

Project Manual

April 19, 2005

2005 Pavement Management Project

Prepared for:

 **ROSEMOUNT**
MINNESOTA

City Project No. 392

WSB Project No. 1556-29

Prepared by:


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a manner to avoid backflow into the pipe. All fittings used in the repair and the pipe ends shall be spray-disinfected and swabbed with a minimum 1% and maximum 5% sodium Hypochlorite (bleach) solution to disinfect the connection. At the discretion of the Engineer, a round of chlorine and bacteriological samples may be taken to ensure the integrity of the system.

Off-hours Corrective Action: In the event that corrective action is needed to the temporary water distribution system outside of normal working hours, the Engineer or Owner will attempt to contact the Contractor to take corrective actions. If, in the sole opinion of the Owner, the Contractor is unable to make the corrections in a timely manner, the Owner may direct their own forces to take corrective steps. The Contractor will be responsible for any costs incurred by the Owner.

Relocation of the Temporary Distribution System: The relocation of the temporary water system either in whole or in parts by any means without conducting and passing the chlorine residual and bacteriological requirements shall not be permitted. Relocation here is defined as depressurizing and moving the pipe work in order to service other water users.

(02611A.5) Basis of Payment

Payment shall be made by the Lump Sum at the unit price in the proposal. If no temporary water is necessary, this item shall be deleted from the contract and no payment shall be made.

(02621) SANITARY SEWER, STORM SEWER, AND SEWER SERVICES

(02621.1) Construction Requirements

The use of a manhole debris catcher equal or equivalent to that provided by grappler specialty products (www.grapplerusa.com) must be used when rehabilitating and or constructing new manholes, catch basins, and structures. The intent is to catch falling debris such as concrete grout mixture, soil, etc. Product information has been included in Appendix A of this Project Manual.

8" Sanitary Sewer Liner: Alternate 2 of this project includes the installation of cured-in-place pipe liner. Appendix C of this Project Manual contains a supplemental specification for cured-in-place pipe (CIPP). If this alternate is chosen by the Engineer, any CIPP shall be equivalent and shall meet the specifications set forth in Appendix C.

(02621.5) Basis of Payment

Sewer Pipe: Payment shall be by the linear foot for diameter of pipe and pipe classification. Sewer service pipe shall be paid as the horizontal distance from the main to the end of the service at the contract unit price bid.

All tie rods, including installation, as noted on the plans will be incidental to the pipe construction.

Special pipefittings, such as pipe bends, shall be measured as standard pipe on a lineal foot basis.

8" Sanitary Sewer Liner: Payment shall be by the linear foot of liner installed, and shall include cutting openings at all service wyes and manholes.

2' x 3' Catch Basins (Drainage Structure Design Special (2'x3' CB): Payment shall be for each catch basin installed including sump and casting and shall include all casting adjustments necessary, including interim adjustments to meet multiple lifts of bituminous.

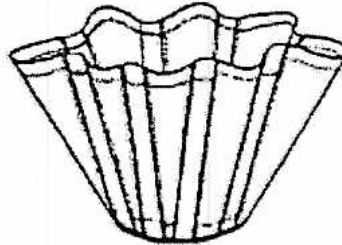
Connect to Existing Sanitary Sewer Manhole: Payment shall be made for each sanitary sewer pipe connection to an existing sanitary sewer manhole. Payment shall include all labor and materials necessary to make the connection, including the repair and pouring of new sanitary sewer inverts, if deemed necessary by the Engineer. The Contractor shall verify locations, alignment, and elevation prior to connecting.

MANHOLE DEBRIS CATCHER

PARTS DESCRIPTIONS

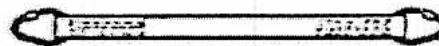
FABRIC

- **GRAPPLER Tuff Coat**, an industrial coated fabric of woven nylon and vinyl. Vinyl and nylon weave are vulcanized together to form an incredibly tough, tear resistant, canvas-like fabric. *Replaceable part: see support straps below.*



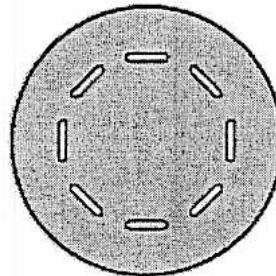
SUPPORT STRAPS

- Four 2" wide latex treated nylon web straps with delta shaped Quick Links, provide total support for **Debris Catcher**. Quick Links for easy disconnecting from web strapping, this feature allows the fabric to be replaced as needed, while retaining the rest of the assembly, giving this tool a long and economical service life. Eight 1"x17" fiberglass support battens (not shown) contained within pockets under web straps.



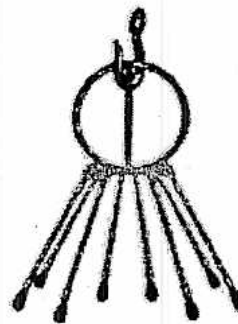
INVERT BRIDGE

- Located on the bottom of the fabric, it is held in place by the four support straps. Its 15" diameter bridges the invert to allow an unobstructed flow. Made from strong and flexible 3/16" HD plastic.



CENTRAL LIFTING RING ASSEMBLY

- The spherical rings are strong 3/8" steel with an 8" diameter. It provides an easy to catch lifting point for a J-hook (*optional part available from GRAPPLER*). The 8" diameter keeps assembly from being buried. Attached directly to Central Lifting Ring are eight 3/16" cables, nylon coated to 1/4" for protection. *NOTE: all cables should be inspected before each use.*



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SAFETY NOTE: Retrieve debris in small quantities as it falls into manhole. Use of a mechanical lifting source (tripod winch, electrical winch, etc.) is recommended.

ALWAYS! Be prepared for confined space entry in case of emergency.

GRAPPLER[®]

SPECIALTY PRODUCTS

www.grapplerusa.com

MANHOLE DEBRIS CATCHER

- **Reduce confined space entries** during routine manhole repairs avoiding possible injury or death.
- **Reduce sewer backups** related to messy repairs.
- **Save time and money** — no need to call in jetter or vac.
- **Easy to use** — fast removal of debris when rehabilitation is complete. Just pull out **Debris Catcher** with debris.
- **Built tuff** for long lasting use. See parts listing on back.

INSTRUCTIONS FOR USE

1. Before starting rehabilitations, lower **Debris Catcher** with J-hook and rope to bottom of manhole (MH) structure.
2. Slowly allow basket to open, make sure **Debris Catcher** is laying flat.
3. Remove J-hook and rope. Start repairs.
4. When work is finished, pull out **Debris Catcher** with debris. Note: use of mechanical lifting source is recommended for removing debris. Take care to keep from hooking **Debris Catcher** on MH steps during removal.



GRAPPLER

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