



ESSENTIAL AREAS OF KNOWLEDGE (COMPETENCY)

- **Ethics and Professionalism**
- **Business Practices**

- **Research**
- **General Boundary Retracement**
- **Descriptions**
- **Easements**
- **Roads**
- **Water Boundaries**
- **Original Township Retracement**
- **Adverse Possession**

- **Spatial Reference**

- **Mining Act**
- **Condominium Act**
- **Planning Act**

It is expected that competency will be achieved through work experience during the term of articles. The Articling Surveyor/Supervisor and Student may supplement work experience with assignments designed by the Articling Surveyor/Supervisor or obtained from the AOLS Learning Management System (LMS).

Ethics and Professionalism

Cadastral students must understand that protection of the public interest is the overarching purpose for acting ethically in the exercise of their profession.

Outcome	Comments/Resources
<p>By the end of the articling term the student will understand:</p> <ul style="list-style-type: none">• the duties of a Surveyor as a Member of the AOLS• the Complaints and Discipline processes of the AOLS• the role of the Surveyor as an Expert Witness	<ul style="list-style-type: none">- ACLS Practice Manual- AOLS Bulletins- What Does It Mean to Be a Self-governing Regulated Profession?- Understanding Professional Self-Regulation <p><i>Surveyors Act</i></p> <ul style="list-style-type: none">- R.S.O. 1990, CHAPTER S.29- O. Reg. 216/10- R.R.O. 1990, REGULATION 1026 – Section 35: Professional Misconduct <p>Case Law</p> <ul style="list-style-type: none">- Bailey v. Barbour, 2013 ONSC 7397 (CanLII)

Business Practices

Cadastral students must be able to effectively communicate with clients, surveyors and other professionals. Cadastral students must also have functional knowledge of the basics of business practices.

Outcome	Comments/Resources
<p>By the end of the articling term the student will be familiar with:</p> <ul style="list-style-type: none">• Professional Writing – preparation of reports, submissions, client letters, etc.• Client Contact - effective client communications• Business Finance – invoicing, accounts receivable/payable, collection practices, business and professional liability insurance• Planning Projects/Project Management – scheduling project timelines and staff• Contracts – cost estimating and job specifications• General Office Organization & Procedures – filing systems, electronic record keeping, time sheets, business forms, etc.• Business Law	<ul style="list-style-type: none">- Surveyors Act, O. Reg. 216/10 – Sections 2-6- Risk Management Guide- AOLS Interpretive Guide to Regulation 216/10

Research

Cadastral surveyors must have functional knowledge of the historical and modern sources of documentary and field research required to offer a competent opinion on a boundary retracement.

Outcome	Comments/Resources
<p>By the end of the articling term the student will understand the role of research in boundary retracement including :</p> <ul style="list-style-type: none"> • Land Registry Office research • Field Notes – sources and interpretation • Original Township Plans, field notes and Crown Instructions • Recognize the existence of other resources such as Library and Archives Canada, Ontario Archives, and municipal and other archives • Recognizing original monumentation evidence • Verbal (oral and written) evidence from long standing owners and the use of a formal affidavit 	<ul style="list-style-type: none"> - Land Registry Office Locations - Library and Archives Canada - Archives of Ontario - Crown Land Patent Records - Crown Surveys in Ontario Booklet - Office of the Surveyor General - Canada Lands Survey System - Cadastral Data & Survey Plan Search - Ontario Municipalities - Surveyors Act, O. Reg. 216/10 – Field Survey Standards - Land Titles Act, R.S.O. 1990, CHAPTER L.5 - Registry Act, R.S.O. 1990, CHAPTER R.20 - Registry Act, O. Reg. 43/96 - CanLII - Canadian Legal Information Institute - Research Revisited - Research vs. 'Survey This Deed'

General Boundary Retracement

Cadastral students must have functional knowledge of the methodologies, legal principles and case law impacting boundary retracements.

Outcome	Comments/Resources
<p>By the end of the articling term the student will understand and be able to apply principles of boundary retracement statute and case law including:</p> <ul style="list-style-type: none"> • Hierarchy of evidence • Priority of registration – priority of severance • Appropriate use of proportioning <p>By the end of the articling term the student will be knowledgeable about:</p> <ul style="list-style-type: none"> • Use and effect of different types of surveys and plans <p>By the end of the articling term the student will be familiar with:</p> <ul style="list-style-type: none"> • Resolution of boundary problems and conflicting surveys • Boundaries Act Decisions • Intention of the original parties <ul style="list-style-type: none"> ○ Intrinsic and extrinsic evidence 	<ul style="list-style-type: none"> - Surveyors Act, O. Reg. 216/10 — Section 8 - Information for Surveyors - First Running of the Line - How Do You Know When You Are Done? <p>Case Law</p> <ul style="list-style-type: none"> - Forrester Estate v. Muzeen Estate, 2008 ONCA 640 (CanLII) - Petek v. Powell, 2011 ONSC 443 (CanLII) - 3209292 Nova Scotia Ltd. v. MacDuff, 2011 NSSC 363 (CanLII) - Gall v. Rogers, 1993 CanLII 5446 (ON SC) - Doyle v. Macdonald, 1999 CanLII 7228 (PE SCTD) - Nicholson v. Halliday, 2005 CanLII 259 (ON CA) - Taylor v. City Sand & Gravel Ltd., 2010 NLCA 22 (CanLII) - Martin v. Kellogg, [1932] O.R. 274, [1932] 2 D.L.R. 496, Affirmed [1932] 4 D.L.R. 617

Descriptions

Cadastral students must be able to interpret the various forms of legal descriptions in terms of what evidence can be used to complete boundary surveys.

Outcome	Comments/Resources
<p>By the end of the articling term the student will understand the nature and role of descriptions including:</p> <ul style="list-style-type: none">• Types of legal descriptions• Interpretation of descriptions• Land Titles Qualifiers• Conversion into Land Titles Plus <p>By the end of the articling term the student will be able to apply principles of statute and case law regarding descriptions including:</p> <ul style="list-style-type: none">• Conventional Lines• Misdescriptions• O. Reg. 43/96 Surveys, Plans and Descriptions of Land	<ul style="list-style-type: none">- Service Ontario Land Registration Bulletins, Memo's and Guides- Registry Act, O. Reg. 43/96 <p>Case Law</p> <ul style="list-style-type: none">- Grasett v. Carter, (1884) 10 S.C.R. 105- Lewis v. Romita, [1980] O.J. No. 2806, 13 R.P.R. 188- Lutz v. Kawa, 1979 CanLII 1021 (AB QB)

Easements

Cadastral students must understand all the nuances of easements since even the simplest of easements can create large scale liabilities.

Outcome	Comments/Resources
<p>By the end of the articling term the student will:</p> <ul style="list-style-type: none"> • know what constitutes a validly created easement • be able to explain the Land Titles conversion rules for easements • be able to identify steps required to assess and correct a title as it pertains to easements • display a basic knowledge of prescriptive easements 	<ul style="list-style-type: none"> - Bulletin No. 90002 – Easement Statute Law - Bulletin No. 2005-02 – Easement, Release of Easements - Bulletin No. 2005-03 – Easement Certificates - EM (External Memo) 2005-03 – Easements in Gross, Dominant Tenement - Bulletin No. 2007-02 – Registry Act Amendments - Bulletin No. 2008-05 – LTCQ Procedures - Bulletin No. 2009-03 – Condominium Corporations - Search land registration documents - Registry Act, R.S.O. 1990 Chapter R.20 – Subsections 112 and 113 - Land Titles Act, R.S.O. 1990 Chapter L.5 – Subsections 39 and 158-162 - Planning Act - Service Ontario Land Registration Bulletins, Memo's and Guides

Roads

Cadastral students must be able to identify where roads originate, what their extents are, who owns them and how their ownership is transferred.

Outcome	Comments/Resources
<p>By the end of the articling term the student will:</p> <ul style="list-style-type: none">• understand the process for purchasing Road Allowances• understand and be able to communicate the complexities of surveying a Road Allowance• understand road access issues• be aware of Ministry of Transportation Ontario (MTO) Plan Types and their effect• understand forced road and colonization road differences• understand the various methods of creating a public highway	<ul style="list-style-type: none">- Public Transportation and Highway Improvement Act, R.S.O. 1990, CHAPTER P.50- Municipal Act, 2001- Real Property Limitations Act, RSO 1990, c L.15- Road Access Act, R.S.O. 1990, CHAPTER R.34- Expropriations Act, R.S.O. 1990, CHAPTER E.26- Release and Voidance of Reservations and Conditions in Land Grants, MNR Policy No. PL 4.03.01- Russell on Roads, 3rd Edition- Legal Survey Manual: Volume 1 - Legal Plans, November 2010- MTO Research Library- The Road Less Travelled

Water Boundaries

Cadastral students must be able apply the legal principles set out in case law in their process of arriving at an opinion on the location of different types of natural boundaries.

Outcome	Comments/Resources
<p>By the end of the articling term the student will be able to apply principles of statute and case law regarding water boundaries including:</p> <ul style="list-style-type: none"> • Flooded Lands <ul style="list-style-type: none"> ○ Methods of retracing the limit prior to flooding • Accretion and erosion <ul style="list-style-type: none"> ○ Recognizing the signs of accretion or erosion as opposed to flooding or reliction. ○ Ownership and distribution of accreted lands • Ownership of the Bed, navigability <ul style="list-style-type: none"> ○ The Beds of Navigable Waters Act ○ Demonstrate an understanding that an OLS does not have authority to make a conclusive determination of navigability ○ Ad medium filum • The ability to research and interpret the intent of a subdivider of a plan of subdivision, including the search for sources which are beyond the traditional scope of field notes and survey data. 	<ul style="list-style-type: none"> - Legal Aspects of Surveying Water Boundaries, Carswell, 1996 Methods of Retracing Limit Prior to Flooding - Clarke v. City of Edmonton, [1930] S.C.R. 137 - Volcanic Oil and Gas Co. v. Chaplin, [1912] O.J. No. 3, 27 O.L.R. 34; [1912] O.J. No. 60, 27 O.L.R. 484, 10 D.L.R. 200; [1914] O.J. No. 38, 31 O.L.R. 364, 19 D.L.R. 442 - Ontario (Attorney General) v. Rowntree Beach Assn., 1994 CanLII 7228 (ON SC) - Talisman Energy Inc. v. Hornick, 2005 CanLII 369 (ON SC) - Walker et al. and Attorney-General for Ontario, [1970] O.J. No. 1634; [1971] 1 O.R. 151, 14 D.L.R. (3d) 643 Accretion and Erosion - Paul v. Bates, [1934] B.C.J. No. 95, 48 B.C.R. 473 - Andriet v. County of Strathcona No. 20, 2008 ABCA 27 (CanLII) - Queen’s County v. Cooper, [1946] S.C.R. 584 Ownership of the Bed, Navigability - Beds of Navigable Waters Act, R.S.O. 1990, c. B.4 - Coleman v. Ontario (Attorney General), [1983] O.J. No. 275, 143 D.L.R. (3d) 608 - Canoe Ontario v. Reed, [1989] O.J. No. 1293, 69 O.R. (2d) 494 - Casselman v. Ontario (Ministry of Natural Resources), [1994] O.J. No. 2180 - Simpson v. Ontario (Natural Resources), 2011 ONSC 1168 (CanLII) Interpret the Intent on Registered Plans - Ellard v. Township of Tiny, 2012 ONSC 280 (CanLII)

- *Tiny (Township) v. Battaglia*, 2013 ONCA 274 (CanLII)
- *Lackner v. Hall*, 2012 ONSC 3951 (CanLII)
- *Lackner v. Hall*, 2013 ONCA 631 (CanLII)
- *Oro-Medonte (Township) v. Warkentin*, 2013 ONSC 1416 (CanLII)
- *1146726 Ontario Inc. v. National Trust*, (2004) 48 M.P.L.R. (3d) 283 (Ont. S.C.)

Original Township Retracement

Cadastral students must have functional knowledge of the statutory methods of re-establishing lost lot corners, concession corners or township corners in original township Surveys as set out in the *Surveys Act*.

Outcome	Comments/Resources
By the end of the articling term the student will understand: <ul style="list-style-type: none">• Original Township Systems• Original Township Boundary Retracement and Methods of Survey as identified in the Surveys Act	- Crown Surveys in Ontario Booklet <i>Surveys Act</i> - R.S.O. 1990, CHAPTER S.30 - R.R.O. 1990, REGULATION 1029

Adverse Possession

Cadastral students must be able to differentiate adverse possession from possessory evidence used to re-establish boundaries. Since adverse possession is a title issue, they must be able to distinguish their scope of expertise from that of a lawyer.

Outcome	Comments/Resources
<p>By the end of the articling term the student will:</p> <ul style="list-style-type: none"> • be able to identify adverse possession versus possession as evidence of a boundary • understand that adverse possession is a title issue that requires the expertise of a lawyer <p>By the end of the articling term the student will be able to:</p> <ul style="list-style-type: none"> • understand principles of statute and case law regarding adverse possession. <p>By the end of the articling term the student will be able to :</p> <ul style="list-style-type: none"> • describe the basic methods of perfecting a claim through adverse possession. 	<ul style="list-style-type: none"> - Keefer v. Arillotta, (1977) 13 O.R. (2d) 680 - Fletcher v. Storoschuk et al., (1982) 35 O.R. (2d) 722 - Masidon Investments Ltd. v. Ham, [1984] O.J. No. 3139, 45 O.R. (2d) 563, 2 O.A.C. 147 - Hamson v. Jones, [1988] O.J. No. 1306, 65 O.R. (2d) 304, 52 D.L.R. (4th) 143 - Teis v. Ancaster (Town of), 1997 CanLII 1688 (ON CA) - Laurier Homes (27) Ltd. v. Brett, 2005 CanLII 44817 (ON SC) - 1636539 Ontario Limited v. W. Bradfield Limited, 2007 CanLII 8013 (ON SC) - Marotta v. Creative Investments Limited, 2008 CanLII 15772 (ON SC) - Real Property Limitations Act - Land Titles Conversion Qualified (LTCQ) to Land Titles Absolute Plus (LT+)

Spatial Reference

Cadastral students must have functional knowledge of the requirements and best practices for georeferencing, datums and projections.

Outcome	Comments/Resources
By the end of the articling term the student will understand and be able to apply: <ul style="list-style-type: none">• Integration Requirements of Reg. 216/10	<ul style="list-style-type: none">- Canadian Spatial Reference System- Height Reference System Modernization- Tools and Applications- Surveyors Act, O. Reg. 216/10 — Integration requirements specified in Sections 10, 12-14, 31-35

Condominium Act

Cadastral students must be familiar with the roles and responsibilities of the surveyor in the development of a condominium under the *Condominium Act*.

Outcome	Comments/Resources
<p>By the end of the articling term the student will:</p> <ul style="list-style-type: none"> • know what's required in order to support a client's decision-making to fulfill the requirements for registering a project • know what basic elements are to be included in a standard condominium description • understand the purpose of , and OLS contribution to, each schedule that form part of the standard condominium declaration • be able to complete a Schedule document (i.e. Schedule "C") • be able to describe the various roles the professionals play in the preparation and registration of a Condominium • briefly describe the various kinds of Condominiums that can be registered in Ontario 	<p><i>Condominium Act, 1998</i></p> <ul style="list-style-type: none"> - S.O. 1998, c. 19 - O. Reg. 48/01 - O. Reg. 49/01 <p>Land Registration Information</p> <ul style="list-style-type: none"> - Service Ontario Land Registration Bulletins, Memo's and Guides - 2001-1 Condominium Act, 1998 - 2004-02 Conversion of Registry Non-converts to LTCQ <p>Check Lists from the Ministry of Consumer and Business Services, Title and Survey Services Office, Registration Division</p> <ul style="list-style-type: none"> - Standard Condominiums - Leasehold Condominiums - Phased Condominiums - Amalgamated Condominiums - Vacant Land Condominiums - Common Elements Condominiums

Mining Act

Cadastral students must understand the types of rights that, depending on the claims' location, can append to mining claims and the unique survey requirements used to establish mining claims on the ground.

Outcome	Comments/Resources
<p>By the end of the articling term the student will:</p> <ul style="list-style-type: none"> • understand Staked Mining Claims, Mining Tenure and Mining and Perimeter Surveys • know how to determine: <ul style="list-style-type: none"> ○ where a claim is located and who the claim holder is ○ when the claim was staked and recorded ○ if there are any encumbrances 	<ul style="list-style-type: none"> - Service Ontario Land Registration Bulletins, Memo's and Guides - Beds of Navigable Waters Act - The Conveyancing and Law of Property Act - Land Titles Act, R.S.O. 1990, CHAPTER L.5 - Registry Act, R.S.O. 1990, CHAPTER R.20 - Registry Act, O. Reg. 43/96 - Surveys Act, R.S.O. 1990, CHAPTER S.30 - Public Lands Act, R.S.O. 1990, CHAPTER P.43 - Crown Land Management Policies - CLAIMaps <i>Mining Act</i> - R.S.O. 1990, CHAPTER M.14 - O. Reg. 43/11 - O. Reg. 263/02 - R.R.O. 1990, Reg. 768 Ministry of Northern Development and Mines: Guides - Georeferencing Standards for Unpatented Mining Claims - Claim Staking FAQ - Converting a Mining Claim into a Lease

Planning Act

Cadastral students must consider land use planning in light of the intended purpose(s) of the *Planning Act*, the provincial interests documented in the Provincial Policy Statement, as well as the restrictions imposed by the municipality's Official Plan and zoning by-laws.

Outcome	Comments/Resources
<p>By the end of the articling term the student will:</p> <ul style="list-style-type: none">• know the role in land development of the general intent of the Planning Act and other statements, plans and zoning by-law policies• understand the approval processes for the division of land under the Planning Act	<ul style="list-style-type: none">- <i>Planning Act</i>- <i>Provincial Policy Statement, 2005</i>- <i>Municipal Act, 2001</i>