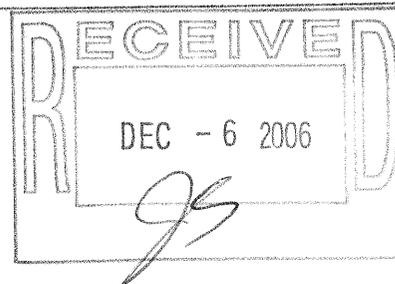


**Sullivan, Brian -- RAI**

*Rec'd at 12/6/06 mtg*

**To:** JGould@fstinc.com  
**Cc:** Albrecht, Dave -- RAI  
**Subject:** FW: Belmont Info  
**Attachments:** Interceptor Surcharge35.pdf; Interceptor Surcharge30.pdf



Justin,

Attached are 2 tables that we prepared after going through all of the MWRA flow metering data that you sent over to us.

The first table summarizes the dates and duration of surcharge events in the interceptor using a "surcharge" definition of 35 inches or greater in the interceptor. As shown in the table, over the 5 years of metering data (October 2001 through October 2006), the pipe surcharged a total of only 8 times. Of these, 4 were for 1 hour or less and 7 of the 8 were for less than 24 hours. The only event that exceeded 24 hours was over the period from May 13-14, 2006 when we experienced over 8 inches of rain. The table also shows rainfall amounts during and immediately preceding the surcharge occurrence.

The second table summarizes the dates and duration of surcharge events in the interceptor using a more conservative "surcharge" definition of 30 inches or greater in the interceptor. Using this criteria, the pipe "surcharge" events increase to 15 times over the 5-year period. However, 12 of these events occur for less than 6 hours and only 2 lasted more than 24 hours (again the May 13- 15, 2006 event and an event in April 2004 which lasted approx 26 hours after about 6 inches of rain).

From this data, it appears reasonable to us that the proposed Uplands project by O'Neill Properties should provide the equivalent of 24 hours of wastewater storage (approx 25,000 gallons) for their project. The Belmont ZBA is looking for your concurrence with this assessment prior to their next hearing on December 6.

Please contact me (508-903-2326) to review this info and to discuss any questions that you have.

Thanks, Brian

11/27/2006

MWRA Sanitary Storm Interceptor  
 Belmont, MA  
 Surcharge Event Tabulation

Surcharge Date	Precipitation				Total (in.)	Surcharge Duration* Hours: Minutes
	(two days prior) (in.)	(one day prior) (in.)	(day of surcharge) (in.)			
5/29/2002	0	0	0	0	0	1:00
12/14/2002	0.52	0.03	1.99	2.54	2.54	0:15
4/1/2004-4/2/2004	1.32	4.29	0.42	6.03	6.03	23:30
4/13/2004	0	0.04	1.97	2.01	2.01	0:30
10/15/2005	0.06	1.22	2.89	4.17	4.17	15:45
5/13/2006-5/15/2006	0.42	3.84	3.77	8.03	8.03	30:45
6/7/2006	0	0	2.89	2.89	2.89	5:30
7/21/2006	0.19	0	1.29	1.48	1.48	0:15

Source: Metering Data Reviewed, October 1 2001 - October 1, 2006  
 Note (\*): Surcharge Duration based on elevation of 35 inches or higher

MWRA Sanitary Storm Interceptor  
 Belmont, MA  
 Surcharge Event Tabulation

Surcharge Date	Precipitation					Total (in.)	Surcharge Duration* Hours: Minutes
	(two days prior) (in.)	(one day prior) (in.)	(day of surcharge) (in.)	(day of surcharge) (in.)	(day of surcharge) (in.)		
5/29/2002	0.00	0.00	0.00	0.00	0.00	0.00	1:00
12/14/2002	0.52	0.03	1.99	1.99	2.54	2.54	2:15
9/23/2003	0.00	0.00	1.05	1.05	1.05	1.05	30
10/12/2003	0.00	0.00	2.00	2.00	2.00	2.00	1:45
12/11/2003**	0.00	0.00	0.69	0.69	0.69	0.69	30
4/1/2004-4/2/2004	1.32	4.29	0.42	0.42	6.03	6.03	26:15
4/13/2004	0.00	0.04	1.97	1.97	2.01	2.01	1:00
10/15/2005	0.06	1.22	2.89	2.89	4.17	4.17	16:00
5/13/2006-5/15/2006	0.42	3.84	3.77	3.77	8.03	8.03	43:30
5/16/2006	3.77	0.36	0.52	0.52	4.65	4.65	2:30
5/17/2006	0.36	0.52	0.00	0.00	0.88	0.88	0:45
6/7/2006	0.00	0.00	2.89	2.89	2.89	2.89	5:30
6/8/2006	0.00	2.89	0.20	0.20	3.09	3.09	1:30
6/23/2006	0.00	0.00	1.36	1.36	1.36	1.36	0:15
7/21/2006	0.19	0.00	1.29	1.29	1.48	1.48	0:15

Source: Metering Data Reviewed, October 1 2001 - October 1, 2006

Note (\*): Surcharge Duration based on elevation of 30 inches or higher

Noe (\*\*): Three inches of snow melt occurred over the period of 12/9/2006 - 12/11/2006