

# UNDERGROUND FACILITY LOCATOR (UFL) CAREER ROAD MAP

## 1 "PUBLIC" UFL

1A JUNIOR

1B INTERMEDIATE

1C SENIOR

## 2 PRIVATE UFL

2A JUNIOR

2B INTERMEDIATE

2C SENIOR

## 3 PRIVATE INDUSTRIAL UFL

3A JUNIOR

3B INTERMEDIATE

3C SENIOR

## 4 QUALITY ASSURANCE

## 5 UFL TRAINER

## 6 UFL SUPERVISOR

## 7 UFL MANAGER

## 8 ADVANCEMENT OPPORTUNITIES IN RELATED FIELDS

# UNDERGROUND FACILITY LOCATOR (UFL) OVERVIEW

## WHAT IS A UFL?

UFLs (aka: line locators or utility locators) locate and mark underground infrastructure (e.g., communication and alarm cables and gas, oil, water, and sewer pipes). Locating and marking underground infrastructure helps prevent damage to underground infrastructure during ground disturbance activities (e.g., construction) by indicating the infrastructure's location. Locating and marking existing underground infrastructure may also be required when designing and planning new infrastructure. UFLs perform this task when requested (e.g., by One-Call program operators, excavators, and underground facility operators). The specific requirements for a UFL role may vary by a position's seniority level and employer. UFLs may be hired as full-time employees, contractors, or seasonal employees, depending on need.

## SKILLS AND TRAITS

UFLs generally benefit from having the following skills:

- Verbal and written communication skills
- Interpersonal skills
- Organizational skills
- Computer skills
- Problem-solving skills

UFLs benefit from having the following traits:

- Safety consciousness
- Situational awareness
- Attention to detail
- Ability to stay calm in stressful situations
- Ability to work alone and in teams
- Physical capability

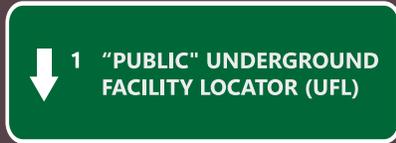
## YOUR UFL CAREER

Now that you have an understanding of what a UFL is and what they do, you can use this booklet to better understand how you may navigate a career as a UFL.

# EXPLORING UNDERGROUND FACILITY LOCATING

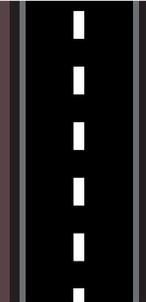
## HOW TO USE THIS ROADMAP

1. Pick one of the three entry points into the UFL career.

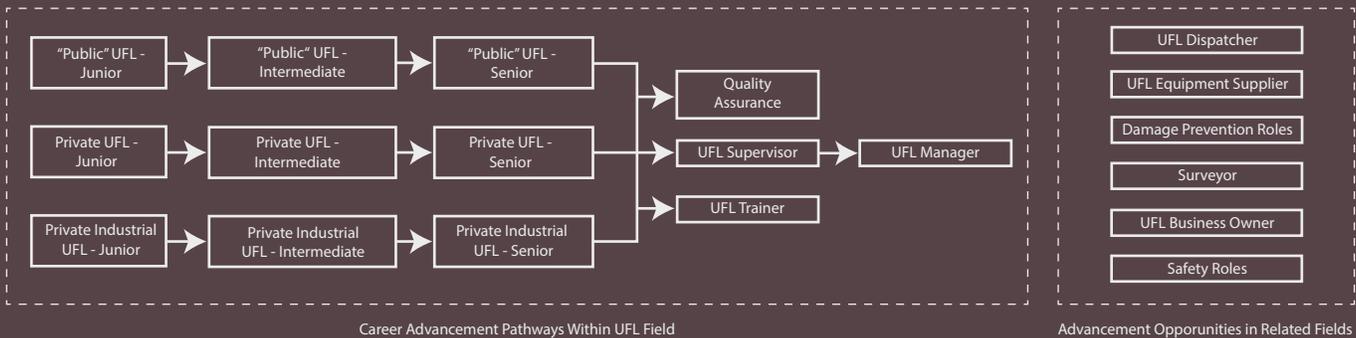


2. Follow the road to see how you can progress your UFL career. Take note of the required experience, education, and certifications.

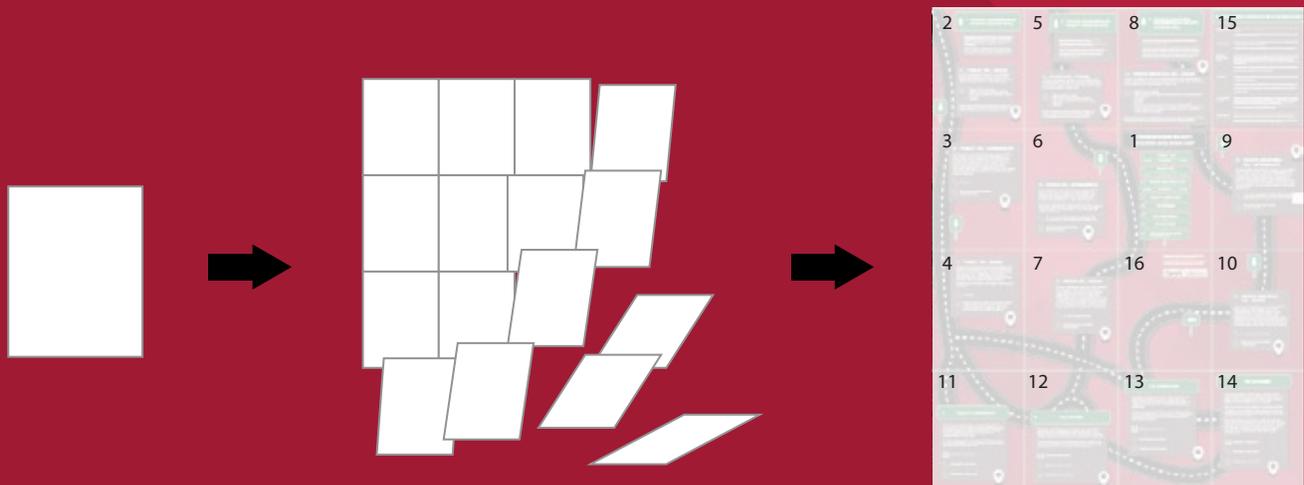
3. If you want to continue to progress in your career, consider the Advancement Opportunities in Related Careers on page 15.



### This flowchart provides an overview of the career pathways



To assemble this booklet into a poster, you can arrange the pages according to the figure below.





# 1 "PUBLIC" UNDERGROUND FACILITY LOCATOR (UFL)

This field-based role generally locates and marks only the underground facilities (e.g., electrical, communication, and gas facilities) that are controlled by facility owners. This task typically occurs in response to One-Call notifications.

Public UFLs follow a standardized, less complex locate process relative to private locates. Consequently, Public UFLs generally require less training than Private UFLs.

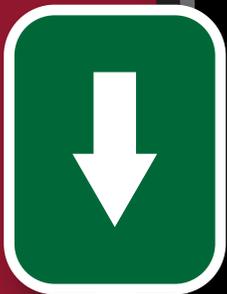
## 1A "PUBLIC" UFL - JUNIOR

A junior role typically has fewer responsibilities than an intermediate or senior role, and may require direct supervision. Junior roles are more commonly responsible for residential locates.



- Class 5 Driver's Licence
- CSTS [Construction Safety Training System] or equivalent (online/in class)
- First Aid
- WHMIS

*Listed certifications are considered an asset, but many employers will hire an individual with no certifications and put them through training.*



## 1B “PUBLIC” UFL - INTERMEDIATE

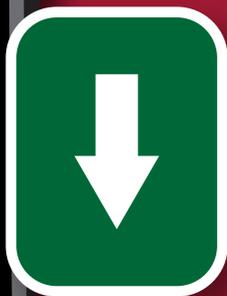
An intermediate role typically has fewer responsibilities than a senior role, but can work independently (i.e., without supervision). Additionally, intermediate roles typically start to include emergency response (i.e., on-call) responsibilities (e.g., responding to gas line or water main breaks). Where junior roles are more commonly responsible for residential locates, intermediate roles will start to be responsible for more complex and commercial locates.



2-3 years locating experience



Relevant competency assessment  
(e.g., by Canadian Certified Locator [CCL])



## 1C “PUBLIC” UFL - SENIOR

A senior role typically has more responsibilities than a junior or intermediate role. These responsibilities may involve mentoring and/or supporting junior and intermediate roles. Additionally, senior locators typically start to be responsible for ongoing projects as well as high-risk and/or sensitive areas or facilities (e.g., downtown cores and/or high-pressure pipelines).



5+ years locating experience



Certain roles may require incremental certifications based on the requirements of the position or specific jobs (e.g., H<sub>2</sub>S Alive, Ground Disturbance, Confined Space).





## 2 PRIVATE UNDERGROUND FACILITY LOCATOR (UFL)

This field-based role generally locates and marks underground facilities (e.g., electrical, telecommunications, and gas facilities) for the clients of independent private locating companies.

Private locates can be more complex than public locates, as they locate everything within a work area and are often completed with limited information available. Consequently, Private UFLs generally require more training than Public UFLs.

### 2A PRIVATE UFL - JUNIOR

A junior role typically has fewer responsibilities than an intermediate or senior role, and may require direct supervision. A junior role may also act as an assistant to an intermediate or senior role.



- Class 5 Driver's Licence
- CSTS [Construction Safety Training System] or equivalent (online/in class)
- First Aid
- WHMIS
- Certain roles may require incremental certifications based on the requirements of the position or specific jobs (e.g., H<sub>2</sub>S Alive, ATV course, UTV course)

*Listed certifications are considered an asset, but many employers will hire an individual with no certifications and put them through training.*





## 2B PRIVATE UFL - INTERMEDIATE

An intermediate role typically has fewer responsibilities than a senior role, but can work independently (i.e., without supervision). Additionally, intermediate roles typically start to include emergency response (i.e., on-call) responsibilities (e.g., responding to gas line or water main breaks). Intermediate roles will also start being responsible for more complex locates and on-going project work.



2 -3 years private locating experience; **OR**  
5+ years (i.e., senior level) public locating experience



Relevant competency assessment (e.g., by Canadian Certified Locator [CCL])



## 2C PRIVATE UFL - SENIOR

A senior role typically has more responsibilities than a junior or intermediate role. These responsibilities may include mentoring and supporting junior and intermediate roles. Additionally, senior locators typically start to be responsible for larger ongoing projects as well as high-risk and/or sensitive areas or facilities (e.g., residential condo sites, and high security areas such as airports, prisons, or hospitals).



5+ years private locating experience



External course on locating fundamentals





## 3 PRIVATE INDUSTRIAL UNDERGROUND FACILITY LOCATOR (UFL)

This field-based role generally locates and marks underground facilities (e.g., high-pressure pipe) on privately-owned industrial sites (e.g., oil and gas sites).

Industrial private locates are completed by Industrial Private UFLs who are hired by independent private locating companies. The role generally requires additional training related to industrial standards. Like private locates, industrial private locates can be more complex than public locates, as they locate everything within a work area, and are often completed with limited information available.

### 3A PRIVATE INDUSTRIAL UFL - JUNIOR

A junior role typically has fewer responsibilities than an intermediate or senior role, and may require direct supervision. A junior role may also act as an assistant to an intermediate or senior role.



- Class 5 Driver's Licence
- CSTS [Construction Safety Training System] or equivalent (online/in class)
- First Aid
- WHMIS
- Ground Disturbance Level 2 course endorsed by USP
- Certain roles may require incremental certifications based on the requirements of the position or specific jobs (e.g., H<sub>2</sub>S Alive, ATV course, UTV course)

*Listed certifications are considered an asset, but many employers will hire an individual with no certifications and put them through training.*





### 3B PRIVATE INDUSTRIAL UFL - INTERMEDIATE

An intermediate role typically has fewer responsibilities than a senior role, but can work independently (i.e., without supervision). Additionally, intermediate roles typically start to include emergency response (i.e., on-call) responsibilities (e.g., responding to gas line or water main breaks). Intermediate roles will also start to be responsible for more complex locates and ongoing project work.



2 -3 years private or private industrial locating experience; OR 5+ years (i.e., senior level) public locating experience



Relevant competency assessment (e.g., by Canadian Certified Locator [CCL])



### 3C PRIVATE INDUSTRIAL UFL - SENIOR

A senior role typically has more responsibilities than a junior or intermediate role. These responsibilities may include mentoring and supporting junior and intermediate roles. Additionally, senior locators typically start to be responsible for larger ongoing projects as well as high-risk and/or sensitive areas or facilities (e.g., an oilfield battery site and/or industrial refinery).



5+ years private or private industrial locating experience



External course on locating fundamentals



## 4 QUALITY ASSURANCE ROLES

This senior-level, field-based role typically audits the performance of other locators to ensure that locates are completed safely, accurately, and efficiently. This role may be a dedicated position or included in the responsibilities of other roles. The individual may be involved in the incident investigations process.

Having a background in Underground Facility Locating ensures an individual has the necessary knowledge and experience to perform this role.



8+ years relevant locating experience



No incremental requirements



5

## UFL TRAINER

This office- and field-based role is generally responsible for developing and administering training programs to UFLs. These training programs may teach how to safely complete locates, regulatory compliance, and specialized locating skills.

Having a background in Underground Facility Locating may help a trainer understand what is helpful for a UFL to know on the job, which can be used to inform training.



10+ years relevant locating experience (including some experience in damage investigation and quality assurance)



Train the Trainer or equivalent coaching course



# 6

## UFL SUPERVISOR

Typically, this field-based role directly supervises the day-to-day activities of a team of UFLs; this may include training, mentoring, and quality assurance. In addition, a UFL Supervisor completes locating jobs individually, and may be involved in the incident investigations process.

Having a background in Underground Facility Locating ensures an individual has the necessary knowledge and experience to both perform this role and ensure the performance of others.



8+ years relevant locating experience



No incremental requirements



# 7

## UFL MANAGER

This role is generally office-based, oversees facility locating operations, and manages the performance of a team of UFLs. Depending on the size of the employer, additional responsibilities may be required.

Having a background in Underground Facility Locating provides an understanding of the nuances involved in facility locating operations and what factors may affect the performance of a team.

One major difference between a public UFL manager and a private UFL manager is that a public UFL manager typically coordinates with facility owners, and a private UFL manager typically coordinates directly with the excavator (e.g., construction contractors and/or homeowners).



10+ years relevant locating experience (including some experience in damage investigation and quality assurance)



No incremental requirements



## 8 ADVANCEMENT OPPORTUNITIES IN RELATED FIELDS

### UFL DISPATCHER

This senior level, office-based role typically distributes and assigns locate tickets (i.e., locating jobs) to locators. This role may be a dedicated position or included in the responsibilities of other roles.

Having a background in Underground Facility Locating helps provide an understanding of the realities of locating that may affect assignments (e.g., timing and the skill level required).

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### UFL EQUIPMENT SUPPLIER

This office- and field-based role generally supplies UFLs with the equipment and accessories they need to complete locates (e.g., cable and pipe locators). This role also involves training people on the specific functionality of the equipment and providing in-person demonstrations, which may require travel.

Having a background in Underground Facility Locating may provide an equipment supplier with practical experience on what equipment will best meet a UFL's needs.

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### DAMAGE PREVENTION ROLES

Damage Prevention roles perform work for facility owners or excavating companies. They are responsible for mitigating damage to underground facilities during ground disturbance activities. They do this by identifying and assessing potential threats, investigating incidents, ensuring the quality of fieldwork, and educating stakeholders. The role can be office- or field-based, depending on the nature of the role.

Having a background in Underground Facility Locating is useful for Damage Prevention roles, as doing so means individuals in Damage Prevention roles can understand both the context of locating work and the consequences if the work is not performed properly.

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### SURVEYOR

This field-based role generally measures and records the location of natural features of the earth, such as changes in elevation. To do this, they use tools such as GPS or physical measurement tools. Surveyors often help to establish property boundaries.

Having a background in Underground Facility Locating is useful both because Underground Facility Locating responsibilities provide a basis for surveying work, and because some roles may require a Surveyor to complete locates. Surveying roles generally require additional education, specifically a 2 year technical diploma in a relevant field (e.g., Geomatics Technician diploma, Civil Engineering Technology diploma).

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### UFL BUSINESS OWNER

UFLs may choose to start their own business in areas such as private locating, training, or locator equipment supply. Business owners have a broad range of responsibilities that may vary with the size of the company. These responsibilities may include managing daily business operations, hiring and managing appropriate staff, and overseeing finances.

Having a background in Underground Facility Locating may help a business owner understand what is needed to run an Underground Facility Locating-related business.

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### SAFETY ROLES

This field-based role involves overseeing that field construction activities are performed safely. This individual may be employed by construction companies, locating companies or facility owners.

Having a background in Underground Facility Locating can provide an individual with an understanding of the safety practices involved in working around various types of facilities.

The Province of Alberta is working in partnership with the Government of Canada to provide employment

Funding provided by the Government of Canada through the Canada-Alberta Job Fund support programs and services

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