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| Date | |
| May 20, 1997 | |
| To | Dept. |
| Mitchell Holmes, P. E. | Airport Engineering |
| From | Dept. |
| Jim Franklin, P. E. <i>Jim Franklin</i> | Airport Engineering |
| Re: | |
| Study of Chemical Stabilization of Subgrades at DFW Airport | |

The attached report on Chemical Stabilization of subgrades at DFW is provided for information.

The clays in the subgrades at the airport have responded very well to the Chemical Stabilization by the reduction of the swell and the increase in capability of the subgrade to support the applied loads. It has almost totally eliminated the problems with the subgrades for the pavement maintenance crew in the areas injected. This has helped to reduce rutting in asphalt pavements and unwanted cracking in concrete pavements. The estimated cost savings in the report are conservative at about \$2 million.

I recommend that Chemical Stabilization be used in both new construction and repair/rehabilitation of pavements. It is cost effective to use by drilling through existing pavements and injecting the subgrades. If used in new construction as an alternative method, it provides competition and also provides the greater depth of stabilization where the zone of movement for the clay is considered to be down to 5 to 6 feet below the surface.

- cc: Van Dyke A. Walker, Jr.
- Joe Mattingly, ADD
- Keith Ghanma
- Bobby Rodriguez
- Darryl Boyd, ADD
- Dwain Brown, ADD
- Curtis Obal
- Dwayne Slaten
- Jim Wardlow

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