

2005/2006 ANNUAL REPORT

CITY OF MIDLAND - ENGINEERING DEPARTMENT

BRIAN P. MCMANUS, CITY ENGINEER



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The past year has been a very busy one for the Engineering Department. We continue to evaluate the improvements made to the sanitary sewer system. Monitoring of flows within the system is a very important part of the ongoing evaluation of the capacities of our sewer system. We have also been working with the Utilities Department to identify sources of surface water entering our sanitary sewer system from roof drains, parking lots and some city street areas. Smoke testing has been performed on many parts of the sanitary sewer system to locate sources of clean water entering the sanitary sewer system and additional areas are scheduled for this year.

The Engineering Department is currently assisting with the planning and construction of two paved walkways with landscaping and plantings. One of the walkways will begin at the existing paved walkway located at the end of Rodd Street at the Tittabawassee River and will extend easterly along the river to State Street and will run along State Street and Buttles Streets where it will intersect with the Grand Curve Parkway Trail that was constructed last year. The other trail is being constructed to extend the Grand Curve Parkway Trail from Washington Street, along James Savage to Saginaw Road, where it will cross under Highway US-10 to Patrick Road and run along Patrick Road and will terminate east of Illinois Street. The future plans are to extend this trail north from that point into Stratford Woods Park. The completion of these trails will give many persons direct access to the Pere-Marquette Rail-Trail via these new paved trails.

Traffic flow and traffic safety are constant concerns for the motoring public. The effects of increased traffic in a growing community can be seen at all major intersections throughout the City of Midland. With observations made by the Police Department and input from concerned citizens, evaluations of traffic patterns are conducted by the Engineering Department. The results of these evaluations are analyzed for possible remedies and changes in traffic control can be implemented on a trial basis before becoming permanent. This year we are extending Airport Road from Hicks Road to Stark Road. This project provides access to Highway US-10 and helps allieviate some of the traffic congestion in the Eastman Avenue area. Another future road improvement involves the extension of Letts Road from Eastman Avenue to Jefferson Avenue. Jefferson Avenue was reconstructed and widened from Broadhead Drive to Letts Road to provide better access to new areas being annexed into the City of Midland. A new traffic signal will be installed at the intersection of Jefferson Avenue and Chapel Lane and also includes the widening of Chapel lane to add a center left turn lane for each side of Jefferson Avenue. A left turn lane was constructed at west bound Sugnet Road at Swede Avenue, to aid traffic flow during school traffic.

During the City Council budget roundtables, residents identified the traffic congestion situation on Eastman Avenue as one of the most significant problems around the city. It has become a major goal of the Engineering Department to expedite the finding a solution to this problem. We hired a traffic planning consultant to evaluate the situation and offer possible solutions to aid in the traffic flow now and for the projected future in this congested and growing commercial development area. They made several recommendations (roundabouts, one way pairs, center median) on how to remedy the situation, however following presentations to the public, one of the options did not stand out as an acceptable option. Future studies and public input will be completed to try to choose an acceptable option.

Street reconstruction and resurfacing projects are a constant need for our community. This year parts of Ashman Street, Jefferson Avenue, Swede Avenue, Wackerly Street, Nelson Street, Noeske Street, Sayre Street, Barstow Drive, Northgate Street, Sugnet Road, Van Buren Street and Wilson Street were reconstructed. Cub Court was a gravel street that was reconstructed with concrete curb and bituminous pavement. Jefferson Avenue was reconstructed and widened to three lanes from Broadhead Street to Letts Road with a grant from MDOT to pay a large portion of the construction cost. We continue to complete an annual surface treatment program to seal cracks and treat the bituminous surfaces to prolong the pavement life of our street system

Development of private property sometimes requires the extension of public utilities across their private developments. These utilities become public once installed and inspected by the Engineering Department. This year public sanitary sewers and water mains were constructed in the Sterling Park Site Condominiums and Hidden Pines Condominiums Phase II. Public water mains were extended at the Midland Soccer Club complex and a sanitary sewer was installed along Eastman Avenue to serve the Logans site development.

Utility reconstruction and renovations are always required when our infrastructure does not meet current needs or when existing facilities require constant repair and maintenance. This year we replaced water mains on Ashman Street, Swede Avenue, Saginaw Road, Noeske Street, Van Buren Street and Wilson Street. These projects replaced the old water

mains, which required constant repairs and maintenance. A new water main was installed along Jefferson Avenue from Broadhead Drive to Letts Road to serve future annexations of property into the City of Midland.

Every year the Engineering Department completes several miscellaneous projects for the City. The streetscape improvements on Ashman Street were completed this year and added a new look to Ashman Street from Buttles Street to Ann Street. The improvements included new curbs, sidewalks, permanent and seasonal planters, irrigation system, new light poles with irrigated planters, benches, water feature and beautiful plantings. This million dollar project adds a great new look for this downtown street.

Keeping the public aware of locations of construction sites and possible traffic slow downs on our street system during construction projects has always been our goal. Notices of up-coming and on-going construction on particular streets and how they may affect travel is available on the City of Midland web site and is updated on a daily basis. This information is also made available on the local television stations and in the Midland Daily News.

Assuring traffic safety within construction zones is also a major goal and priority of the Engineering Department. Training contractors to provide proper traffic signing to keep construction zones as safe as possible and understandable to drivers has helped us to eliminate confusion to the motoring public.

Every year the Engineering Department receives requests from residents, developers and other departments for possible projects to consider for the annual budget. Following receipt of requests and evaluation of our street reconstruction priorities, we prepare a Project Priority List for City Council to consider and approve for the next budget cycle. It is a goal of the Engineering Department to complete these projects as safely as possible and with as little disruption to the motoring public as possible and within the time lines approved by City Council. We are very glad to report that we have accomplished these goals and strive to find more ways to better serve the residents of Midland.

The City of Midland is in the process of implementing a new Geographic Information System (GIS). The Engineering Department has been instrumental in its early development. This year began the first phase of a three year implementation program. The first year has a heavy emphasis on sanitary sewer system infrastructure development and modeling.

We have been very busy coordinating with the engineers and contractors that are constructing the new minor league baseball stadium near the intersection of State Street and Buttles Street. Utility and traffic needs for the stadium are a major component in the development of this new facility in the City and we have been working closely with them to assure that the public infrastructure will support their project.

The Engineering Department frequently provides technical assistance to other city departments on future projects and current maintenance situations. This assures that the City uses the most cost effective means to achieve the requested results. We believe that interdepartmental cooperation provides an efficient high level service to our customers.

STATISTICS

PERMITS ISSUED:

Sidewalk and Curb Cut	78
Sanitary Laterals	50
Storm Connection and Laterals	51

CONTRACT COSTS OF CONSTRUCTION/MAINTENANCE & NEW SUBDIVISION PROJECTS:

Water Main Improvements	\$776,600.00
Sanitary Sewer Improvements	\$274,500.00
Storm Sewer Improvements	\$375,100.00
Major Street Reconstruction	\$1,715,700.00
Local Street Reconstruction	\$604,200.00
Ashman Streetscape Improvements	\$961,400.00
Countryside Estates No. 2	\$502,100.00
Broadhead Estates No. 2	\$159,600.00
Hidden Pines No. 2 - Water Main and Sanitary Sewer	\$12,200.00
Logans - Sanitary Sewer	\$13,000.00
Sterling Park Site Condominiums - Water Main and Sanitary Sewer	\$36,900.00
Fast Ice Drive	\$200,000.00
Soccer Club Improvements - Street and Water Main	\$609,700.00
Sidewalk Improvement	\$60,700.00

5 YEAR CHART OF CONSTRUCTION EXPENDITURES

TYPE	05-06	04-05	03-04	02-03	01-02	TOTAL
Water Improvements	1,048,000	1,569,000	1,662,000	1,345,000	483,000	6,107,000
Street Recon./Resurf.	2,320,000	1,669,000	2,338,000	4,044,000	1,853,000	12,224,000
New Street Construction	705,000	557,000	474,000	374,000	258,000	2,368,000
Storm Sewers	702,000	2,466,000	282,000	382,000	384,000	4,216,000
Sanitary Sewers	435,000	569,000	1,177,000	661,000	10,215,000	13,057,000
Sewer Separation	0	65,000	0	0	0	65,000
Sidewalk Improvement	138,000	269,000	74,000	38,000	63,000	582,000
Miscellaneous	961,000	256,000	337,000	0	609,000	2,163,000
TOTAL	6,309,000	7,420,000	6,344,000	6,844,000	13,865,000	40,782,000

MILEAGE OF EXISTING STREETS, UTILITIES AND SIDEWALKS:

Streets:	154	Local
	78	Major
	16	Trunkline
Sanitary Sewers	195	
Storm Sewers	171	
Water Mains	255	
Sidewalks	352	