Cost Comparison of Technical Alternatives for the Outer District Service Area

July 15, 2010

Scenario #	Scenario Description	Estimated Project Cost	User cost per billing unit (93) per year (30 years; 3.375%) In addition to prevailing billing rate
1 (Options 1/6A)	The proposed east side tank will provide domestic service to approximately the intersection of Adams and Oxbow Roads as Proctor customers using the existing transmission main. Transmission main improvements are not budgeted as a capital cost. Since, hydraulically, Proctor service cannot extend further by gravity, other existing out-of-Town customers will be served by individual wells. RD's current position is that for these wells to be funding eligible, they must be constructed and maintained as municipal sources. A manual emergency connection will be made with Pittsford's water system.	$326,735	$188 (additional 40% over current rate)
2 (Options 1/7A)	The proposed east side tank will provide domestic service to approximately the intersection of Adams and Oxbow Roads as Proctor customers using the existing transmission main. Transmission main improvements are not budgeted as a capital cost. Since, hydraulically, Proctor service cannot extend further by gravity, other existing out-of-Town customers will be served by a new public community well located on or near the existing Proctor filter plant. The existing filter plant would be reused as a well pump station and possibly a clearwell. Limited main replacement is included. A small pressure reduction station and flushing hydrant are to be constructed. RD's current position is that for this well to be funding eligible, it must be constructed and maintained as a municipal source. A manual emergency connection will be made with Pittsford's water system.	$412,535	$237
3 (Options 2/6A)	The proposed east side tank will provide domestic service to approximately the intersection of Adams and Oxbow Roads as Proctor customers using the existing transmission main. Transmission main improvements are not budgeted as a capital cost. Since, hydraulically, Proctor service cannot extend further by gravity, other existing out-of-Town customers will be served by individual wells. RD's current position is that for these wells to be funding eligible, they must be constructed and maintained as municipal sources. An automatic emergency connection (with building) will be made with Pittsford's water system to exhaust into their system based upon water age or temperature.	$419,685	$242
4 (Options 2/7A)	The proposed east side tank will provide domestic service to approximately the intersection of Adams and Oxbow Roads as Proctor customers using the existing transmission main. Transmission main improvements are not budgeted as a capital cost. Since, hydraulically, Proctor service cannot extend further by gravity, other existing out-of-Town customers will be served by a new public community well located on or near the existing Proctor filter plant. The existing filter plant would be reused as a well pump station and possibly a clearwell. Limited main replacement is included. A small pressure reduction station and flushing hydrant are to be constructed. RD's current position is that for this well to be funding eligible, it must be constructed and maintained as a municipal source. An automatic emergency connection (with building) will be made with Pittsford's water system to exhaust into their system based upon water age or temperature.	$505,485	$291
5 (Options 1/7B)	The proposed east side tank will provide domestic service to approximately the intersection of Adams and Oxbow Roads as Proctor customers using the existing transmission main. Transmission main improvements are not budgeted as a capital cost. Since, hydraulically, Proctor service cannot extend further by gravity, other existing out-of-Town customers will be served by a new public community well located on or near the existing Proctor filter plant. A new pump station, small pressure reduction station and flushing hydrant will be constructed. RD's current position is that for this well to be funding eligible, it must be constructed and maintained as a municipal source. A manual emergency connection will be made with Pittsford's water system.	$641,335	$369

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6 (Options 3A/6A)	The proposed east side tank will provide domestic gravity service to approximately the intersection of Adams and Oxbow Roads as Proctor customers using the existing transmission main. Transmission main improvements are not budgeted as a capital cost. A control valve will be provided at the northern boundary of Proctor. Modest water storage (80,000 gallons) will be provided at Corn Hill Road to buffer high elevation customers from demands, especially fire demands, in the Proctor system. Since, hydraulically, Proctor service cannot extend further than Adams Road at Oxbow Road by gravity, other existing out-of-Town customers will be served by individual wells. RD's current position is that for these wells to be funding eligible, they must be constructed and maintained as municipal sources. A manual emergency connection will be made with Pittsford's water system.	$648,485	$373
7 (Options 2/7B)	The proposed east side tank will provide domestic gravity service to approximately the intersection of Adams and Oxbow Roads as Proctor customers using the existing transmission main. Transmission main improvements are not budgeted as a capital cost. Since, hydraulically, Proctor service cannot extend further by gravity, other existing out-of-Town customers will be served by a new public community well located on or near the existing Proctor filter plant. A new well pump station, small presssure reduction station and flushing hydrant will be constructed. RD's current position is that for this well to be funding eligible, it must be constructed and maintained as a municipal source. An automatic emergency connection (with building) will be made with Pittsford's water system to exhaust into their system based upon water age or temperature.	$734,285	$423 (approximately double the current rate)
8 (Options 3A/7A)	The proposed east side tank will provide domestic gravity service to approximately the intersection of Adams and Oxbow Roads as Proctor customers using the existing transmission main. Transmission main improvements are not budgeted as a capital cost. A control valve will be provided at the northern boundary of Proctor. Modest water storage (80,000 gallons) will be provided at Corn Hill Road to buffer high elevation customers from demands, especially fire demands, in the Proctor system. Since, hydraulically, Proctor service cannot extend further by gravity, other existing out-of-Town customers will be served by a new public community well located on or near the existing Proctor filter plant. The existing filter plant would be reused as a well pump station and possibly a clearwell. Limited main replacement is included. A small pressure reduction station and flushing hydrant are to be constructed. RD's current position is that for this well to be funding eligible, it must be constructed and maintained as a municipal source.	$734,285	$423 (approximately double current rate)
9 (Options 3A/7B)	The proposed east side tank will provide domestic gravity service to approximately the intersection of Adams and Oxbow Roads as Proctor customers using the existing transmission main. Transmission main improvements are not budgeted as a capital cost. A control valve will be provided at the northern boundary of Proctor. Modest water storage (80,000 gallons) will be provided at Corn Hill Road to buffer high elevation customers from demands, especially fire demands, in the Proctor system. Since, hydraulically, Proctor service cannot extend further by gravity than Adams Road at Oxbow Road, other existing out-of-Town customers will be served by a new public community well located on or near the existing Proctor filter plant. A new well pump station, small presssure reduction station and flushing hydrant would be constructed. RD's current position is that for this well to be funding eligible, it must be constructed and maintained as a municipal source. A manual emergency connection will be made with Pittsford's water system.	$963,085	$554
10 (Options 5A/6A)	The proposed east side tank will provide domestic service to approximately Stevens Road as Proctor customers using the existing transmission main. Transmission main improvements are not budgeted as a capital cost. A meter and valve vault would exist at the northern boundary of Proctor. Beyond Stevens Road, the water main would be re-used as a sleeve for small diameter polyetylene as far as the intersection of Adams and Oxbow Roads. This would address the water quality concern of the oversized existing main. Other existing out-of-Town customers will be served by individual wells. RD's current position is that for these wells to be funding eligible, they must be constructed and maintained as municipal sources.	$1,175,440	$676

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11 (Option 6B)	Individual wells for all out-of-Town customers	$1,258,900	$725
12 (Options 5A/7A)	The proposed east side tank will provide domestic gravity service to approximately Stevens Road as Proctor customers using the existing transmission main. Transmission main improvements are not budgeted as a capital cost. A meter and valve vault will be provided at the northern boundary of Proctor. Beyond Stevens Road, the water main would be re-used as a sleeve for small diameter polyethylene as far as the intersection of Adams Road and Oxbow Road. This would address the water quality concern of the oversized existing main. Other existing out-of-Town customers will be served by a new public community well located on or near the existing Proctor filter plant. The existing filter plant would be reused as a well pump station and possibly a clearwell. Limited main replacement is included. A small pressure reduction station and flushing hydrant are to be constructed. RD's current position is that for this well to be funding eligible, it must be constructed and maintained as a municipal source.	$1,261,240	$726
13 (Options 5A/7B)	The proposed east side tank will provide domestic gravity service to approximately Stevens Road as Proctor customers using the existing transmission main. Transmission main improvements are not budgeted as a capital cost. A meter and valve vault will be provided at the northern boundary of Proctor. Beyond Stevens Road, the water main would be re-used as a sleeve for small diameter polyethylene as far as the intersection of Adams Road and Oxbow Road. This would address the water quality concern of the oversized existing main. Other existing out-of-Town customers will be served by a new public community well located on or near the existing Proctor filter plant. A new well pump station, small presssure reduction station and flushing hydrant would be constructed. RD's current position is that for this well to be funding eligible, it must be constructed and maintained as a municipal source.	$1,490,040	$858
14 (Option 3B)	The proposed east side tank will provide domestic service to approximately the intersection of Adams and Oxbow Roads as Proctor customers using the existing transmission main. Transmission main improvements are not budgeted as a capital cost. A meter vault/control valve will be provided at the northern boundary of Proctor. Modest water storage will be provided at Corn Hill Road to buffer high elevation customers from demands, especially fire demands, in the Proctor system. Since, hydraulically, Proctor gravity service cannot extend further than Adams Road at Oxbow Road, other existing out-of-Town customers will be served by two successive booster pump stations. The existing main would be re-used as a sleeve for small diameter polyethylene piping. A manual emergency connection will be made with Pittsford's water system.	$1,844,261	$1,061
15 (Option 5B)	Proctor-based boosted ground water system with adaptive reuse of existing main as a sleeve for new, small diameter piping to serve all out-of-Town customers	$2,193,600	$1,262
16 (Options 4B/6A)	New piping called the Goodnough Loop connecting the existing Pittsford system at Elm Street to the Proctor transmission main at Stevens Road via the Goodnough Water District. Adaptive re-use of the existing transmission main for gravity service, not including capital costs for improvements. Booster pump station for Corn Hill. Entire section of the Goodnough Loop would be taken over by the Town of Pittsford water system. and reuse of the transmission main from the northern boundary of Proctor to Adams/Oxbow Roads as a Pittsford system. Other existing out-of-Town customers will be served by individual wells. RD's current position is that for these wells to be funding eligible, they must be constructed and maintained as municipal sources.	$2,270,820	$1,307

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17 (Options 4B/7A)	New piping called the Goodnough Loop connecting the existing Pittsford system at Elm Street to the Proctor transmission main at Stevens Road via the Goodnough Water District. Adaptive re-use of the existing transmission main for gravity service, not including capital costs for improvements. Booster pump station for Corn Hill. Entire section of the Goodnough Loop would be taken over by the Town of Pittsford water system. and reuse of transmission main from the northern boundary of Proctor to Adams/Oxbow Roads as a Pittsford system. Other existing out-of-Town customers will be served by a new public community well located on or near the existing Proctor filter plant. The existing filter plant would be reused as a well pump station and possibly a clearwell. Limited main replacement is included. A small pressure reduction station and flushing hydrant are to be constructed. RD's current position is that for this well to be funding eligible, it must be constructed and maintained as a municipal source.	$2,356,620	$1,356
18 (Options 4B/7B)	New piping called the Goodnough Loop connecting the existing Pittsford system at Elm Street to the Proctor transmission main at Stevens Road via the Goodnough Water District. Adaptive re-use off the existing transmission main for gravity service, not including capital costs for improvements. Booster pump station for Corn Hill. Entire section of the Goodnough Loop would be taken over by the Town of Pittsford water system. and reuse of transmission main to Adams/Oxbow Roads as a Pittsford system plus other measures. Other existing out-of-Town customers will be served by a new public community well located on or near the existing Proctor filter plant. A new well pump station, small presssure reduction station and flushing hydrant would be constructed. RD's current position is that for this well to be funding eligible, it must be constructed and maintained as a municipal source.	$2,585,420	$1,488 (additional 350% increase)
19	Proctor-based hybrid and seasonal surface water/ground water-based system to serve all out-of-Town customers	$3,527,790	$2,030
20	Proctor-based boosted ground water system to serve all out-of-Town customers	$4,052,600	$2,332