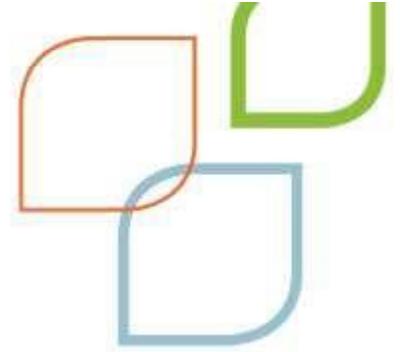




MUNICIPAL
PROPERTY
ASSESSMENT
CORPORATION



METHODOLOGY GUIDE

VALUING PITS AND QUARRIES IN ONTARIO

Valuation Date: January 1, 2016

OCTOBER 2024



MUNICIPAL PROPERTY ASSESSMENT CORPORATION

October 30, 2024

The Municipal Property Assessment Corporation (MPAC) is responsible for accurately assessing and classifying property in Ontario for the purposes of municipal and education taxes.

In Ontario, property assessments are typically updated on a four-year assessment cycle. In 2016, MPAC updated the assessments of every property in Ontario to reflect the legislated valuation date of January 1, 2016. Due to the COVID-19 pandemic, the Ontario government postponed the planned 2020 Assessment Update, directing that property assessments for the 2021-2024 property tax years will continue to be based on fully phased-in January 1, 2016 base-year values. However, MPAC continues to review properties during non-Assessment Update years as properties are built, modified or demolished, or to reflect classification or tax liability changes.

MPAC is committed to provide Ontario property owners, municipalities and all its stakeholders with the best possible service. As part of this commitment, MPAC has defined three levels of valuation information in support of its delivery quality and transparent assessed values. This Methodology Guide is the first level of information disclosure, which explain assessment methodology and valuation process for pit and quarry properties.

In 2023, the Assessment Review Board (ARB) released a decision on outstanding appeals which impacted the assessed values and classification of pit and quarry properties across Ontario. MPAC worked to apply the recommendations outlined in this decision to ensure consistent assessments and stability for property owners and municipalities. More recently (September 25, 2024), the Minister of Finance filed O.Reg 370/24 to amend section 2 of O.Reg. 282/98 to add and establish a new property class called the Aggregate Extraction property class, pertaining to pit and quarry properties. This amendment is applicable to 2025 and subsequent tax years only.

Originally published in 2016, this guide has been revised to reflect changes to methodology as directed by the ARB decision, specifically how licenced areas of pit and quarry properties are classified. MPAC is making this methodology guide available to ensure the approach taken by MPAC to update values is well documented and in alignment with industry standards.

Property owners can access additional information about their own properties through aboutmyproperty.ca. Login information for aboutmyproperty.ca is provided on each Property Assessment Notice mailed. Additional information about MPAC can be accessed at mpac.ca.

Sincerely,

A handwritten signature in black ink, appearing to read "Greg Martino". The signature is fluid and cursive, with the first name "Greg" and last name "Martino" clearly distinguishable.

Greg Martino, M.I.M.A.
Vice-President and Chief Valuation & Standards Officer

Table of Contents

1.0 INTRODUCTION	5
1.1 PROPERTIES COVERED BY THIS METHODOLOGY GUIDE	5
1.2 LEGISLATION	6
1.3 CLASSIFICATION	6
1.4 CASE LAW & CLASSIFICATION.....	8
1.5 CASE LAW & VALUATION.....	10
1.6 THE USE OF THIS METHODOLOGY GUIDE.....	11
1.7 CONSULTATION AND DISCLOSURE	11
2.0 THE VALUATION PROCESS	13
2.1 OUTLINE.....	13
2.2 APPROACH.....	13
2.3 DATA COLLECTION.....	14
2.4 DATA ANALYSIS.....	16
2.5 VALUATION	17
2.6 VALIDATING THE RESULTS	17
3.0 THE VALUATION	18
3.1 COST APPROACH OVERVIEW	18
3.2 LAND VALUATION	18
3.3 BUILDING AND SITE IMPROVEMENTS.....	19
3.4 ESTABLISHING COST NEW.....	20
3.5 DEDUCTING DEPRECIATION AND/OR OBSOLESCENCE	21
3.6 CURRENT VALUE CONCLUSION.....	22
3.7 QUALITY CONTROL.....	22
3.8 CONCLUSION	22

1.0 Introduction

The Municipal Property Assessment Corporation (MPAC) – mpac.ca – is responsible for accurately assessing and classifying all property in Ontario for the purposes of municipal and education taxation.

In Ontario, property assessments are typically updated on the basis of a four-year assessment cycle. In 2016, MPAC updated the assessments of Ontario’s nearly five million properties to reflect the legislated valuation date of January 1, 2016. Due to postponement of the 2020 Assessment Update, assessments updated for the 2016 base year remain in effect for the 2017–2024 property tax years.

It is important to ensure that the valuation methodology applied is aligned with the legislative framework for estimating current value at the relevant valuation date, which, in turn, enables all stakeholders to understand the valuation process and have confidence in the fairness and consistency of its outcome.

This Methodology Guide has been prepared to support MPAC assessors as well as to inform property owners and their representatives, municipalities and their representatives, Assessment Review Board members, provincial officials, and the general public on the process MPAC has followed to arrive at current values assessments for these properties.

This guide outlines the valuation process to be followed by an assessor, including steps that require application of appraisal judgment. It is incumbent upon the assessor to make informed decisions throughout the valuation process to ensure estimates of current value are reflective of market conditions as of the valuation date.

1.1 Properties Covered by This Methodology Guide

This Methodology Guide applies to properties with pits and quarries in Ontario. A pit or quarry is where aggregate (i.e., sand, stone and gravel) is extracted. The following MPAC property codes are used to categorize the various types of pits and quarries in Ontario:

- 228 Farm with gravel pit
- 593 Gravel pit, quarry, sand pit

It should be noted that these are general guidelines that may vary depending on the specific circumstances of a particular property.

An assessor may also make reference to additional Methodology Guides for properties that do not fall precisely within the description of one of the property codes listed above.

1.2 Legislation

The main legislation governing the assessment of properties in Ontario for property tax purposes is contained in the *Assessment Act*.¹

The *Act* contains important definitions and states what property is taxable and how it should be valued. Section 19(1) requires that the land be assessed at current value, which is to mean, in relation to land, “the amount of money the fee simple, if unencumbered, would realize if sold at arm's length by a willing seller to a willing buyer;” Land as defined in the *Act* includes “all mines, minerals, gas, oil, salt quarries and fossils in and under land;”

Section 3(1)20 of the *Act* provides an exemption from taxation for mineral land and minerals including “the buildings, plant and machinery in or on the land only to the extent and in the proportion that the buildings, plant and machinery are used for obtaining minerals from the ground, and all minerals that are in, on or under land.”

In 2008, the *Assessment Act* was amended to exempt **all** minerals from taxation. As a result, paragraph 20 of Section 3(1) of the *Assessment Act* provides an exemption from taxation for “the buildings, plant and machinery under mineral land and the machinery in or on the land only to the extent and in the proportion that the buildings, plant and machinery are used for obtaining minerals from the ground, and all minerals that are in, on or under land.”

Prior to 2008, the *Act* provided exemption for “all minerals, other than diatomaceous earth, limestone, marble, peat, clay, building stone, stone for ornamental or decorative purposes, or non-auriferous sand or gravel that are in or under land.”

The Minister of Finance filed Ontario Regulation 430/15 on December 18, 2015, which added additional rules affecting the valuation and classification of properties on which a third-party sign (billboard) is located. To comply with the regulation, the income attributable to a third-party sign will not be included in the valuation of any property for assessment purposes.

1.3 Classification

Classification

MPAC's role is to accurately assess and classify all properties in Ontario in accordance with the *Assessment Act* and regulations established by the Government of Ontario. The classification of pits and quarries are covered in various sections of Ontario Regulation 282/98².

¹ <https://www.ontario.ca/laws/statute/90a31>.

² <https://www.ontario.ca/laws/regulation/980282>

Property Classes

Subsection 7(1) of the *Assessment Act* states that “the Minister shall prescribe classes of real property for the purposes of this Act.”

Subsection 7(2) states “the classes prescribed by the Minister shall include, but are not restricted to, the following:

1. The residential property class.
2. The multi-residential property class.
3. The commercial property class.
4. The industrial property class.
5. The pipeline property class.
6. The farm property class.
7. The managed forests property class.

All properties are classified according to their use, and O. Reg. 282/98 sets out how various property uses are classified. Gravel pits, quarries and sand pits are classified in the following property classes as prescribed by the Minister:

- aggregate extraction property class
- farm property class
- residential property class
- managed forests property class

Aggregate Extraction Property Class

On September 25, 2024, the Minister of Finance filed [O.Reg. 370/24](#) to amend the above section to add and establish a new property class called the Aggregate Extraction Property Class.

The Aggregate Extraction Property Class consists of the following land:

- The portion of land that is licensed or required to be licensed under Part II of the *Aggregate Resources Act* and that is used to carry out aggregate extraction activities (e.g., privately-owned land).
- The portion of land that is licensed or required to be licensed under Part II of the *Aggregate Resources Act* if the land were in part of Ontario designated under section 5 of the Act and that is used to carry out aggregate extraction activities (e.g., Crown land).
- Roadways and structures on a portion of land that is licensed or required to be licensed

under Part II of the *Aggregate Resources Act* if the roadway or structure is used in connection with aggregate extraction activities on a portion of land that is licensed or required to be licensed under Part II of that Act.

This new regulation defines aggregate extraction activities to include:

- Extracting anything from the earth
- Excavating
- Processing extracted or excavated material
- Stockpiling extracted or excavated material
- Stockpiling overburden

**The Aggregate Extraction Property Class applies to the 2025 and subsequent taxation years only.*

Farm Property Class

Farm properties are classed in the farm property class or the residential property class. Section 8 of O. Reg. 282/98 sets out what is included in the farm property class. If the property is farmed but does not meet the criteria of the farm property class, the property would be placed in the residential property class.

Residential Property Class

Section 3(1)3 includes in the Residential Property Class “the portion of land that is licensed or required to be licensed under Part II of the *Aggregate Resources Act* that is not in the farm property class or the industrial property class.”

As stated above, the exemption from taxation for minerals, which includes sand, stone and gravel, is contained in Section 3(1)20 of the *Assessment Act*.

Classification is based on use, so if a portion of the property is used for other purposes, it may be necessary to apportion the total value of the property between the various uses to ensure that the appropriate tax rate is applied to the relevant parts of the property.

1.4 Case Law & Classification

The Assessment Review Board issued an interim decision in March 2021:

County of Wellington v Municipal Property Assessment Corporation, Region 22, 2021 Can LII26723 (ON ARB), <https://canlii.ca/t/jf4bm>).

The Board issued a final decision in October 2021:

October 2021 (County of Wellington v Municipal Property Assessment Corporation, Region 22, 2021 CanLII 101834 (ON ARB), <https://canlii.ca/t/jjr2m>).

In those decisions, the Board found that all lands within the licensed areas of the six subject properties are lands within the Residential property class, except:

- land that is being farmed and is eligible for the Farm Property Tax Class Program, as determined by the Agriculture, Farm and Rural Affairs Appeal Tribunal (“AFRAAT”). Such land is the farm property class;
- land that is occupied by berms as required by the subject license issued by the Ministry of Natural Resources and Forestry (“MNR”). Such land is in the industrial property class.
- land that is being excavated or extracted or land that has been excavated or extracted, but not yet rehabilitated. Such land is in the industrial property class;
- land that is used for movement of machinery, vehicles, trucks, equipment, stackers, screening machinery, either mobile or stationary that is related to excavating, extracting, processing and stockpiling (the ‘activities’). Such land is in the industrial property class;
- land that is used for processing of aggregate material that is extracted from the subject licensed area or that has been extracted from another property, including the area occupied by machinery related to washing or screening, either mobile or stationary, the areas of access to that machinery, the area comprised of ponds designated for settling, the area comprised of ponds used for the source of water for washing or any lands used by trucks and other vehicles involved in any of the activities. Such land is in the industrial property class;
- roadways that are used at any time in connection with any of the activities, either exclusively or non-exclusively. Such land is in the industrial property class;
- buildings, structures either permanently or temporarily on the property used partially or exclusively for in connection with the activities. Such land is in the industrial property class.
- For each source with inlet pumps, one(1) acre of the pond per pump, regardless of the pond’s size, is in the industrial property class.
- Where there is active extraction below the water table, a five (5) metre ‘halo’ will be applied to the outer edge of the pond being actively extracted. This five (5) metre ‘halo’ is in the industrial property class. The remainder of the pond created by below water extraction is in the residential property class.
- Land that has been fully extracted, is not being used for extraction or stockpiling, but has

not been re-habilitated, is in the residential property class.

Divisional Court Appeal

MPAC and the owners sought and obtained leave to appeal the Board's decision on the classification issue only. In February 2023, the Divisional Court dismissed the appeal, holding that the Board's decision to be correct in law.

1.5 Case Law & Valuation

In Paragraph 80 of its March 29, 2021 Interim Decision³, the Assessment Review Board outlined the following points of consideration that should be taken into account when valuing land associated with pits and quarries:

- current value should be based on sales (either of the subject, or of comparable properties);
- there was un-refuted testimony from the operators of the six Subject Properties' gravel pits indicating that any value based on General Industrial Zoning is far too high to represent the price they would pay (in accordance with the definition of current value) for land to be used for gravel extraction;
- gravel pits are unique in Ontario and through legislation they are set apart from other land uses by both the [ARA](#), which bestows upon them rights and obligations related to the specific use, as well as the [Act](#) which sets them apart with respect to valuation by distinguishing the value of the aggregate itself from the cost of the land. These are important distinctions and they do not apply to any other land use in the Province (including General Industrial use). Therefore, the only properties that can be reasonably compared, that share the uniqueness of gravel pits, are other gravel pits;
- none of the County's comparable properties used to compare with the Dufferin Pit and the Capital Pit were gravel pits. The proposed comparable properties were not "land with similar function and utility" to the six Subject Properties;
- the County urged the Board to consider 'locational value' and 'enterprise value' as separate components when determining current value.
- the Board finds that 'locational value' would be a consideration of the sale value. Therefore, it would not be appropriate to add as a separate component.
- as to 'enterprise value', the Board accepts and adopts MPAC's response that the Board is determining the value of land. Enterprise value is not land, therefore not a component to be considered; and

³ <https://cpta.org/wp-content/uploads/Country-of-Wellington-v.-MPAC-ID-167894-Gravel-Pits.pdf>
© Municipal Property Assessment Corporation 2016 All rights reserved

- the Board does not agree that the formula developed and adopted by MPAC is reasonable. This approach to assessment applies an agreed-to value, based on marginal farmland rates in the County. There was no evidence at the hearing to suggest only marginal farmland is purchased for the purpose of developing land as gravel pits. This approach does not demonstrate the values established in sales transactions for lands being developed for gravel pits, as required when applying the cost approach to value. Nor does it meet the definition of current value in the [Act](#).

1.6 The Use of This Methodology Guide

This Methodology Guide is intended to:

- Ensure MPAC's assessed values for these properties are accurate, predictable and transparent.
- Provide direction to assessors and clarity to municipalities, taxpayers and Assessment Review Board members on the process undertaken by MPAC to value these properties.
- Ensure that MPAC's methodology for valuing these properties is well documented and aligns with industry standards.
- Provide guidance and considerations to assessors in the decision-making process when valuing these properties.
- Ensure a consistent approach to valuing these property types.
- Support MPAC's assessors in conducting their due diligence in:
 - applying Ontario's legislation and regulations.
 - adhering to industry standards for market valuation in a mass appraisal environment.

While this Methodology Guide provides the legislative framework and outlines industry standards, best practices and other valuation considerations for the determination of property assessments for these properties, it is not intended to be a substitute for the assessor exercising judgment in arriving at a market value-based assessment (i.e., current value) for a particular property. Where individual property circumstances suggest a change from what has been noted in this guide, the assessor should document their rationale including all relevant information considered to arrive at their conclusion.

1.7 Consultation and Disclosure

MPAC is committed to providing municipalities, taxpayers and all its stakeholders with the best possible service through transparency, predictability and accuracy. In support of this commitment, MPAC defined three levels of disclosure as part of its delivery of the 2016

province-wide Assessment Update.

- **Level 1** – Methodology Guides explaining how MPAC approached the valuation of particular types of property
- **Level 2** – Market Valuation Reports explaining how the methodology outlined in Level 1 has been applied at the sector level for the purposes of each assessment
- **Level 3** – Property Specific Valuation Information available to property taxpayers, their representatives and municipalities

2.0 The Valuation Process

The valuation process always begins with a determination of the highest and best use of the subject property.

Reliance upon this guide is made only after the assessor has determined that the highest and best use of the subject property is that of a pit or quarry.

Assessors determine the value of a property using one of three different approaches to value:

- the direct (sales) comparison approach
- the income approach
- the cost approach

2.1 Outline

In the **direct (sales) comparison approach**, value is indicated by recent sales of comparable properties in the market. In considering any sales evidence, it is critical to ensure that the property sold has a similar or identical highest and best use as the property to be valued.

In the **income approach** (or, more accurately, the income capitalization approach), value is indicated by a property's revenue-earning power, based on the capitalization of income. This method requires a detailed analysis of both income and expenditure, both for the property being valued and other similar properties that may have been sold, in order to ascertain the anticipated revenue and expenses, along with the relevant capitalization rate.

In the **cost approach**, value is estimated as the current cost of reproducing or replacing improvements of the land (including buildings, structures and other taxable components), less any loss in value resulting from depreciation. The market value of the land is then added.

MPAC uses the cost approach to value pits or quarries. This approach separately values improvements and land to produce a current value for the property.

2.2 Approach

There are three main phases in the valuation process used by MPAC:

- data collection
- analysis of the data collected
- valuation

2.3 Data Collection

The data required for gravel pit and quarry valuations come from a number of sources:

- MPAC conducts periodic inspections of pits and quarries.
- MPAC sends land use questionnaires to owners of pits and quarries.
- MPAC collects information about sales and transfers of gravel pits and quarries.
- MPAC collects information about sales and transfers of lands in the vicinity of gravel pits and quarries.
- A number of guides and other published information about pits and quarries.
- Available resources including aerial imagery.

MPAC generally collects the following types of data for pits and quarries:

- general data
- financial data through consultation with Ontario Stone, Sand & Gravel Association (OSSGA)
- property description
- sales data for lands in the vicinity of the subject property
- aerial imagery

Land

The pit or quarry site may be categorized according to the following uses:

- extraction
- future extraction
- depleted
- farm

Site Improvements

Site improvements may include:

- exterior access roads
- interior access roads
- berms
- fencing
- tunnels

Building Improvements

Building improvements may include:

- screening plants
- hoppers
- conveyors
- wash plants
- tanks
- weigh scales
- electrical rooms
- office
- garage
- transformer station

The land will be measured in terms of its size in acres. Buildings will normally be measured in square feet.

MPAC will record details not only of the size and capacity of the buildings and structures, but also their age, condition and use.

MPAC will either prepare a plan of the site and buildings or obtain one from the site operator. The site plan will identify all the different buildings, structures and other improvements by a reference number for ease of identification.

These reference numbers will be used in the valuation of the pit or quarry to ensure that all parts of the property are properly included in the current value assessment.

Confidentiality

As outlined above, it is important to be aware that, in order to enable MPAC to produce an accurate valuation of the property concerned, information needs to be obtained from a variety of sources.

This will include information from MPAC's records, from the owner or operator of the property, from the municipality in which the property is located, from the assessor's visit to the property, and from other sources including available imagery.

All stakeholders in the property assessment and tax system have an interest in ensuring that the current value provided by MPAC is correct; in order to achieve this, it is necessary for all parties to cooperate in the provision of information.

MPAC acknowledges that some of the information outlined above may be of a commercially sensitive nature. To that end, MPAC takes significant measures to ensure that any information provided to it is properly safeguarded and only used for the purpose for which it is supplied. Assessors must appreciate the nature of this undertaking and ensure data is treated accordingly.

The *Assessment Act* outlines in Section 53(2) that disclosed information may be released in limited circumstances "(a) to the assessment corporation or any authorized employee of the corporation; or (b) by any person being examined as a witness in an assessment appeal or in a proceeding in court involving an assessment matter."

MPAC will only release of actual income and expense information, or other sensitive commercial proprietary information, if instructed to do so by the Assessment Review Board in accordance with the requirements noted above. In those instances, the usual practice is to require the person seeking the information to bring a motion before the Assessment Review Board (ARB), with notice to the third parties, requesting that the ARB order production of the requested information. The release of such information is at the discretion of the ARB.

2.4 Data Analysis

Having carried out the data collection outlined previously, the assessor needs to analyze it and reach a conclusion regarding how it should be applied using the cost approach to value.

The cost approach for pits or quarries has the following main steps:

1. Determine the land value for the pit or quarry complex.
2. Determine reproduction cost new (RCN) of the pit or quarry buildings and structures.
3. Determine physical depreciation of the pit or quarry buildings and structures.
4. Determine functional obsolescence for the pit or quarry buildings and structures.
5. Determine external obsolescence for the pit or quarry buildings and structures.
6. Determine net improvement value for the pit or quarry buildings and structures.
7. Determine RCN of the pit or quarry site improvements (yard work).
8. Determine physical depreciation of the pit or quarry site improvements.
9. Determine functional obsolescence for the pit or quarry site improvements.
10. Determine external obsolescence for the pit or quarry site improvements.
11. Determine net improvement value for the pit or quarry site improvements.
12. Add values for other purposes (e.g., excess land).
13. Determine current value assessment.

2.5 Valuation

Having undertaken the necessary steps outlined above, the assessor should now be in a position to apply the appropriate valuation model.

2.6 Validating the Results

Once the assessor has completed the valuation, it is necessary to carry out a series of checks to ensure that all relevant parts of the property have been included in the valuation, there has been no double-counting of any adjustments made for depreciation, the resulting valuation has been compared with any market evidence that may be available in relation to similar properties and the final valuation is in line with the valuation of other similar properties in Ontario.

3.0 The Valuation

3.1 Cost Approach Overview

The theory behind the cost approach to value follows the principle of substitution: the value of a property is equal to the amount it would cost to replace it with a substitute of equal utility.

There are two main tasks in estimating current value using the cost approach: valuing the land and valuing the improvements.

The sum of land value plus depreciated improvement value is the estimated current value of the real estate at the subject location.

3.2 Land Valuation

The determination of land values for pits and quarries can be broken into two steps:

- Determine the value of the raw land.
- Determine the costs associated with obtaining the necessary zoning and licencing needed to permit extraction.

Raw Land Value

The first step of the land valuation process involves the determination of the value of the raw land. A pit or quarry is typically located in rural areas. A potential purchaser may compete for large tracts of land with other market participants in the vicinity of the subject property.

As the sand, stone or gravel is exempt from taxation, when arriving at the value of the raw land, the assessor must be careful to exclude the contributory value of the aggregate. It is recommended that assessors disregard sales of pits and quarries when they are estimating the value of the raw land, as the value of the sand, stone or gravel may be reflected in the sale price.

As a basis for the value of the raw land, the assessor makes reference to the sales of lands in the vicinity of the pit or quarry.

Zoning and Licencing Costs

The second step involves the determination of what costs are associated with converting raw land into land where extraction of aggregates is permitted.

The following list contains many of the steps required before any extraction may occur:

- official plan amendment
- zoning bylaw amendment
- licence application to the Ministry of Natural Resources
- consulting fees
- hydrogeology study
- environment impact study
- archaeological assessment
- noise and vibration study
- traffic impact study

The costs will vary depending on the locations of the pits and quarries. In order to determine the costs of each requirement, the assessor should consult with both the owners of the subject properties and the municipalities where the subject properties are located.

The current value of the land is equal to the value of the raw land plus the cost of obtaining permission to extract aggregate.

3.3 Building and Site Improvements

Improvement value is established in four steps:

- Collect the physical and descriptive data about the pit or quarry. Inspect the buildings, structures and other improvements, quantify areas, note conditions and analyze their utility.
- Quantify the building areas from plans and layouts, or, if necessary, during the property inspection.
- Using MPAC's automated cost system (ACS), estimate the reproduction cost new of the assessable improvements as of the valuation date.

- Deduct from the reproduction cost new value an amount reflecting all forms of depreciation, which may include:
 - physical deterioration (age-life depreciation)
 - functional obsolescence (curable and incurable)
 - external obsolescence (economic and locational obsolescence)

The resulting value will be an estimate of the contribution of the improvements to the current value of the subject.

Note that the assessor gathers information about both the nature of the improvements and the way in which they are used. The assessor talks to the operator of the pit or quarry to ensure he or she understands how the improvements are used and their efficiency.

3.4 Establishing Cost New

Three approaches can be used to establish cost new:

- Historical Construction Cost – actual costs indexed to the valuation date, which may be useful for relatively new buildings or structures (up to 5–10 years)
- Reproduction Cost Techniques – applied in the valuation of most buildings or structures and obtained from cost manuals, such as the Automated Cost System (ACS) developed for MPAC
- Replacement Cost Techniques – may be applied when estimating the cost of a modern facility that is different than the existing pit or quarry and may be used in connection with quantifying any functional obsolescence

The assessor will select the most relevant option for the subject property depending on its functional utility. MPAC will use reproduction cost new (RCN) as the starting point for the valuation.

3.5 Deducting Depreciation and/or Obsolescence

Depreciation may include physical deterioration due to age, condition and/or use of the property. Depreciation may also include obsolescence.

Obsolescence reflects the abnormal depreciation that arises in some properties due to functional and/or externally generated economic problems.

Functional obsolescence can be the result of numerous factors, including poor or outdated designs, inadequate areas, excess operating costs, etc.

Obsolescence is not related to the age of the buildings and site improvements but to their ability to adequately perform the intended functions.

The assessor asks the following question when determining a property's obsolescence: "Could the existing facility be replaced with a more modern, efficient substitute, and if so, what would constitute this modern facility?"

The assessor must have knowledge of current trends and building and structure designs for pits or quarries to recognize obsolescence. Functional obsolescence can usually be recognized through poor design and layout, poor or inferior construction, unused areas, and the existence of excess operating costs.

External obsolescence results from a change of circumstances outside the control of the pit or quarry operator.

This could be a large-scale factor such as economic recession or a change in the price/value of the aggregate, or a more localized factor such as a change in the local transportation infrastructure, which makes the location of the pit or quarry less attractive and less valuable.

A variety of methods can be used to quantify depreciation. A description of these methods is outside of the scope of this Methodology Guide. However, while it is important to quantify all aspects of depreciation, it is equally important not to double count for the same aspect of depreciation.

After the amount and degree of depreciation have been determined and quantified, if any, the end result should reflect the reproduction cost new of the building and site improvements less any depreciation (RCNLD) found in the present improvements.

3.6 Current Value Conclusion

Adding the value of the land plus the value of the depreciated building and site improvements produces the current value of the property based on the cost approach.

The final step in the process is to consolidate a current value assessment for the property. Once the determination of value has been completed following the cost approach, the assessor will consider whether there is any other value in the real estate that has not been captured by the analysis.

3.7 Quality Control

Having arrived at the value of the pit or quarry through the above process, MPAC assessors will check the outcome of the valuation to ensure no errors have been made and that the value is in line with the valuation of other similar pits or quarries in Ontario.

3.8 Conclusion

This guide sets out how MPAC assessors approach the valuation of pits and quarries for property assessment purposes.

While guide provides the assessor with a general approach for the valuation of these properties that is aligned with industry standards and best practices, it is not intended to be a substitute for the application of the assessor's judgement in arriving at market-based assessments when individual property circumstances warrant it. In such cases, the assessor should clearly and satisfactorily outline their assumptions, supporting documentation and conclusions.