

CITY OF EAST BETHEL

ENGINEERING MANUAL

March 2005

**CITY OF EAST BETHEL
EAST BETHEL, MINNESOTA**

RESOLUTION NO. 2005-17

RESOLUTION ADOPTING ENGINEERING MANUAL

WHEREAS, the City Engineer, Hakanson Anderson Associates, Inc., has drafted an Engineering Manual dated March 2005 for the purposes of setting forth requirements, materials and standards to be incorporated into plans and specifications for sanitary sewer, storm sewer, watermain, trails and street construction constructed within the City; and

WHEREAS, said Engineering Manual may be amended or revised from time to time by resolution of the Council; and

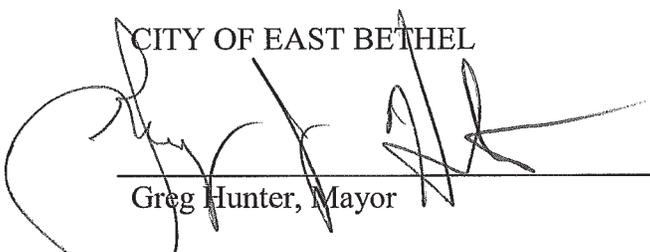
WHEREAS, the Engineering Manual will serve as a convenient reference for those developing within the City.

NOW THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF EAST BETHEL, MINNESOTA THAT:

1. The Engineering Manual dated March 2005 prepared by Hakanson Anderson Associates, Inc. is hereby adopted by the City of East Bethel as setting forth the approved standards and specifications to be incorporated into projects requiring City approval.
2. Copies of the Engineering Manual shall be distributed to those applying for development within the City, and agreements, conditions and findings related to such development shall reference the Engineering Manual where appropriate.

Adopted this 2nd day of March, 2005 by the City Council of the City of East Bethel.

CITY OF EAST BETHEL



Greg Hunter, Mayor

ATTEST:



Douglas Sell, City Administrator

Forward

In order to protect the public health, safety and welfare, it is necessary to establish standards for engineering in the City of East Bethel.

This manual outlines specific requirements, materials and standards that will be incorporated into the preparation of plans and specifications for sanitary sewer, storm sewer, watermain, trails, street construction and other improvements within the City of East Bethel. The following definitions shall be used for this manual:

Owner: Owner shall mean the person(s), company, corporation, etc. that enter into a "Developers Agreement" with the City of East Bethel for the purpose of construction of public improvements on lands under the ownership and control of said persons(s), company, corporation, etc.

Engineer: Engineer shall mean the Owner's Engineer.

City Engineer: City Engineer shall mean the Licensed Professional Engineer(s) under contract to the City to serve in that capacity.

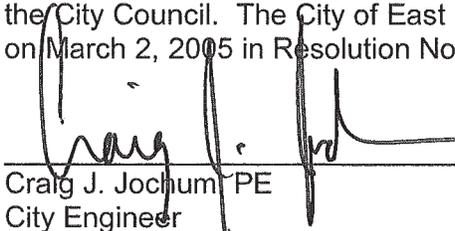
Approved Plans: Shall mean all Plans and Specifications and information required to be shown thereon per the City of East Bethel Ordinances, along with these Standard Specifications.

Sanitary sewer facilities and water work shall be designed to conform to the "10 State Standards" and shall be constructed in accordance with City Engineers Association of Minnesota Standard Specifications except as modified by specific City of East Bethel requirements. Street and road surface improvements shall be designed to the standards of the Minnesota Department of Transportation design manuals and shall be constructed in accordance with the Minnesota Department of Transportation Standard Specifications except as modified by specific City of East Bethel requirement.

Development plans and public facilities construction plans shall conform to City of East Bethel Ordinances and Comprehensive Plans. Related to engineering, comprehensive plans include the sanitary sewer system with associated trunk facilities for area service, the water distribution system with watermain oversizing, the surface water runoff control plan and the city transportation plan with designated collector streets. The City of East Bethel has the authority to construct improvements as necessary conforming with City Comprehensive Planning with the costs of improvements allocated or assessed to properties for benefit.

Once the plat, plans and specifications and associated documents have been reviewed, approved and signed, the City will allow the Developers, as defined in the Development Agreement, to proceed with the construction.

These standards are established as policy and as such may be subject to change by action of the City Council. The City of East Bethel Engineering Manual was approved by the City Council on March 2, 2005 in Resolution No. 2005-17.


Craig J. Jochum, PE
City Engineer

HAKANSON ANDERSON ASSOCIATES, INC.
3601 Thurston Avenue
Anoka, MN 55303

Acknowledgments

The Roads Committee was extremely helpful in identifying the key issues and concerns of the City in establishing the Engineering Manual. They also were very generous with their time in reviewing this document.

The City appreciates the assistance of the following people who served on the Roads Committee.

- Joseph Pelawa, Committee Member
- Larry Peterson, Committee Member
- Michael Bloyer, Committee Member
- Mike Simpson, Committee Member
- Pat Monnier, Committee Member
- Roger Virta, Committee Member
- Brad LeTourneau, Superintendent of Public Works
- Greg Hunter, Mayor

TABLE OF CONTENTS

- I. Engineering Requirements
- II. Erosion Control Policy
- III. City Standard Plans
- IV. City Standard Materials
 - 1) Sanitary Sewer Pipe and Service Line Materials
 - 2) Storm Sewer and Drainage Pipe
 - 3) Metal Sewer Castings
 - 4) Manhole and Catchbasin Structure
 - 5) Watermain and Appurtenances
- V. Testing Requirements
- VI. Construction Requirements
- VII. Storm Water Treatment Basins
- VIII. Miscellaneous

APPENDIX

- A. Standard Plates
 - Pavement 1 Series
 - Water System and Appurtenances 2 Series
 - Sanitary Sewer and Appurtenances 3 Series
 - Storm Sewer Appurtenances 4 Series
 - Erosion Control and Land Restoration 5 Series
 - Walls or Miscellaneous Structures 6 Series
 - Curb and Gutter and Sidewalk 7 Series
 - Barricades, Signals, Markers, etc. 8 Series
 - Miscellaneous 9 Series
- B. City of East Bethel Policy on Stormwater Drainage, Submittal Requirements for Developers
- C. City of East Bethel Standard Specifications for Street Construction for Developers

GLOSSARY OF TERMS

AASHTO	American Association of State Highway and Transportation Office
ANSI	American National Standards Institute
ASTM	American Society of Testing and Materials
AWWA	American Water Works Association
CEAM	City Engineer's Association of Minnesota
CMP	Corrugated Metal Pipe
HDPE	High Density Polyethylene
MnDOT	Minnesota Department of Transportation
MnPCA	Minnesota Pollution Control Agency
PID	Property Identification Number
PVC	Polyvinyl chloride
RCP	Reinforced Concrete Pipe
SDR	Strength to Diameter Ratio