for the 2016/17 fiscal year:
 - Maintenance: Not paid – these are the grant applications submitted in March/April 2016 for work performed in 2015. These will be processed in the next few months.
 - Superintendent: Not yet submitted. These are the grant applications that will be submitted in January 2017 for the costs incurred in 2016.
 - Construction: As of October 17/16, we received 63 construction/improvement grant applications representing \$1.81 million in grant demand. None have been processed.

Program Management:

- When the ADIP program was introduced in 2005, the budget was set at \$6.0 million
- About 2 years later, it was increased to \$7.0 million, with 1/3 of the additional million being reserved for OMAFRA drainage related expenses (e.g. computer systems)
- That left us with an effective budget of \$6.67 million.
- For the past 5 years, demand has exceeded the budget.
- Until last year, the added demand was paid through excess funds within the Ministry
- For 2015/16, there were no additional funds; resulted in a carryover of \$4.9 million
- For 2016/17, it is unlikely that there will be any additional funds available
- We are developing a strategy to manage grant demand.

DRAINAGE ENGINEERS GUIDE

- Purpose is to update the guide from a technical and legal perspective, but to also provide guidance to new engineers on practicing under the Drainage Act
- The primary author was Kenn Smart of K. Smart Associates Ltd.
- The OMAFRA team is Arlene Robertson, Tim Brook, Jacqui Empson Laporte and myself.
- The first draft of the new Guide is complete.
- Thank you to all of you who responded with photographs
- Guide is to be divided into 3 parts:
 - Meeting the Requirements of the Drainage Act
 - Technical Information for the Design of Drains
 - Regulatory Agencies and Approval requirements

Project Status:

- The document will be released for peer review in the next couple of weeks.
- After receiving comments and updating the document, the guide will be released for broader consultation.
- Working towards a release date of summer 2017.

NORTHERN ONTARIO HERITAGE FUND CORPORATION (NOHFC)

On August 12th, Premier Kathleen Wynne announced that Ontario is providing \$3.7 million through the Northern Ontario Heritage Fund to help increase farm production in Northeastern Ontario. This includes helping 76 farmers bring new farmland into production through land clearing or improving land with the installation of tile drainage systems.

NOHFC funds 50% of land clearing and/or tile drainage contractor costs to a maximum of \$500 per acre and 100 per cent of the project administration fees (maximum of 10%)

DRAINAGE ACT and Section 28 REGULATIONS TEAM (DART)

- Last October, DART met in Peterborough where DART members provided their views on the review of the Conservation Authorities Act and the Wetlands Policy.
- In 2016, we've had 4 short teleconference meetings, one in-person meeting at the OFA office in Guelph. In July, the DART participated in a consultation session on the Conservation Authorities "Conserving Our Future: Proposed Priorities for Renewal".
- On Friday, October 28, we are meeting at the Maitland Valley Conservation Authority office and will be touring the Garvey Glen Drain and the Scott Drain.
- Further progress is dependent on the outcome of the Conservation Authorities Act review

FISHERIES ACT – DRAINS ACTION WORKING GROUP (DAWG):

- DAWG had 3 meetings in 2016; these meetings are chaired by Tom Hoggarth from DFO and also involve Richard Kavanagh, Jenn Thomas and Lisa Wren
- We will be hearing about the new drain maintenance guide at the Drainage Engineers Conf.
- Overall, things appear to be running relatively smoothly, but I occasionally hear some concerns about drain classification changes.

FRANCHISE AGREEMENTS

There was a recent court decision concerning a charge levied to Union Gas (UG) under Section 26 of the Drainage Act. UG had a franchise agreement with the municipality that allowed the municipality to request the relocation of a gas line, but that would require them to pay 35% of the cost of the relocation. UG would pay the remaining 65% of the cost.

A landowner requested improvements to a drain and in his report, the engineer indicated that a bore was required under the UG pipeline. UG accepted that the work was required but argued that the municipality should pay 35% of the cost which was \$26,808.39. The municipality disagreed and the issue was brought to the Superior Court of Justice.

UG argued that the gas pipeline relocation falls outside the definition of “drainage works” and is therefore not caught by S.26 of the Drainage Act. The judge quoted the following from another court decision:

“Today there is only one principle or approach, namely, the words of an Act are to be read in their entire context and on their grammatical and ordinary sense harmoniously with the scheme of the Act, the object of the Act and the intention of Parliament.”

The judge then summarized by stating “In other words, courts should not look at the phrases in isolation, but rather in a broader context in an effort to advance the goals of the legislation and the intent of the drafters.”

The judge disagreed with UG’s position, finding that S.26 applies to any works of a public utility that increases the cost of the drainage works. Costs were awarded.

Please note that it appears that this decision is being appealed to Divisional Court.

POSTINGS ON THE ENVIRONMENTAL REGISTRY (EBR)

ACTIVE EBR POSTINGS:					
TITLE	Lead Ministry	What is It?	EBR Registry No.	Date Posted	Comments Due By
Discussion Document for Developing an Agricultural Soil Health and Conservation Strategy for Ontario	OMAFRA	Policy Proposal	012-8468	August 29/16	November 27/16
Reducing Phosphorus to Minimize Algal Blooms in Lake Erie	MOECC	Policy Proposal	012-8760	October 6/16	November 20/16
A Wetland Conservation Strategy for Ontario 2016-2030	MNRF	Policy Proposal	012-7675	August 8/16	November 16/16

1) Developing an Agricultural Soil Health and Conservation Strategy for Ontario

OMAFRA is developing an Agricultural Soil Health and Conservation Strategy. The purpose of the EBR posting is to solicit input towards the development of an Agricultural Soil Health and Conservation Strategy, to seek feedback on the government's proposed framework (draft vision, long-term goals and objectives) for developing the strategy and to identify opportunities and challenges to achieving the objectives in the proposed framework.

Healthy soil is fundamental to the success of Ontario's agricultural sector and to a healthy environment. Maintaining and enhancing the health of our agricultural soil will help:

- Maintain and enhance the productive capacity of Ontario's farmland;
- Contribute to the economic growth of the agri-food sector and food security;
- Improve water quality and biodiversity; and
- Increase the sector's resilience through mitigating and adapting to climate change.

2) Reducing Phosphorus to Minimize Algal Blooms in Lake Erie

Canada and the U.S.A. adopted a 40% phosphorus load reduction target for Lake Erie's western and central basins. This target was adopted by Ontario by virtue of provisions within the Canada-Ontario Agreement on Great Lakes Water Quality and Ecosystem Health. Ontario's interim goal is a 20% reduction by 2020 and a 40% phosphorus load reduction by 2025 (from 2008 levels).

Ontario is seeking input to help guide the content of the draft Canada-Ontario Action Plan for Lake Erie as part of a two-stage engagement process – to obtain comments now on proposed high level actions, followed by further public engagement once a draft plan is developed. The proposed high level actions include:

- Reducing inputs from point sources such as sewage treatment facilities and greenhouse operations.
- Reducing inputs from non-point sources such as septic systems and hauled sewage.
- Improving wetland protection, wetland restoration/rehabilitation
- Agriculture:
 - Promote the application of nutrients at the right time to reduce phosphorus runoff during high risk periods; consider tighter restrictions on the application of nutrients during this period.
 - Support the industry-led 4Rs program (right time, rate, source and placement of nutrients)
 - Leverage funding for initiatives such as the Great Lakes Agricultural Stewardship Initiative that support nutrient management and soil health best practices.
 - Develop an Agricultural Soil Health and Conservation Strategy to support soil management practices that provide economic, environmental and social benefits.
 - Enhance and promote environmentally sustainable best practices to increase use of cover crops during the non-growing season to reduce soil loss and field runoff.
 - Develop a publicly available digital elevation model of the Lake Erie watershed (based on LiDAR technology) to assist with environmental stewardship planning.

3) A Wetland Conservation Strategy for Ontario 2016-2030

In 2014, the MNRF was given a mandate to work with other ministries, municipalities and partners to review Ontario's broad wetland conservation framework and identify opportunities to strengthen policies and stop the net loss of wetlands. To achieve this mandate, the MNRF is working to develop a wetland conservation strategy for Ontario that will identify a provincial vision, goals and outcomes for wetlands in Ontario and set out a series of actions that the

government will undertake over the next 15 years to improve wetland conservation and stop the net loss of wetlands.

As a first step in the process, MNRF released Wetland Conservation in Ontario: A Discussion Paper. The purpose of the paper was to provide some ideas and priorities for wetland conservation in Ontario and solicit feedback from a diverse array of stakeholders on the current framework and ideas for the future of wetland conservation in Ontario. Over 286 comments were submitted via the Environmental Registry, which provided thoughtful analysis and clear recommendations for the development of a wetland conservation strategy for Ontario.

Building on the input received, MNRF has developed a proposed Wetland Conservation Strategy for Ontario. The Strategy represents a 15-year blueprint to improve the conservation of wetlands across the province, providing a conceptual framework for conserving Ontario’s wetlands, as well as a list of actions the Ontario government will undertake to ensure progress. The key goals include advancing public awareness of Ontario’s wetlands, increasing knowledge, strengthening partnerships to maximize conservation efforts and to continue to improve and develop policy approaches as opportunities arise, including development of a wetland offsetting policy to prevent the net loss of wetlands and promote net gain and better support implementation and compliance.

RECENTLY EXPIRED EBR POSTINGS					
TITLE	Lead Ministry	What is It?	EBR Registry No.	Date Posted	Comments Due By
Conservation Authorities Act Review “Conserving Our Future: Proposed Priorities for Renewal”	MNRF	Policy Proposal	012-7583	May 12/16	September 9/16
Regulation of invasive species under the Ontario Invasive Species Act, 2015	MNRF	Regulation Proposal	012-8310	September 8/16	October 11/16

4) Conservation Authorities Act Review “Conserving Our Future: Proposed Priorities for Renewal”

The Conservation Authorities Act, administered by MNRF, enables two or more municipalities in a common watershed to establish a conservation authority in conjunction with the province. The purpose of a conservation authority is to deliver a local resource management program at the watershed scale for both provincial and municipal interests. Conservation authorities have played a significant role in Ontario’s natural resource management landscape for nearly 70 years.

In order to ensure that the Conservation Authorities Act is meeting the needs of Ontarians in a modern context, the MNRF is undertaking a review of the Conservation Authorities Act by seeking feedback from municipalities, Indigenous communities, conservation authorities, stakeholders and the public regarding roles, responsibilities, funding and governance of conservation authorities in resource management and environmental protection.

The five priorities areas for updating the Conservation Authorities Act include:

1. Stronger oversight and accountability in decision making;
2. Increased clarity & consistency in roles and responsibilities, processes and requirements;
3. Improved collaboration & engagement among parties involved in resource management;
4. Modern funding mechanisms to support conservation authority operations; and
5. Enhanced flexibility for the Province to update Conservation Authorities Act in the future.

5) Regulation of invasive species under the Ontario Invasive Species Act, 2015

The Ontario Invasive Species Act, 2015 comes into force on November 3, 2016. The Act provides the power to make regulations prescribing invasive species and classifying them as either prohibited or restricted.

There are a number of prohibited species, but of interest to the drainage community is the proposal to list Phragmites, Dog Strangling Vine and Japanese Knotweed as restricted species. While Phragmites is a serious problem in some parts of Ontario, this regulation, if passed, may impose some conditions on working around these species.

Section 8 of the Ontario Invasive Species Act restricts a person from bringing a member of a restricted species into a provincial park or allow it to be deposited or released anywhere in Ontario.

40 YEARS AGO...

Major amendments were made to the Drainage Act (1976) that began with the appointment of a Select Committee in 1972. This committee was chaired by Lorne Henderson, an MPP from Lambton County (Township of Enniskillen). The committee held a number of hearings across the province and also accepted a number of written submissions about drainage in Ontario. As a result, in June 1974, this Select Committee submitted a report to the Legislature recommending a number of changes to the Drainage Act. The following is a summary of some of the major changes that were made to the Drainage Act, resulting from this report:

- Determining the validity of the petition was assigned to the engineer
- Environmental appraisals and benefit cost statements.
- Preliminary reports.
- The authority to assess as a block
- Farm crossings now had to be made part of the drain.
- The establishment of the Drainage Tribunal (now the AFRAAT)
- The establishment of the position of drainage superintendent, with qualifications satisfactory to the Minister
- Grants for maintenance and repair of drains and for the municipal cost of employing a drainage superintendent. The provision of these grants was implemented in 1981.

The following section of this report provides recommendations regarding drainage engineers:

(C) QUALIFICATIONS OF ENGINEERS AND LAND SURVEYORS

During its public hearings, the Committee became concerned about the performance of the duties imposed on individual engineers and Ontario land surveyors practising under the Act. Criticisms ranged from charges of incompetence to a lack of clarity and detail in report documents. Wide variations were found with respect to allowances under Section 8 and to assessment procedures. In some instances, the Committee was made aware of faulty design and received complaints concerning both underdesign and overdesign. The Committee feels that municipal councils appointing an engineer under The Drainage Act should have the assurance that the appointee is competent to carry out the assignment.

Informal discussions were held with representatives of the Association of Professional Engineers and the Association of Ontario Land Surveyors concerning a means of qualifying persons practicing in land drainage. The Committee also consulted the staff of the Ministry of Agriculture and Food, who are involved to a degree with all municipal drainage projects and accordingly with all drainage consultants. The information presented by the Ministry tended to confirm some of the criticisms received from the public.

As a result of considerable deliberation and debate, the Committee recommends the following:

- 1. The Association of Professional Engineers and the Association of Ontario Land Surveyors, either individually or collectively, should initiate an effective means of determining those individuals or firms that are properly qualified to practise land drainage under this Act. This will not be an easy task since there are no formal university courses available in this field and competence in the past has been obtained only through what might be termed an apprenticeship system. However, the committee feels that this duty lies within the responsibility of the professional associations and recommends that they take the necessary steps to establish and define the qualifications of drainage engineers and land surveyors.*
- 2. The Committee considers this problem to be very important and feels some satisfactory solution must be found, particularly since provincial grants are involved and ample evidence exists that these monies have been used unwisely and improperly in some instances. The Committee therefore recommends that the Ministry of Agriculture and Food become the qualifying body if the professional associations involved do not develop a satisfactory system of designation that will protect all concerned.*

WHAT'S IN A NAME?

Why do we give municipal drain names? The answer comes from Section 41 of the Drainage Act which requires the clerk to send out a copy of the engineer's report and a notice stating, among other things, "the name or other designation of the drainage works."

Based on this, for 150+ years, engineers and municipalities have been giving drainage works constructed under the Drainage Act some name, followed by "Municipal Drain". Why?

- Are you required to use the term "Municipal Drain"? NO
- Do you even need to use the term "Drain"? NO
- Does the use of the term "Municipal Drain" make it easier to get approvals? NO
- Is it any less a Drainage Act "drainage works" if it is called something else? NO.

In my opinion, for many people, the term "drain" or "municipal drain" has a negative image. This may result in more public resistance to the project and greater difficulty in obtain approvals. When performing work on larger systems under the Drainage Act, here are some suggested alternatives:

- The ABC Creek Watercourse Management Project
- The ABC Ditch Rehabilitation Project
- The ABC Stream Restoration Project

Emphasizing the environmental benefits of a project in its title does not diminish your core work in resolving drainage issues.

Table 1: Construction/Improvement Project Types

TABLE 1	CONSTRUCTION/IMPROVEMENT PROJECT TYPES FISCAL YEAR 2015/16				
PROJECT TYPE	# OF PROJECTS	TOTAL COST	GRANT AMOUNT	STATISTICAL NOTES	DESCRIPTION OF PROJECT TYPE
Regular	155	23,047,336	4,655,013	Number of projects, total costs and grant amounts are all included in statistics	Project application was received and grant paid in 2015/16
Interim	1	746,828	302,254	Number of projects, total costs and grant amounts are all included in statistics	Interim application received and paid in 2015/16; final grant application is expected in a future year.
Final	2	313,661	82,650	Total costs and grant amounts included in statistics; number of projects are not.	Interim application received and paid earlier; final grant application was received and paid in 2015/16.
Adjustments	0	0	0	Total costs and grant amounts included in statistics; number of projects are not.	Completed projects (grants paid) but an adjustment of costs was required.
TOTAL	156	24,107,825	5,039,917		
Preliminary	0	0	0	Not included in statistical information.	Grant application for preliminary report costs, after project terminated.

Note: A “project” is deemed to be an activity under a single engineer’s report. This can be a single culvert installation or a project with a main drain and several branches.

Table 2 Municipal Drain Statistics - Provincial Averages 2006/07 to 2015/16:

TABLE 2		MUNICIPAL DRAIN ENGINEERING STATISTICS IN ONTARIO PROVINCIAL AVERAGES FROM 2006/07 TO 2015/16			
YEAR	TOTAL COST (\$)	ENGINEERING COSTS (\$)	% ENGINEERING	NO. OF ENGINEERS	TOT. GRANT PAID (\$)
2006/07	11,639,346	2,942,772	25.3	27	2,642,924
2007/08	12,142,307	3,046,381	25.1	23	2,399,909
2008/09	10,853,223	2,747,529	25.3	23	2,191,583
2009/10	14,767,599	3,563,517	24.1	27	2,953,528
2010/11	11,989,799	2,894,855	24.1	20	2,383,193
2011/12	19,837,820	4,536,820	22.9	26	2,809,306
2012/13	18,492,806	4,432,881	24.0	26	2,700,402
2013/14	18,731,409	4,648,494	24.8	26	3,287,519
2014/15	21,114,878	4,786,490	22.7	22	3,688,534
2015/16	24,107,825	5,690,698	23.6	29	5,039,917

Table 3: General Municipal Drain Statistics in Ontario from 2006/07 to 2015/16

TABLE 3		GENERAL MUNICIPAL DRAIN STATISTICS IN ONTARIO FROM 2006/07 TO 2015/16			
YEAR	TOTAL NO. OF DRAINS	TOTAL DRAIN COST (\$ million)	AVG. DRAIN COST (\$)	TRIBUNAL HEARINGS	% OF HEARINGS
2006/07	170	11.6	68,467	16	9.4
2007/08	154	12.1	78,846	17	11.0
2008/09	142	10.9	76,431	4	2.8
2009/10	160	14.8	92,298	6	3.8
2010/11	149	12.0	80,468	16	10.7
2011/12	133	19.8	149,156	7	5.3
2012/13	158	18.5	117,043	14	8.9
2013/14	157	18.7	119,308	11	7.0
2014/15	134	21.1	157,574	12	9.0
2015/16	156	24.1	154,537	28	17.9

Table 4: Technical Municipal Drain Statistics in Ontario 2006/07 to 2015/16

TABLE 4		TECHNICAL MUNICIPAL DRAIN STATISTICS IN ONTARIO FROM 2006/07 TO 2015/16					
YEAR	SERVICED HA	OPEN M	CLOSED M	OPEN %	CLOSED %	TOTAL COST (\$)	UNIT COST \$/HA
2006/07	65,422	111,177	78,276	58.7	41.3	11,639,346	178
2007/08	50,686	128,740	90,623	58.7	41.3	12,142,307	240
2008/09	44,104	132,819	55,243	70.6	29.4	10,853,223	246
2009/10	38,659	104,680	83,527	55.6	44.4	14,767,599	382
2010/11 ¹	34,532	81,909	63,846	56.2	43.8	11,989,799	347
2011/12 ¹	35,276	113,720	70,540	61.7	38.3	19,837,820	562
2012/13 ¹	27,666	80,345	82,590	49.3	50.7	18,492,806	668
2013/14 ¹	26,057	66,988	88,633	43.0	57.0	18,731,409	718
2014/15 ¹	42,025	90,609	79,974	53.1	46.9	21,114,878	502
2015/16 ¹	30,753	101,946	113,727	47.3	52.7	24,107,825	784

Notes: 1. Holland Marsh Dyke and Canal Reconstruction project has been excluded from the statistics.

Table 5: Range of Municipal Drain Costs in Ontario

TABLE 5		RANGE OF MUNICIPAL DRAIN COSTS IN ONTARIO FROM 2006/07 TO 2015/16						
YEAR	TOTAL NO. DRAINS	NO. OF DRAINS IN THE COST RANGE OF: (Note: Percentage Engineering for Cost Range shown in brackets)						HIGHEST SINGLE COST (\$)
		< \$5,000	\$5,000 - < \$50,000	\$50,000- < \$75,000	\$75,000 - < \$100,000	\$100,000- < \$200,000	> \$200,000	
2006/07	172	4 (31.1%)	102 (26.3%)	17 (25.7%)	14 (26.6%)	22 (26.0%)	11 (23.7%)	817,351
2007/08	152	0	93 (31.2%)	21 (27.2%)	6 (25.1%)	20 (23.4%)	14 (22.6%)	825,740
2008/09	142	3 (46.2%)	75 (28.0%)	21 (27.3%)	15 (28.4%)	18 (23.7%)	10 (24.8%)	791,420
2009/10	160	2 (28.3%)	76 (28.7%)	20 (24.0%)	16 (24.2%)	29 (22.0%)	17 (24.4%)	1,031,235
2010/11 ¹	149	2 (99.5%)	83 (32.8%)	20 (25.4%)	16 (23.2%)	13 (23.4%)	15 (21.2%)	668,526
2011/12 ¹	133	1 (58.6%)	48 (33.1%)	16 (23.2%)	11 (23.8%)	31 (27.0%)	26 (20.5%)	1,543,425
2012/13 ¹	158	1 (97.9%)	60 (31.2%)	27 (28.6%)	20 (25.5%)	33 (24.8%)	17 (21.2%)	2,466,972
Updated Cost Ranges		< \$25,000	\$25,000 - < \$50,000	\$50,000 - < \$100,000	\$100,000 - < \$200,000	\$200,000 - < \$400,000	> \$400,000	
2013/14 ¹	157	23 (36.8%)	34 (33.3%)	43 (27.8%)	35 (27.5%)	18 (23.4%)	4 (19.2%)	674,512
2014/15 ¹	134	12 (32.1%)	29 (33.4%)	38 (24.4%)	29 (23.1%)	18 (22.7%)	8 (20.3%)	2,160,372
2015/16 ¹	156	16 (34.4%)	25 (35.1%)	41 (26.1%)	36 (23.2%)	24 (22.2%)	14 (22.3%)	858,602

Notes: 1. Holland Marsh Dyke and Canal Reconstruction project has been excluded from the statistics.

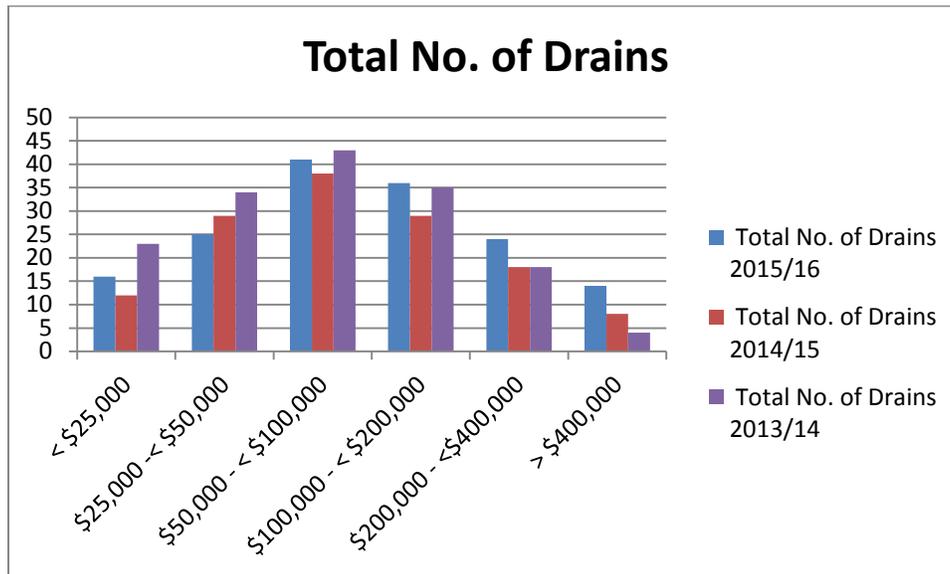


Figure 1: Distribution of the number of drainage projects for each cost range

Figure 1 shows the data from Table 5 in a graphical form. Generally project numbers were increased from the previous year with more projects in the ranges over \$50,000.

The information in Figure 2 is the engineering cost and the grant amount for all projects in 2015/16 versus the total cost of that project. In this plot it can be seen that in general the grant amount closely follows the engineering cost associated with each project but this would be merely a coincidence. Figure 3 shows the variation in the percentage engineering as it relates to project cost. The information in Table 5 shows the percentage of engineering for each cost range but does not totally capture the variation in percentage engineering for the lower value projects. As a minimum the engineering cost will be at no lower than 10% and for the lower value projects could be the majority of the project cost.

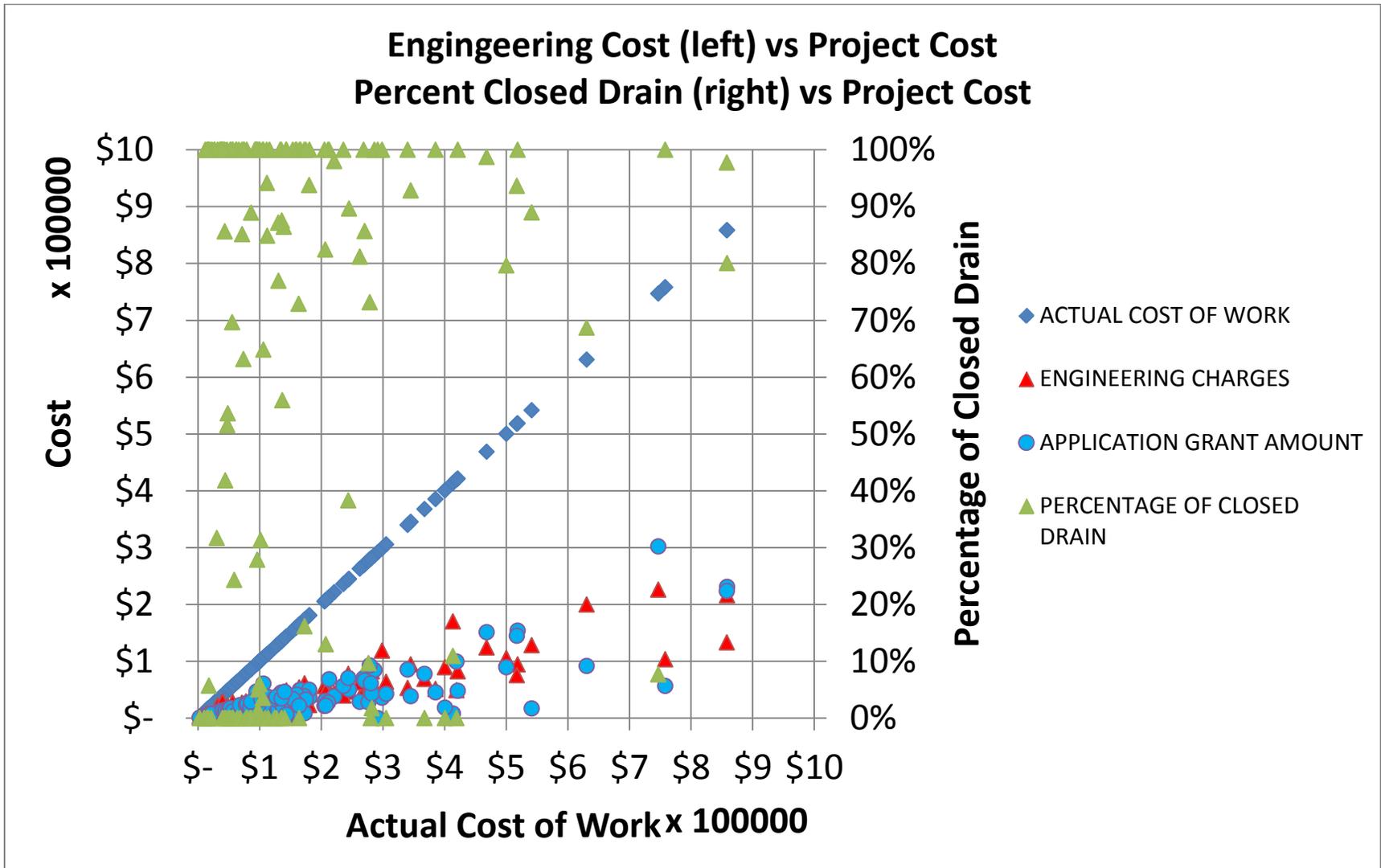


Figure 2: Plot of the Engineering Cost and Grant Amount vs. Project Cost

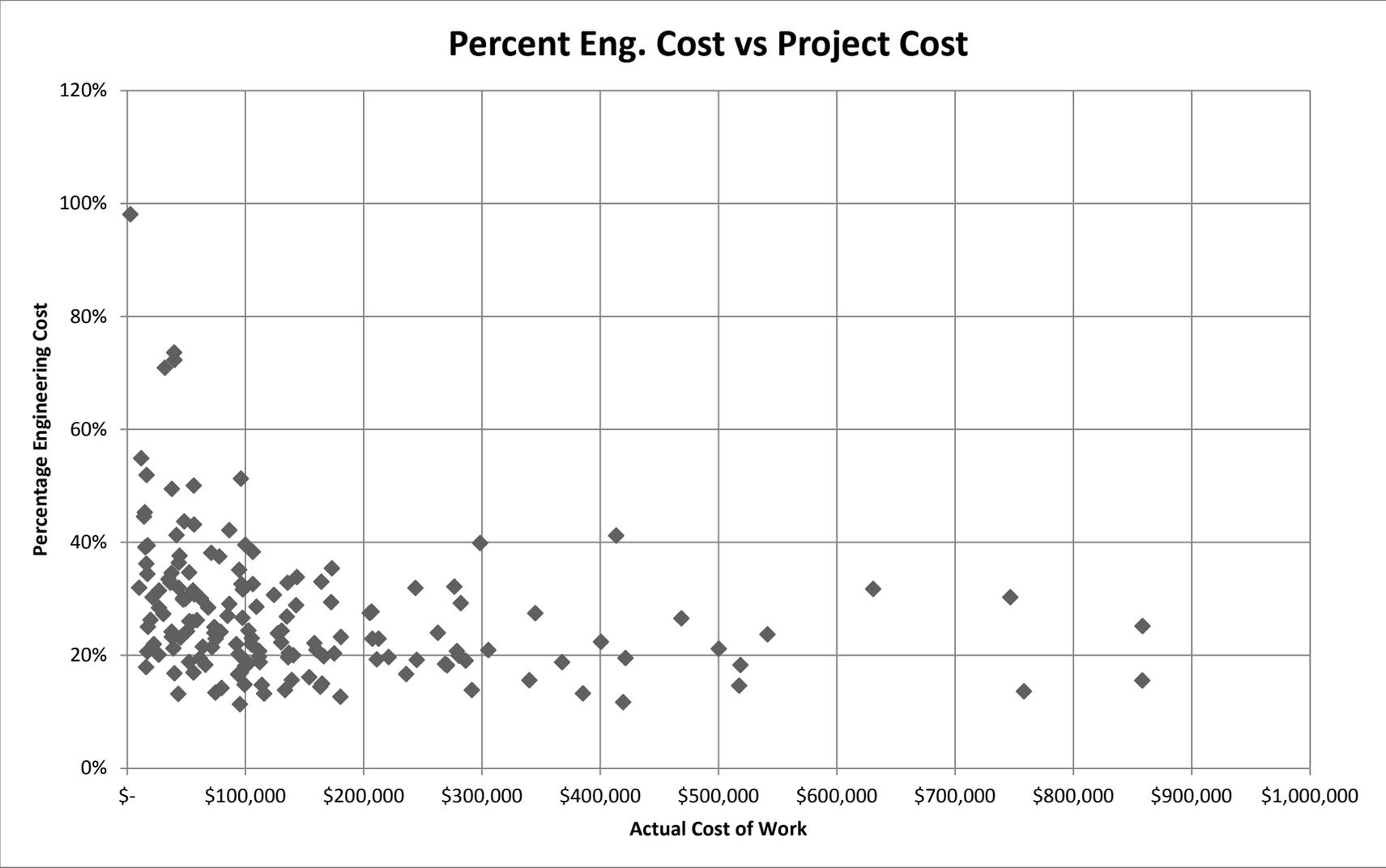


Figure 3: Plot of Percentage Engineering vs Project Cost

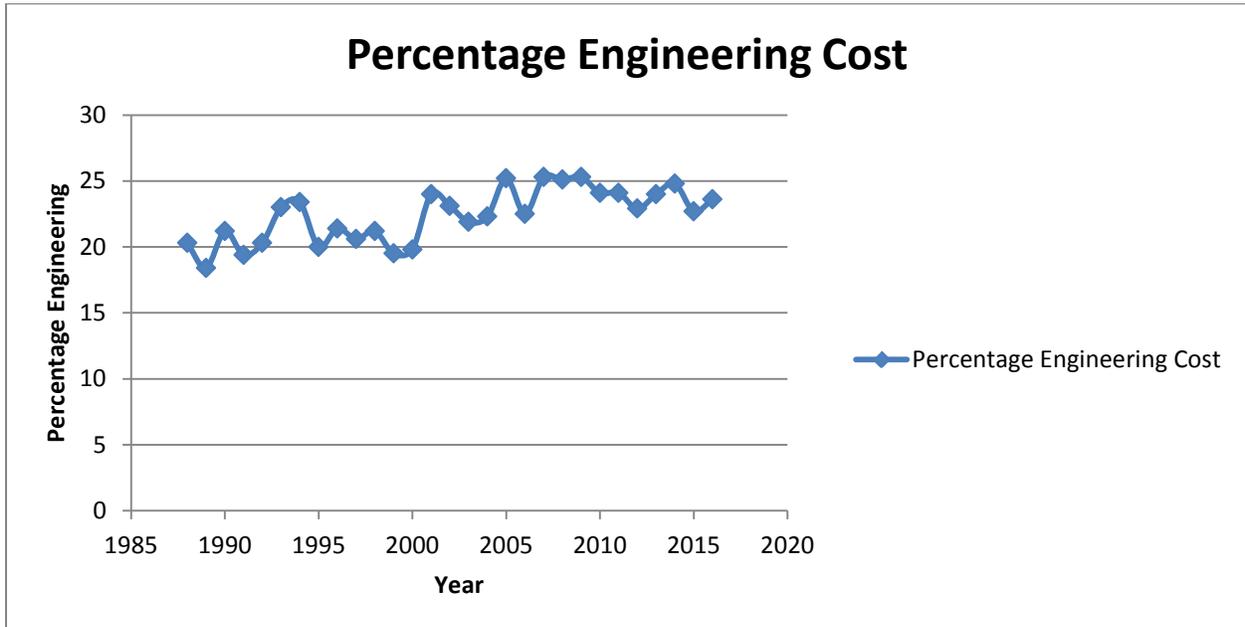


Figure 4: Overall Percentage for Engineering from 1987/88 to 2015/16

Figure 4 shows the overall percentage of engineering cost since 1987/88 there is only a slight increase in this percentage but has largely stayed consistent. The percentage of engineering has stayed consistent even as average project cost has increased. Figure 5 shows the increase in the average project cost from 1987/88 to 2015/16. The plot is compared to an adjusted projection of the 1987/88 cost using the Consumer Price Index. The cost of a fixed basket of goods and services purchased by consumers is evaluated over time. Although this may not be the most appropriate index to use when comparing drainage infrastructure projects, without a proper breakdown of the project cost (allowances, bridges/culverts, construction costs) it is difficult to determine an appropriate index to reflect the increase in project cost over time. The index does however give a baseline for the increase in value due to inflation and is the minimum increase we would expect to see. The values for CPI used for this data is the value reported in April at the end of the fiscal year i.e. 1987/88 uses the April 1988 value of CPI.

Similar plots were created for the average maintenance project cost Figure 6 and the total Superintendent cost Figure 7. The data for the Superintendent cost only reaches back to 1991/92 and therefore the CPI adjustment is based on the 1991/92 value.

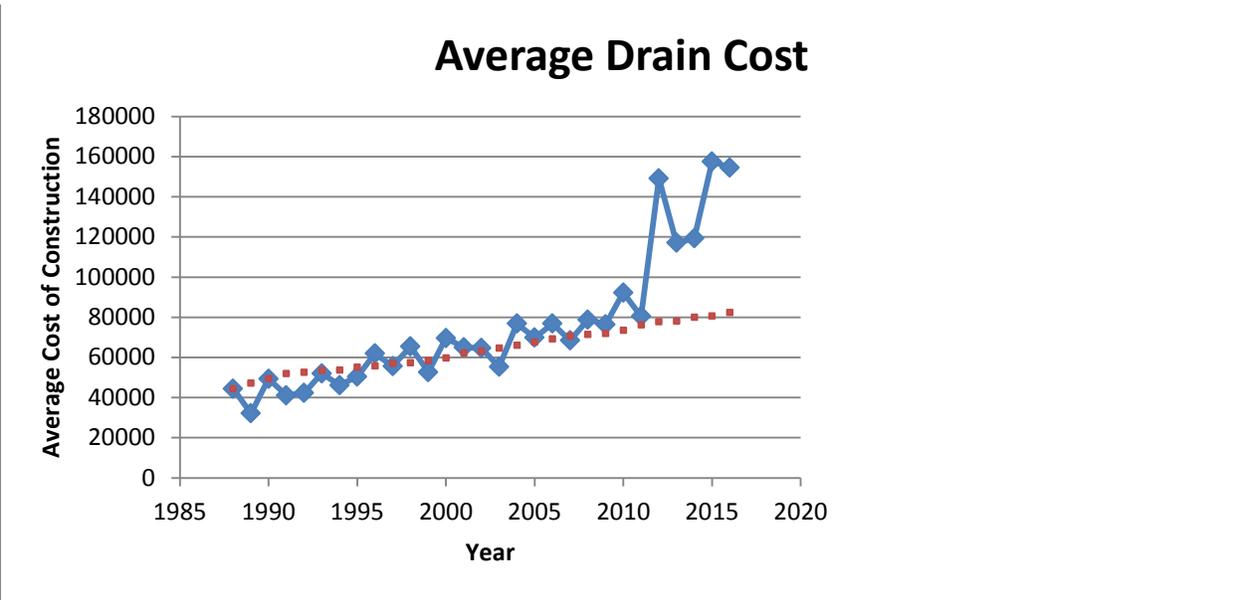


Figure 5: Average Drain Cost since 1987/88

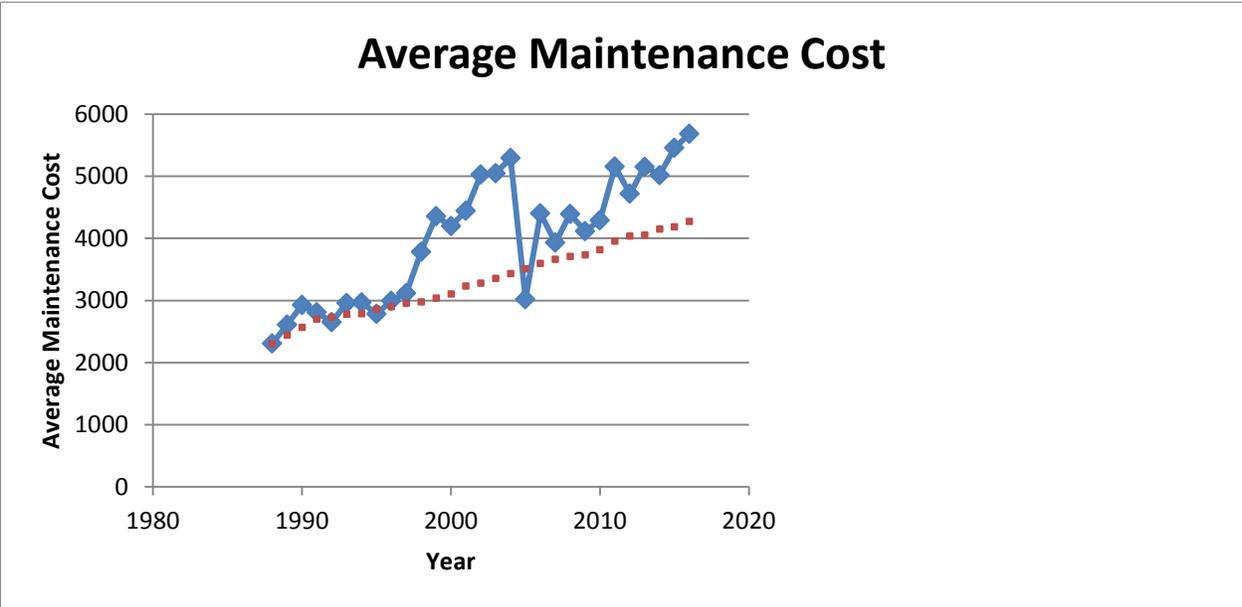


Figure 6: Average Maintenance Cost 1987/88 to 2014/15

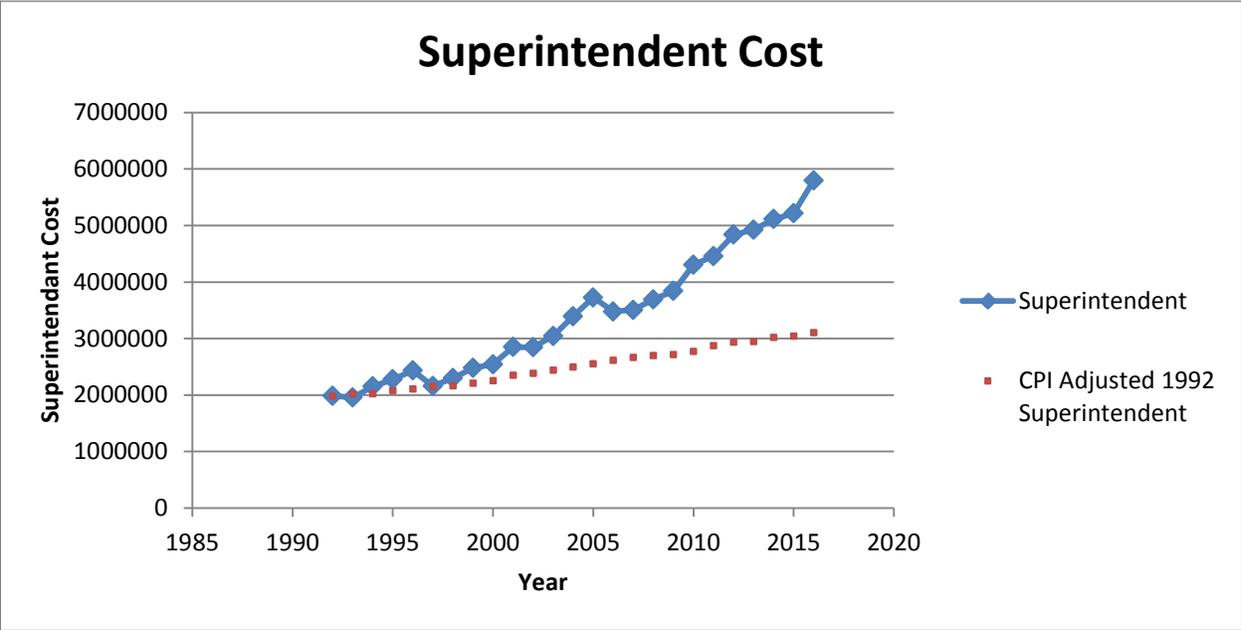


Figure 7: Superintendent Cost from 1991/92 to 2014/15

Table 6: Maintenance Statistics in Ontario from 2006/07 to 2015/16

TABLE 6		MUNICIPAL DRAIN MAINTENANCE STATISTICS IN ONTARIO FROM 2006/07 TO 2015/16	
YEAR	NO. OF PROJECTS	TOTAL COST	AVERAGE COST
2006/07	1397	\$5,489,548	\$3,930
2007/08	1602	\$7,033,738	\$4,391
2008/09	1668	\$6,867,771	\$4,117
2009/10	2034	\$8,725,247	\$4,290
2010/11	1704	\$8,784,649	\$5,155
2011/12	1580	\$7,455,566	\$4,719
2012/13	2303	\$11,866,946	\$5,153
2013/14	2290	\$11,494,684	\$5,020
2014/15	2369	\$12,927,171	\$5,457
2015/16	2361	\$13,413,773	\$5,681

Table 7: Ontario Drain Maintenance and Superintendent Activity

TABLE 7	ONTARIO DRAIN MAINTENANCE & SUPERINTENDENT ACTIVITY		
		2013/14	2014/15
Total Drain Maintenance Expenditures	\$11,494,684	\$12,927,171	\$13,413,773
Drain Maintenance Grant Paid	\$2,943,133	\$3,334,252	\$3,553,417
Drainage Superintendent Cost	\$5,114,558	\$5,213,651	\$5,795,287
Superintendent Grant Paid	\$2,502,626	\$2,611,360	\$2,769,778
Municipalities Claiming Grant	150	150	153
Number of Maintenance Projects	2,290	2,369	\$2,361
Average # of Projects per Municipality	15.3	15.8	15.4
Average Cost of Projects	\$5,020	\$5,457	\$5,681
Average Total Cost per Municipality	\$110,728	\$120,939	\$125,549
Average – Maintenance/Superintendent	2.25	2.48	2.32
Average % - Superintendent/Total Cost	30.8%	28.7%	30.2%