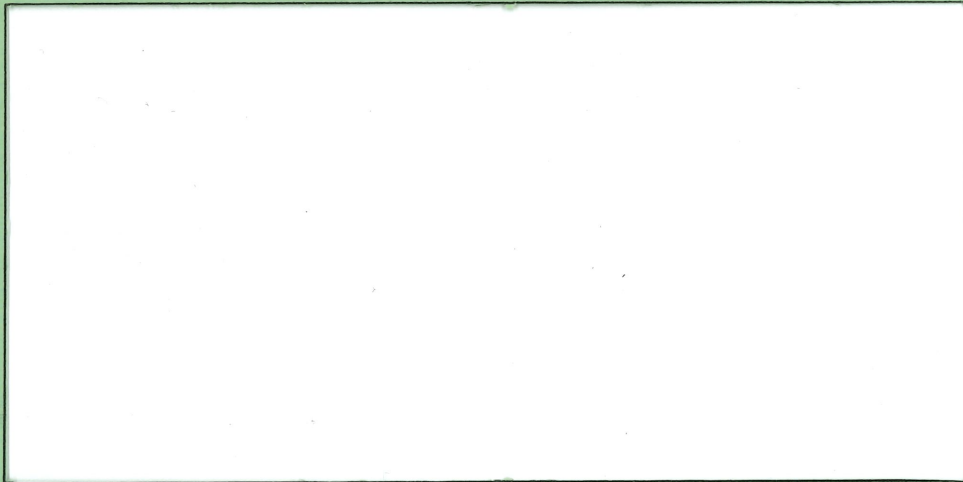


INVENTORY AND EVALUATION

SOIL AND WATER RESOURCES



SOIL CONSERVATION SERVICE
U.S. DEPARTMENT OF AGRICULTURE

PROJECT # 730488
HARDIN COUNTY FAS ROUTE 1883
REVIEW

This review was requested for the Department of Soil Conservation at the request of the State Office for Planning and Programming.

The review was made by the Hardin Soil Conservation District assisted by the Soil Conservation Service. Richard L. Bassett, District Conservationist, Soil Conservation Service assembled the following material.

April, 1973

A Soil, Water and Related Resource Review for Project #730488, Hardin County FAS Route 1882, Road Improvement Project.

PROJECT LOCATION AND DESCRIPTION

This proposed one and one-half mile-long road improvement project is located in Sections 23 and 24, Township 88 North, Range 22 West, Hardin County, Iowa. The exact location is shown on the attached map.

The site was visited by Dean E. Miller, Conservation Technician, Soil Conservation Service, and Richard L. Bassett, District Conservationist, Soil Conservation Service on Thursday, March 29, 1973. The project was discussed with Rolley Glasgow, Hardin County Engineer.

Construction on the road will begin in 1973, paving in 1975.

OBJECTIVE OF THE REVIEW

The objective is to review and determine if the proposed road project will affect any soil and water conservation improvements planned or presently installed.

SOIL

The proposed road improvement project is located within the Clarion-Nicollet-Webster Soil Association. The area has not been soil mapped.

The Clarion-Nicollet-Webster Soil Association consists of varying depths of glacial till parent material. The upland glacial till soils found along the proposed road location are primarily a firable, calcarious loam till with occasional sand pockets, gravel and rocks found at various levels throughout the soil profile.

There will be no excessive road cuts since the land is fairly flat with slopes no greater than five percent.

Soil erosion can occur during earth moving, leveling and grading operations. Soil loss from the project will result when bare soil is left exposed to wind and water erosion elements for an indefinite length of time. A good follow-up seeding program for roadside ditches, slopes, and banks will prevent excessive soil loss from occurring above the permissible five tons per acre per year.

WATER

The project passes through County Drainage District, numbers 11 and 21, location shown on attached map. There are two drainage districts underground tile mains crossing the road, one main in each drainage district.

There is one agricultural drainage tile line outletting on the north side of the road near the large culvert. When the culvert is extended the tile main should be extended. There may be several other agricultural underground tile drainage lines crossing the road right-of-way.

RELATED RESOURCES

Smooth brome grass seed will be seeded along road ditches, banks and shoulders. Switchgrass added to the vegetation seeding mixture would add natural beauty to the roadside as well as control soil loss.

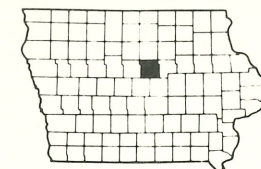
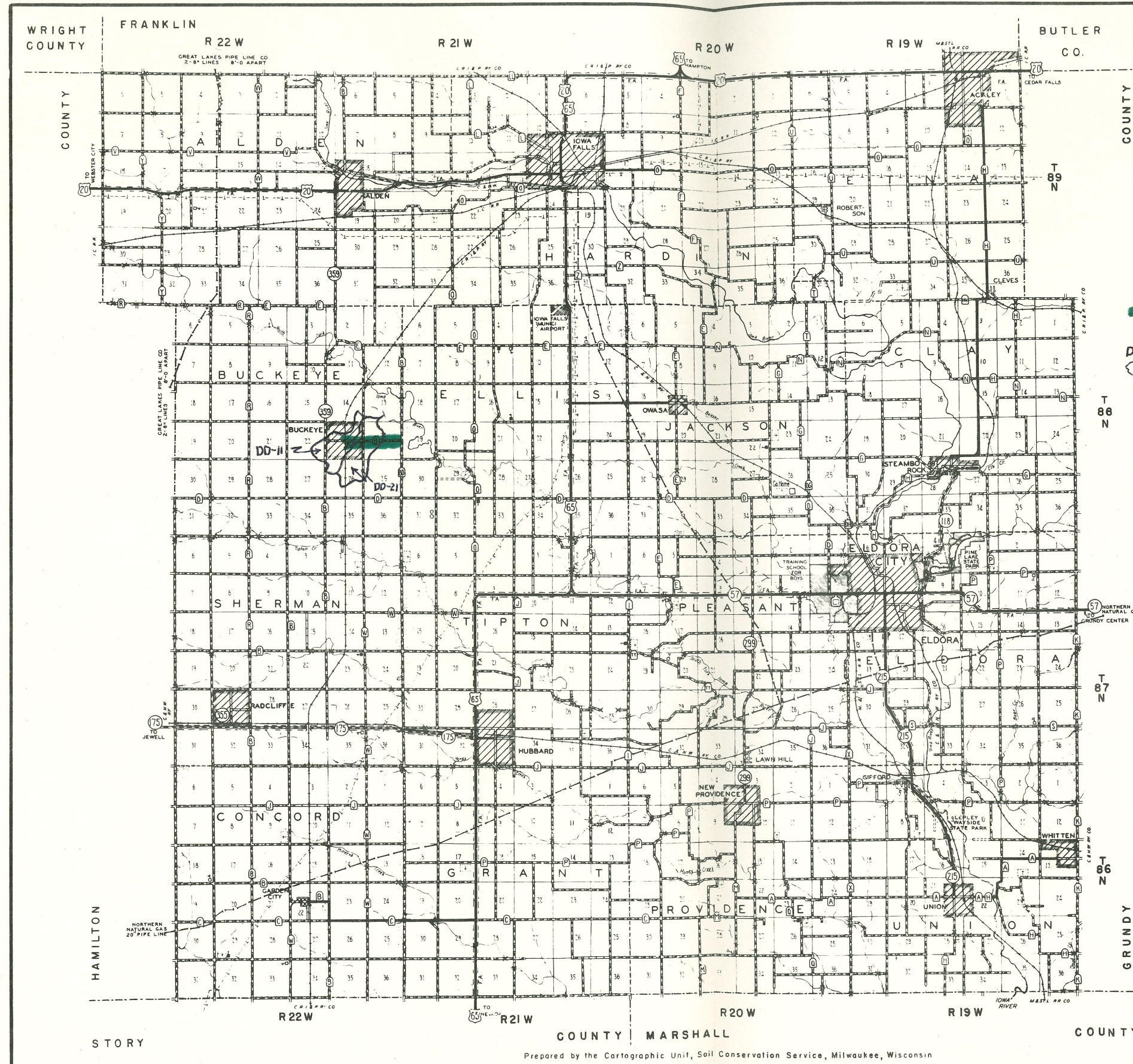
A nurse crop such as oats or rye grass should be seeded with the above mixture at the rate of 1 bushel per acre to provide quick vegetative cover.

RECOMMENDATIONS

1. Recognize that there are several different soil types within the vicinity of the proposed road improvement project.
2. Provide for immediate and adequate soil erosion control measures during all phases of road improvement or construction to insure that the soil loss will be less than five tons per acre per year from the construction site.
3. Consider establishing switchgrass vegetation that will enhance natural beauty of the roadsides as well as provide permanent vegetative cover to protect bare soil from wind and water erosion.
4. Repair or replace broken agricultural underground tile drainage lines damaged during construction including the drainage district tile mains for Drainage District 11 and 21.
5. Extend the underground drainage tile outlet near the large culvert as the culvert is extended.

CONCLUSION

There will be no serious soil, water and related resource impact resulting from the construction of road project #730488 provided the preceding recommendations are considered. The proposed road project does not interfere with any soil and water conservation improvements planned or presently installed.



LOCATION IN IOWA

-  EXCLUDED AREA
-  Proposed Road Improvement Project
-  County Legal Drainage District

Total acreage approximate 336,490

The District includes all of Hardin County exclusive of incorporated cities, towns, and villages.

HARDIN COUNTY SOIL CONSERVATION DISTRICT IOWA

