NEW JERSEY REAL PROPERTY APPRAISAL MANUAL

The State Board of Agriculture directed the New Jersey Department of Agriculture to request that the Division of Taxation modify the Real Property Appraisal Manual for New Jersey Assessors to properly reflect appraisal values for farm buildings. Taxation was asked to review cost data, depreciation and economic obsolescence schedules, and establish a separate category for replacement cost conversion factors for farm buildings.

The Division of Taxation, with assistance from the Department of Agriculture, updated the New Jersey Real Property Appraisal Manual, Farm Building Section. The farm building cost section has been revised to include changes in construction techniques and building materials. In recent years, pre-engineered post and frame structures (PF Series) in large have replaced the traditional masonry and frame structures due to their cost effectiveness in construction. The farm building supplement to the Real Property Appraisal Manual for New Jersey Assessors provides the building specifications and cost schedules. Included in the document are cost conversion tables, depreciation factor tables plus various illustrations and definitions to assist the assessor in calculating replacement costs and accrued deprecation.

The original traditional building costs have been retained in the Manual to accommodate existing structures throughout the state (pages II-108 to II-114). Structures of this type, in most cases, will require functional and economic obsolescence, and if warranted, physical depreciation. To aid the assessor in the valuation of dissimilar structures, a demonstration appraisal (page II-115.2) is included for reference. A separate cost conversion factor has been established for these buildings (this was not included in prior editions of the Manual).

A second part of the farm building section of the Manual is the new section which includes replacement costs using current construction material and methods. The PF Series buildings can be found on pages II 115.1 to II-115.7. The farm building section also includes structures (pages II-115.8-115.9) which traditionally were included in the commercial portion of the Manual. Seed starting plastic greenhouses and single purpose/use agricultural buildings (greenhouses and silos), are included in the Manual.

And finally, the farm building section of the Manual also includes information about "The Business Retention Act" which amends the description of local property to reaffirm the legislature's regularly stated position of excluding machinery, apparatus and equipment used or held for use in business from local taxation.

The Farm Building Section is only a portion of the complete Manual and can not be used by itself in assessing real property on farms. The Manual includes other facets used in an appraisal, such as, the procedures for rural land appraisals, the cost approach, market/income approach, cost conversion factors, etc. The updated Farm Building Section of the Manual, will be published and distributed to local tax assessors for utilization in assessing structures during tax year 2000. Grant funds from the Department of Agriculture will be used by Taxation for printing of the document for distribution to tax assessors and any unused funds will be set aside to update the Manual in the future. Copies of the Manual are available from Property Administration, Division of Taxation, for a fee of \$28 (this includes shipping, handling and updates). Contact Taxation at (609) 984-3466 for ordering information. Copies may be available at local property tax assessors' offices, local libraries and the county tax board offices.

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INTRODUCTION

The following is an updated version of the Agriculture Farm Building Costs. This section of the New Jersey Real Property Appraisal Manual has been revisited to include changes in construction techniques and building materials. In recent years pre-engineered post and frame structures in large have replaced the traditional masonry and frame structures due to their cost effectiveness in construction. This supplement of the Real Property Appraisal Manual for New Jersey Assessors provides the specifications and cost approach to value. Contained in this issue are cost conversion tables, depreciation, depth factors tables plus various illustrations and definitions to assist the assessor in classifying and calculating replacement costs.

Included in this publication are the original traditional building costs to accommodate existing structures throughout the state. The section is contained on the pages II-108 to II-114 and is comprised of class 150 through class 156, no changes have been made to this section. Structures of this type, in most cases, will require functional and economic obsolescence, and if warranted, physical deprecation.

To aid the Assessor in the valuation of dissimilar structures a demonstration appraisal on page II-115.12 is included for reference. It should be noted that while the base year of 1975 is still the starting point, a separate farm conversion factor (F-1) has been established for these buildings.

In the second part of this handbook, a new section has been added which includes replacement values using current construction material and methods. Post and frame style buildings are the "PF" series which encompass categories 157 through 163 found on pages II-115.1 to II- 115.7. Alternative cost tables and adjustment sections are based on local material and labor costs prevailing throughout New Jersey as of October 1998. To efficiently use this section, the assessor must be familiar with all the cost schedules herein and should be proficient with the appraisal procedures outlined in Volume I of the Handbook. Additionally, since this manual is in a format suitable for computerization, accuracy and uniformity in the use of all cost data is absolutely essential.

A new section covering Greenhouses and/or Seed Starting Houses is also included as a handbook revision on page II-115.8 and II-115.9. While historically these structures were addressed in the commercial portion of the Appraisal Manual, updated values are now provided for farm based buildings. Square foot costs are current as of October 1998 and the cost conversion factor of F-2 is to be employed when appraising these building.

In the appraisal of farm buildings, the assessor must be familiar with all the recent legal and statutory rules governing the taxation of farm structures. Of particular concern in this area are the "single use" structures, which are exempt from taxation. 54:4-23.12 defines a single use agricultural or horticultural facility which is exempt from taxation. All other structures, whether used for agricultural or horticultural purposes, residential use or otherwise, must be valued, and taxed by the same standards applicable to all other taxable structures in the taxing district.

The Business Retention Act

P.L. 1992, c24, "The Business Retention Act", amends the description of local taxable property to reaffirm the Legislature's regularly stated position of excluding machinery, apparatus and equipment used or held for use in business from local taxation.

The law amends subsection b. of R.S.54:4-1 to specify that items of machinery, apparatus or equipment used in the conduct of a business are defined as personal property regardless of the class or type of real property to which such items may be affixed. Such items are defined as locally taxable real property only if they constitute a structure, as defined in the law, or are primarily used to enable a structure to support, shelter, contain, enclose or house persons or property. Examples of machinery, apparatus or equipment which enable a structure to house persons or property, and which are therefore locally taxable, include central heating or air conditioning systems, elevators, suspended ceilings, affixed partitions, plumbing and plumbing fixtures connected to a plumbing system, overhead lighting, sprinkler systems, piping and electric wiring up to the point of connection with a manufacturing process within the structure, and a central hot water system or the boiler primarily used to supply it.

54:4-1.15. Definitions - Business Retention Act

"Machinery, apparatus or equipment" means any machine, device, mechanism, instrument, tool, tank or item of tangible personal property used or held for use in business.

"Production process" means the process commencing with the introduction of raw materials or components into a systematic series of manufacturing, assembling, refining or processing operations and ceasing when the product is in the form in which it will be sold to the ultimate consumer.

"Structure" means any assemblage of building or construction materials fixed in place for the primary purpose of supporting, sheltering, containing, enclosing or housing persons or property.

"Used or held for use in business" means any item of machinery, apparatus or equipment used or held for use in a business transaction, activity, or occupation conducted for profit in New Jersey.

54:4-23.12. Valuation, assessment and taxation of structures

All structures, which are located on land in agricultural or horticultural use and the farmhouse and the land on which the farmhouse is located, together with the additional land used in connection therewith, shall be valued, assessed and taxed by the same standards, methods and procedures as other taxable structures and other land in the taxing district, regardless of the fact that the land is being valued, assessed and taxed pursuant to P.L.1964, c. 48 (C. 54:4-23.1 et seq.); provided, however, that the term "structures" shall not include "single-use agricultural or horticultural facilities." As used in this act, "single-use agricultural or horticultural facility" means property employed in farming operations and commonly used for either storage or growing, which is designed or constructed so as to be readily dismantled and is of a type which can be marketed or sold separately from the farmland and buildings and shall include, but not be limited to, temporary demountable plastic covered framework made up of portable parts with no permanent under-structures or related apparatus, commonly known as seed starting plastic greenhouses, or other readily dismantled silos, greenhouses, grain bins, manure handling equipment, and impoundment's, but shall not include a

- structure that encloses a space within its walls used for housing, shelter, or working, office or sales space, whether or not removable.
- The Director of the Division of Taxation shall adopt, in consultation with the Secretary of Agriculture and in accordance with the "Administrative Procedure Act," P.L.1968, c. 410 (C. 52:14B-1 et seq.), rules and regulations establishing criteria for the assessment of all farm structures.
- In the valuation and assessment of farm structures the assessor shall consider those indications of value which such structures have under the same value applicable to all other real property. Assessors shall take into consideration the following criteria for the establishment of value:
- Cost less depreciation: Based on the premise that the cost new of the structure is the highest possible value. Costs may include in addition to materials and labor, architect, engineering and permit fees, surveys and site improvement costs. From the highest possible value are deducted accrued depreciation, physical deterioration and functional and economic obsolescence.
- Alteration to existing structures: The cost of alterations or modernization to an
 existing farm structure does not necessarily add to building value. Where major
 alterations or modernization definitely increases or adds to the value of the farm
 structure, the percentage appreciation is determined by estimating the probable
 increase in sales value or the increase in remaining economic life of the building.
- Specialized nature of building use: Farm structures are designed and built for specific production uses. Knowledge of building types, construction quality, useful life and utilization is important in determining value. Comparisons should be made with like structures.
- Depreciation: The physical condition of agricultural buildings should be compared to the near perfect condition of similar new buildings, based on inspection of all components. A depreciation schedule for farm structures shall be used in the assessment of the physical condition of a building.
- Obsolescence: This is loss of value due to internal or external deficiencies.
 - Functional obsolescence is loss in value due to the inability of the structure to perform adequately the function it was intended for. Functional obsolescence would result if a building has limited contribution to a farming operation by being technologically obsolete, such as a dairy barn with 30 stall stanchions when today's standard is larger free stall structures with milking parlors. Or being unusable for the purpose for which it was built.
 - Economic obsolescence of a structure with a specialized agriculture use is loss in value as a result of impairment in utility and desirability caused by factors outside the properties boundaries. For example dairy farming has generally been unprofitable for New Jersey Farmers, therefore farm structures design for milk production have limited value even though said structures are physically usable.
 - Municipal zoning: Ordinances or codes may limit the use of a farm structure to agricultural purposes. Consideration should be given to the permitted uses of a structure. The proximity of a farm structure to a farm dwelling shall also be considered since the valuation of both buildings may be adversely impacted

Class 150 General Purpose Barns

AVERAGE QUALITY MATERIALS AND WORKMANSHIP

BASE SPECIFICATIONS

1) Roof: Gable or Gambrel,

5) Floors: Dirt, Hayloft with

Composition

Part Concrete, Part

Shingle or Equivalent

2) Foundation: Masonry Walls or

Equivalent

6) Plumbing: Minimum Number of

Outlets Water

Wood Flooring

3) Exterior Wall: Wood Siding on

Wood Frame, Concrete Block or equivalent 7) Lighting:

None

4) Interior Finish: Stall Partitions,

Feed Storage

and Equipment Rooms

8) Other Items: None

BASE COST PER CUBIC FOOT

10,000	<u>15,000</u>	20,000	30,000	<u>50,000</u>	<u>75,000</u>	<u>100,000</u>	<u>150,000</u>
\$0.45	\$0.40	\$0.35	\$0.35	\$0.35	\$0.30	\$0.30	\$0.30
		10. 1.0 1	1 77	-	11' 1 0	12. 1.2.1	1 1 20

For Low Quality, multiply by .75

For High Quality, multiply by 1.30

NOTES:

Depreciation: For High Quality - Table D-III, Average Quality - Table D-II, Low Quality Table D-I

CLASS 151 LIVESTOCK BARNS

AVERAGE QUALITY MATERIALS AND WORKMANSHIP

BASE SPECIFICATIONS

Gable or Gambrel, Wood 1) Roof:

5) Floors:

Concrete Slab or Equivalent

Shingle or Equivalent 2) Foundation:

Masonry Walls or Equivalent

6) Plumbing:

Adequate Number of Outlets Water

3) Exterior Walls: Concrete Block, Wood Siding 7) Lighting:

on Wood Frame or Equivalent

Conduit Wiring with

Minimum Number of

Fixtures

4) Interior Finish: Stanchion and Stalls;

Feed Room and Storage Rooms

8) Other Items: None

BASE COST PER CUBIC FOOT

Without Loft

10,000	<u>15,000</u>	<u>20,000</u>	30,000	50,000	<u>75,000</u>	100,000	<u>150,000</u>
\$0.70	\$0.65	\$0.60	\$0.60	\$0.55	\$0.55	\$0.50	\$0.50

With Loft

<u>10,000</u>	<u>15,000</u>	20,000	30,000	50,000	<u>75,000</u>	<u>100,000</u>	<u>150,000</u>
\$1.10	\$1.00	\$0.95	\$0.90	\$0.85	\$0.80	\$0.80	\$0.75
				_			

For Low Quality, multiply by .70

For High Quality, multiply by 1.40

NOTES:

Depreciation: For High Quality - Table D-III, Average Quality - Table D-II, Low Quality Table D-I

CLASS 152 FARM SHED AND OUTBUILDINGS

AVERAGE QUALITY MATERIALS AND WORKMANSHIP

BASE SPECIFICATIONS

1) Roof: Gable or Shed Type,

5) Floors: Concrete Slab or Softwood

Composition Shingle

or Equivalent

2) Foundation: Masonry Walls or Equivalent

6) Plumbing: None

3) Exterior Walls: Wood Siding on Wood Frame, 7) Lighting: Conduit Wiring with

Concrete Block or Equivalent Minimum Number of

Fixtures

4) Interior Finish: None 8) Other Items: None

BASE COST PER SQUARE FOOT GROUND AREA

<u>100</u>	<u>150</u>	<u>200</u>	<u>400</u>	<u>600</u>	<u>1,000</u>	<u>2,000</u>	<u>3,000</u>
\$7.75	\$6.75	\$6.50	\$6.00	\$5.55	\$5.40	\$5.40	\$4.70

For Low Quality, multiply by .75 For High Quality, multiply by 1.25

NOTES:

Depreciation: For High Quality - Table D-III, Average Quality - Table D-II, Low Quality Table D-I

CLASS 153 POLE BARNS/EQUIPMENT SHEDS

AVERAGE QUALITY MATERIALS AND WORKMANSHIP

BASE SPECIFICATIONS								
1) Roof:	Gable or Shed Type, Metal or Aluminum or Wood Frame	5) Floors:	None					
2) Foundation:	Creosoted Poles	6) Plumbing:	None					
3) Exterior Walls:	Corrugated Metal or Aluminum on Wood Framing	7) Lighting:	Minimum	Conduit Wiring with Minimum Number of Fixtures				
4) Interior Finish:	None	8) Other Items:	None					
	BASE COST PER SO	OUARE FOOT GROU	ND AREA					
<u>500</u> <u>1,000</u>	1,500 2,000	<u>2,500</u> <u>3,000</u>	3,500	<u>4,000</u> <u>5,000</u>				
\$4.65 \$4.13	\$3.85 \$3.75	\$3.65 \$3.60	\$3.55	\$3.50 \$3.45				
For Low Qua	For Low Quality, multiply by .75 For High Quality, multiply by 1.25							

NOTES:

Depreciation: For High Quality - Table D-III, Average Quality - Table D-II, Low Quality Table D-I

CLASS 154 HORSE STABLES

AVERAGE QUALITY MATERIALS AND WORKMANSHIP

PACE CDECIFICATIONS

DASE SI EC	IFICATIONS	
* *** O	5) Elegan	

1) Roof: Gable or Shed Type, Concrete Slab or 5) Floors: Average Quality Roofing

Wood in Storage

Rooms

2) Foundation: Masonry Walls or Equivalent 6) Plumbing:

Water Outlets Only

3) Exterior Walls: Stucco on Wall or Block, Wood Siding on Wood Frame, 7) Lighting:

Conduit Wiring with Minimum Number of

Concrete Block or Equivalent

Fixtures

Storage Rooms, Wood

8) Other Items:

None

or Concrete Block **Stall Partitions**

BASE COST PER SQUARE FOOT GROUND AREA

<u>1,000</u>	<u>2,000</u>	3,000	<u>4,000</u>	<u>5,000</u>	<u>7,500</u>	<u>10,000</u>	12,500	<u>15,000</u>
\$9.85	\$8.75	\$8.25	\$7.90	\$7.75	\$7.60	\$7.50	\$7.20	\$7.00

For Low Quality, multiply by .55 For High Quality, multiply by 1.50

NOTES:

4) Interior Finish:

Depreciation: For High Quality - Table D-III, Average Quality - Table D-II, Low Quality Table D-I

CLASS 155 POULTRY HOUSES

AVERAGE QUALITY MATERIALS AND WORKMANSHIP

BASE SPECIFICATIONS									
1) Roof:	Comp	or Shed Tyosition Shing or Equiv	ngle		5) Floors:	First Floor, C Slab; Upper F Wood		
2) Foundation: Masonry Walls or Equivalent) Plumbing:	Water Outlets	ets Only	
3) Exterior Wood Siding on Wood Frame, Concrete Walls: Block or Equivalent					e 7) Lighting:	Conduit Wirit Minimum Nu Fixtures	_	
4) Interior Minimum Partitioning Finish:						Other ems:	None		
		BASE C	OST PER	SQUARE I	FOOT (GROUND A	REA		
Number of									
Stories	<u>500</u>	<u>1,000</u>	<u>2,000</u>	<u>3,000</u>	4,000	<u>5,000</u>	<u>10,000</u>	<u>20,000</u>	
1	\$7.80	\$7.25	\$6.45	\$6.15	\$6.00	\$5.90	\$5.60	\$5.50	
2	\$15.20	\$13.65	\$12.95	\$11.70	\$11.4	0 \$11.2	0 \$10.65	\$10.45	
For Lov	w Quality,	multiply b	y .70	For H	ligh Qua	lity, multipl	y by 1.35		

NOTES:

Depreciation: For High Quality - Table D-III, Average Quality - Table D-II, Low Quality Table D-I Cost Conversion Factors: See Page II - 153

Adjustments To Base Specifications: None

CLASS 156A FARM SILOS

AVERAGE QUALITY MATERIALS AND WORKMANSHIP

			BAS	SE SPE	CIFICA	TIONS				
1) Roof:	Nor	ne					5) In	terior Fi	nish:	None
2) Foundation:	Cor	ncrete W	all and F	Footing			6) Pl	umbing:		None
3) Exterior Walls:	Cla	y Tile or	Poured	in Place	Concret	te	7) Li	ghting:		None
·						8) Ot	ther Item	ns:	None	
D II .: -14 20 E-	-4.			BAS	E COST	<u>-</u>				
Base Height 28 Fe o Diameter	et: 10`	12`	14`	16`	18`	20`	22`	26`	30`	36`
Circumference	31`	38`	44`	50`	57`	63`	69`	82`	94`	113`
Wall Type A	\$2560	\$3085	\$3600	\$4115	\$4635	\$5160	\$5695	\$6765	\$7820	\$9315
Add or Deduct for	each 2	` variati	on in He	eight:						
Wall Type A	\$115	\$140	\$160	\$185	\$205	\$230	\$255	\$305	\$350	\$415

Add for Chute, Steel per foot - Height \$7.50

Tile per foor - Height- \$8.50; Add for Lining: Per Sq. Ft. \$1.20

NOTES:

Depreciation Schedules: For All Wall Types - Table D-II Cost Conversion Factors: See Page II-153 - Table - F-1

Adjustments To Base Specifications: None

CLASS 156C FARM SILOS



AVERAGE QUALITY MATERIALS AND WORKMANSHIP

BASE SPECIFICATIONS

1) Roof:	Steel	5) Interior Finish:	None
2) Foundation:	Concrete Pads or Equivalent	6) Plumbing:	None
3) Exterior Walls:	Steel	7) Lighting:	None
4) Floors:	None	8) Other Items:	None

These structures are not assessable for Real Property Taxation Purposes.

These silos are not permanently affixed, they rest on concrete pads and can be easily removed without damage to the structure or to the real property. Under the guidelines of P.L.1993, c.251 (S-15) these structures are exempted under the single purpose agricultural or horticultural use criteria. As such, they must be a single use; must be for storage or growing of an agricultural or horticultural commodity; designed or constructed so as to be readily dismantled; and can be marketed or sold separately from the farmland buildings.

CLASS PF 157 STALL BARNS



AVERAGE QUALITY MATERIALS AND WORKMANSHIP

BASE SPECIFICATIONS

1) Roof:

Gable or Gamble, Average Quality
Roofing, "Rigid" Insulation

5) Floors:
None

2) Foundation: Treated Poles 6) Plumbing: None

3) Exterior Walls: Steel, Two (2) Sliding Doors 7) Lighting: None

4) Interior Finish: None 8) Other Items: None

9) Height: 9-10 Ft.

BASE COST PER S/F

<u>1000</u>	<u>2500</u>	<u>5000</u>	<u>7500</u>	10000	<u>15000</u>
11.03	8.06	7.14	6.81	6.42	6.24

For Low Quality, multiply by .75 For High Quality, multiply by 1.25

NOTES:

Depreciation: For High Quality - Table D-III, Average Quality - Table D-II, Low Quality Table D-I

Cost Conversion Factors: See F-2

CLASS PF 158 HORSE RIDING ARENAS



AVERAGE QUALITY MATERIALS AND WORKMANSHIP

BASE SPECIFICATIONS

1) Roof: Gable or Gamble, Average Quality 5) Floors: None

Roofing, 1' "Rigid" Insulation

2) Foundation: Treated Poles 6) Plumbing: None

3) Exterior Walls: Steel, Two (2) Sliding Doors 7) Lighting: None

One (1) Entry Door

4) Interior Finish: None 8) Other Items: None

9) Height: 15 Ft.

BASE COST PER S/F

<u>5000</u>	<u>7500</u>	<u>10000</u>	<u>15000</u>	<u>20000</u>
7.52	7.11	7.13	7.23	6.92

For Low Quality, multiply by .75 For High Quality, multiply by 1.25

NOTES:

Depreciation: For High Quality - Table D-III, Average Quality - Table D-II, Low Quality Table D-I

Cost Conversion Factors: See F-2

CLASS PF 159 HORSE TURN OUT SHEDS



AVERAGE QUALITY MATERIALS AND WORKMANSHIP

BASE SPECIFICATIONS

1) Roof: Gable, Average Quality 5) Floors: None

Roofing, No Insulation

2) Foundation: Treated Poles 6) Plumbing: None

3) Exterior Walls: Wood, One (1) Side Open 7) Lighting: None

4) Interior Finish: Wood Kick Board Liner - 5 Ft High 8) Other Items: None

9) Height: 9 Ft.

BASE COST PER S/F								
<u>144</u>	<u>288</u>	<u>432</u>	<u>576</u>	<u>720</u>				
18.41	14.71	11.07	9.90	8.94				
For Low Qualit	y, multiply by .75	For High Q	uality, multiply	by 1.25				

For Fully Enclosed Shed Add \$0.95/SF Wall Area

NOTES:

Depreciation: For High Quality - Table D-III, Average Quality - Table D-II, Low Quality Table D-I

Cost Conversion Factors: See F-2

Class PF 160 General Purpose/Hay Barns



AVERAGE QUALITY MATERIALS AND WORKMANSHIP

BASE SPE	CIFICA	ATIONS
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1) Roof: Gable, Average Quality Roofing, 5) Floors: None

Ridge Vent Vented Overhang

No Insulation

6) Plumbing: 2) Foundation: **Treated Poles** None

Steel, One (1) Sliding Door 7) Lighting: 3) Exterior Walls:

One (1) Entry Door

4) Interior Finish: 8) Other Items: None None

BASE COST PER S/F									
SIDEWALL HT.	<u>5000</u>	<u>7500</u>	<u>10000</u>	<u>15000</u>	<u>20000</u>				
16'	6.73	6.52	5.99	6.09	5.80				
20'	7.58	7.25	6.65	6.72	6.39				
For Low Quality,	multiply by .	75	For High	Quality, multipl	y by 1.25				

NOTES:

Depreciation: For High Quality - Table D-III, Average Quality - Table D-II, Low Quality Table D-I

Cost Conversion Factors: See F-2

CLASS PF 161 LIVESTOCK BARNS WITH STORAGE



AVERAGE QUALITY MATERIALS AND WORKMANSHIP

5) Floors:

None

Gambrel, Average Quality Roofing,

DA OF COOK DED CO							
4) Interior Finish:	None	8) Other Items:	None				
3) Exterior Walls:	Steel, Two (2) Sliding Doors One (1) Entry Door	7) Lighting:	None				
2) Foundation:	Treated Poles	6) Plumbing:	None				
	1' Rigid Insulation						

BASE COST PER S/F									
SIDEWALL HT.	<u>2500</u>	<u>5000</u>	<u>7500</u>	10000	<u>15000</u>	<u>20000</u>			
10'	10.90	10.04	9.47	9.63	9.45	9.17			
14'	12.26	11.20	10.59	10.62	10.40	10.08			
For Low Quality, multiply by .75			For High	Quality, multip	ly by 1.25				

NOTES:

1) Roof:

 $Depreciation: For \ High \ Quality \ - \ Table \ D-III, \ Average \ Quality \ - \ Table \ D-II, \ Low \ Quality \ Table \ D-III$

Cost Conversion Factors: See F-2

CLASS PF 162 POULTRY BARNS



AVERAGE QUALITY MATERIALS AND WORKMANSHIP

|--|

1) Roof:	Gable, Averag 1' Rigid Insula		Roofing,	5) Flo	ors:	None	
2) Foundation:	Masonry & Tr	eated Pol	es	6) Plu	mbing:	None	
3) Exterior Walls:	Steel, Two (2) One (1) Entry	Doors	7) Lig	7) Lighting:			
4) Interior Finish:	None			8) Oth	er Items:	None	
		BASE	COST PER S/F				
	2500	5000	7500	10000	15000	20000	

BASE COST PER S/F								
SIDEWALL HT.	<u>2500</u>	<u>5000</u>	<u>7500</u>	<u>10000</u>	<u>15000</u>	20000		
10'	8.19	7.12	6.94	7.07	7.18	6.91		
14'	9.32	8.05	7.68	7.56	7.83	7.51		
For Low Quality, multiply by .75			For Hig	h Quality, multip	oly by 1.25			

NOTES:

 $Depreciation: For \ High \ Quality \ - \ Table \ D-III, \ Average \ Quality \ - \ Table \ D-II, \ Low \ Quality \ Table \ D-III$

Cost Conversion Factors: See F-2

CLASS PF 163 POLE BARNS



AVERAGE QUALITY MATERIALS AND WORKMANSHIP

BASE SPECIFICATIONS									
1) Roof:	*	Gable, Average Quality Roofing,					None		
0) F 1.4'	No Insulatio			() D1	1.	NT			
2) Foundation:	Treated Pole	es			6) Pi	umbing:	None		
3) Exterior Walls:	Steel, One (1	l) Slidir	ng Doors	S	7) Li	ghting:	None		
One (1) Entry Door									
4) Interior Finish:	None				8) O	8) Other Items: N			
BASE COST PER S/F									
<u>SIDEWALL HT.</u> <u>1000</u> <u>2500</u> <u>5000</u> <u>7500</u> <u>10000</u> <u>15000</u> <u>20000</u>									
10'	8.65	6.85	5.88	5.75	5.78	5.91	5.68		
14'	10.25	7.81	6.65	6.58	6.36	6.45	6.18		
For Low Qu	High Quality	, multiply by	1.25						

NOTES:

Depreciation: For High Quality - Table D-III, Average Quality - Table D-II, Low Quality Table D-I

Cost Conversion Factors: See F-2

CLASS GH 164 GREEN HOUSES*

AVERAGE QUALITY MATERIALS AND WORKMANSHIP

BASE SPECIFICATIONS

1) Frame: Steel with Glass Walls and Roof 4) Floors:

None

Not Readily Dismantled

2) Foundation: Concrete/Masonry or Equivalent 5) Plumbing: Minimum Number of Water Outlets

3) Heating: See GH164-02 Series 6) Lighting: Minimum Number of Fixtures

BASE COST PER S/F

CLASS	1000	<u>1500</u>	2000	3000	4000	5000	10000
GH164-01 (Unheated)	27.09	22.57	20.33	18.05	16.95	16.24	14.90
GH164-02 (Heated)	35.52	27.40	24.82	22.27	20.98	20.22	18.68

For Low Quality, multiply by .75

For High Quality, multiply by 1.25

ADJUSTMENTS TO BASE PER SQUARE FOOT OF FLOOR AREA

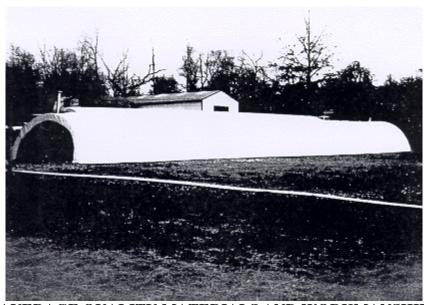
<u>ITEM</u>	LOW	<u>AVERAGE</u>	<u>HIGH</u>
Wood Flooring	2.60	5.07	7.78
Concrete Flooring	1.53	3.07	4.60
Crushed Stone	0.16	0.16	0.16
(\$0.16/SF at 1 inch deep)			

NOTES:

Depreciation: For High Quality - Table D-III, Average Quality - Table D-II, Low Quality Table D-I Cost Conversion Factors: See F-2

*P.L. 1993, c251 includes a provision that readily dismantled greenhouses may be tax exempt if specific criteria are met.

CLASS GH 0000 TEMPORARY SEED/GREEN HOUSES



AVERAGE QUALITY MATERIALS AND WORKMANSHIP

BASE SPECIFICATIONS

1) Frame: De-Mountable Temporary Metal 3) Floors: None

or Wood Frame

2) Foundation: None 4) Cover: Plastic Covered

These structures are not assessable for Real Property Taxation purposes

Under Chapter 70 Laws of 1979 regarding seed starting plastic greenhouses and Charter 251 Laws of 1993 pertaining to single purpose / use agriculture buildings, these buildings are not assessable locally. These protective coverings are designed or constructed to be readily dismantled. Included are the temporary demountable seed starting plastic greenhouses comprised of plastic covered framework of portable parts with no permanent under structures.

AGRICULTURAL ADJUSTMENTS TO BASE

For Low Quality multiply cost by 0.75 For High Quality multiply cost by 1.25

ID CODE	DOORS	AMEDACE				
<u>ID CODE</u>	<u>DOORS</u>	<u>AVERAGE</u>				
PF1	FULL DUTCH	\$569				
PF2	HALF DUTCH	\$406				
PF3	SLIDING	\$722				
PF4	ENTRY	\$396				
PF5	VENT	\$378				
PF6	OVERHEAD	\$8.25/SF				
ID CODE	<u>FLOORS</u>	AVERAGE				
	CONCRETE	\$2.41/SF				
PF7	4 inches REINFORCED	\$2.88/SF				
PF8	6 inches REINFORCED	\$2.00/SF \$0.16/SF				
PF9	STONE (per 1 inch deep)	\$0.10/SF				
ID CODE	WINDOWS	AVERAGE				
PF10	STANDARD	\$170				
PF11	WITH BAR PROTECTION	\$265				
ID CODE	EQUESTRIAN EQUIPMENT	AVERAGE				
PF12	WASH ROOM	\$1,233				
PF13	TACK ROOM	\$1,492				
PF14	FEED ROOM	\$1,492				
	ased on an average size of 10 x 12	+-,				
ID CODE	EQUESTRIAN STALL	<u>AVERAGE</u>				
PF15,	<u> </u>	· · · · · · · · · · · · · · · · · · ·				
	10 Y 10	\$993				
	10 x 10 10 x 12	\$993 \$1.102				
PF16,	10 x 12	\$1,102				
PF16, PF17,	10 x 12 12 x 12	\$1,102 \$1,224				
PF16,	10 x 12	\$1,102				
PF16, PF17, PF18,	10 x 12 12 x 12 STIRRUP GUARDS	\$1,102 \$1,224 \$12.67/LF				
PF16, PF17, PF18, PF19	10 x 12 12 x 12 STIRRUP GUARDS SIDE WALL CURTAINS	\$1,102 \$1,224 \$12.67/LF \$5.30/SF				
PF16, PF17, PF18, PF19	10 x 12 12 x 12 STIRRUP GUARDS SIDE WALL CURTAINS	\$1,102 \$1,224 \$12.67/LF \$5.30/SF				
PF16, PF17, PF18, PF19	10 x 12 12 x 12 STIRRUP GUARDS SIDE WALL CURTAINS LIGHTING TRANSLUCENT PANEL	\$1,102 \$1,224 \$12.67/LF \$5.30/SF AVERAGE \$1.03/SF \$5.68/LF				
PF16, PF17, PF18, PF19 ID CODE PF20,PF21 ID CODE	10 x 12 12 x 12 STIRRUP GUARDS SIDE WALL CURTAINS LIGHTING TRANSLUCENT PANEL WALL or CEILING ELECTRICAL	\$1,102 \$1,224 \$12.67/LF \$5.30/SF AVERAGE \$1.03/SF \$5.68/LF				
PF16, PF17, PF18, PF19 ID CODE PF20,PF21	10 x 12 12 x 12 STIRRUP GUARDS SIDE WALL CURTAINS LIGHTING TRANSLUCENT PANEL WALL or CEILING	\$1,102 \$1,224 \$12.67/LF \$5.30/SF AVERAGE \$1.03/SF \$5.68/LF				
PF16, PF17, PF18, PF19 ID CODE PF20,PF21 ID CODE PF22 PF23	10 x 12 12 x 12 STIRRUP GUARDS SIDE WALL CURTAINS LIGHTING TRANSLUCENT PANEL WALL or CEILING ELECTRICAL Per Outlet Service Panel	\$1,102 \$1,224 \$12.67/LF \$5.30/SF AVERAGE \$1.03/SF \$5.68/LF AVERAGE \$45 \$300 -\$700				
PF16, PF17, PF18, PF19 ID CODE PF20,PF21 ID CODE PF22 PF23 ID CODE	10 x 12 12 x 12 STIRRUP GUARDS SIDE WALL CURTAINS LIGHTING TRANSLUCENT PANEL WALL or CEILING ELECTRICAL Per Outlet Service Panel	\$1,102 \$1,224 \$12.67/LF \$5.30/SF AVERAGE \$1.03/SF \$5.68/LF AVERAGE \$45 \$300 -\$700				
PF16, PF17, PF18, PF19 ID CODE PF20,PF21 ID CODE PF22 PF23 ID CODE PF24	10 x 12 12 x 12 STIRRUP GUARDS SIDE WALL CURTAINS LIGHTING TRANSLUCENT PANEL WALL or CEILING ELECTRICAL Per Outlet Service Panel PLUMBING COLD WATER TAP	\$1,102 \$1,224 \$12.67/LF \$5.30/SF AVERAGE \$1.03/SF \$5.68/LF AVERAGE \$45 \$300 -\$700 AVERAGE \$780				
PF16, PF17, PF18, PF19 ID CODE PF20,PF21 ID CODE PF22 PF23 ID CODE PF24 PF25	10 x 12 12 x 12 STIRRUP GUARDS SIDE WALL CURTAINS LIGHTING TRANSLUCENT PANEL WALL or CEILING ELECTRICAL Per Outlet Service Panel PLUMBING COLD WATER TAP COLD & HOT WATER TAP	\$1,102 \$1,224 \$12.67/LF \$5.30/SF AVERAGE \$1.03/SF \$5.68/LF AVERAGE \$45 \$300 -\$700 AVERAGE \$780 \$1,260				
PF16, PF17, PF18, PF19 ID CODE PF20,PF21 ID CODE PF22 PF23 ID CODE PF24	10 x 12 12 x 12 STIRRUP GUARDS SIDE WALL CURTAINS LIGHTING TRANSLUCENT PANEL WALL or CEILING ELECTRICAL Per Outlet Service Panel PLUMBING COLD WATER TAP	\$1,102 \$1,224 \$12.67/LF \$5.30/SF AVERAGE \$1.03/SF \$5.68/LF AVERAGE \$45 \$300 -\$700 AVERAGE \$780				

NOTE: Other fixtures costs refer to page II-93 of Real Property Appraisal Manual.

ID CODE	<u>HEATING</u>			
	SPACE HEAT,			
PF28	MINIMUM INDUSTRIAL UNIT HEATERS	\$0.50 - \$1.25 PER SF		
ID CODE	<u>INSULATION</u>	<u>AVERAGE</u>		
PF29	RIGID BOARD 1/2 inch	\$0.72/SF		
PF30	FIBERGLASS	\$0.60/SF		
PF31	9 inch FIBERGLASS STEEL			
PF32	INTERIOR CEILING	\$2.42/SF		
ID CODE	MISCELLANEOUS ITEMS	<u>AVERAGE</u>		
PF33	STORAGE LOFTS	\$3.05/SF		
PF34	ROOF SHINGLES (standard 25 years)	\$1.05/SF		
	DEDUCT FOR MISSING WALL			
PF35	COST PER SF OF WALL AREA	\$0.95/SF		
ID CODE	EXTERIOR SIDING (Per SF of Wall Area)	AVERAGE		
PF36	T-111 SIDING or EQUIVALENT	\$0.90/SF		
PF37	CEDAR SIDING or EQUIVALENT	\$2.26/SF		
PF38	WHITE PINE SIDING or EQUIVALENT	\$1.75/SF		
ID CODE	INTERIOR OFFICE FINISH	AVERAGE		
		\$11.99/SF		
PF39	AVERAGE QUALITY			

An introduction to estimating the replacement cost of an existing Livestock Barn, Class 151

The purpose of this demonstration appraisal is to review the cost valuation techniques applicable to the assessment of older type farm buildings that an assessor encounters in reassessment programs. The scope of this report is limited to the cost approach for building replacement value using the original type specifications provided on page II-109 of this handbook.

The steps in the cost approach to the building value are as follows:

- Estimate the replacement cost new of the improvements using the Class 151 cost specifications.
- Estimate functional depreciation by comparing the replacement cost of the original building to the cost of the an alternate structure derived through the PF 161 series buildings. The difference between the replacement cost and the substitution cost from the PF series building is the functional depreciation attributable to the dairy barn.
- Deduct the functional depreciation from the new replacement cost calculated for the Class 151 building.

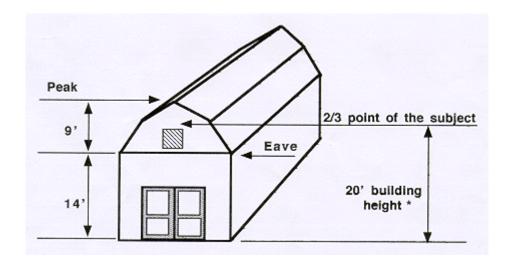
Estimate depreciation from all sources, physical, economic and deduct all accrued depreciation from the improvements to arrive at a present day depreciated cost. The first step listed above (Estimate Reproduction Cost New of the Improvements) is of major concern in this report. This cost is done in a detailed manner to promote an understanding of the appraisal manual and demonstrate its uniform application throughout New Jersey. Class 151 includes all farm buildings having a structural frame of wood with exterior wall of wood and/or concrete block or wood on frame or equivalent. Buildings in this class have a masonry foundation or equal with a concrete slab as the floor. The base specifications for this demonstration of a Class 151 are found in Volume II, page II-109 of the Real Property Appraisal Manual.

For purposes of this demonstration the cost conversion factor of 2.79 for farm buildings series 150 through 156 is found on the 1997 revised cost conversion table. Guidelines for suggested effective age depreciation tables for the subject building are to be found on page II-137.

Procedure for a Livestock Building Appraisal

The base area replacement cost given for this Class 151 is determined in the following manner:

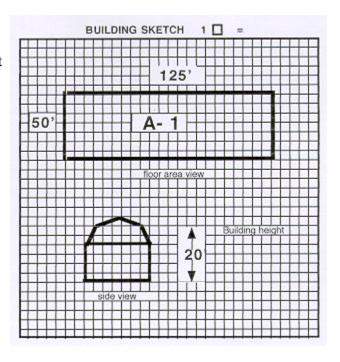
- 1. Measure and calculate the square footage of ground area.
- 2. Establish the standard height factor to be used. In this type of livestock barn with storage and a gambrel roof, the unit cost are based on cubic foot calculations with or without a loft. The building height is determined through the following procedure. The height component is calculated by adding the side wall elevation with two thirds (2/3) of the roof height from the eves to the roof peak.



For the subject building the width of 50×125 of length = 6,250 square feet of floor area. Using a height factor of twenty (20) feet (14' (wall) + 6' (roof)) multiplied by the ground area results in a building volume of 125,000 cubic feet. Note: See step #5

4.

Sketch the building dimensions using a floor view with a side illustration to display the height profile. Clearly label all the dimensions to ensure accuracy in the area calculations.



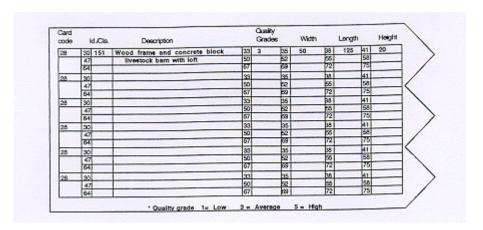
6.

In the note section of the property record card describe the structure, list the building materials, quality of construction, the year built, the observed physical condition and all relevant information that may affect its value.

NOTES
Wood frame, gambrel roof, wood siding, cement floor, unfinished storage loft, 5 water outlet, minimum electric.
livestock barn built in 1943, normal condition
STRUCTURE FLAT ADDS
ACCESSORY FLAT ADDS

For purposes of this demonstration, the selected samples of a property record card were adjusted in size to fit the page dimensions.

8. Under the section of ACCESSORY AND FARM BUILDINGS enter the class identification number, building description, quality grade, width, length and building height.



9. Using the building dimensions derived from the example, calculate the building area and apply the unit costs, quality factors and cost conversion factor to arrive at the RCN (Replacement Cost, New) value of \$279,000. In this demonstration physical curable and incurable depreciation is estimated by using the AGE / LIFE method. The structure is 40 years old, in average condition and has a typical economic life of 60 years.

 $\underline{40}$ years actual = 67% physical depreciation 60 years economic

{Replacement Cost New (\$279,000) X .67 = \$186,930. = physical depreciation

Replacement Cost New \$279,000 Less physical depreciation \$186,930 RCNLD \$92,070

Area	Rate	Quality Factor	Cost	Conv	RCN		Cond	RONLD
125000	.80	11	100,000	2.79	279,000	44	.33	92070
120000	100					81		
				100000		78		
						4.6		
00000000000						61		
						7.8		
			Less functional			44		
			depreciation			6.1		
			-69%			78		- 6352
	100					44		
						81		
			Less coonomic			78		
			depreciation			44		
			- 15% ***			61		- 4281
						7.8		
						44		
	29766					81	_	
						7.8		
			ACCESSORY A	AND FARM	BUILDINGS T	OTAL F	CNLD	24,26

10. Functional obsolescence in the subject property was extracted by comparing the cost new of a traditional 151 livestock barn to a PF series 161. As defined functional obsolescence is an element of accrued depreciation: a defect caused by a flaw in the structure, material or design of the building. The subject building costs out new at \$279,000 in contrast to a PF series of \$86,099. This change in design, building techniques and construction materials reflects the 69% adjustment made for functional depreciation. As per the following example a basic PF 161 livestock barn of 50' X 125' was modified with the additions to base specifications to reflect current day replacement structure for the traditional class 151 building.

Class 151 Reproduction cost new \$279,000

Class PF 161 Replacement cost new -\$86,099

\$192,901 / \$279,000 = 69% functional obsolescence*

RCNLD \$92,070 X .69 = \$63,528 = Deduction for functional elements *

	Area	Rate	Quality Factor	Cost	Cost Conv	RCN		Net Cond	RCNLD
							44		
PF Series 161		10.50		00107	100	66187	61	100	66187
Pole frame	6250	10.59	1	66187	1.00	00187	78	100	00107
50 X 125 X 14 Ht							61		
gambrel roof							78		
built 1997							44		
normal condition							61		
							78		
Additions							44		
4" reinforced		5.00	500000				61	100	45000
concrete floor	625	2.41	1	15062	1.00	15062	78	100	15062
5 Plumbing fixtures	- 5	780	1	3900	1.00	3900	61	100	3900
	- 40	100		450	1.00	450	78	100	450
Lights & outlets	10	45	1	500	1.00	500	44	100	500
Electric panel		500		500	100	: X.K.I	61	- 11.01	- ^ ^ ^
							78		
				ACCESSO	RY AND FARM B	BUILDINGS TO	TAL R	CNLD	86,09

11.

In the subject demonstration a 15 % adjustment was made for economic obsolescence.** Economic obsolescence as defined is an element of accrued depreciation; an incurable defect caused by negative influences outside the property itself. When an Assessor can measure and justify an adjustment for loss in value due to external conditions, then a factor for economic obsolescence is warranted. For example the decline in demand for dairy barns due to the general diminution of dairy farms in New Jersey was reflected in the above adjustment of economic obsolescence

EFFECTIVE AGE DEPRECIATION DEDUCTION TABLE

The following tabulation representation suggested guides for effective age percentage depreciation tables for different types of building construction. Each building class specification indicates the tables which are applicable to the class.

EFFECTIVE AGE IN YEARS	TABLE D	TABLE D-I	TABLE D-II	TABLE D-III	TABLE D-IV	TABLE D-V	TABLE D-VI	TABLE D-VII
1	4.0%	2.5%	2.0%	1.5%	1.5%	1.0%	1.0%	0.5%
2	7.0	4.5	3.5	2.5	2.5	2.0	2.0	1.5
3	11.0	7.0	4.5	3.5	3.0	2.5	2.5	2.0
4	16.0	9.0	6.0	4.5	4.0	3.5	3.5	3.0
5	20.0	11.0	7.0	5.5	4.5	4.0	4.0	3.5
6	22.0	13.0	8.5	6.5	5.5	5.0	5.0	4.5
7	27.0	15.5	10.0	8.0	6.5	6.0	5.5	5.0
8	30.0	17.5	11.0	9.0	8.0	7.0	6.5	6.0
9	34.0	20.0	12.5	10.5	9.0	8.0	7.0	7.0
10	37.5	22.0	14.0	11.5	10.0	9.0	8.0	7.5
11	41.0	24.0	15.5	13.0	11.0	10.0	9.0	8.0
12	44.0	25.5	17.0	14.0	12.0	10.5	9.5	9.0
13	47.0	27.5	18.0	15.5	13.0	11.5	10.5	9.5
14	50.0	29.5	19.5	16.5	14.0	12.5	11.0	10.5
15	52.0	31.0	21.0	18.0	15.0	13.5	12.0	10.5
16	54.0	33.0	22.5	19.0	16.0	14.5	13.0	11.0
17	56.0	34.5	24.0	20.5	17.5	15.5	13.5	12.0
18	58.0	36.5	25.5	21.5	18.5	16.5	14.5	12.5
19	60.0	38.0	27.0	23.0	20.0	17.5	15.0	13.5
20	62.0	40.0	28.5	24.0	21.0	18.5	16.0	14.0
21	64.0	41.5	30.0	25.5	22.0	19.5	17.0	14.5
22	65.0	43.0	32.0	27.0	23.0	20.5	17.5	15.0
23	67.0	45.0	33.5	28.0	24.5	21.5	18.5	16.0
24	68.5	46.5	35.0	29.5	25.5	22.5	19.0	16.5
25	70.0	48.0	36.5	31.0	26.5	23.5	20.0	17.0
26	71.5	49.5	38.0	32.5	28.0	24.5	21.0	18.0

27	73.0	51.0	39.5	34.0	29.0	25.5	22.0	19.0
28	74.5	52.0	41.0	35.0	30.5	26.0	23.0	20.0
29	76.0	53.5	42.0	36.5	32.0	27.0	24.0	21.0
30	77.5	55.0	43.5	38.0	33.0	28.0	25.0	22.0
35		61.0	49.0	44.0	38.5	33.5	29.0	26.0
40		65.0	54.0	47.5	43.0	37.0	33.0	30.0
45		68.0	58.0	50.5	44.5	38.5	34.5	31.5
50		70.0	62.5	53.0	45.5	39.5	35.5	32.5
55		72.0	65.0	55.0	47.0	41.0	37.0	34.0
60		74.0	63.0	57.0	48.0	42.0	38.0	35.0
65		76.0	70.0	59.0	49.5	43.5	39.5	36.5
70		78.0	73.5	60.5	50.5	44.5	40.5	37.5
75			75.5	62.0	52.0	46.0	42.0	39.0
80			78.0	63.0	53.0	47.0	43.0	40.0

NOTE:	Building marked	Fair Physical Condition increase deduction	5%
		Poor Physical Condition increase deduction	10%
		Dilapidated Condition increase deduction	20%
		Unusable and Beyond Repair increase deduction to total of	90%

Type of Building

CLASS OF BUILDING	FRAME	BRICK/ STONE	APARTMENT	HOTEL/ MOTEL	OFFICE	COMMERCIAL/ INDUSTRIAL
105			C-2	C-2	C-2	C-5
106			C-2	C-2	C-2	C-6
107						C-5
108						C-5
109						C-5
123						C-3
124						C-4
125						C-5
126						C-4
127						C-5
133						C-3
134						C-4
135						C-5
136						C-4
137						C-5
145				C-1		
150	F-1	F-1				
151	F-1	F-1				
152	F-1	F-1				
153	F-1	F-1				
154	F-1	F-1				
155	F-1	F-1				
156	F-1	F-1				
PF157	F-2					
PF158	F-2					
PF159	F-2					
PF160	F-2					
PF161	F-2					
PF162	F-2					
PF164	F-2	F-2				F-2

To convert or adjust building construction cost included in this manual to the current local labor and material prices and costs, the appropriate building cost conversion table is used for each respective building class or sub-class type of construction.

BASE COST CONVERSION ITEM FACTOR

Base cost conversion item factors have been calculated for all typical building classes in each building conversion group on the basis of the relative weight or importance of each component building cost items in each building group.

To obtain the building conversion index in the basis of current or future prevailing prices of labor and material in any assessment jurisdiction, the following conversion factors are used for the respective building cost conversion groups described above.