



MUNICIPAL STREET PAVING PROGRAM

Project Report #26

Salix, Iowa

November, 2001

In 1875 the town of Salix was platted and initially settled in the Missouri River Valley twelve miles south of Sioux City. The rural agricultural economy of Salix has been served by the forefathers of the Farmers Co-op Grain Elevator, who built adjacent to early railroads (now U.P.R.R.), and local Woodbury County roads which gave access to its seat of government. In more recent times, paved highways such as old State Road US 75 and County Road K-25 have attracted a modest increase in population and housing. Within the community, the only other pavements were partial north-south sections serving the city hall/fire station, local businesses, and a church.

At one time, curb and gutter units had been built to establish grade, but the only surfacing was a granular aggregate on natural subgrade. In 1992 a paving project was proposed but rejected by the less than 400 residents as being too costly for Salix. Then on January 6, 1999, Mayor Paul Scott and his Council held a public meeting to discuss the issue of street improvements. Although not totally endorsed by those in attendance, a presentation from CSD Engineering, P.C., suggested that most north-south streets could be built with financing from municipal funds with maximum property assessments not to exceed 25% of assessed values.

On March 24, 1999, the Council adopted Resolution 10-1999, which approved detailed plans and specifications as proposed by CSD Engineering, involving 7,300 SY of 8" PCC pavement, 22,700 SY of 6" PCC pavement, and miscellaneous items, for an estimated \$870,000. Street paving differed by loca-



tion in widths of 24' (no curbs), to 28', 31', and 35' back of curbs. Conventional urban curbs were specified. Having declared this action as being in the best public interest, the letting date of April 21 was authorized.

The amount assessed for streets and intersections included 100% of paving and subgrade preparation costs. The expense for grading, mobilization and excavation was assumed by the city. A portion of the engineering, legal and administrative costs were distributed among the benefiting parties. Assessments calculated according to the Flint formula consider the distances of each parcel to the nearest street. Only the part of any parcel within one-half block of a street to be paved was involved. This procedure is a method devised to weigh relative benefits so that a property nearer to the improvement is assessed at a higher rate than those more distantly located, with special consideration factored into variable dimensions, irregular tracts, and small shapes.

At the Salix City Hall on April 21, 1999, bids were filed by six contractors. The low bid of \$776,534.71 by Gill Construction, Inc., from Jackson, Nebraska, was accepted and a contract awarded, with work to be completed within 120 consecutive calendar days.

- Subgrade preparation required removal processing and recompacting existing base material to a 12" depth and extending to 2' outside the back of curb. When directed by the engineer, 4" perforated pipe subdrains were located 3' inside the curb line at a 2' depth, surrounded by porous backfill.
- All pavements required 10' transverse joint spacing and ½-point longitudinal joints sawed T/3 over ½" x 30" tie bars at 2' centers. Class C concrete paving mix was air-entrained, using crushed limestone with IDOT 4115.04 Class 2 durability and AASHTO M 85, Type 1 cement plus 10% Class C or F fly ash.
- Because of the naturally flat valley terrain, surface runoff and pavement drainage generally sloped from north to south. Valley gutters were created through intersecting street profiles to specified outlet points.



The Iowa Concrete Paving Association compliments Gill Construction, Inc., for having prosecuted this work in order to minimize the inconvenience for the people of Salix.

Under the direction of Chris Jens and Terry Moss, CSD Engineering, P.C., is commended for their professional project administration and assessment technology.



In summary, City Clerk Barb Heilman reports that Salix taxpayers are very pleased with this completed project. Residents have undertaken efforts to make individual property improvements to enhance appearances. Within a year of completion, 50% of the full assessments had already been paid. Perhaps the greatest testimony has been offered by residents whose homes front on unimproved east-west streets, through their inquiries as to prospects for early paving across their frontage.

The people of Salix, who had rejected a proposal for paving just seven short years earlier, are now very pleased with their efforts to place the most permanent of pavements - CONCRETE.

By R. H. (Bob) Given, ICPA Associate Engineer

