

Request for Proposals

The Town of Windsor is seeking proposals from engineering/consulting firms qualified to provide professional grant writing and engineering services for a municipal water project in West Windsor, NY. The Town's expectation is the procurement of grants to fund 85% to 90% of an estimated project cost of \$5 million. Interested parties can contact the Elizabeth Pfister, Town Clerk for a copy of RFP via phone 607-655-2023, via email at windsortc1@echoes.net or on The Town of Windsor's Website www.windsorny.org

To submit a proposal, please submit five (5) copies of all information to the Town no later than 3:00 pm on October 1, 2020, for opening at the October 7, 2020 Board Meeting.

The address is as follows:

Town of Windsor Town Hall
124 Main Street
Windsor, NY 13865

Attention: RFP for Grant Writing and Engineering Services

If you have any questions, please contact the Town Clerk at (607)655-2023.

REQUEST FOR PROPOSALS (RFP)

Town of Windsor, New York

Grant Writing and Engineering Services

Program Years 2020 and 2021

I. Introduction

The Town of Windsor is seeking proposals from engineering/consulting firms qualified to provide professional grant writing and engineering services for a municipal water project in West Windsor, NY. The Town's expectation is the procurement of grants to fund 85% to 90% of an estimated project cost of \$5 million.

II. Time of Performance

The Town of Windsor anticipates awarding one contract for grant writing, engineering, and/or infrastructure services.

III. Scope of Services

- A. Identify potential sources of grant monies for the project, including but not limited to Federal and State sources.
- B. Development of Federal grant applications through the US Department of Agriculture (USDA), US Army Corps of Engineers, Environmental Protection Agency (EPA), US Department of Commerce, Appalachian Regional Commission, Community Development Block Grant Program, and other applicable Federal sources.
- C. Development of State grant applications through the New York State Water Grant Program, County-Wide Shared Services Initiative (CWSSI), Environmental Facilities Corporation, and other applicable State sources.
- D. Development of other grant applications through identified sources.
- E. Professional engineering, architecture, surveying, and planning services required for the design and implementation of the infrastructure improvement project, including but not limited to:
 - Feasibility studies;
 - Engineering reports;
 - Plans, specifications, cost estimates;
 - Maps;
 - Preparation of bids, bid material and contracts;
 - Assisting in the bid process;
 - Construction observation;
 - Technical guidelines, and
 - Planning/design and project structuring activities.

IV. Budgeted Amounts

Budgeted amounts will be determined and agreed to prior to contracting. Preference will be given to firms willing to not charge for grant writing should the Town not be successful through the firm's

**ADDENDUM NO. 1
TO RFP FOR
Grant Writing and Engineering Services
Program Years 2020 and 2021**

Date: September 28, 2020

To All Potential Proposers:

This addendum is issued to modify the previously issued request for proposal documents and/or given for information purposes, and is hereby made a part of the RFP documents. Please attach this addendum to the documents in your possession and make sure that an executed copy of this addendum and any additional addendum is included in your response to the RFP. **All proposers shall acknowledge receipt of this addenda, and provide a copy of each completed addenda with their letter of interest/response to the RFP.**

- 1) **New response date for this RFP is now October 5, 2020 at 3:00 p.m. The location remains unchanged.**
- 2) **Additional information is provided for your consideration prior to your response to this RFP. The additional information is as follows:**
 - Kirkwood-Windsor Water Main Extension Drawing Reference Number C-1 and Preliminary Engineers Opinion of Probable Cost 9/13/2015
 - Source Water Protection and Development Plan for West Windsor Area, Windsor, NY September 2019
 - Information Survey for Public Water Supply Hamlet of West Windsor, New York June 10, 2020

PLEASE RETURN A COPY OF YOUR COMPLETED ADDENDUM WITH YOUR RESPONSE.

I acknowledge receipt of this Addendum:

Print Name _____

Sign _____

Date: _____

grant writing in obtaining 85% to 90% of an estimated project cost of \$5 million and not able to proceed with the project.

V. Payments

Payments shall be made in increments equal to the project progress as agreed to by the parties.

VI. Work Time Frames

Project completion shall be achieved within the specific program's allowable time frame.

VII. Statements of Qualification

- A. Background information describing the nature and history of the firm, including client listings and references.
- B. Specific information regarding the firm's experience and technical expertise with securing and implementing Public Infrastructure programs and similar project work as described in the Scope of Services.
- C. Resumes of the individuals who will provide the services and their respective roles.

VIII. Selection

The Town of Windsor will select a firm based on qualifications such as technical skills, experience, reference information. Preference will be given to a firm that will not charge for grant writing should the Town not be able to proceed with the project.

IX. Submission Procedures

If you wish to submit a proposal, please submit five (5) copies of all information to the Town no later than 3:00 pm on October 1, 2020.

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124 Main Street
Windsor, NY 13865

Attention: RFP for Grant Writing and Engineering Services

If you have any questions, please contact the Town Clerk at (607)655-2023.

X. Miscellaneous

- A. The Town reserves the right to reject any or all proposals and to conduct interviews at its sole discretion.
- B. The Town assumes no responsibility or liability for costs incurred by respondents to the Request for Proposals including information, interviews, or negotiations.

**INFORMATION SURVEY FOR PUBLIC WATER SUPPLY
HAMLET OF WEST WINDSOR, NEW YORK
April 2020**

Please answer all questions to the best of your knowledge. A self-addressed stamped envelope is provided. **Please return by May 13, 2020.** The statistical results of the survey will be presented at a public information meeting on June 10, 2020, 7:00 p.m. at the Town Hall.

1. Would you be interested in the Town providing public water to West Windsor?

Yes _____ No _____ Please explain.

2. Are you currently or have you previously experienced problems with your well supplying your water needs. In other words, have you run out of water?

Yes _____ No _____ Please explain.

3. How would you rate the quality of your water on a scale of 1 to 5, with 5 being excellent?

_____ **Have you experienced problems with the following?** *(Check as many as apply.)*

___ Hard Water ___ Taste Problems ___ Runs Out Sometimes
___ Odor Problems ___ Staining Problems

4. Are you aware of anyone in your area experiencing problems with their well?

Yes _____ No _____ Comments

- over-

5. Do you filter or treat your water to improve color, remove sediment, disinfect, improve taste or soften the water? Yes _____ No _____ Other devices? Please explain.

6. Would you be interested in public water for the purpose of improving fire protection for the residents, businesses and C.R. Weeks Elementary School? Yes _____ No _____
Comments?

7. What is your primary source of water supply? *(Please circle one)*

Drilled Well Dug Well Spring Other (Please specify: _____)

THANK YOU FOR YOUR COOPERATION!

INFORMATION SURVEY FOR PUBLIC WATER SUPPLY HAMLET OF WEST WINDSOR, NEW YORK

PREPARED FOR:

Town of Windsor

Town Board

Windsor Town Hall

124 Main Street

Windsor, New York 13865



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TABLE OF CONTENTS

Section	Page
1 EXECUTIVE SUMMARY	1
2 SURVEY RESULTS:	2
2.1 Question No. 1:.....	2
2.2 Question No. 2:.....	4
2.3 Question No. 3:.....	6
2.4 Question No. 4:.....	6
2.5 Question No. 5:.....	7
2.6 Question No. 6:.....	9
2.7 Question No. 7:.....	10

APPENDICES

APPENDIX A – Resident's Addresses Who Received Survey

I EXECUTIVE SUMMARY

Keystone Associates Architects, Engineers and Surveyors was retained by the Town of Windsor Town Board to administer a Survey for Public Water Supply in the Hamlet of West Windsor and tabulate the results.

The Town Board wanted the residents in the West Windsor area surveyed to determine if there is an interest or need for municipal water by the residents. In order to have development in the commercial district such as senior housing for middle income seniors and a hotel, there must be municipal water. Developers have indicated that they will not pursue a project without municipal water. In the case of senior housing, municipal water is required by the State of New York. A commercial district can be developed without public participation and usage. The Town Board has been very clear that no residents will be forced to connect to municipal water. It will only be pursued as a residential project if survey results show interest.

The survey was mailed to one hundred and fifty one (151) residents, fifteen (15) were returned as undeliverable. Seventy-one (71) survey responses were returned to our office, which calculates to a 47 percent response . Resident Addresses Who Received the Survey are listed in Appendix A.

Question No. 1 below was specifically direct in an effort to gage the interest of the residents for public water. As indicated below the affirmative response is 42 percent without considering one survey response of both yes and no and one survey response left blank.

Question No. 2 indicates that only 16 percent are currently experiencing problems with their water supply with three (3) surveys left blank on this question.

Question No. 3 was a two part question in an attempt to understand the water quality in the area and what the problems may be. For Part 1, we grouped the responses into three categories of poor, average and good. A 1 or 2 response was considered poor, a 3 response was average and a response above 3 was good. the percentages are as follows considering 10 non-responses.

	<u>Percent</u>
Poor:	26
Average:	17
Good:	57

Part 2 of the question was developed to determine, if the residents had problems with their water supply or quality, what were they. 26 surveys were left blank which could correlate that 37 percent of the residents did not experience any of the problems we surveyed. This does not correlate with the 58 percent of the residents not in favor of public water. A conclusion could be drawn that although 63 percent of the residents are experiencing problems they remain unfavorable to public water. The percentage of each problem is as follows:

	<u>Percent</u>
Hard Water:	91
Taste Problems:	29
Odor Problems:	44
Staining Problems:	49
Runs Out Sometimes:	11

Note: Multiple responses from the same residents resulting in the percentage not totaling 100%.

Question No. 4 was developed to gather more responses. For example, if one resident did not respond, possibly their neighbor would respond and identify a problem. Considering 5 non-responses 85 percent were not aware of any problems with other residents.

Question No. 5 was developed to determine if positive responses to water quality were the result of some form of treatment. Considering 8 blank responses, 71 percent are treating their water. Some may conclude that even though the water quality is poor, the residents are willing to pay for treatment but remain unfavorable as a majority to public water.

Question No. 6 solicits the resident's interest in public fire protection via a public water supply. With 18 non-responses, 58 percent were in favor, leaving 42 not in favor.

Question No. 7 involved the source of the water supply with 89 percent from drilled wells which is typical.

2 SURVEY RESULTS:

The following are the results of the Seventy-one (71) responses received.

2.1 Question No. 1:

Would you be interested in the Town providing public water to West Windsor?

Yes (29) No (40) Checked Both (1) Blank (1)

Comments: (Numbers Correlate with Numbered Responses):

1. Do not feel we have the population density to support expanding current systems and make it cost effective. It would be too expensive on top of all ready high taxes.
2. But, what would the cost be? Already have to pay the sewer, which is way too expensive. It would be a good thing if we don't have to pay a lot for it.
3. (Blank)
4. (Blank)
5. For commercial usage and optional residential hookup
6. Depending on cost per year. Reason: our well water is discolored and full of other matter
7. It would depend on cost
8. I prefer the taste of my well water & do not wish to pay for something that my property provides for free. I take pride knowing that I'm drinking all natural, God made fresh water, not chemically treated processed water.
9. Depending on expense.
10. Dependent upon quality of water and cost.
11. I find it funny Keystone is always project leads. Hmmm... that is Windsor for ya. Do not wish to pay water usage see. Raped paying sewage fee as it is When we did not need public sewer!!! Sewer Failed
12. I'm happy with the well.
13. For further development of the area, it is more than likely needed
14. (Blank)
15. (Blank)
16. Our well, like our septic before we were forced to connect to the sewer and fill it in, is new and out water is very good. Also, I have no interest in fluoridated water.
17. Possibly, but not with a tax
18. (Blank)
19. (Blank)
20. don't need! don't want! Another bill we can't afford! Got screwed on the septic!

21. Only if it is more affordable and better managed than our public sewer system which is very expensive (currently \$872.00/yr./regardless of use) and apparently (per newsletter) in need of major upgrade already (only 11 years old).
22. We/I have a well that I would prefer to continue to use. Our home is only 30 years old, so the well is good.
23. (Blank)
24. Live on limited income - unaffordable to most + have their own wells (Disability)
25. I live alone and can't afford my sewage bill cause I'm just on social security, so there is no way that I can afford a water bill too!
26. Can't afford it on top of the sewer bill.
27. Depends on cost upfront to hook up and ongoing costs to pay for upkeep and maintenance of municipal facility
28. If you provide public water, you have the ability to force the use.
29. We have a well that we've invested in & it's been reliable
30. For commercial use and optional residential use
31. Well water is great at my residence. I do not wish to have chlorinated/fluoridated, etc. Municipal water with an overpriced sales tag.
32. It would be another required hook-up like the sewer, and an extra unneeded bill to go with it. Rural properties should continue to enjoy the benefits of well water. NOT interested in commercial development here.
33. We have a fabulous well - a well that uses supply 3 additional homes! And we don't have a water bill to pay each month.
34. Well water is bad.
35. If it is cost effective.
36. hoping for better water quality, where would this water come from?
37. (Blank)
38. Our water is hard.
39. (Blank)
40. Due to high mineral content, well water is unusable without expensive equipment to improve it. Water using appliances wear out at an incredible rate d/t iron and sediment. So hard you can't even wash your car with it.
41. I do not wish to have public water. My well works fine. I enjoy my well. I moved to the countryside to get away from public water.
42. Just bought home paying for septic already and have a well with a 5000 water system. Can't afford to pay for water with six people sucking it dry.
43. (Blank)
44. I don't see the need as a taxpayer. I don't want the added expense. We are already paying on outrages amount for the sewage plant.
45. (Blank)
46. I do not want municipal water. I did not want the overpriced sewage that we were forced into. There is no need for this.
47. I like knowing my water is in my control.
48. Go put in the Town of Windsor, they need it worse than West Windsor does, taxes in this community are high enough!
49. I don't have any desire to have water with the need of chemicals to treat it, or the financial burden of installation and maintenance for it.
50. Public water would be a very valuable asset to West Windsor, it would make living in West Windsor more desirable, as many people do not like well water. It would also provide safety as our fire stations could access it and not have to worry about running out or inadequate pressure.
51. Only if there is no additional tax.
52. (Blank)
53. (Blank)
54. Having a well is more economical
55. I'd rather not have another bill to pay (similar to sewage bill)
56. Depends on cost

57. Perfectly happy with my well, do not want to deal with the expense and problems associated with the expense and problems associated with a water system controlled by a municipality as demonstrated by the sewer system.
58. (Blank)
59. To better water quality & fire protection
60. (Blank)
61. well
62. Don't want public water.
63. I do not want higher taxes or a water bill. I do not want chlorinated water or water with fluoride. I cannot afford higher taxes!
64. (Blank)
65. No! Kirkwood water is more than adequate as a municipal supplier for our area.
66. I refuse to complete this survey because we were deceived at the time of the sewer implementation. We were told, "promised" there would be grants to offset the cost. Yet, every time the Town of Windsor has received grant money they have used it on the "facility" or so we are informed. Not one time has there been one single thought of the poor residents who were saddled with the "full" burden for the cost of the sewage treatment plant. Essentially we had to take on a 2nd mortgage. Over the years we have all struggled financially without "one single" care given to us by the Town of Windsor. We have watched as many of our neighbor's homes were foreclosed on or they were forced to move before it came to that. So no to this survey completion or more deception from the town of Windsor who makes promises to their residents then offers them no hope for relief!! Sincerely, A Resident of West Windsor for 34 years.
67. Not sure how safe my well water is for drinking has a lot of calcium in it + sometimes has an odor Plus it stains my tub orange.
68. We were already forced to pay for a botch contract for the septic system at the cost of \$288.00 every three months and sewer worked fine. My water is good and free I would like to keep it that way.
69. I know public water is needed for development, but I am not interested in being included for cost reason and public water has to be treated.
70. Our water is fine, our well is fine. This would be another expense that we, as being retired on a fixed income, did not plan for!
71. Not if we have to pay for it! Or Metered usage - then NO

2.2 Question No. 2:

Are you currently or have you previously experienced problems with your well supplying your water needs? In other words, have you run out of water?

Yes (11) No (57) Checked Both (0) Blank (3)

Comments: (Numbers Correlate with Numbered Responses):

1. (Blank)
2. (Blank)
3. I would like the option to connect in the future
4. (Blank)
5. No issues in 11 years at home
6. Only lived here since July 2019
7. (Blank)
8. Even during droughts, our water supply has not been affected.
9. (Blank)
10. (Blank)
11. NO!!!WAY!!!
12. (Blank)
13. Have not run out of water, but it is always a looming concern. Water pressure sucks!

14. (Blank)
15. (Blank)
16. Our well pump failed and we changed over to a submersible pump but we did not run out of water.
17. (Blank)
18. (Blank)
19. hard water
20. lived here since 1991 have never had a problem!
21. This April I had some water line work done and replaced my submersible pump. My well contractor then informed me I have a "bad" well. He told me it ran dry quickly but that it "might" supply enough water for 1 person.
22. Never an issue
23. (Blank)
24. We maintain our own well + pump
25. Never had a problem.
26. (Blank)
27. (Blank)
28. (Blank)
29. We dug a deeper well years ago and haven't had any issues since.
30. Drilled deeper
31. (Blank)
32. (Blank)
33. See above - it's a great well
34. Have not run out but quality is poor.
35. Been here 50+ years never ran out of water, quality of water went downhill over the years
36. only once when electricity failed to come to the wire from the well
37. Drilled 2 wells over past 30 years, run out of water multiple occasions, poor water pressure
38. This hasn't happened in several years, but if we leave the water on for several hours - filling a children's swimming pool for example, the pressure runs down and water gets muddy
39. (Blank)
40. (Blank)
41. I have never had an issue with my well the well is full and strong enough to provide the water I need.
42. Never
43. 15-20 year ago
44. No issues.
45. (Blank)
46. My well works fine. If there were problems we would be responsible for that.
47. (Blank)
48. (Blank)
49. We have a good well.
50. We have had to replace our well pump several times. Waking up to no water in the house before work is not fun. Plus we have hardly any water pressure.
51. (Blank)
52. (Blank)
53. (Blank)
54. (Blank)
55. Well pump went bad a few years back. I replaced it.
56. (Blank)
57. Never run out of water.
58. (Blank)
59. We have an old well.
60. (Blank)

- 61. (Blank)
- 62. I have never had any problems with well or water supply.
- 63. (Blank)
- 64. (Blank)
- 65. (Blank)
- 66. (Blank)
- 67. Had to put in a new well in 2015 due to it running dry and taking hours to refill
- 68. water is great
- 69. (Blank)
- 70. (Blank)
- 71. (Blank)

2.3 Question No. 3:

How would you rate the quality of your water on a scale of 1 to 5, with 5 being excellent?

One (1)	Two (2)	Three (3)	Three 1/2 (3.5)	Four (4)	Four. Five (4.5)	Five (5)	Six (6)	(Blank)
6	10	8	2	16	1	17	1	10

Have you experienced problems with the following? (Check as many as apply.)

Hard Water	Taste Problems	Odor Problems	Staining Problems	Runs Out Sometimes	(Blank)
41	13	20	22	5	26

Comments: (Numbers Correlate with Numbered Responses):

- 10. Just fine!! Do not want to pay for hotel & senior living. Just fine.
- 25. None- Never
- 29. We have a Beacon water system that takes care of these issues, (without treatment it's a 1)
- 33. We have a softener
- 36. This is without the water softener
- 42. with filter
- 44. none
- 47. I have water filtration system.
- 50. All of our sinks and tub are stained from the well water!
- 57. Have controlled it with water system that is already paid for.

2.4 Question No. 4:

Are you aware of anyone in your area experiencing problems with their well?

Yes (10) No (56) Checked Both (0) Blank (5)

Comments: (Numbers Correlate with Numbered Responses):

- 3. Several have severe sulfur smell
- 6. Only been here since July 2019, don't know neighbors
- 8. I have never seen or heard any of my neighbors needing a new well or complaining about their well.

9. We've had to buy 2 water softeners & replaced a toilet w/problems re: rust, need tub replaced \$\$\$\$. We have to buy drinking water.
11. You just want us to help pay for development like we did for Dollar General & McDonalds If Windsor wants to proceed pay for it themselves! Don't Rape Us.
13. Have heard friends and relatives' w/concerns/problems
19. no sure
20. If this gets passed we will be selling our house!!!
21. As a recent resident, I have not spoken with neighbors about well water quality yet.
22. We/I have neighbors that have had unknown issues, but only know they borrowed water hose from us. I believe they may have an artesian well in their basement.
25. Don't know of anyone
30. Not at present
33. Our (close) neighbors have similar wells - they supply more than one home with water.
34. Same issues I am having
35. Neighbors have water softeners - some buy water for drinking.
37. Neighbors some issues
39. Neighbor runs out of water sometimes
40. Several who have ran dry or re-drilled after running dry. One neighbor who occasionally has salt water.
41. People I have talked to in my area do not want public water, no one has problems with their wells.
50. My neighbors have complained about their water and well problems as well. We all would love to see public water come to West Windsor!
67. not sure
68. everyone likes the water they have
70. no idea

2.5 Question No. 5:

Do you filter or treat your water to improve color, remove sediment, disinfect, improve taste or soften the water? Other devices? Please explain.

Yes (45) No (18) Checked Both (0) Blank (8)

Comments: (Numbers Correlate with Numbered Responses):

1. We have a filter from level to the water softener.
2. Poor taste and rust, have to have a water softener and filter
3. (Blank)
4. To soften and improve taste with filters
5. Water softener - use salt and iron out, filtered drinking water in fridge
6. it needs more, can't afford a better system to upgrade
7. (Blank)
8. I use a sediment filter only to ensure sediment free water for my household needs.
9. (Blank)
10. water softener / filter drinking water
11. None of your business
12. (Blank)
13. Water Softener, R02 System
14. Salt based water softener
15. Softener, chlorinator
16. We use a whole house filter to remove iron and manganese and a RO filter for our drinking water.
17. brine, filters
18. (Blank)
19. (Blank)
20. (Blank)

21. Only recently (Spring 2020) activated well and replaced submersible pump. Water is not clear so far, so I have not used it. Don't know if I can get it tested due to COVID-19 lockdown.
22. we have a whole house filter
23. (Blank)
24. water softener
25. never heard of anyone that did
26. water / iron filter
27. water softener
28. (Blank)
29. Beacon System
30. (Blank)
31. (Blank)
32. (Blank)
33. We use a softener (with iron buster) the water has been tested and although there is iron, it's not terrible & the water is a good quality.
34. Beacon Water System
35. Water Softener, Iron Filter, Big Blue Filters
36. Water Softener
37. (Blank)
38. We have a tank and filter that I must change every 1-2 months
39. (Blank)
40. Whole house filter. Still can't use it to drink or cook d/t taste/smell, use bottled for those purposes.
41. No, I do not filter or soften my water. The Ph level is above average.
42. Came with home - good one
43. (Blank)
44. No need to.
45. (Blank)
46. My water is fine the way it is.
47. A filter on the sink for drinking besides water softener + entrance area filter.
48. (Blank)
49. Rainsoft System
50. We use a filter system to filter out the sediment, but it still gets through and clogs our water system from time to time.
51. Whole house filter and water softener
52. (Blank)
53. (Blank)
54. water softener
55. (Blank)
56. water softener
57. Very happy with my water system to control the iron content.
58. (Blank)
59. Water filters
60. (Blank)
61. (Blank)
62. Don't have any problems.
63. (Blank)
64. (Blank)
65. (Blank)
66. (Blank)
67. Have a regular filter (whole house) off the well and a UV light
68. (Blank)
69. I use an iron filter.
70. (Blank)
71. (Blank)

2.6 Question No. 6:

Would you be interested in public water for the purpose of improving fire protection for the residents, businesses and C.R. Weeks Elementary School?

Yes (31) No (22) Checked Both (0) Blank (18)

Comments: (Numbers Correlate with Numbered Responses):

1. Do not have the population density to warrant it at this time.
2. (Blank)
3. (Blank)
4. (Blank)

5. (Blank)
6. (Blank)
7. (Blank)
8. There are ample supplies of natural water for the fire department to use to fill their trucks. I have not heard of any homes or businesses in this area burning down due to lack of water.
9. \$\$\$\$?
10. Dependent upon cost.
11. Stop acting like you care about residents you just want us to pay for this to get business
12. (Blank)
13. safety is always a plus
14. (Blank)
15. (Blank)
16. But at what cost to taxpayer?
17. (Blank)
18. (Blank)
19. (Blank)
20. We have house ins, let it burn!
21. (Blank)
22. We/I would like to help with public water, if it did not mean I would have to be on the public water service myself.
23. (Blank)
24. Lived here for 50+ years - never had problems with water or fire coverage - people who live in the country assume these risks + understand them - taxes too high now!
25. Why?
26. Still can't afford it
27. (Blank)
28. (Blank)
29. circled fire protection, businesses, CR Weeks Elementary School - We'd be interested for those businesses but since we don't need it we wouldn't want our taxes to increase. What tax benefits would residents get if these businesses came to our area?
30. If source was sufficient as to not deplete aquifer of personal well users.
31. Not at a bloated cost which after seeing the septic project I would assume would occur
32. Only for fire protection, not for household (required) hookup!
33. Some of the folks in this area already have public water - I believe Dollar General, McDonalds + Speedway are already taken care of. CB Weeks should have it though I suppose. I really don't worry about fires anyone can have municipal water, in my opinion, if they feel the need as long as we are not forced to participate. Thank you!
34. (Blank)
35. (Blank)
36. safety
37. (Blank)

38. (Blank)
39. (Blank)
40. Retired West Windsor Firefighter, So yes, hydrants would be nice.
41. No, I am not interested in public water. I have not heard any issues from residents, fire department, or the school about their water supply.
42. Fire company is right by the school.
43. (Blank)
44. No.
45. (Blank)
46. This is a small community that has managed well without municipal water. This would just be an additional cost to residents in order to overdevelop this small community.
47. Not sure about that.
48. (Blank)
49. As a resident, community safety is important to me. That being said, using public safety as a selling point for public water is, too raise our taxes to develop the area is absurd.
50. West Windsor would be much safer overall if we had public water as it would improve our fire protection. The well water has bad water pressure.
51. Only if there is no charge for the residents
52. (Blank)
53. (Blank)
54. (Blank)
55. (Blank)
56. Depends on cost
57. There could be a hydrant for the school, I suppose. There is nothing to say that a municipal well could handle a fire station.
58. (Blank)
59. (Blank)
60. (Blank)
61. (Blank)
62. (Blank)
63. (Blank)
64. (Blank)
65. gilding the lily, do not see improvement
66. (Blank)
67. Just for fire protection - no, well is fine for that
68. (Blank)
69. (Blank)
70. The C.R. Weeks Elementary I am interested, but No for any others.
71. Maybe, if we do not get charged for the use of it.

2.7 Question No. 7:

What is your primary source of water supply? (Please circle one)

Drilled Well	Dug Well	Spring	Other	Blank
58	6	1	0	8

Two (2) people marked two different types of sources.

Comments: (Numbers Correlate with Numbered Responses):

6. unsure

11. None of your business, If Windsor cared about residents everyone know when you lay sewer pipes you usually lay water lines at the same time. Sewer project FAILED making residents mail its so insufficient and expensive.

25. Never had a problem
26. one of the two, don't know which
36. Will meetings be scheduled to discuss this? Ex. Timing, cost, etc. Thank you for this opportunity.
44. I don't want to see a hotel or senior living in West Windsor.
52. I don't like questions that point someone in the direction that the town wants. In other words, misleading questions are not honest, what is planned for social distancing at the informational meeting? How are we to know the plans? Things to consider. Thank you.
71. No housing unless they lower the speed limit on that part of the road. And put in red/green lights. And enforce the speed, not just say so. Senior Housing too much traffic there already, dangerous intersection, McDonalds, D. Gen. Gas Station Already too much to deal with.

APPENDICES

APPENDIX A
Resident's Addresses Who Received Survey

	<u>Returned</u>	<u>Name</u>	<u>Address1</u>	
1		Current Resident	4 Colpitts Drive	39
2		Current Resident	7 Colpitts Drive	40
3		Current Resident	10 Colpitts Drive	41
4		Current Resident	11 Colpitts Drive	42
5		Current Resident	15 Colpitts Drive	43
6		Current Resident	19 Colpitts Drive	44
7		Current Resident	20 Colpitts Drive	45
8		Current Resident	25 Colpitts Drive	46
9		Current Resident	26 Colpitts Drive	47
10		Current Resident	30 Colpitts Drive	48
11		Current Resident	40 Colpitts Drive	49
12		Current Resident	45 Colpitts Drive	50
13		Current Resident	46 Colpitts Drive	51
14		Current Resident	54 Colpitts Drive	52
15		Current Resident	440 Foley Road	53
16		Current Resident	461 Foley Road	54
17		Current Resident	463 Foley Road	55
18		Current Resident	471 Foley Road	56
19		Current Resident	481 Foley Road	57
20		Current Resident	489 Foley Road	58
21		Current Resident	491 Foley Road	59
22		Current Resident	497 Foley Road	60
23		Current Resident	505 Foley Road	61
24		Current Resident	515 Foley Road	62
25		Current Resident	521 Foley Road	63
26		Current Resident	525 Foley Road	64
27		Current Resident	17 Fox Farm Road	65
28		Current Resident	18 Fox Farm Road	66
29		Current Resident	37 Fox Farm Road	67
30		Current Resident	38 Fox Farm Road	68
31	Returned	Current Resident	44 Fox Farm Road	69
32		Current Resident	48 Fox Farm Road	70
33		Current Resident	52 Fox Farm Road	71
34		Current Resident	80 Fox Farm Road	72
35	Returned	Current Resident	84 Fox Farm Road	73
36		Current Resident	88 Fox Farm Road	74
37		Current Resident	92 Fox Farm Road	75
38		Current Resident	98 Fox Farm Road	76

<u>Returned</u>	<u>Name</u>	<u>Address1</u>
	Current Resident	99 Fox Farm Road
	Current Resident	106 Fox Farm Road
Returned	Current Resident	110 Fox Farm Road
	Current Resident	114 Fox Farm Road
	Current Resident	20 Harold Street
	Current Resident	31 Harold Street
	Current Resident	32 Harold Street
	Current Resident	50 Harold Street
	Current Resident	51 Harold Street
	Current Resident	57 Harold Street
	Current Resident	7 Hilltop Lane
	Current Resident	14 Hilltop Lane
	Current Resident	15 Hilltop Lane
	Current Resident	19 Hilltop Lane
	Current Resident	20 Hilltop Lane
	Current Resident	26 Hilltop Lane
	Current Resident	29 Hilltop Lane
	Current Resident	32 Hilltop Lane
	Current Resident	35 Hilltop Lane
Returned	Current Resident	36 Hilltop Lane
	Current Resident	39 Hilltop Lane
	Current Resident	40 Hilltop Lane
	Current Resident	44 Hilltop Lane
	Current Resident	47 Hilltop Lane
	Current Resident	8 Karla Drive
	Current Resident	9 Karla Drive
	Current Resident	11 Karla Drive
Returned	Current Resident	13 Karla Drive
	Current Resident	37 Liberty Highway
	Current Resident	43 Liberty Highway
Returned	Current Resident	44 Liberty Highway
	Current Resident	49 Liberty Highway
	Current Resident	54 Liberty Highway
	Current Resident	55 Liberty Highway
	Current Resident	58 Liberty Highway
	Current Resident	61 Liberty Highway
Returned	Current Resident	64 Liberty Highway
	Current Resident	67 Liberty Highway

<u>Returned</u>	<u>Name</u>	<u>Address1</u>		<u>Returned</u>	<u>Name</u>	<u>Address1</u>
	Current Resident	68 Liberty Highway	115		Current Resident	11 Pine Valley Road
	Current Resident	71 Liberty Highway	116		Current Resident	14 Pine Valley Road
	Current Resident	72 Liberty Highway	117	Returned	Current Resident	15 Pine Valley Road
	Current Resident	75 Liberty Highway	118		Current Resident	18 Pine Valley Road
	Current Resident	80 Liberty Highway	119		Current Resident	19 Pine Valley Road
	Current Resident	83 Liberty Highway	120		Current Resident	22 Pine Valley Road
	Current Resident	97 Liberty Highway	121		Current Resident	23 Pine Valley Road
	Current Resident	100 Liberty Highway	122		Current Resident	27 Pine Valley Road
	Current Resident	109 Liberty Highway	123		Current Resident	57 Pine Valley Road
	Current Resident	114 Liberty Highway	124		Current Resident	58 Pine Valley Road
	Current Resident	118 Liberty Highway	125		Current Resident	61 Pine Valley Road
	Current Resident	124 Liberty Highway	126		Current Resident	62 Pine Valley Road
	Current Resident	127 Liberty Highway	127		Current Resident	65 Pine Valley Road
	Current Resident	130 Liberty Highway	128		Current Resident	66 Pine Valley Road
	Current Resident	131 Liberty Highway	129		Current Resident	69 Pine Valley Road
	Current Resident	136 Liberty Highway	130		Current Resident	70 Pine Valley Road
	Current Resident	137 Liberty Highway	131		Current Resident	73 Pine Valley Road
	Current Resident	141 Liberty Highway	132		Current Resident	74 Pine Valley Road
Returned	Current Resident	142 Liberty Highway	133	Returned	Current Resident	3 Riley Road
	Current Resident	145 Liberty Highway	134	Returned	Current Resident	20 Riley Road
Returned	Current Resident	152 Liberty Highway	135		Current Resident	24 Riley Road
	Current Resident	16 North Road	136		Current Resident	25 Riley Road
	Current Resident	90 North Road	137	Returned	Current Resident	27 Riley Road
	Current Resident	96 North Road	138		Current Resident	29 Riley Road
	Current Resident	100 North Road	139		Current Resident	31 Riley Road
	Current Resident	103 North Road	140		Current Resident	31.5 Riley Road
	Current Resident	104 North Road	141		Current Resident	34 Riley Road
	Current Resident	107 North Road	142		Current Resident	35 Riley Road
	Current Resident	108 North Road	143		Current Resident	38 Riley Road
	Current Resident	112 North Road	144		Current Resident	39 Riley Road
	Current Resident	115 North Road	145		Current Resident	4 Rogers Road
	Current Resident	116 North Road	146		Current Resident	12 Rogers Road
	Current Resident	120 North Road	147	Returned	Current Resident	15 Rogers Road
	Current Resident	128 North Road	148		Current Resident	16 Rogers Road
	Current Resident	2 Pine Valley Road	149		Current Resident	26 Rogers Road
	Current Resident	5 Pine Valley Road	150		Current Resident	163 North Road
	Current Resident	6 Pine Valley Road	151		Current Resident	176 Frost Road
	Current Resident	10 Pine Valley Road				



KIRKWOOD-WINDSOR WATER

**TOWN OF WINDSOR
BROOME COUNTY, NEW YORK**

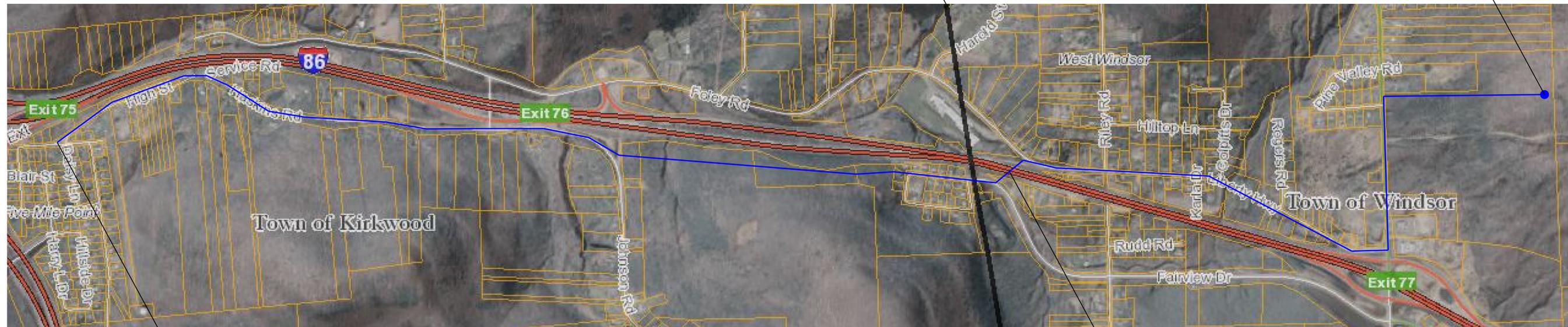
**GRIFFITHS ENGINEERING, LLC
PROJECT # 2015-109-001**

**PRELIMINARY
ENGINEERS OPINION OF PROBABLE COST**

5/13/2015

ITEM DESCRIPTION	QUANTITY	UNITS	ENGINEER'S OPINION OF PROBABLE COST	
			UNIT PRICE	TOTAL
MOBILIZATION/DEMobilIZATION	1	LS	30,000.00	\$30,000.00
BOOSTER STATION	1	LS	\$100,000.00	\$100,000.00
BOLTED-GLASS LINED WATER STORAGE TANK (250	1	LS	\$500,000.00	\$500,000.00
8" PVC C-900 WATERMAIN & FITTINGS (INCLUDES TR	19500	LF	\$100.00	\$1,950,000.00
FIRE HYDRANT ASSEMBLIES	60	EA	\$4,000.00	\$240,000.00
GATE VALVES	80	EA	\$2,500.00	\$200,000.00
WATER SERVICE LINES (FROM WATERMAIN TO R.O	100	EA	\$2,000.00	\$200,000.00
CREEK CROSSING	1	EA	\$10,000.00	\$10,000.00
ELECTRICAL/CONTROLS	1	LS	\$50,000.00	\$50,000.00
SITework	1	LS	\$100,000.00	\$100,000.00
DEWATERING	1	LS	\$50,000.00	\$50,000.00
ROCK REMOVAL	500	CY	\$150.00	\$75,000.00
MAINTENANCE & PROTECTION OF TRAFFIC	1	LS	\$12,000.00	\$12,000.00
ENGINEERING	1	LS	\$280,000.00	\$280,000.00
LEGAL	1	LS	\$100,000.00	\$100,000.00
ADMINISTRATIVE	1	LS	\$50,000.00	\$50,000.00
BOND COSTS	1	LS	\$25,000.00	\$25,000.00
LAND ACQUISITION	1	LS	\$40,000.00	\$40,000.00
TOTAL ESTIMATED COST				\$3,982,000.00

NOTES: HISTORIC BID PRICES USED TO DERIVE UNIT PRICES.
PRICES WILL VARY BASED ON MARKET FLUCTUATIONS.

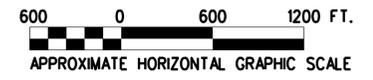


PROPOSED BOOSTER STATION LOCATION

KIRKWOOD/WINDSOR TOWN LINE

PROPOSED WATER STORAGE TANK

EXISTING SLEEVE CROSSING BENEATH HIGHWAY



GRIFFITHS ENGINEERING
18 South Washington Street, Suite 1
Binghamton, New York 13903
Telephone (607) 734-2400
Fax (607) 734-2456

Seal

Designed by:	CSS	Date:	5-13-2015	Rev.:	
Drawn by:	CSS	Cad by:	JML	Project No.:	2015-109-1
UNAUTHORIZED ALTERATION OF THIS DRAWING IS PROHIBITED BY SECTION 7209, SUBSECTION 2, NEW YORK STATE EDUCATION LAW.				Plot Scale:	AS NOTED

Drawing Name:
PROPOSED WATER LINE EXTENSION ROUTE

Project Name:
KIRKWOOD - WINDSOR WATER MAIN EXTENSION
Project Location & Owner:
TOWNS OF KIRKWOOD AND WINDSOR BROOME COUNTY, NEW YORK

Drawing Reference Number:
C-1

SOURCE WATER PROTECTION AND DEVELOPMENT PLAN

For the

**WEST WINDSOR AREA
WINDSOR, NEW YORK**

PREPARED BY:

**Steven Winkley, P.G.
New York Rural Water Association**



In coordination with the Town of Windsor



September 2019

1.0 INTRODUCTION

1.1 Goals and Objectives

The term source water refers to all sources of drinking water. In Windsor, all residents and businesses rely upon groundwater for drinking water. The New York Rural Water Association (NYRWA), a non-profit organization of communities and water systems in New York, has worked with the Town of Windsor to develop this Source Water Protection and Development Plan for the West Windsor area.

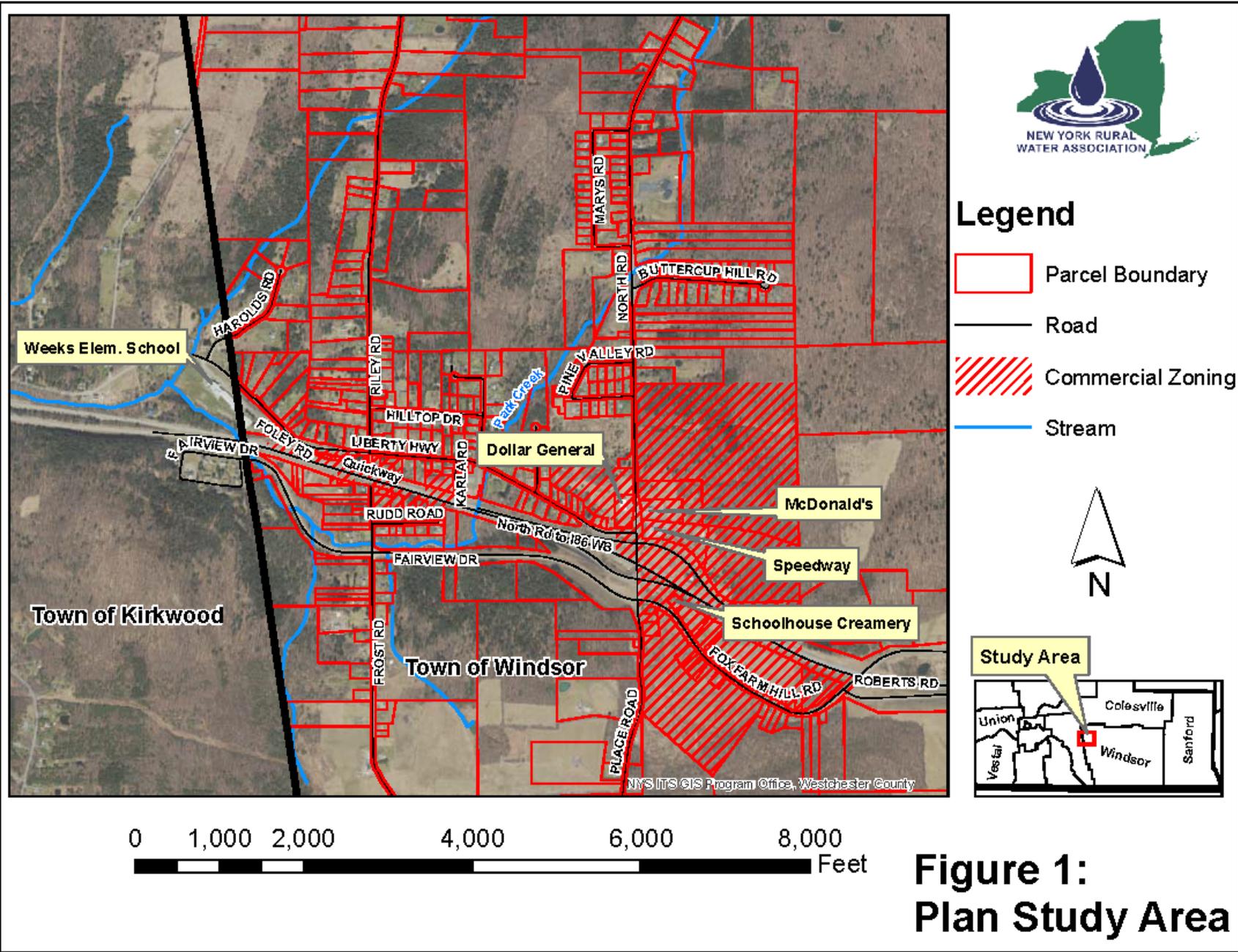
The West Windsor area in the Town of West Windsor is primarily zoned residential (R-14), with the exception of two areas adjacent to I-86 (also referred to as NY-17 or the “Quickway”). The area along North Road presently contains several commercial establishments that are regulated by the Broome County Health Department and the New York State Department of Health as transient, non-community public water systems since they have their own well supply and serve an average of at least 25 people daily for at least 60 days out of the year (but not regularly the same people) (see Figure 1). In addition, the Weeks Elementary School, located in both the Town of Kirkwood and the Town of Windsor, maintains its own water supply and is regulated as a non-transient, non-community public water system (Figure 1). This type of non-community system serves at least 25 of the same people, four hours or more per day, for four or more days per week, for 26 or more weeks per year. The NYSDOH lists the Weeks Elementary School as serving a population of 365.

The Town of Windsor is interested in establishing a public water district in the West Windsor area along North Road to initially service commercial interests here. Two options exist for doing this. One is to work with the Town of Kirkwood to have that Town extend its existing public water mains some 1.6 miles east to the Town of Windsor line.

The other option is for the Town of Windsor develop its own groundwater supply source and storage facility to serve this potential new water district. This plan documents work that NYRWA has completed in coordination with the Town of Windsor to: (1) identify and protect the existing source water resources in the area; and (2) tentatively identify possible well locations that could be suitable for a new public water system. NYRWA has studied the West Windsor area, primarily along Foley Road, Liberty Highway, North Road, and surrounding areas (Figure 1). The following plan maps existing and potential source water resources for the area, identifies potential contaminant threats, and plans for future source water needs.

1.2 Scope and Methods

NYRWA Source Water Protection Specialist, Steven Winkley, P.G., began meeting with representatives of the Town of Windsor in early 2019 to initiate this Source Water Protection and Development Plan. New York Rural Water Association utilized a variety of published and unpublished data sources for this plan (see below). All data were input into a Geographical Information System (GIS). This is a computer system that allows one to visualize, manipulate, analyze, and display geographic (spatial) data.



Water well and test boring data were collected from the New York State Department of Environmental Conservation (NYSDEC) Water Well Contractor Program, the Broome County Health Department, and the New York State Department of Transportation (NYSDOT). This data is summarized on Figure 2. Data on potential sources of contamination was collected from the NYSDEC and the United States Environmental Protection Agency (USEPA).

A digital version of the New York State Surficial and Bedrock Geologic Maps were utilized for analysis. Elevation data for the West Windsor area were taken from a 2-meter digital elevation model (DEM) created from a 2007 LIDAR (Light Detection and Ranging) dataset. This information was then used to derive elevation and hillshading images. A parcel boundary dataset, as well as a zoning dataset, was provided by the Broome County GIS & Mapping Services Division. Other digital data on wetlands, floodplains, surface waters, roads, regulated facilities, aerial photography, etc. were downloaded from the New York State GIS Clearinghouse and the Cornell University Geospatial Information Repository.

Finally, New York Rural Water Association conducted on-site activities in West Windsor, driving all roads to note geologic features, land use, etc. A global positioning system (GPS) device was used to capture the geospatial coordinates of such features.

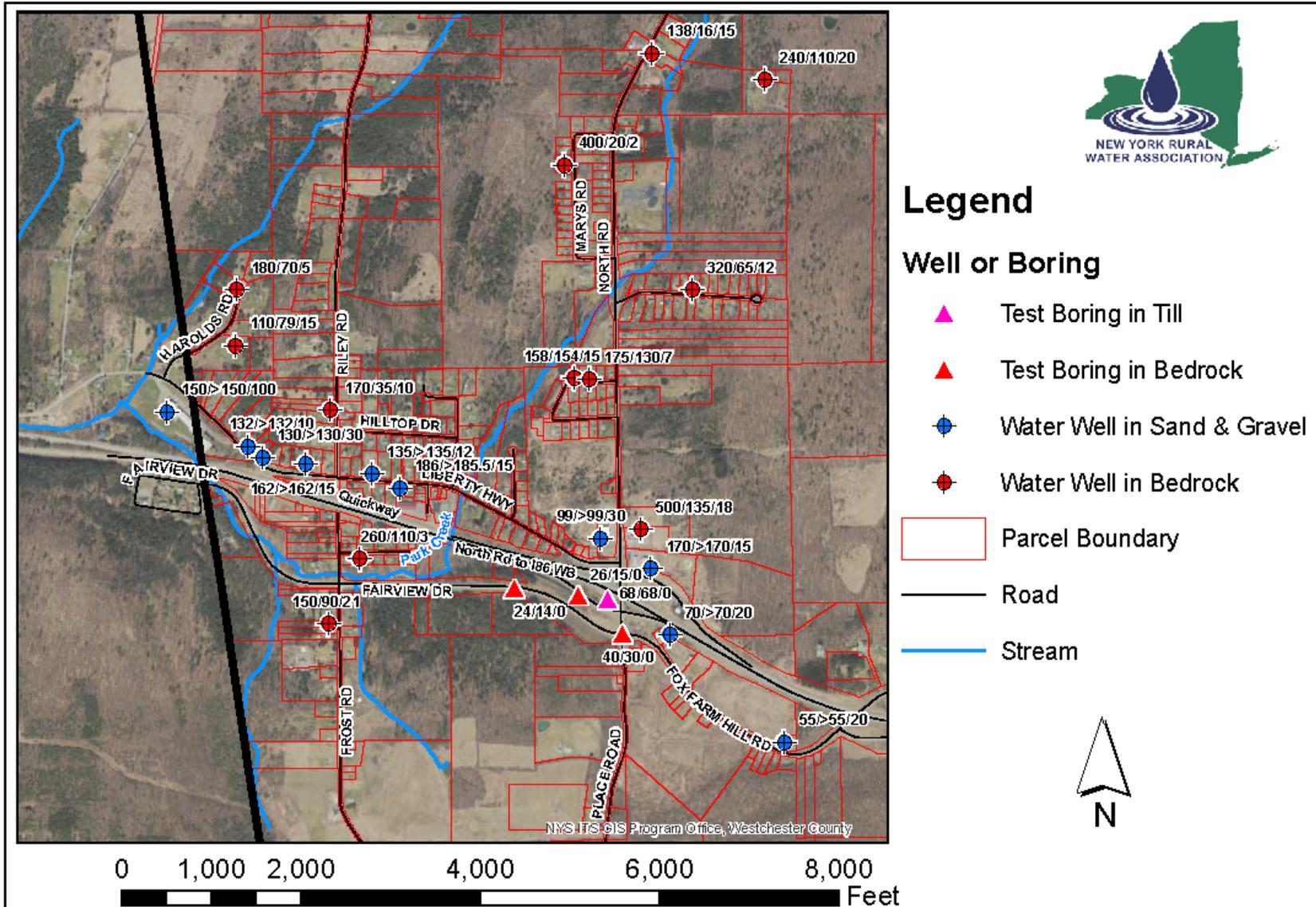
2.0 HYDROGEOLOGIC SETTING

West Windsor lies within the Appalachian Plateau physiographic region. In the plan study area, total elevations ranging from 1,070 to 1,990 feet above sea-level. Figure 3 is a shaded relief map displaying the elevation variation. The plan area occurs at the intersection of several smaller tributary valleys in which Park Creek flows west to the Susquehanna River.

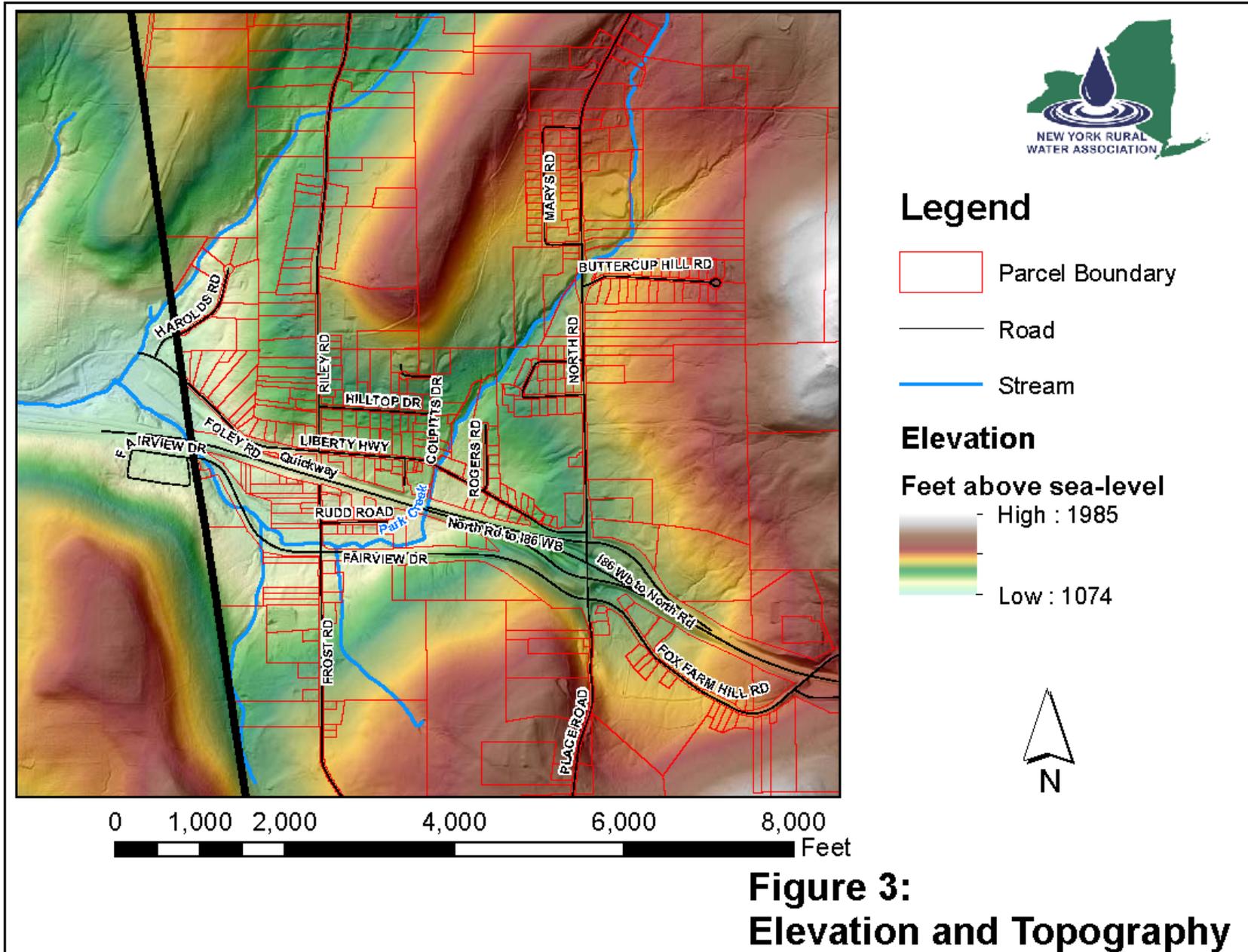
Surficial geologic deposits are geologic materials that are found at or near the land surface. These loose (unconsolidated) deposits above the bedrock originated during glaciation and continue to be formed by processes today. The principal material left by the advancing glacial ice sheet was glacial till, a relatively dense poorly-sorted mixture of boulders, gravel, sand, silt and clay. Till, also referred to as unstratified drift or hardpan, is found at the land surface across the plan study area. It does not yield significant quantities of water to wells.

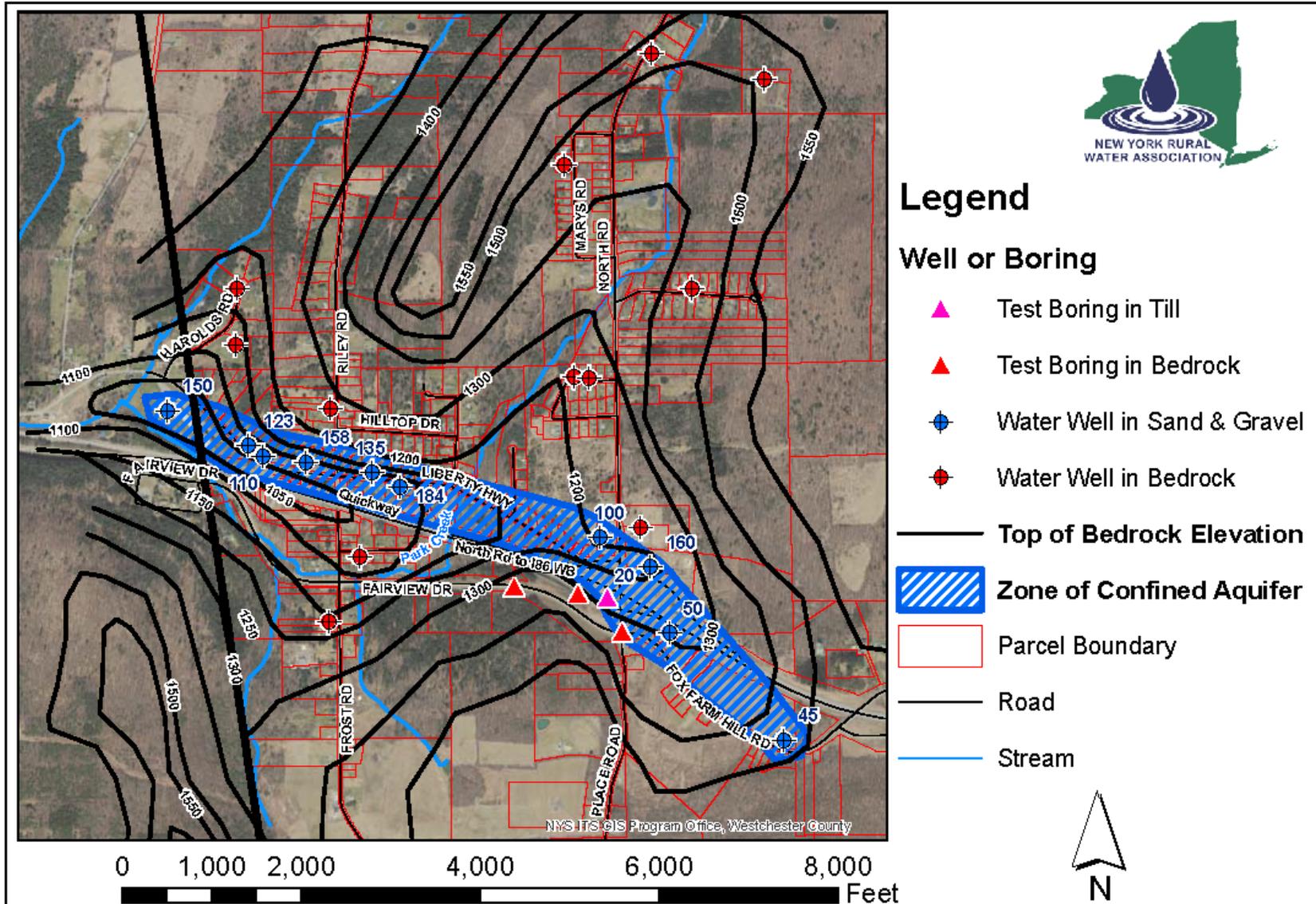
Sand and gravel (unconsolidated) aquifers, deposited by glacial meltwater, are generally more productive than fractured bedrock and thus initially favored for municipal water supply development. Bedrock is generally used as a source of supply where sand and gravel aquifers are absent, too thin, or yield little water. At first glance, it appears that there are no sand and gravel aquifers in the valley of Park Creek and its tributaries. No sand and gravel aquifers appear on local maps for the area.

However, several water wells drilled in the Park Creek valley have intersected sand and gravel deposits at depths ranging from 45 feet to the southwest of I-86 off Fox Farm Hill Road to 120-180 feet towards the northwest along Liberty Highway-Foley Road. These sand and gravel deposits comprise an aquifer that is confined by relatively finer-grained deposits described by drillers as clay and/or hardpan (see Figure 4). This aquifer is situated in a valley deeply carved



**Figure 2:
 Compiled Subsurface Data**





The well or boring label is the depth to the confined aquifer if present.

Figure 4:
Confined Sand and Gravel Aquifer

into the underlying bedrock (Figure 4). It is possible that the confining layer is glaciolacustrine clay and/or glacial till.

The confined sand and gravel aquifer in the Park Creek valley has reported yields ranging from 10 to 100 gallons per minute (gpm), with a median yield of 17.5 gpm. Every well completed in the aquifer has been completed by simply leaving the bottom of the casing open to the formation. Higher yields could be obtained by installation of a screen. The 8-inch diameter well at the Weeks Elementary School is 150 feet deep and reported by the water well driller in 1986 as producing 100 gallons per minute with a water level of 6 feet. Under static (non-pumping conditions), it is a flowing artesian well. The water quality from this well is good, meeting water quality standards (though the iron level was just below the drinking water standard of 0.3 parts per million).

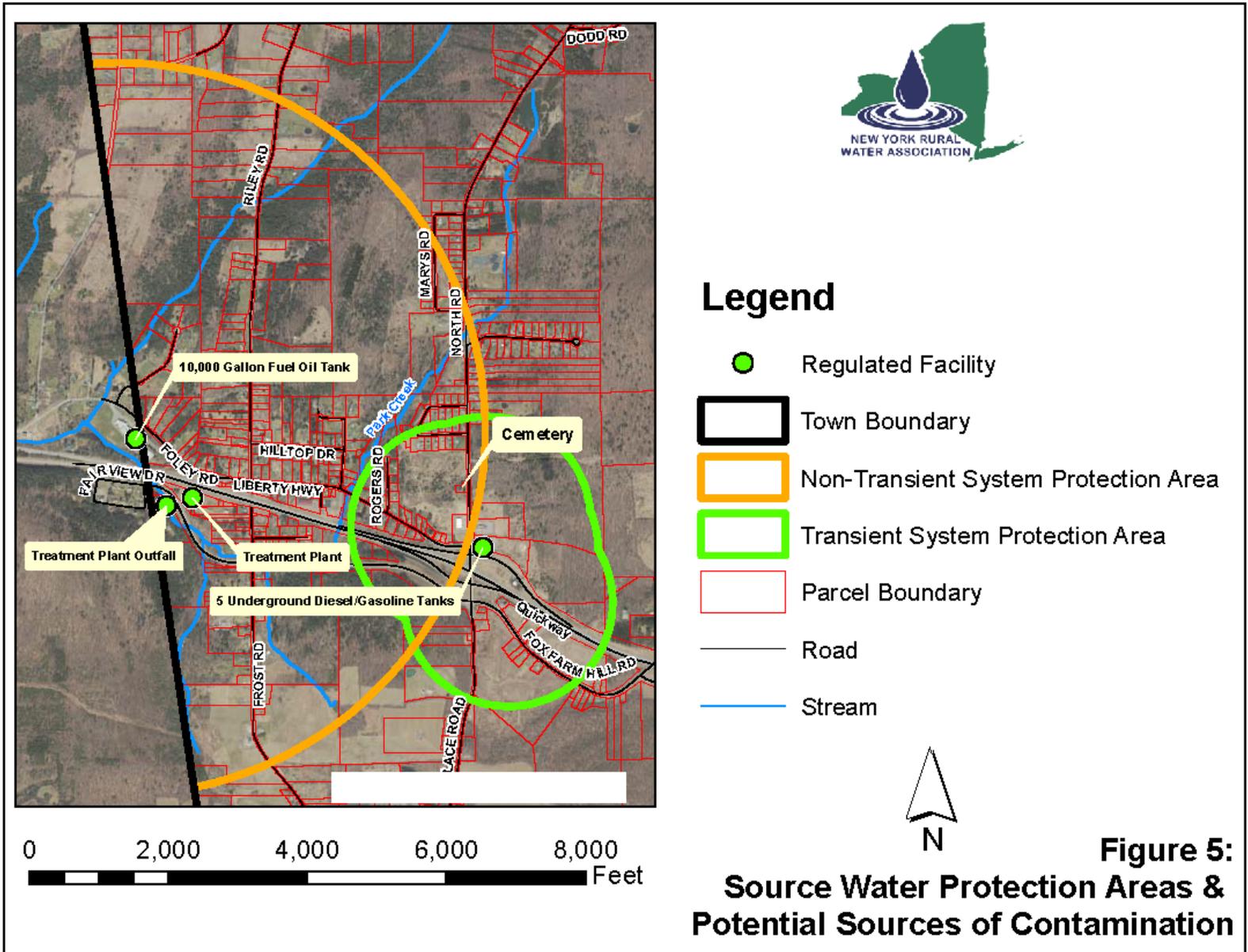
However, at least two other wells in the confined aquifer have documented manganese levels in the range of 0.49 ppm to 0.63 ppm, above the New York State drinking water standard of 0.3 ppm. Manganese is a naturally-occurring substance whose occurrence can be highly variable in in glacially-derived aquifers. It can be treated through various technologies depending upon the concentration of manganese present.

The local bedrock is that of the Upper Walton Formation. It consists largely of interbedded sandstone and shale. The reported yields of local wells in the bedrock have ranged from 2 to 21 gpm, with a median yield of 13.5 gpm. At least one residential well in the plan area that is completed in the bedrock has reportedly failed due to insufficient production (Windsor Supervisor, verbal communication). The only local public water supply well that is completed in the bedrock is that of McDonald's. The manganese level in this well (0.109 ppm) is lower than in some of the other wells completed in the confined sand and gravel.

3.0 SOURCE WATER PROTECTION AREAS

A source water protection area is an area that has been defined to protect a source of water. It is the area through which contaminants are reasonably likely to move toward and reach the water well. A 1,500-foot radius protection area has been mapped around each of the transient, non-community sources on Figure 5. This area has been merged into one area because the various radii intersect. A one-mile radius protection area in the Town of Windsor has been plotted around the well that serves the non-transient, non-community water system (Weeks Elementary School). These distances correspond to the outer well zones delineated in source water assessments completed by the New York State Department of Health (NYSDOH).

The remaining water wells in the West Windsor area serve individual residences and business that do not meet the threshold of a public water system. The construction, renovation, development and abandonment of such water wells is now subject to regulation under NYSDOH (Part 5, Subpart 5-1 Standards for Water Wells - Appendix 5B). New York State law also requires that water well drillers and pump contractors must be registered with the NYSDEC and that this department be notified prior to the drilling a water well. In addition, after a well is drilled, a well completion report must be filed with the NYSDEC and the well owner. No source water protection areas are defined for non-regulated water wells, but the NYSDOH has specified



minimum horizontal separation distances from potential sources of contamination for new and replacement water wells that range in distance from 25 to 300 feet depending upon the potential contaminant source.

4.0 POTENTIAL SOURCES OF CONTAMINATION

Groundwater resources are susceptible to contamination from a variety of anthropogenic sources. These include various industrial, commercial, residential, and agricultural uses and activities. Practices involving the handling, use, storage, and/or disposal of petroleum and other hazardous substances have a higher potential to contaminate groundwater. Once contaminated, groundwater is very difficult and costly to cleanup. It is best to reduce the likelihood of contamination through the use of environmentally-sound best management practices and/or structural methods.

NYRWA has conducted an inventory of facilities regulated by state and federal agencies. Results are presented on Figure 5. As part of the inventory NYRWA used databases available from the NYSDEC and USEPA on regulated activities. This inventory indicates that there is the West Windsor Wastewater Treatment Plant, a large aboveground fuel oil storage tank at the Weeks Elementary School, and five underground gasoline and diesel tanks at the Speedway.

Spills are not indicated on Figure 5 because there presently are no active spill sites in West Windsor and spills are not geo-located by NYSDEC. On average, there has been a spill every year or two that has been reported to the NYSDEC in the West Windsor area. The most common source of spills in West Windsor has been from traffic accidents along I-86 and equipment/tank failures at residences and businesses.

Studies have shown that leachate from cemeteries have the potential to impact groundwater quality. There is one cemetery in the West Windsor area along North Road (Figure 5).

5.0 FUTURE PROTECTION AND PLANNING STEPS

The *ideal* site for a public groundwater supply source for West Windsor would be located such that it is:

- On accessible property where a minimum 200-foot protective radius could be maintained (including purchase of a 100-foot radius of ownership and an additional 100 feet of control in the form of ownership, protective easement, local laws, etc.);
- Not subject to the direct influence of surface water (>200 feet away from surface water and wetlands to reduce threat);
- Positioned upgradient and away from as many potential sources of contamination as possible; and
- Located over a potentially productive aquifer.

The confined sand and gravel aquifer in the Park Creek valley is likely to be the only source of groundwater capable of supplying the production needs of a potential public supply system for the West Windsor area. The long-term safe yield of this aquifer has not been determined. Based upon the very limited data available on wells completed to date in this aquifer, yields could be in the 25 to 100 gallons per minute (gpm) range. The water is likely to be high in manganese and require treatment. In order to provide redundancy, a minimum of two water wells would have to be developed to serve as sources of public water. Three potential public water well sites have been identified by New York Rural Water Association and are indicated on Figure 6. The suitability of these sites can only be assessed based upon actual test drilling, pump testing, and water quality sampling.

Site A

This site is on a 27.4 acre vacant parcel. Access is provided from either Liberty Highway or North Road. The site is open with a slope of approximately 4 percent. The depth to the confined sand and gravel aquifer here is estimated to be 100 to 180 feet. The Town would be able to own a 100 and 200 foot protective radius around public well(s) here.

Site B

This site is on a largely undeveloped portion of a residential parcel owned off Liberty Highway. This site is partially wooded with a slope of 4 percent. The depth to the confined sand and gravel aquifer is estimated to be 100 to 180 feet. The Town would be able to own a 100 foot protective buffer around a public well(s) here, but would have to obtain an easement to protect the residential portions of the area within the 200 foot protective buffer.

Site C

This site is located south of I-86, along Fox Farm Hill Road. It is part of a large, vacant, and open parcel. The site is open with a 3 percent slope. The depth to the confined sand and gravel aquifer is estimated to be 45 feet here, with a total of depth of approximately 63 feet. The Town would be able to own a 100 and 200 foot protective radius around public well(s) here.

Note that the Broome County Department of Health and the NYSDOH should review proposed well locations in relation to siting requirements. Assuming a favorable response from the Health Department, subsequent ground water development activities could proceed if there is support to do so. It is recommended that an option agreement is secured before well drilling and testing commences. Such an agreement would not only allow site access for testing purposes, but would establish a purchase agreement if testing proved successful.

