

DBYD Certification Ltd

Certified Locator Candidate Manual

August 2023



DBYDCertification[®]

ABN 88 617 374 94

©Copyright

This work is copyright. Apart from any use permitted under the Copyright Act 1968, no part may be reproduced by any process, nor may any other exclusive right be exercised, without the permission of DBYD Certification Ltd, Unit 19/35 Paringa Rd, Murarrie QLD 4172; 2017.

CONTENTS

CONTENTS.....	3
1. General Information.....	4
2. Candidate information	5
Candidates	5
Access and equity	5
Systems management	5
Cancellation and Refund policy	5
Managing conflict of interest	5
Quality Management.....	5
Complains And Appeals	5
Language, Literacy and Numeracy.....	5
3. The Certification Process.....	7
Assessment Topics.....	8
4. Assessment Rules – Practical Assessment	9
5. Locate Basics	10
The four key features of an EMF Locator	10
The four steps to a reliable location.....	10
AS-5488 Quality Levels	10
Gain.....	10
Peak / Null	10
Weak or Poor Signal	10
Signal Trace Frequencies	11
Current.....	11
To increase CURRENT	11
Active Methods of Locating.....	11
Passive Methods of Locating	11
Work to a process.....	12
Plans are not 100% accurate	12
APPENDIX 1: Equipment List.....	13
Appendix 2: Complaints and Appeals Policy.....	14

1. GENERAL INFORMATION

ABOUT DBYD CERTIFICATION LTD

DBYD Certification Limited (DCL) is a charitable community organisation. The registered office of DCL is currently Unit 19,35 Paringa Rd, Murarrie 4172 Queensland.

DCL MISSION

We are dedicated to utility damage prevention through education and locator certification.

DCL VISION

To ensure safer workplaces and communities by protecting utility subsurface infrastructure services.

MOTTO

“Every Locator a Certified Locator”

ABOUT THE CERTIFIED LOCATOR (CL) PROGRAM

DCL offers certification for locators working with asset owners and contractors. The Certification recognises locators who have demonstrated a high level of understanding and practical expertise.

DCL has developed a rigorous assessment for locating that contains both theory and practical elements. Having successfully passed the DCL Certified Locator Program assessment the locator will have recognition that he/she has met a standard that is endorsed by our asset owning members.

THE CERTIFIED LOCATING ORGANISATION (CLO) PROGRAM

Is a formal agreement between DBYD Certification Ltd (as representative of the utility) and a locating company that gives certain properly certified employees access permissions to utility pits and manholes - for the purposes of Cable and Plant Location.

At the moment only the Telstra infrastructure is included in this agreement. However, a number of utilities are showing interest and it is the aim of DCL to approach and include as many utilities into the process as possible.

ONLINE TRAINING COURSE

DCL has partnered with Locate Management Institute Canada to provide online training to locators wishing to refresh their knowledge prior to taking the assessment.

The Utility Advanced Line Locating course provides a foundation for aspiring locators and will give you a sound knowledge base prior to enrolling into a training course with an Australian training provider.

CURRENT CERTIFICATION FEES

\$1,295.00 + GST

\$1,095 + GST NULCA Members

FIND OUT MORE

For more information visit www.dbydlocator.com or call 1300 340 017

ISO 9001 QUALITY MANAGEMENT

DBYD Certification is proud to have achieved ISO 9001 Certification of quality management system standards for the provision of the Certified Locator, Certified Locating Organisation Program, the delivery of the Pre-Excavation Management Course and Skills Development Program.



2. CANDIDATE INFORMATION

CANDIDATES

Throughout this manual, locators undertaking the assessment process are termed “Candidates”.

ACCESS AND EQUITY

DCL actively supports and encourages people of all abilities to participate in our assessment program. All staff members and contractors are responsible for ensuring access and equity to people of all abilities for all assessments provided by DCL.

SYSTEMS MANAGEMENT

DCL will maintain systems for recording and archiving client enrolments, examinations, assessment outcomes, complaints, statement of certification issued, et al. DCL will treat all personal records of clients confidentially.

CANCELLATION AND REFUND POLICY

If a Candidate is unable to attend the practical assessment, DCL reserves the right to charge a cancellation fee of \$695 + GST. This is outlined in the [Terms and Conditions](#).

MANAGING CONFLICT OF INTEREST

It is understood that Candidates and Assessors may have potential conflicts of interest (whether actual or perceived). Such conflicts or perceived conflicts may be related (but not limited) to:

- Competing business interests
- Assessors have conducted training or a previous assessment for the Candidate

These are generally more perceived than real however any Assessor or Candidate who feels a possible conflict exists must immediately notify the DCL at the time of arranging the assessment. Failure to do so will void grounds for appeal on the issue. Candidates will need to be aware that an alternative Assessor may not be available and could delay assessment for some time. Additional costs may also have to be borne by the Candidate.

QUALITY MANAGEMENT

DCL operates a Quality Management System for the provision of assessment of Certified Locators and Skills Development training, the administration of the Certified Locator Program and the Certified Locating Organisation Program and the delivery of Pre-Excavation Management course. (Refer DCL’s [Quality Policy](#))

COMPLAINS AND APPEALS

1. COMPLAINTS AND APPEALS POLICY

DCL recognises the need for Candidates, staff and other clients to have confidence that the Organisation will deal with grievances in a fair and equitable manner based on procedures that are appropriate, accessible and easily understood. Refer Complaints and Appeals Policy in Appendix 2.

2. ASSESSMENT APPEALS

Assessment appeals must be submitted in writing to info@dbydlocator.com

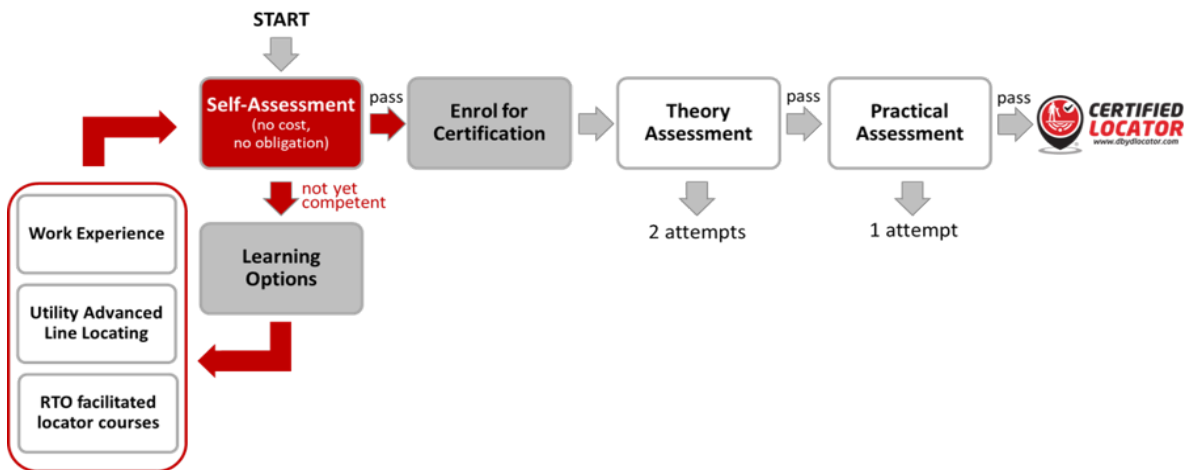
LANGUAGE, LITERACY AND NUMERACY

Language, Literacy and Numeracy (LL&N) skills are essential aspects of work performance and shall be explicitly addressed in the assessment process. The DCL Certified Locator practical

assessment (standard) requires the Candidate to read and interpret plans, drawings and specifications and as such:

- The Candidate MUST have the reading skills to read and interpret information contained in plans/drawings and specifications
- The Candidate MUST have the numeracy skills to convert numerical values and scales shown on plans, drawings and specifications

3. THE CERTIFICATION PROCESS



Step One

A Candidate must undertake the self-assessment at <http://www.dbydlocator.com/become-a-certified-locator/self-assessment/>

The Self-Assessment is used by the Candidate to identify if they are likely to be deemed adequately skilled to pass the actual Certified Locator Program. The Self-Assessment is free.

The Candidate agrees to the [Terms and Conditions](#).

Step Two

A Candidate must enrol in the Certified Locator Program. This involves the payment of a non-refundable assessment fee (refer cancellation and refund policy for details). For group enrolments or invoice payments Candidates should contact the DCL Administration Team.

Nb – The assessment fee is currently \$1,295.00 + GST, though it is subject to change upon four weeks' notice on the DCL website, www.dbydlocator.com additional charges may apply for practical assessments conducted outside capital cities.

Step Three

This theory assessment is comprised of 70 multiple choice questions. These questions are in the following sections:

- a. 15 questions on Plan and Prepare for locating
- b. 35 questions on Locating Techniques
- c. 20 questions on Telecommunications

A Candidate is provided with two (2) attempts to obtain at least 96% on the theory component.

If the Candidate does not achieve at least 96% on the theory component, within the two (2) attempts, they are required to re-sit the theory assessment upon payment of the re-sit fee (currently \$150 +GST).

Step Four

If the Candidate obtains at least a score of 96% on the theory component, within the two (2) attempts, the Candidate will be contacted to organise a time for the practical assessment to be conducted by an Assessor.

Step Five

The Candidate is assessed by an Assessor on the Candidate's ability to correctly identify underground assets/utilities, including pipe and cable networks; and the procedures performed/conducted by the Candidate in doing same.

If the Candidate does not achieve 100% on the practical component, the Candidate may choose to book a re-assessment (re-assessment fee currently \$695 +GST).

Step Six

If the Candidate obtains a score of 100% on the practical assessment, a Statement of Certification will be sent out to the successful Candidate.

ASSESSMENT TOPICS

The following topics are covered in the Certified Locator Assessment:

- locating equipment
- scope of work
- BYDA enquiry launched
- work area orientation
- risk assessment
- approach to locating task
- locating overview
- conductive cable locating
- blind search
- nonconductive cable locating
- using sondes
- located utilities
- housekeeping
- reporting
- understanding of how signal is created
- identify signal distortion
- use of current
- verifying accuracy
- ability to read plans

4. ASSESSMENT RULES – PRACTICAL ASSESSMENT

Candidates to acknowledge the following at the start of the assessment:

You are attempting an assessment to obtain DBYD Certification to prove competency.

- You will be asked to locate predominantly in the peak mode for various reasons although any mode may be used at any time as long as you can determine signal trace quality with the various modes.
- Your methods, experience and knowledge are a major contributor to the outcome.
- You have completed the self-assessment and an online theory component and should be able to answer any theoretical questions asked today.
- You will be given an area or scenario to complete this assessment within a timeframe of approximately 2 hours; therefore, some utilities may be excluded.
- This assessment can be extended or aborted at any time at the assessor's discretion if a result can or cannot be achieved within the appropriate time.
- You may leave the designated area if required but are asked to only mark utilities within the designated area.
- You should be supplied with flags, markers or crayon and are not permitted to use paint at any stage.
- The site is considered your site and signs may be placed, providing they comply with local guidelines and a Traffic Management Plan is not required.
- The assessor may at any time follow, watch or ask questions on your procedure, machine settings or techniques as he/she feels required.
- The assessor may also leave you to complete the task, then ask questions upon completion.
- You must present all the required equipment as per the list to achieve a "pass".

EQUIPMENT LIST

Refer Appendix 1

5. LOCATE BASICS

THE FOUR KEY FEATURES OF AN EMF LOCATOR

1. Manual Gain
2. Separate Peak and Null
3. A range of Frequencies. Low, Medium and High.
4. Be able to read Current

These features are required to enable us to provide a reliable electronic location.

THE FOUR STEPS TO A RELIABLE LOCATION

1. Connect. Direct or clamp
2. Confirm. Sweep, determine signal point and identify target by current
3. Trace. Minimise gain adjustments and check Peak/Null
4. Sanity Check. Trace to a known end.

AS-5488 QUALITY LEVELS

1. QL-A Verified Potholed +/- 50mm
2. QL-B Reliable electronic location. 300mm Horizontal, 500mm Vertical
3. QL-C Identify buried assets by surface features but not able to achieve QL-B
4. QL-D Identify asset in the vicinity by plans but not able to achieve QL-B

GAIN

1. Gain must be manual, not automatic.
2. Set to 50-60%
3. When gain changes it is telling you something.
4. Change of direction or depth.
5. A split or tee in the target.

PEAK / NULL

1. Allows us to determine if we have a round signal or a distorted signal.
2. Tells us if we can give an accurate depth.
3. If Peak and Null do not align we have a distorted signal and should not give a depth.
4. Allows us to determine true location of the target. Half the distance between the Peak and Null and transfer outside the Peak.
5. ALWAYS check Peak and Null before placing a mark.

WEAK OR POOR SIGNAL

- Weak or Poor signal is different to distorted signal.
- It is identified by the displayed signal not being steady.
- The audible signal will also be erratic.

Always start at the lowest frequency likely to give a good signal and at the lowest signal output.

- If the signal is weak or poor
- Increase the signal output one level at a time
- If this doesn't correct it go back to the lowest signal output and up to the next Frequency

SIGNAL TRACE FREQUENCIES

1. Low Frequency – Typically 8 kHz and lower - Low frequencies are best for Direct Connection.
2. Medium Frequency – Typically 33kHz - Medium frequencies are best for the Induction Clamp.
3. High Frequency – Typically 65kHz and higher - High frequencies are best for Spill Induction / Drop Box method of applying signal.

CURRENT

1. We read it in milli amps mA
2. It is used to determine the target. Highest mA.
3. Used to identify branch line or tees.
4. We want to achieve Maximum current for best signal flow.

TO INCREASE CURRENT

1. Reduce resistance - e.g. water on earth stake, use bigger earth stake, connect bigger target (largest cable size)
2. Increase voltage - Increase transmitter output.

ACTIVE METHODS OF LOCATING

1. Why? Because we apply the signal using the transmitter
2. They are:
 1. Direct Connect
 2. Clamp
 3. Induction

PASSIVE METHODS OF LOCATING

1. We use only the receiver
2. We detect naturally occurring noise.
3. We can only determine conductive assets
4. We cannot identify them.

Caution! Power Passive does not necessarily identify power cables.

WORK TO A PROCESS

1. Where is the jobsite
2. Obtain BYDA (essential) and any other plans or anecdotal information
3. Clarify work area with client
4. Walk and inspect work area looking for signs of buried assets.
5. Check all plans and prioritise them
6. Locate everything you can to QL-B
7. Identify that which is QL-D
8. Complete active and passive sweeps
9. Complete Asset Location Report and go over with the client

PLANS ARE NOT 100% ACCURATE

1. Never take plans as the truth. They are a guide.
2. Always compare what the plan says to what you see and let your locator discover the truth.
3. Open every pit.

APPENDIX 1: EQUIPMENT LIST



To undertake the practical assessment, you must present with the following equipment*. Failure to do so will result in the assessment being aborted and the participant will incur the cost of re-assessment (\$695 + GST).



1. Complete BYDA Plans for the assessment location ordered in the candidate's name (complete print outs in **colour** on A3 or loaded onto an at least 10-inch tablet)



2. Photo ID and construction white card



3. EMF locating instrument must be serviced, maintained, and calibrated as required by the manufacturer with the following minimum requirements:

- Multiple frequencies (min of 1 Low, 1 Medium & 1 High Frequency)
- At least one sonde frequency
- Three active modes, Direct Connect, Inductive Clamp and Spill Induction
- Two passive modes, Radio and Power
- Separate Peak and Null Modes
- Be able to read Current Measurement
- Manual Gain control



4. Multiple Frequency Transponder Locator



5. 4 Gas detector with sniffer hose.

- Combustibles (LEL)
- Oxygen (O)
- Carbon Monoxide (CO)
- Hydrogen Sulphide (H2S)



6. Traceable duct rodding equipment and a sonde suitable for rodding a communication duct and at a frequency to suit EMF Locator



7. Induction Clamp Extension Handle (recommended 2m length and non-conductive handle)



8. Pair of Telstra Manhole guards



9. Telstra Manhole keys



10. Minimum of 4 X 450 mm witches hats



11. Telstra pit seal breaker tool



12. Applicable safety management signs



13. Site record document, Asset location report or similar



14. Safety documentation (Take 5, JSA, SWMS)



15. First aid kit



16. Hi Vis workwear or vest and work boots

* Please contact us if you are travelling by plane and we will discuss exceptions to this list.

APPENDIX 2: COMPLAINTS AND APPEALS POLICY

DBYD Certification Ltd (DCL) recognises the need for Candidates, staff and other clients to have confidence that the Organisation will deal with grievances in a fair and equitable manner based on procedures that are appropriate, accessible and easily understood.

DCL has a duty of care in ensuring Candidates undertake assessments in an environment free of coercion, unfair treatment, or harassment.

Nothing in these procedures limits the rights of individuals to take action under Australia's Consumer Protection laws.

DCL is constantly reviewing and updating policies, as a grievance helps us to fix a problem and assists with continuous improvement.

COMPLAINT OR APPEAL:

A complaint would generally be directed at the general performance of DCL or its staff in the delivery of our services.

An appeal would generally be directed at the assessment outcome and/or assessment process.

Candidates are required to submit a complaint or appeal in writing.

A complaint or appeal will be dealt with promptly. All complaints will be dealt with by the CEO and contact will be made within 10 working days to arrange a time to discuss your complaint or appeal.

Candidates will be provided with a written outcome on their case including the rationale for the decision. If a Candidate is satisfied with the resolution, agreed actions will be implemented and the complaint or appeal will be closed.

If a Candidate is not satisfied with the outcome and the above processes are not effective in resolving the issue, then a suitable person or panel (determined by the CEO) may be engaged to aid in the resolution of the issue.

GROUNDINGS FOR APPEAL

An application for appeal will be considered where:

1. A Candidate claims a disadvantage because the Assessor did not provide an assessment outline
2. A Candidate claims disadvantage because the Assessor varied without consultation or in an unreasonable way the assessment requirements as specified in the subject outline
3. A Candidate claims disadvantage because assessment requirements specified by the Assessor were unreasonably or prejudicially applied to him or her
4. A Candidate is of the view that a clerical error has occurred in the documenting of the assessment outcome
5. A Candidate claims disadvantage because the Assessor did not follow the guidelines as per Assessor instructions on assessment instrument

RECORD KEEPING:

A written record of all complaints handled under this procedure and their outcomes will be maintained for a period of five years. These records will remain with the Candidates file and cannot be accessed without a written request to the CEO.

If the appeal for re-assessment is proven, DCL will appoint an alternative Assessor who will make all necessary arrangements to conduct the re-assessment of the Candidate at a time that is mutually convenient for all parties concerned at no cost to the Candidate.