Contents

Completing a Property Record Card	3
Task 1-Recording Information	5
Task 2-Determining the Base Rate	11
Task 3-Determining the Adjusted Base Rate and Replacement Cost	16
Task 4-Calculating the Remainder Value	19
Task 5-Calculating the Improvement Value	21
Task 6-Calculating the Total Non- Residential Improvement Value	23

Tables

Table 5-1.	Condition Ratings for Yard	
Improv	ements	8

Figures

Figure 5-1. Improve	Summary of Non-Residential ements Section4
Figure 5-2.	Columns Completed in Task 16
Figure 5-3.	Improvement Features10
Figure 5-4.	Columns Completed in Task 212
Figure 5-5.	Columns Completed in Task 317
Figure 5-6.	Columns Completed in Task 420
Figure 5-7.	Columns Completed in Task 522

This chapter provides the guidelines for establishing the true tax value of residential yard and agricultural yard structures. This chapter includes guidelines for collecting and recording the physical characteristics of each type of yard structure, the procedures necessary to calculate the replacement cost of each yard structure, and the procedures necessary to calculate the true tax value of each yard structure.

Step-by-step instructions indicate how to enter information about residential and agricultural yard structures in the "Summary of Non-Residential Improvements" section of the property record card. The necessary depreciation tables and cost schedules are provided in *Appendix B* and *Appendix C*.

Residential yard structures include:

- utility sheds
- greenhouses
- tennis courts
- stables
- boat houses
- gazebos
- car sheds
- bath houses

Agricultural yard structures include:

- dairy barns
- feed lots
- silos
- steel grain bins
- granaries
- milk houses
- milking parlors
- tobacco barns
- quonset buildings
- wire corn cribs
- slurry tanks
- lean-tos
- veal confinement facilities

- detached garages
- exterior features valued as yard items
- geothermal heating and cooling systems
- solar heating and cooling systems
- in-ground swimming pools
- above-ground swimming pools
- swimming pool enclosures
- trench and bunker silos
- bank and flat barns
- chicken, duck, and turkey barns
- hog confinement facilities
- poultry confinement facilities
- poultry houses, non-confinement
- frame corn cribs, free-standing type
- frame corn cribs, drive-through type
- potato storage buildings
- butler low-moisture silage silos
- general purpose pole-framed barns and machine sheds

Completing a Property Record Card

The valuation of residential and agricultural yard structures is recorded in the "Summary of Non-Residential Improvements" section of the property record card, shown in *Figure 5-1*. Space is provided in the table to itemize each structure. Each row corresponds to one particular structure. The improvement value of all of the structures is totaled at the bottom of the table.

Note: If the property has more structures than there are rows in this section of the property record card, use an additional card (or cards) to describe those structures.

The steps for completing the property record card for residential and agricultural yard structures are grouped into the following tasks, described in the sections below:

- **Task 1**—Record information about the structure.
- Task 2—Determine the base rate for the structure.
- **Task 3**—Determine the adjusted base rate and replacement cost for the structure.
- Task 4—Calculate the remainder value of the structure.
- Task 5—Calculate the improvement value of the structure.
- **Task 6**—After performing Task 1 through Task 5 for each structure on the property, calculate the total non-residential improvement value for the property.

	Occupancy	Story Height	Attic	Bsmt Craw	Ŧ		IMPROVE	MENT DA	TA AND	COMPUT	ATIONS				
1 Single	Family	0	None	0 None C								=	MPROVEMI	ENT FE.	ATURES
2 Dupley	×		Unfinished	- 11 1 - 10 -								Maj	or Items	Ă	gricultural
5 0 M. Hor	umily me_0	2 Bi-level 3 3 Tri-level 4	3/4 Finished Finished	4 Full 4								C Concr D Dirt Fle	ste Floor oor c Lights	BARNS T / S /	L/P/E/1/D/Q
ĉ	Instruction Ba	ase Area Floor	Finished Living Area	Value								H Heatin	o o	T/P/	LE/C/I
1 Frame or	r Aluminum											L Loft		Slatte	d Floors
2 Stucco 3 Tile												Q Living	Quarters	CORN	CRIB
4 Concrete 5 Metal	e Block											T Type o	f Construction	Free-9	Wire tanding Drive-thru
6 Concrete	I	Attic										Re	sidential	No Ro Floor	of
7 Brick 8 Stone	1	Basement										BOAT H	DUSE	GRAN	RIES
9 Frame w	/Masonry	Crawl	I									Open S	lde	Pole 1	ype
Roofing		TOTAL BASE											C C	GRAIN	BINS - STEEL ter & Height or
Asphalt Shi	ngles	Row-type Adjustme	ant	%								Back-to	-back	QUON	I Capacity SET BUILDINGS
Slate or Tile			SUB-TOTAL									DETACH	IED GARAGE	E / I / Floor:	H Asphalt/Concrete
		Unfinished	Interior [-]									GREEN	HOUSE	SLURF	Y TANKS nd/above ground
Metal		Extra Livinç	3 Units [+]	_								Free St	anding	Plank	//Rectangle Cover/No Cover
Floors	B 1 2	Rec. Room	<u>+</u>									Attache Lean-to	d at End	SILO Condr	ete:
Earth		Loft	±									T/D/0	S/L	Conc Maso	. Stave/Reinfd nry:
Slab		Fireplace	<u>+</u>										NGFUUL	Tile/C Steel:	onc. Blk./Brick
Sub & Joist:	s	No Heating	<u>.</u>									Underv Tile: Ce	rater Lighting ramic/Plastic	Unlin No Ro	ed/Glass Lined of
		Air Conditic	+] buing									Heater		SILOS	H & BUNKER
Wood		No Electric	al Service [-]									Non-rec Concre	stangular Shape le Apron	Depth	
Parquet		Plumbing TE: E -	+ 000 >									TENNIS	COURT		
Tile		11	000 V										SHED		
Carpet		Sporially Blumbing	2) 3				CLIANA DV		JENTIAL	Caam	CACNTO	1/G			
Unfinished		Sillen tomoodo	AL ONE LINE			Story Const Year F		0 210				enterment	Total Remaind	tor %	Nhhd Imnrovement
Interior Fin	iish B 1 2				ID Use	Height Type Grade Const. A	ige Cond. Base Ra	te Features	R L/M	Adj. Rate S	ize or Area	Cost	Depr. Value	Comp	Factor Value
Plaster or D	IN Wall	SUB-TOI	LAL, UNIT	s	01 Dwelling		6								
Paneling		Garages		ī	02									-	
Fiberboard		Integral	E B		- 03										
		Attached G	arage [+		04										
Unfinished		Attached C	arport 1+		05										
No Electrica	Il Service	Extension Footpace	<u>+</u>		90										
Accomoda	tions		PLUT TOTAL		- 07					0		0			
Total Numb	ier of Rooms		aub-IUIAL								Suppleme	ntal Card Re	sidential Impro	ovement T	otal
Bedrooms		 Grade and Design Fat () 	tor	%								otal Resider	Mial Improvem	ant Value	
Family Rool	ε	ADJUSTED SUB-1	TOTAL				SUMMARY OF	NON-RE	SIDENT	IAL IMPR	OVEMEN	TS			
Formal Dini	ing Room	Location Multiplier			D	Story Const. Grade Year E	Eff. Cond Base Ra	e Features	M / 1	Adi. Rate S	ze or Area	eplacement h	lormal Remainde	er Abnorm	Nhbd Improvement
		Replacement Cos	t		5	Height Type Const. 4	de					Cost	Depr. Value	Obs.	Factor Value
		Heating & Air Conditionin	g Plumbing	# TF	5			_						_	
		Central Warm Air	Full Bath		02										
I off Area		Hot Water or Steam	Half Bath		03			_							
	Type	Heat Pump	Kitchen S	ž	04										
Room	Area	No Heat (Gravity/Mall/Space)	Water He.	ater	05								_		
Fireplace	Stacks	Central Air Cond.	Extra Fixt	sem	90										
□ Masonry		Extra Living Conversion #		TOTAL	Data Collector / D.	ate	Appraiser / D	ate		<i>w</i>	upplements	I Card Non-F	tesidential Imp	provement	Total
Metal	Openings	Unit Designed #	No P	(umbing			_				Fotal Non-R	esidential Im	provement Val	ue	

Figure 5-1. Summary of Non-Residential Improvements Section

Task 1—Recording Information

In this task, you provide descriptive information about the characteristics of the structure. The shading in *Figure 5-2* indicates the columns of the "Summary of Non-Residential Improvements" table that you complete in this task.

ŏ	cupancy	Story Height	Attic	Bsmt Crav	M			IMPROVEM	ENT DAT	A AND C	DMPUTAT	SNO				
1 🗌 Single Far	nily	0	None	0 None	0								IMPRO	VEMENT	FEATURE	S
2 🗌 Duplex		[]]	Unfinished	1 1/4 1/4									Major Iter	ns	Agricult	ural
3 L Inplex 4 L 4-6 Family 5 M. Home	0 C Row-type	2 Bi-level 2 3 Tri-level 4	3/4 Finished Finished	4 Full	1 m 4								oncrete Floor rt Floor ectric Lights	<u>.</u>	ARNS [/S/L/P/E	11/D/Q
Const	ruction Bi	se Area Floor	Finished Living Area	Value	r								ade sating	.0.	ONFINEMENT	
1 Frame or Al	minum												ft Imhion		slatted Floors Pits	
2 Stucco 3 Tile												L⊐ð LØø	ving Quarters	.0.	ORN CRIB	
4 Concrete BI	Dck											9 - 1 - 1 - 1 - 0 - 1 - 1 - 0 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1	pe of Construction	uction	rame/Wire	Drive-thru
6 Concrete	1	Attic											Resident	al	Vo Roof Floor	
7 Brick 8 Stone	1	Basement					Image: Sector					BOA	THOUSE	0-	RANARIES	
9 Frame w/M	Isoury	Crawl	J									202	en Side	<i>с</i> о —	orage Bins ole Type	
Roofing		TOTAL BASE										320	G/D	0-	RAIN BINS - S Diameter & Hei	TEEL Ight or
Asphalt Shingl	se 🗆	Row-type Adjustme	int	0	%							5 B C B C B C B C B C B C B C B C B C C B C C B C C B C C B C C B C C C C C C C C C C C C C C C C C C C C	envenciosed ck-to-back	-0	Sushel Capacit UONSET BUIL	DINGS
Slate or Tile			SUB-TOTAL									ж Ш	ACHED GAF	AGE	E / I / H	Concrete
		Unfinished	Interior [-]									GRE	G / D / L / Q	0	URRY TANKS	S
Metal		Extra Living	· Units [+]									o F	e Standing		Round/Rectand	gle
Floors	B 1 2	Rec. Room	÷									Alt	ached at End an-to	· 00 –	LO Concrete:	
Earth		Loft	[+]									STA T/	BLES D/G/L		Conc. Stave/R	teinfd
Slab		Fireplace	Ŧ									- SW	MMING POC		Tile/Conc. Blk.	/Brick
Sub & Joists		No Heating	[-]										derwater Light: Ceramic/PI	astic	Unlined/Glass	Lined
		Air Conditio	ning [+]										ər ater	. – o:	RENCH & BUN	IKER
Wood		No Electrica	al Service [-]									Ŝ	n-rectangular ncrete Apron	Shape 1	Depth	
Parquet		Plumbing -	[+]									а <u>й</u> а	closure Type NIS COURT			
Tile			X 800									ΰĒ	y/Sod/Aspha			
Carpet		No Plumbing	Ξ.									11	U			
Unfinished		speciality Plumbing	£		-			SUMMARY	JF KESID	ENIIALI	MPROVEM	ENIS	10 10 10 10 10 10 10 10 10 10 10 10 10 1	10 M 10 M	The second second second	
Interior Finish	B 1 2	SUB-TOT	AL, ONE UNIT		9	Use	Story Const. Grade Year Eff. Height Type Const. Age	Cond. Base Rate	Features	L/M Adj	. Rate Size or	Area Replaceme	t Total F Depr.	Value	% Nhbd Ir Comp Factor	nprovement Value
Director or Day		SUB-TOT.	AL UNITS		;							-				
Platel of Dig		Garages			5 8	Dwelling										
Faneling		Integral	[-]	r	62											
Fiberboard		- Attached Gi	arage [+]		8											
		- Attached Ct	arport [+]		5											
Untimished		Basement	+		5											
		- Exterior Features			8											
Accomodatio	2		SUB-TOTAL		10							_				
Total Number	of Rooms	- Grade and Design Fact	tor	0							Ŋ	pplemental Can	Residentia	Improvem	ent Total	
Bedrooms	÷	()			0							Total Res	idential Imp	rovement V	alue	
Family Room		ADJUSTED SUB-T	OTAL		4		л.	IMMARY OF	NON-RES	DENTIA	L IMPROV	EMENTS				
Formal Dining	Room	Location Multiplier			9	llee	Story Const. Grade Year Eff.	Cond Base Rate	Features	W Adi	Rate Size or	Area Replacemen	t Normal R	emainder Al	norm Nhbd Ir	nprovement
		Replacement Cos	ţ		5	200	Height Type Const. Age					Cost	Depr.	Value	Obs. Factor	Value
		Heating & Air Conditioning	Plumbing	11 #	5 8											
		Central Warm Aur	Half Raffie	+	; 8						+	+	+	-	+	T
Loft Area					3											T
Rec	be	Heat Pump	Kitchen Sil	×	4 r											
Room	ea	(Gravity/Wall/Space)	Water Hea	er	<u>s</u> 8											
Fireplace S:	acks	Central Air Cond.	Extra Fixtu	Sel	9			sor / Dot						-		
Masonry	and a second sec	Extra Living Conversion #	1	IUIAL			212		2		Iddne		on-Kesiden		ment I otal	
	benings	Unit Designed #	I No Pli	umbing							Total	Non-Residentia	Improvem	ent Value		

Figure 5-2. Columns Completed in Task 1

To record information about the structure, perform these steps:

STEP 1 In the "ID" column, select an identification number for the structure. Record the information about the structure in the row corresponding to this identification number. Also, use this number to identify the location of the individual structure relative to the dwelling or other structures in the sketch area.

Note: It is *not* necessary to sketch the structure to scale or to show the dimensions of the structure in the sketch area.

- STEP 2 In the "Use" column, enter the predominant use of the structure
- **STEP 3** In the "Story Height" column, enter the height of the structure in feet, measured from the top of the floor to the eaves.
- **STEP 4** In the "Const. Type" column, enter the type of exterior wall construction used for the structure. The exterior wall construction options are:
 - Frame or aluminum (Fr)
 - Stucco (Stco)
 - Tile (Tile)
 - Concrete block (CB)
 - Metal (Mtl)
 - Concrete (Conc)
 - Brick (Br)
 - Stone (Stn).
- **STEP 5** In the "Grade" column, enter the grade for the structure. Information about determining the grade for a structure is provided in *Appendix A*.
- **STEP 6** In the "Year Const." column, indicate when the structure was originally constructed. Follow these guidelines:
 - If you are sure of the date, enter just the date, for example "1990".
 - If you (the assessing official) must estimate the date, enter the date followed by a question mark, for example "1985?"
 - If the owner estimates the date, enter the date followed by "+/-", for example "1985+/-".
 - Enter "Old" to indicate construction prior to:
 - 1938 if the structure is depreciated from the 40 year life expectancy table
 - 1953 if the structure is depreciated from the 30 year life expectancy table
 - 1969 if the structure is depreciated from the 20 year life expectancy table

— 1974 if the structure is depreciated from the in-ground swimming pool depreciation table

— 1989 if the structure is depreciated from the above-ground swimming pool depreciation table.

STEP 7 Swimming pools only. If the pool shows excessive physical deterioration for its age and you have subtracted six (6) years from its construction year, you must enter the new year in the "Eff. Age" column. This is explained in the section "Using the Swimming Pools Depreciation Tables" in Appendix B.

If the effective age of the pool is the same as the actual age, leave this column blank.

STEP 8 In the "Cond." column, enter the code indicating the assigned condition of the structure. *Table 5-1* describes the codes for this column.

Classification	Indicated Depreciation
Excellent	The structure is in like-new physical condition and has been well maintained. It has been modernized and updated and suffers from no inutilities.
Good	The structure has been maintained in better physical condition than the majority of structures of its age and suffers from no deferred maintenance. It offers more amenities and has better utility than the majority of the structures of its design.
Average	The structure has been maintained like and is in the typical physical condition of the majority of structures of its age. It offers the same utility as the majority of the structures of its design.
Fair	The structure suffers from minor deferred maintenance and demonstrates less physical maintenance than the majority of structures of its age. It suffers from minor inutilities in that it lacks an amenity that the majority of structures of its design offer.
Poor	Many repairs needed; the structure suffers from extensive deferred maintenance. It suffers from major inutilities in that it lacks several amenities that the majority of structures of its design offer. However, it is still being put to some use in the farming operation.
Very Poor	Extensive repairs needed; the structure suffers from extensive deferred maintenance and is near the end of its physical life. It suffers from extensive inutilities in that it lacks most amenities that the majority of structures of its age and design offer. Poor location for the type of structure.

Table 5-1. Condition Ratings for Yard Improvements

Note: Instructions for determining the condition rating for a structure are provided in *Appendix B*.

- STEP 9 In the "Features" column, enter the abbreviations for any features that alter the base rate for the structure. For a list of features for each type of structure, refer to the section "Improvement Features" on the property record card, shown in *Figure 5-3*.
- **STEP 10** In the "L/M" column, enter the location multiplier for your county, which can be found in *Table C-1* in *Appendix C*.
- STEP 11 In the "Size or Area" column, enter the size or area of the structure."Size" refers to the dimensions of the structure, such as length and width, or diameter and height. "Area" refers to the square foot ground area of the structure.

To determine whether to enter the size (and if size is used, exactly which dimensions) or the area of the structure, refer to the cost schedule for the structure type. Measure the dimensions and use the same units of measurement as the appropriate cost schedule uses.

STEP 12 In the "Normal Depr." column, enter the total depreciation from the appropriate depreciation table. Information about evaluating depreciation is provided in *Appendix B*.

Occupancy	Story Height	t A#	ic Bs	mt Crawl					IMPR	DVEMEN	T DATA	AND CO	MPLITATI	SNC				
1 🗌 Single Family		0 None	0	None 0											IMPRC	NEMEN	T FFATUR	FS.
2 Duplex	[]	1 Unfir.	1 1ished	1/4 1											Major Ite	ms	Agricul	tural
3 Inplex 4 4 4.6 Family 5 M. Home 0 7 Ro	2 Bi-level w-type 3 Tri-level	2 1/2 F 3 3/4 F 4 Finisi	Finished 3 hed 4	3/4 2 3/4 3 Full 4										C D M	concrete Floo int Floor lectric Lights	-	ARNS T/S/L/P/I	E/1/D/Q
Construction	Base Area Flo	tor Finisht	ed Living	Value										ŰŦ.	brade leating		CONFINEMEN T/P/E/C/	5 -
1 Frame or Aluminum															off		Slatted Floors Pits	
2 Stucco 3 Tile														L d w	iving Quarte talls	S	T T	
4 Concrete Block 5 Metal														F	ype of Const	inuction	Free-standing	g Drive-thru
6 Concrete	Att	tic													Residen	tial	No Koof Floor	
8 Stone	Base	ment												Bo	AT HOUSE	-	L L 210m00 Bine	
9 Frame w/Masonry	Cre	Iwe	1											07	ben Side		Pole Type	
Roofing	TOTAL BASE													Ş⊢ć	(G/D		Diameter & H	STEEL eight or
Asphalt Shingles	Row-type Adju	ustment		%										C m c	tick-to-back		Bushel Capac DUONSET BU	sity
Slate or Tile		SUB-	TOTAL											<u>а</u> на 2010	IACHED GP	RAGE	E / I / H Floor: Asphall	VConcrete
	Unfin	nished Interior	[-]											- %	EENHOUSE		SLURRY TANI Inground/abov	<s ve around</s
Metal	Extra	a Living Units	+											o T	ee Standing	. 1	Round/Rectar Plank Cover/	nglé Vo Cover
Floors B 1	2 Rec.	Room	+											Ľ\$	tached at En an-to	0	SILO Concrete:	
Earth 0			[+]											LS L	VBLES		Conc. Stave/ Masonry	Reinfd
Slab 0	T T Firepi	lace	+											AS 1	IMMING PO	OL	Tile/Conc. BI	k./Brick
Sub & Joists	H ON	leating	-											54	e: Ceramic/F	Slastic	Unlined/Glas	s Lined
	D D Air C	onditioning.	+											ŒĨ	ter sater		IRENCH & BL	JNKER
Wood []		lectrical Servi	ice [-]											zŏ	on-rectangula	ar Shape	Depth	
Parquet 0	Plumbing		+											ΞĒ	Indosure Typ	θL		
	□ □ 1 F: -5=	x	800											ÖE	ay/Sod/Asph	alt		
	No Plumbing		Ξ											5-	(C			
	Specialty Plumt	bing	+						SUMM.	ARY OF	RESIDE	NTIAL IM	PROVEMI	ENTS				
	INS	B-TOTAL, OF	NE UNIT		Q	Use	Story Const. Grade	Year Et	ť. Cond. E	ase Rate	Features L	/ M Adj. F	tate Size or A	Vrea Replacem	int Total	Remainder	% Nhbd	Improvement
	SUL	B-TOTAL	UNITS				Height Type	Const. A	e de la compañía de					Cost	Depr.	Value	Comp Factor	Value
Plaster or Dry Wall	Garages				1 10	Owelling											-	
Paneling	Integ	jral	[·]		02												-	
Fiberboard	Attac	shed Garage	[+]		03													
	Attac	shed Carport	÷		04													
Untimished Untimished	Base	ement	[+]		05 De													
Accomodations	Exterior Feature	Se			20				-									
Total Niimher of Roome		SUB-	TOTAL		5									niemental Car	d Residenti	al Imnrover	nent Total	
Bedrooms	Grade and Desk	ign Factor		%										Total Re	sidential Im	provement	Value	
Family Room	AD.IUSTED S	SUB-TOTAL							SUBARAD	V OF NO	N-PESIL	DENTIAL	IMPROVE	MENTS				
Formal Dining Room	Location Multi	inlier			9		Story Const.	Year Ef						Replaceme	int Normal	Remainder /	Abnorm Nhbd	Improvement
2					2	Use	Height Type Grad	e Const. Ac	le Cond.	ase Kate	Features	./ M Adj.	Kate Size or J	Cost	Depr.	Value	Obs. Factor	Value
	Keplacemen	IT COST	Plumbine	# TC	01													
	Central Warm Air	*	Full Bath	*	02				-									
I off Aron	Hot Water or Steam		Half Baths		03													
	Heat Pump		Kitchen Sink		04													
Rec 1ype	No Heat		Water Heater		05													
Final Alea	(Gravity/Wall/Space	÷	Extra Fixtures		90													
Masconic Stacks				OTAL	Data Co	llector / Da	te		Apprais	er / Date			Supple	mental Card I	Ion-Resider	ntial Improv	ement Total	
Metal Openings	Unit Design	1000 # pet	O No Plumt	ing									Total	Non-Residenti	al Improven	nent Value		2
	•			>														

Figure 5-3. Improvement Features

Task 2—Determining the Base Rate

You determine the base rate of the structure using the cost schedule for the appropriate type of structure. The cost schedules for residential and agricultural yard structures are provided in *Appendix C*.

The cost schedules provide either whole dollar or square foot unit values. The schedules are based on a "C" grade unless otherwise specified. Each schedule includes base rates for the typical range of size or configuration for the type of structure.

The rates given, unless otherwise specified, apply to detached, free standing structures. For attached structures, not identified as such in the pricing schedules, apply the following multipliers to the price derived from the pricing schedules:

- (1) If one (1) end or the shortest length is attached, multiply by ninety-hundredths (.90).
- (2) If one (1) side or the longest length is attached, multiply by eighty-hundredths (.80).

The shading in *Figure 5-4* indicates the columns of the "Summary of Non-Residential Improvements" table that you complete when determining the base rate for a structure.

Occu	pancy	Story Height	Attic	Bsmt Cre	Iwi				IMPR	OVEMEN	IT DATA	AND CO	MPUTATI	SNC				
1 🗌 Single Family		0	None	0 None	0										IMPR	OVEMEN	IT FEATU	RES
2 🗌 Duplex		1 1 1 1	Unfinished	1 1/4 2 2											Major It	ems	Agric	ultural
3 U Irplex 4 0 4-6 Family 5 0 M. Home 0	Cow-type	2 Bi-level 2 3 Tri-level 4	3/4 Finished Finished	2 1/2 3 3/4 4 Full	104										int Floor lectric Light	s	BARNS T/S/L/P	/E/1/D/Q
Construc	tion Ba	tse Area Floor	Finished Living Area	Value	T									9 I -	irade leating		CONFINEMI T/P/E/O	II
1 Frame or Alumi	unu														off		Slatted Flor Pits	DIS
2 Stucco 3 Tile														las	iving Quart	SIG	CORN CRIB	
4 Concrete Block 5 Metal														0 H	ype of Con	struction	Frame/Wire Free-stand	ng Drive-thru
6 Concrete	1	Attic													Reside	ntial	No Roof Floor	
7 Brick 8 Stone	1	Basement												B0 B0	AT HOUSE		GRANARIES L	10
9 Frame w/Masor	- Jul	Crawl	J											-0	ben Side		Storage Bins Pole Type	
Roofing		TOTAL BASE												g⊢°	G/D		GRAIN BINS Diameter &	- STEEL Height or
Asphalt Shingles		Row-type Adjustme	int		%									сй	tck-to-back	8	Bushel Car QUONSET E	acity
Slate or Tile			SUB-TOTAL											ЯЩ	IACHED G	ARAGE	E / I / H Floor: Asph	alt/Concrete
		Unfinished	Interior [-]											⊢ %	G/D/L/	aπ	SLURRY TA	NKS ave around
Metal		Extra Living	Units [+]											ОĽ	ee Standing	-	Round/Rec Plank Cove	tangle r/No Cover
Floors	B 1 2	Rec. Room	±											L A	tached at E an-to	pu	SILO Concrete:	
Earth		Loft	[+]											TS III	D/G/L		Conc. Stav Masonny	e/Reinfd
Slab		Fireplace	÷											AS ⊢	IMMING P	JOL	Tile/Conc.	Blk./Brick
Sub & Joists		No Heating	[·]											57	nderwater L e: Ceramic	ighting Plastic	Unlined/GI No Roof	ass Lined
		Air Condition	ning [+]											ŒŤ	ter sater		TRENCH &	BUNKER
Wood		No Electrica	al Service [-]	200										žŏ	on-rectangu	lar Shape on	Depth	
Parquet		Plumbing -	+												Indosure Ty	00 8T		
Tile		=	X 800		ļ									σĘ	ay/Sod/Asp LITY SHED	halt		
Carpet		No Plumbing												F	IJ			
Unfinished		Speciality Plumbing	<u>+</u>		-			2401	SUMN	IAKY OF	KESIDE		PROVEM	-NIS	10000	14. 10 ships	1000	
Interior Finish	B 1 2	SUB-TOT	AL, ONE UNIT		9	Use	Story Const. Height Tyne	Grade Const	Eff. Cond.	Base Rate	Features L	/ M Adj. F	ate Size or /	Vrea Replacem	int Total Denr	Remainder Value	% Nhbo	Improvement r Value
		- SUB-TOT,	AL, UNIT	\$	1		adkı viñalı		PRC					1000		anita A	and I dillon	
Plaster of Dry wa		Garages		1	5 8	Dwelling						_						
Latenda		Integral	[-]		3													
Floerooard		- Attached Gi	arage [+.		8							_						
		- Attached Ca	arport [+,	-	4								-					
Unfinished		Basement	+		3							_	-					
		- Exterior Features			8													
Accomodations	Part Levino and St.		SUB-TOTAL		20		-											
I otal Number of H	tooms	- Grade and Design Fact	tor		7								fns	plemental Ca	d Residen	tial Improve	ment Total	
Bedrooms		()			0									Total Re	sidential Ir	uprovemen	Value	
Family Room		ADJUSTED SUB-T	OTAL		_				SUMMA	OV OF NC	N-RESIL	DENTIAL	IM PROVI	MENTS				
Formal Dining Roc	mc	Location Multiplier			9	Use	Story Const.	Grade Year	Eff. Cond	Base Rate	Features L	/ M Adi. R	ate Size or /	Replacem	int Normal	Remainder	Abnorm Nhbo	Improvement
		Replacement Cosi	+		2		Height Type	Const.	Age					Cost	Depr.	Value	Obs. Facto	r Value
		Heating & Air Conditioning	Plumbing	72	1 1 1													
	1	- Hof Water of Steam	Half Baths		8													
Loft Area					2						-							
Rec Type		Heat Pump	KICNEN S	ž.	5 8							+					-	
Room Area		(Gravity/Wall/Space)	Water He	Jaje	S a													
Fireplace Stack	8	Central Air Cond.	EXtra FIX	Sein		a Collactor / F	lata		And	ł						1.1		
Masonry	linen	Extra Living Conversion #		IUIAL	3		23		middy	2011 000			Iddne		ion-reside			
	S6III	Unit Designed #	L No F	lumbing					-				I OTAI	Non-Kesident	al Improve	ment value		

Figure 5-4. Columns Completed in Task 2

Chapter 5

Using Area (Square Footage)

To determine the base rate for a structure that uses a schedule based on *area* (*square footage*), perform these steps:

- **STEP 1** Based on the type of structure, locate the appropriate cost schedule.
- **STEP 2** In the "Area" column of the cost schedule, locate the row corresponding to the square footage of the structure (entered in the "Size and Area" column in the "Summary of Non-Residential Improvements" section).

If the structure is any type other than a general purpose pole barn, use the area in the cost schedule that is closest to the actual square footage of the structure. There is no need to interpolate between these rates.

If the structure is a general purpose pole barn, perform the interpolation procedure described in the cost schedule and shown in Example 2, below. The interpolation procedure calculates a value for a pole barn that has measurements different than those listed in the schedule. The first number in the size column represents the width of the structure and the second number represents the length. A size deviation in a building should be compared against the width column of the schedule first.

The procedure below applies when selecting the next smallest and next largest structure from the cost schedule:

• If the width of the subject building exactly matches the width in the size column, the interpolation of the rates is between the lengths only. For example, a subject building measuring $50' \ge 150'$ uses the $50' \ge 140'$ building and the $50' \ge 160'$ building in the interpolation process.

• If the width of the subject does not exactly match the width in the size column and the lengths do match, the interpolation of the rates is between the widths only. For example, a subject building measuring 48' x 100' uses the 40' x 100' building and the 50' x 100' building in the interpolation process.

• If the width and length of the subject building does not exactly match the sizes listed in the cost schedule, the interpolation of the rates begins with the width first, then the length. A subject building measuring 75' x 150' uses the 60' x 140' building and the 80' x 160' building in the interpolation process. The first comparison in this example is the width since 75' is above 60' and below 80'. The second qualifier is the 140' length and the 160' length which is the range when analyzing the 150' length.

• If the area of the structure is larger than the largest area or smaller than the smallest area provided in the cost schedule, extrapolate to calculate the amount to add to, or subtract from, the base rate. When extrapolating, perform the following calculations:

a. For an area larger than the square footage listed on the schedule, calculate the difference between the rate of the largest square footage and the rate of the next highest square footage. Subtract this difference from the rate of the largest square footage to arrive at the appropriate rate for the subject building.

b. For an area smaller than the square footage listed on the schedule, calculate the difference between the rate of the smallest square footage and the rate of the next smallest square footage. Add this difference to the rate of the smallest square footage to arrive at the appropriate rate for the subject building.

STEP 3 Find the intersection of the selected row (area in square feet) and the appropriate column. In the "Base Rate" column in the "Summary of Non-Residential Improvements" section, enter the number that you find (or interpolate or extrapolate).

Note: The column headings vary in the cost schedules. Often there are separate columns for different types of construction.

Example 1: The following example illustrates the procedure of determining the base square foot rate for a detached frame garage which measures 20' x 24'.

- **a.** Calculate the area to be 480 square feet ($20 \times 24 = 480$ square feet)
- **b.** In the detached garage schedule, find the area closest to 480 square feet.

c. In the row for 500 square feet, follow across to the right to the column labeled frame.

d. Record the base rate from the cost tables in *Appendix C* in the base rate column of the "Summary of Non-Residential Improvements" section.

Example 2: The following detailed example illustrates the interpolation procedure using a 14' high general purpose pole building with the dimensions of 75' by 150'.

a. Select the model width(s) and length(s) closest to the subject building (60' x 140' and 80' x 160').

b. Select (or calculate) the square foot rate applicable for each of the two areas immediately smaller and larger than the subject building.

Any height adjustment to the subject building above 14' or below 14' must be attributed to the smallest size and largest size when calculating the rate in Step b.

c. Calculate the difference in the whole dollar value applicable to each of the areas selected in Step b.

d. Divide the result from Step c by the difference in the areas used in Step b.

e. Apply the rate from Step d to the difference in the area of the subject building and the smaller area of the two used in Step b.

f. Add the result from Step e to the whole dollar value calculated for the smaller area in Step c and round to the nearest \$10 to arrive at the value of the $75' \times 150'$ building.

Using Whole Dollar Amounts

To determine the base rate for a structure that uses a schedule based on *whole dollar amounts*, perform these steps:

- **STEP 1** Based on the type of structure, locate the appropriate cost schedule.
- STEP 2 In the "Size" column of the cost schedule, locate the row corresponding to the size of the structure, which you entered in the "Size and Area" column in the "Summary of Non-Residential Improvements" section. Use the area in the cost schedule that is closest to the actual size of the structure.

Note: If the size of the structure is larger than the largest size or smaller than the smallest size provided in the cost schedule, extrapolate to calculate the amount to add to, or subtract from, the base rate. When extrapolating, go to the column that best represents the size of the subject building and perform the following calculations:

a. For sizes smaller than those listed in the cost schedule, calculate the difference between the two smallest sizes listed in the schedule and subtract the difference from the smallest size in the schedule.

b. For sizes larger than those listed in the cost schedules, calculate the difference between the two largest sizes listed in the schedule and add the difference to the largest size in the schedule.

STEP 3 Find the intersection of the selected row and the appropriate column. In the "Base Rate" column in the "Summary of Non-Residential Improvements" section, enter the number that you find (or extrapolate).

Example 1: The following example illustrates the procedure of determining the whole dollar base rate for an 18' diameter above ground pool:

- **a.** In the diameter column, find the diameter closest to 18'.
- **b.** In the 18' diameter row, locate the base rate.

c. Record the rate from Step b in the base rate column of the "Summary of Non-Residential Improvements" section.

Example 2: The following example illustrates the extrapolation procedure for finding the base rate for a steel grain bin that measures 30' x 55' 0".

a. Find the size and base rate for the closest 30' steel bin. This is $30' \ge 47'8''$.

b. Find the size and base rate for the next closest 30' steel bin. This is $30' \times 40'4''$.

c. Find the difference between the rates found in Step a and Step b

d. Add the difference calculated in Step c to the largest 30' bin rate in Step a

e. The result is the base rate for a $30' \ge 55'0''$ steel bin. Record this base rate in the base rate cell in the "Summary of Non-Residential Improvements" section.

Task 3—Determining the Adjusted Base Rate and Replacement Cost

The adjusted base rate for the structure is the base rate, adjusted to take into account any relevant features identified for the structure, an adjustment for location (by applying the location cost multiplier), and the grade factor percentage. *If the structure uses a cost schedule based on area (square footage)*, the replacement cost for the structure is the structure's area multiplied by the adjusted base rate (per square foot). If the structure uses a cost schedule based on whole dollar amounts, the replacement cost is the same as the adjusted base rate.

The shading in *Figure 5-5* indicates the columns of the "Summary of Non-Residential Improvements" section that you complete when determining the adjusted base rate and replacement cost of the structure.

ŏ	scupancy	Story Height	Attic	Bsmt Crav	N				IMPR(OVEMENT	L DATA A	ND COM	PUTATIO	NS				
1 🗌 Single Fa	mily	0	None	0 None (0										IMPRO	VEMENT	FEATUR	ES
2 🗌 Duplex		[]	Unfinished	1/4											lajor Itel	ms	Agricul	tural
5 0 M. Home	y 0 🗌Row-type	2 Bi-level 2 3 Tri-level 4	3/4 Finished Finished	4 Full 4	V 00 97									C D D D D D D D D D D D D D D D D D D D	ncrete Flooi I Floor ctric Lights	<u> </u>	ARNS T / S / L / P / I	5/1/D/Q
Cons	truction Bi	ase Area Floor	Finished Living Area	Value										5 # -	ating	0	ONFINEMEN T/P/E/C/	F
1 Frame or A	luminum													L Lof	mhino		Slatted Floors Pits	
2 Stucco 3 Tile		•												- 0 v	ing Quarter	s	ORN CRIB	
4 Concrete B. 5 Metal	lock	•												T/yr	e of Constr	uction	Frame/Wire Free-standing	Drive-thru
6 Concrete	1	Attic													Resident	ial	No Roof Floor	
7 Brick 8 Stone	1	Basement												BOA	L HOUSE		RANARIES L	
9 Frame w/M.	asonry	Crawl	1											obe	n Side	00	torage Bins Pole Type	
Roofing		TOTAL BASE													SHEU	0	RAIN BINS - Diameter & H	STEEL sight or
Asphalt Shingl	les	Row-type Adjustmer	щ	6	,o									Bac	k-to-back	0	Bushel Capac UONSET BU	ity LDINGS
Slate or Tile			SUB-TOTAL											DET	Walls CHED GAF	AGE	E / I / H Floor: Asohall	/Concrete
		Unfinished In	nterior [-]											T/C GREI	ENHOUSE	o	LURRY TAN	(S
Metal		Extra Living	Units [+]											Free	Standing	2	Round/Rectai	igle lo Cover
Floors	B 1 2	Rec. Room	÷											Atta	ched at Enc	00 T	ILO Concrete:	
Earth		Loft	[+]											STAE T/L	ILES		Conc. Stave/ Masonry	Reinfd
Slab		Fireplace	÷											SWIN	MING POC	<u>с</u>	Tile/Conc. BI	c./Brick
Sub & Joists		No Heating	[-]											Tile	erwater Lig Ceramic/P	hting lastic	Unlined/Glas	s Lined
		Air Condition	[+] [+]											Filte	r ter	<u>но:</u>	RENCH & BL	NKER
Wood		No Electrica	Service [-]											Con	-rectangula crete Apron	r Shape	Depth	
Parquet		Plumbing -	[+]											TENS	IS COURT			
Tile		-9	x 800												IY SHED	all a		
Carpet		No Plumbing	-											T/1	-			
Linfinished		Speciality Plumbing	Ŧ		-				NMM	AKY OF P	KESIDEN	IAL IMP	KOVEME	2		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	and and and	
Interior Finish	1 8 1 2	SUB-TOT/	AL, ONE UNIT		9	Use	Story Const. Height Tyme	Grade Const	Eff. Cond. B	Sase Rate F	eatures L/ I	M Adj. Rate	Size or Are	a Replacement	Total	Kemainder Value	% Nhbd Comn Eactor	Improvement Value
		- SUB-TOTA	AL, UNITS		1		adkı yıfanı	1000	284				61.0	1900		2010 A		AUDA
Plaster or Ury		Garages			5 5	Dwelling												
) [] [] [] [Integral	[-]		3													
FIDEIDOBIO		Attached Ga	trage [+]		8													
		- Attached Ca	irport [+]		\$													
Untimished		Basement	[+]		65													
		Exterior Features			8								-					
Accomodatio	50		SUB-TOTAL		20		-						,					
I otal Number	of Kooms	Grade and Design Fact	or	%									ddns	emental Card	Kesidentia	ul Improven	ient lotal	
DEGLOOMS	-)												I otal Kesi	dential Imp	provement	/alue	
Family Room		ADJUSTED SUB-T	OTAL						SUMMAR	Y OF NO	N-RESIDE	NTIAL IN	APROVEN	IENTS	•			
Formal Dining	Room	Location Multiplier			₽	Use	Story Const	Grade Year	Eff. Cond. B	tase Rate F	eatures L/B	Adj. Rate	Size or Are	Replacement	hormal R	Remainder A	bnorm Nhbd	Improvement
		Replacement Cost			5		Height Type	Const.	Age					Cost	Depr.	Value	Obs. Factor	Value
		Heating & Air Conditioning	Plumbing Cult BAth	#	5 8													
	1	- Hot Water of Steam	Half Baths		1 8													
Loft Area					2													
Rec	ype	Heat Pump No Heat	KITCHEN SIL	×	5 5										-			
Room	rea	(Gravity/Wall/Space)	Flotter From	101	90		+	+		+	_	_	_				_	
Fireplace S	tacks	Central Air Cond.		Les .	Data	Collector / De	sto		Annraise	ar / Data	_	_			-		Table T Later	
		Extra Living Conversion #		DIAL			2						uaiddne		uanisau-u			
L Metal	shiilings	Unit Designed #	I No Pli	umbing									I otal No	n-Kesidential	Improvem	ent value		

Figure 5-5. Columns Completed in Task 3

To determine the adjusted base rate and replacement cost for the structure, perform these steps:

- **STEP 1** Compare the features that you entered in the "Features" column in the "Summary of Non-Residential Improvements" section with the features in the cost schedule for the structure. If the cost schedule indicates that the base rate should be adjusted because of one or more of the features, adjust the base rate accordingly.
- **STEP 2** Determine and enter the location cost multiplier established for your county in the "L/M" cell. The table containing the location cost multipliers can be found in *Appendix C*.
- STEP 3 Divide the grade factor percentage corresponding to the grade entered in the "Grade" column in the "Summary of Non-Residential Improvements" section by 100 to arrive at a multiplier. Instructions for determining the grade factor percentage for a structure are provided in the section Assigning Grades to Residential and Agricultural Yard Structures in Appendix A.
- **STEP 4** Calculate the adjusted base rate by multiplying the base rate (adjusted for any features) by the multiplier obtained in Step 2 and then by the multiplier in Step 3:

Adjusted	Base Rate		Multiplier		Multiplier
Aujusieu Pasa Pata =	Adjusted	X	Obtained	X	Obtained in
Dase Kale	for Features		in Step 2		Step 3

Enter the adjusted base rate in the "Adj. Rate" column.

STEP 5 If the structure uses a schedule based on area (square footage), calculate the replacement cost by multiplying the adjusted base rate (entered in the "Adj. Rate" column) by the structure's square footage (entered in the "Size or Area" column):

 $\frac{\text{Replacement}}{\text{Cost}} = \frac{\text{Adjusted}}{\text{Base Rate}} \mathbf{x} \quad \frac{\text{Area}}{(\text{Square Footage})}$

Round the replacement cost to the nearest \$10 and enter it in the "Replacement Cost" column.

If the structure uses a schedule based on whole dollar amounts, round the adjusted base rate (entered in the "Adj. Rate" column) to the nearest \$10 and enter it in the "Replacement Cost" column.

Example: The procedures for calculating the adjusted base rate and the replacement cost of a 20' x 24' detached frame garage with a quality rating of D is as follows:

a. Find the base rate for a 480 square foot detached frame garage of average quality in the cost tables in *Appendix C*.

b. The adjusted rate for the garage is the product of the base rate times the location cost multiplier (i.e. 1.00), times the D grade multiplier of .80.

Base Rate x 1.00 x D Grade Multiplier of .80

c. Record the rate in the adjusted base rate cell in the "Summary of Non-Residential Improvements" section.

d. The replacement cost is the product of the adjusted base rate times the area of the detached garage rounded to the nearest \$10. Assuming a replacement cost of \$8,077 would round to \$8,080 rounded to the nearest \$10.

e. Record the replacement cost in the "Summary of Non-Residential Improvements" section.

Task 4—Calculating the Remainder Value

The structure's remainder value is its replacement cost adjusted for normal depreciation. The shading in *Figure 5-6* indicates the columns of the "Summary of Non-Residential Improvements" table that you complete when calculating the remainder value of the structure.

Oct	cupancy	Story Height	Attic	Bsmt Cr	lwe.				IMPR	OVEMEN	IT DATA	AND C	OMPUTA'	TIONS					
1 Single Fam	uly	0	None	0 None	0,										H	APROVE	MENT F	EATURE	ES
2 🗌 Duplex 3 🗌 Triplex		1	Unfinished 1/2 Finsihed	2 1/2	- 7										Maj	or Items		Agricult	tural
4 🗌 4-6 Family 5 🗌 M. Home	0 🗌 Row-type	2 Bi-level 3 3 Tri-level 4	3/4 Finished Finished	3 3/4 4 Full	€ 4										C Concre D Dirt Flo E Electric	tte Floor or : Lights	BAR T/: Ope	NS S/L/P/E	/1/D/Q
Constr	uction Ba	se Area Floor	Finished Living Area	Valu											H Heating	0	No.	FINEMENT FINEMENT	-
1 Frame or Alu	minum														L Loft P Plumbi		Pits	ted Floors	
2 Stucco 3 Tile															Q Living	Quarters	405⊢	N CRIB	
4 Concrete Blo.	×														T Type of	f Constructio	an Fra	me/Wire >-standing [Drive-thru
6 Concrete	1	Attic													Res	sidential	Ser	Roof	
7 Brick 8 Stone	1	Basement													BOAT HC	DUSE	GRA	NARIES	
9 Frame w/Mas	soury	Crawl	1	_											Open Si	de de	Pol	ige Bins Fype	
Roofing		TOTAL BASE															GRA Dia	IN BINS - S neter & Hei	STEEL vight or
Asphalt Shingle:	°	Row-type Adjustmer	nt		%										Back-to	back	QUC	hel Capaci NSET BUIL	Ity LDINGS
Slate or Tile			SUB-TOTAI												DETACH	ED GARAGI	E E/	I / H vr: Asphalt/(Concrete
		Unfinished Ir	nterior [-]												GREENH	IN LIQ	SLUI	RY TANK: ound/above	S e ground
Metal		Extra Living	Units [+	1											G Free Sta	anding	Plan	ind/Rectan	glé o Cover
Floors	B 1 2	Rec. Room	<u>+</u>	1											Attached Lean-to	d at End	SILC	crete:	
Earth		Loft	<u>+</u>	1											T/D/G	5/L	Co Mas	nc. Stave/R	Reinfd
Slab		Fireplace	<u>+</u>	1											SWIMMI	VG POOL	Ster	a/Conc. Blk.	c/Brick
Sub & Joists		No Heating	-	-	H										Underwi Tile: Cel	ater Lighting ramic/Plastic	NON CHI	Roof Roof	s Lined
		Air Condition	+] Buiu	1											Heater		SILC	VCH & BUNS	NKER
Wood		No Electrical	I Service [-]	1											Concret	tangular Shé e Apron	ape Det Wio	t t	
Parquet		Plumbing	+	_											TENNIS	COURT			
Tile		-0- 11			T											SHED			
Carpet		- No Plumbing Secondity: Dlumbing							CLINANA			NTIAL		MENTO	1/G				
Unfinished			N ONE IND	7 -	1		Story Const	Year Ff	*	DINE				Ren	arement .	Total Rema	vinder %	al bhhd	mnrovement
Interior Finish	B 1 2				9	Use	Height Type Gra	de Const. Aç	je Cond.	Base Rate	Features	L/M Ad	Rate Size o	or Area	Cost	Depr. Val	lue Con	Ip Factor	Value
Plaster or Dry W	/all 🗆 🗆 🗆	TIDI-GDS		0	01	Dwelling									~				
Paneling		Garages			02														
Fiberboard		Integral	<u>-</u> .	_ ,	03														
		Attached Gz	arage [+		64											a			
Unfinished		Attached Ca	arport 1+	- ,	05								-		-	-			
No Electrical Ser	vice 🗆 🗆 🗆	Basement	<u>+</u>	_	90												+		
Accomodation	ø	Exterior Features	TOT TOT ALL		10														
Total Number of	f Rooms	1	aub-loi AL				-			1			s	upplement	al Card Res	sidential Imp	provement	Total	
Bedrooms		Grade and Design Fact ()	OL		%									To	al Residen	tial Improve	ement Valu	ē	
Family Room		ADJUSTED SUB-T(OTAL						SUMMAF	RY OF NC	N-RESI	DENTIA	L IMPROV	VEMENT	s				
Formal Dining R	toom	Location Multiplier			9	lleo	Story Const. Grat	Year Et	f. Cond	Rate Rate	Fasturae	I / M Adi	Rate Size (Sr Arra Rep	acement N	ormal Remai	inder Abnoi	m Nhbd Ir	mprovement
		Replacement Cost				Cae	Height Type	Const. A	36 0011						Cost [Jepr. Valu	ue Obs	. Factor	Value
		Heating & Air Conditioning	Plumbin	*	5 1 1				-			+		_			+	+	
		Central Warm Air	Full Bath		62			-	-			+	+	_		_	-		
Loft Area		Hot Water or Steam	Half Bath	22	8							-	_						
Tw	90	Heat Pump	Kitchen 5	Sink	8														
Room Are	a	- No Heat (Gravity/Mall/Space)	Water He	ater	05		_	_	_			_							
Fireplace Sta	inka	Central Air Cond.	Extra Fix	tures	90			_				-							
Masonry		Extra I Mind Conversion #		TOTAL	ő	ita Collector /	Date		Apprais	ser / Date			Sup	plemental (ard Non-R	esidential Ir	mproveme	nt Total	
Metal Op	enings	Unit Designed #	- No F	glidmbing	_				_				Tot	al Non-Res	dential Imp	provement \	Value		

Figure 5-6. Columns Completed in Task 4

To calculate the remainder value, perform these steps:

- **STEP 1** Subtract the percentage determined for total depreciation (entered in the "Normal Depr." column) from 100%.
- **STEP 2** Divide the result obtained in Step 1 by 100 to arrive at a multiplier.
- **STEP 3** Calculate the remainder value by multiplying the replacement cost of the structure (entered in the "Replacement Cost" column) by the multiplier obtained in Step 2.

Remainder Cost = Replacement Cost \mathbf{x} Multiplier Obtained in Step 2

Enter the remainder value in the "Remainder Value" column rounded to the nearest \$10.

Example: The replacement cost of a structure is \$5,500. The normal depreciation percentage for the structure is 30%. The remainder value is:

 $100\% - 30\% = 70\% \div 100 = .70 x \$5,500 = \$3,850$

Task 5—Calculating the Improvement Value

The structure's improvement value is its remainder value, adjusted for abnormal obsolescence and neighborhood factor, and rounded to the nearest \$100. The shading in *Figure 5-7* indicates the columns of the "Summary of Non-Residential Improvements" table that you complete when calculating the improvement value of the structure.

Occup	ancy	Story Height	Attic	Bsmt Ci	awl	AND THE TRANSPORT			IMP	ROVEME	VT DAT/	AND CO	IMPUTAT	LIONS				
1 Single Family		1	0 None	0 None	0,										MI	PROVEME	INT FEAT	URES
2 🗌 Duplex 3 🗍 Trinlex			1 Unfinished	211 2	- ~										Majo	r Items	Agri	sultural
4 1 4-6 Family 5 1 M. Home 0	Row-type	2 Bi-level 3 Tri-level	3 3/4 Finished 4 Finished	3 3/4 4 Full	107										C Concrete D Dirt Floo	e Floor r Lights	BARNS T/S/L/	P/E/1/D/Q
Constructio	on Ba	se Area Floor	Finished Living Area	Valu											G Grade H Heating	2	CONFINEI T/P/E/	1ENT C / I
1 Frame or Aluminu	E														L Loft		Slatted FI Pits	oors
2 Stucco 3 Tile		1													Q Living Q	uarters	CORN CR	60
4 Concrete Block															T Type of (Construction	Frame/W Free-stan	re ding Drive-thru
6 Concrete	1	Attic													Resi	dential	No Roof Floor	
7 Brick 8 Stone	1	Basement													BOAT HOI	JSE	GRANARII	S
9 Frame w/Masonry	Ì	Crawl	J												Open Sid	J	Storage Bi Pole Type	S
Roofing		TOTAL BASE													T/G/D		GRAIN BIN Diameter	S - STEEL & Height or
Asphalt Shingles		Row-type Adjustm	ient		%										Back-to-t	ack	Bushel C QUONSET	pacity BUILDINGS
Slate or Tile			SUB-TOTAI												DETACHE	D GARAGE	E / I / H Floor: Ast	hall/Concrete
		Unfinished	d Interior [-]												CREENHC	USE USE	SLURRY 7	ANKS above around
Metal		Extra Livir	ig Units [+	-											G Free Star	ding	Round/Re Plank Co	ctangle er/No Cover
Floors	B 1 2	Rec. Roor	+u	-											Attached Lean-to	at End	SILO Concrete	
Earth		Loft	<u>+</u>	1											T/D/G	L.	Conc. St Masonry:	tve/Reinf d
Slab		Fireplace	<u>+</u>												SWIMMIN	3 POOL	Tile/Cont	. Blk./Brick
Sub & Joists		No Heatin	-] 0												Underwal Tile: Cerr	er Lighting mic/Plastic	Unlined/	slass Lined
		Air Condit	ioning [+	-											Hilter Heater	2	TRENCH 8	BUNKER
Wood		No Electric	cal Service [-]	5											Concrete	Apron	Depth Width	
Parquet		Plumbing TE:	+]	_											TENNIS C	OURT		
Tile					1										UTILITY S	HED		
Carpet		Secondary Blumbing			-				0110					ACNTO	T/G			
Unfinished					1		Stony Const	Voir	201		VESIL			VIEN 13	T, T	and Domained	VIN 76	immentation to
Interior Finish	B 1 2	Sub-10			9	Use	Height Type Gra	de Const.	Age Cond.	Base Rate	Features	L/ M Adj.	Rate Size o	w Area Neple	Sost De	pr. Value	Comp Fac	tor Value
Plaster or Dry Wall		SUB-10		'n	3	Dwelling							-					
Paneling		Garages		- T.	02	n												
Fiberboard		Integral	<u> </u>		6													
		Attached (Garage [+	_	3 3				-							-		
Unfinished		Attached (Carport [+	I	5								-					
No Electrical Service		Basement	<u>+</u>	_	8 99													
Accomodations		Extendir Features	TOT OT O		07													
Total Number of Roc	sm	1	SUB-IULAL				-					-	Ø.	upplementa	I Card Resi	dential Impro	/ement Tota	
Bedrooms		- Grade and Lesign Fa	ICTOF		%								2	Tota	al Residenti	al Improveme	nt Value	
Family Room		ADJUSTED SUB-	TOTAL						SUMMA	RY OF N	ON-RES	DENTIA	IMPRO/	/EMENTS	(0)			-
Formal Dining Room		Location Multiplier			9	leo	Story Const. Gra	Year	Eff. Cond	Rase Rate	Fasturae	I / M Adi	Rate Size o	r Area Repl	acement No	rmal Remainde	Abnorm Nh	Improvement
		Replacement Co	st			e ca	Height Type	Const.	Age collu-	Dase Male	Lediures			D DOIL	Cost De	pr Value	Obs. Fac	kr Value
		Heating & Air Condition in	ng Plumbin	71	1 1 1 1								_	_				
		Central Warm Air	Full Bath		20 20												-	
Loft Area		Hot Water or Steam	Half Bath	s	8								_					
D.c. Type		Heat Pump	Kitchen S	link	8			_				_	_					
Room Area	_	. No Heat (Gravity/Wall/Space)	Water He	ater	8 3		-	_	_			_	+	_	-	_		
Fireplace Stacks		Central Air Cond.	Extra Fix	ures	8		_			4					_	_	_	
Masonry		Extra Living Conversion #		TOTAL		tta Collector / Da	e		Appre	Iser / Date			Supt	olemental C	ard Non-Re	sidential Impi	ovement To	a
Metal Openin	SS	Unit Designed #	N N	lumbing	-				_				Tota	al Non-Resi	dential Impr	ovement Valu	œ	

Figure 5-7. Columns Completed in Task 5

To calculate the improvement value of the structure, perform these steps:

- **STEP 1** *If abnormal obsolescence depreciation applies to the structure,* divide the dollar amount of abnormal obsolescence by the "Remainder Value" to get an abnormal obsolescence depreciation percentage. Enter this percentage in the "Abnorm Obs" Column of the property record card.
 - **Note:** This column can also be utilized to make adjustments for improvements less than 100% complete. Be sure to indicate what you have done in the memorandum section.
- **STEP 2** Calculate the neighborhood factor and enter the result in the "Nhbd Factor" cell. Information on neighborhood factors can be found in *Appendix B*.
- STEP 3 The improvement value is the remainder value of the dwelling, adjusted for % complete, abnormal obsolescence and neighborhood factor (if necessary), and rounded to the nearest \$100. Enter this amount in the "Improvement Value" column on the property record card.

Example: The remainder value of a structure is \$3,850. Assuming the structure is 100% complete, suffers no abnormal obsolescence and the neighborhood factor is 1.00, the improvement value is \$3,900.

Task 6—Calculating the Total Non-Residential Improvement Value

Calculate the improvement value for each structure by performing Task 1 through Task 5 for each structure. If you run out of rows in the "Summary of Non-Residential Improvements" section of the property record card, use an additional card (or cards).

To calculate the total non-residential improvement value for the property, perform these steps:

STEP 1 If you used only one property record card to complete the "Summary of Non-Residential Improvements" for the property, sum the entries in the "Improvement Value" column and enter the total in the "Total Non-Residential Improvement Value" cell.

> If you used **more than one** property record card to complete the "Summary of Non-Residential Improvements" for the property, on each card except Card 001, sum the entries in the "Improvement Value" column and enter the total in the "Total Non-Residential Improvement Value" cell.

STEP 2 Sum the entries in the "Total Non-Residential Improvement Value" cell of all of the property record cards except Card 001. Enter the total in the "Supplemental Card Non-Residential Improvement Total" cell on Card 001. STEP 3 On Card 001, sum the entries in the "Improvement Value" column, including the entry in the "Supplemental Card Non-Residential Improvement Total" cell and enter the total in the "Total Non-Residential Improvement Value" cell.