

IMPROVEMENT OF IOWA HIGHWAY 5

in

POLK AND WARREN COUNTIES
from
INTERSTATE 35 to U.S. HIGHWAY 65/69

Project No. NHS-5-5(36)--19-77

FINAL
SECTION 4(f) STATEMENT

Submitted Pursuant to 49 U.S.C. 1653(f)
by the

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION

and

IOWA DEPARTMENT OF TRANSPORTATION
PLANNING AND PROGRAMMING DIVISION
OFFICE OF PROJECT PLANNING

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5 in Polk and Warren

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PLANNING AND PROGRAMMING DIVISION
OFFICE OF PROJECT PLANNING

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Section 1– Summary

This project pertains to the construction of a four-lane, controlled access improvement of Iowa Highway 5 in Polk and Warren counties, south of the Des Moines metropolitan area. The project extends from Interstate 35 southwest of Des Moines approximately 17.5 kilometers (10.8 miles) easterly to a tie-in with the relocated U.S. Highway 65 eastern beltway at the interchange with U.S. Highway 65/69 south of Des Moines. Reference may be made to Figure 1 – Project Location.

Environmental and location studies for Relocated Highway 5 began in the early 1970s. A Corridor Public Hearing was held February 13, 1975 to discuss project alternatives. On October 16, 1976, the Iowa DOT Commission adopted the Alt. 4A-build proposal evaluated in the draft EIS. The Final Environmental Impact Statement (FEIS) was signed by the Federal Highway Administration (FHWA) on May 18, 1977 giving Corridor approval on May 22, 1978. In September 1991, the Des Moines Area Transportation Planning Committee requested that the Iowa DOT reexamine the preferred alignment that was approved in 1976. An advisory committee was formed for the purpose of providing comment on the *Reevaluation* process. The advisory committee requested that an alternative alignment within the Approved Corridor be evaluated. After considering public comments on the alternative alignment, the Iowa DOT Commission, on August 10, 1993, gave approval to an alternative alignment. The Federal Highway Administration (FHWA) approved the *Reevaluation* reaffirming the original location approval using a modified alignment September 24, 1993.

As part of the project restudy, local and regional transportation interests were formally established as an advisory committee to furnish input to the reevaluation process. This committee evaluated development patterns within the Des Moines metro area, recommending changes to the original concept that would account for recent intensive commercial and residential development that has occurred in the corridor. This resulted in modifications to the approved alignment intended to respond to changes in traffic growth and capacity needs in the corridor. A direct result of this process was local reaffirmation of the need to provide access to Iowa Highway 5. Interchanges were proposed at S. 50th Street Extension (S. 35th Street) and the Southwest Diagonal Connector.

Within the City of West Des Moines, S. 50th Street provides the only access across the Raccoon River between I-35 and Iowa Highway 28. S. The proposed 50th Street and S. 50th Street Extended are classified as arterial streets within the Master Major Street Plan and Comprehensive Plan. S. 50th Street and the proposed interchange at Iowa Highway 5 not only are intended to accommodate traffic demands, but also serve as a primary route for emergency response vehicles. Comments from the Open Forum Public Hearing held on March 31, 1998 expressed the need for emergency response vehicles to reach existing development south of Iowa Highway 5 and west of I-35.

The proposed Southwest Connector extends from I-35 south of the Iowa Highway 5/I-35 interchange to the Des Moines Central Business District. The City of Des Moines, City of West Des Moines, and Polk County have committed to the Southwest Connector from the Iowa Highway 5 north ramp terminus to Iowa Highway 28. Reference may be made to Appendix D concerning the time frame for development of the Southwest Connector.

Construction of the two (2) proposed new interchanges at S. 50th Street Extended and the Southwest Connector, impact two properties that have been determined to contain elements that are eligible for the National Register of Historic Places. These two properties are subject to the provisions of 49 USC, 1653(f). Both locations contain farmsteads with outbuildings or other structures that meet register criteria.

These sites are located within the 1977 Approved Corridor and in close proximity of the 1993 Alternative Alignment.

- 9807 SW 77th Avenue (Formerly Leopold Dairy Farm)
- 7620 SW 72nd Avenue (Formerly Gilcrest Farmstead)

The *Reevaluation Study* concluded that construction of the 1976 preferred alignment would warrant further study or require preparation of a supplemental environmental document. More specifically, the 1976 preferred alignment would have a major impact on approximately 52 residences in the Hills of Coventry Subdivision as well as on the Willow Creek Golf Course.

Development of the 1993 Alternative Alignment, which exists within the general corridor approved in 1977, was located south of the 1976 alignment to avoid the Hills of Coventry Subdivision. The 1993 Alternative Alignment also accommodates expansion plans approved for the Des Moines International Airport. The 1996 Alternative Alignment provided increased separation between Walnut Woods State Park, Browns Woods, and the Raccoon Regional Park, Iowa Highway 5.

The *Reevaluation Study* also recommended that consideration be given to a location of Iowa Highway 5 to minimize the impact on the two properties containing elements that are eligible for the National Register of Historic Places:

- Proposed S. 50th Street Interchange/9807 SW 77th Avenue
- Proposed Southwest Connector Interchange/7620 SW 72nd Avenue

Given the 1993 Approved Alignment for Iowa Highway 5 and the proposed construction of interchanges at S. 50th Street Extended and the Southwest Diagonal Connector, the two properties would be impacted. The interchange locations are fixed by function at the location shown on Figure 1.

A Parclo "A" interchange (diamond with two loops) was initially proposed at S. 50th Street Extended (S. 35th Street) and the Southwest Connector facility. Consideration was also given to a three-quadrant interchange design that would minimize impact on portions of the two properties.

An analysis of the proposed Parclo "A" and three-quadrant interchange was undertaken. The major difference between the interchange alternatives is how eastbound vehicles exit and enter Relocated Iowa Highway 5. A capacity analysis was performed and a level of service (LOS) rating computed for the merge/diverge area along Relocated Iowa Highway 5 and at the intersection of S. 50th Street.

It was concluded that the two alternatives performed equally well except for the south intersection associated with the three-quadrant interchange. This intersection did not meet the minimum acceptable level of performance. The desirable performance level is LOS C. The south intersection associated with the three quadrant interchange was given a LOS D rating compared to a LOS B rating computed for the Parclo "A" south intersection.

The drop in performance for the three-quadrant interchange was linked to the introduction of the southbound left turn movement from South 50th Street to the eastbound on ramp. This movement opposed large northbound volumes on South 50th Street.

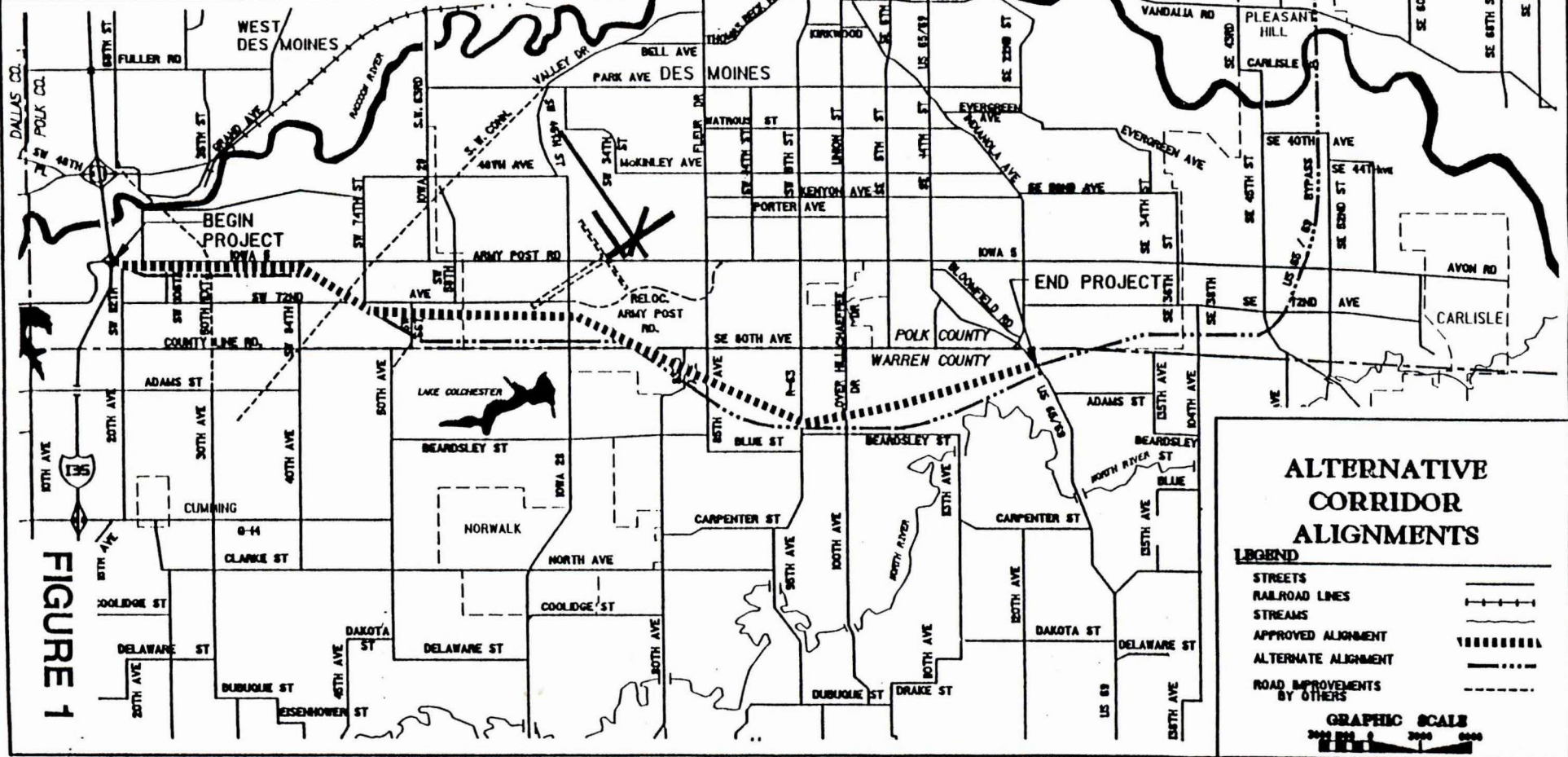
The analysis concluded that the Parclo "A" interchange configuration provides an enhanced level of safety and was the more prudent alternative. Consequently, the Parclo "A" interchange was recommended as the preferred alternative.

The present property owner of the barn impacted by the proposed S. 50th Street interchange, was contacted and provided an opportunity to comment on the alternative interchange configurations. The property owner indicated that the barn would not fit with the eventual character of the surrounding area and would not be part of their future development plans.

PROPOSED IOWA 5 IMPROVEMENTS

I-35 TO US 65/69

POLK AND WARREN COUNTIES, IOWA



Section 2 – Description of Proposed Action

The proposed improvement of Iowa Highway 5 would provide an east west four-lane divided highway facility in Polk and Warren Counties, immediately south of the Des Moines metropolitan area. The planned improvement begins at a redesigned interchange with Interstate 35 southwest of Des Moines and proceeds east to a connection with U.S. Highways 65/69, just south of the Polk - Warren County Line.

The new relocated Iowa Highway 5 facility will be a controlled access highway, with a system interchange planned at I-35, and local interchanges at the Southwest Diagonal Connector facility, Iowa Highway 28/SW 63rd Street, Fleur Drive, SW 9th Street/R-63, and full cloverleaf interchange at U.S. Highway 65/69. Reference may be made to Figure 2 – West Des Moines Comprehensive Plan – Land Use Maps.

Section 3 – Purpose and Need

Purpose:

The primary purpose of this highway project is to provide an improved level of traffic service within the existing Iowa Highway 5 transportation corridor. This corridor is a principal arterial within the Des Moines metropolitan area and forms a vital transportation network. The Iowa Highway 5 corridor is also part of the State of Iowa's commercial and industrial network of highways, which are intended for the movement of workers, shoppers and others as well as the movement of commodities to, through, and from the southern portion of the Des Moines metropolitan area.

Need:

The Des Moines Area Planning Organization prepared estimates of future traffic that would use the facility. The proposed Iowa Highway 5 improvements were included in the Horizon Year 2020 Transportation Development Report prepared by the Des Moines Area Planning Organization. The continued growth within the Des Moines metropolitan area provides the basis for the proposed highway improvements. When complete, Iowa Highway 5 and the recently completed U.S. Highway 65 will provide a circumferential highway from I-80/U.S. Highway 65 east and south of Des Moines to I-35/Iowa Highway 5. Land use patterns within the Iowa Highway 5 Corridor are changing from a rural to an urban environment. The impetus for the changing land use patterns is due in part to residential, commercial, and industrial growth in the Des Moines metropolitan area. Existing utility infrastructure, roadways, and the Des Moines International Airport represent a significant public investment within the southwest quadrant of the metropolitan area. The Iowa Highway 5 improvements and access to the network will better serve existing and future traffic demands including safety and capacity functions.

The proposed interchange locations at S. 50th Street Extended and the Southwest Connector will provide access to the arterial street network. The arterial street network was developed to accommodate traffic generated by existing as well as future land uses.

LEGEND

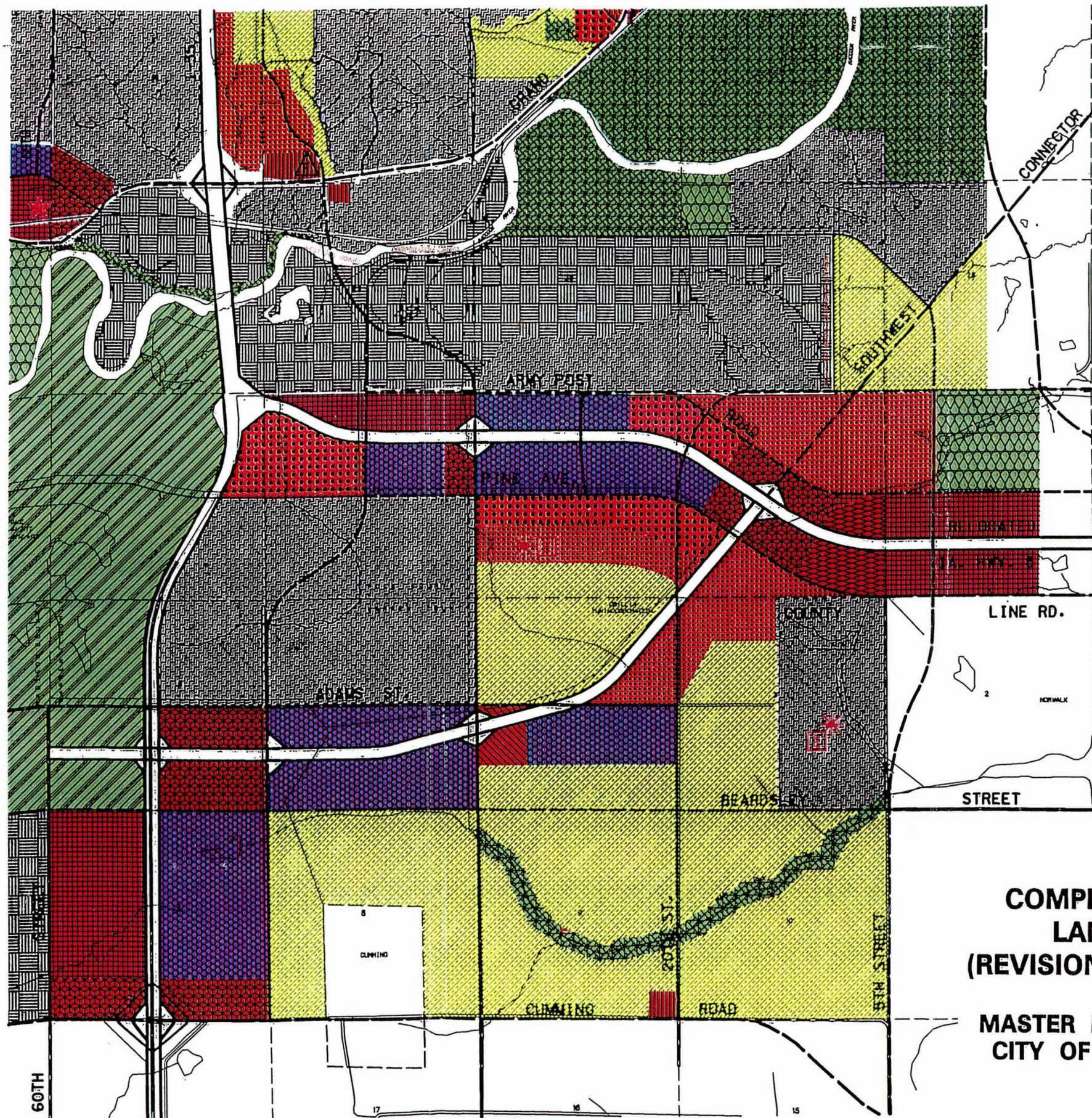
- Agricultural / Open Space
- Low Density Residential
- Single-Family Residential
- Medium Density Residential
- Medium Density Residential - Manufactured Homes
- High Density Residential
- Regional Commercial
- Village Center Commercial
- Community Commercial
- Neighborhood Commercial
- Convenience Commercial
- Historic Business Commercial
- Support Commercial
- Valley Junction Support Commercial
- Office
- Industrial Park
- Light Industrial
- General Industrial
- Public CC - Civic Center, F - Fire/EWS Station, PW - Public Works, W - Water Works, HS - Human Services, L - Library, P - Park Maintenance, C - Cemetery, D - Stormwater Detention
- Semi-Public E - Elementary School, J - Junior High, H - High School, SD - School District Facility
- Park and Recreation - Private
- Park and Recreation - Public S - State and County Park, CM - Community Park, N - Neighborhood Park, M - Mini Park
- National Historic Forest
- Community Park Node
- Neighborhood Park Node
- Fire Station Node
- Water Works Node
- School Node: E - Elementary, J - Junior High, H - High School
- Subarea Boundary
- Off Street Bike / Pedestrian Routes

- Freeway / Expressway
- Major Arterial
- Minor Arterial
- Major Collector
- Minor Collector

- System Interchange
- Local Interchange
- Section Number
- County Highway



CITY OF WEST DES MOINES
DEPARTMENT OF PUBLIC WORKS
ENGINEERING DIVISION
100 S. 10TH STREET, SUITE 200
WEST DES MOINES, IOWA 50319
FAX NO. 515-281-3478
CADD PRODUCED



**COMPREHENSIVE PLAN
LAND USE MAP
(REVISIONS AS OF 12-16-97)**

**MASTER MAJOR STREET PLAN
CITY OF WEST DES MOINES
1-11-99**



FIGURE 2

Section 4 – Section 4(f) Resources

Section 4(f) Resources:

The two (2) Section 4(f) Resources that are located within the Iowa DOT Highway 5 Corridor and impacted by the proposed interchanges at S. 50th Street Extended and the Southwest Connector facility are described below:

- 9807 SW 77th Ave. Owner; Specialty Lundt Partnership (formerly Leopold Dairy Farm.) This property consists of a former dairy farm located south of Army Post Road in section 32, T78N, R25W of Polk County. Developments on this property consist of a frame construction, single family dwelling with dairy barn, attached milk collection station and two silos. Significant features that are eligible for the National Register of Historic Places are as follows:
 - The barn is eligible for nomination under criterion A, because of its historical associations with the dairy industry in Polk County.
 - The dairy complex (consisting of a barn, two silos attached to the barn and a milk collection station) is eligible for nomination under criterion C, because of its method of construction.
 - The barn is currently used for various group activities to include weddings, receptions, and charitable events. The facility can accommodate up to 350 persons.
- 7620 SW 72nd Ave. Owner; Locust Center Ltd. (formerly Gilcrest farmstead.) This property comprises a frame house, a barn with attached silo, sheds, grain bins, and a mobile home, located in section 34, T78N, R25W, of Polk County. The farmstead as a whole does not appear eligible for nomination to the National Register, however, historically significant features are as follows:
 - The silo is eligible under criterion C, as an example of octagonal design dating from the first quarter of the twentieth century.
 - The silo is presently not used for storage. The owner indicated a desire to relocate the structure if it is feasible to do so.

More detailed descriptions of each property can be found in the Iowa Site Inventory forms provided at the end of this document. Reference may be made to Figures 3 through 5 for maps detailing the location of both historic properties.

Both of these properties are located in an area historically dubbed “the Golden Circle”, a portion of Warren and Polk counties where the local dairy industry expanded to meet the growing population and economy of greater Des Moines during the second quarter of this century.

Beginning in the 1920s and 1930s, local dairy operations evolved in response to the commercial opportunities provided by the metropolitan population of Des Moines. The rolling terrain of the land in this portion of Polk and Warren counties encouraged pasture use for these dairy operations, as did the close proximity to a large market in Des Moines, which provided a steady demand for milk products. The end result of this was that several large dairy operations were established in the project corridor and numerous farmers also engaged in dairying on a small scale.

Other local trends in the ownership of farmland in northern Warren and southern Polk counties have seen the self-contained family farm frequently replaced by large-scale operations. The ownership of farmland by companies, for investment or other purposes, dates from at least the first decade of this century, with the trend continuing today, particularly in the western segment of the study area. Finally, urban growth and its associated development, such as commercial enterprises, schools, entertainment facilities all connected with a transportation network, continue to change the character of the corridor.

Project Impacts to Historic Resources:

Under the proposed construction concept, both national register eligible properties would be removed to provide necessary right-of-way for Iowa Highway 5 interchange construction at S. 50th Street Extended and the Southwest Connector Facility.

Section 5 – Alternatives Considered

No Action Alternative:

The No Action Alternative would be a continuation of the highway system as it exists at the present time. No physical changes would be made in pavement widths or grades, right of way widths, traffic circulation patterns or traffic control devices (signs and pavement markings.) With this option, it is expected that traffic congestion and traffic-related accidents would continue and increase in proportion to future traffic volume increases.

This alternative will not accommodate existing and future traffic needs within the Iowa Highway 5 corridor, nor does it represent a viable option in the context of corridor transition. Land uses within the corridor are in transition from rural to urban character. This transition is placing increased demands upon the existing transportation facilities. Consequently, some upgrading will be required if the integrity of the present highway system is to be preserved.

Additionally, improvements within the Iowa Highway 5 corridor are also seen as a principal element of the larger Des Moines - Polk County transportation system. As such, improvements in capacity and efficiency in the Iowa Highway 5 corridor are necessary in order to maintain capacity on the other two principal Des Moines metro transportation corridors:

- I-235 extending through the center of Des Moines metropolitan area
- Interstate Highways 35/80 extending north and west of the Des Moines metropolitan area

Although the no action alternative would not impact the historic properties in question, it would not provide needed improvements to the Iowa Highway 5 corridor. The no action alternative would contribute to a diminished network level of service. More specifically, the existing arterial street network would not be able to accommodate traffic demands thereby contributing to congestion. The level of safety would also be diminished and contribute to a higher probability of vehicular accidents. The arterial street system, metropolitan highway network and interchange locations contribute to an efficient transportation network.

Proposed Construction Alternative:

The proposed alternative consists of interchange construction at S. 50th Street Extended and the Southwest Diagonal Connector facilities. The two proposed interchanges are located between I-35 and Iowa Highway 28. At both locations a full access interchange design is proposed with ramps in each of the four quadrants to provide ingress/egress to relocated Iowa Highway 5. Because of projected traffic volumes, access loops in the southwest and northeast quadrants are also planned to provide additional mainline access from the intersecting roadways.

This design provides free-flow features that reduce traffic conflicts at ramp terminals caused by left-turn movements across opposing lanes. The proposed design recognizes both capacity and safety issues, and is being advanced as the minimum and preferred design to meet predicted traffic growth and expected capacity demands within this segment of the Iowa Highway 5 corridor.

Figure 3 – Year 2020 Arterial and Collector Street System shows the general location of the planned interchanges within the Iowa Highway 5 corridor. Figure 4 – Location of 4(f) Resources shows the preferred design for the proposed interchange located at S. 50th Street Extended and Iowa Highway 5. Figure 5 – Location of 4(f) Resources shows the preferred design for the proposed Southwest Connector/Iowa Highway 5 Interchange.

The specific locations of these interchanges and subsequent design features were a direct outgrowth of the project scoping and community involvement process that was initiated for the Iowa Highway 5 improvement. During the planning and environmental documentation phase of project development, an advisory committee was established to provide local and regional assistance in planning for the proposed improvement. The advisory committee included representatives from the communities of Des Moines, West Des Moines, and Norwalk, as well as Polk County, Warren County, the Des Moines International Airport and the Des Moines Area Metropolitan Planning Organization.

The advisory committee responded by recommending a number of modifications to the initial alignment that would minimize impact on existing land uses and be consistent with on-going land use planning efforts by the City of West Des Moines. The advisory committee recognized the need to protect the Raccoon River Valley Corridor as well as other sensitive resources south of the Raccoon River Valley. In addition to resource protection, the advisory committee also recognized the need to accommodate residential, commercial, and recreational development within the Iowa Highway 5 corridor.

The end result of this activity was the merging of the construction concept approved in the 1993 *Reevaluation* with an alternative concept to provide a viable transportation facility that would best meet area transportation needs, but was also acceptable to the numerous groups involved in the development process.

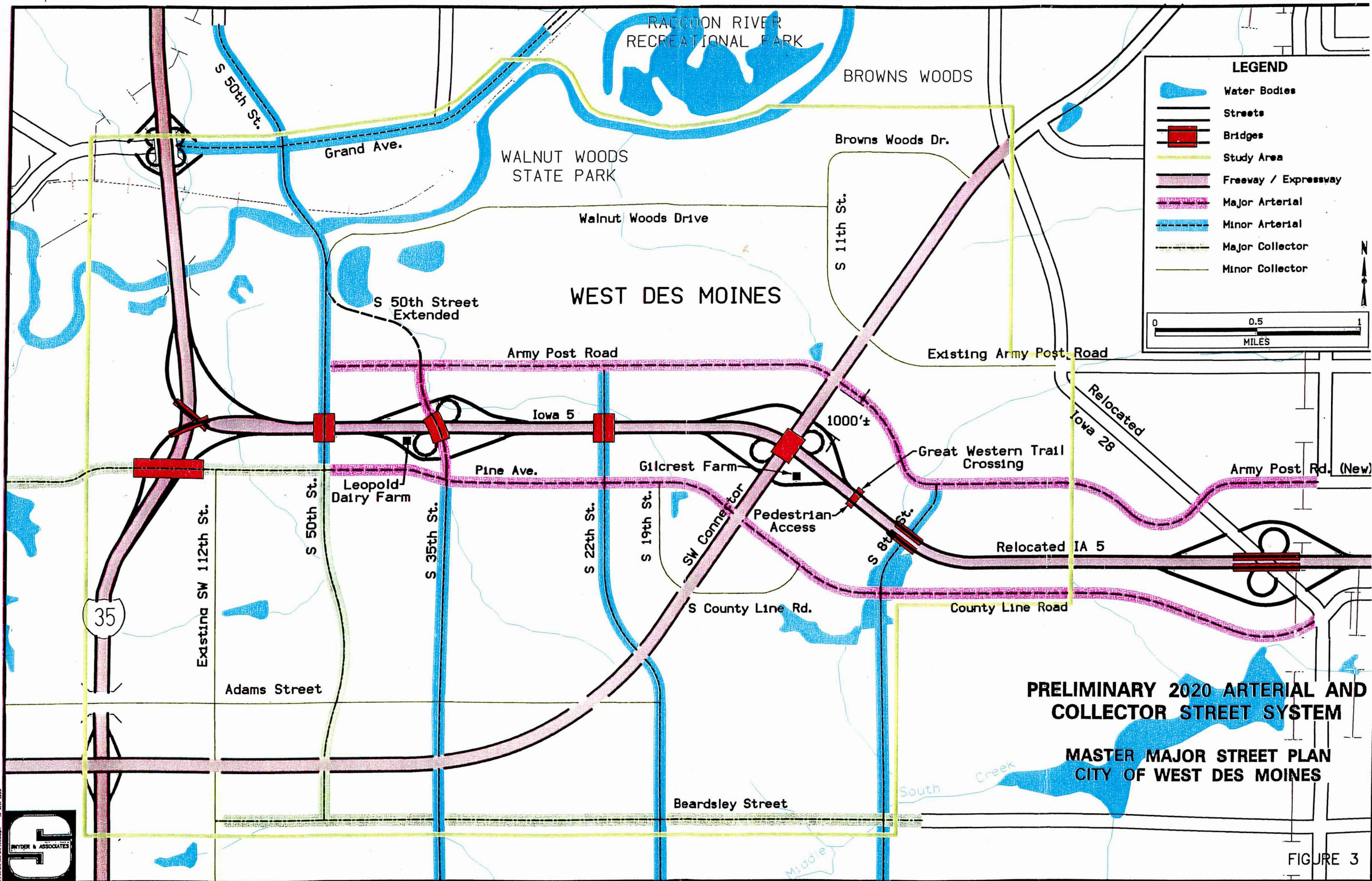
The resulting construction concept also involved specific modifications to meet objectives of the Des Moines Year 2020 Level of Service Needs Roadway Network developed as part of the traffic modeling work for the MPO's Horizon Year 2020 Transportation Development Report, as well as expansion plans for the Des Moines International Airport.

Finally, project concept modifications represented avoidance and/or mitigation responses to the numerous residential, economic and private recreational developments planned for the corridor, and generally constituted a consensus regarding a location concept for Iowa Highway 5 expansion.

The Design Public Hearing held on March 31, 1998 generated a number of comments concerning access to the Greenbrier Estates and River Oaks residential neighborhoods. In response to the concerns raised, the department has made a commitment to construction of the S. 50th Street interchange to reduce the concerns raised with out of distance travel.

The existing Army Post Road interchange with I-35, under today's highway design standards, is not adequate as evidenced by the three-way stop at the intersection with Army Post Road and the west I-35 ramps. Relocated Iowa Highway 5 is being designed to freeway standards and access to Iowa Highway 5 will be limited to interchange only. The freeway-to-freeway system interchange will provide a safe and efficient facility to tens of thousands of vehicles on a daily basis. State and American Association of State Highway and Transportation Officials (AASHTO) guidelines do not allow a local access directly adjoining a freeway-to-freeway interchange system.

The present access to I-35 involves two low speed horizontal curves and steep roadway grade as SW Maffitt Lake Road turns from the west to the north to access I-35. This low speed alignment is being replaced by the extension of SW 72nd Avenue to the west over I-35, which is being designed for highway speed (90 km/hr or 56 mph) to the proposed S. 50th Street Extended interchange approximately 2.0 km (1.25 miles) east of I-35. This results in additional out of distance travel of approximately 4.5 km (2.8 miles).



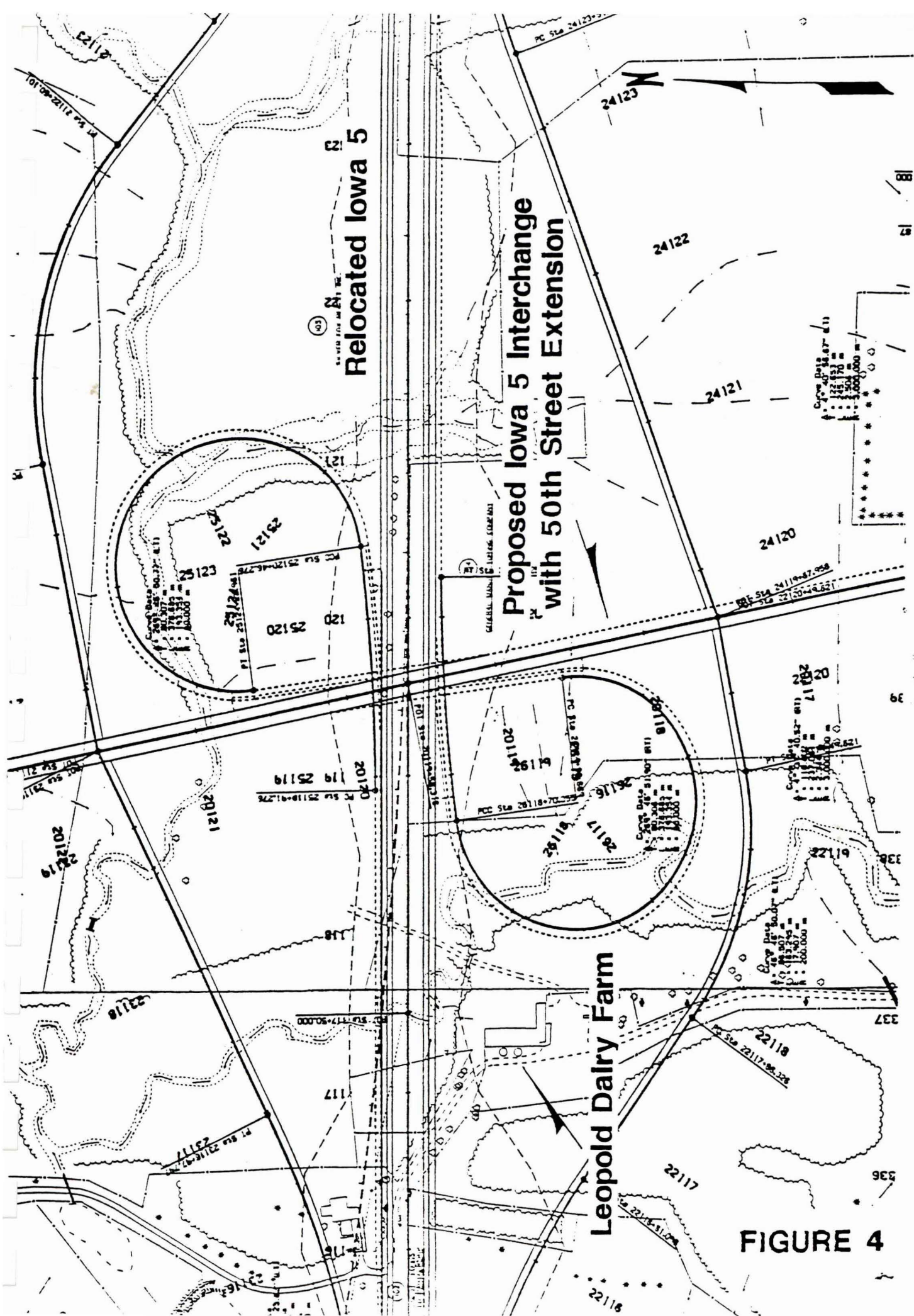


FIGURE 4

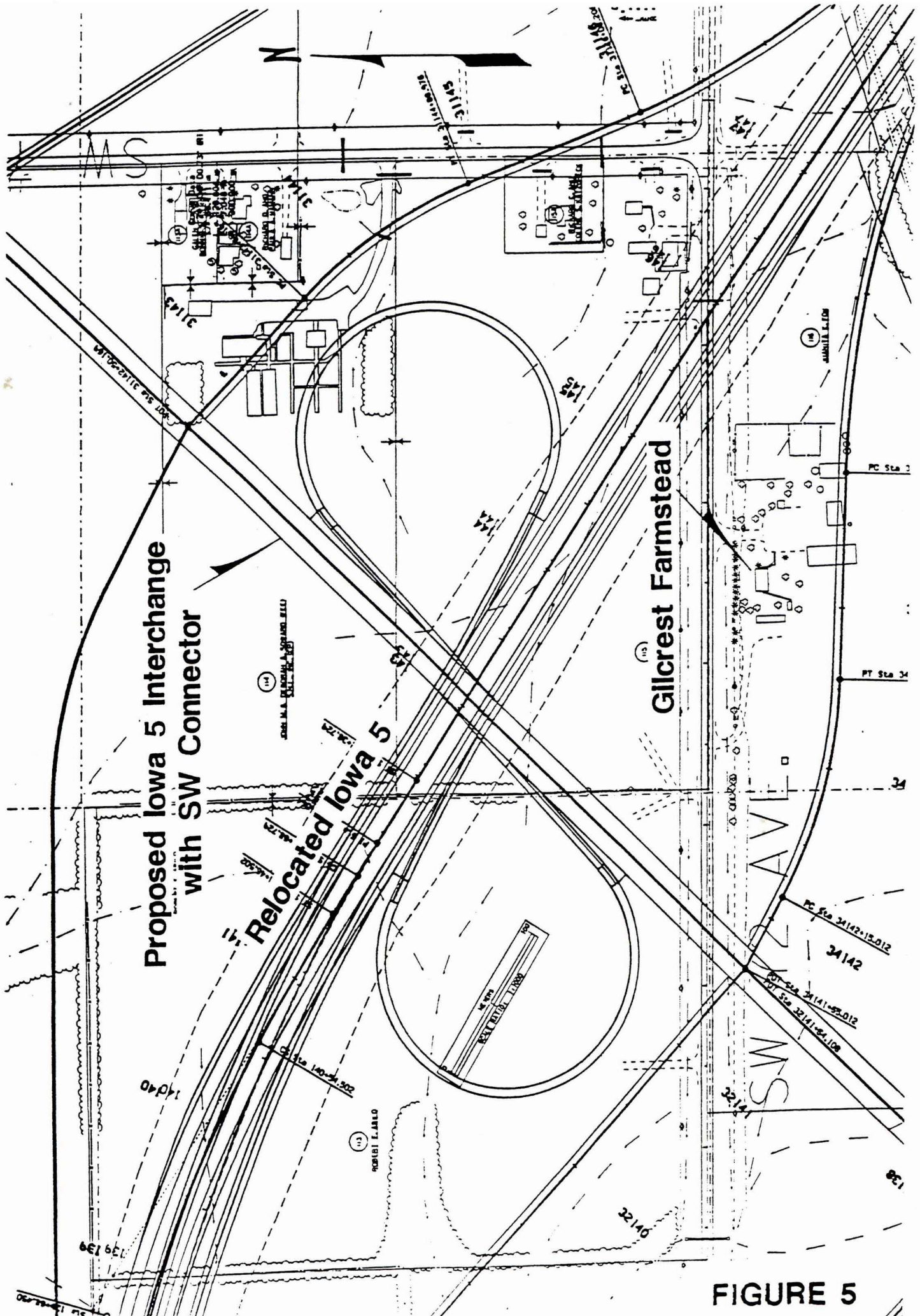


FIGURE 5

Emergency response vehicles traveling from the east (Bloomfield Township – SW 7th Street and Army Post Road) may have their response time shortened as access will be obtained at the new S. 50th Street Extended interchange south to SW 72nd Avenue. Emergency vehicles traveling from the north will be able to maintain their speed through the systems interchange of Iowa Highway 5 and I-35 to the S. 50th Street Extended interchange. While the travel distance has increased, the proportional travel time has been minimized because of improved roadway geometrics. The City of West Des Moines also shows a future extension of S. 50th Street south to Relocated Iowa Highway 5 alignment. The current location of Relocated 50th Avenue has been designed to be compatible with the City's future plans.

Avoidance Alternative:

- ✳ An avoidance alternative exists in the form of a modified interchange design that would result in a three-quadrant concept. By eliminating one quadrant from the interchange design, impacts to the 4(f) resources could be avoided.

The principle concern this presents however is that by changing the concept to three quadrants, operational characteristics of the interchanges are modified as well. This means that a free-flow design, one that does not allow left-turn movements across opposing traffic lanes, would no longer be under consideration. Moreover, by using a three-quadrant or other lower capacity design, it may be necessary to install signalization to control traffic movements.

In practical terms, the end result of constructing an interchange design that is less than optimum for the design volumes using it can generally be expressed in terms of capacity and safety functions. Less capacity means that fewer vehicles can pass through the interchange limits during a given time (for example, the rush hour period.) Higher accident rates (measured in both absolute numbers as well as accident severity) due to congestion and turning conflicts, would also be a predictable result. A third factor, time, also becomes significant, since the lower functional capacity of the interchange design due to congestion from turning vehicles and traffic signal operation would have a direct effect on reducing operational efficiency, leading to higher road user costs.

Accordingly, because the avoidance alternative does not meet the capacity and safety goals established for the project, this alternative has been deleted from consideration.

Section 6 – Measures to Minimize Harm and Proposed Mitigation

The intent of this 4(f) statement is to document the presence of two historic properties located in the Iowa Highway 5 corridor, to establish that circumstances are changing in the project corridor that will lead to loss of these structures through economic development, and to determine appropriate avoidance and/or mitigation measures.

It has been established that land use trends within the corridor will likely lead to the loss of these properties through private development. This trend is documented by local government land use planning data and consultation with both of the affected property owners who have indicated the land in question is available for commercial redevelopment.

The City of West Des Moines Comprehensive Land Use Map (December 1997 revisions) shows the relocated Iowa Highway 5 alignment as a dedicated transportation corridor, and includes interchanges at the locations proposed for the S. 50th Street Extended and the Southwest Connector locations. Zoning within that portion of the Iowa Highway 5 corridor under review in this document shows land uses that include high density residential, industrial park, office, commercial and general industrial.

Within the Iowa Highway 5 Corridor, there are no private recreational areas or resource protection areas noted on the Comprehensive Land Use Map.

Planned land uses at the sites proposed for both interchange locations are as follows: Southwest Connector - Support Commercial classification. The S. 50th Street extension shows a combination of office, support commercial and industrial park classifications.

The present owners have indicated a desire to develop their respective sites. Given these circumstances, the State of Iowa, in consultation with the State Historic Preservation Office (SHPO), has concluded that the interests of posterity and historic preservation may best be served by providing documentation of the two historic properties. Recognizing that highway projects funded with federal aid are subject to the provisions of 49 U.S.C. 303, more specifically Section 4(f); the State will fund the costs of such documentation.

Documentation of the two historic properties will adhere to requirements set forth by the Iowa SHPO. Documentation criteria for barns are set forth in Appendix B. The SHPO has not developed specific criteria for silos. The level of protection for the two Section 4(f) properties may best be provided by adherence to requirements set forth by the Iowa SHPO.

It may be possible to relocate one or both of the historic structures involved (one of the property owners has indicated an interest in relocation) however, the principal value of these structures lies mainly in the context and setting of the original farmstead and their relationship with the now defunct "Golden Circle" dairy industry (this is also true in the case of the silo on the former Gilcrest farmstead, which is primarily significant because of the type of early octagonal construction design used.) Relocation would permanently alter this relationship and is seen as a less desirable outcome than historic documentation.

Section 7 – Disposition of the Draft 4(f) Statement

The draft 4(f) statement was circulated to appropriate resource and regulatory agencies for review and comment. A 45-day review period ending May 30, 1999 was established for this purpose. Responses were reviewed and the project evaluated to incorporate agency recommendations. There were no negative comments or new concerns raised as a result of the review and comment period. Comment letters are attached. Copies of the final 4 (f) document will be forwarded to commenting agencies.

With local and regional support for an upgraded transportation facility within the Iowa Highway 5 corridor, and the established need for such a facility, it is the intent of the Iowa Department of Transportation to proceed with project construction as proposed, and to implement the mitigation procedures for the two 4(f) properties in accord with the Memorandum of Agreement to be developed in consultation with the SHPO.

Section 8 – Conclusion

With local and regional support for an upgraded transportation facility within the Iowa 5 corridor, and the established need for such a facility, it is the intent of the Iowa Department of Transportation to proceed with project construction. This action will result in direct project impacts to the 4(f) resources discussed in this document, however, mitigation has been identified that is acceptable to the State Historic Preservation Office, and a completed Memorandum of Agreement is attached regarding disposition of the protected 4 (f) resources.

Given these circumstances, it is the conclusion of this final 4(f) document that:

- The proposed highway improvement represents a need identified and supported by area governments and citizens as being vital to the social and economic well being of the region.
- The selected alignment represents the corridor supported by area governments, citizens and resource and regulatory agencies as being the least environmentally intrusive while still meeting the transportation goals of the project.
- The proposed highway construction project represents the minimum level of practicable encroachment upon protected 4(f) resources and acceptable mitigation has been identified that will result in remedial action for the resources affected by construction.
- Accordingly, based on these considerations, it is the Federal Highway Administration and Iowa Department of Transportation's determination that there is no feasible or prudent alternative to the use of land and encroachment upon the historic features of the Leopold Dairy Farm and Gilcrest Silo, structures found eligible for listing on the National Register of Historic Places.

for Stephen G. Budd

Harry Budd, Director
Office of Project Planning
Iowa Department of Transportation

June 30, 1999

Date

Bahby W. Blackman

Division Administrator
Federal Highway Administration

6/30/99

Date

Section 9 – Comments and Coordination

APPENDIX A
IOWA SITE INVENTORY FORMS

IOWA SITE INVENTORY

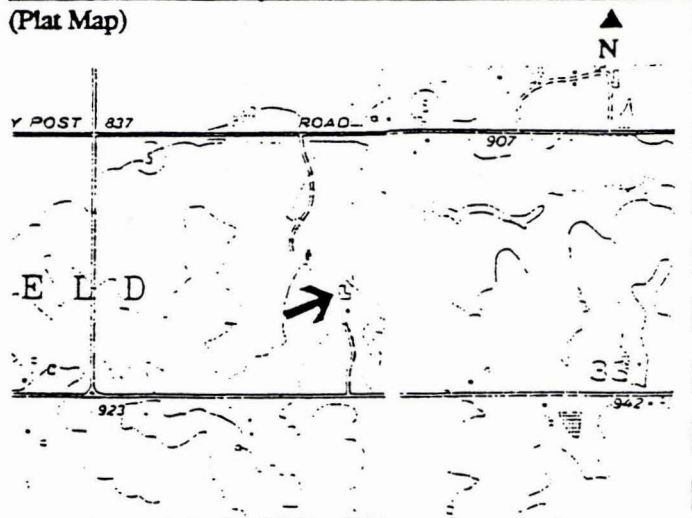
Survey ID Number 26
 Database ID Number _____
 Nonextant _____

Location and Functional Information

1. Historic Name(s) LEOPOLD DAIRY FARM
 2. Common Name(s) SPECIALTY LUNDT PARTNERSHIP, ET AL.
 3. Street Address 9807 SW 77th AVE
 4. City _____ Vicinity [X] 5. County POLK
 6. Subdivision _____ 7. Block(s) _____ 8. Lot(s) _____
 9. Legal Description: (If Rural) Township T78N Range R25W Section 32 Quarter of Quarter S 1/2 OF NE 1/4

10. Historic Function(s) FARMSTEAD Description Code
 11. Current Function(s) SUBURBAN ACREAGE Code
 12. Owner SPECIALTY LUNDT PARTNERSHIP ET AL. Phone # _____
 Address P.O. BOX 1333 City/State DES MOINES, IA Zip 50305

BHP Sources: Cty. Resource [] HABS [] Photo [] NR [] Tax Act [] Grants [] DOE [] R&C []
 (Plat Map) (Sketch Map)



SEE SKETCH MAP ON
FARMSTEAD FORM

(Integrity Notes)

Roll/Frame 2/15 Photographer Lawrence O. Edris
 View Looking SW
 Location of Negatives: Historic Preservation Bureau

SEE NEXT PAGE.



IOWA SITE INVENTORY FORM
EVALUATION SHEET

Architectural Significance and Associated Context(s):

ARCHITECTURE

Applicable National Register Criteria:

☐ A ☐ B ☒ C ☐ D

National Register Eligibility:

Individual: X Yes No
District: Contributing Non-Contributing

Reviewed by/Date: _____

This property comprises a 1-1/2-story, frame, single-family dwelling and a dairy barn with an attached milk collection station and two silos. Although the barn obtains architectural significance (discussed below), the farmstead as a whole does not appear to be eligible for nomination to the National Register. Other outbuildings associated with this property are nonextant and the farmhouse has been considerably altered.

House

The house features a side-gable roof, with a dormer window on the facade covered with a shed roof. An enclosed porch is also situated on the facade. The configuration of the dormer window suggests the influence of Craftsman styling. A California-type deck, which is also situated at the facade, is a modern addition, as is the cover-up siding that now clads the building. These alterations pose serious questions of integrity concerning this house and its potential as a contributing resource.

Dairy Complex

This dairy complex comprises a barn, two silos, and a milk collection station. Both silos and the station are physically attached to the barn. This complex appears eligible for nomination to the National Register, under Criterion C, because of its method of construction.

The barn is architecturally significant as an outstanding and well-preserved example of laminated construction technique as practiced in the 1930s and 1940s. The presence of the silos and the milk collection station increases the architectural significance of the resource because they contribute to the integrity of its functional design. This barn measures approximately 40'x112', with two silos attached on the west, and a milk collection station on the southeast. Foundation of the barn is poured concrete, which also forms most of the walls on the ground floor. The rafters of the barn penetrate the ceiling of the first floor about 12". They are tied into the floor joists of the second floor with both the joists and the rafters resting on the concrete walls. The roof system comprises the rafters already mentioned. Each rafter consists of six plys of wood. Each ply measures 1-1/2" wide and 3/4" thick. Six of these ply are laminated together to form each rafter. The entire rafter system contains 58 pairs of rafters placed 2' on center. The rafters are shaped in the form of a gothic arch. The rafters are joined at the peak of the arch by a metal plate on each side, bolted together. The rafters are divided near the floor of the second level, one portion flaring to form the soffit, while the other rests on the concrete wall plate. The rafters are connected to the floor of the second level by 1"x4" members, which stabilize the overhang and provide an anchor for the soffit. Sheathing for the roof is tongue-and-grove. The second level is notable because the roof is supported entirely by the laminated rafters without any internal members. This results in one gigantic room containing approximately 4,500 square feet. The ground level features a series of 30 metal posts arranged in pairs and forming a central hallway. Floor of this level is poured concrete.

Two silos are attached to the barn on the west elevation. Constructed of hollow clay tile and probably built at the same time as the barn, these structures retain original features such as roofs, outside ladders and protective cages, and trap doors. They have been well maintained and should be evaluated with the barn as one resource.

A 2-story, concrete block milk collection station is also attached to the barn. This resource provided a cooling facility for the Leopold Dairy milk, as well as possibly some milk processing machinery. This station should also be evaluated with the barn as one resource. The station may or may not have been constructed simultaneously with the dairy barn.

Continuation Sheet []

Prepared by

WILLIAM C. PAGE

Date

JUNE, 1993

Address

104 SW 4TH ST., DES MOINES, IA 50309

Telephone

515/280-8026

Affiliation

DUNBAR/JONES PARTNERSHIP

IOWA STATE HISTORICAL FORM
EVALUATION SHEET

Historical Significance and Associated Context(s):

EVOLUTION OF AN AGRICULTURAL ECONOMY

Applicable National Register Criteria:
National Register Eligibility:

☒ A

☐ B

☐ C

☐ D

Individual:

☒ Yes

☒ No

District:

☐ Contributing

☐ Non-Contributing

Reviewed by/Date: _____

The dairy complex, as described in the architectural evaluation portion of this inventory form, appears eligible for nomination to the National Register, under Criterion A, because of its historical associations with the dairy industry in the Golden Circle. This industry is discussed in the historic context "Evolution of an Agricultural Economy" in Volume One of this report. Alterations to the farmhouse and the nonextant status of outbuildings pose questions of integrity concerning the farmstead as a whole. For these reasons, only the barn is evaluated as eligible for nomination.

This property currently consists of about 80 acres. In 1902, a portion of this land was owned by Patrick Hoey, while another portion was owned by J. E. Slavin. By 1907, Devine and Harvison had acquired Hoey's land. By about 1911, J. I. Brody and L. H. Cohen had gained title to the entire 160 acres of the northeast quarter of Section 32. Joseph Isaac Brody, a notable Des Moines attorney, and Cohen, the co-titleholder, appear to have established the farm for investment purposes.

Howard Leopold later established a dairy operations on this property. Owning 160 acres, Leopold maintained a herd of Holstein cattle (Johnson, personal communication 1993). This dairy operated during the 1940s.

A subsequent owner, Calvin E. Johnson, DVM, later sold the property in two parcels, each containing 80 acres (Johnson, personal communication 1993).

PROPERTY CHARACTERISTIC FORM - RESIDENTIAL

Survey ID Number 26

Database ID Number _____

Street Address 9807 SW 77th Ave. City WDSM County POLK
Legal Description: (If Rural) Township T78N Range R25W Section 32 Quarter of Quarter S1/2 of NE1/4

Location Integrity: Original Site (OS) Moved (MV) Moved to Original Site (MO) OSEndangered?: YES If yes, why? HIGHWAY PROJECTGround Plan: a. Building Shape(s) Rectangle b. Width 24' by Depth 38' in units

Architectural Style/Stylistic Influences	Key Stylistic Attributes	Code
<u>NONE</u>	_____	_____
_____	_____	_____

Materials:	Foundation	<u>CONCRETE BLOCK</u>	<u>100</u>
	Walls	<u>COVER-UP SIDING</u>	<u>21</u>
	Roof	<u>ASPHALT SHINGLES</u>	<u>22</u>

Number of Stories _____ 1.5Roof Shape GABLE 1Builder(s) UNKNOWN Architect(s) UNKNOWNOriginal Construction Date 1925* Modification/Addition Dates: _____

PORCH NOW ENCLOSED. A CALIFORNIA-TYPE DECK WAS ADDED, PROBABLY IN THE 1980s.

Continuation Sheet [1]

Significant Interior Components:

INTERIOR NOT SURVEYED

Continuation Sheet [1]

Surveyor Comments:

SIMPLE, VERNACULAR SINGLE-FAMILY DWELLING

Continuation Sheet [1]

Sources:

*POLK CO. ASSESSOR'S OFFICE RECORDS

Needs Further Study/Anomaly []

Continuation Sheet []

Surveyor WILLIAM C. PAGE Date SPRING 1993

Property Characteristic Form - FARMSTEAD

CFN 600-0000

9/1/91

Farmstead ID Number: 26

Database ID Number: _____

Nonextant: _____

LOCATION:

Name LEOPOLD DAIRY FARM

Street Address 9807 SW 77th AVE. City WDSM # _____ County POLK # 77

Legal Description: (If Rural): Township T78N Range R25W Section 32 Quarter of Quarter S 1/2 of NE 1/4

List of Structures and Buildings (Including ones dilapidated and not in use)

	Name	Year Built	Type
1.	<u>HOUSE</u>	<u>1925</u>	<u>_____</u>
2.	<u>BARN W/ MILK STATION</u>	<u>C. 1940</u>	<u>_____</u>
3.	<u>SILOS (2)</u>	<u>C. 1940</u>	<u>_____</u>
4.	<u>_____</u>	<u>_____</u>	<u>_____</u>
5.	<u>_____</u>	<u>_____</u>	<u>_____</u>
6.	<u>_____</u>	<u>_____</u>	<u>_____</u>
7.	<u>_____</u>	<u>_____</u>	<u>_____</u>
8.	<u>_____</u>	<u>_____</u>	<u>_____</u>
9.	<u>_____</u>	<u>_____</u>	<u>_____</u>
10.	<u>_____</u>	<u>_____</u>	<u>_____</u>
11.	<u>_____</u>	<u>_____</u>	<u>_____</u>
12.	<u>_____</u>	<u>_____</u>	<u>_____</u>
13.	<u>_____</u>	<u>_____</u>	<u>_____</u>
14.	<u>_____</u>	<u>_____</u>	<u>_____</u>
15.	<u>_____</u>	<u>_____</u>	<u>_____</u>
16.	<u>_____</u>	<u>_____</u>	<u>_____</u>
17.	<u>_____</u>	<u>_____</u>	<u>_____</u>
18.	<u>_____</u>	<u>_____</u>	<u>_____</u>
19.	<u>_____</u>	<u>_____</u>	<u>_____</u>
20.	<u>_____</u>	<u>_____</u>	<u>_____</u>
21.	<u>_____</u>	<u>_____</u>	<u>_____</u>
22.	<u>_____</u>	<u>_____</u>	<u>_____</u>
23.	<u>_____</u>	<u>_____</u>	<u>_____</u>
24.	<u>_____</u>	<u>_____</u>	<u>_____</u>

What use best describes the farm and its facilities? (Based on 3 indicators of observed building capacity, continued use, and building conditions)

- ☐ Cash Grain ☐ Beef Cattle
☒ Dairy ☐ General/No Discernible Emphasis
☐ Hogs ☐ Unable to determine
☐ Other _____

(e.g., vacant, part-time, tenant operation, specialized poultry, etc.)

(Place Plat Map Here)

SEE
ISI
FORM

Comments/Observations

(Farmstead's historical integrity, condition and important buildings / structures not visible in adjacent photo)

SEE
ISI
FORM

Roll / Frame 2/16 Photographer LAWRENCE O. EDRIS

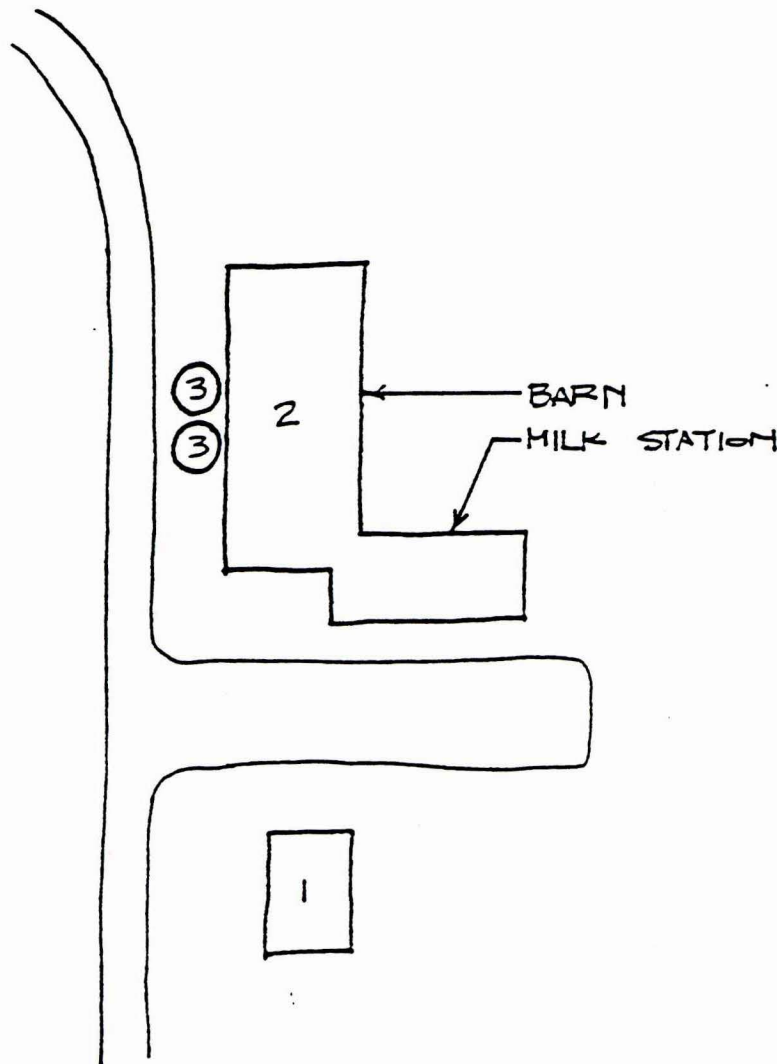
View LOOKING NE

Location of Negatives HISTORIC PRESERVATION BUREAU



Sketch of Farmstead Layout Arrangement

▲
N



Remarks on Historical or Architectural Significance of Overall Farmstead
(Include sources of information consulted)

SEE IOWA SITE INVENTORY FORM

Continuation Sheet ☐

Prepared by WILLIAM C. PAGE Date SPRING 1993
Address 104 SW 4th STREET, DES MOINES, IOWA 50309 Telephone (515) 280-8026
Affiliation DUNBAR / JONES PARTNERSHIP

Survey Consultant/Office Use Only Below This Line

Historical or Architectural Associated Context(s): EVOLUTION OF AN AGRICULTURAL ECONOMY
ARCHITECTURE

Applicable National Register Criteria: ☐ A ☐ B ☐ C ☐ D Other: _____

National Register Eligibility: District: _____ Yes _____ No
_____ # Contributing _____ # Non-Contributing

Evaluated by _____ Date _____

PROPERTY CHARACTERISTIC FORM - BARN

CFN 259 - 1402

Survey ID Number 26

9/17/91

Database ID Number _____

Name Leopold Dairy Barn Street Address _____

City _____ County _____

Legal Description: (If Rural) Township T78N Range R25W

Section 32 Quarter S1/2 of Quarter NE1/4

BACKGROUND INFORMATION

1. Construction Date: C. 1940
2. Builder: UNKNOWN
3. Source of barn design/plan: _____
4. Original Use: Cattle Feeding ☒ Dairy ☐ General ☐
Other _____
5. Present Use: Cattle Feeding ☐ Dairy ☐ Hogs ☐ General Purpose ☐
Storage Only ☐ Vacant ☐ Other: MIXED

EXTERIOR FEATURES

Materials

6. Foundation: Clay Tile ☐ Stone ☐ Concrete Block ☒ Poured Concrete ☐ Wood ☐ Other _____
7. First Story Walls: Clay Tile ☐ Stone ☐ Concrete Block ☒ Vertical Wood Siding ☐ Horizontal Wood Siding ☐ Other: B&B
8. Second Story Walls: Clay Tile ☐ Stone ☐ Concrete Block ☒ Vertical Wood Siding ☐ Horizontal Wood Siding ☐ Other: B&B
9. Roof: Asphalt Shingles ☒ Wood Shingles ☐ Metal ☐ Other _____

Form of Barn

10. Roof Profile: GOTHIC
11. Relationship to the Surrounding Terrain: A
12. Basic Shape of the Barn: Square ☒ Rectangular ☐ T-Shape ☐ "O" Shaped ☐ "L" Shape ☐ Can't Determine ☐ Other: _____
13. Extensions (for shelter/weather protection storage): pent roofed ☐ Cantilever Forebay ☐ Supported Forebay ☐ Recessed ☐ None ☒ Can't Determine ☐ Other _____
14. Location of Lean-to Additions or Sheds: None ☒ Side ☐ Both Sides ☐ End Only ☐ End and Side ☐ End and 2 Sides ☐ Other: _____
15. Silo(s) Relation to Barn: Attached Long-side ☐ Attached Gable-end ☒ Detached Long-side ☐ Detached Gable-end ☐ No Silo ☐ Can't Determine ☐ Other _____
16. Number of Roof Ventilators: Wood Cupola 0 Metal Aerator 0
17. Total Number of Window Openings: 24
18. Outside Loft Entry Door: None ☐ At Gable-end ☒ On Long Side ☐

Dimensions

19. Barn Dimensions (of Main Portion) in Feet: Width _____ X Length _____

INTERIOR FEATURES

Floor

20. Floor Layout: Sketch on back according to instructions.

Framing

21. Type of Framing System: Heavy Timber ☐ Plank Frame ☐ Balloon Frame ☐ Pole Frame ☒ Other _____
22. Frame/Truss Configuration: Sketch on back according to instructions.
23. Method of Shaping Wood for Heavy Timber Barns (complete if applicable):
Hewn with Axe or Adze ☐ Sawed Timbers ☐ Mixed Hewed and Sawed ☐
24. Estimated feet between each roof truss or loft floor-to-plate brace: _____
25. Gothic Arch Roof Barns (complete if applicable): Sawed Edges of Boards ☐ Bent and Nailed/Bolted ☐ Bent and Glued Only ☐ Bent and Glued Plus Nails/Bolts ☒ Combination Sawed and Bent Rafters (sawed type every 6-8 feet with bent type in between) ☐ Other: _____
Type of Gothic Construction:
☐ Type 1: Rafter rests on concrete foundation.
☒ Type 2: Rafter rests on plate of a stud wall at the level of the mow floor joist.
☐ Type 3: Rafter rests on plate of a stud wall 3-4 feet above the mow floor.

Dimensions

26. Manufactured Interior Equipment (indicate any that apply):
☐ Hay Carrier/Fork (Mfg. Hay Fork Monorail)
☐ Litter Carrier (Mfg. _____)
☐ Metal Stanchions (Mfg. _____)
☐ Other Equipment (Mfg. Feeding Mill)

Ventilation

27. Type of Interior Ventilation System: King ☐ Rutherford ☐ None ☒ Other _____

OTHER

28. If you have old photos of the barn, please attach a zerox photocopy, noting the year taken if known.
29. Photographs: Attach at least two photos of barn's exterior to a continuous sheet.
30. Map: If a completed Farmstead form does not accompany this barn form, attach a map on which is shown where the barn is located in the county or township.
31. If you know of any other barns like yours in the immediate vicinity, please give the location: _____

32. Integrity notes on alterations affecting the barn's authenticity and remarks historical or architectural significance of barn or of special features not elsewhere on the form: _____

33. Sources of Information Consulted: _____

Prepared by: _____ Date: _____
Address: _____ Telephone: () _____
Affiliation: _____

Survey Consultant/Office Use Only Below Line

Historical or Architectural Context(s): _____

Applicable National Register Criteria: A B C D Other: _____

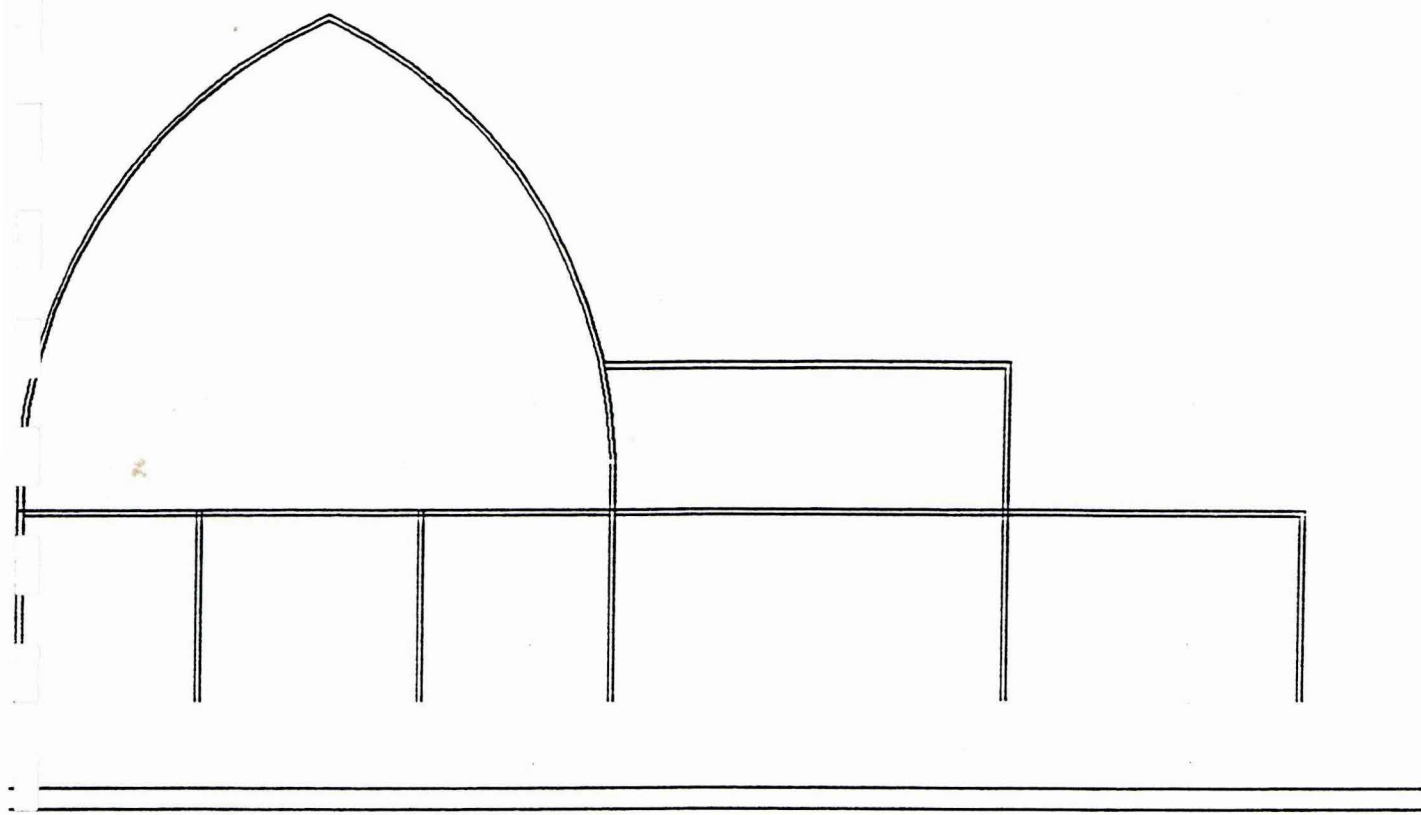
National Register Eligibility: _____ Individual: Yes ☐ No ☐

Contributing Building to an Eligible Farmstead District: Yes ☐ No ☐

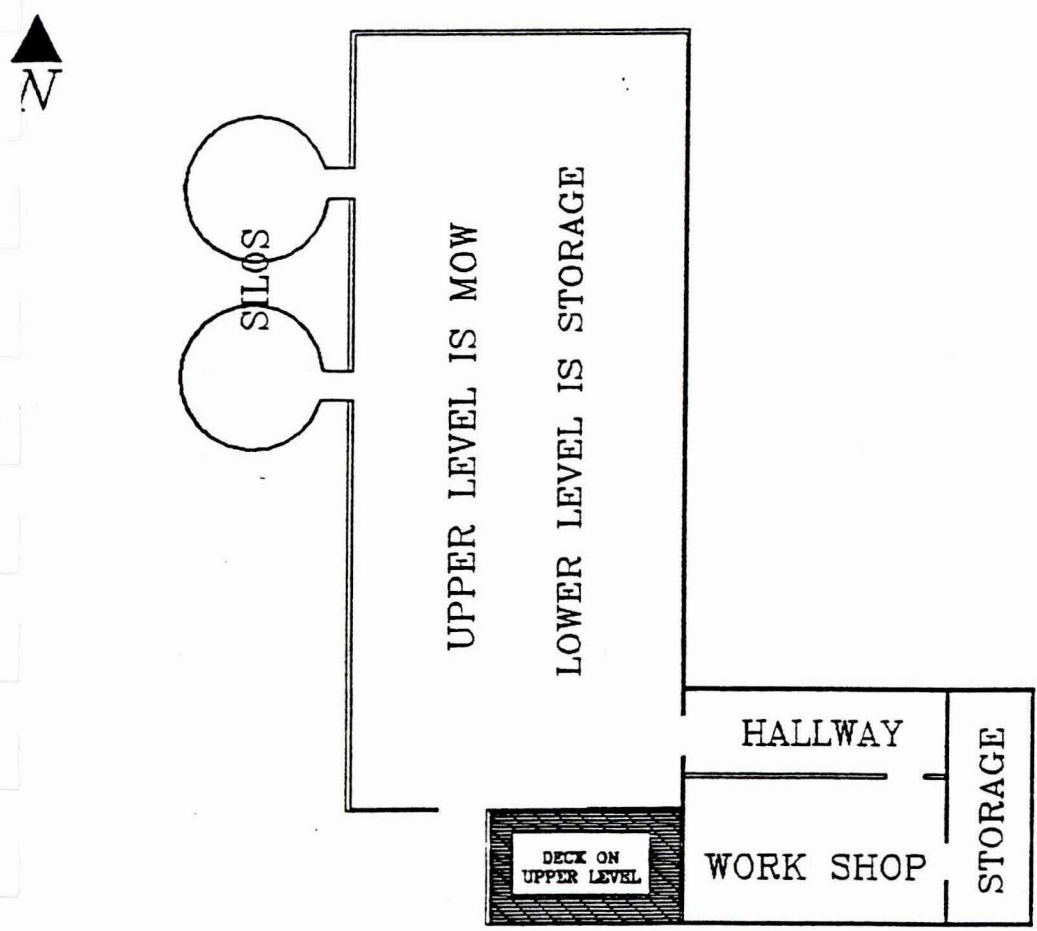
Number Contributing _____ Number Non-Contributing _____

Evaluated by: _____ Date: _____

Sketch of Typical Interior Bent



Sketch Basic Features of Floor Layout



IOWA SITE INVENTORY FORM
CONTINUATION SHEET

Survey ID Number 26

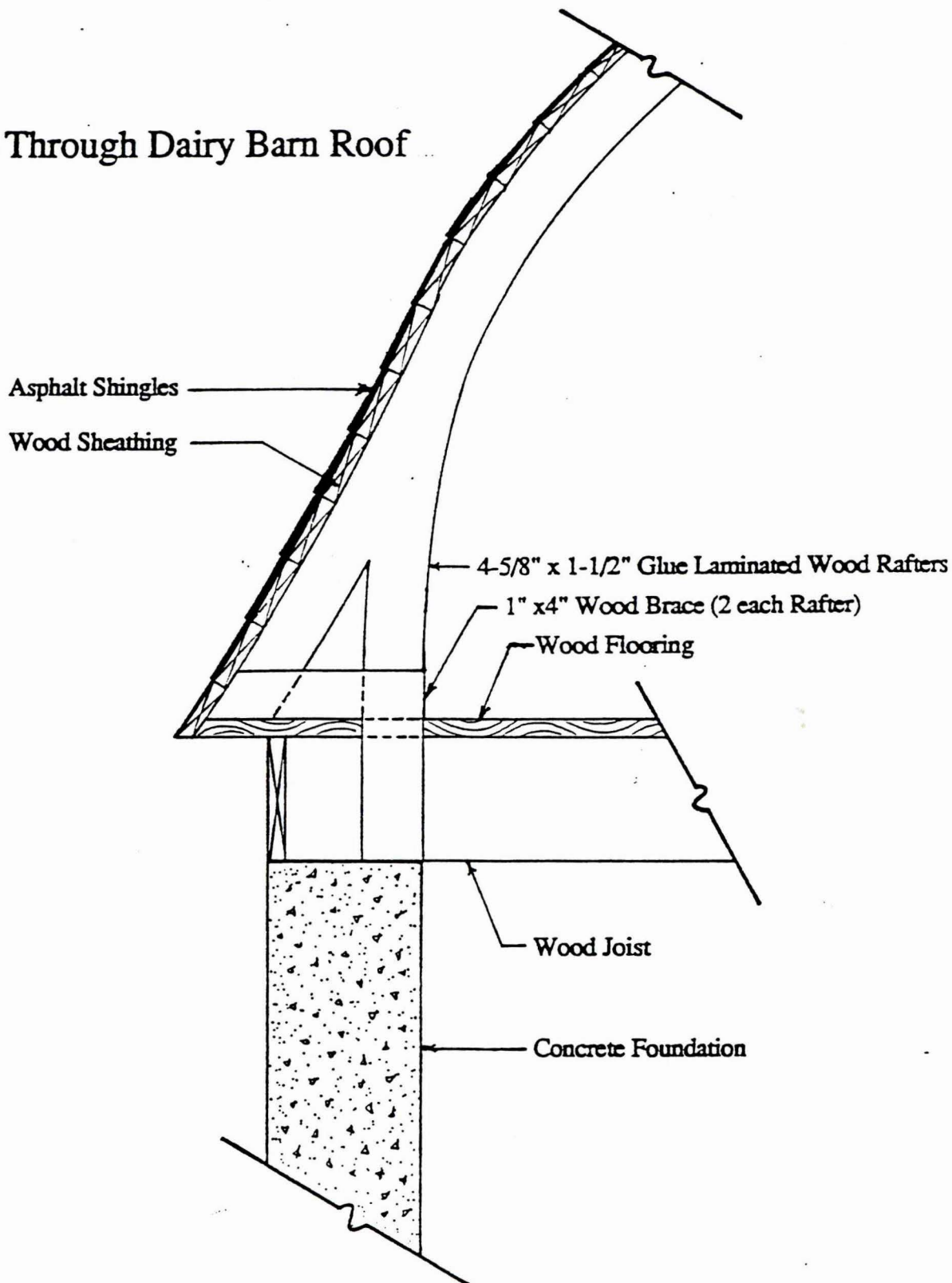
Database ID Number _____

Street Address 9807 SW 77th Avenue City _____ County Polk

Legal Description: (If Rural) _____ Township 78N Range 25W Section 32 Quarter of Quarter S 1/2 of NE 1/4

UTM: _____

Section Through Dairy Barn Roof



IOWA SITE INVENTORY FORM
CONTINUATION SHEET

Survey ID Number 26
Database ID Number _____

Street Address 9807 SW 77th Avenue City _____ County Polk
Legal Description: (If Rural) _____ Township 78N Range 25W Section 32 Quarter of Quarter S 1/2 of NE 1/4

UTM: _____



Farmstead Resource #1
Roll 2 / Frame 18

House
Looking SW



Farmstead Resource #2
Roll 2 / Frame 17

Dairy Barn & Milk Station
Looking NE

IOWA SITE INVENTORY

Survey ID Number 19

Database ID Number _____

Nonextant _____

Location and Functional Information

1. Historic Name(s) GILCREST FARMSTEAD

2. Common Name(s) _____

3. Street Address 7620 SW 72ND AVENUE4. City _____ Vicinity [X] 5. County POLK

6. Subdivision _____ 7. Block(s) _____ 8. Lot(s) _____

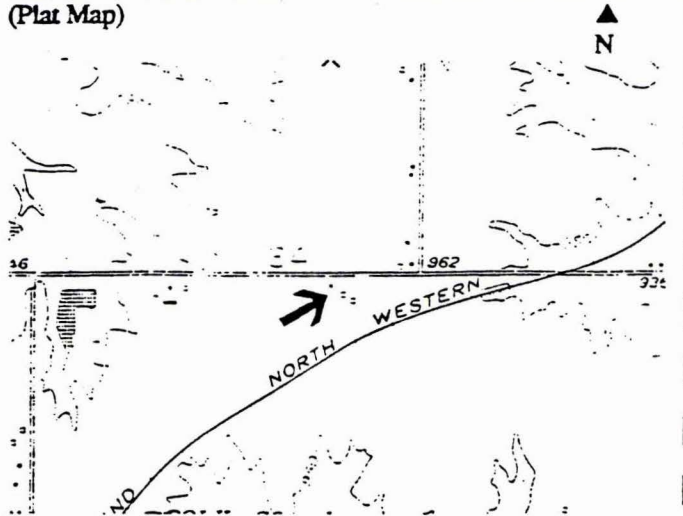
9. Legal Description: (If Rural) Township 78N Range 25W Section 34 Quarter of Quarter NW OF SE

Description

Code

10. Historic Function(s) FARMSTEAD0911. Current Function(s) FARMSTEAD0912. Owner JUANITA FOXPhone # (515) 285-1194Address 7620 SW 72nd AVE

City/State

BLOOMFIELD TWP Zip _____BHP Sources: Cty. Resource [] HABS [] Photo [] NR [] Tax Act [] Grants [] DOE [] R&C []
(Plat Map) (Sketch Map)SEE SKETCH MAP ON
FARMSTEAD FORM

(Integrity Notes)

Roll/Frame 2/8 Photographer Lawrence O. EdrisView Looking SELocation of Negatives: Historic Preservation Bureau

SEE NEXT PAGE.



IOWA SITE INVENTORY FORM
EVALUATION SHEET

Architectural Significance and Associated Context(s):

ARCHITECTURE

Applicable National Register Criteria:
National Register Eligibility:

☐ A

☐ B

☒ C

☐ D

Individual:

X Yes

 No

District:

 Contributing

 Non-Contributing

Reviewed by/Date: _____

This farmstead comprises a 2-story, frame, single-family dwelling, a barn with an attached silo, several sheds, including a large corn shed, several metal grain bins, and a mobile home. Although the barn and silo obtain architectural significance (discussed below), the farmstead as a whole does not appear to be eligible for nomination to the National Register. It resembles many other farmsteads of similar size and vintage in Central Iowa.

House

This is a 2-story, single-family, frame house, constructed circa 1908. Its moderately steep roof, wide eaves, and full-length facade porch (now enclosed) show the influence of Craftsman styling. According to the present owner, this house was constructed by the Gilcrest Lumber Company of Des Moines (Juanita Fox, personal communication). The building also features 6/6 double hung sash windows. The building is now clad with cover-up siding. This and the enclosing of the porch distract from the building's integrity. Although the design of this building is not outstanding, its association with Gilcrest Lumber Company provides a connection to standard house designs as available through lumber yards in the first quarter of the Twentieth Century.

Silo and Barn

This silo appears to date from the first quarter of the Twentieth Century. It is architecturally significant as an outstanding and unusual example of octagonal silo design. While this shape was popular in the late Nineteenth Century, far fewer of these designs were constructed in the Twentieth Century. By this time, the round, hollow clay tile block silo had come into general use. This resource illustrates, therefore, a late example of the design. Perhaps its construction can be traced to the Gilcrest brothers and the ready availability of lumber from their business. The silo measures approximately 10 feet side-to-side. It is attached to the barn by a passageway. The silo stands approximately 30 feet high and is covered with an eight-sided roof. The silo rests on a concrete foundation. Exterior walls are clad with tongue and groove vertical siding, approximately 6" in width with staggered joints, each panel milled with a V-shaped divider to simulate two panels. These panels are attached with nails to the structural system. This system features 1-1/2"x3" wood members stacked on one another and mitered at each of the eight corners. A 2"x4" runs vertically from grade to top of the silo at each of these corners. The internal roof system is unknown. Access to the silo is gained through a series of 6 or so openings, each about 2'x2' and located in the passageway. The passageway is accessed through the barn. The silo is excavated approximately 5 feet below grade. Floor of the silo is dirt. Construction of the silo may pre-date that of the barn. Present access to the silo is gained only by the passageway to the barn, making the upper silo openings difficult to access. Inside the passageway, the cladding of the silo is the same as on the exterior. The openings to the silo may have been cut-in after its original construction. Finally, it is unclear how the farmer accessed silage in the below-grade portion of the silo in its present situation. Although the barn is fair condition, the silo is in excellent condition. It is currently painted a tan color.

Other Outbuildings

Although there are a number of other outbuildings on this property, none is architecturally significant in its own right.

Continuation Sheet []

Prepared by
Address
Affiliation

WILLIAM C. PAGE

104 SW 4TH ST., DES MOINES, IA 50309

DUNBAR/JONES PARTNERSHIP

Date

MAY, 1993

Telephone

515/280-8026

IOWA SITE INVENTORY FORM
EVALUATION SHEET

Historical Significance and Associated Context(s):

EVOLUTION OF AN AGRICULTURAL ECONOMY

Applicable National Register Criteria:
National Register Eligibility:

☒ A

☐ B

☐ C

☐ D

Individual:

☐ Yes

☒ No

District:

☐ Contributing

☐ Non-Contributing

Reviewed by/Date: _____

Historical significance is not claimed. Although this is one example of an early Twentieth Century farmstead, it is not an outstanding one. It represents a type widely found throughout Polk County and Central Iowa.

This property currently embraces 40 acres of land. In 1902, this land constituted one portion of a large holding of some 180 acres in Section 34 of Bloomfield Township held by the J. K. and W. H. Gilcrest Company of Des Moines. (The Gilcrest family owned other land in the township, including 120 acres in Section 25 and about 40 acres in Section 24, both owned by Charles L. Gilcrest.) By about 1911, this 180 acres had been reduced to 169.63, at least a portion of which had been deeded to a church, whose sanctuary stood on SW 72nd Avenue at the south head of SW 74th Street.

Continuation Sheet []

Prepared by
Address
Affiliation

WILLIAM C. PAGE

104 SW 4TH ST., DES MOINES, IA 50309

DUNBAR/JONES PARTNERSHIP

Date

MAY, 1993

Telephone

515/280-8026

PROPERTY CHARACTERISTIC FORM - RESIDENTIAL

Survey ID Number 19

Database ID Number _____

Street Address 7620 SW 72ND AVE. City WDSM County POLK
Legal Description: (If Rural) Township T78N Range R25W Section 34 Quarter of Quarter NW of SE

Location Integrity: Original Site (OS) Moved (MV) Moved to Original Site (MO) OSEndangered?: YES If yes, why? HIGHWAY PROJECTGround Plan: a. Building Shape(s) Rectangle b. Width 24' by Depth 33' in units
Enclosed Porch 10'X 24'Architectural Style/Stylistic Influences BUNGOLOW/CRAFTSMAN Key Stylistic Attributes ROOF PITCH, SHAPE Code 64

Materials: Foundation CONCRETE BLOCK 100
Walls COVER-UP SIDING 21
Roof ASPHALT SHINGLES 22

Number of Stories 2.5Roof Shape GABLE 1Builder(s) UNKNOWN Architect(s) UNKNOWNOriginal Construction Date 1908* Modification/Addition Dates: _____

PORCH NOW ENCLOSED. COVER-UP SIDING NOW CLADS CLAPBOARD.
RETAINS ORIGINAL 6/6 DOUBLE-HUNG SASH WINDOWS

Continuation Sheet [1]

Significant Interior Components:

INTERIOR NOT SURVEYED

Continuation Sheet [1]

Surveyor Comments:

Continuation Sheet [1]

Sources:

POLK CO. ASSESSOR'S OFFICE RECORDS

Needs Further Study/Anomaly []

Continuation Sheet []

Surveyor WILLIAM C. PAGE Date SPRING 1993

Property Characteristic Form - FARMSTEAD

FN 600-0000

1/1/91

Farmstead ID Number: 19

Database ID Number: _____

Nonexant: _____

LOCATION:

Name GILCREST

Street Address _____

City _____ # _____ County POLK # 77

Legal Description: (If Rural): Township 78N Range 25W Section 34 Quarter of Quarter NW of SE

List of Structures and Buildings (Including ones dilapidated and not in use)

	Name	Year Built	Type
1.	<u>HOUSE</u>	<u>1908</u>	_____
2.	<u>BARN</u>	<u>1930 or bef.</u>	_____
3.	<u>SILO</u>	<u>1930 or bef.</u>	_____
4.	<u>MOBILE HOME</u>	<u>unknown</u>	_____
5.	<u>SHED</u>	<u>unknown</u>	_____
6.	<u>CORN SHED</u>	<u>1930</u>	_____
7.	<u>MACHINE SHED</u>	<u>1970</u>	_____
8.	<u>SHED, SMALL</u>	<u>unknown</u>	_____
9.	<u>METAL GRAIN BINS (3)</u>	<u>modern</u>	_____
10.	_____	_____	_____
11.	_____	_____	_____
12.	_____	_____	_____
13.	_____	_____	_____
14.	_____	_____	_____
15.	_____	_____	_____
16.	_____	_____	_____
17.	_____	_____	_____
18.	_____	_____	_____
19.	_____	_____	_____
20.	_____	_____	_____
21.	_____	_____	_____
22.	_____	_____	_____
23.	_____	_____	_____
24.	_____	_____	_____

What use best describes the farm and its facilities? (Based on 3 indicators of observed building capacity, continued use, and building conditions)

- ☐ Cash Grain ☐ Beef Cattle
☐ Dairy ☐ General/No Discernible Emphasis
☐ Hogs ☒ Unable to determine
☐ Other _____

(e.g., vacant, part-time, tenant operation, specialized poultry, etc.)

(Place Plat Map Here)

SEE
ISI
FORM

Comments/Observations

(farmstead's historical integrity, condition and important buildings / structures not visible in adjacent photo)

SEE
ISI
FORM

Roll / Frame 02/5 Photographer LAWRENCE O. EDRIS

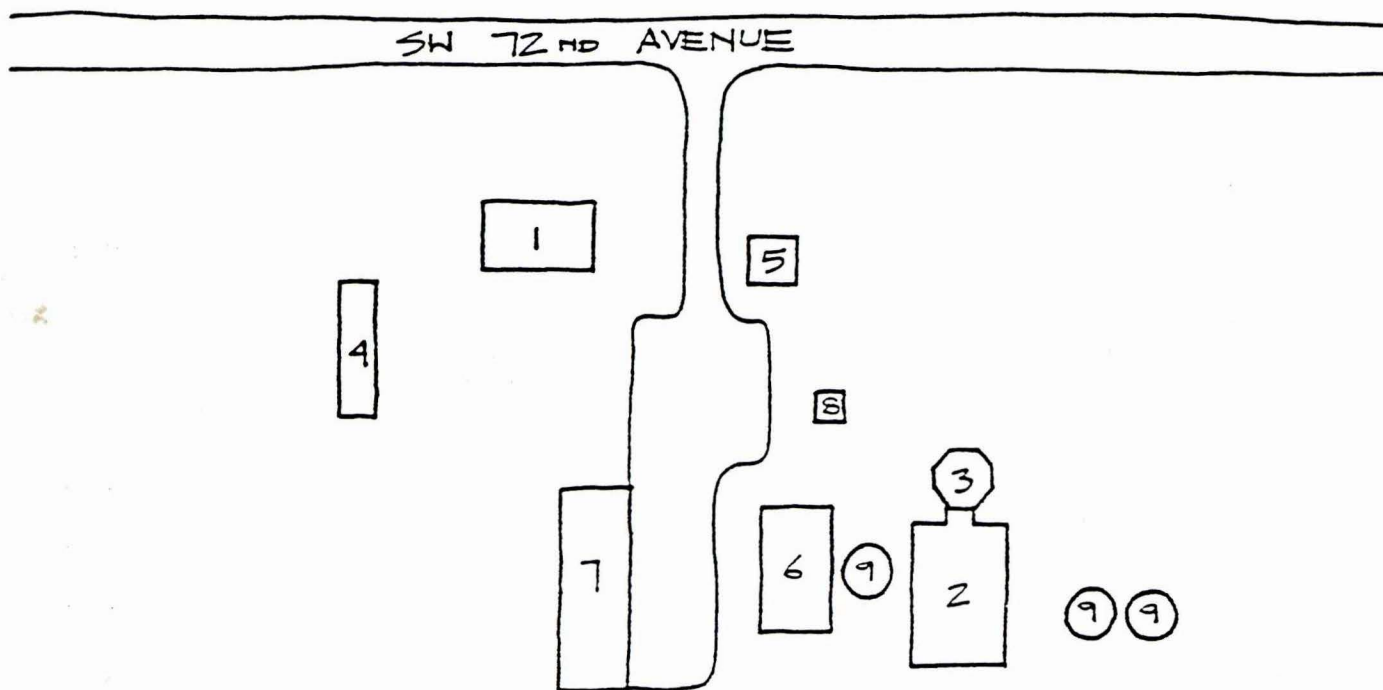
View LOOKING SW

Location of Negatives HISTORIC PRESERVATION BUREAU



Sketch of Farmstead Layout Arrangement

▲
N



Remarks on Historical or Architectural Significance of Overall Farmstead
(Include sources of information consulted)

SEE IOWA SITE INVENTORY FORM

Continuation Sheet ☐

Prepared by WILLIAM C. PAGE Date SPRING 1993
Address 104 SW 4th STREET, DES MOINES, IOWA 50309 Telephone (515) 280-8026
Affiliation DUNBAR / JONES PARTNERSHIP

Survey Consultant/Office Use Only Below This Line

Historical or Architectural Associated Context(s): EVOLUTION OF AN AGRICULTURAL ECONOMY
ARCHITECTURE

Applicable National Register Criteria: ☐ A ☐ B ☐ C ☐ D Other: _____

National Register Eligibility: District: _____ Yes _____ No
_____ # Contributing _____ # Non-Contributing

Evaluated by _____ Date _____

PROPERTY CHARACTERISTIC FORM - BARN

CFN 259 - 1402

Survey ID Number 19

9/17/91

Database ID Number _____

Name GILCREST BARN Street Address 7620 SW 72nd Ave. City WDSM County _____
Legal Description: (If Rural) Township 78N Range 25N Section 34 Quarter NW of Quarter SE

BACKGROUND INFORMATION

1. Construction Date: _____
2. Builder: _____
3. Source of barn design plan: _____
4. Original Use: Cattle Feeding ☒ Dairy ☐ General ☐
Other _____
5. Present Use: Cattle Feeding ☐ Dairy ☐ Hogs ☐ General Purpose ☐
Storage Only ☒ Vacant ☐ Other: _____

EXTERIOR FEATURES

Materials

6. Foundation: Clay Tile ☐ Stone ☐ Concrete Block ☐ Poured Concrete ☒ Wood ☐ Other _____
7. First Story Walls: Clay Tile ☐ Stone ☐ Concrete Block ☐ Verticle Wood Siding ☐ Horizontal Wood Siding ☐ Other: shiplap
8. Second Story Walls: Clay Tile ☐ Stone ☐ Concrete Block ☒ Verticle Wood Siding ☐ Horizontal Wood Siding ☐ Other: shiplap
9. Roof: Asphalt Shingles ☐ Wood Shingles ☐ Metal ☒ Other _____

Form of Barn

10. Roof Profile: A
11. Relationship to the Surrounding Terrain: A
12. Basic Shape of the Barn: Square ☒ Rectangular ☐ T Shape ☐ "O" Shaped ☐ L Shape ☐ Can't Determine ☐ Other: _____
13. Extensions (for shelter/weather protection storage): pent roofed ☐ Cantilever Forebay ☐ Supported Forebay ☐ Recessed ☐ None ☒ Can't Determine ☐ Other _____
14. Location of Lean-to Additions or Sheds: None ☒ Side ☐ Both Sides ☐ End Only ☐ End and Side ☐ End and 2 Sides ☐ Other: _____
15. Silo(s) Relation to Barn: Attached Long-side ☐ Attached Gable-end ☒ Detached Long-side ☐ Detached Gable-end ☐ No Silo ☐ Can't Determine ☐ Other _____
16. Number of Roof Ventilators: Wood Cupola 0 Metal Acroter 2
17. Total Number of Window Openings: 26
18. Outside Loft Entry Door: None ☐ At Gable-end ☒ On Long Side ☐

Dimensions

19. Barn Dimensions (of Main Portion) in Feet: Width _____ X Length _____

INTERIOR FEATURES

Floor

20. Floor Layout: Sketch on back according to instructions.

Framing

21. Type of Framing System: Heavy Timber ☐ Plank Frame ☐ Balloon Frame ☒ Pole Frame ☒ Other _____
22. Frame/Truss Configuration: Sketch on back according to instructions.
23. Method of Shaping Wood for Heavy Timber Barns (complete if applicable): Hewn with Axe or Adze ☐ Sawed Timbers ☐ Mixed Hewed and Sawed ☐
24. Estimated feet between each roof truss or loft floor-to-plate brace: 10
25. Gothic Arch Roof Barns (complete if applicable): Sawed Edges of Boards ☐ Bent and Nailed/Bolted ☐ Bent and Glued Only ☐ Bent and Glued Plus Nails/Bolts ☐ Combination Sawed and Bent Rafters (sawed type every 6-8 feet with bent type in between) ☐ Other: _____
Type of Gothic Construction:
☐ Type 1: Rafter rests on concrete foundation.
☐ Type 2: Rafter rests on plate of a stud wall at the level of the mow floor joist.
☐ Type 3: Rafter rests on plate of a stud wall 3-4 feet above the mow floor.

Dimensions

26. Manufactured Interior Equipment (indicate any that apply):
☒ Hay Carrier/Fork (Mfr. Hav Fork Monorail)
☐ Litter Carrier (Mfr. _____)
☒ Metal Stanchions (Mfr. _____)
☐ Other Equipment (Mfr. Feeding Mill)

Ventilation

27. Type of Interior Ventilation System: King ☐ Rafterford ☒ None ☐ Other _____

OTHER

28. If you have old photos of the barn, please attach a zerox photocopy, noting the year taken if known.
29. Photographs: Attach at least two photos of barn's exterior to a continuous sheet.
30. Map: If a completed Farmstead form does not accompany this barn form, attach a map on which is shown where the barn is located in the county or township.
31. If you know of any other barns like yours in the immediate vicinity, please give the locations: _____
32. Integrity notes on alterations affecting the barn's authenticity and remarks historical or architectural significance of barn or of special features not elsewhere on the form: _____

33. Sources of Information Consulted: _____

Prepared by: _____ Date: _____
Address: _____ Telephone: () _____
Affiliation: _____

Survey Consultant/Office Use Only Below Line

Historical or Architectural Context(s): _____

Applicable National Register Criteria: A B C D Other: _____

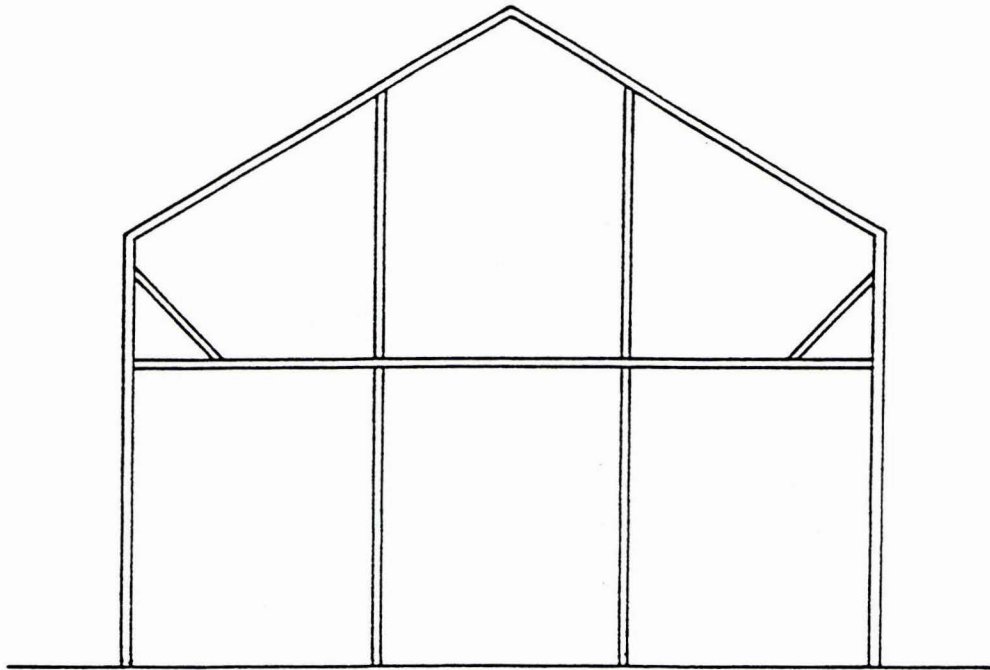
National Register Eligibility: _____ Individual: Yes ☐ No ☐

Contributing Building to an Eligible Farmstead District: Yes ☐ No ☐

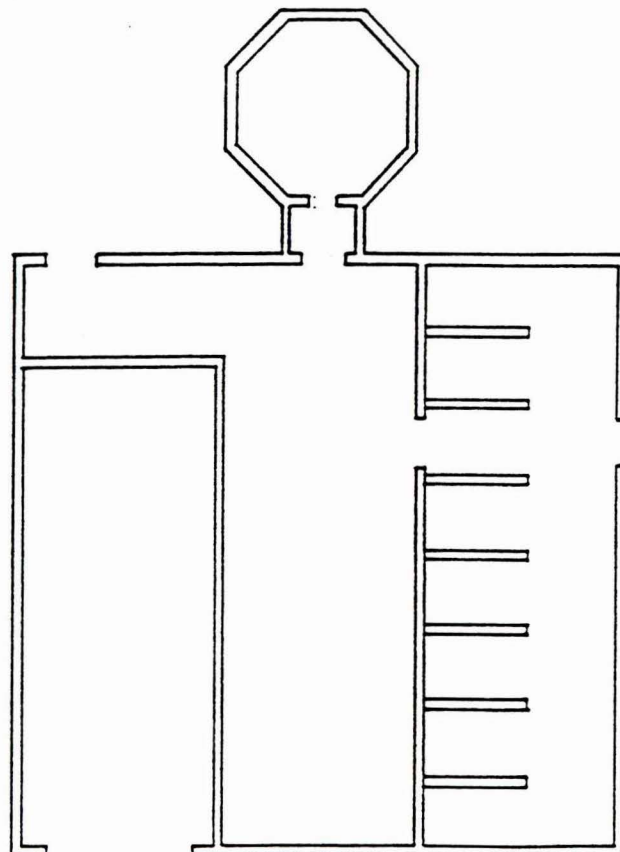
Number Contributing _____ Number Non-Contributing _____

Evaluated by: _____ Date: _____

Sketch of Typical Interior Bent



Sketch Basic Features of Floor Layout



CONTINUATION SHEET

Survey ID Number 19

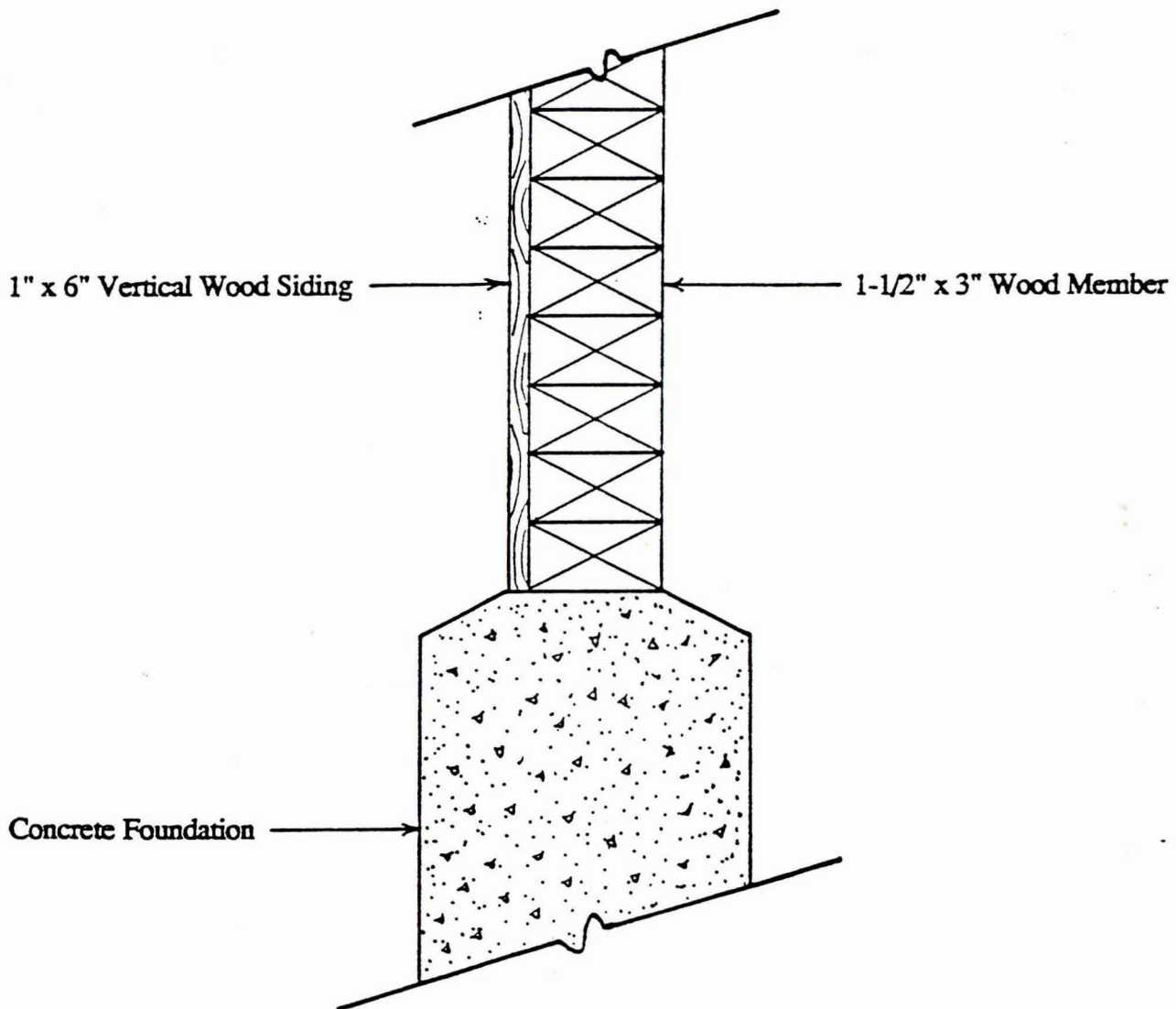
Database ID Number _____

Street Address 7620 SW 72nd Avenue City _____ County Polk

Legal Description: (If Rural) _____ Township 78N Range 25W Section 34 Quarter of Quarter NW of SE

U.M: _____

Section Through Silo Wall



IOWA SITE INVENTORY FORM
CONTINUATION SHEET

Survey ID Number 10

Database ID Number _____

Street Address 7620 SW 72nd Avenue

City _____

County _____

Polk _____

Legal Description: (If Rural)

Township

Range

Section

Quarter of Quarter

78N

25W

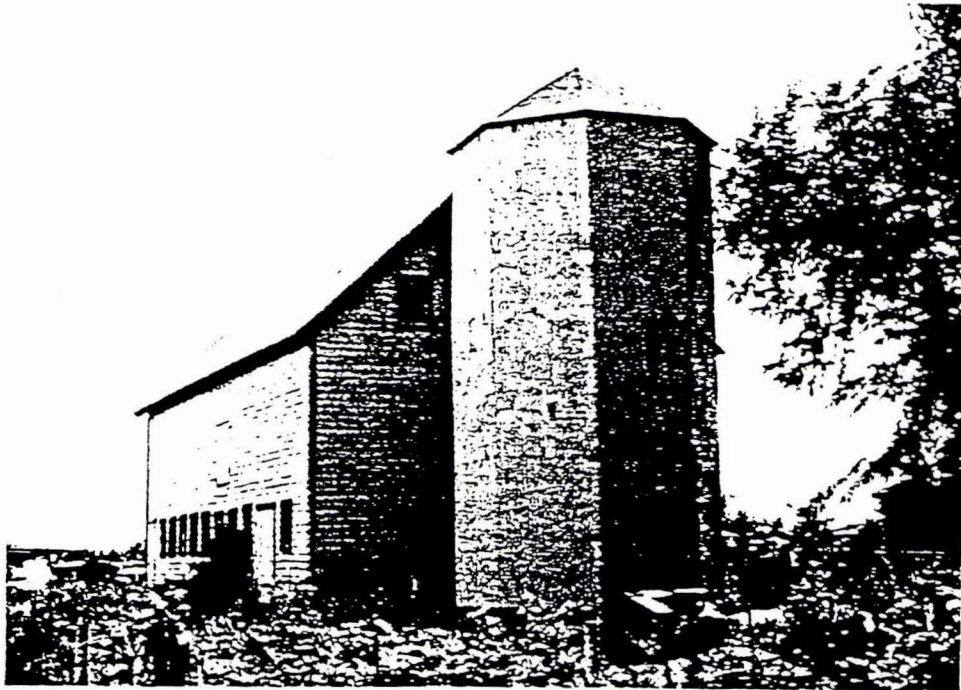
34

NW

of

SE

UTM: _____



Farmstead Resources #2, #3
Roll 5 / Frame 1

Barn & Silo
Looking SW



Farmstead Resources #3
Roll 5 / Frame 2

Foundation Detail
Looking SW

IOWA SITE INVENTORY FORM
CONTINUATION SHEET

Survey ID Number 19
Database ID Number _____

Street Address 7620 SW 72nd Avenue City _____ County Polk
Legal Description: (If Rural) _____ Township 78N Range 25W Section 34 Quarter of Quarter
NW of SE

UTM: _____



Farmstead Resources #5, #6, #7
Roll 2 / Frame 7

General View
Looking SSW



Farmstead Resources #2, #3, #6, #8, #9
Roll 2 / Frame 6

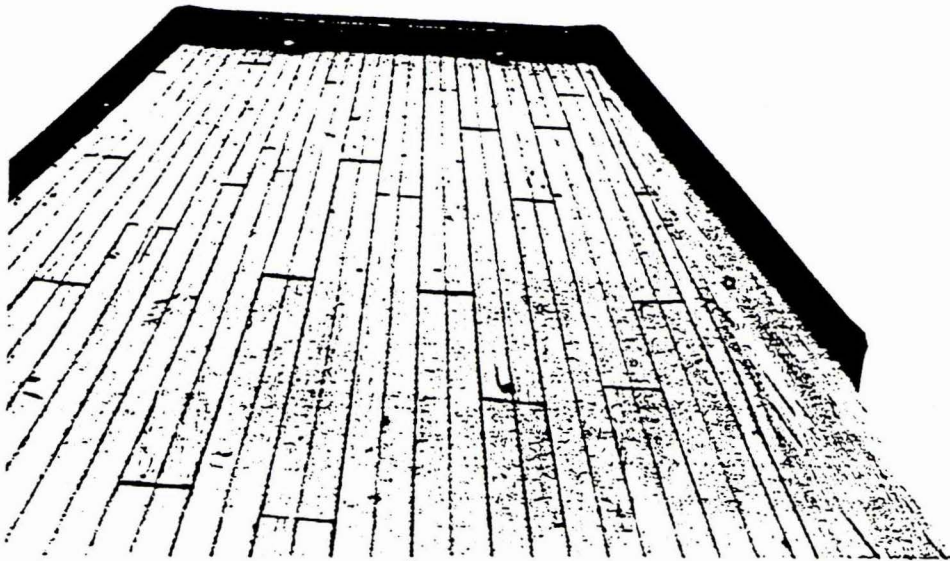
Barn & Silo
Looking SW

IOWA SITE INVENTORY FORM
CONTINUATION SHEET

Survey ID Number 19
Database ID Number _____

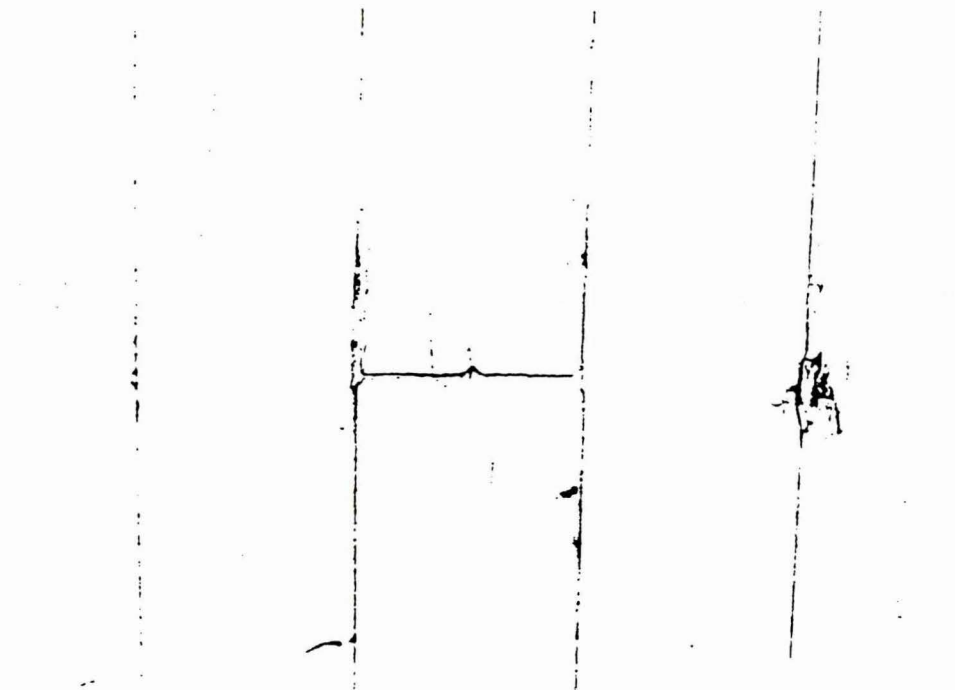
Street Address 7620 SW 72nd Avenue City _____ County Polk
Legal Description: (If Rural) Township 78N Range 25W Section 34 Quarter of Quarter NW of SE

UTM: _____



Farmstead Resources #3
Roll 5 / Frame 4

Silo Soffit
Looking S



Farmstead Resources #3
Roll 5 / Frame 3

Detail of Exterior Cladding
Looking SW

APPENDIX B

IOWA HISTORIC PROPERTY STUDY: Gothic Roof Barn, Silo
IOWA HISTORIC PROPERTY STUDY

DOCUMENTATION CRITERIA

Iowa Historic Property Study: Gothic Roof Barn

The documentation identified below is for a kind of Iowa barn property with state and local significance, namely, the gothic roof barn. This type of laminated rafter barn represented the final achievement of open loft design. In the process of doing so, the methods of lamination and accompanying truss support changed. A principal purpose of this report is to describe the particular way that the roof support system is constructed and fastened to the wall sill or plate. The report is to be written for a broad public audience--kept simple, direct, and free of technical and academic jargon. The information is to be presented (i.e., edited, cataloged and packaged) in accordance with State Historical Society of Iowa guidelines. The character of the documentation produced--its content, quality, materials, and presentation--will meet the Secretary of Interior's four standards for architectural and historical documentation (48 FR 44731).

The purpose of the report will be to place the gothic roof barn in architectural and historical perspective, with stress on historical context. The research emphasis will be placed on recovering information about local or state context surrounding the construction, growth and agricultural uses of the barn based on primary sources to the greatest extent possible. Thus, the weight of total effort is to be given not only to elaborate architectural description or structure photography, but on amplifying what is known about the story of the barn in relation to the farm operation as grasped through research in local archives, courthouse records, and with persons knowledgeable about the barn's past. The test of responsiveness to documentation projects under this historic property study series will be as much on the depth of local historical sources consulted as it is on the numbers of site photographs produced.

The documentation prepared for the purpose of inclusion in the State Historical Society of Iowa's records must meet the requirements below. The Society retains the right to refuse to accept documentation for inclusion in its collections when that documentation (edited, cataloged, and packaged) does not meet requirements as specified below.

Kinds of Documentation to be Gathered:

1. *Iowa Site Inventory Number and Historical Architectural Data Base Number:* Two report reference numbers are to be obtained from the statewide inventory coordinator at the State Historical Society's historic preservation office. The first is the Iowa Site Inventory Number, which can be assigned upon providing a specific street address in a town or city or, for rural areas, its quarter section, township and range. This number would be cited in the report, appear on reference maps and site plans, and be identified on photographic prints, slides, etc. The second number refers to the number assigned for entering this report into the state's Historic Architectural Data Base (HADB) through completing the HADB form for inclusion in the appendix.
2. *Photographs:* Unless stipulated elsewhere, the coverage will be field photography, with each view taken in both 35mm black and white film and Kodachrome-64 color slides. The black and white photographs shall be on fiber-based papers or on resin-coated papers of double or medium-weight paper that have been processed in trays in order to meet guidelines outlined in National Register Bulletin 16A. The documentation is to meet requirements for ready inclusion in the records of the State Historical Society of Iowa. The purpose of the number and kind of views taken will be to sufficiently illustrate what is significant or valuable about the barn and associated structure(s) as if one were intending the views to be

used in a brief visual presentation on the character of the barn. For each barn element, the following views will be minimally taken:

- a. Overall farmstead. At least two contextual views showing the barn's placement on the farmstead landscape.
 - b. Barn.
 - Exterior perspective views, a general view from the distance showing its environment and landscaping, and views of significant exterior details.
 - Interior views that reveal:
 1. Loft rafter framing
 2. End wall framing
 3. Side wall framing
 4. Method of fastening or joining frame members of typical middle truss at:
 - Sill/floor level
 - Plate/rafter level
 5. Other details (e.g., equipment systems, apparatus for raising/lowering hay door, barn door hanger, door hinges) that help impart its construction history.
 - c. Associated outbuildings and structures. Views showing the exterior facades of attached or connected building such as a milkhouse or a structure such as a silo.
3. *Drawings:* Unless stipulated elsewhere, the standard coverage will comprise straightforward, one-line drawings no larger than 8 1/2 by 11 inches in size showing elements in correct relation and proportion to one another, with label, north arrow, overall measurements/dimensions, and the date sketched. The drawings include:
- a. Farmstead site plan to which the barn is keyed to other buildings and structures.
 - b. Barn floorplan, indicating building dimensions..
 - c. Barn frame configurations, including identification of wood types and dimensions where informative, of:
 - side wall frame
 - end wall frame, and
 - typical middle truss, if used for supplemental support at certain rafter points
 - form of plate on top of the wall for carrying the rafters
 - d. Laminated rafter construction method, including:
 - Number of layers to each rafter and their dimensions
 - Method of fastening layers (glue, nails, bolts, or combination of each)
 - Method of connecting each laminated rafter to the wall plate or sill
 - e. Method of fastening or joining frame members of typical middle truss at:
 - Sill/floor level
 - Plate/rafter level
 - e. Other distinctive diagnostic barn frame connections or details (e.g., lap or scarf joints, dowel connections, decorative element).

4. *Available historic photographs or illustrations* that reveal the barn or its associated buildings under construction or in later use will be selected and appropriately reproduced.
5. *Narrative Report* of approximately eight to ten pages with statements within the narrative footnoted as to their sources, where appropriate. The format for presentation is stated below.

Format for the Narrative Report:

Cover Page:

Includes report title, governmental entity or source of support for sponsoring the study, author/authors, name of affiliated firm or research organization, date of report.

Acknowledgments (if applicable)

This might include acknowledgment of valuable oral informants, or recognition of those who provided useful research leads, or tendered special library assistance or helped locate and access useful courthouse archives.

Table of Contents

Introduction:

The project's purpose is described, including the time frame when research and field work occurred, and limitations of the project.

Part I: Historical Background surrounding the barn's development. This would identify when this part of the county was settled, by whom, the type of farming engaged in by persons living in the township vicinity, and subsequent changes of farming emphasis within the area that prompted the varying kinds of barns constructed in the area.

Part II: The Barn Today describes where it is situated, its general appearance and arrangement, and important physical characteristics of its setting, buildings, and landscape features that have influenced the way things developed.

Part III: Barn History narrates the particular barn's story of construction, use and ownership. This would include mention of particularly important individuals such as a leading stock producer or the influence of a local master builder. It might also relate the barn's design to changing patterns of agricultural practices.

Its construction history would document the physical evolution of the barn in terms of when the barn originated, when major changes occurred or when ancillary buildings were introduced. The description would also note specific features that the barn shares with other known similar properties (e.g., similarities in plan, materials, construction techniques, and subsequent alterations).

Part IV: Significance of the barn to explaining the rise of gothic barn construction elsewhere or of other agricultural developments. To the extent possible, discussion will address how the frequency, arrangement, construction dates, and type of barn building and their storage/livestock capacities helps interpret the agricultural history, farm engineering and evolving rural architecture of the area. Included here might be mention of past publicity given the barn or if it illustrated new, innovative, or typical design practices and uses of material. Photographs, illustrations, or site plan may be integrated into the

narrative as needed to help convey the property's interpretive value.

Part IV: Reference Sources

A paragraph or two about the quality and quantity of information consulted, its location, noting any conflicts in source materials, their accuracy, biases or noteworthy historical perspectives. This would be followed by a bibliography of the reference source materials.

Part V: Appendices

The information here--if not placed elsewhere in the report--would include, but not be limited to, the following:

1. A site plan drawing showing the farmstead's relation to its immediate landscape configuration.
2. Map(s) showing location in county/town, changes in property size, etc.
3. A 5" X 7" enlargement of each black and white view taken to satisfy specifications above, arranged sequentially, from the most general view to the most detailed view. Each is to be labeled on the back as to building/structure name, view taken, and roll/frame number with a No. 1 (soft) pencil, and placed in Print-File (57-4P), or equivalent, sleeve.
4. A "Photograph Catalog Field Sheet" completed for each sleeve of black and white negatives and color slides.
5. Negatives of 35mm (ASA 125 or less) black and white film in Print-File (35-7B), or equivalent, sleeves.
6. A contact print sheet for each roll of black and white film placed in a Print-File (810-1B), or equivalent, sleeve.
7. Kodachrome-64 slides properly labeled (property name, Iowa Site Inventory number, and Slide sleeve number/slot number) and placed in Print-File (2x2-20B), or equivalent, 20-slot sheet sleeves.
8. Completed Iowa Historical Architectural Data Base (HADB) form.
9. Other relevant information (e.g., photocopy of biographical information about a noteworthy carpenter/builder associated with the farm, remaining sketch plans and drawings that were not integrated into the report).

Iowa Historic Property Study: Silo

The documentation identified below is for Iowa silo properties of state and local significance. It is to be written for a broad public audience--kept simple, direct, and free of technical and academic jargon. The information is to be presented (i.e., edited, cataloged and packaged) in accordance with State Historical Society of Iowa guidelines. The character of the documentation produced--its content, quality, materials, and presentation--will meet the Secretary of Interior's four standards for architectural and historical documentation (48 FR 44731).

The purpose of the report will be to place the silo in architectural and historical perspective, with stress on historical context. The research emphasis will be placed on recovering information about local or state context surrounding the construction, growth and agricultural uses of the silo based on primary sources to the greatest extent possible. Thus, the weight of total effort is to be given not only to elaborate architectural description or structure photography, but on amplifying what is known about the story of the silo in relation to the farm operation as grasped through research in local archives, courthouse records, and with persons knowledgeable about the silo's past. The test of responsiveness to documentation projects under this historic property study series will be as much on the depth of local historical sources consulted as it is on the numbers of site photographs produced.

The documentation prepared for the purpose of inclusion in the State Historical Society of Iowa's records must meet the requirements below. The Society retains the right to refuse to accept documentation for inclusion in its collections when that documentation (edited, cataloged, and packaged) does not meet requirements as specified below.

Kinds of Documentation to be Gathered:

1. *Iowa Site Inventory Number and Historical Architectural Data Base Number:* Two report reference numbers are to be obtained from the statewide inventory coordinator at the State Historical Society's historic preservation office. The first is the Iowa Site Inventory Number, which can be assigned upon providing a specific street address in a town or city or, for rural areas, its quarter section, township and range. This number would be cited in the report, appear on reference maps and site plans, and be identified on photographic prints, slides, etc. The second number refers to the number assigned for entering this report into the state's Historic Architectural Data Base (HADB) through completing the HADB form for inclusion in the appendix.
2. *Photographs:* Unless stipulated elsewhere, the coverage will be field photography, with each view taken in both 35mm black and white film and Kodachrome-64 color slides. The black and white photographs shall be on fiber-based papers or on resin-coated papers of double or medium-weight paper that have been processed in trays in order to meet guidelines outlined in National Register Bulletin 16A. The documentation is to meet requirements for ready inclusion in the records of the State Historical Society of Iowa. The purpose of the number and kind of views taken will be to sufficiently illustrate what is significant or valuable about the barn and associated structure(s) as if one were intending the views to be used in a brief visual presentation on the character of the barn. For each silo element, the following views will be minimally taken:

- a. Overall farmstead. At least two contextual views showing the silo's placement on the farmstead landscape.
 - b. Silo.
 - Exterior perspective views, a general view from the distance showing its environment and landscaping, and views of significant exterior details, including:
 - Hoop strap connections, if any
 - Connection building to barn, if applicable
 - Interior views that reveal:
 1. Type of interior surface material
 2. Silo framing, if wood
 3. Other details (e.g., silage filling and removing equipment systems, silo door frame (patented) that help impart its construction history.
 - c. Associated outbuildings and structures. Views showing the exterior facades of attached or connected building such as a barn, or milk-house.
3. *Drawings:* Unless stipulated elsewhere, the standard coverage will comprise straightforward, one-line drawings no larger than 8 1/2 by 11 inches in size showing elements in correct relation and proportion to one another, with label, north arrow, overall measurements/dimensions, and the date sketched. The drawings include:
- a. Farmstead site plan to which the silo is keyed to other buildings and structures.
 - b. Silo dimensions (height, diameter, radius, and circumference).
 - c. Silo frame configuration, including identification of wood types and section dimensions where informative.
 - d. Method of fastening or joining strips, staves, and sections together, if applicable, including method of anchoring them at the sill/floor level and plate.
 - e. Other distinctive diagnostic silo frame connections or details (e.g., roof type, joints, decorative element).
4. *Available historic photographs or illustrations* that reveal the silo or its associated buildings under construction or in later use will be selected and appropriately reproduced.
5. *Narrative Report* of approximately eight to ten pages with statements within the narrative footnoted as to their sources, where appropriate. The format for presentation is stated below.

Format for the Narrative Report:

Cover Page:

Includes report title, governmental entity or source of support for sponsoring the study, author/authors, name of affiliated firm or research organization, date of report.

Acknowledgments (if applicable)

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Part I: Historical Background surrounding the silo's development. This would identify when this part of the county was settled, by whom, the type of farming engaged in by persons living in the township vicinity, and subsequent changes of farming emphasis within the area that prompted silo construction in the area.

Part II: The Silo Today describes where it is situated, its general appearance and arrangement, and important physical characteristics of its setting, buildings, and landscape features that have influenced the way things developed.

Part III: Silo History narrates the particular silo's story of construction in relation to the kind of design adopted (e.g., wood octagon crib, Gurler, wood stave, monolithic concrete, concrete stave, concrete-block, hollow-tile, panel silo, steel silo) its affiliation with a particular company provider, its use and ownership. This would include mention of particularly important individuals such as a leading dairy or stock producer or the prevalence of a local master builder. It might also relate the silo's design to patterns of prevailing agricultural practices in the vicinity.

Its construction history would document the physical evolution of this silo as an expression of its type, in terms of when it originated, when it was in use, when major changes occurred or when ancillary buildings were introduced. The description would also note specific features of the silo (type of foundation, walls, sheeting and siding, formation of the plate, roof construction) and what it shares with other known similar properties (e.g., similarities in plan, materials, construction techniques, and subsequent alterations).

Part IV: Significance of the silo to explaining local or state silo construction or agricultural developments, pointing to how the frequency, arrangement, construction dates, and type of silo and its storage capacities helps interpret the agricultural history, farm engineering and evolving rural architecture of the area. Included here might be mention of any past publicity given the silo or if it illustrated new, innovative, or typical or uncommon design practices and uses of material. Photographs, illustrations, or site plan may be integrated into the narrative as needed to help convey the property's interpretive value.

Part IV: Reference Sources

A paragraph or two about the quality and quantity of information consulted, its location, noting any conflicts in source materials, their accuracy, biases or noteworthy historical perspectives. This would be followed by a bibliography of the reference source materials.

Part V: Appendices

The information here--if not placed elsewhere in the report--would include, but not be limited to, the following:

1. A site plan drawing showing the farmstead's relation to its immediate landscape configuration.
2. Map(s) showing location in county/town, changes in property size, etc.
3. A 5" X 7" enlargement of each black and white view taken to satisfy specifications above, arranged sequentially, from the most general view to the most detailed view. Each is to be labeled on the back as to building/structure name, view taken, and roll/frame number with a No. 1 (soft) pencil, and placed in Print-File (57-4P), or equivalent, sleeve.
4. A "Photograph Catalog Field Sheet" completed for each sleeve of black and white negatives and color slides.
5. Negatives of 35mm (ASA 125 or less) black and white film in Print-File (35-7B), or equivalent, sleeves.
6. A contact print sheet for each roll of black and white film placed in a Print-File (810-1B), or equivalent, sleeve.
7. Kodachrome-64 slides properly labeled (property name, Iowa Site Inventory number, and Slide sleeve number/slot number) and placed in Print-File (2x2-20B), or equivalent, 20-slot sheet sleeves.
8. Completed Iowa Historical Architectural Data Base (HADB) form.
9. Other relevant information (e.g., photocopy of biographical information about a noteworthy carpenter/builder associated with the farm, remaining sketch plans and drawings that were not integrated into the report).

APPENDIX C

PROPERTY OWNER CORRESPONDENCE

July 30, 1998

Mr. Scott Dockstader
Iowa D.O.T.
1020 S. 4th Street
Ames, Ia. 50010

RECEIVED
OFFICE OF PROJECT PLANNING
AUG 5 1998

RE: Diamond Interchange with 2 loops At S.W. Diagonal Connector


Dear Mr. Dockstader:

Thank you for meeting with me and explaining the plans for the 4 lane bypass that will slice through the property that I am purchasing at 7620 SW 72nd Avenue. As you know I will close the purchase of the property from Juanita Fox early in August.

I support the current design of this Interchange. I also believe that we should attempt to save the historic grain silo located on this property. I have been involved in Historic Preservation for over 15 years and feel very strongly that if at all possible, we should try to relocate the silo out of the path of the new road.

I look forward to working with you and the State in this regard.

Sincerely,


Bruce W. Gerleman

COPY TO:
Gerry Kennedy (FHWA)
Harry Budd
Tom Gustafson
Lore Lassen

F.A. WITTERN, JR.

9265 S.W. Army Post Road
West Des Moines, Iowa 50265

11-5
RECEIVED
OFFICE OF PROJECT PLANNING
SEP 18 1998

September 14, 1998

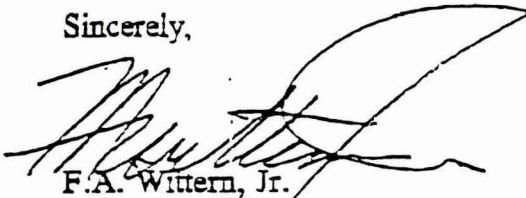
Scott Dockstader
Iowa Department of Transportation
Central Iowa Transportation Center
1020 S. 4th Street
Ames, Iowa 50010

Dear Scott:

I have visited with family members and advisers regarding the barn and modified interchange proposal the DOT has presented if the DOT does not take the barn. It is our view that the diamond interchange as originally designed is safer for the traveling public than your revised three quadrant proposal. Furthermore, your revised proposal, which leaves the barn to us on a temporary basis, virtually eliminates any remaining use the barn would have. It would not fit with the eventual character of the surrounding area and would not be a part of our future development plans.

Upon consideration of all the circumstances, our family will consent to the DOT's acquisition of the barn and associated ground. We do, of course, reserve all of our rights to obtain fair market value for the barn and property taken.

Sincerely,

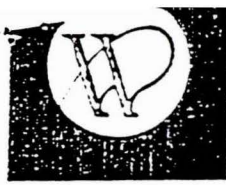


F.A. Wittern, Jr.

FAW:dh

Copy To:

Harve Budd
Gerry Kennedy - FHW
Steve Larson
Tony Gustafson
Randy Faber



THE WITTERN GROUP, INC.

An Association of Independent Companies

RECEIVED
OFFICE OF PLANNING

NOV 13 1997

November 7, 1997

Mr. Scott Dockstader
Central Iowa Transportation Center
1020 South Fourth Street
Ames, Iowa 50010

Re: Relocated Highway 5/South 50th Street Interchange

Dear Scott:

As you know, I represent the owners of the land on which the above-referenced project will be constructed. I am writing to follow up with a conversation that the owners' representatives, F.A. Wittern, Jr., Misty Herr, and I had recently with Dan Ohlman, concerning the design of the interchange.

At our meeting, Mr. Ohlman was proposing a modification to the current design, in order to preserve a certain barn that would be located within the Southwest quadrant of the intersection. As we discussed the design with Mr. Ohlman, he said that the DOT believed that the barn had some historical significance.

It is our understanding that the barn was built some time in the mid-1940's. It is a perfectly functional, structurally sound barn, and it has a nice dance floor on the loft level. It is not, however, to our way of thinking, of any historical significance. While I am not pre-judging the values that the land and buildings will be assigned in the right-of-way acquisition process, I am inclined to tell you that the landowners will not be asserting that the barn has any additional value as an historical building.

I hope that this clarifies the landowners' position on the barn. I would like to continue the process of discussing the interchange with your staff, as the final design will have a significant impact on the future usefulness of the surrounding land.

Please contact me if you have any questions.

Sincerely,

Daniel Jacobi
General Counsel

cc: F.A. Wittern, Jr.
Misty Herr
Clyde Evans, Planning Director
City of West Des Moines

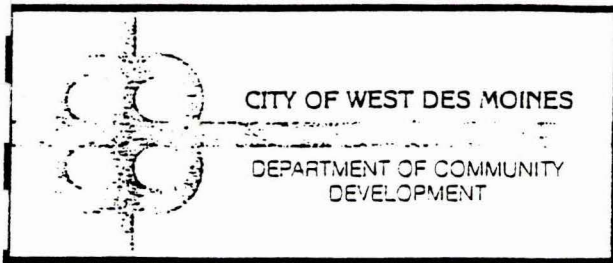
800 University Blvd. • Des Moines, IA 50325
Phone (515) 271-8000 • Fax (515) 271-1228

Copies to
Dan Ohlman
Gary Hood

APPENDIX D

SOUTHWEST CONNECTOR ANTICIPATED CONSTRUCTION SCHEDULE SOUTHWEST CONNECTOR/IOWA HIGHWAY 5 INTERCHANGE

*Very
Searle*



July 27, 1998

Scott Dockstader
Iowa Department of Transportation
Central Iowa Transportation Center
1020 S. 4th Street
Ames, IA 50010

Re: Southwest Connector and Interchange

Dear Mr. Dockstader:

On July 22, 1998, representatives from the cities of Des Moines and West Des Moines and Polk County met to discuss the Southwest Connector and how to accomplish its construction.


Although all of the jurisdictions present have a very strong desire to see the Southwest Connector and the interchange built, there are serious problems and questions still outstanding for both Des Moines and West Des Moines in regards to design, funding and timing. Because of timing issues, both cities are being asked by IDOT to commit to a serious financial obligation without a lot of design, funding and location issues being resolved. This would be a major departure for all of the jurisdictions involved to make this type of commitment without more of the details being finalized. In order to resolve those issues, it will take more time on the local jurisdictions part than IDOT can afford to delay in doing design.


Therefore, the three jurisdictions are proposing the following:


1. That the Southwest Connector interchange be built as part of the Iowa 5 project;
2. That the jurisdictions commit to have under contract or under construction the Southwest Connector from the north ramp terminus to Army Post Road by July 1, 2001; and
3. That the jurisdictions commit to have under contract or under construction the Southwest Connector from Army Post Road to Iowa 28 by July 1, 2006.

With this type of time line, we feel it achieves the objectives of IDOT while giving the local jurisdictions enough time to resolve a lot of issues. We would like to schedule a meeting with you and senior management to discuss this alternative.

Sincerely,


Harold Smith
City of Des Moines


Jeffrey A. Ponderanz
City of West Des Moines


Mark Wandro
Polk County

APPENDIX E

IOWA STATE HISTORIC PRESERVATION OFFICE COORDINATION



Iowa Department of Transportation

800 Lincoln Way, Ames, Iowa 50010-6993

515/239-1215

FAX 239-1982

March 25, 1999

Ref. No. NHS-500-1(76)--19-91

Warren County

Primary Roads

R&C# 9310 77 057

Dr. Lowell Soike
Review and Compliance
Bureau of Historic Preservation
State Historical Society of Iowa
600 East Locust
Des Moines, IA 50319

Dear Lowell:

RE: *Findings of Effect* for south Des Moines IAS bypass construction upon the
Leopold Dairy Barn and the Gilcrest Barn and Silo,
ID Nos. 26 and 19, 1993 report by William Page.

1) The construction of an interchange for the proposed IAS freeway at the location of the City of Des Moines' proposed new 50th Street connection will require removal of the Leopold Dairy Barn located at 9807 SW 77th Avenue. The structure was determined eligible for the National Register under Criterion C for its laminated rafter construction and under Criterion A for its past association with the Golden Circle Dairy Industry around Des Moines.

The farm was acquired a number of years ago by a commercial interest and it is no longer used for agricultural purposes. Although its architectural integrity is reasonably good, the hay loft has been converted to a dance floor with the installation of chandelier lighting and construction of restrooms in one corner. The building is used for company "retreats" and rented out for private dances, receptions, etc. Dairy equipment has been removed from the buildings and a bar with pool tables was installed in the milk station.

The setting of the farmstead, which is presently a timbered pasture land, agricultural environment, will also be drastically altered by construction of the four-lane freeway through the valley in which it is located. It can be expected that development from the City of Des Moines and its suburbs will expand into the area as it has to the north, east, and west. The owners of the barn have not indicated a commitment to preserving the barn at its present location if the interchange design were altered to avoid removal of the building.

Dr. Lowell Soike
Page 2
March 25, 1999

2) The construction of an interchange for the IAS freeway at the location at the City of Des Moines' proposed new SW Connector Street would require removal of the Gilcrest Barn and Silo, located at 7620 SW 72nd Avenue. Although the barn's construction isn't notable, the attached octagonal wood silo was found eligible for the National Register under Criterion C for its design and construction features.

The farmstead has recently been sold to a commercial developer. The new owner is open to the possibility of moving and preserving the silo, although its agricultural setting is certain to change.

Therefore, we conclude that construction of the proposed IAS project would have an Adverse Effect on these historic properties. We propose mitigation of the Adverse Effects by 1) facilitating any relocation efforts which the present owners or other interested parties may propose, and 2) through recordation of the architectural features of the structures accompanied by a written historical account of the properties which make them eligible for the National Register. The stipulations of this mitigation effort will be set forth in a Memorandum of Agreement (MOA) and the documentation will be completed in accordance with *IOWA HISTORIC PROPERTY STUDY: BARN* with emphasis as appropriate for these properties.

If you agree with the above conclusions, please indicate by signing the concurrence line below and returning this letter to me; or if you prefer, send your comments in a separate letter. Your recommendations for drafting the MOA are welcome.

Sincerely,



Randall B. Faber
Office of Project Planning
rfaber@iadot.e-mail.com

RBF:

Enclosure

cc: Gerry Kennedy, Federal Highway Administration
Scott Dockstader, Central Iowa Transportation Center

CONCUR:  DATE March 30, 1999
for the Iowa State Historic Preservation Officer

COMMENTS:

MEMORANDUM OF AGREEMENT

SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
PURSUANT TO 36 CFR 800.6(a)

LEOPOLD DAIRY FARM GILCREST FARMSTEAD

Des Moines, Warren County, Iowa
NHS-5-5(36)--19-77

WHEREAS, the Federal Highway Administration (FHWA) proposes to construct on relocation Iowa Highway 5 south of the City of Des Moines, Iowa, and has consulted with the Iowa State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800 regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. Section 470f).

WHEREAS, construction of the proposed project will result in the removal of the dairy barn complex known as the Leopold Dairy Farm, located at 9807 SW 77th Avenue, and the barn and octagonal silo identified as the Gilcrest Farmstead, located at 7620 SW 72nd Avenue south of Des Moines, an Adverse Effect on these properties which were determined eligible for listing on the National Register of Historic Places (NRHP),

WHEREAS, the Iowa Department of Transportation (IADOT) will let and construct the project and representatives of the IADOT participated in the consultation and have been invited to concur in this Memorandum of Agreement;

NOW, THEREFORE, FHWA and the Iowa SHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

FHWA will ensure that the following measures are carried out:

1. The IADOT will afford the owners or other interested parties an opportunity to preserve the historic buildings through relocating one or more of them to another site.
2. The IADOT, in consultation with the SHPO, will have the story of these buildings and their features recorded with appropriate photographs, drawings, and historical description as specified

Leopold Dairy Farm
Gilcrest Farmstead

- 2 -

in the attached Appendix: **Iowa Historic Property Study: Barn.**

3. The completed documentation records will be placed at the State Historical Society of Iowa with photocopies of the study provided to the Des Moines Historic Districts Commission and to the public library of Des Moines for their collections.

4. If stipulation 1 cannot be completed for some or all of the above named properties, and upon SHPO approval of the photo work and field notes and drawings for stipulation 2, any of the historic properties, which were not relocated may be removed or demolished at the discretion of the IADOT.

Execution of this Memorandum of Agreement by FHWA and the Iowa SHPO, its subsequent acceptance by the Council, and implementation of its terms, evidence that FHWA has afforded the Council an opportunity to comment on this project and its effects on historic properties, and that FHWA has taken into account the effects of the undertaking on historic properties.

FEDERAL HIGHWAY ADMINISTRATION

By: _____
Iowa Division Administrator Date

IOWA STATE HISTORIC PRESERVATION OFFICER

By: _____
Date

Concur: Iowa Department of Transportation

By: _____
Date

ACCEPTED for the Advisory Council on Historic Preservation

By: _____

APPENDIX F
COMMENT LETTERS

THE MPO

DES MOINES AREA METROPOLITAN PLANNING ORGANIZATION

ARGONNE ARMORY - 602 EAST FIRST STREET

DES MOINES, IOWA 50309-1881 - PHONE: (515) 237-1366 - FAX: (515) 237-1303

April 22, 1999

RECEIVED
OFFICE OF PROJECT PLANNING
APR 23 1999

Mr. Stephen Larson
Office of Project Planning
Iowa Department of Transportation
800 Lincoln Way
Ankeny, IA 50010

Dear Mr. Larson:

SUBJECT: IOWA 5 DRAFT 4(f) STATEMENT

The Des Moines Area Metropolitan Planning Organization (MPO) appreciates the opportunity to comment on the Draft 4(f) Statement for the proposed Iowa 5 improvements. In response to Jerald Searle's April 2, 1999, letter to Tom Kane, the MPO offers the following comments:

1. Page 1, second paragraph. Note that the name of our organization is the Des Moines Area Metropolitan Planning Organization. Also, the name of the MPO was the Des Moines Area Transportation Planning Committee in September 1991.
2. Page 2, seventh paragraph. The first sentence refers to "interchanges at S. 50th Street Extended (S. 35th Street) at the Southwest Connector facility." This appears to refer to interchanges at two locations, since S. 50th Street and the SW Connector do not cross near proposed Iowa 5. The meaning would be clearer with the word "and" before "the Southwest Connector facility", instead of the word "at."
3. Page 4, second paragraph. The list of proposed interchanges for Iowa 5 does not include the proposed interchange at S. 50th Street extended.
4. Page 4, third paragraph. The first sentence states that the MPO identified the need for an improved transportation facility in the corridor. It would be more accurate to state that the MPO estimated the future traffic that would use the facility, and that the MPO's *Horizon Year 2020 Transportation Development Report* included the proposed Iowa 5.

LARSON.WPD

Larson/Gilchrist

April 21, 1999

Page 2

5. Page 4, third paragraph. Under Need, the report does not state that Army Post Road (existing Iowa 5) no longer provides a direct connection through the corridor. Army Post Road was relocated due to proposed airport expansion.
6. Page 8, first paragraph. Please reverse the words "Area" and "Metropolitan" for the name of our organization.
7. Page 8, fourth paragraph. The referenced "Des Moines 2020 Level of Service Needs Roadway Network" was part of the traffic modeling work for the MPO's *Horizon Year 2020 Transportation Development Report*. Adding this additional context would be helpful.
8. Page 9, seventh paragraph. The report notes that both of the affected property owners have said that their property is available for commercial development. This is a good argument for not modifying the freeway design to avoid affecting the existing buildings.

Sincerely,



Kevin Gilchrist
Senior Planner

cc: Tom Kane, MPO Executive Director



United States Department of the Interior

OFFICE OF THE SECRETARY
WASHINGTON, D.C. 20240

ER-99/309

JUN 4 1999

RECEIVED
OFFICE OF PROJECT PLANNING
JUN 9 1999

Mr. Bobby Blackman
Division Administrator
Federal Highway Administration
105 Sixth Street
Ames, Iowa 50010

Dear Mr. Blackman:

This is in response to the request for Department of the Interior's comments on the Draft Section 4(f) Evaluation for the proposed improvement of Iowa Highway 5 from Interstate 35 to U.S. Highway 65/69 in Polk and Warren Counties, Iowa.

We concur that there is no feasible and prudent alternative to the proposed project, if project objectives are to be met. We also concur with the proposed measures to minimize harm to the former Leopold Dairy Farm and the former Gilcrest Farmstead as detailed in the Draft Memorandum of Agreement (MOA) included with the draft evaluation. A signed copy of the MOA should be included in the Final Section 4(f) Evaluation.

The Department of the Interior has no objection to Section 4(f) approval of this project by the Department of Transportation.

We appreciate the opportunity to provide these comments.

Sincerely,

Willie R. Taylor
Director, Office of Environmental
Policy and Compliance

cc: Mr. Harry S. Budd, Director
Office of Project Planning
Iowa Department of Transportation
800 Lincoln Way
Ames, Iowa 50010

APPENDIX G

MEMORANDUM OF AGREEMENT

IOWA DEPARTMENT OF TRANSPORTATION

To Office Federal Highway Administration

Date June 9, 1999

Attention Bobby Blackmon, Division Administrator

Ref. No. NHSX-5-5(70)--3H-77

From Dennis L. Tice, Director

Polk County

Primary Roads

Office Planning & Programming Division

Subject: Memorandum of Agreement for Adverse Effects to Historic Properties

The Iowa Department of Transportation proposes to use federal funds for the construction on relocation of Iowa Highway 5 south of the City of Des Moines. The complete project extends eleven miles from the interchange with Interstate 35 on the west to the interchange with US65/69 at the east end. It involves the construction of a four-lane divided highway, interchanges and overpasses, and access roads. It was divided into smaller sections for construction purposes. The above referenced section involves reconstruction of SW 72nd Street, an adjacent local road, and some initial work at the SW 50th Street interchange.

Construction of the Southwest 50th Street interchange and the Southwest Arterial Connector interchange will require displacement of the Leopold Dairy Barn and the Gilcrest Silo, two structures which were found eligible for listing on the National Register of Historic Places. This was found to be an Adverse Effect to these historic buildings under provisions of Section 106 of the National Historic Preservation Act. A Memorandum of Agreement, which provides for documentation of the buildings with a provision which would make them available for relocation, was signed by the Iowa State Historic Preservation Officer and the Iowa DOT.

This letter is to request that, if the Federal Highway Administration (FHWA) is in agreement with the above determination, FHWA add their signature to the MOA and forward it with summary documentation, as required under 36 CFR 800.8(b)&(c), to the Advisory Council on Historic Preservation for their signed acceptance. The referenced MOA and summary documentation has been transmitted to Gerry Kennedy in your office.

If you have any questions about the above, please contact Randy Faber at 239-1215.

Dennis L. Tice,
Planning & Programming Division



Harry S. Budd, Director
Office of Project Planning

DLT:HSB:

cc: Scott Dockstader, Central Iowa Transportation Center

*Leopold Dairy Barn
Gilcrest Barn and Silo*

IMPACT EVALUATION

Archaeological sites 13WA92, 13WA93, and 13WA126, located in the eastern most section of the project, was determined to be outside the project's area of effect.

The project was determined to have no effect on the Pleasant Ridge-Finchway Dairy located just north of the project corridor east of Iowa Highway 28.

Construction of the project will require displacement of the Leopold Dairy Barn and the Gilcrest Barn and Silo in order to construct interchanges at Southwest 50th Street and the City of Des Moines' new southwest connector road. The removal of these properties is an Adverse Effect. However, as described in the enclosed draft 4(f) document, alternatives to avoid displacement of these properties were not found to be prudent. In addition, growth and expansion of the city are already threatening the historic properties. The Gilcrest farm was recently sold to a real estate developer.

A mitigation plan for the properties was developed in consultation with the Iowa SHPO and it has been incorporated into a Memorandum of Agreement. The plan includes recordation of the properties and makes provision for their relocation should owners and locations be found. The current owner of the Gilcrest silo has indicated interest in moving the structure to a nearby location.

ENCLOSED DOCUMENTS

- 1) Excerpts from Phase I Archeological and Historic Architectural Survey Report
- 2) Iowa State Historic Preservation Officer review comments
- 3) Copy of Draft Section 4(f) document pursuant to 49 U.S.C. 1653(f)
- 4) Project area maps

***Leopold Dairy Barn
Gilcrest Silo and Barn***

*City of Des Moines
Warren County, Iowa*

PROJECT DESCRIPTION

The proposed action is the reconstruction, on a new alignment, of Iowa Highway 5 along the south side of the City of Des Moines, Iowa. This action is for construction of the final segment of an eleven mile long project which began at the interchange with US65/69 at the southeast corner of the city. The action under consideration begins at an interchange with Iowa Highway 28 and extends west five miles to a new interchange with Interstate 35 southwest of Des Moines.

The project will consist of a four-lane divided highway with four interchanges to connect intersecting highways and major city arterial and overpass structures for carrying other local streets over or under the highway. Construction will be require the acquisition of right of way throughout the project.

IDENTIFICATION and EVALUATION OF CULTURAL RESOURCES

Archaeological and historic architectural surveys were completed for 1867 acres in a corridor 1000 -2000 feet wide along the entire eleven mile project in 1993. Supplemental surveys for the segment from IA28 west were completed in 1997 and 1998.

The initial survey identified 29 archaeological sites within the project corridor. Two archaeological sites 13WA92 and 13WA93 were recommended for additional evaluation if they were not avoided. Site 13WA126 contained a prehistoric mound and avoidance was recommended.

The survey identified twelve historic/architectural properties over fifty years old. Three of these, the Pleasant Ridge-Finchway Dairy Farmstead, the Leopold Dairy Barn, and the Gilcrest Silo & Barn were evaluated as eligible for the National Register of Historic Places.

Supplemental surveys identified three additional archaeology sites and six additional historical properties. None were evaluated to be eligible for the National Register.

Advisory Council On Historic Preservation

The Old Post Office Building
1100 Pennsylvania Avenue, NW, #809
Washington, DC 20004

JUN 22 1999

Mr. Gerald L. Kennedy
Environment and Realty Manager
Federal Highway Administration
Iowa Division
105 Sixth Street
Ames, IA 50010-6337

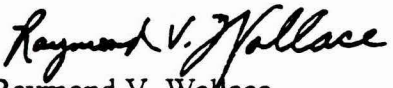
REF: Proposed Removal of the Dairy Barn Complex at Gilcrest Farmstead
Des Moines, Warren County, Iowa

Dear Mr. Kennedy:

The enclosed Memorandum of Agreement for the referenced project has been accepted by the Council. This acceptance completes the requirements of Section 106 of the National Historic Preservation Act and the Council's regulations. Please provide a copy of the Agreement to the Iowa State Historic Preservation Officer.

We appreciate your cooperation in reaching a satisfactory resolution of this matter.

Sincerely,


Raymond V. Wallace
Historic Preservation Technician
Office of Planning and Review

MEMORANDUM OF AGREEMENT

SUBMITTED TO THE ADVISORY COUNCIL ON HISTORIC PRESERVATION
PURSUANT TO 36 CFR 800.6(a)

LEOPOLD DAIRY FARM GILCREST FARMSTEAD

Des Moines, Warren County, Iowa
NHS-5-5(36)--19-77

WHEREAS, the Federal Highway Administration (FHWA) proposes to construct on relocation Iowa Highway 5 south of the City of Des Moines, Iowa, and has consulted with the Iowa State Historic Preservation Officer (SHPO) pursuant to 36 CFR Part 800 regulations implementing Section 106 of the National Historic Preservation Act (16 U.S.C. Section 470f).

WHEREAS, construction of the proposed project will result in the removal of the dairy barn complex known as the Leopold Dairy Farm, located at 9807 SW 77th Avenue, and the barn and octagonal silo identified as the Gilcrest Farmstead, located at 7620 SW 72nd Avenue south of Des Moines, an Adverse Effect on these properties which were determined eligible for listing on the National Register of Historic Places (NRHP),

WHEREAS, the Iowa Department of Transportation (IADOT) will let and construct the project and representatives of the IADOT participated in the consultation and have been invited to concur in this Memorandum of Agreement;

NOW, THEREFORE, FHWA and the Iowa SHPO agree that the undertaking shall be implemented in accordance with the following stipulations in order to take into account the effect of the undertaking on historic properties.

STIPULATIONS

FHWA will ensure that the following measures are carried out:

1. The IADOT will afford the owners or other interested parties an opportunity to preserve the historic buildings through relocating one or more of them to another site.
2. The IADOT, in consultation with the SHPO, will have the story of these buildings and their features recorded with appropriate photographs, drawings, and historical description as specified in the attached Appendix: **Iowa Historic Property Study: Barn.**

Leopold Dairy Farm
Gilcrest Farmstead

- 2 -

3. The completed documentation records will be placed at the State Historical Society of Iowa with photocopies of the study provided to the Des Moines Historic Districts Commission and to the public library of Des Moines for their collections.

4. If stipulation 1 cannot be completed for some or all of the above named properties, and upon SHPO approval of the photo work and field notes and drawings for stipulation 2, any of the historic properties, which were not relocated may be removed or demolished at the discretion of the IADOT.

Execution of this Memorandum of Agreement by FHWA and the Iowa SHPO, its subsequent acceptance by the Council, and implementation of its terms, evidence that FHWA has afforded the Council an opportunity to comment on this project and its effects on historic properties, and that FHWA has taken into account the effects of the undertaking on historic properties.

FEDERAL HIGHWAY ADMINISTRATION

By: Donald J. Kennedy for 6-9-99
Iowa Division Administrator Date

IOWA STATE HISTORIC PRESERVATION OFFICER

By: Patricia Oshersky DSO 6-7-99
Date

Concur: Iowa Department of Transportation

By: Harry S. Rude 6/3/99
Date

ACCEPTED for the Advisory Council on Historic Preservation

By: [Signature] 6/17/99
(for) Executive Director Date

Appendix A

Iowa Historic Property Study: Barn

The documentation identified below is for Iowa barn properties of state and local significance. It is to be written for a broad public audience—kept simple, direct, and free of technical and academic jargon. The information is to be presented (i.e., edited, cataloged and packaged) in accordance with State Historical Society of Iowa guidelines. The character of the documentation produced—its content, quality, materials, and presentation—will meet the Secretary of Interior's four standards for architectural and historical documentation (48 FR 44731).

The purpose of the report will be to place the barn in architectural and historical perspective, with stress on historical context. The research emphasis will be placed on recovering information about local or state context surrounding the construction, growth and agricultural uses of the barn based on primary sources to the greatest extent possible. Thus, the weight of total effort is to be given not only to elaborate architectural description or structure photography, but on amplifying what is known about the story of the barn in relation to the farm operation as grasped through research in local archives, courthouse records, and with persons knowledgeable about the barn's past. The test of responsiveness to documentation projects under this historic property study series will be as much on the depth of local historical sources consulted as it is on the numbers of site photographs produced.

The documentation prepared for the purpose of inclusion in the State Historical Society of Iowa's records must meet the requirements below. The Society retains the right to refuse to accept documentation for inclusion in its collections when that documentation (edited, cataloged, and packaged) does not meet requirements as specified below.

Kinds of Documentation to be Gathered:

1. *Iowa Site Inventory Number and Historical Architectural Data Base Number:* Two report reference numbers are to be obtained from the statewide inventory coordinator at the State Historical Society's historic preservation office. The first is the Iowa Site Inventory Number, which can be assigned upon providing a specific street address in a town or city or, for rural areas, its quarter section, township and range. This number would be cited in the report, appear on reference maps and site plans, and be identified on photographic prints, slides, etc. The second number refers to the number assigned for entering this report into the state's Historic Architectural Data Base (HADB) through completing the HADB form for inclusion in the appendix.
2. *Photographs:* Unless stipulated elsewhere, the coverage will be field photography, with each view taken in both 35mm black and white film and Kodachrome-64 color slides. The black and white photographs shall be on fiber-based papers or on resin-coated papers of double or medium-weight paper that have been processed in trays in order to meet guidelines outlined in National Register Bulletin 16A. The documentation is to meet requirements for ready inclusion in the records of the State Historical Society of Iowa. The purpose of the number and kind of views taken will be to sufficiently illustrate what is significant or valuable about the barn and associated structure(s) as if one were intending the views to be used in a brief visual presentation on the character of the barn. For each barn element, the following views will be minimally taken:
 - a. Overall farmstead. At least two contextual views showing the barn's placement on the farmstead landscape.

- b. Barn.
 - Exterior perspective views, a general view from the distance showing its environment and landscaping, and views of significant exterior details.
 - Interior views that reveal:
 - 1. Loft framing,
 - 2. End wall framing
 - 3. Side wall framing
 - 4. Method of fastening or joining frame members of typical middle bent at:
 - Sill/floor level
 - Plate/rafter level
 - 5. Other details (e.g., equipment systems, apparatus for raising/lowering hay door, barn door hanger, door hinges) that help impart its construction history.
 - c. Associated outbuildings and structures. Views showing the exterior facades of attached or connected building such as a milkhouse or a structure such as a silo.
3. *Drawings:* Unless stipulated elsewhere, the standard coverage will comprise straightforward, one-line drawings no larger than 8 1/2 by 11 inches in size showing elements in correct relation and proportion to one another, with label, north arrow, overall measurements/dimensions, and the date sketched. The drawings include:
- a. Farmstead site plan to which the barn is keyed to other buildings and structures.
 - b. Barn floorplan.
 - c. Barn frame configurations of:
 - side wall frame
 - end wall bent, and
 - typical middle bent.
 - d. Method of fastening or joining frame members of typical middle bent at:
 - Sill/floor level
 - Plate/rafter level
 - b. Other distinctive diagnostic barn frame connections or details (e.g., lap or scarf joints, queen post detail where straining beam meets the purlin, cupola , decorative element).
4. *Available historic photographs or illustrations* that reveal the barn or its associated buildings under construction or in later use will be selected and appropriately reproduced.
5. *Narrative Report* of approximately eight to ten pages with statements within the narrative footnoted as to their sources, where appropriate. The format for presentation is stated below.

Format for the Narrative Report:

Cover Page:

Includes report title, governmental entity or source of support for sponsoring the study, author/authors, name of affiliated firm or research organization, date of report.

Acknowledgments (if applicable)

This might include acknowledgment of valuable oral informants, or recognition of those who provided useful research leads, or tendered special library assistance or helped locate and access useful courthouse archives.

Table of Contents

Introduction:

The project's purpose is described, including the time frame when research and field work occurred, and limitations of the project.

Part I: Historical Background surrounding the barn's development. This would identify when this part of the county was settled, by whom, the type of farming engaged in by persons living in the township vicinity, and subsequent changes of farming emphasis within the area that prompted the varying kinds of barns constructed in the area.

Part II: The Barn Today describes where it is situated, its general appearance and arrangement, and important physical characteristics of its setting, buildings, and landscape features that have influenced the way things developed.

Part III: Barn History narrates the particular barn's story of construction, use and ownership. This would include mention of particularly important individuals such as a leading stock producer or the influence of a local master builder. It might also relate the barn's design to patterns of the wider ethnic or rural neighborhood or of its prevailing agricultural practices.

Its construction history would document the physical evolution of the barn in terms of when the barn originated, when major changes occurred or when ancillary buildings were introduced. The description would also note specific features that the barn shares with other known similar properties (e.g., similarities in plan, materials, construction techniques, and subsequent alterations).

Part IV: Significance of the barn to explaining local or state barn construction or agricultural developments, pointing to how the frequency, arrangement, construction dates, and type of barn building and their storage/livestock capacities helps interpret the agricultural history, farm engineering and evolving rural architecture of the area. Included here might be mention of past publicity given the barn or if it illustrated new, innovative, or typical design practices and uses of material. Photographs, illustrations, or site plan may be integrated into the narrative as needed to help convey the property's interpretive value.

Part IV: Reference Sources

A paragraph or two about the quality and quantity of information consulted, its location, noting any conflicts in source materials, their accuracy, biases or noteworthy historical perspectives. This would be followed by a bibliography of the reference source materials.

Part V: Appendices

The information here--if not placed elsewhere in the report--would include, but not be limited to, the following:

1. A site plan drawing showing the farmstead's relation to its immediate landscape configuration.
2. Map(s) showing location in county/town, changes in property size, etc.
3. A 5" X 7" enlargement of each black and white view taken to satisfy specifications above,

arranged sequentially, from the most general view to the most detailed view. Each is to be labeled on the back as to building/structure name, view taken, and roll/frame number with a No. 1 (soft) pencil, and placed in Print-File (57-4P), or equivalent, sleeve.

4. A "Photograph Catalog Field Sheet" completed for each sleeve of black and white negatives and color slides.
5. Negatives of 35mm (ASA 125 or less) black and white film in Print-File (35-7B), or equivalent, sleeves.
6. A contact print sheet for each roll of black and white film placed in a Print-File (810-1B), or equivalent, sleeve.
7. Kodachrome-64 slides properly labeled (property name, Iowa Site Inventory number, and Slide sleeve number/slot number) and placed in Print-File (2x2-20B), or equivalent, 20-slot sheet sleeves.
8. Completed Iowa Historical Architectural Data Base (HADB) form.
9. Other relevant information (e.g., photocopy of biographical information about a noteworthy carpenter/builder associated with the farm, remaining sketch plans and drawings that were not integrated into the report).

Appendix B

Iowa Historic Property Study: Barn

The documentation identified below is for Iowa barn properties of state and local significance. It is to be written for a broad public audience--kept simple, direct, and free of technical and academic jargon. The information is to be presented (i.e., edited, cataloged and packaged) in accordance with State Historical Society of Iowa guidelines. The character of the documentation produced--its content, quality, materials, and presentation--will meet the Secretary of Interior's four standards for architectural and historical documentation (48 FR 44731).

The purpose of the report will be to place the barn in architectural and historical perspective, with stress on historical context. The research emphasis will be placed on recovering information about local or state context surrounding the construction, growth and agricultural uses of the barn based on primary sources to the greatest extent possible. Thus, the weight of total effort is to be given not only to elaborate architectural description or structure photography, but on amplifying what is known about the story of the barn in relation to the farm operation as grasped through research in local archives, courthouse records, and with persons knowledgeable about the barn's past. The test of responsiveness to documentation projects under this historic property study series will be as much on the depth of local historical sources consulted as it is on the numbers of site photographs produced.

The documentation prepared for the purpose of inclusion in the State Historical Society of Iowa's records must meet the requirements below. The Society retains the right to refuse to accept documentation for inclusion in its collections when that documentation (edited, cataloged, and packaged) does not meet requirements as specified below.

Kinds of Documentation to be Gathered:

1. *Iowa Site Inventory Number and Historical Architectural Data Base Number:* Two report reference numbers are to be obtained from the statewide inventory coordinator at the State Historical Society's historic preservation office. The first is the Iowa Site Inventory Number, which can be assigned upon providing a specific street address in a town or city or, for rural areas, its quarter section, township and range. This number would be cited in the report, appear on reference maps and site plans, and be identified on photographic prints, slides, etc. The second number refers to the number assigned for entering this report into the state's Historic Architectural Data Base (HADB) through completing the HADB form for inclusion in the appendix.
2. *Photographs:* Unless stipulated elsewhere, the coverage will be field photography, with each view taken in both 35mm black and white film and Kodachrome-64 color slides. The black and white photographs shall be on fiber-based papers or on resin-coated papers of double or medium-weight paper that have been processed in trays in order to meet guidelines outlined in National Register Bulletin 16A. The documentation is to meet requirements for ready inclusion in the records of the State Historical Society of Iowa. The purpose of the number and kind of views taken will be to sufficiently illustrate what is significant or valuable about the barn and associated structure(s) as if one were intending the views to be used in a brief visual presentation on the character of the barn. For each barn element, the following views will be minimally taken:
 - a. Overall farmstead. At least two contextual views showing the barn's placement on the farmstead landscape.

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- b. Barn.
 - Exterior perspective views, a general view from the distance showing its environment and landscaping, and views of significant exterior details.
 - Interior views that reveal:
 1. Loft framing,
 2. End wall framing
 3. Side wall framing
 4. Method of fastening or joining frame members of typical middle bent at:
 - Sill/floor level
 - Plate/rafter level
 5. Other details (e.g., equipment systems, apparatus for raising/lowering hay door, barn door hanger, door hinges) that help impart its construction history.
 - c. Associated outbuildings and structures. Views showing the exterior facades of attached or connected building such as a milkhouse or a structure such as a silo.
3. *Drawings:* Unless stipulated elsewhere, the standard coverage will comprise straightforward, one-line drawings no larger than 3 1/2 by 11 inches in size showing elements in correct relation and proportion to one another, with label, north arrow, overall measurements/dimensions, and the date sketched. The drawings include:
- a. Farmstead site plan to which the barn is keyed to other buildings and structures.
 - b. Barn floorplan.
 - c. Barn frame configurations of:
 - side wall frame
 - end wall bent, and
 - typical middle bent.
 - d. Method of fastening or joining frame members of typical middle bent at:
 - Sill/floor level
 - Plate/rafter level
 - b. Other distinctive diagnostic barn frame connections or details (e.g., lap or scarf joints, queen post detail where straining beam meets the purlin, cupola , decorative element).
4. *Available historic photographs or illustrations* that reveal the barn or its associated buildings under construction or in later use will be selected and appropriately reproduced.
5. *Narrative Report* of approximately eight to ten pages with statements within the narrative footnoted as to their sources, where appropriate. The format for presentation is stated below.

Format for the Narrative Report:

Cover Page:

Includes report title, governmental entity or source of support for sponsoring the study, author/authors, name of affiliated firm or research organization, date of report.

Acknowledgments (if applicable)

This might include acknowledgment of valuable oral informants, or recognition of those who provided useful research leads, or tendered special library assistance or helped locate and access useful courthouse archives.

Table of Contents

Introduction:

The project's purpose is described, including the time frame when research and field work occurred, and limitations of the project.

Part I: Historical Background surrounding the barn's development. This would identify when this part of the county was settled, by whom, the type of farming engaged in by persons living in the township vicinity, and subsequent changes of farming emphasis within the area that prompted the varying kinds of barns constructed in the area.

Part II: The Barn Today describes where it is situated, its general appearance and arrangement, and important physical characteristics of its setting, buildings, and landscape features that have influenced the way things developed.

Part III: Barn History narrates the particular barn's story of construction, use and ownership. This would include mention of particularly important individuals such as a leading stock producer or the influence of a local master builder. It might also relate the barn's design to patterns of the wider ethnic or rural neighborhood or of its prevailing agricultural practices.

Its construction history would document the physical evolution of the barn in terms of when the barn originated, when major changes occurred or when ancillary buildings were introduced. The description would also note specific features that the barn shares with other known similar properties (e.g., similarities in plan, materials, construction techniques, and subsequent alterations).

Part IV: Significance of the barn to explaining local or state barn construction or agricultural developments, pointing to how the frequency, arrangement, construction dates, and type of barn building and their storage/livestock capacities helps interpret the agricultural history, farm engineering and evolving rural architecture of the area. Included here might be mention of past publicity given the barn or if it illustrated new, innovative, or typical design practices and uses of material. Photographs, illustrations, or site plan may be integrated into the narrative as needed to help convey the property's interpretive value.

Part IV: Reference Sources

A paragraph or two about the quality and quantity of information consulted, its location, noting any conflicts in source materials, their accuracy, biases or noteworthy historical perspectives. This would be followed by a bibliography of the reference source materials.

Part V: Appendices

The information here--if not placed elsewhere in the report--would include, but not be limited to, the following:

1. A site plan drawing showing the farmstead's relation to its immediate landscape configuration.
2. Map(s) showing location in county/town, changes in property size, etc.
3. A 5" X 7" enlargement of each black and white view taken to satisfy specifications above,

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arranged sequentially, from the most general view to the most detailed view. Each is to be labeled on the back as to building/structure name, view taken, and roll/frame number with a No. 1 (soft) pencil, and placed in Print-File (57-4P), or equivalent, sleeve.

4. A "Photograph Catalog Field Sheet" completed for each sleeve of black and white negatives and color slides.
5. Negatives of 35mm (ASA 125 or less) black and white film in Print-File (35-7B), or equivalent, sleeves.
6. A contact print sheet for each roll of black and white film placed in a Print-File (810-1B), or equivalent, sleeve.
7. Kodachrome-64 slides properly labeled (property name, Iowa Site Inventory number, and Slide sleeve number/slot number) and placed in Print-File (2x2-20B), or equivalent, 20-slot sheet sleeves.
8. Completed Iowa Historical Architectural Data Base (HADB) form.
9. Other relevant information (e.g., photocopy of biographical information about a noteworthy carpenter/builder associated with the farm, remaining sketch plans and drawings that were not integrated into the report).

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