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This appendix describes the concept of construction quality grade as it pertains to assessing:

- residential dwellings
- mobile and manufactured homes
- residential and agricultural yard improvements

This appendix discusses how construction quality is a necessary determinant of cost new and how it is used in the valuation process through the assignment of grade factors. Guidelines are included for determining the quality grade of improvements. This appendix also describes the types of materials, design features, and workmanship characteristic of each quality grade. Pictures of graded improvements are provided to help the assessor determine the grade of actual improvements.

Understanding the Concept of Construction Quality

Construction quality is a central concept in the approaches used to value dwelling units, mobile and manufactured homes, and residential and agricultural yard improvements. The quality of the material and workmanship used in constructing an improvement, together with its design elements, will influence its cost new.

Construction quality, and the resultant quality grade assigned, is a composite characteristic. It describes the cumulative effects of workmanship, the costliness of materials, and the individuality of design used in constructing an improvement.

Although the construction quality of individual components of an improvement may vary, the overall construction quality tends to be consistent for the entire residence. This is true because a builder will normally install components that tend to be of consistent quality and that will compliment each other.

Workmanship quality can easily be observed in an inspection of the property. Good quality workmanship is evidenced by plumb vertical surfaces, level horizontal surfaces, perfectly mitered trim joints, smooth interior surfaces on walls and ceilings, properly located and installed mechanical systems, and an overall pride in workmanship.

Material quality is also easily observable during an inspection of the property. Primary indicators of material quality are type and spacing of framing members, type and grade of interior and exterior finishing materials, type and grade of plumbing and electrical fixtures, and type and grade of mechanical systems.

Design is also an indicator of quality of construction. Improvements using simple or standard floor plans, little or no exterior decorative millwork, and basic interior trim are indicative of average and low quality improvements. Examples of higher quality designed improvements are those that have custom designed floor plans, higher pitched roofs with more than one roof line, decorative exterior millwork and masonry, and detailed interior design characteristics.

The costs given in this manual are for improvements that demonstrate a construction quality that is typical of the majority of improvements that will be valued.

Understanding Quality Grades

For each of the types of improvements (dwelling units, mobile and manufactured homes, and residential and agricultural yard improvements), a model has been defined to summarize the elements of construction quality that are typical of the majority of that type improvement. This typical model has been assigned a "C" quality grade for residences and a "Good" quality grade for mobile and manufactured homes. The characteristics of these typical models can be thought of as construction specifications for an improvement that was built with average quality materials and workmanship.

For dwelling units, as well as for residential and agricultural yard improvements, "AAA", "AA", "A", and "B" grade models have been defined to summarize the elements of improvements that use higher quality, hence more costly, building materials and workmanship than the typical model. For mobile and manufactured homes, a "Custom" grade model has been defined to summarize the elements of higher quality, hence more costly, construction.

For dwelling units, as well as for residential and agricultural yard improvements, "D" and "E" grade models have been defined to summarize the elements of improvements that use lower quality, hence lower cost, building materials and workmanship than the typical model. For mobile and manufactured homes, an "Economy" grade model has been defined to summarize the elements of lower quality, hence less costly, construction.

When considering quality grade, keep in mind that the grades are relative rankings of the cost of the materials, workmanship, and design used in construction. Quality grade does not indicate an improvement is inferior or superior to an improvement assigned a different grade.

This appendix describes the construction elements for each quality grade for each type of residential and agricultural improvement. It also provides pictures and descriptions of actual improvements to illustrate the various quality grades.

Understanding Quality Grade Factors

The replacement cost of an improvement is calculated by taking the base price of the improvement, adjusting it for various construction elements that add or deduct value, and then multiplying this adjusted cost by a percentage based on the improvement's grade. This percentage, known as a Quality Grade Factor, adjusts the costs in this manual for variations in construction quality.

The quality grade factor for an improvement assigned a "C" or "Good" grade is 100% since these were the quality grades assigned the models used to develop the costs published in this manual. In other words, a "C" or "Good" quality grade has no affect on the costs taken from this manual. The quality grade factors for the other quality grades reflect an increase in costs above those costs given in the tables of this manual for quality grades higher than the typical and a decrease in costs for quality grades lower than the typical, as shown in Table A-1.

Table A-1. Quality Grade Factors

Quality Grade	Quality Grade Factor
AAA	360%
AA	240%
A	160%
B	120%
C	100%
D	80%
E	40%
Custom	120%
Good	100%
Economy	90%

Assigning Quality Grades

When trying to determine a quality grade, the assessor first finds several improvements that are typical for the type of materials, workmanship, and design found in the majority of improvements within the neighborhood. The assessor then compares the materials, workmanship, and design used in these representative improvements to the construction specifications given in the quality grade classification tables and the pictures of graded improvements in this manual.

Note: The assessor should emphasize the quality of materials and workmanship used in the construction of the improvement when conducting this analysis and place less reliance on the pictures of graded improvements shown in this manual. Photographs alone cannot be used to determine construction quality grade since the front elevation may not truly represent the overall construction quality of both the interior and exterior of the improvement.

The assessor selects the quality grade that the representative improvements most closely resemble. This then becomes the base quality grade to be used as a starting point in determining the actual quality grade for each improvement within that neighborhood.

A second method of establishing the base quality grade for a neighborhood is to compare the actual construction costs of the improvements in the neighborhood, trended to January 1, 1999, to the construction costs given in this manual. If the trended actual costs match the costs in the table of this manual, then the base quality grade for the neighborhood is "C". If they are higher or lower than the costs in the tables of this manual, then the base quality grade for the neighborhood would be something other than a quality grade of "C". In this case, the base quality grade would be determined by dividing the trended actual costs by the costs determined from the manual. The result of this calculation should be compared to the quality grade factors in Table A-1 and Table A-2 to determine the corresponding quality grade.

The majority of dwelling units have a quality grade that falls between the "D" and "B" classifications, clustering heavily around the "C" classification. Neighborhoods tend to have

improvements with the same or similar quality of construction, thus narrowing the range of base grades applicable to a particular neighborhood.

When assigning quality grades to individual improvements within the neighborhood, the assessor starts with the assumption that the subject improvement will have the same quality grade as the base quality grade established for the neighborhood.

Assigning Intermediate Quality Grades

Some improvements in the neighborhood may have construction characteristics that deviate from the base quality grade specifications. To assign a quality grade to these properties, the assessor must weigh the components that deviate from the base quality grade selected for the neighborhood to determine whether an intermediate quality grade, or an entirely higher or lower full quality grade, is appropriate. The assessor should steer away from using intermediate quality grades if at all possible. Most improvements will be designed and constructed using materials, workmanship, and design that are typical for the base quality grade assigned to their neighborhood without the need to assign intermediate quality grades. Thus, the assessor must use careful judgment when assigning any quality grade that varies from the base quality grade for the neighborhood.

The following guidelines apply when assigning intermediate quality grades:

- “+ 2” indicates a quality grade that falls halfway between two full quality grades (AA, A, B, C, D, E). The quality grade factor for this intermediate quality grade is halfway between the percentages for the two full quality grades immediately above and below it.

For example, a quality grade of “C + 2” indicates that the overall construction quality is halfway between “C” and “B”. It would have a quality grade factor of 110% meaning the assessor has determined that the construction quality of the improvement has caused its cost new to be 10% higher than those given in the cost schedules in this manual.

- “+ 1” indicates a quality grade slightly higher than the full quality grade immediately below it. The quality grade factor for this intermediate quality grade is one quarter of the interval between the percentages for the two full quality grades immediately above and below it.

For example, a grade of “C + 1” indicates that the overall construction quality is one quarter of the way between “C” and “B”. It would have a quality grade factor of 105% (one quarter of the way between 100% and 120%). This means the assessor has determined that the construction quality of the improvement has caused its cost new to be 5% higher than those costs given in the schedules in this manual.

- “- 1” indicates a quality grade slightly lower than the full quality grade immediately above it. The quality grade factor for this intermediate quality grade is one quarter of the interval between the percentages for the two full quality grades immediately above and below it.

For example, a grade of “C - 1” indicates that the overall construction quality is one quarter of the way between “C” and “D”. It would have a quality grade factor of 95% (one quarter of the way between 100% and 80%). This means the assessor has determined that the construction quality of the improvement

has caused its cost new to be 5% lower than those costs given in the schedules in this manual.

- “E –1” is the only intermediate quality grade below “E”. It represents a reduction of ten percentage points from the “E” quality grade factor.
- Intermediate quality grades above “A” are indicated by “+ 1” through “+ 8”. Each number between “+ 1” and “+ 4” represents an increase of twenty percentage points between it and the next lowest intermediate grade designation. Each number between “+ 5” and “+ 8” represents an increase of thirty percentage points between it and the next lowest intermediate grade designation.

Example: The assessor has determined that the base quality grade for a neighborhood is “C”. A dwelling within that neighborhood has a roof that has a higher than normal pitch and is composed of two distinct rooflines. The dwelling's roof overhangs are wider than most dwellings in the neighborhood. There is also a four-foot offset at one corner of the dwelling that prevents it from being a simple rectangular shape like most of the dwellings in the neighborhood. The assessor decides to assign this improvement an intermediate quality grade, higher than the “C” base quality grade but lower than “B”, and places a “C+2” quality grade on the dwelling. In doing so, the assessor has determined that the design features of the subject residence make its cost new 10% higher than the costs given in the manual. (The quality grade factor percentage for a quality grade of “C+2” is 110% as shown in Table A-2, below.)

Note: An intermediate grade cannot be assigned to a mobile or manufactured home. An intermediate grade can be assigned to all other types of agricultural and residential improvements.

Grade Factor Percentages

Table A-2 shows the quality grade factors as percentages for the full and intermediate quality grades for improvements other than mobile and manufactured homes.

Table A-2. Quality Grade Factors for Dwelling Units

GRADE	FACTOR
AAA	360%
AAA-1	330%
AA +2	300%
AA +1	270%
AA	240%
AA -1	220%
A+2	200%
A+1	180%
A	160%

GRADE	FACTOR
A-1	150%
B+2	140%
B+1	130%
B	120%
B-1	115%
C+2	110%
C+1	105%
C	100%
C-1	95%

GRADE	FACTOR
D+2	90%
D+1	85%
D	80%
D-1	70%
E+2	60%
E+1	50%
E	40%
E-1	30%

Quality Grade Specification Tables

Table A-3 provides a list of the typical construction materials and design elements found in dwelling units of each full construction quality grade. This table is designed to assist the local assessing official in determining the appropriate quality grade to assign to dwelling units in his/her jurisdiction.

These descriptions **are not** detailed construction specifications of any particular dwelling unit. They are intentionally general to emphasize the most prominent elements of all dwelling units within a given quality grade. Because a dwelling unit does not have a particular element listed in the table, does not mean it cannot fit into the respective quality grade. Likewise, if a dwelling unit has something more than is listed in a particular quality grade, it does not necessarily mean it fits into a higher quality grade.

As stated earlier in this discussion of construction quality; although the construction quality of individual components of an improvement may vary, the overall construction quality tends to be consistent for the entire residence.

Table A-3. Quality Grade Specifications for Dwelling Units (Grades "AAA" through "E")

	"AAA" Grade	"AA" Grade	"A" Grade	"B" Grade	"C" Grade	"D" Grade	"E" Grade
Foundation	10" or 12" reinforced poured concrete; 10" or 12" concrete blk	10" or 12" reinforced poured concrete; 10" or 12" concrete blk	8" poured concrete or 8" concrete block	8" poured concrete or 8" concrete block	8" poured concrete or 8" concrete block	8" concrete block	8" concrete block or concrete block piers
Slab on Grade	6" reinforced concrete slab on sand or gravel base	6" reinforced concrete slab on sand or gravel base	4" concrete slab on gravel base	4" concrete slab on gravel base	4" concrete slab on gravel base	4" concrete slab on gravel base	4" concrete slab on gravel base
Structural floors	Wood or steel joists and sub floor sized & spaced to support additional interior components; foamed concrete surfacing	Wood or steel joists and sub floor sized & spaced to support additional interior components; may include foamed concrete surfacing	3/4" plywood sub floor on 2"x8" or 2"x10" wood joists or wood I-joist	3/4" plywood sub floor on 2"x8" or 2"x10" wood joists or wood I-joist	3/4" plywood sub floor on 2"x8" or 2"x10" wood joists or wood I-joist	3/4" plywood on 2"x8" wood joists or wood I-joist	1/2" or 3/4" plywood on 2"x8" wood joists
Exterior Walls							
Framing	2"x6" or 2"x8" studs 16" o.c. with partial or total steel frame to allow for long spans in larger rooms	2"x6" or 2"x8" studs 16" o.c. with partial steel frame to allow for long spans in larger rooms	2" x 6" or 2"x4" studs 16" o.c. with insulation board	2" x 6" or 2"x4" studs 16" o.c. with insulation board	2" x 6" or 2"x4" studs 16" o.c. with insulation board	2" x 4" studs 24" o.c.	2" x 4" studs 24" o.c.
Frame Sdg.	Wood shakes or cedar/steel/vinyl lap siding or stucco on lath	Wood shakes or cedar/steel/vinyl lap siding or stucco on lath	Wood shakes or cedar/steel/vinyl lap siding or stucco on lath	Wood shakes or cedar/steel/vinyl lap siding	Composite, alum., plywood, or vinyl siding	Composite, alum., plywood siding or textured plywood	Composite lap siding or textured plywood
Masonry Sdg.	Very finest select brick, cut stone, marble, granite or equal	Select brick, cut stone, marble, granite or equal	Brick or stone veneer	Brick or stone veneer	Brick or stone veneer	No masonry veneer	No masonry veneer
Doors	Solid core wood or insulated steel doors, sidelights; transoms very finest quality hardware	Solid core wood or insulated steel doors, sidelights; high quality hardware	Solid core wood or insulated steel doors, sidelights; high quality hardware	Solid core wood or insulated steel doors, sidelights	Solid core wood or insulated steel doors, sidelights	Wood or steel doors	Wood doors
Windows	Very finest quality casement or double hung, energy efficient windows	High quality casement or double hung, energy efficient windows	Casement or double hung wood or vinyl clad with energy efficient glass	Casement or double hung wood or vinyl clad with energy efficient glass	Double hung wood or vinyl	Wood, aluminum, or vinyl	Wood, aluminum, or vinyl

	"AAA" Grade	"AA" Grade	"A" Grade	"B" Grade	"C" Grade	"D" Grade	"E" Grade
Exterior Walls (continued)							
Other	Custom trim and ornamentation above doors and windows, roofline, and on other exterior surfaces	Custom trim and ornamentation above doors and windows	---	---	---	---	---
Roof							
Design	Custom design with many ridges and valleys with a pitch up to 6:12	Custom design with many ridges and valleys with a pitch up to 6:12	Multi-gable, hip & high pitch	Gable, hipped, or gambrel; moderate to high pitch	Gable, hipped, or gambrel; moderate pitch	Gable; moderate to low pitch	Gable; moderate to low pitch
Framing	Heavy wood rafters or custom trusses	Heavy wood rafters or custom trusses	Rafters or trusses	Rafters or trusses	Rafters or trusses	2"x4" trusses	2"x4" trusses
Sheathing	¾" or thicker plywood or boards	¾" or thicker plywood or boards	7/16" or thicker plywood or boards	7/16" or thicker plywood or boards	7/16" or thicker plywood or composition board	7/16" plywood or comp. board	Composition board
Cover	Wood shake, slate, or clay tile	Wood shake, slate, or clay tile	Wood shake or fiberglass shingles	Fiberglass or cedar shingles	Fiberglass or composition shingles	Fiberglass or composition shingles	Fiberglass or composition shingles
Soffits	Wide overhangs up to 3'	Wide overhangs up to 3'	12"-24" overhangs	12"-24" overhangs	12"-24" overhangs	12" or less overhang	No overhangs
Flashing	Copper	Copper or galvanized	Copper, galv., or aluminum	Copper, galv., or aluminum	Aluminum	Aluminum	Aluminum
Gutters	Designed and constructed to be an integral part of residence	5" or 6" wood, steel, or alum made as an integral part of roofline	5" or greater wood, steel, or alum.	5" or greater steel or aluminum	Aluminum or plastic	Aluminum or plastic	Aluminum or no gutters
Interior Finish							
Flooring	Very finest quality or custom carpet and resilient cover, hardwood, terrazzo, ceramic, marble, granite	Best quality or custom carpet and resilient cover, hardwood, terrazzo, ceramic, marble, granite	Marble, ceramic tile hardwood, high-grade carpet and resilient flooring	Ceramic tile, good-grade vinyl, hardwood, good-grade carpet	Builders grade carpet and vinyl	Builders grade carpet and vinyl	Low grade carpet or vinyl
Wall Covering	Decorative drywall or plaster w/paint and/or very finest grade cover and/or hardwood panels	Decorative drywall or plaster w/paint and/or best grade cover and/or hardwood paneling	Drywall or plaster w/paint and/or high grade cover	Drywall or plaster w/paint and/or good grade cover	Drywall with paint	Drywall with paint	Inexpensive painted or textured drywall, printed hardboard

	"AAA" Grade	"AA" Grade	"A" Grade	"B" Grade	"C" Grade	"D" Grade	"E" Grade
Interior Finish (continued)							
Doors	Very finest quality raised-panel solid hardwood w/finest quality hardware	Best quality raised-panel solid hardwood w/best quality hardware	Six panel or solid core doors; stained or painted w/high quality hardware	Six panel wood or composition doors; stained or painted w/good quality hardware	Six panel or slab wood or composition doors; stained or painted, average quality hardware	Hollow core wood doors; stained or painted	Hollow core wood doors; stained or painted
Trim	Decorative hardwood with extensive use throughout; installed w/excellent workmanship	Decorative hardwood with extensive use throughout; installed w/excellent workmanship	Oak, poplar, or pine 3-1/2" + baseboard, 2-1/2" + casing, crown molding, chair rail, wainscoting	Oak, poplar, or pine 3-1/2" + baseboard, 2-1/2" + casing, crown molding, chair rail, wainscoting	Pine 3-1/2" baseboard, 2-1/2" casing	Ranch base and casing	Ranch base and casing
Cabinets	Very finest quality wood, resin, or baked enamel finish w/finest quality hardware; counter top of best quality plastics, ceramic, granite, or marble	Best quality wood, resin, or baked enamel finish w/best quality hardware; counter top of best quality plastics, ceramic, granite, or marble	High quality wood & hardware; counter top of laminate plastic, ceramic, or cultured marble	Good quality wood & hardware; counter top of laminated plastic or ceramic	Standard grade box cabinets w/standard hardware; counter top of laminated plastic	Standard grade box cabinets w/standard hardware; counter top of laminated plastic	Standard grade box cabinets w/standard hardware; counter top of laminated plastic
Built-ins	Bookcases, shelves, mantles, cabinets, desks, kitchen island, pantry, entertainment centers, wet bar, walk-in closets with built-in features, exercise room, large linen closets; vaulted or custom ceilings	Bookcases, shelves, mantles, cabinets, desks, kitchen island, pantry, entertainment centers, wet bar, walk-in closets; custom ceiling designs	Bookcases, mantles, entertainment centers, china cabinets	Bookcases and mantles	Mantles	---	---
Stairways	Very finest hardwood including handrail system; may be carpeted; may be curved	Oak, poplar, or other finish grade lumber including handrail system; may be carpeted; may be curved	Oak, poplar, or other finish grade lumber including handrail system; may be carpeted; may be curved	Oak, poplar, or other finish grade lumber including handrail system; may be carpeted	Oak, poplar, or other finish grade lumber including handrail system; may be carpeted	Pine; painted, stained or carpeted	Pine; painted, stained or carpeted
Bath Finish	Very finest quality ceramic tile, plastic laminates or marble	Best quality ceramic tile, plastic laminates or marble	High quality ceramic tile or marble	Good quality ceramic tiled bath	Ave. quality ceramic tile or fiberglass tub enclosure	Fiberglass tub enclosure	No finish over drywall in bath

	"AAA" Grade	"AA" Grade	"A" Grade	"B" Grade	"C" Grade	"D" Grade	"E" Grade
Service	200 amp	200 amp	200 amp	100 or 200 amp	100 amp	60 or 100 amp	60 amp
Wiring	Conduit	Conduit	Romex cable	Romex cable	Romex cable	Romex cable	Romex cable
Outlets	Abundant outlets that are well-positioned	Abundant outlets that are well-positioned	Abundant outlets	Abundant outlets	Adequate outlets	Adequate outlets	Few outlets
Fixtures	Very finest quality; custom light treatments; High value chandeliers throughout	Best quality; under counter and cabinet lighting High value chandelier	High grade fixtures	Good grade fixtures	Average grade fixtures	Average or inexpensive fixtures	Inexpensive fixtures

Heating		Equipment		Thermostat		
	Large capacity central forced air or steam; may include more than one heating plant; insulated ductwork or piping	Large capacity central forced air or steam; may include more than one heating plant; insulated ductwork or piping	Central forced air or steam	Central forced air or steam	Central forced air	Central forced air or space heaters
	Zoned	Zoned	Zoned	Central	Central	Central

Plumbing		Piping		Kitchen Fixtures		Bathroom Fixtures		Vanity Tops	
	Copper or iron	Copper or iron	Copper or iron	Copper or iron	Copper or iron	Copper, iron, or plastic	Plastic	Plastic	Plastic
	Very finest quality porcelain or stainless steel; multiple sinks; very finest quality faucets	Best quality porcelain or stainless steel; multiple sinks; best quality faucets	High quality porcelain or stainless steel sink; high quality faucets	Better quality porcelain or stainless steel sink; better quality faucets	Average quality porcelain or stainless steel sink; average quality faucets	Stainless steel sink; average quality faucets	Low quality pedestal sink or vanity; low quality faucets	Wall hung lavatory; average quality faucets and fixtures	---
	Very finest quality tiled shower stall; sunken tub; jacuzzi; bidet, vanities or pedestal sinks	Best quality tiled shower stall; sunken tub; jacuzzi; bidet, vanities or pedestal sinks	High quality pedestal sink or vanity; high quality faucets and fixtures	Good quality pedestal sink or vanity; good quality faucets and fixtures	Average quality vanity; average quality faucets and fixtures	Average quality vanity; average quality faucets and fixtures	---	---	---
	Very finest quality marble, ceramic, or equal	Best quality marble, ceramic, or equal	Marble, ceramic, high quality plastic laminates	Cultured marble, ceramic, better quality plastic laminates	Cultured marble, ceramic, average quality plastic laminates	Plastic laminates	---	---	---

	"AAA" Grade	"AA" Grade	"A" Grade	"B" Grade	"C" Grade	"D" Grade	"E" Grade
Design Characteristics	One-of-a-kind, architecturally designed for an individual; specifies very finest quality workmanship, fenestration, appointments, finishes, and considerable attention to detail	Architecturally designed with attention to detail	Individual custom design with attention to detail	Custom built	Tract type	Tract type	Tract type
	Numerous cuts, angles, and offsets	Numerous cuts, angles, and offsets	Numerous cuts, angles, and offsets	Few cuts, angles, and/or offsets	Rectangular or with minor offsets	Rectangular	Rectangular
	Stresses uniqueness, height and irregularity	Stresses uniqueness, height and irregularity	Stresses height and irregularity	Stresses horizontal & symmetrical	Stresses eye appeal w/standard colors	Meets minimum building code	May not meet minimum bldg. code

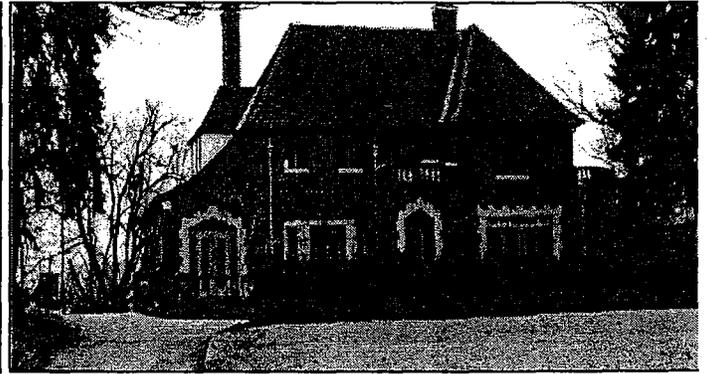
Photographs of Graded Dwelling Units

The following photographs illustrate the grade classifications for dwelling units. These photographs are provided to help the assessor determine the grade of actual dwelling units.

Important: *These photographs are only an indication of grade and not a determination of the actual grade of the improvement shown. The grade determination must be based on individual inspection of the type of materials, quality of workmanship, and design of the subject improvement.*



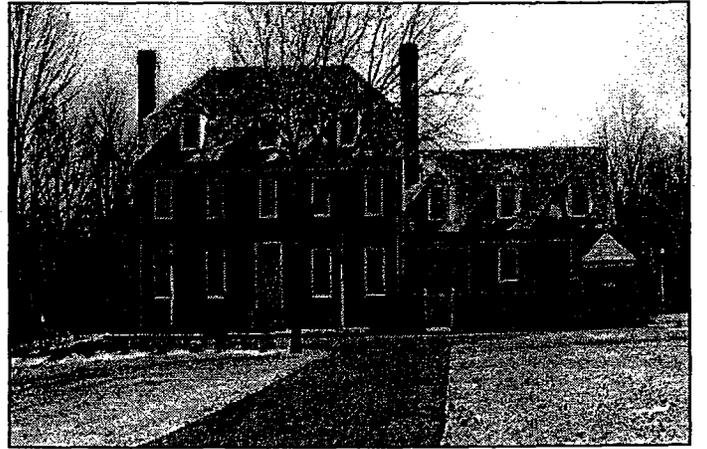
Grade AA Residential Dwelling



Grade AA Residential Dwelling



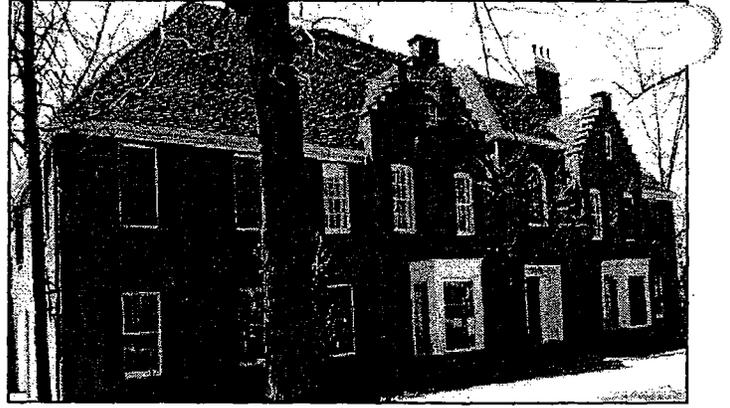
Grade AA Residential Dwelling



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Grade AA Residential Dwelling



Grade AA Residential Dwelling



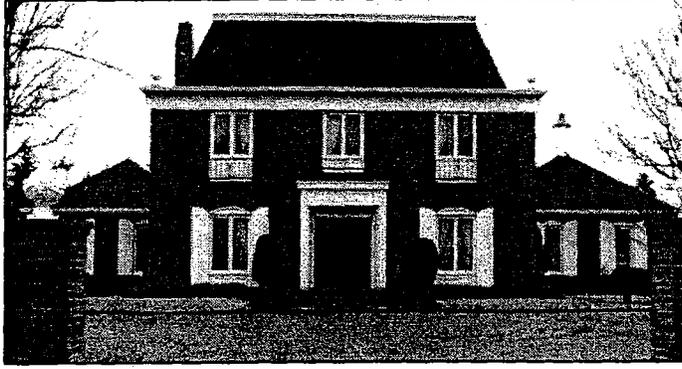
Grade AA Residential Dwelling



Grade AA Residential Dwelling



Grade A Residential Dwelling



Grade A Residential Dwelling



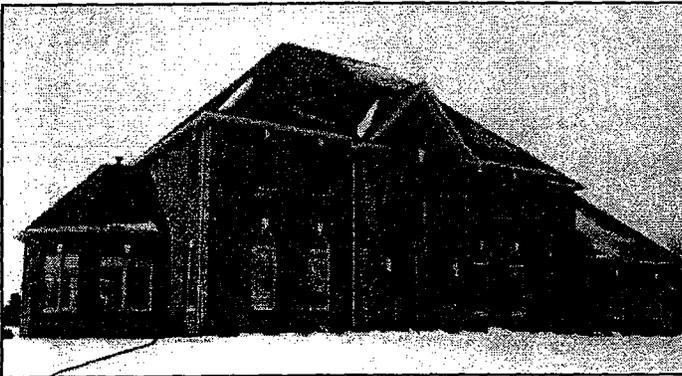
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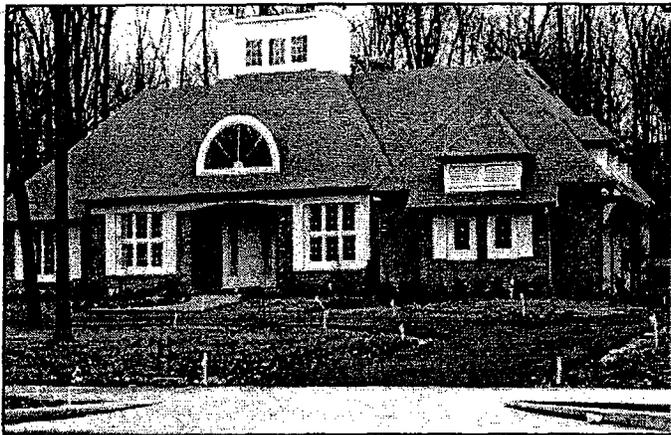
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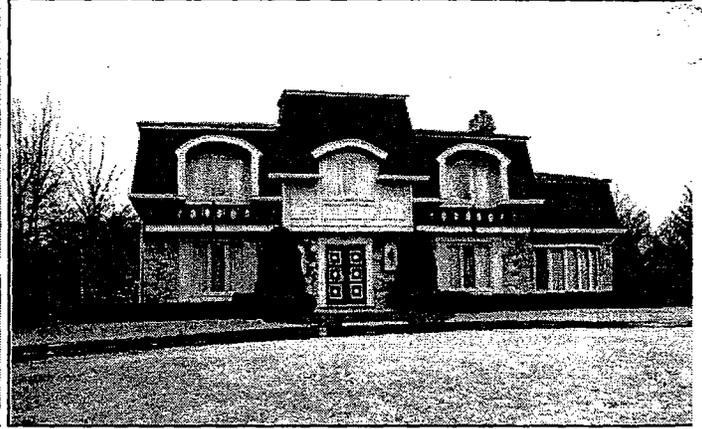
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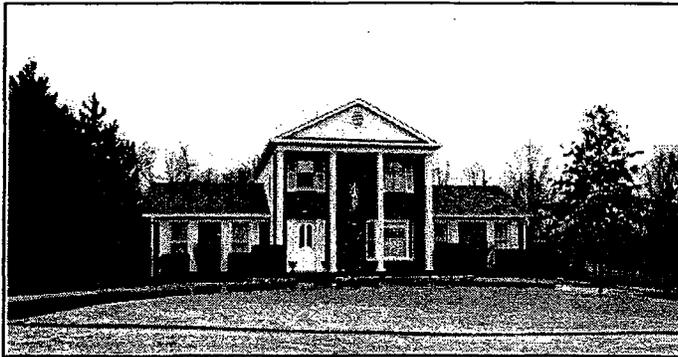
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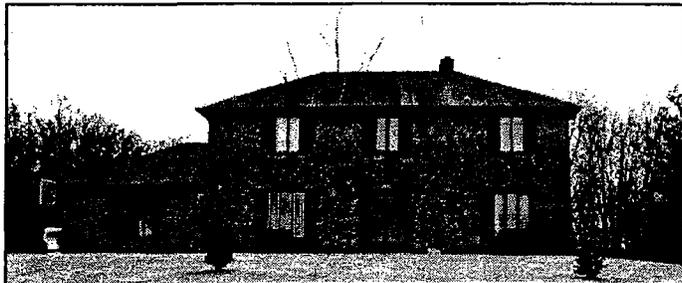
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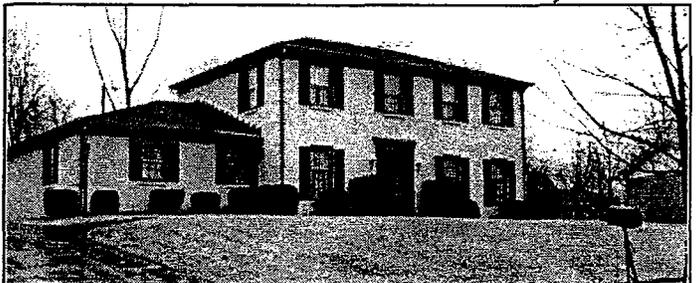
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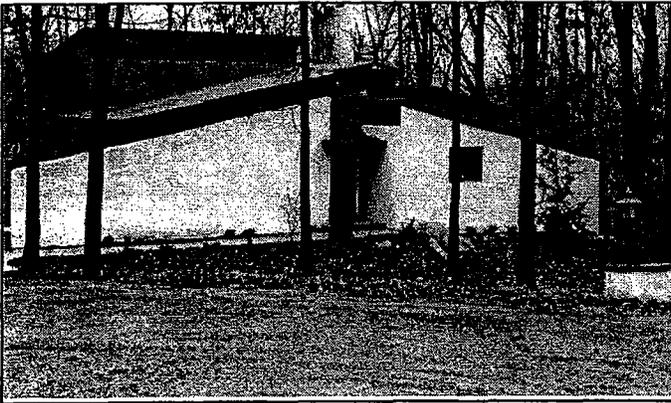
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Grade C Residential Dwelling



Grade C Residential Dwelling



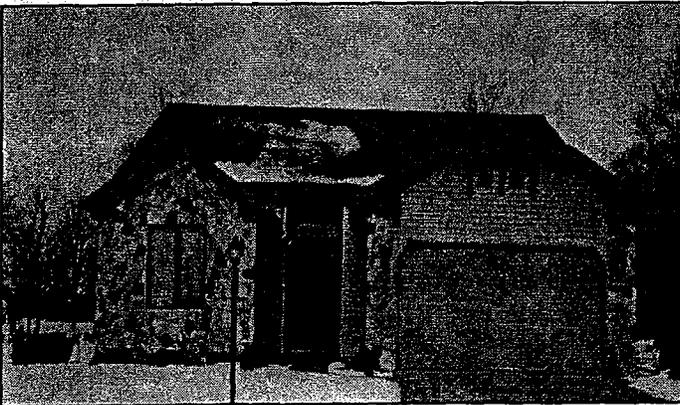
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Grade C Residential Dwelling



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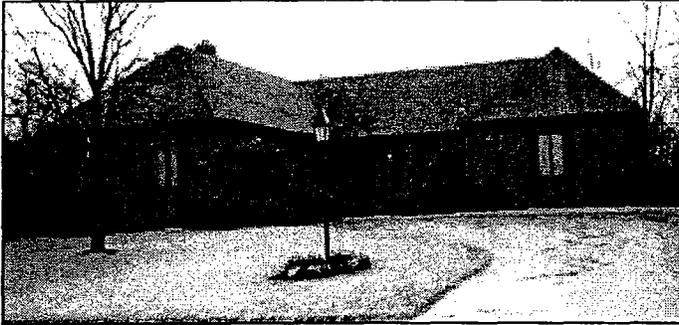
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Grade C Residential Dwelling



Grade C Residential Dwelling



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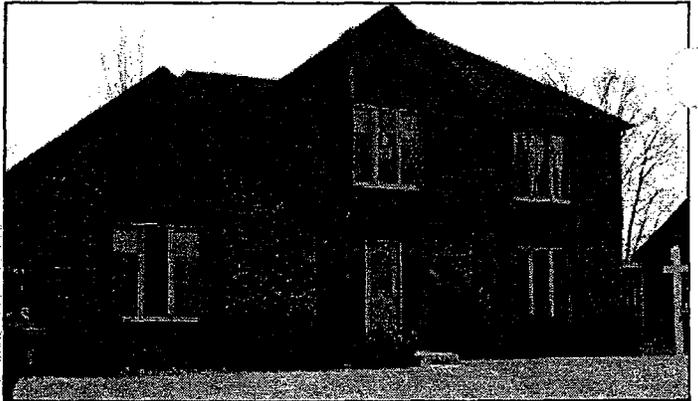
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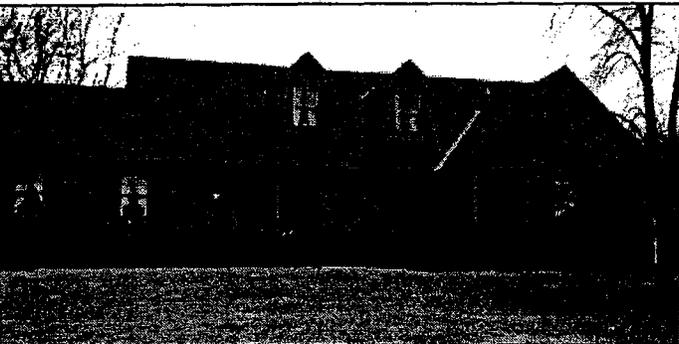
Grade C Geodesic Residential Dwelling



Grade C Geodesic Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



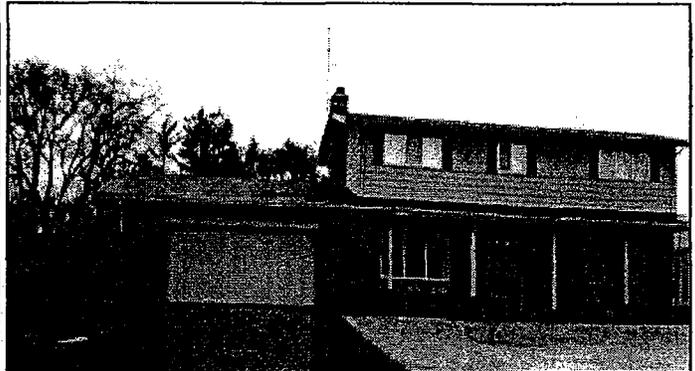
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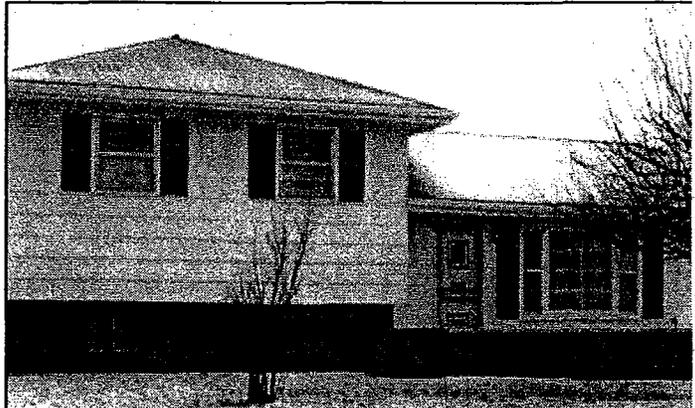
Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Earth Home Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



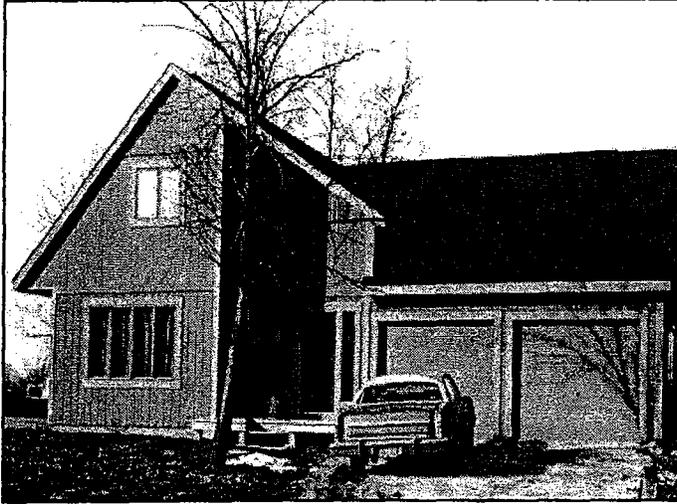
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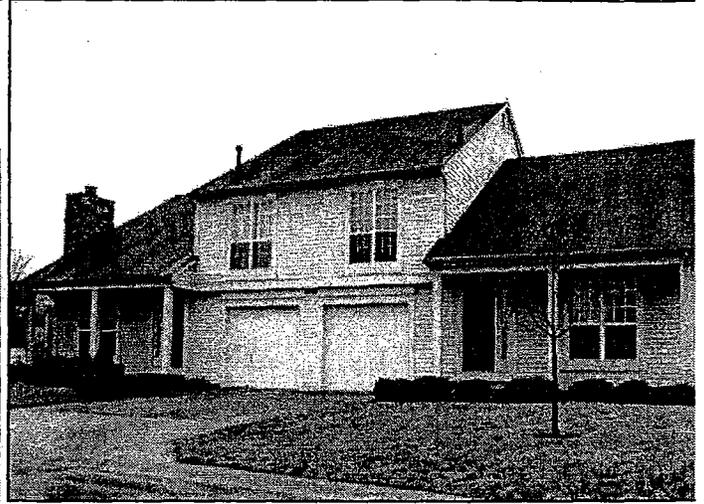
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Grade C Residential Dwelling



Grade C Residential Dwelling



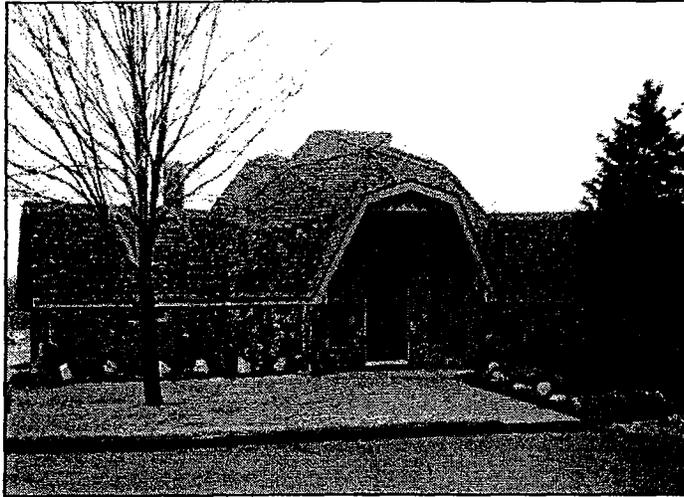
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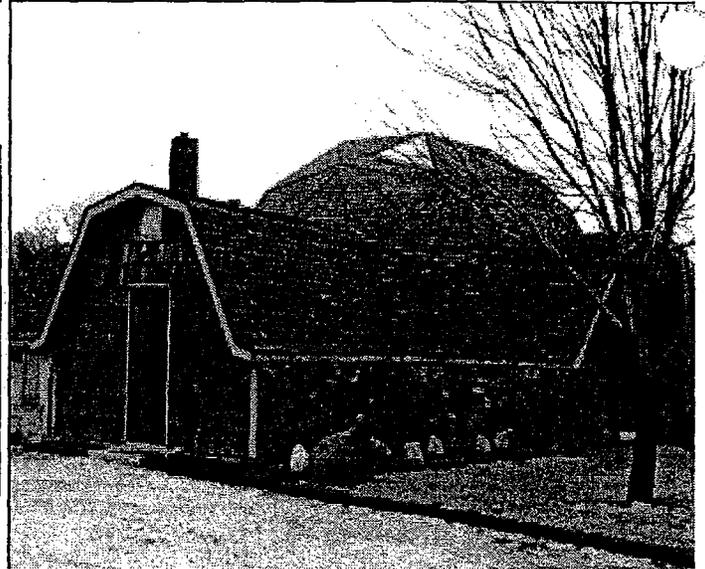
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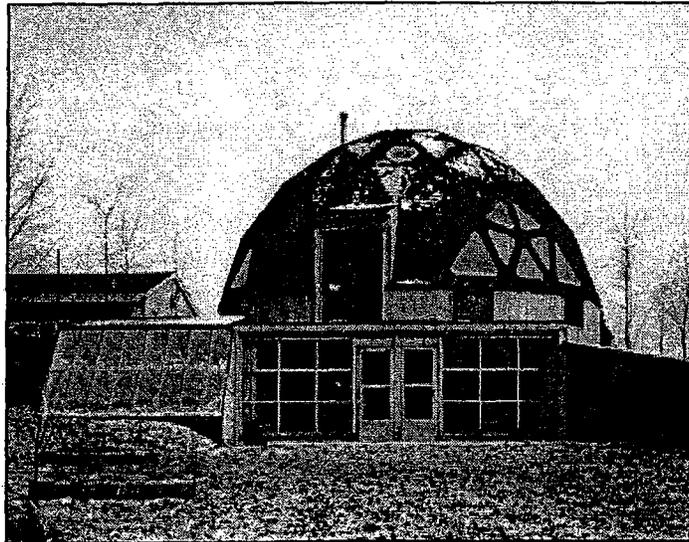
Grade C Residential Dwelling



Grade C Geodesic Residential Dwelling



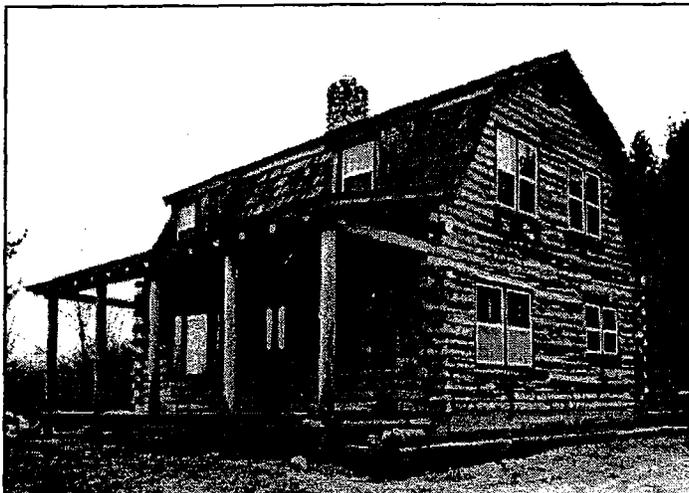
Grade C Geodesic Residential Dwelling



Grade C Geodesic Residential Dwelling



Grade C Log Home Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



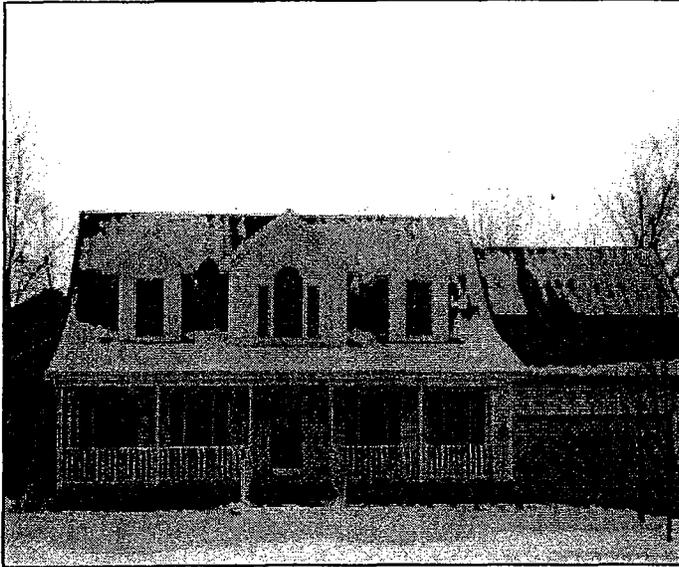
Grade C Log Home Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



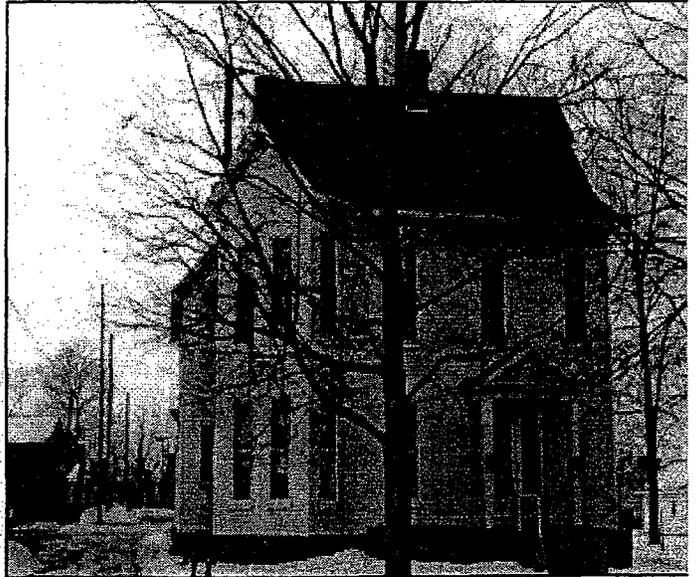
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Grade C Residential Dwelling



Grade C Residential Dwelling



Grade C Residential Dwelling



Grade D Residential Dwelling



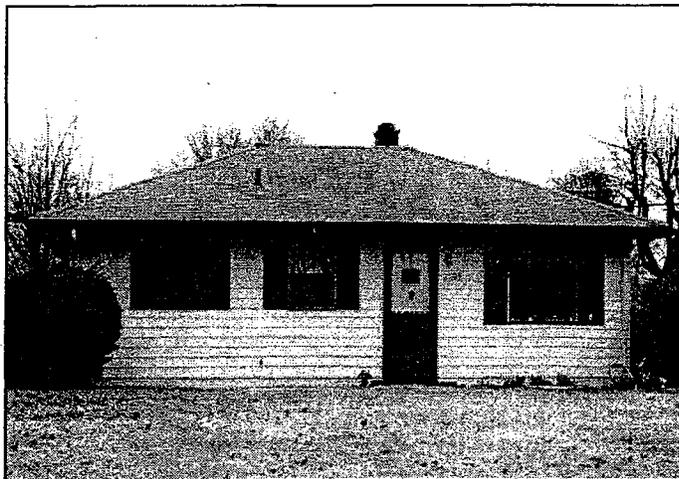
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Grade D Residential Dwelling



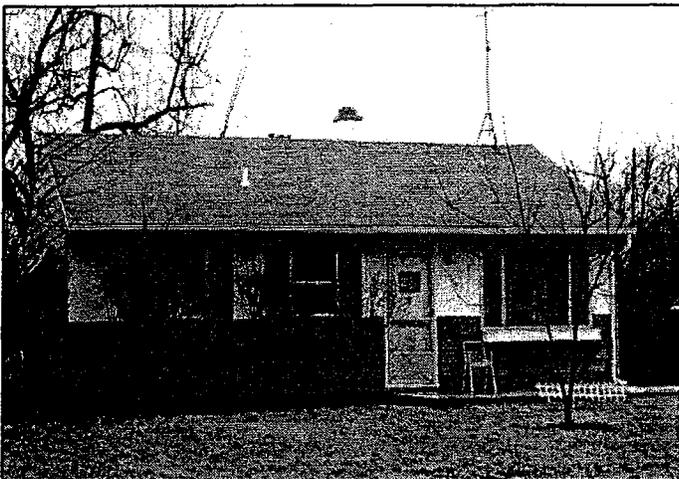
Grade D Residential Dwelling



Grade D Residential Dwelling



Grade D Manufactured Residential Dwelling



Grade D Residential Dwelling



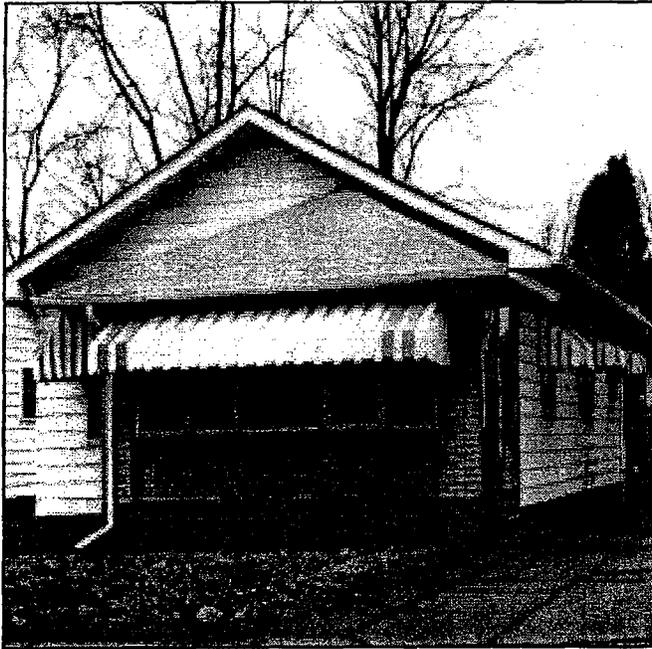
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Grade D Residential Dwelling



Grade D Residential Dwelling



Grade D Residential Dwelling



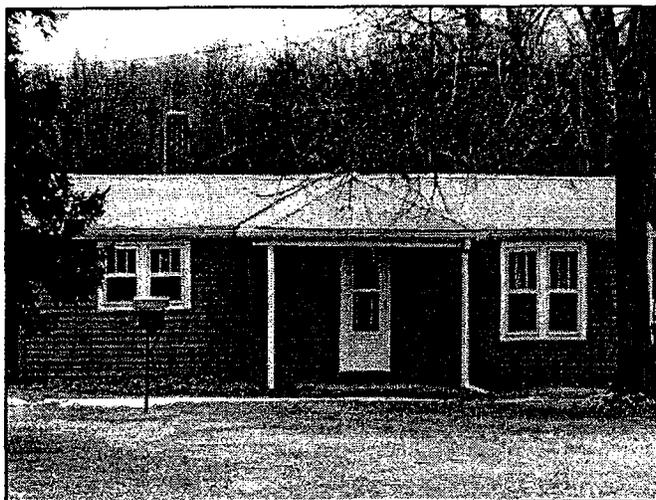
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Grade D Residential Dwelling



Grade D Residential Dwelling



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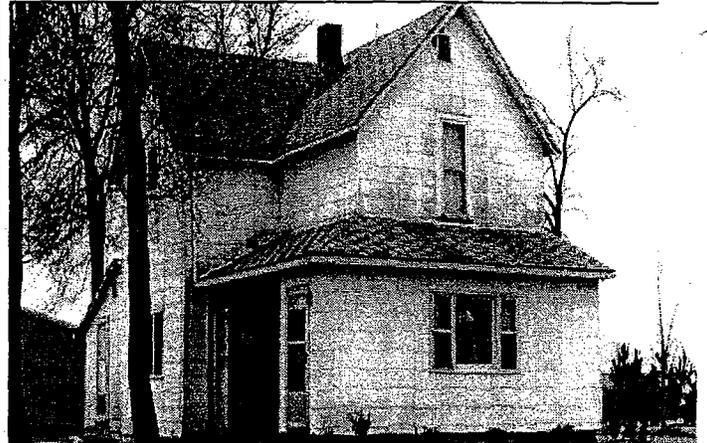
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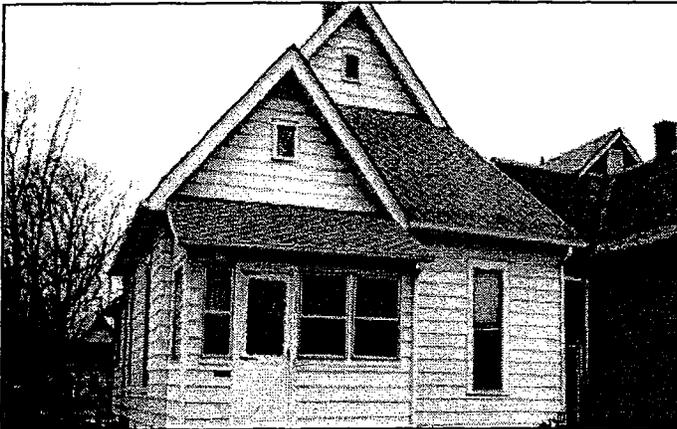
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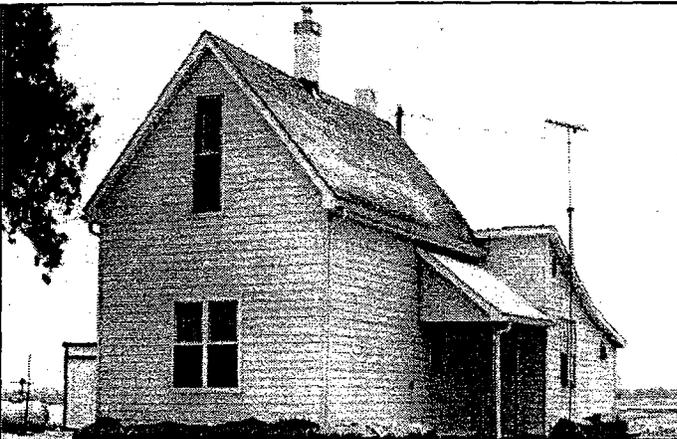
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Grade D Residential Dwelling



Grade D Residential Dwelling



Grade D Residential Dwelling



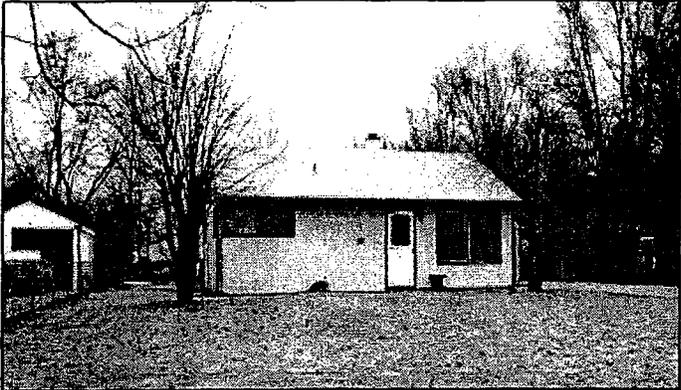
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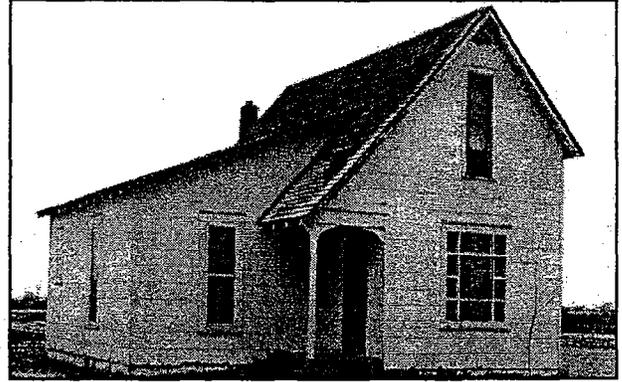
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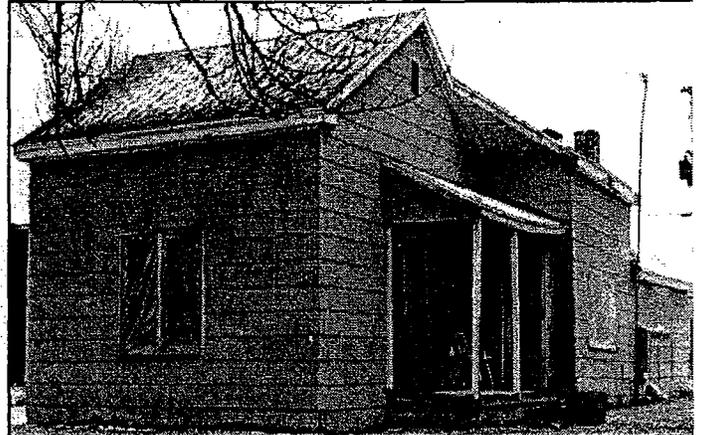
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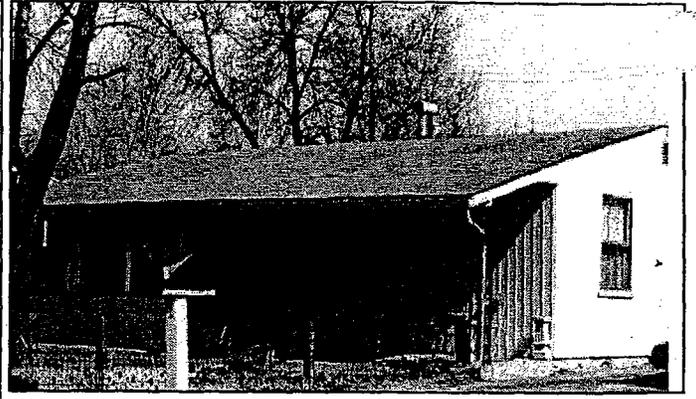
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Grade D Residential Dwelling



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Grade D Residential Dwelling



Grade D Residential Dwelling



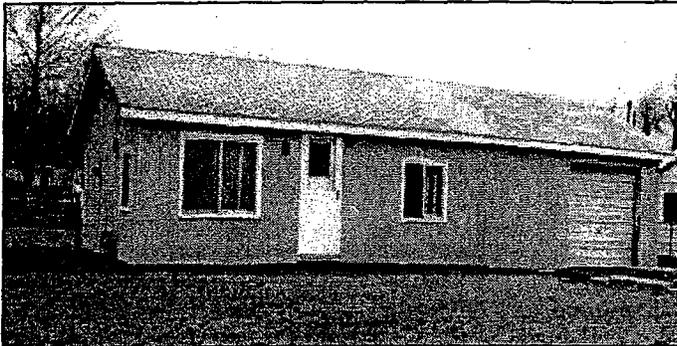
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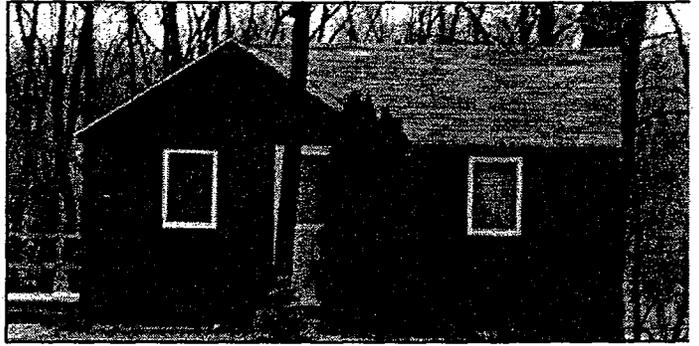
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Grade D Residential Dwelling



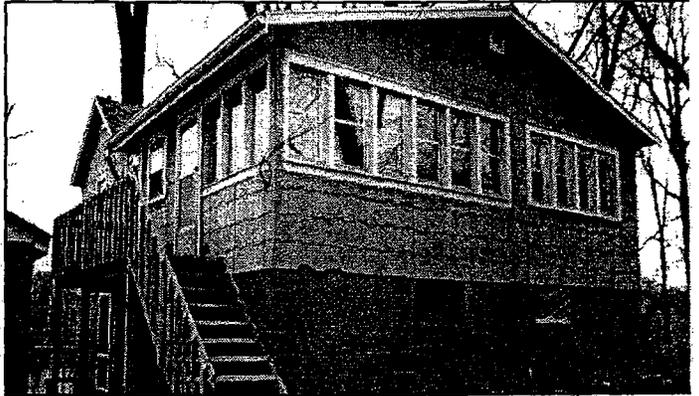
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Grade D Residential Dwelling



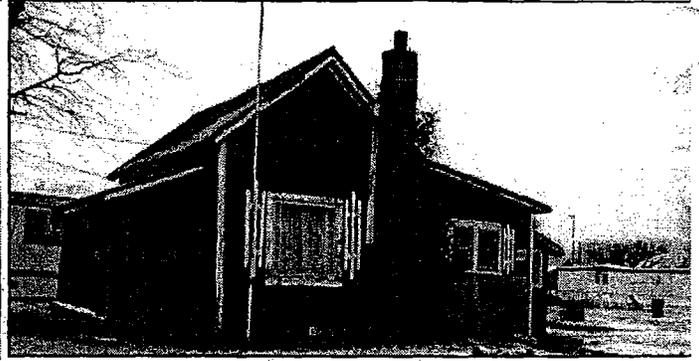
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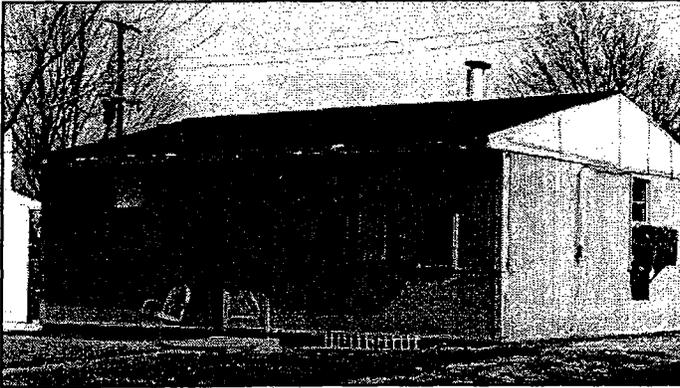
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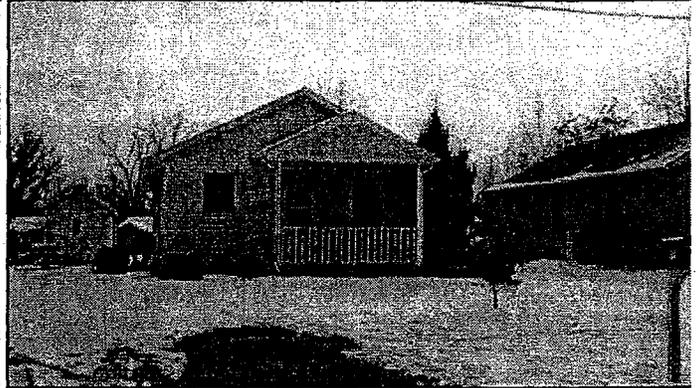
Grade D Residential Dwelling



Grade D Residential Dwelling



Grade D Residential Dwelling



Grade D Residential Dwelling



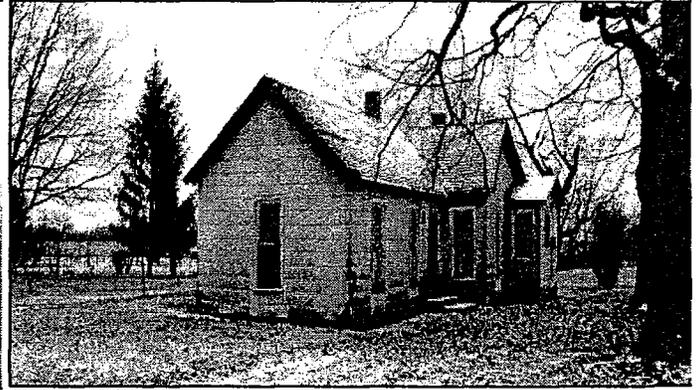
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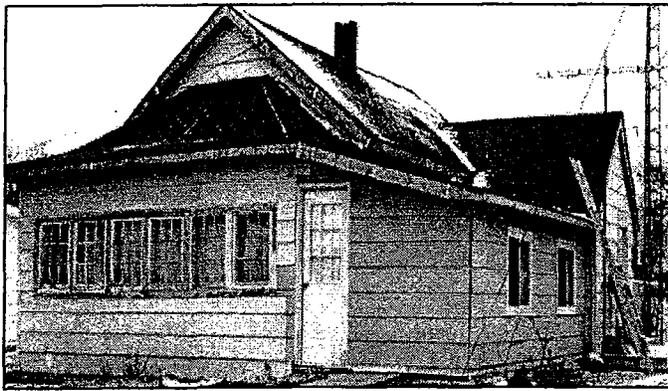
Grade E Residential Dwelling



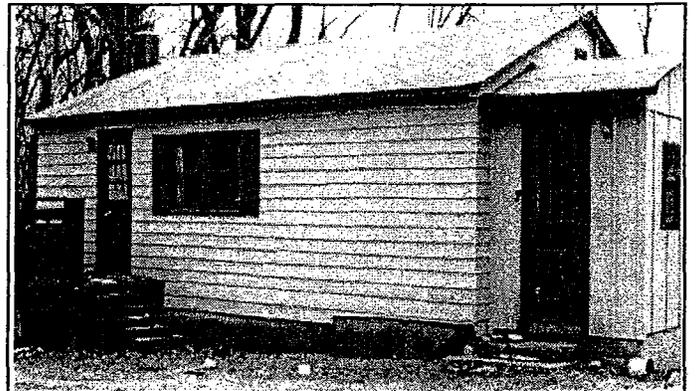
Grade E Residential Dwelling



Grade E Residential Dwelling



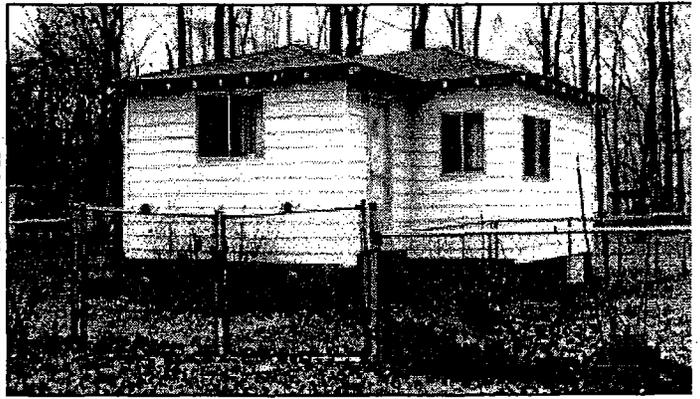
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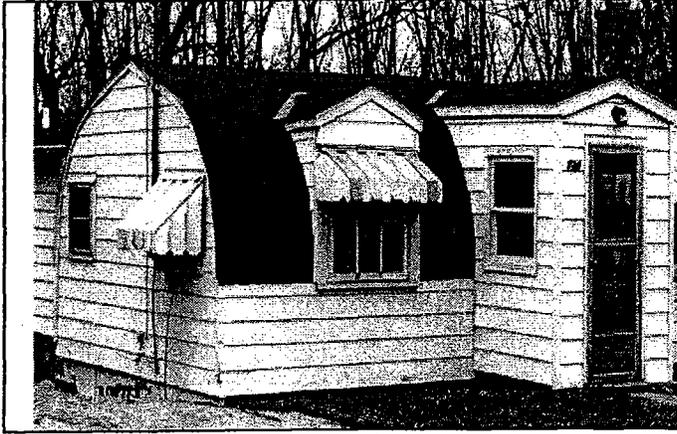
Grade E Residential Dwelling



Grade E Residential Dwelling



Grade E Residential Dwelling



Grade E Residential Dwelling



Grade E Residential Dwelling

Assigning Grades to Mobile and Manufactured Homes

Table A-4 describes the grade descriptions. Table A-5 provides the grade factor percentage for each grade and describes the differences between the grade classifications for mobile and manufactured homes.

For exterior features, stick-built room additions, and basements, use the grade classifications and corresponding grade factor percentages defined for dwelling units. Information about dwelling unit grade classifications is provided in the section *Assigning Grades to Dwelling Units* in this appendix.

Table A-4. Grade Descriptions

Custom Grade	
	The custom mobile home is similar in both design and appearance to a modular constructed home. It exceeds minimum requirements of mobile home codes, with special attention given to separate foyer entries and family living areas.
Exteriors	Usually finished to resemble site-built housing with aluminum, vinyl, or other siding in various patterns and textures resembling wood. The exterior usually includes plastic, imitation brick, or stone ornamentation.
Walls	6" thick, 8' high with ample openings consisting of residential-type windows, sliding doors and ornamental entrances.
Interiors	Wallpaper, simulated brick, stone, and natural hardwood veneers. Cabinets, vanities and hardware are good quality with counters of the best plastics. Floor coverings are of sheet vinyl, some parquet, and good medium-weight carpeting. Ceiling treatment often includes exposed beams, dropped or cathedral ceilings.
Heating	Floor and ceiling ducts that are ready to adapt for air conditioning. Add for air conditioning.
Plumbing	Five good-quality fixtures in the base cost. The fixtures include any of the following: lavatory, toilet, tub with shower over, tiled or modular stall shower, kitchen sink, laundry tray, water heater, and walk-in tub.
Good Grade	
Exteriors	Pre-finished aluminum, vinyl, or hardboard siding.
Walls	3" to 4" thick and 7'6" to 8' high with ample amount of windows
Interiors	Better quality pre-finished plywood. Resilient flooring and carpeting is average residential quality.
Heating	Heating is forced air through insulated ducting with provision for air conditioning.

	Add for air conditioning.
Plumbing	Plumbing includes five average quality fixtures in the base cost. The fixtures can include any of the following: lavatory, toilet, tub with shower over, tiled or modular stall shower, kitchen sink, laundry tray and water heater. Most fixtures are located along one side of the home (wet wall).
Economy Grade	
The economy mobile home is designed to meet minimum home code requirements. The overall quality of materials and workmanship is below average.	
Exteriors	Pre-finished aluminum, vinyl, or hardboard lap siding. Fasteners might be hidden. Windows are few and low-cost. Roofs are typically arched or sloped, with minimum overhang on the front elevation.
Walls	Walls are typically 3" thick, and 7' to 7'6" high.
Interiors	Painted or pre-finished plywood. Carpeting is low to moderate grade and cabinetry is standard, inexpensive units.
Heating	Heating and ducting are normally minimal with straight-line forced-air-ducts. Add for air conditioning.
Plumbing	Plumbing includes five fixtures in the base cost. The fixtures can include any of the following: lavatory, toilet, tub with shower over, water heater, and kitchen sink. All fixtures are usually located along one side of the home (wet wall) with minimum runs.

Table A-5. Grade Classifications for Mobile and Manufactured Homes

	"Custom" Grade	"Good" Grade	"Economy" Grade
Percentage	120%	100%	90%
Exterior walls	2" x 6" exterior walls	2" x 4" and some 2" x 6" exterior walls	2" x 3" exterior walls
	Vinyl or wood lap siding	Aluminum or steel siding with some models having vinyl or wood siding	Aluminum or steel corrugated siding
	10 or more good quality windows, with possibly some bay windows	8 or more good quality windows, with possibly some bay windows	6 or more minimum quality windows with few special features
	Abundant amount of exterior trim making the structure look like a conventional home	Average amount of accented exterior trim	Minimum amount of exterior trim

	"Custom" Grade	"Good" Grade	"Economy" Grade
Roof	Pitched roof, with asphalt shingles	Pitched shingle roof or a flat metal roof, possibly stepped over the living room	Straight roof line with a plain metal roof
Interior finish	High quality carpet	Medium quality carpet	Thin rubber-backed carpet or vinyl floor covering
	Drywall, monowall, or high quality paneling with deluxe trim	Standard paneling and some variety of printed wallboard with common trim	Thin economy paneling throughout with little variety
	Abundance of hardwood cabinets	Standard cabinetry	Few cabinets other than basics
	Seamless 7 1/2' to 8' ceilings, possibly cathedral	Seamless 7' to 7 1/2' ceilings, possibly cathedral	7' ceilings with exposed fasteners
	Possible built-in fireplace	Possible free-standing fireplace	No fireplace

Photographs of Graded Mobile and Manufactured Homes

The following photographs illustrate the grade classifications for mobile and manufactured homes. These photographs are provided to help the assessor determine the grade of actual mobile and manufactured homes.

Important: *These photographs are only an indication of grade and not a determination of the actual grade of the structure shown. The grade determination must be based on individual inspection of the type of materials and quality of workmanship of the subject parcel.*



"Custom" Grade Manufactured Home



"Custom" Grade Manufactured Home



"Custom" Grade Manufactured Home



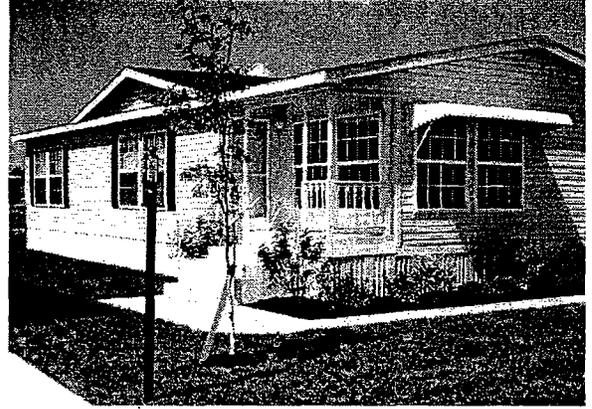
"Custom" Grade Manufactured Home



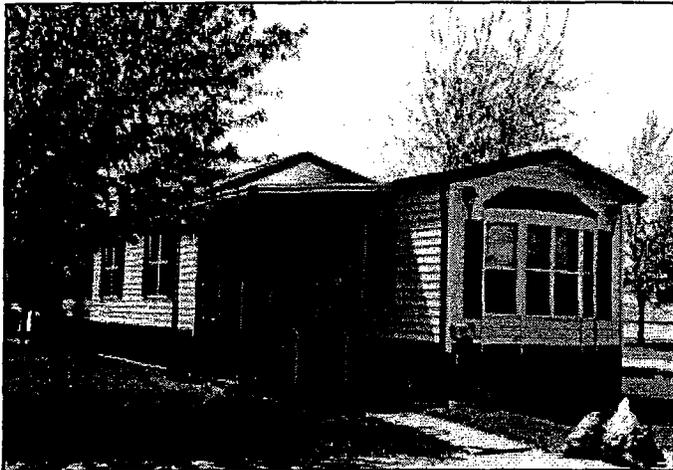
"Custom" Grade Manufactured Home



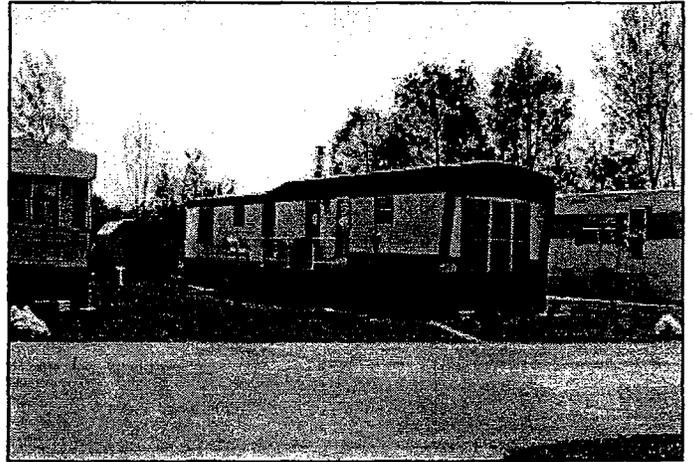
"Good" Grade Manufactured Home



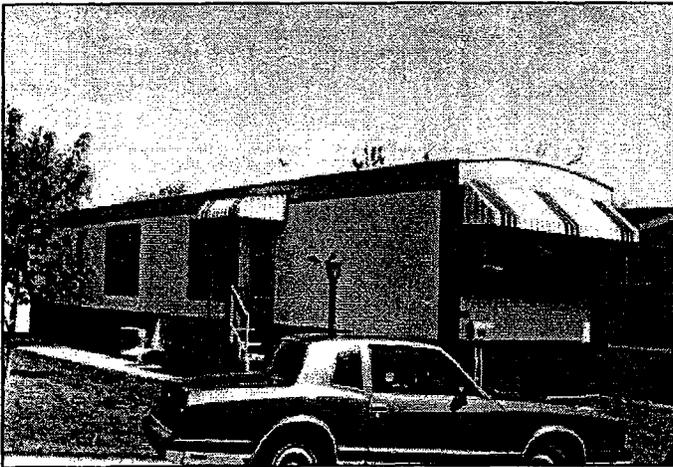
"Good" Grade Manufactured Home



"Good" Grade Mobile Home



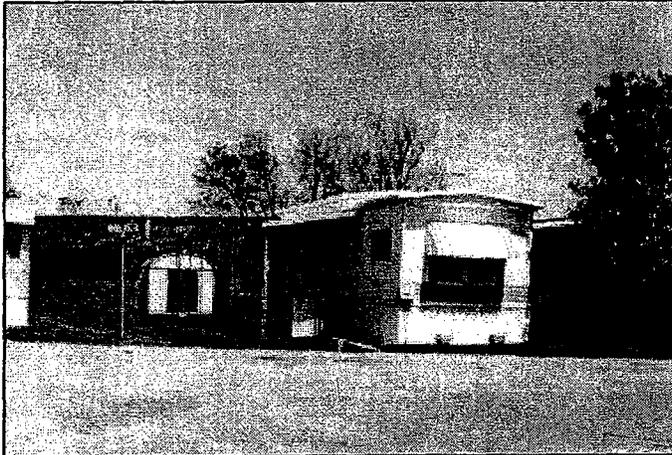
"Economy" Grade Mobile Home



"Economy" Grade Mobile Home



"Economy" Grade Mobile Home



"Economy" Grade Mobile Home

Assigning Grades to Residential and Agricultural Yard Structures

The Cost Schedules for Residential and Agricultural Yard Structures, provided at the end of Appendix C, reflect the specifications for “C” grade structures.

Determining Grade Factor Percentages

Table A-6 shows the grade factor percentages for the whole and intermediate grades for residential and agricultural yard structures.

Table A-6. Percentage Multipliers for Residential and Agricultural Yard Structure Grades

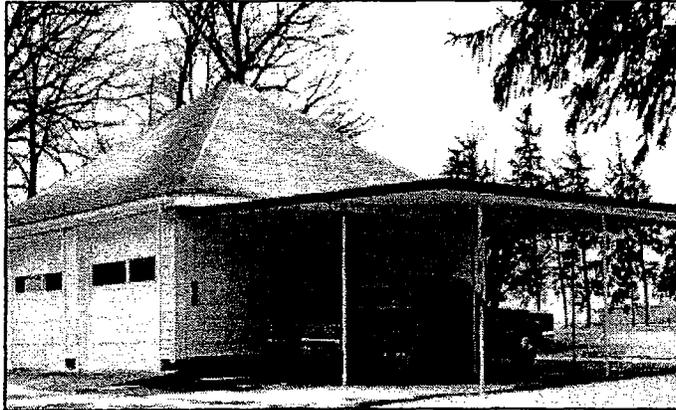
-1	E	+1	+2	-1	D	+1	+2	-1	C	+1	+2	-1
30	40	50	60	70	80	85	90	95	100	105	110	115
	E				D				C			

B	+1	+2	-1	A	+1	+2	-1	AA	+1	+2	-1	AAA
120	130	140	150	160	180	200	220	240	270	300	330	360
B				A				AA				AAA

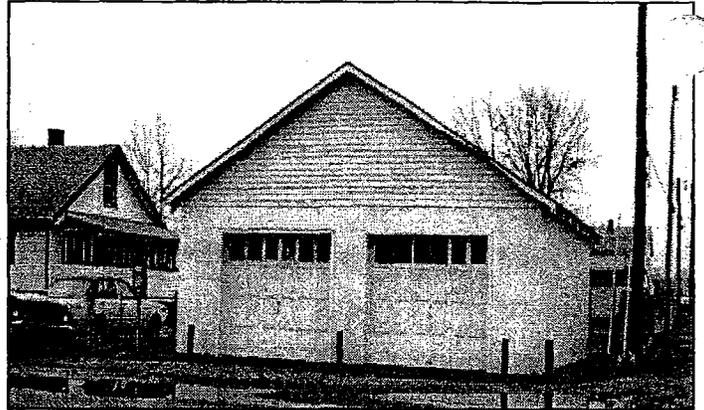
Photographs of Graded Residential and Agricultural Yard Structures

The following photographs illustrate the grade classifications for residential and agricultural yard structures. These photographs are provided to help the assessor determine the grade of actual residential and agricultural yard structures.

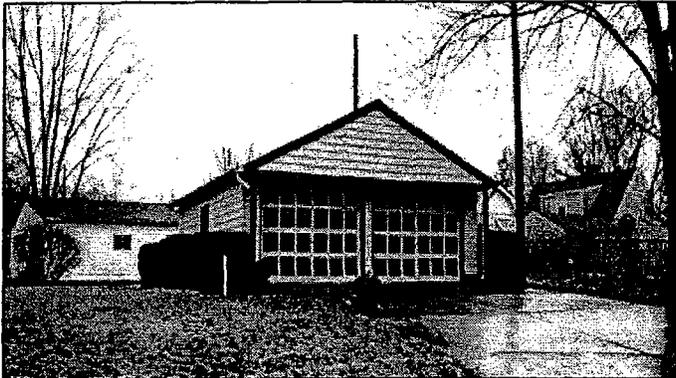
Important: *These photographs are only an indication of grade and not a determination of the actual grade of the structure shown. The grade determination must be based on individual inspection of the type of materials and quality of workmanship of the subject parcel.*



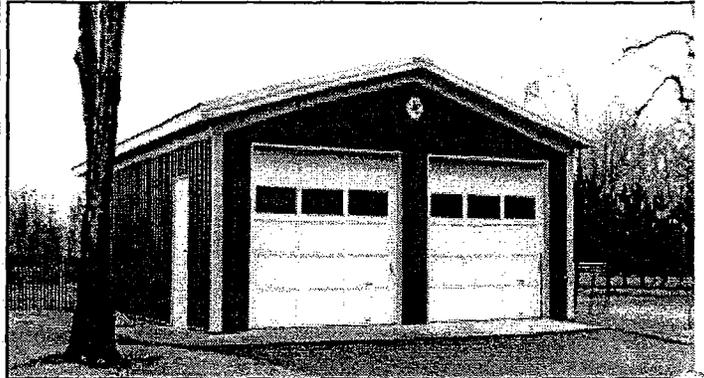
Grade C Detached Garage with Shed-type Carport



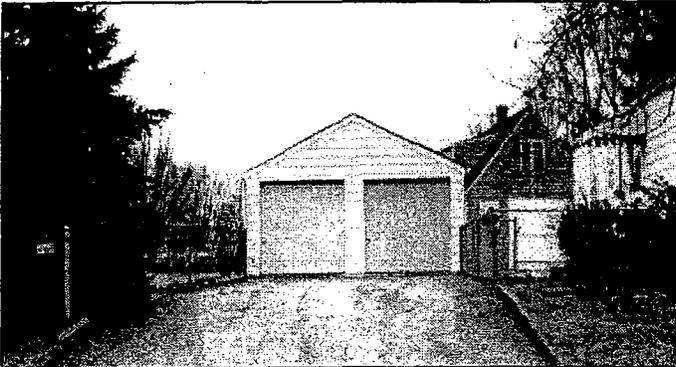
Grade C Detached Garage



Grade C Detached Garage



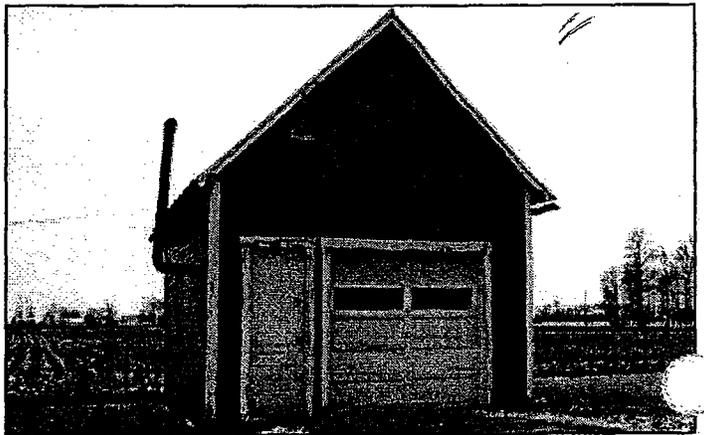
Grade C Detached Garage (Pole Type Construction)



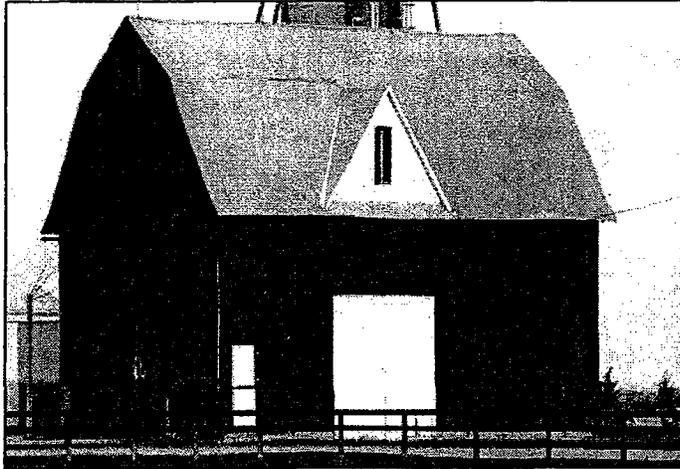
Grade D Detached Garage



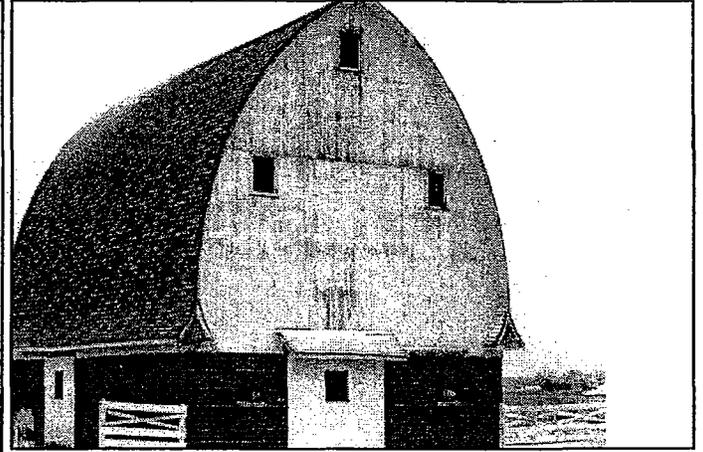
Grade E Detached Garage



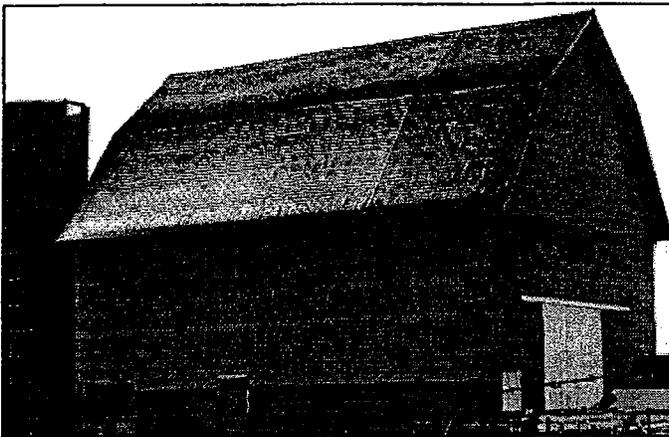
Grade E Detached Garage



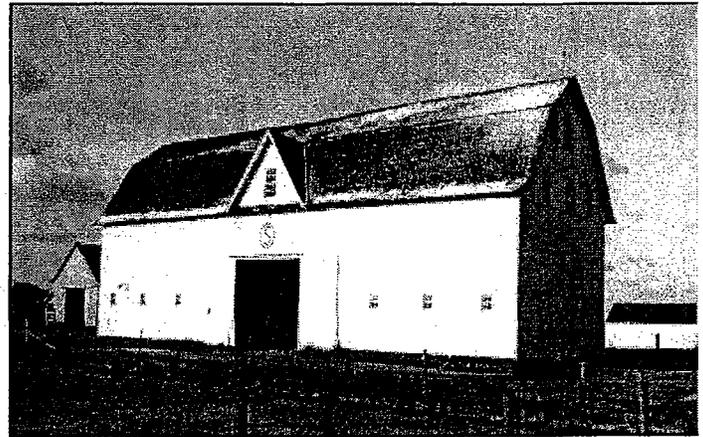
Grade E Detached Garage



Grade C Flat Barn

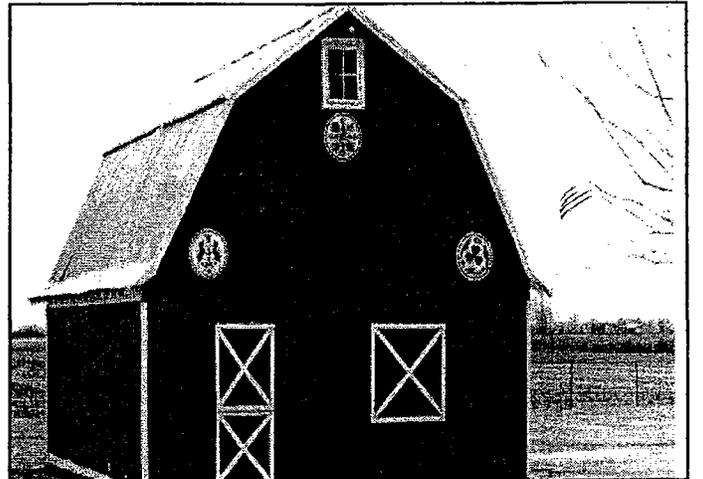
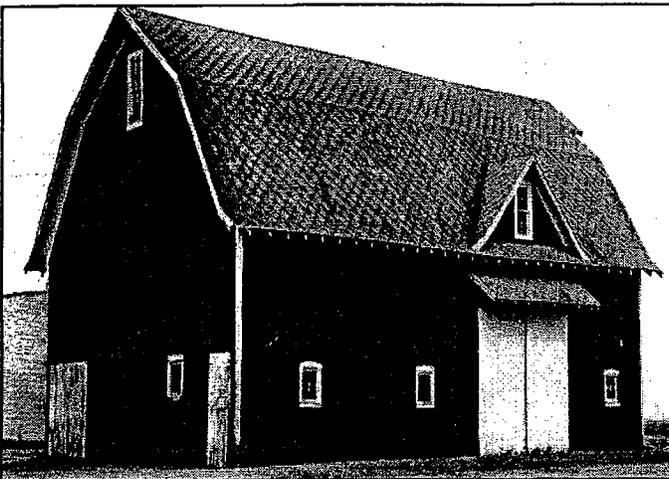


Grade C Flat Barn



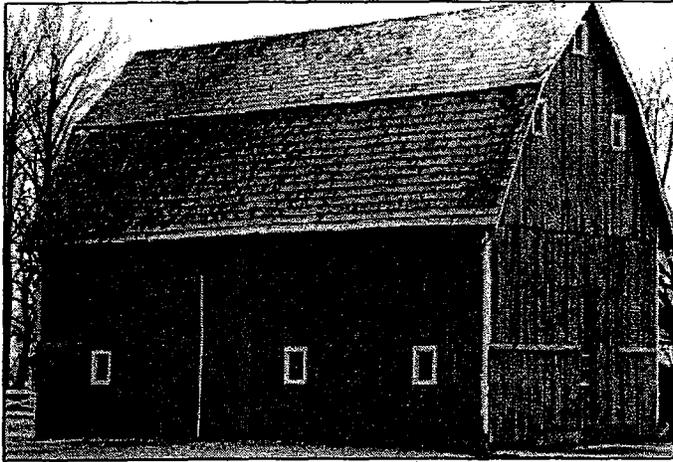
Grade C Flat Barn

Grade C Flat Barn



Grade C Flat Barn

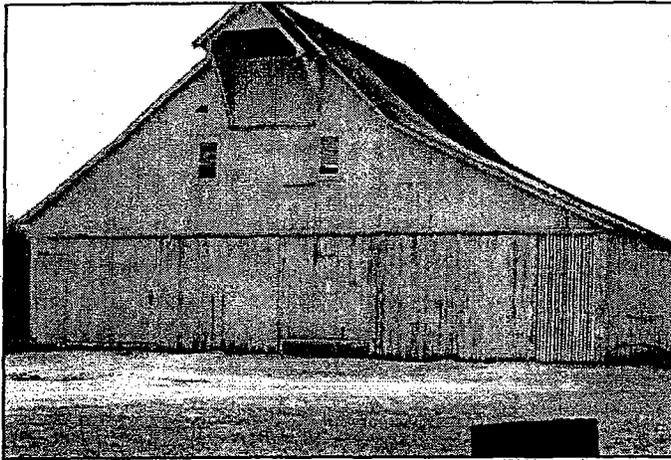
Grade C Flat Barn



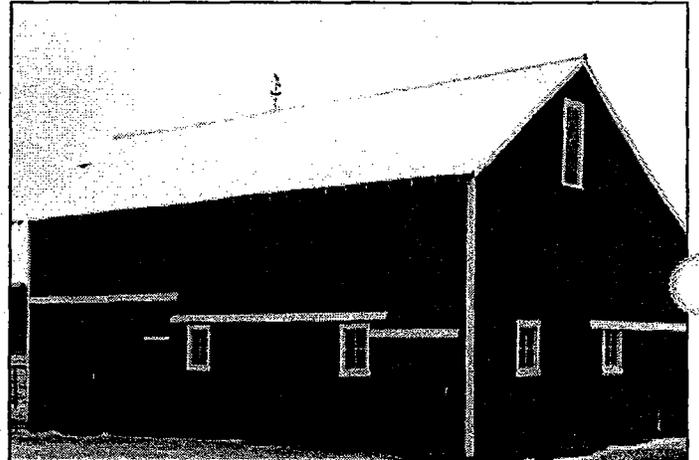
Grade C Flat Barn



Grade D Flat Barn



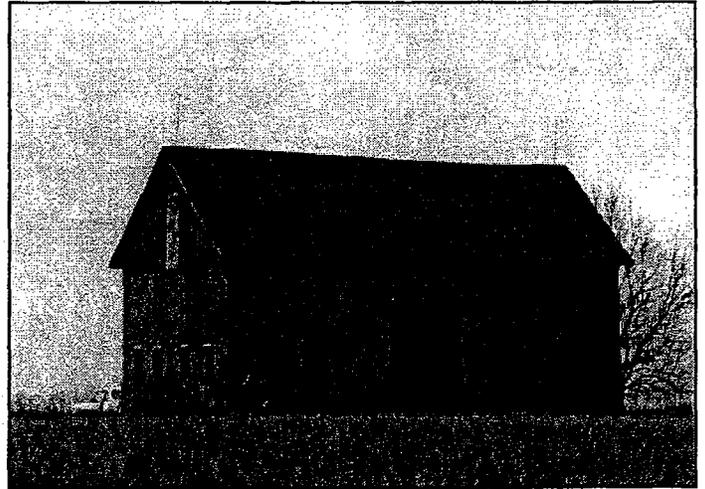
Grade D Flat Barn



Grade D Flat Barn



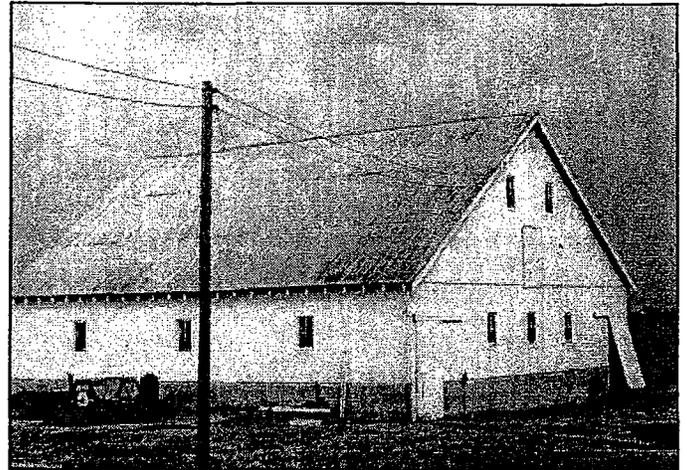
Grade D Flat Barn



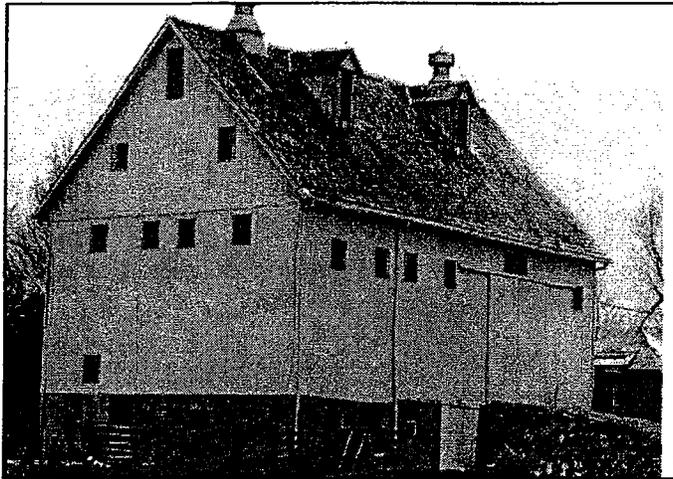
Grade D Flat Barn



Grade D Flat Barn



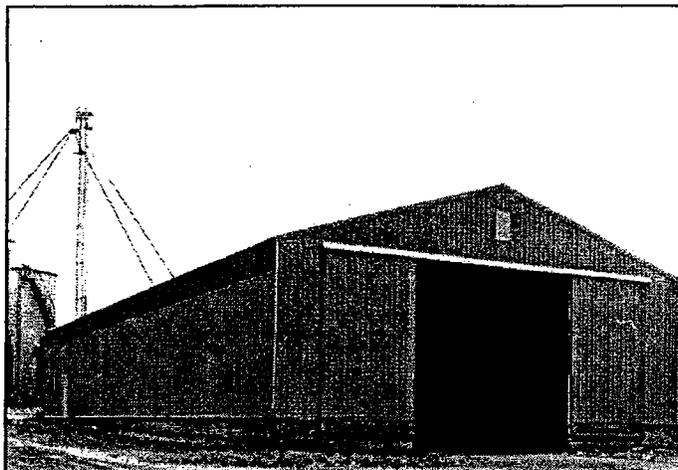
Grade D Flat Barn



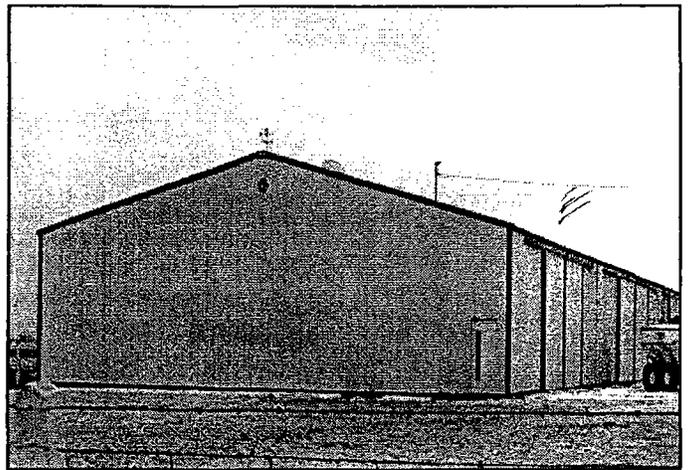
Grade C Bank Barn



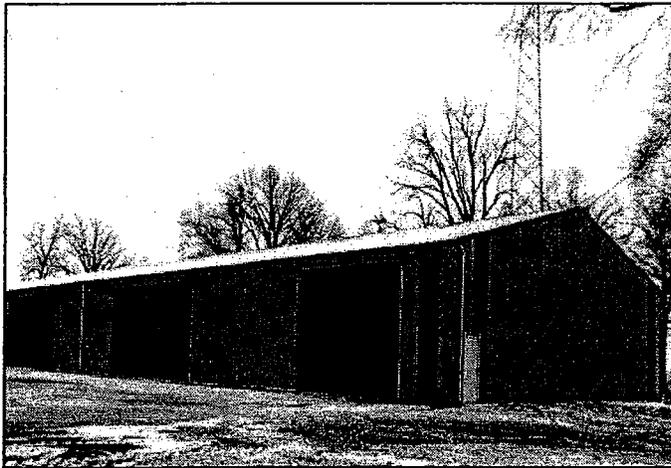
Grade C Bank Barn



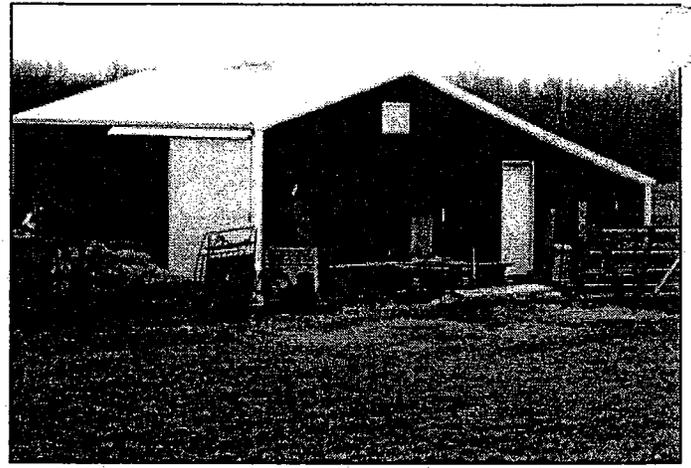
Grade C Pole Barn



Grade C Pole Barn



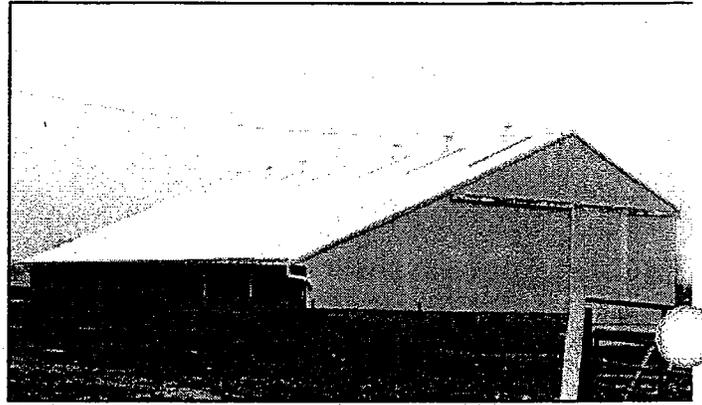
Grade C Pole Barn



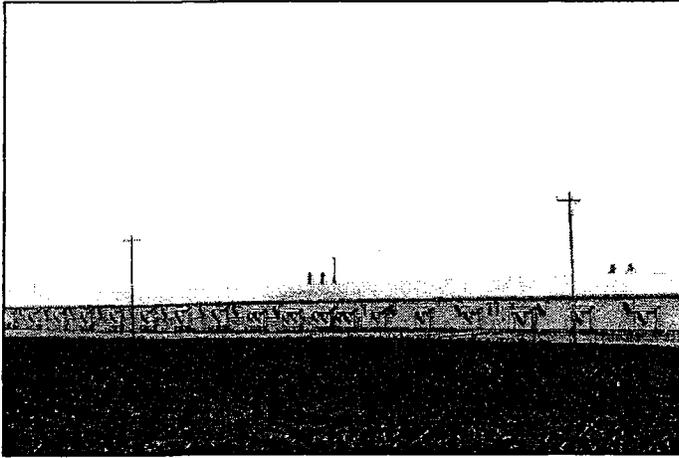
Grade C Pole Barn



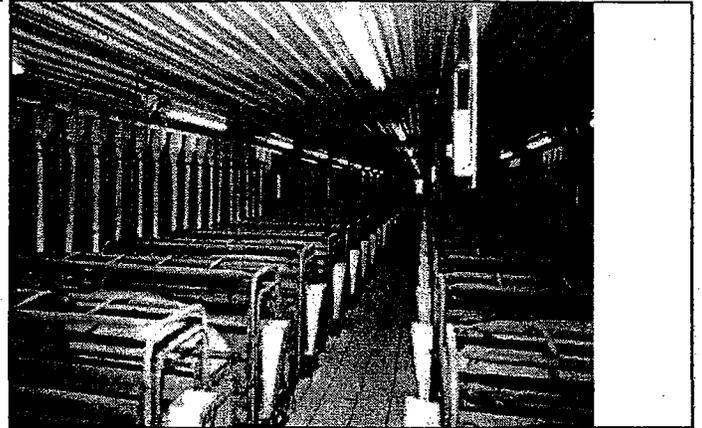
Grade C Pole Barn, One Side Open



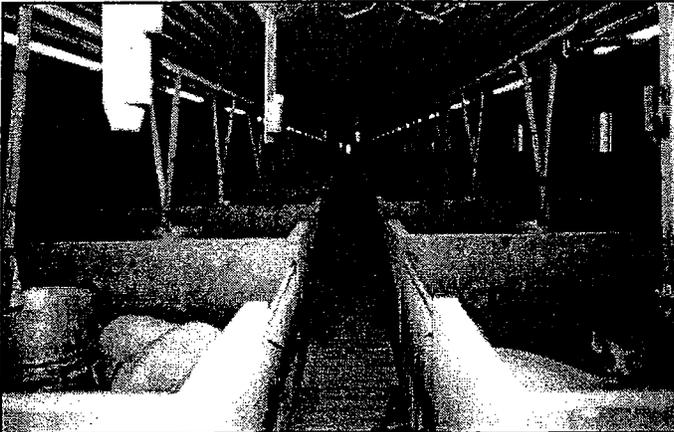
Grade C Pole Barn, One Side Open



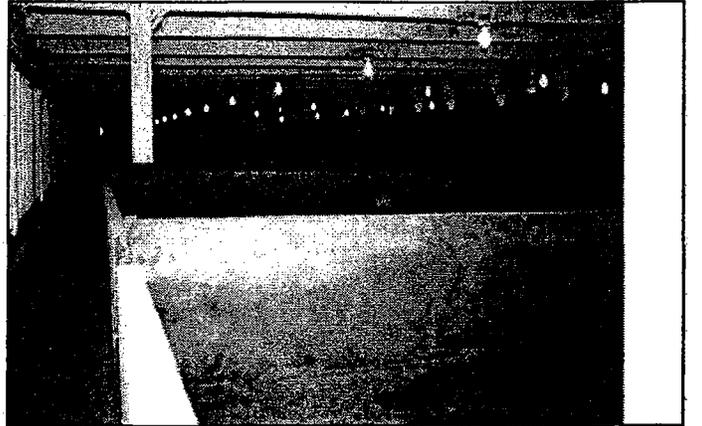
Grade C Hog Confinement



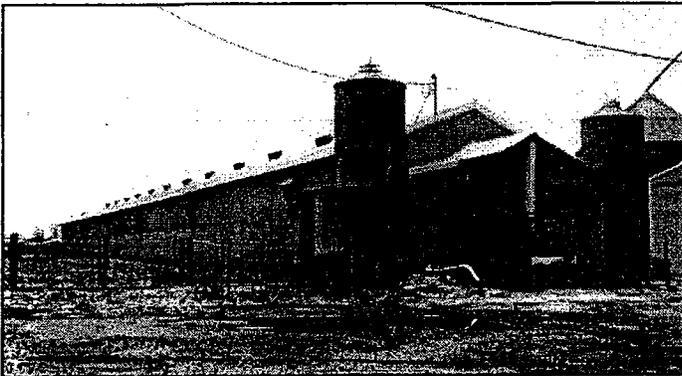
Hog Confinement



Hog Confinement



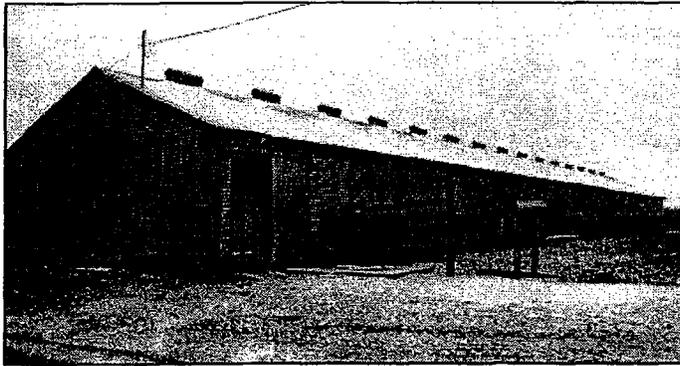
Hog Confinement



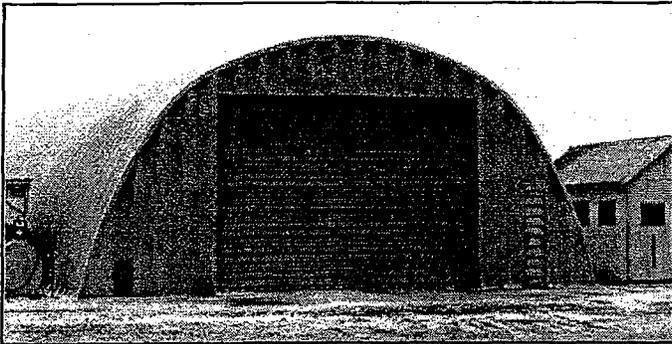
Grade C Confinement



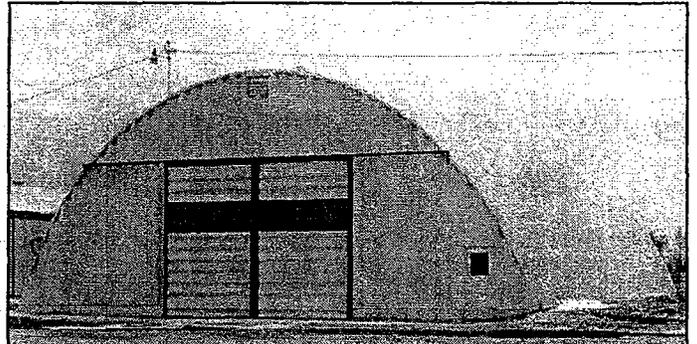
Grade C Confinement



Grade C Confinement



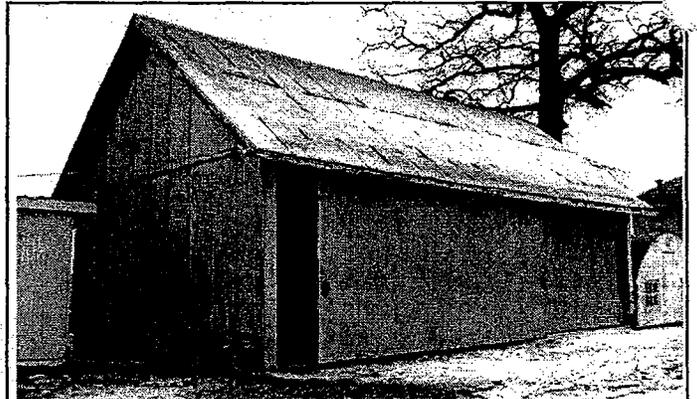
Grade C Quonset



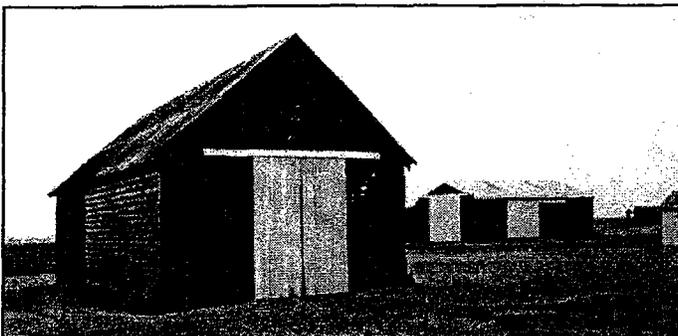
Grade C Quonset



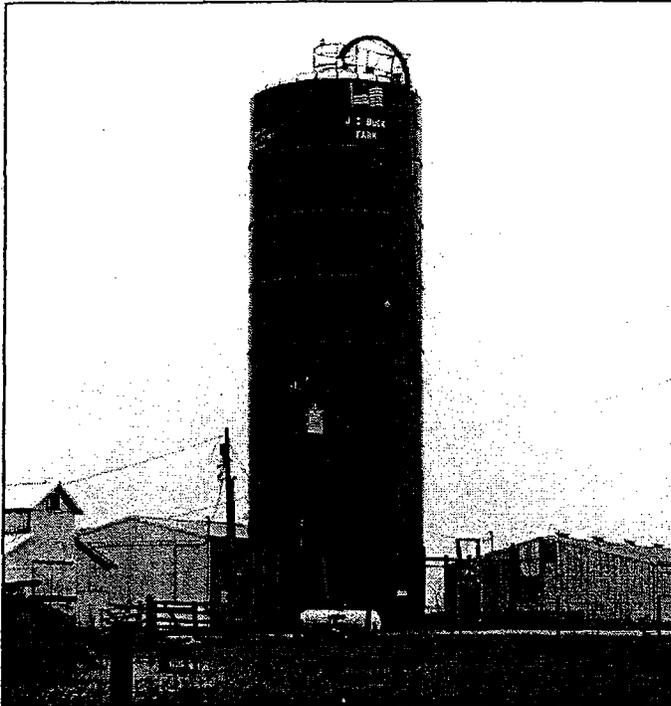
Grade C Quonset



Grade D Implement Shed



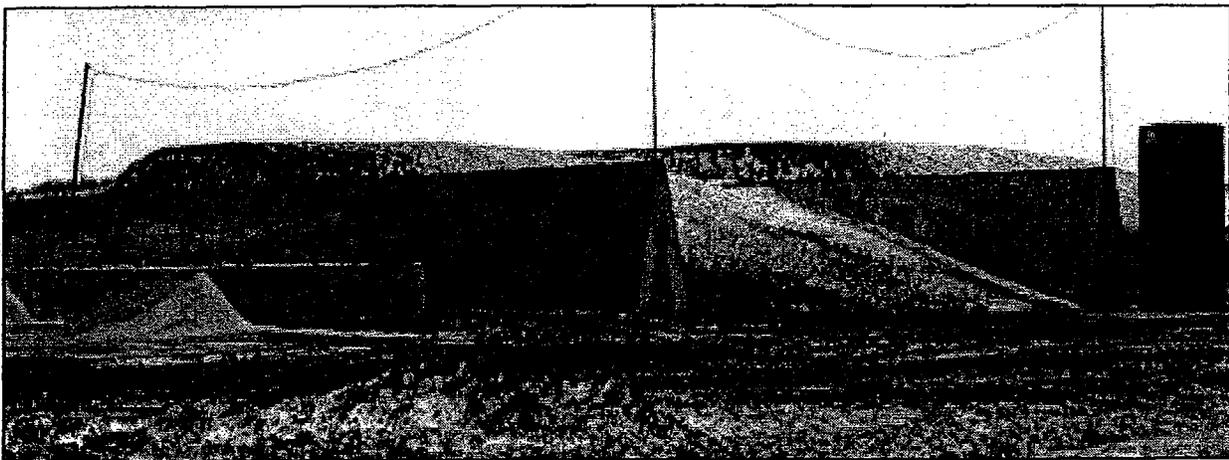
Grade D Corn Crib, Drive-thru Type



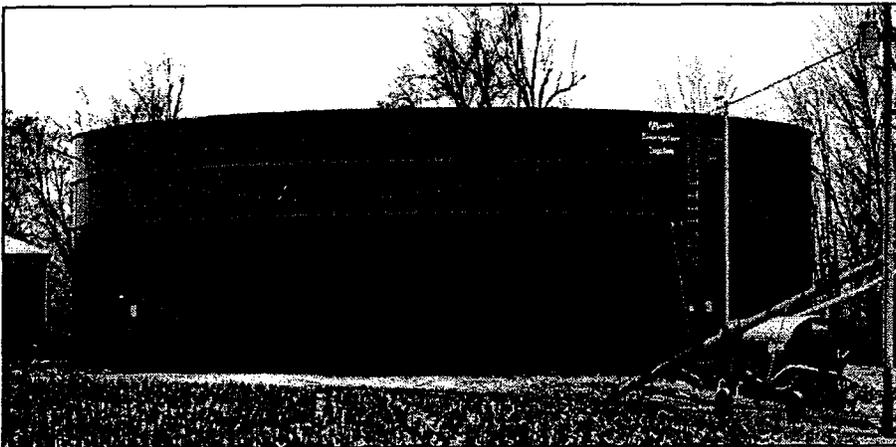
Harvestore Silo



Concrete Stave Silo

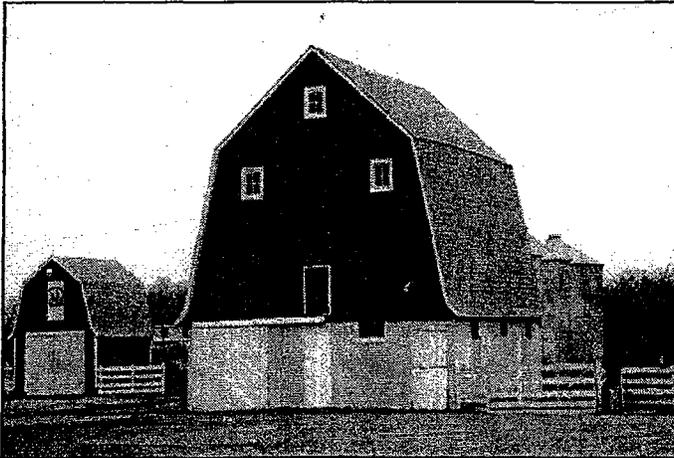


Bunker Silo

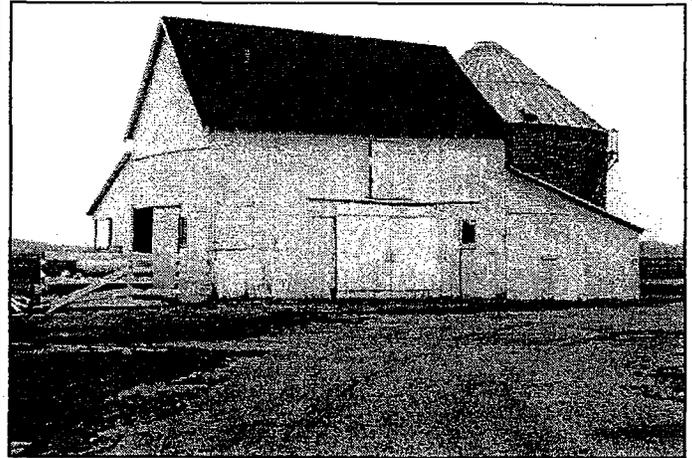


Slurry Tank

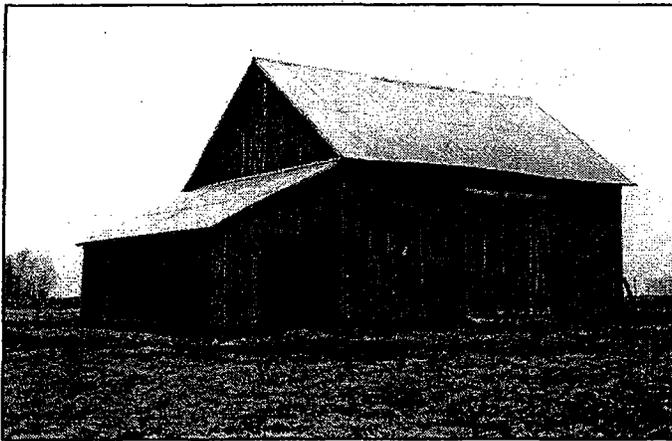
Barn Condition Rating



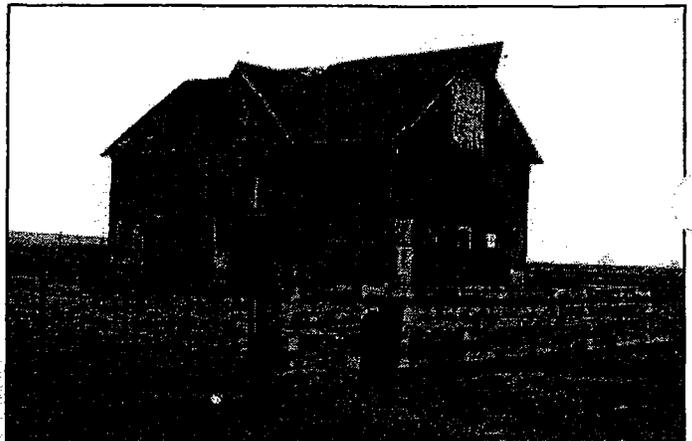
Good Condition
Foundation-Solid Walls-Solid
Structure-Sound Roof-Solid



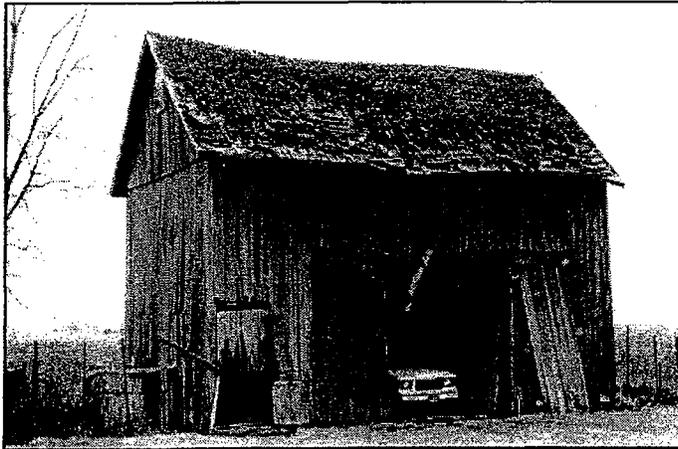
Average Condition
Foundation-Solid Walls-Sound
Structure-Sound Roof-Sound



Fair Condition
Foundation-Cracked Walls-Intact
Structure-Stable Roof-Stable



Poor Condition
Foundation-Severely cracked Walls-Loose
Structure-Weakened Roof-Fairly stable



Poor Condition
Foundation-Uneven and severely cracked
Structure-Unstable Walls-Extremely loose
Roof-Unstable



Very Poor Condition
Foundation-Crumbled Walls-Limited to lone
Structure-Rotted or missing Roof-Collapsing

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