2018 ASSESSMENT METHODOLOGY

COST APPROACH

A summary of the methods used by the City of Edmonton in determining the value of residential and non-residential properties valued using the cost approach in Edmonton for assessment purposes.

edmonton.ca/assessment

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Scope

This guide is an aid in explaining how properties are valued for assessment purposes.

The guide is intended as a tool; it is not intended to replace the assessor's judgment in the valuation process.


This icon signifies when legislation is quoted.

Introduction

Property assessments in the City of Edmonton are prepared in accordance with the requirements of the *Matters Relating to Assessment and Taxation Regulation*, Alta Reg 220/04, (hereinafter "*MRAT*"). This regulation establishes the valuation standard to be used, defines the procedures to be applied, and proposes objectives for the quality to be achieved in the preparation of assessments. The legislation requires the municipality to prepare assessments that represent *market value* by application of the *mass appraisal process.* All assessments are expected to meet quality standards prescribed by the province in the regulation.

In summary, property assessments represent:

- an estimate of the value
- of the fee simple estate in the property
- as it existed on December 31, 2017
- would have realized if it had been sold on July 1, 2017
- on the open market and under typical market conditions
- from a willing seller to a willing buyer

The assessment is a prediction of the value that would result when those specific, defined conditions are met.

> *"Fee simple interest [is] absolute ownership unencumbered by any other interest or estate…leased fee interest [is] the ownership interest held by the lessor, which includes the right to the contract rent specified in the lease plus the reversionary right when the lease expires….leasehold interest [is] the interest held by the lessee (the tenant or renter) through a lease conveying the rights of use and occupancy for a stated term under certain conditions."*
>
> Appraisal Institute of Canada, ***The Appraisal of Real Estate Third Canadian Edition***, Vancouver, Canada, 2010, page 6.4.

Both *market value* and *property,* along with additional terms are defined in the *Municipal Government Act*, RSA 2000, c M-26 (hereinafter the "*MGA*") and *MRAT* :

*s.284(1)(r) "**property**" means*

(i) a parcel of land

(ii) an improvement, or

(iii) a parcel of land and the improvements to it

MGA .s.284(1)(r)

*s.1(k) "**regulated property**" means*

(i) land in respect of which the valuation standard is agricultural use value,

(ii) designated industrial property, or

(iii) machinery and equipment

MRAT s.1(k)

*s.9(1) the **valuation standard** for the land and improvements is market value unless subsection (2)… applies*

MRAT s.9(1)

*s.1(1)(n) "**market value**" means the amount that a property, as defined in section 284(1)(r), might be expected to realize if it is sold on the open market by a willing seller to a willing buyer*

MGA s.1(1)(n)

*s.5 An assessment of property based on **market value***

(a) must be prepared using mass appraisal,

(b) must be an estimate of the value of the fee simple estate in the property, and

(c) must reflect typical market conditions for properties similar to that property

MRAT s.5

s.289(2) Each assessment must reflect

*(a) the characteristics and physical condition of the property on **December 31** of the year prior to the year in which a tax is imposed*

MGA s.289(2)(a)

*s.6 Any assessment prepared in accordance with the Act must be an estimate of the value of a property on **July 1** of the assessment year*

MRAT s.6

*s.1(g) "**mass appraisal**" means the process of preparing assessments for a group of properties using standard methods and common data and allowing for statistical testing*

MRAT s.1(g)

Mass Appraisal

Mass appraisal is the legislated methodology used by the City of Edmonton for valuing individual properties, and involves the following process:

- properties are stratified into groups of comparable properties
- common property characteristics are identified for the properties in each group
- a uniform valuation model is created for each property group

> *31(c) "**valuation model**" means the representation of the relationship between property characteristics and their value in the real estate marketplace using a mass appraisal process*
>
> *MRAT s.31(c)*

The following two quotations indicate how the International Association of Assessing Officers distinguishes between mass appraisal and single-property appraisal:

> *... "single-property appraisal is the valuation of a particular property as of a given date: mass appraisal is the valuation of many properties as of a given date, using standard procedures and statistical testing."*
>
> *... "Also, mass appraisal requires standardized procedures across many properties. Thus, valuation models developed for mass appraisal purposes must represent supply and demand patterns for groups of properties rather than a single property."*
>
> *Property Appraisal and Assessment Administration*, pg.88-89.

For both mass appraisal and single-property appraisal, the process consists of the following stages:

	Mass Appraisal	Single Appraisal
Definition and Purpose	Mass appraisal is used to determine the assessment base for property taxation in accordance with legislative requirements	The client specifies the nature of the value to be estimated, including rights to be valued, effective date of valuation, and any limiting conditions
Data Collection	Mass appraisal requires a continuing program to maintain a current database of property characteristics and market information.	The extent of data collection is specific to each assignment and depends on the nature of the client's requirements
Market Analysis	Mass appraisal is predicated on highest and best use	Market analysis includes the analysis of highest and best use
Valuation Model	Valuation procedures are predicated on groups of comparable properties	Subject property is the focus of the valuation. The analysis of comparable properties is generally six or less
Validation	The testing of acceptable analysis and objective criteria	The reliability of the value estimate is more subjective. Acceptability can be judged by the depth of research and analysis of comparable sales

Valuation Models

A valuation model creates an equation of variables, factors and coefficients that explains the relationship between estimated market value and property characteristics.

An assessed value is calculated by applying the appropriate valuation model to individual properties within a group.

*s.31(a) "**coefficient**" means a number that represents the quantified relationship of each variable to the assessed value of a property when derived through a mass appraisal process*

*(b) "**factor**" means a property characteristic that contributes to a value of a property;*

*(d) "**variable**" means a quantitative or qualitative representation of a property characteristic used in a valuation model*

***MRAT,** s.31 (a), (b) and (d)*

s.33(3) Information prescribed…does not include coefficients

***MRAT,** s.33(3)*

Valuation Model	● variables are created from property characteristics ● analysis of how variables affect market value ● factors and coefficients are determined ● the resulting valuation models are applied to property characteristics

Property Groups

Property groups can include multi-residential, commercial, and industrial. The general definitions for each group are below. For more detailed definitions for a specific group or sub-group, refer to the applicable Assessment Methodology Guide. For example, if a property is industrial, refer to the Industrial Warehouse Assessment Methodology Guide.

Multi-Residential

Multi-Residential properties include properties with four or more dwelling units, on one legal title, each having one or more rooms accommodating sitting, sleeping, sanitary facilities and a principal kitchen for food preparation, cooking and serving. A common form of a multi-residential property is an apartment building, fourplexes and some townhouses.

Commercial

Commercial properties are designed for general commercial occupancy and used for business activities. They include government and corporate offices, retail properties (for example, shopping centres, stores and restaurants), hotels and motels.

Industrial

Industrial properties are principally used for the processing, manufacturing, servicing or storage of materials, goods and equipment. Industrial properties may include a commercial business for the distribution and sales of materials, goods and services.

Special Purpose

A special purpose property is typically a property that has a limited utility and marketability, (The Appraisal Institute, 2015). Often these properties are purpose built with limited alternative uses. Typically, a special purpose property needs significant investment to be converted to an alternative use, making most conversions financially infeasible. With special purpose properties, it is the property itself, not the use, that is typically unique. Special purpose properties may include churches, schools, manufacturing plants, prisons, museums, legislative buildings, recreational facilities and railway property.

Zoning

Zoning regulates the use and development of a property and is set by Edmonton Zoning Bylaw, No. 12800. For a zone description, refer to the identified account zone found in the Land Assessment Methodology Guide.

> *s.6.123* ***zone:*** *means a specific group of listed Uses and Development Regulations which regulate the Use and Development of land within specific geographic areas of the City...*
>
> ***Zoning Bylaw No. 12800****, 2017, s. 6.123*

For zoning information, please see City of Edmonton Zoning Bylaw, No. 12800.

Effective zoning is applied to reflect the current use of the property. The effective zoning may differ from the actual zoning when the current use differs from the Zoning Bylaw (e.g., a legal nonconforming use).

> *643(1) If a development permit has been issued on or before the day on which a land use bylaw or a land use amendment bylaw comes into force in a municipality and the bylaw would make the development in respect of which the permit was issued a nonconforming use or nonconforming building, the development permit continues in effect in spite of the coming into force of the bylaw*
>
> ***MGA**, s. 643(1)*

Approaches to Value

The most common approaches to determine market value are the direct sales, income, and cost. Each emphasizes a particular kind of market evidence.

Direct Sales Approach	Typical market value (or some other characteristic) is determined by referencing comparable sales and other market data. It is often used when sufficient sales or market data is available. It may also be referred to as the Sales Comparison Approach.
Income Approach	This approach considers the typical actions of renters, buyers and sellers when purchasing income-producing properties. This approach estimates the typical market value of a property by determining the present value of the projected income stream. Often used to value rental or leased property.
Cost Approach	Typical market value is calculated by adding the depreciated replacement cost of the improvements to the estimated value of land. It is often used for properties under construction or when there is limited market data available.

Cost Approach

The Cost approach produces the most accurate assessment for properties that are not actively traded in the marketplace due to their features or use where there is insufficient income and expense data available to effectively apply an income approach, or where the property is under construction. The cost approach rationale is that an informed purchaser will pay no more for a property than the cost of building a similar one.

The cost approach determines the replacement cost new of improvements less depreciation plus land value. The replacement cost is determined using a cost manual. The cost manual is a guide for developing replacement cost and depreciated values for buildings and other improvements. The guide contains indexes of the building cost and determines depreciation tables that are applied to the replacement cost. The City of Edmonton uses the Marshall & Swift Valuation Service which is the most comprehensive database in the marketplace.

The land value of a property is determined using the sales comparison approach.

Replacement Cost New - Depreciation + Land Value = Assessment

Replacement Cost New: *the cost, including material, labor, and overhead, that would be incurred in constructing an improvement having the same utility to its owner as a subject improvement, without necessarily reproducing exactly any particular characteristics*
Glossary for Property Appraisal and Assessment*, p.120*

Depreciation: *loss in value of an object, relative to its replacement cost new*
Glossary for Property Appraisal and Assessment*, p.41*

Sales

Sales information is received from Land Titles. Sales are verified and validated. Validation may include conducting site inspections and interviews, reviewing title transfers (change of ownership), sales validation questionnaires, and secondary data collection sources. The resulting verified and validated sales are used to develop capitalization rates to determine market value in the income approach. ***Sales reflect the condition of a property as of the sale date and thus may not always be equivalent to their assessed value.***

Land

Land is grouped based on its use. Please see the relevant Land Assessment Methodology Guide for more information.

- 2018 Multi Residential Land Assessment Methodology
- 2018 Commercial Land Assessment Methodology
- 2018 Industrial Land Assessment Methodology
- 2018 Agriculture Development and Dual Use Methodology

Improvements

The City uses the following cost manual to determine the replacement cost new of improvements.

- for other-residential improvements – the Marshall and Swift Cost Manual
- for commercial improvements - the Marshall and Swift Cost Manual
- for industrial improvements - the Marshall and Swift Cost Manual
- for special purpose improvements - the Marshall and Swift Cost Manual

Assessment Detail Report

The following are sample assessment detail reports accompanied with corresponding terms that are applicable to the Marshall and Swift (M&S) Cost Manual.

Assessment Detail Report using the Marshall and Swift Manual

Edmonton

Assessment Detail Report

ANNUAL REALTY ASSESSMENT DETAILS 2018

Tax Roll Account 9999999 **Taxation year** 2018 **Date of mailing** 02-JAN-2018 **Date of request** 18-JAN-2018 09:25

Property Address 100 Sample Avenue NW **Property Assessment** **$4,161,000**

Property Details

Unit Of Measure IMPERIAL

Legal Plan: 4460HW Block: 33 Lot: 2
Neighborhood 6110 - CPR IRVINE
Effective Zoning IM - Medium Industrial District
Actual Zoning IM - Medium Industrial District
Lot Size 68,257 Ft2 1.567 Ac **Site Coverage Percent** 69 %

Tax Class / Land Use / Taxable Status

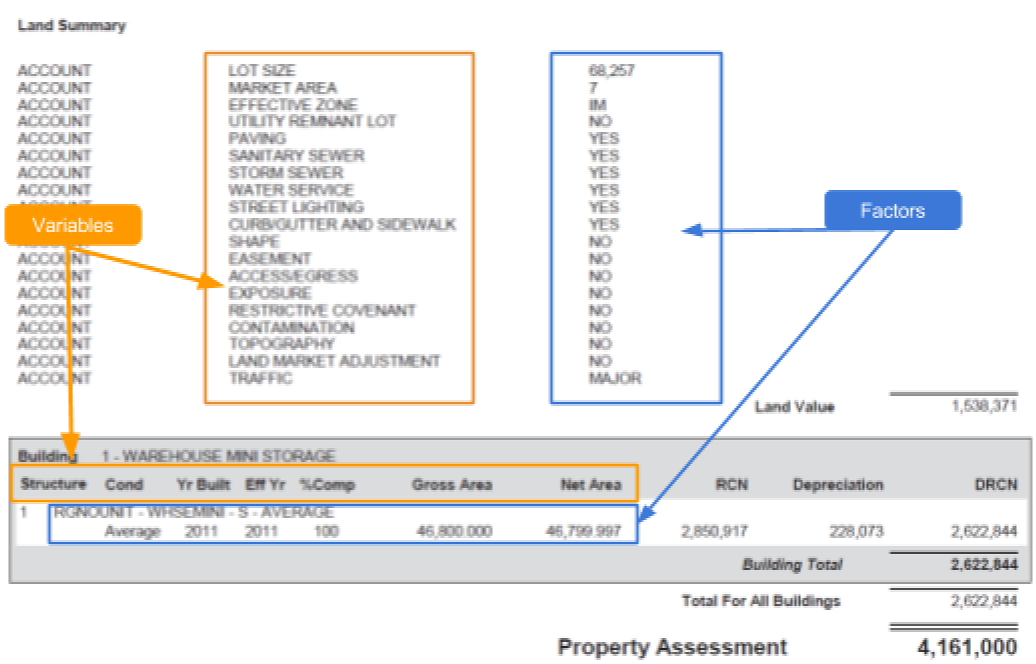
COMMERCIAL
100 % 250 - MINI-WAREHOUSE
01-JAN-2018 To 31-DEC-2018 100 % FULLY TAXABLE

Site Attributes			
Paving	Y	Study Area	99INDAREA13

Building Details

No.	Market Building Class	%Comp	Condition	Yr Built	Eff Yr Built	Gross Area	Net Area
1	WAREHOUSE MINI STORAGE	100	AVERAGE	2011	2011	46,800	46,800

Replacement Cost Summary



Land Summary

ACCOUNT	LOT SIZE	68,257
ACCOUNT	MARKET AREA	7
ACCOUNT	EFFECTIVE ZONE	IM
ACCOUNT	UTILITY REMNANT LOT	NO
ACCOUNT	PAVING	YES
ACCOUNT	SANITARY SEWER	YES
ACCOUNT	STORM SEWER	YES
ACCOUNT	WATER SERVICE	YES
ACCOUNT	STREET LIGHTING	YES
ACCOUNT	CURB/GUTTER AND SIDEWALK	YES
ACCOUNT	SHAPE	NO
ACCOUNT	EASEMENT	NO
ACCOUNT	ACCESS/EGRESS	NO
ACCOUNT	EXPOSURE	NO
ACCOUNT	RESTRICTIVE COVENANT	NO
ACCOUNT	CONTAMINATION	NO
ACCOUNT	TOPOGRAPHY	NO
ACCOUNT	LAND MARKET ADJUSTMENT	NO
ACCOUNT	TRAFFIC	MAJOR

Land Value 1,538,371

Building 1 - WAREHOUSE MINI STORAGE

Structure	Cond	Yr Built	Eff Yr	%Comp	Gross Area	Net Area	RCN	Depreciation	DRCN
1 RGNOUNIT - WHSEMINI - S - AVERAGE									
	Average	2011	2011	100	46,800.000	46,799.997	2,850,917	228,073	2,622,844

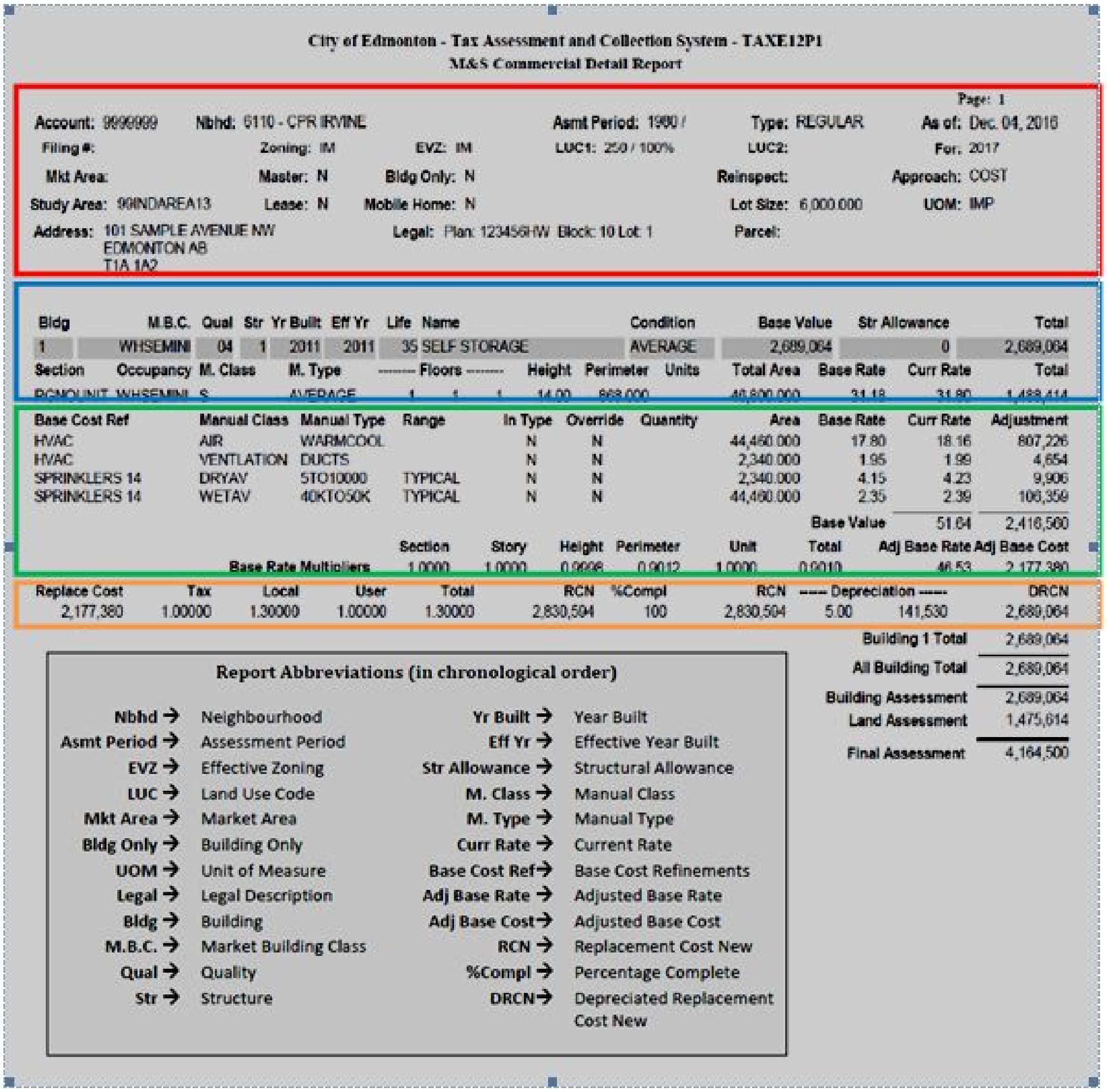
Building Total 2,622,844

Total For All Buildings 2,622,844

Property Assessment **4,161,000**

For more information on definitions please contact Assessment and Taxation Branch, Support and Information Management Services at (780) 442-1495.

Assessment Detail Report using the Marshall and Swift Manual



City of Edmonton - Tax Assessment and Collection System - TAXE12P1
M&S Commercial Detail Report

Part 1

Page: 1

Account: 9999999	**Nbhd:** 6110 - CPR IRVINE		**Asmt Period:** 1900 /	**Type:** REGULAR	**As of:** Dec. 04, 2016
Filing #:	**Zoning:** IM	**EVZ:** IM	**LUC1:** 250 / 100%	**LUC2:**	**For:** 2017
Mkt Area:	**Master:** N	**Bldg Only:** N		**Reinspect:**	**Approach:** COST
Study Area: 99INDAREA13	**Lease:** N	**Mobile Home:** N		**Lot Size:** 6,000.000	**UOM:** IMP
Address: 101 SAMPLE AVENUE NW EDMONTON AB T1A 1A2		**Legal:** Plan: 123456HW Block: 10 Lot: 1		**Parcel:**	

Part 2

Bldg	M.B.C.	Qual	Str	Yr Built	Eff Yr	Life	Name	Condition	Base Value	Str Allowance	Total
1	WHSEMINI	04	1	2011	2011	35	SELF STORAGE	AVERAGE	2,689,064	0	2,689,064

Section	Occupancy	M. Class	M. Type	Floors			Height	Perimeter	Units	Total Area	Base Rate	Curr Rate	Total
RCNOUNIT	WHSEMINI	S	AVERAGE	1	1	1	14.00	868.000		40,800.000	31.18	31.80	1,488,414

Part 3

Base Cost Ref	Manual Class	Manual Type	Range	In Type	Override	Quantity	Area	Base Rate	Curr Rate	Adjustment
HVAC	AIR	WARMCOOL		N	N		44,460.000	17.80	18.16	807,226
HVAC	VENTLATION	DUCTS		N	N		2,340.000	1.95	1.99	4,654
SPRINKLERS 14	DRYAV	5TO10000	TYPICAL	N	N		2,340.000	4.15	4.23	9,906
SPRINKLERS 14	WETAV	40KTO50K	TYPICAL	N	N		44,460.000	2.35	2.39	106,359
								Base Value	51.64	2,416,560

	Section	Story	Height	Perimeter	Unit	Total	Adj Base Rate	Adj Base Cost
Base Rate Multipliers	1.0000	1.0000	0.9998	0.9012	1.0000	0.9010	46.53	2,177,380

Part 4

Replace Cost	Tax	Local	User	Total	RCN	%Compl	RCN	Depreciation		DRCN
2,177,380	1.00000	1.30000	1.00000	1.30000	2,830,594	100	2,830,594	5.00	141,530	2,689,064

Building 1 Total	2,689,064
All Building Total	2,689,064
Building Assessment	2,689,064
Land Assessment	1,475,614
Final Assessment	4,164,500

Report Abbreviations (in chronological order)

Nbhd →	Neighbourhood	Yr Built →	Year Built
Asmt Period →	Assessment Period	Eff Yr →	Effective Year Built
EVZ →	Effective Zoning	Str Allowance →	Structural Allowance
LUC →	Land Use Code	M. Class →	Manual Class
Mkt Area →	Market Area	M. Type →	Manual Type
Bldg Only →	Building Only	Curr Rate →	Current Rate
UOM →	Unit of Measure	Base Cost Ref →	Base Cost Refinements
Legal →	Legal Description	Adj Base Rate →	Adjusted Base Rate
Bldg →	Building	Adj Base Cost →	Adjusted Base Cost
M.B.C. →	Market Building Class	RCN →	Replacement Cost New
Qual →	Quality	%Compl →	Percentage Complete
Str →	Structure	DRCN →	Depreciated Replacement Cost New

Marshall and Swift Commercial Detail Report Definitions

The following definitions are in chronological order of the Marshall and Swift (M&S) Commercial Detail Report.

Part 1

Zoning: Zoning is set in accordance with the Edmonton Zoning Bylaw 12800 and regulates the development of a parcel.

Effective Zoning: Effective zoning is applied to reflect the current use and development of a parcel. The effective zoning may differ from the actual zoning when current use differs from that which is permitted by the actual zoning as subsequently amended by Edmonton Zoning Bylaw 12800 (i.e. legal nonconforming use).

Land Use Code (LUC): LUC defines the use of a property. The amount of a property subject to any specific LUC will be expressed as a percentage (%).

Approach: The M&S Commercial Detail Report indicates the cost approach was used to value the improvement(s) on the property. In appraisal and assessment theory there are three approaches to value; cost, income and direct sales.

Unit of Measure (UOM): UOM is identified as either imperial (IMP) or metric.

Part 2

Building: Identifies the building number. There can be multiple buildings located on a property.

Market Building Class (MBC): MBC indicates the occupancy of the building. Buildings are classified in the M&S Cost Manual by occupancy type.

Quality: Quality of the property refers to the methods and material used in the construction and design of a property (workmanship, complexity of the structure, use of high end or low end materials). Consideration must be given to the fit and finish of the building in relation to its functional requirements. M&S Cost Manual has four primary qualities of construction; low cost(02), average(04), good(05) and excellent(08).

Structure: Identifies the structure number. A building can be made up of various structures. For example, a warehouse building can have multiple structures, such as a warehouse structure and an office structure.

Year Built: Year Built is the actual year of construction.

Effective Year Built: Effective year built is the actual year built adjusted to reflect an addition or significant renovation that extends the improvement's remaining economic life.

Life: Life, or remaining economic life, is the number of years an improvement is expected to last.

Marshall and Swift Commercial Detail Report Definitions, continued

Condition: Condition of a property is rated using the following categories, generally described as:

Poor

· deterioration to a point where major repairs and/or replacements are required;
· typically indicates structural or foundation issues.

Fair

· discernable deterioration;
· deferred maintenance requiring rehabilitation and/or replacement resulting in reduced functional utility.

Average

· normal deterioration for the effective age of the improvements;
· minor repairs or rehabilitation of some components required.

Good

· slight evidence of deterioration in minor components;
· well maintained;
· attractive, desirable, and high utility.

Very Good

· little deterioration;
· well maintained;
· high degree of utility.

Excellent

· state-of-the-art components;
· like new condition.

Base Value: Base Value equals building area multiplied by the base rate from the M&S Cost Manual.

Structural Allowance: Structural Allowance displays a dollar amount attributable to assigned deductions such as additional depreciation (i.e. functional obsolescence).

Total: Total is equal to base value less structural allowance.

Section: Section is a code developed to satisfy system requirements and has no effect on value.

Occupancy: Indicates the occupancy (or MBC) of the structure.

Manual Class: Manual class refers to the type of construction. The M&S Cost Manual has five basic construction groups:

Class A: Fire proofed; protected structural steel frame.
Class B: Reinforced concrete frame in which the columns and beams can be either formed or precast concrete; floors and roofs are formed or precast concrete slabs.
Class C: Masonry (concrete block/brick) or tilt-up concrete panel exterior walls; wood or steel roof and floor structures.
Class D: Generally wood framed; floor and roof structure considered combustible construction.
Class S: Framing, roof, and walls made of incombustible metal; includes pre-engineered metal buildings.

Marshall and Swift Commercial Detail Report Definitions, continued

M. Type : Refers to quality of construction. The M&S Cost Manual has four primary qualities of construction; low cost, average, good, very good and excellent.

Floors: The number of floors in the building.

Height: The average wall height per floor.

Perimeter: Exterior linear measurement of the structure's perimeter. Each structure within a building has its own perimeter.

Total Area: Total area, or gross floor area, is the total floor area per floor contained within the building measured to the external face of the external walls.

Base Rate: Base rate is the M&S Cost Manual rate per square foot or square meter for the occupancy type.

Current Rate: The M&S Cost Manual base rate adjusted to present day or current rate. In the case of base cost refinements, it's the cost of the item adjusted to present day.

Part 3

Base Cost Refinements: Base cost refinements are items that can be included or excluded in the base rate. The costs associated with these adjustments are either added or subtracted from the base rate.

Manual Class: Description of the base cost refinement.

Manual Type: Further description of the base cost refinement.

Range: For some base cost refinements are measured in ranges in the M&S Cost Manual.

In Type: A "Y" (yes) indicates the refinement cost is included in the manual base cost. An "N" (no) indicates that the refinement cost is not included in the manual base cost.

Override: A "Y" (yes) indicates a change or removal of a refinement.

Quantity: For some base cost refinements the adjustment is based on the quantity of the refinement.

Area: For some base cost refinements the adjustment is based on the total area of the refinement.

Base Rate Multipliers: Factors applied to the base rate to adjust for variances in number of stories, wall height, and perimeter.

Marshall and Swift Commercial Detail Report Definitions, continued

Part 4

Section: Section is a code developed to satisfy system requirements and has no effect on value.

Story: An adjustment factor applied when the number of stories exceeds three stories above ground.

Height: An adjustment factor applied when the wall height exceeds typical wall height for that particular occupancy.

Perimeter: An adjustment factor based on building perimeter.

Total: Multiplicative rate of story, height and perimeter base rate multipliers.

Adjusted Base Rate: The adjusted base rate is equal to the base rate multiplied by the total.

Adjusted Base Cost: The adjusted base cost is equal to the total area multiplied by the adjusted base rate.

Replacement Cost: Replacement cost is equal to the adjusted base cost.

Tax: An adjustment factor to account for tax.

Local: An adjustment factor that adjusts the M&S Cost Manual rate (based in the US) to local market costs.

User: An adjustment factor used to account for other influences not included in the M&S Cost Manual rate.

RCN: Replacement Cost New (RCN) is the cost, including material, labor, and overhead, that would be incurred in constructing an improvement having the same utility to its owner as a subject improvement, without necessarily reproducing exactly any particular characteristics. RCN is equal to replacement cost, adjusted for tax and local market costs, before depreciation.

Percent Complete: Percent complete indicates the progression of building construction.

Depreciation: This is the depreciation allowance as calculated by M&S Cost Manual depreciation tables.

DRCN: Depreciated Replacement Cost New (DRCN) refers to the RCN of a building less the depreciation allowance.

Provincial Quality Standards

For Cost Approach properties the City of Edmonton used the cost approach to calculate the 2018 assessments. The assessment models, the process utilized, and the results are submitted annually to the Assessment Services Branch of the Department of Municipal Affairs for audit purposes. This audit is used to determine the accuracy of our predictions relative to the marketplace, and is a direct reflection on the accuracy of our models. The results indicated that our assessments meet Provincial Quality Standards as set out in *MRAT*.

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Revision History

Jan 22, 2018 - Revised Assessment Detail Report - pg 11

Appendix

Measure Conversion Chart

Imperial to Metric – Length	**Imperial to Metric – Area**
1 inch (in) = **2.54** centimetres (cm)	**1** square foot (sqft) = **0.09290** square metre (m^2)
1 foot (ft) = **0.3048** metres (m)	**1** acre (ac) = **4,046.86** square metre (m^2)
Imperial Conversions	**1** acre (ac) = **0.40469** hectares (ha)
1 acre (ac) = **43,560** square feet (sqft)	**Metric Conversions**
1 square mile = **640** acres (ac)	**1** square kilometer (sq km) = **100** hectares (ha)
1 section = **640** acres (ac)	**1** hectare (ha) = **10,000** square metres (m^2)