July 22, 2015

PC#2

John Therriault, Clerk
Illinois Pollution Control Board
100 W. Randolph Street, Suite 11-500
Chicago, IL 60601

Re: R15-22 (Rulemaking Water)
Public Water Supplies: Proposed Amendments to 35 Ill Adm. Code Parts 601, 602 & 603
Submittal of Comments / Testimony for Second Hearing to be held August 17, 2015

Greetings:

I respectfully submit herewith two (2) copies of my comments for the referenced docket.

I also am forwarding a copy of my comments to W. David McMillian, P.G., at Illinois EPA in Springfield.

Please do not hesitate to contact me if you have any questions or wish to give further instructions.

Very truly yours,

Roger Mensing, P.E.
201 Covered Bridge Lane
Belleville, IL 62221
rmensing@curryassociates.com

cc w/encl: W. David McMillan, P.G., Manager – IEPA Division of Public Water Supplies

PUBLIC WATER SUPPLIES: PROPOSED AMENDMENTS TO 35 ILL. ADM. CODE PARTS 601, 602, AND 603.

SECOND HEARING, MONDAY, AUGUST 17, 2015 AT 10:00 A.M.,
IEPA, CHESTNUT ROOM, 1021 N. GRANT AVE. E., SPRINGFIELD, IL

COMMENTS SUBMITTED BY: Roger K. Mensing, P.E.
As an individual.
201 Covered Bridge Lane
Belleville, IL 62221
Work Ph. 618-327-8841

SUBMITTAL DATE: 22 July 2015

A summary statement of my qualifications and experience is attached at the end of my comments.

PART 602, PERMITS

Section 602.260 Water Main Construction

a) 14. Requires that the water main construction permit application specify sewer and water separation in accord with 35 Ill. Adm. Code 653.119.

(It is noted that Section 601 of this part does not contain the definition of "sewer".)

Section 653.119 does not differentiate between storm sewer and culvert. It is my understanding that the Agency had adopted a policy for clearances at culverts but the policy has not been subject to public review and has not been incorporated into the Board's regulations to the best of my knowledge. It is my opinion that storm sewers and culverts convey the same surface water runoff from precipitation events, ie., rainwater.

I respectfully request that the Pollution Control Board review the rationale and effectiveness of the existing water/sewer separation rules pertaining to storm water drainage. This would be for communities that have separate sanitary and storm water sewers. The water/sewer separation rules as written do not differentiate between sanitary sewers and storm water. It would be indisputable that rainwater runoff poses minimal health risks when compared to sanitary sewers.

The following are reasons I feel that this situation should be reviewed by the Board.

1. The IEPA Division of Public Water Supplies Permit Section has been using the criteria of being able to "see through a pipe" in determining whether it is classified as storm sewer. For instance, a culvert which you can "see though" is not storm sewer, but a pipe with an inlet on one side is storm sewer. How this determination protects public health is unclear, as it is the same storm water runoff.

2. There are no separation rules for storm water ditches. However, if that same water is placed in a pipe with an inlet, then the separation rules apply. It would be fair to say that the water mains are more isolated from storm water runoff if the storm water is in a pipe. For rural water systems, the water main is typically installed adjacent to the edge of the road parallel to storm water ditches. To my knowledge, there has not been any health hazards posed by water mains in contact with storm water drainage.

   For installations where a new water main crosses below a storm sewer with 18" of separation, the Agency has required that a casing be installed over the water main if the storm sewer is not constructed of water main pipe. This installation will cause maintenance issues for water systems in the future if repairs ever need to be performed. While the regulations call for the end of the casings to be sealed, any current product on the market today cannot be considered to be "bottle tight" for the lifespan of the water main. I have personally witnessed that these casings will hold stagnant water around the water main. The rules do not allow water mains to be installed within 18" of a storm sewer at all, yet the encased water main is surrounded by stagnant water of unknown bacteriological quality.

3. Water main pipes typically come in 20 foot lengths. Many times the water main joint will already will be approximately 10' away from the storm sewer anyway. Therefore, the protective casing is just encasing a continuous length of pipe.

4. The cost is a significant burden to local communities. Current costs from recent bids indicate that it costs approximately $50 per foot to install protective casings on 6" water lines. Costs would of course be higher for larger diameter pipe. In the attached example, (Exhibit A), a local community would have to expend approximately $3,200 to install protective casing for just one intersection. This community has highly deteriorated cast iron water mains, and this money would be much better spent in installing more new water mains for their residents.

5. Communities have to maintain a minimum of 20 psi in water mains at all time and this requirement by itself would prevent any surface water infiltration into the water main. Typically, water pressures within communities where storm sewers are present are closer to 50 psi. I feel that the rule of maintaining a minimum 20 psi on water mains, the quality of water main gaskets, and compacted soil around the water main is more than sufficient to protect the quality of the potable water supply without the costly and mostly ineffective use of protective casing. The rule where water main is not allowed within 18" of storm sewers should also be reviewed.

Thank you for considering my comments.

Summary Statement of Qualifications

Roger K. Mensing, P.E.

I have a Bachelor of Science Degree in Civil Engineering from the University of Missouri-Rolla. I graduated in 1993.

I have been employed by Curry and Associates Engineers, Inc. in Nashville, Illinois for 20+ years. My duties have mainly been involved in the design and subsequent construction of water and wastewater treatment systems.

Attachments: Exhibit A – Typical Casing Requirements for Municipalities where Storm Sewer Inlets are Present.

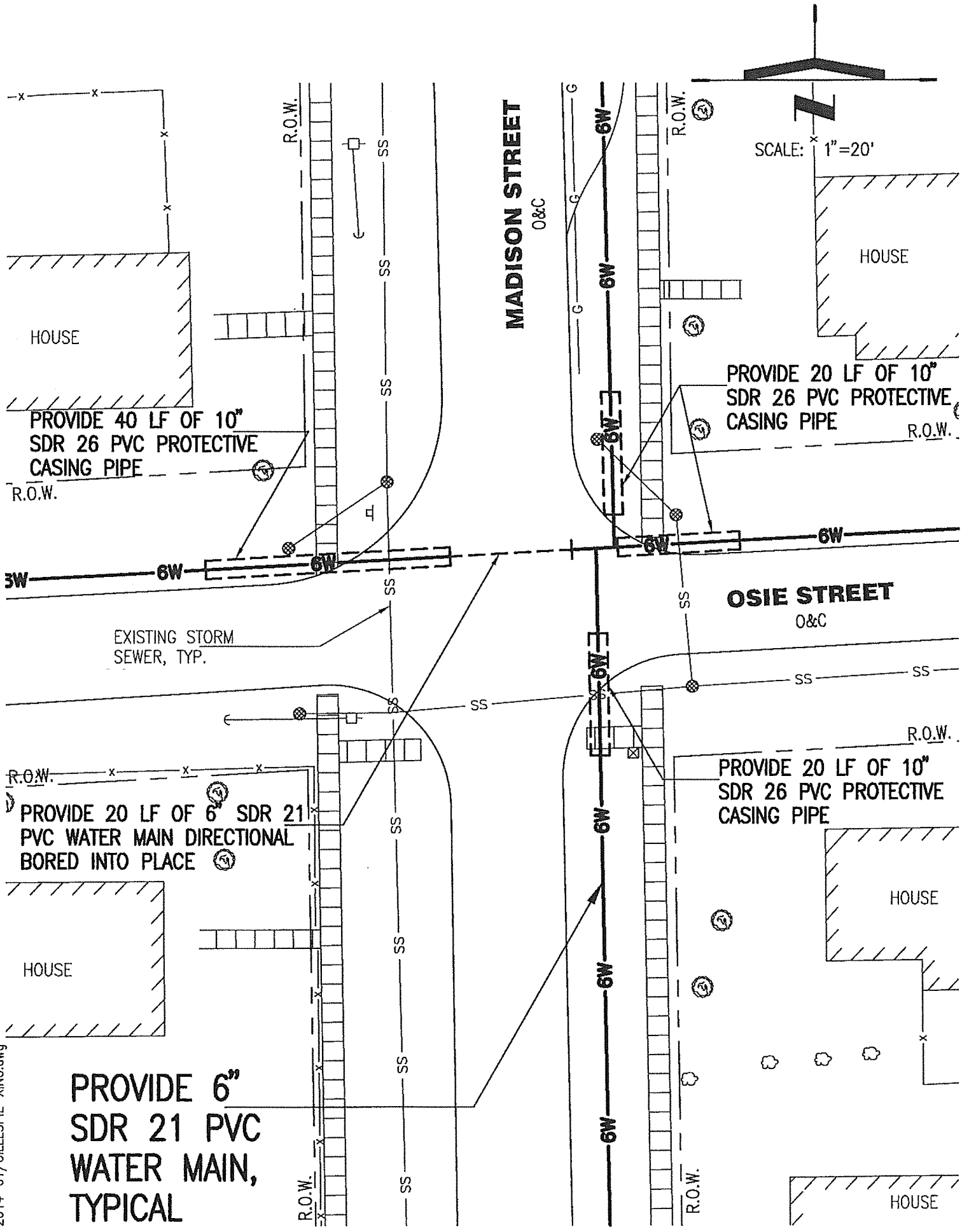

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EXHIBIT A