



Hennepin County Transportation Department

ADDENDUM

**TO PLANS, SPECIFICATIONS AND SPECIAL PROVISIONS FOR
CSAH 152 RECONSTRUCTION
HENNEPIN COUNTY TRANSPORTATION DEPARTMENT**

(To be opened Tuesday, June 21, 2015 at 2:00 P.M.)

ADDENDUM NO. 1

**CSAH 152; C.P. 9840
S. A. P. 027-752-027**

NOTICE TO ALL BIDDERS:

This Addendum shall be attached to the Contract Documents and shall be included as part of said Contract Documents. Items herein shall take precedence over any clauses which they modify in the Contract Documents or portions of plans which they modify or supplement.

PROPOSAL

Division SWR

B. Centrifugally Cast Fiberglass Reinforced Polymer Mortar Pipe (CCFRPM) and Fittings in section 2503.2 Materials is hereby **Revised** as shown in Attachment A.

JJT:jj
June 15, 2016
Attachment(s)

Receipt of this addendum must be acknowledged in accordance with the provisions of 1210 of the specifications.

Attachment A

B. Centrifugally Cast Fiberglass Reinforced Polymer Mortar Pipe (CCFRPM) and Fittings Materials

A. Resin Systems: The manufacturer shall use only polyester resin systems with a proven history of performance in this particular application. The historical data shall have been acquired from a composite material of similar construction and composition as the proposed product.

B. Glass Reinforcements: The reinforcing glass fibers used to manufacture the components shall be of highest quality commercial grade E-glass filaments with binder and sizing compatible with impregnating resins.

C. Silica Sand: Sand shall be minimum 98% silica with a maximum moisture content of 0.2%.

D. Additives: Resin additives, such as curing agents, pigments, dyes, fillers, thixotropic agents, etc., when used, shall not detrimentally effect the performance of the product.

E. Elastomeric Gaskets: Gaskets shall meet ASTM F477 and be supplied by qualified gasket manufacturers and be suitable for the service intended.

Manufacture and Construction

A. Pipes: Manufacture pipe by the centrifugal casting **or filament wound** process to result in a dense, nonporous, corrosion-resistant, consistent composite structure. The interior surface of the pipes exposed to sewer flow shall provide crack resistance and abrasion resistance. The exterior surface of the pipes shall ~~be comprised of a sand and resin layer which~~ provides a UV protection to the exterior. Pipes shall be Type 1, Liner 2, Grade 3 **or Type 1, Liner 1, Grade 1** per ASTM D3262.

B. Joints: Unless otherwise specified, the pipe shall be field connected with fiberglass sleeve couplings that utilize elastomeric sealing gaskets as the sole means to maintain joint watertightness. The joints must meet the performance requirements of ASTM D4161. Joints at tie-ins, when needed, may utilize gasket-sealed closure couplings.

C. Fittings: Flanges, elbows, reducers, tees, wyes, laterals and other fittings shall be capable of withstanding all operating conditions when installed. They may be contact molded or manufactured from mitered sections of pipe joined by glass-fiber-reinforced overlays. Properly protected standard ductile iron, fusion-bonded epoxy-coated steel and stainless steel fittings may also be used.

D. Acceptable Manufacturer: HOBAS Pipe USA, **Thompson Pipe Group - Flowtite** or approved equal.

Dimensions

A. Diameters: The actual outside diameter (18" to 48") of the pipes shall be in accordance with ASTM D3262. For other diameters, OD's shall be per manufacturer's literature.

B. Lengths: Pipe shall be supplied in nominal lengths of ~~20~~ **10 to 50** feet. Actual laying length shall be nominal +1, -14 inches. ~~At least 90% of the total footage of each size and class of pipe, excluding special order lengths, shall be furnished in nominal length sections.~~

C. Wall Thickness: The minimum wall thickness shall be the stated design thickness.

D. End Squareness: Pipe ends shall be square to the pipe axis with a maximum tolerance of 1/8".

Testing

A. Pipes: Pipes shall be manufactured and tested in accordance with ASTM D3262.

B. Joints: Coupling joints shall meet the requirements of ASTM D4161.

C. Stiffness: Minimum pipe stiffness when tested in accordance with ASTM D2412 shall normally be 36 psi.

Customer Inspection

A. The Owner or other designated representative shall be entitled to inspect pipes or witness the pipe manufacturing.

B. Manufacturer's Notification to Customer: Should the Owner request to see specific pipes during any phase of the manufacturing process, the manufacturer must provide the Owner with adequate advance notice of when and where the production of those pipes will take place.

Packaging, Handling, Shipping

A. Packaging, handling, and shipping shall be done in accordance with the manufacturer's instructions.